Andrey Filchenko

Aspect of the Grammar of Eastern Khanty

Tomsk 2010
Abstract: A reference grammar of the endangered indigenous dialects of Vasyugan and Alexandrovo Eastern Khanty of the Uralic language family is the study based on the corpus of natural narrative discourse, and is set in a general cognitive-functional paradigm. The description addresses the main patterns of the Eastern Khanty language system and offers typological contextualization of the reviewed language data. The description covers the issues in phonology (backness vowel harmony, consonant-vowel harmony), word-classes, morphology (derivation and inflection), syntax and semantics of simple and complex clauses (typical SOV patterns with occasional non-canonical argument ergative marking against the general background of Nom-Acc system and robust use of non-finite and finite constructions as relative, adverbial and complement clauses.

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Andrey Filchenko

Aspects of the Grammar of Eastern Khanty

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I would like to express my deepest gratitude to the people of the Vasyugan, Yugan and Alexandrovo Khanty communities, the co-authors of this work, who welcomed me in their homes, and shared their knowledge and stories. There are less than 1000 speakers remaining of these dialects combined and my hope is that this ancient, sophisticated and beautiful language and culture further persists in modern time and into the future.

I am forever indebted to my teachers in linguistics who invested their valuable time, patience and their trust in me and tactfully guided my cautious progress in science and life in many ways. I would like to thank my first professor Dr.Olga A.Ossipova in Russia who continues to be an unattainable example of hard work and enthusiasm in research and life in general. My deep appreciation is to my supervisor and mentor at Rice University Dr.Philip Davis, who gave me an opportunity and the value of perspective in more areas than he is probably aware of. Many of the good things in this work are there because of his insights, questions and hints, at times repetitive. My deepest gratitude is to my Rice University dissertation committee members Dr.Masayoshi Shibatani, Dr.Stephen A.Tyler, Dr.James Copeland and to Dr.Edward Vajda of West Washington University. My deep appreciation is also owed to the faculty and staff of the Department of Linguistics: Dr. Robert Englebretsen; Dr. Nancy Niedzielsky, Dr. Michel Achard; Dr. Sidney Lamb; Dr. Suzanne Kemmer; Dr. Michael Barlow and Mrs. Rita Riley. I would also like to express my appreciation to my fellow graduate students: Sebastian Ross-Hagebaum, Rolando Felix, Nadia Castilo, Pumsup Shim, Christian Koops, Martin Hilpert, Dave Katten, Caleb Everett, Chris Taylor, and also to Viktoria Papp, Anne-Marie Hartenstein, Gu-jiing Lin, Monica Sanaphre and others. Finally, my warmest regards are to my fellow researchers at Tomsk State Pedagogical University: Dr.A.A.Kim, Dr.E.G.Kotorova, Dr.O.S.Potanina, Dr.E.A.Krjukova, Dr.N.V.Polyakova, Pavel Yu.Glazunov and others.

All the merits of this work I share with my language assistants, my mentors and my fellow researchers; all mistakes are my own.
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EASTERN KHANTY: INTRODUCTION

The Language

The language of the Khanty (often referred to as Ostjak) forms, together with Mansi, the Ob'-Ugric subgroup of the Finno-Ugric group of the Uralic language family. Though often considered to be a single language, Khanty is actually a group of dialect clusters (western and eastern) (Decsy, 1965; Jääsalmi-Krüger, 2000). The dialects of interest in this study are closely related river dialects of Vasyugan, Alexandrovo, Vakh and Yugan Khanty. These dialects are particularly interesting as they represent a reportedly more archaic and richer system, in morphosyntactic terms (Gulya 1970; Honti 1987; Kulonen 1989; Decsy 1999), and they are also underdescribed in comparison to the western dialects. The Eastern Khanty, now totaling under 1000 persons, are subsistence hunters and fishermen. They live in widely separated, extended family settlements on traditional hunting territories, populated between the 14th-17th centuries. Their culture was born in and is especially adapted to the middle taiga and swamp ecosystem. The eastern dialects under study total under 300 fluent speakers, most of whom are over 50 years old. They constitute less than 2% of the total Khanty population.

Although there is a considerable supply of scholarly literature on many aspects of the Ugric languages, including Khanty, both in Russian and in foreign languages, there are areas almost completely ignored by researchers. The main sphere of scholarly attention has mostly been the western dialect group (Zhivotikov 1942; Steinitz 1980; Hajdu 1985; Koshkareva 1991; Kovgan 1994; Solovar 1994; Honti 1995; Kulonen 1989; Nikolaeva 1999; Kaksin 2000). In contrast to the western, the eastern Khanty have always had less academic

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1 The material for this thesis was collected within the projects supported under grants: National Science Foundation No. 0416607; Rice University field research grants 2000-2003; OSI IPF 1998-1999.
attention, largely unnoticed by minority rights and environmental activists, probably due to their isolation and the small number of speakers. Among the Eastern dialects at present, only Yugan and Vakh enjoy any depth of description (Steinitz 1980; Tereskin 1961; Gulya 1966; Csepregi 1997). The other two Eastern dialects – the object of the present study – Vasyugan and Aleksandrovo have been sparsely studied. While occasional reference to linguistic data on the Vasyugan dialect can be found, it is unsystematic, mainly serving the purpose of illustration of dialectal variation by single examples (Gulya 1966; Kalinina 1974; Kulonen, 1989). There is almost no material available on the language of Alexandrovo Khanty except for a small collection of vocabulary, gathered at the end of the 19th century.

Although previous research provides a scientific and methodological basis to establish the literary norm for Khanty, there are hardly any substantial achievements in this sphere. The attempts at developing teaching materials in Khanty are based mostly on the western dialects. Except for a small textbook in Surgut dialect, Eastern Khanty is unwritten, and there is no educational instruction in it as the native language. Standardization of the language has not occurred. Efficacy of attempted mother tongue education suffered from students' and teachers' alienation from the existing teaching aids, as they are based on other dialects, which differ considerably from those spoken locally (Filtchenko 2003, Kazakevitch 2003). Thus, there is no likelihood that either dialect will become an officially recognized Eastern Khanty literary norm. Consequently, there is a glaring need for research to promote the development of the teaching resources for the eastern dialects. The recent survey, carried out by a research group including the author of this study, shows that Eastern Khanty dialects, including Vasyugan and Alexandrovo Khanty is being used increasingly less as means of daily communication. There are almost no child speakers, and only the older
generation preserves knowledge of the language. There are, however, members of the Khanty communities, who maintain a strong ethnic identity, and who initiate and welcome efforts aiming at preserving their cultural and linguistic heritage, and are eager to assist linguistic researchers in the area. This study will serve to advance current knowledge of the various aspects of the Eastern Khanty dialects: phonology, grammar, lexicon; to provide a theoretical contribution, based on the described data, to the typology of language grammar organization and information structuring. The assembled core database may be used for the reference and pedagogical materials and offer a contribution to the efforts of local communities in ethnic education initiative.

The Speakers

The Eastern Khanty (a.k.a. Ostjak) reside to the east of the Ural Range along the south-western tributaries of the Ob' river: Vasyugan and Yurgan, and the eastern tributary Vakh. The low-lying local landscape consists of a multitude of rivers and lakes, which drain the world’s largest bog lands – the Vasyugan swamp. Traditionally Eastern Khanty were subsistence hunters and fishermen who lived in widely-spaced settlements – yurt (local topological term of Turkic etymology), puyol (native Khanty term), along the river or lake banks, often several days by boat from one another. The rich spiritual life of these communities was described in detail by late 19th and early 20th century ethnographers, including Sirelius (2001) and Karjalainen (1921, 1922). However, after a period of tumultuous change, beginning in the 1930’s with collectivization and forced resettlement of ‘kulaks’ from Russia’s European territories into what had formerly been traditional Khanty territories, and followed by mandatory education and the rapid development of local oil and gas reserves, there are today only about 20 Vasyugan Khanty, 10 Alexandrov, 150 Vakh and 300 Yurgan
Khanty speakers left on the rivers (Jordan and Filtchenko 2005).

In contrast to other Khanty groups, e.g. those living along the Middle Ob’ tributaries, the Vasyugan and Alexandrovo Khanty had no local tradition of reindeer husbandry. This appears to have been conditioned by the local ecology, consisting of dense mixed forests, numerous streams and rivers, vast expanses of bog and large numbers of lakes (Fig.1).

Vasyugan and Vakh Khanty patterns of seasonal migration were motivated primarily by the scheduling of hunting and fishing, rather than the need to move between reindeer pastures. The distances involved were also quite small: hunting territories were not particularly extensive and were located close to the village sites. In winter, men moved away to hunt, leaving families behind, while in summer it was more typical for the whole family to take part in the fishing

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2 The numbers of Vasyugan Khanty officially registered vary from source to source, however, based on the original research there are around 20 Khanty who permanently reside on the Vasyugan river and have practical knowledge of traditional language and culture.
expeditions.

The prevailing majority of the traditional Eastern Khanty permanent settlements are located along the rivers and shores of the region’s major lakes. This settlement pattern, made up of extended family clan villages, was also reflected in the main structures of traditional social organization, which was based on patrilocal, exogamous patrilineages, each resident in a particular riverside settlement, or base camp. The native reference term used for this social grouping is *aj puyol jay*, meaning 'same settlement people'. The word *puyol* ‘village’ describes the typical Khanty settlement of 2-3 cabins located at the river or lake edge, and housing a small community of 10-15 people. These local exogamous lineages were grouped at larger scales to form exogamous ‘clans’ *sir*. Alternatively, hydronymic groups are identified: *(toy)-ɔmtər jay* ‘lake people’.

In addition to these more localized senses of clan and lineage identity, historical accounts dating back to early 19th C (Haruzin, 1905; Sokolova, 1983) suggesting that Eastern Khanty were aware of a number of other forms of social identity, for which there were specific terms and notions, recounted in both daily life and the community folklore. At one end of the continuum there was the notion of the nuclear family – a couple with children; while along the loci of the continuum and at the other end there was awareness of some equivalent to various scales of localized and larger ‘ethnic’ groupings, which distinguished themselves from neighboring and in-coming groups, mainly on the grounds of linguistic affinity. Commonly, these terms for these groupings referred to the major rivers the group occupied, for example, *äs’ jay* ‘the Ob River People’, *waya jay* ‘the Vakh River People’, and *wat’ joyn jay* ‘the Vasyugan People. Finally, at a general level, all Khanty groups describe themselves in relation to
other ethnic groups as qantəɣ jaɣ — a compound combining the adjective ethnonym qantəɣ ‘Khanty’ and the lexeme jaɣ with the general sense ‘people’ (Tereskin, 1961). Eastern Khanty of the left Ob tributaries – Vasyugan and Yugan are confident that their ancestors have long resided on these territories and refer to them as ären jaɣ, meaning ‘ancient people’. These ancestors were, according to folklore, in frequent conflict with qatan’ jaɣ ‘Tatars’. The folklore also includes interpretations of archaeological sites found in many places in the landscape. These include the remains of former fortified settlements, pit houses, scatters of metal arrow heads, occasional swords and pieces of body armor, as well as burial mounds. The occupants of these sites are regarded as the warrior-hero progenitors of modern Eastern Khanty clans, who lived in the region for an extended period and actively defended it from attacks and occupations by Tatars from the South and Nenets (jorən jaɣ) from the North (Lukina, 1976). These landscape interpretations, and the associated folklore, were integral to the Vasyugan Khanty’s sense of a historical constituted identity.

The Dialects

The focus of this study is a group of closely related dialects spoken along the rivers Vakh, Vasyugan, Ob (in Alexandrovo region of Tomsk), and Yugan, which can collectively be referred to as Eastern Khanty. Each of the river varieties has a number of specific phonological features distinguishing them from others. The extent and the number of these variations across these dialects, in their traditional affiliation, is compatible to the number of distinguishing features within each of the varieties – across micro speech communities along each of the rivers, e.g. lower vs. upper Vasyugan; Bolshoj vs. Malij Yugan; lower vs. upper Bolshoj Yugan; lower vs. upper part of Alexandrovo Ob; etc. Thus, the
description to follow is in essence a description of a language variety that is synchronous to the micro speech community where the data for this analysis originate, and an increase in variation of the described features is to be expected proportional to the increase in the distance from the data-origin location. In other words, even within the Eastern Khanty dialectal continuum, features are likely to be attested that will vary to various extent from those described here.

It is important to take into consideration the traditional local cultural and historical context in order to adequately account for the extent and kinds of variations. Until recently, the traditional economy was based on seasonal migrations between hunting, fishing, and reindeer breeding grounds. In some areas, this economy still persists. The migrations, though quite regular from year to year, are nevertheless distinct seasonally. Whereas summer migrations are mainly along the river, winter migrations frequently follow routes between the rivers. Linguistic contact and language variation reflects this multidirectional traditional economy dynamic. Speakers of the ‘river’ variety are exposed equally to other speakers within this variety, as they are to the speakers of another ‘river’ variety. This, coupled with established exogamous marriage patterns, a complex animistic religious system, (implying regular moves, exchanges, pilgrimages, feasts), as well as a strong ethnic identification vis-à-vis other ethnic/linguistic groups results in a linguistic situation, where continuity and gradience of variation at all levels of the language system has produced a dialectal continuum extending from the southeast to northwest. Within this dialectal area any affinity of communities into discrete dialects, groups and languages is very abstract, random and relative. It is this continuum of micro river speech communities demonstrating lesser degree of variation that we will further refer to as Eastern Khanty.
The work

In what follows, I will provide an overview of the main patterns of the Eastern Khanty language system in maximally representative manner, paying more emphasis and detail to the issues not covered in any adequate detail in the few existing publications on these extremely endangered and underdescribed unwritten dialects.

The empirical base of this study is the narrative corpus of Vasyugan, Alexandrovo, Vakh and Ygan Eastern Khanty dialects, compiled in course of the field work in these communities (Filtchenko 1997-2005), as well as previously published texts by Tereskin (1961), Gulya (1966), Kalinina (1970, 1974, 1976), and the unpublished field notes by Kalinina (1960’s), all of which were converted into IPA notation, glossed morphemically and free-translated. The dictionaries by Tereskin (1981) and Mogutaev (1996) were used in translation of the previously archived data.

The theoretical framework for the study is kept as wide as possible within the general functional-typological perspective. The typological insights into language structure and function by such theorists as B.Comrie, R.Dixon, M.Shibatani, T.Givon, R.Van Valin among others, informed the core principles and concepts, terminology and methods of this description. Importantly, the proposals by P.Hopper, J.Bybee and K.Lambrecht were of major importance as theoretical underpinnings in this work, especially in their emphasis on language use as an integral factor in approaching linguistic description. Variation and gradience are taken to be omnipresent phenomena effectively preventing strict definitions and discrete categorical feature-based assignments. Rather, a prototype-based dynamic continuum between central and peripheral members is taken to be the basic feature of structural patterns.
<table>
<thead>
<tr>
<th>Abbreviations</th>
<th>Description</th>
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<tbody>
<tr>
<td>ABES – Abessive case</td>
<td>INCH – Inchoative affix</td>
</tr>
<tr>
<td>ACC – Accusative case</td>
<td>IndPrn – Indefinite pronoun</td>
</tr>
<tr>
<td>ADJ – Adjectival phrase</td>
<td>INF – Infinitive affix</td>
</tr>
<tr>
<td>AdjP – Adjectival phrase</td>
<td>InstrO – Instrumental Object case</td>
</tr>
<tr>
<td>ADV – Adverb</td>
<td>InterPrn – Interrogative pronoun</td>
</tr>
<tr>
<td>AdvCl – Adverbiacl Clause</td>
<td>LOC – Locative case</td>
</tr>
<tr>
<td>Ag – Agent</td>
<td>NEG – Negative particle</td>
</tr>
<tr>
<td>All – Allative case</td>
<td>Nom – Nominative case</td>
</tr>
<tr>
<td>Attenuat – Attenuative affix</td>
<td>NP – Noun phrase</td>
</tr>
<tr>
<td>Caus – Causative affix</td>
<td>Mltpl – Multiplicative affix</td>
</tr>
<tr>
<td>Coll – Collective affix</td>
<td>Mmnt – Momentative affix</td>
</tr>
<tr>
<td>COM – Comitative case</td>
<td>Mod – Modifier (nominal, verbal)</td>
</tr>
<tr>
<td>Conj – Conjunction</td>
<td>PL – Plural number</td>
</tr>
<tr>
<td>CNV – Converb affix</td>
<td>PL/3SG – agreement in num. of the</td>
</tr>
<tr>
<td>C-VH – Consonant-Vowel Harmony</td>
<td>O=(Pl) and pers/num. of the</td>
</tr>
<tr>
<td>Der – Derivational affix</td>
<td>S/A=(3SG)</td>
</tr>
<tr>
<td>DET – Determiner</td>
<td>1SG – 1SG Possessor</td>
</tr>
<tr>
<td>DIM – Diminutive affix</td>
<td>PP – Perfective participle</td>
</tr>
<tr>
<td>DS – Different subject chain clause</td>
<td>PRD – Predicator affix</td>
</tr>
<tr>
<td>DU – Dual number</td>
<td>Prn – Pronoun</td>
</tr>
<tr>
<td>Dur – Durative affix</td>
<td>PRL – Prolative case</td>
</tr>
<tr>
<td>ELA – Elative case</td>
<td>PRS – Present-Future tense</td>
</tr>
<tr>
<td>EP – Epenthetic vowel/consonant</td>
<td>PS – Passive voice affix</td>
</tr>
<tr>
<td>ILL – Illative case</td>
<td>PST – Past tense affix</td>
</tr>
<tr>
<td>IMPP-imperfectective participle</td>
<td>Purp – Purposive affix</td>
</tr>
<tr>
<td>Imper – Imperative affix</td>
<td>RCPR – Reciprocal particle</td>
</tr>
</tbody>
</table>
RFL – Reflexive particle/affix
RelCl – Relative clause
SAP – Speech act participant
Semlf – Semilfactive affix
SG – Singular number
SS – Same subject chain clause
SUP – Supine affix
Trg – Target
TR – Transitivizer affix
TRNSL – Translative case
VH – Vowel Harmony
1. Phonology and Phonotactics of Eastern Khanty.

It has to be mentioned at the outset, that this chapter is not in any substantial way a proposal or a discussion of any theoretical framework, as it is not, at least intentionally, an exercise in theory application or empirical verification of any phonological theory. The terminology and definitions that are used below are chosen to serve as a meta language solely for descriptive purposes, i.e. to enable a rendering of sound patterns of the described language system.

1.1 Vowels

In our use of the term “vowel”, we will refer to the steady states in the speech units’ articulation, characterized by absence of a friction-causing obstructive action in the articulatory tract, that are consistently distinguished from one another in the speakers mental representation, both in production and perception. These steady states delimit the articulatory maxims, points of articulatory change, i.e. consonants.

1.1.1 Inventory

<table>
<thead>
<tr>
<th></th>
<th>front</th>
<th>back</th>
<th>Reduced(^3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>i</td>
<td>i</td>
<td>ì</td>
</tr>
<tr>
<td>mid</td>
<td>e(^4)</td>
<td>u</td>
<td>ò</td>
</tr>
<tr>
<td>low</td>
<td>ä</td>
<td>a</td>
<td>ò</td>
</tr>
</tbody>
</table>

\(^3\) Reduced vowels are produced as lax, weak and short.

\(^4\) /e/, /ü/ and /ö/ occur with prevailing frequency (~85%) in the root-initial syllable, or as an affix allophone.
The Eastern Khanty vowels can be sub-grouped into Front and Back sets, which are largely symmetrical with the exception of /e/ in the front set, which does not have a symmetrical partner of the back set. This group differentiation will be essential for the discussion of the Vowel Harmony (VH) of Eastern Khanty below.

The key articulatory difference between these sets is fairly transparent. In the production of the members of the Front set, the articulatory gestures are performed relatively at the front of the articulatory tract, whereas the members of the Back set – relatively at the back. Perhaps, the most notable articulatory difference is in the position of the tongue; that is, the Front set is more alveolar-apical, whereas the Back set is more velar-palatal and dorsal.

1.1.2 Full and Reduced Vowels

Second important differentiation in the Eastern Khanty vowel inventory is the one between the full and reduced vowels. Full vowels are articulated tensely and relatively long, whereas the reduced vowels are relatively lax, short and less distinct with regard to place and height, tending to be more mid central.

<table>
<thead>
<tr>
<th>Full</th>
<th>Reduced</th>
</tr>
</thead>
<tbody>
<tr>
<td>sem ‘eyes’</td>
<td>səm ‘heart’</td>
</tr>
<tr>
<td>qos ‘star’</td>
<td>kəs ‘(s)he urinated’</td>
</tr>
<tr>
<td>jom ‘wild cherry’</td>
<td>jøm ‘rain’</td>
</tr>
</tbody>
</table>

The reduced vowels are commonly encountered in the unstressed syllables in poly-syllabic words, with a few exceptions though. The reduced /ə/ also serves as the epenthetic vowel to prevent some of the consonant clusters.

Further implications of this differentiation into full and reduced vowels will be discussed below in the paragraphs on stress and vowel harmony.
1.1.2.1 Front

1.1.2.1.1 Unrounded

1.1.2.1.1.1 High

/ɪ/ — front high unrounded, has no apparent combinatorial or local (position) restrictions, and may occur word-initially, -medially, and -finally:

iki ‘old man’
wiŋtä ‘to stumble, get caught up on’
kiriw ‘big boat’
timi ‘this’

1.1.2.1.1.2 Mid

/e/ — front mid unrounded, occurs almost exclusively in the word-initial position in onsetless syllables and in the word-initial syllable with an onset:

ewlän ‘smelly’
weltä ‘to kill’
metäm ‘tired’

1.1.2.1.1.3 Low

/æ/ — front low unrounded, has no apparent combinatorial or local restrictions, however, it is more frequent word-initially than word-medially or -finally:

äš ‘Ob river’
wän ‘short’
wätäläŋ ‘disorderly, messy’
jänältä ‘to let/make drink’

1.1.2.1.2 Rounded

1.1.2.1.2.1 High

/ü/ - front high rounded, occurs with the highest frequency in the word-initial syllable, extremely rare as word-initial in onsetless syllable, is occasionally attested word-medially, but mainly in compounds:
üyöl ‘tool’
jüŋköl ‘fallen branches covering forest floor’
küj ‘swamp’
köt-pült ‘fish extraction hole in the fish-trap’

1.1.2.1.2.2 Mid

/ö/ – front mid rounded, occurs with the highest frequency in the word-initial syllable including word-initial onsetless syllables and rarely word-medially in compounds and affixes:

öyi ‘daughter’
wöyläy ‘powerless’
kömältöy ‘from outside’
wet-jöŋ ‘fifty’

1.1.2.2 Back

1.1.2.2.1 Unrounded

1.1.2.2.1.1 High

/i/ – back high unrounded, has no apparent combinatorial or local (position) restrictions, and may occur word-initially, -medially, and -finally:

iyata ‘to hang’
wij ‘craftiness’
jir ‘sacrifice’
qiníwi juy ‘ladder’
qəli ‘corpse’

1.1.2.2.1.2 Low

/a/ – back low unrounded, more frequent in word-initial syllables, but is also attested word-medially or -finally:

al ‘year’
warta ‘to push’
janta ‘to sue’
qоynay  ‘for a long time’

1.1.2.2.2 Rounded

1.1.2.2.2.1 High
/u/ – back high rounded, occurs with the highest frequency in the word-initial syllable, attested but less frequent in onsetless syllables, occasionally attested word-medially, but mainly in compounds:

ul  ‘berry’
tur  ‘throat’
ruqata  ‘to snarl’
juγ  ‘tree/wood’
way-put  ‘big family pot’

1.1.2.2.2.2 Mid
/o/ – back mid rounded, occurs with the highest frequency in the word-initial syllable, including onsetless syllables, rarely word-medially in compounds and affixes:

ont  ‘the inside’
wont  ‘forest’
jor  ‘middle, straight’
qat-loγ  ‘log body of the house’

1.1.3 Reduced Vowels
/ə/ – back mid central unrounded schwa-like, has no combinatorial or local (position) restrictions, may occur word-initially, -medially, and -finally:

əj  ‘one’
ən’kə  ‘step Mo’
əjlənə  ‘once’
əŋət  ‘horn’
toŋənkə  ‘sharp’
kəsta  ‘run’
/ə/ – front mid central unrounded, may occur word-initially, -medially, and – finally, is much less frequent as a root vowel compared to the back /ɔ/, has overlapping distribution with /ə/ in idiolects (last 4 example lines):

äwöltä ‘to hug’
jömsi ‘right’
jömäŋə ‘sharp’
øjki ‘sober’
köstä ‘run’
äj ‘one’
äjlänə ‘once’

/ö̯/ – front mid central rounded, occurs almost exclusively in word-initial syllables including onsetless syllables, or in non-initial syllables in compounds (‘paper sheet’):

öltä ‘to lit the fire’
pöγ ‘arrow’
nipiksöγ ‘paper sheet’
lök ‘black grouse’

/ø/ – back mid central rounded, occurs with the highest frequency in the word-initial syllable, including onsetless syllables, rarely word-medially in affixes; has considerably higher frequency than the front /ö̯/ – approx by 30%:

øŋ ‘exit wound’
töŋi ‘away’
töŋəl ‘feather’
löŋ ‘log house body’

The Eastern Khanty vowel distribution demonstrates the following features (Table 3):
<table>
<thead>
<tr>
<th>(+)</th>
<th>Word-initial syllable</th>
<th>Non-initial syllable</th>
<th>Word-final inflections</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>/i/ /ɪ/ /e/ /ø/</td>
<td>/i/ /ɪ/ /ø/</td>
<td>/ã/ /ã/ /ø/</td>
</tr>
<tr>
<td></td>
<td>/ã/ /ã/</td>
<td>/œ/</td>
<td>/œ/</td>
</tr>
<tr>
<td></td>
<td>/u/ /œ/</td>
<td>/u/</td>
<td>/œ/</td>
</tr>
<tr>
<td></td>
<td>/œ/ /œ/</td>
<td>/œ/</td>
<td>/œ/</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(-)</th>
<th>Word-initial syllable</th>
<th>Non-initial syllable</th>
<th>Word-final inflections</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>/ã/</td>
<td>/œ/</td>
<td>/œ/</td>
</tr>
</tbody>
</table>

1.1.4 Full – reduced differentiation

The full-reduced vowel differentiation, apart from reflecting the reductive tendencies resulting from prosodic shifts, is phonemic in Eastern Khanty; that is, there are lexical units where a reduced vowel is the root-initial vowel under stress, forming minimal pairs with full vowels in comparable environments:

/ɪ/ kir ‘ice crust’ – kør ‘milling can’
/e/ vs. /œ/ täλєγ ‘empty’ – tølєγ ‘winter’
/ά/ sem ‘eyes’ – søm ‘heart’
/ũ/ kũr ‘chisel’ – kør ‘leg’
vs. /œ/ kόt ‘hand’ – kόt ‘gap’
/ö/
/i/ mir ‘council’ – mόr ‘tree tumor’
vs. /œ/ qαм ‘hole for a handle’ – qοm ‘very, strongly’
/a/
/ũ/ jũɣ ‘tree’ – jόɣ ‘mountain’
vs. /œ/ jόɣən ‘river’ – jόɣən ‘at night’
/œ/

In the Eastern Khanty data, /œ/ in word-initial syllables is strongly associated with front vowels. That is, whenever it is followed by a full vowel, the full vowel is predominantly front, 75% /œ/-C-front vowel collocation (/œ/-C-/ã/ 60%; /œ/-C-
/i/=10%; /ə/-C-/e/=4%; /ə/-C-/ü/=1%; ~10% of the /ə/-C-/ə/, reduced vowel is followed only by another reduced vowel(s):

kəl-tä   kəl-tə-tä   kəlŋil-tä
‘be in sight’-INF   ‘be in sight’-TR-INF   ‘be in sight repeatedly’-INF

The counter examples appear to be mainly either compounds, where vowel harmony does not penetrate the base roots’ boundaries (Cf. 1.2.5 Disharmony), or instances of a root-vowel alternation (Cf. 1.3 Vowel Alternation), where, for example, the Imper. V-affix harmonizes with the original (uninflected) root vowel:

\[\begin{array}{ll}
\text{wərtul} & \text{‘whortleberry’ (wərt ‘red/blood’ + ul ‘berry’)} \\
\text{məγqat} & \text{‘dugout’ (məγ ‘earth’ + qat ‘house’)} \\
\text{wəsa} & \text{‘Jump!’ (wosta ‘to jump’ + Imper)} \\
\text{qəwti} & \text{‘Put out!’ (qowəta ‘to put out’ + Imper)}
\end{array}\]

Phoneme /ə/ in non-initial syllables may be seen as VH-neutral, allowing for both front and back vowels in the following syllables. Reduced vowels may be treated as transparent for VH, allowing the VH value to pass through them:

\[\text{Trigger V [BACK]} \rightarrow /ə/ \rightarrow \text{Target V [BACK]}\]

\[\text{qantəmta ‘to put a load on the back’} \sim \text{ləyəmtä ‘to look back’}\]

1.1.5 Backness differentiation

Backness appears also to be a distinctive phonemic feature minimally differentiating individual lexical units:

\[\text{Table 4}
\]

Vowel Backness Differentiation

<table>
<thead>
<tr>
<th></th>
<th>Front</th>
<th>Back</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Full</strong></td>
<td>il ‘front’</td>
<td>il ‘down/bottom’</td>
</tr>
<tr>
<td></td>
<td>pāj ‘pile, cloud’</td>
<td>pāj ‘aspen’</td>
</tr>
<tr>
<td></td>
<td>sōy ‘magpie’</td>
<td>sōy ‘sturgeon’</td>
</tr>
<tr>
<td></td>
<td>püt ‘fish flour’</td>
<td>put ‘kettle’</td>
</tr>
<tr>
<td><strong>Reduced</strong></td>
<td>õj ‘one’</td>
<td>õj ‘happiness’</td>
</tr>
<tr>
<td></td>
<td>lōy ‘(s)he’</td>
<td>lōy ‘bone’</td>
</tr>
</tbody>
</table>
1.1.6 Roundness differentiation

Another vowel phonemic quality in the vowel system of Eastern Khanty is roundness. Compare the minimal (or near-minimal) pairs below:

<table>
<thead>
<tr>
<th>Vowel Roundedness Differentiation</th>
<th>Table 5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Full</strong></td>
<td></td>
</tr>
<tr>
<td>Rounded</td>
<td>Unrounded</td>
</tr>
<tr>
<td>kūr ‘chisel’</td>
<td>kir ‘ice crust’</td>
</tr>
<tr>
<td>kör ‘oven’</td>
<td>kär ‘tree bark’</td>
</tr>
<tr>
<td>ul ‘berry’</td>
<td>il ‘down/bottom’</td>
</tr>
<tr>
<td>sort ‘quarter’</td>
<td>sart ‘pike fish’</td>
</tr>
</tbody>
</table>

| Reduced                          |         |
| rounded                          |         |
| kõntfā ‘scratch’                 | kõntfā ‘search’ |
| əŋkə ‘exit wound’-Du             | əŋkən ‘mother in law’-PX.2SG |

1.1.7 Height differentiation (full vowels)

Finally, vowel height is also phonemic in Eastern Khanty, as illustrated in the following pairs of lexical units:

<table>
<thead>
<tr>
<th>Full Vowel Height Differentiation</th>
<th>Table 6</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>High</strong></td>
<td></td>
</tr>
<tr>
<td>nirtā ‘to play an instrument’</td>
<td></td>
</tr>
<tr>
<td>küjāŋ ‘swampy’</td>
<td></td>
</tr>
<tr>
<td>wiŋa ‘ask!’ -Imper</td>
<td></td>
</tr>
<tr>
<td>julta ‘to massage’</td>
<td></td>
</tr>
<tr>
<td>nerta ‘to moan’</td>
<td></td>
</tr>
<tr>
<td>wet ‘5’</td>
<td></td>
</tr>
<tr>
<td>köjāŋ ‘lively’</td>
<td></td>
</tr>
<tr>
<td>jolta ‘to do magic’</td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td></td>
</tr>
<tr>
<td>wät ‘ski detail’</td>
<td></td>
</tr>
<tr>
<td>waya ‘pike fish’</td>
<td></td>
</tr>
</tbody>
</table>

1.2 Vowel Harmony

Vowel harmony is a requirement that certain vowels agree with another vowel in the same word in some feature. The essence of vowel harmony (VH) in Eastern Khanty is in complementary distribution of the [+back] and [-back] vowels within a single-root word. It is a very productive pattern, which is consistent and robust.

---

5 körjuy ‘fire wood’ is a compound consisting of: kör ‘oven’ and juy ‘wood’, the second part is [-BH].
across the speech communities (Eastern Khanty), and applied to novel and loan words.

To an extent, VH in Eastern Khanty may be viewed as a type of progressive vowel assimilation, i.e. within a single-root the place of vowels in subsequent syllables and affixes, assimilates to the place of the initial vowel in the root. Thus, the probability of a front and back vowel in the same single-root lexical unit, including the inflected and derived forms, is extremely low. In fact, those rare disharmonic tokens that do occur either belong to a very limited disharmonic set consisting predominantly of loans, or manifest local articulatory allophonic variation in on-line speech. They will be discussed in more detail below.

Hence, phonemically, all affixes, except for passive affix -uj-6, have [front] and [back] allomorphic pairs:

<table>
<thead>
<tr>
<th>Front</th>
<th>Back</th>
</tr>
</thead>
<tbody>
<tr>
<td>/i/, /ʊ/, /e/, /æ/, /o/, /ɒ/</td>
<td>/i/, /ʊ/, /al, /ɒl, /ɔl, /ɒl/</td>
</tr>
<tr>
<td>wär-lay ‘bloodless’</td>
<td>apa-lay ‘fatherless’</td>
</tr>
<tr>
<td>köy-öy ‘of stone’</td>
<td>juy-øy ‘of wood’</td>
</tr>
<tr>
<td>wär-i-ta ‘to fish with a dam’</td>
<td>at-i-ta ‘to fence off’</td>
</tr>
<tr>
<td>wör-ä ‘Do!’ –Imper.2SG</td>
<td>pän-a ‘put–Imper.2SG</td>
</tr>
<tr>
<td>tjoyt-am ‘take aim’-PST0.1SG</td>
<td>tjoyt-am ‘whistle-PST0.1SG</td>
</tr>
<tr>
<td>läl-im ‘in/exhale’-PST0.1SG</td>
<td>quil-im ‘stay overnight’-PST0.1SG</td>
</tr>
<tr>
<td>kőryil-yal ‘roll around’-PST1.3SG</td>
<td>joyam-yal ‘hit’-PST1.3SG</td>
</tr>
<tr>
<td>kiml-in ‘bottom edge of the coat’-POSS.2SG</td>
<td>qaq-in ‘younger brother’-POSS.2SG</td>
</tr>
<tr>
<td>kőyor-min ‘sew up the edge of clothes’-Conv.</td>
<td>quil-min ‘staying overnight’-Conv.</td>
</tr>
<tr>
<td>pāyšl-s-öm ‘forge’-PST2-1SG</td>
<td>paqliyəl-s-əm ‘step’-PST2-1SG</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>But</th>
</tr>
</thead>
<tbody>
<tr>
<td>wer-s-ųj-əm ‘make’-PST2-PS-1SG</td>
</tr>
</tbody>
</table>

6 The 3SG and 3Pl passive affixes, however, do have harmonic allomorphs: /-ų/- vs. /-ų/-, and /-at/- vs. /-at-/.
1.2.1 Backness Vowel Harmony

As shown above, the Eastern Khanty backness vowel harmony requires that all vowels in a word belong to either the front or back class, and applies both root-internally and in affixal morphology. This requirement is directional, that is, all subsequent vowels take their cue from the word-initial vowel. The backness value is thus fully predictable for all post-initial vowels in a word. From a formal standpoint, backness is assumed to be an equipollent feature and all the post-initial vowels are assumed to be underspecified for the harmonic feature [back] and thus, as fully predictable, may be eliminated from underlying representations (Harrison 2000).

\[
\begin{array}{c}
\text{CVCV} \\
\text{[+back]} \\
\end{array}
\]

In the Optimality Theory framework (Smolensky 1993), backness vowel harmony can be viewed as an alignment constraint (Harrison 2000):

*Align [a back] with word boundary (Wd)*

In Eastern Khanty, the scope of vowel harmony is constrained to the domain of a single-root word, and does not apply across the word boundary to prepositions (Khanty does not have prefixes), postpositions and compounds. Lexical token frequency does not appear a relevant factor here, as the word-boundary constraint appears to be absolute.

Vowel Harmony (VH) is attested in many languages in the region both, related (Hungarian, Finnish) and unrelated (Tatar). The variety of advanced analysis (even for the same vowel harmony systems) is in large due to the variety of theoretical and methodological frameworks utilized in approaching the systems.
1.2.1.1 VH – Functional Articulatory Analysis

Regardless of the amendments accommodating problematic cases and theory-
internal contradictions, the generative phonological approach to describing and
explaining the origin of the harmonic systems such as Eastern Khanty is not the
most attractive. As mentioned above, similarly to other unwritten languages in
Siberia, Eastern Khanty constantly manifests fluidity, gradience, and variation
across even the smallest speech communities, as well as across social strata. Such
pervasive features of the Eastern Khanty phonology as numerous interdependent
allophonic alterations (Cf. 1.2.3 Consonant assimilation; 1.3 Vowel alternation),
multiple assimilations, shifts and language proficiency dynamics due to
bilingualism and extensive language contact, would force the generative
phonological approach to produce repeated accommodations and rule
modifications.

Variation and gradience is constantly observed in empirical linguistic studies,
effectively preventing final strict definitions of even the basic language units such
as segment, syllable, morpheme, and word. Furthermore, there is a lack of discrete
boundaries between levels/categories in language: phonology, lexicon,
morphology, syntax, discourse, and social context (Bybee 2001). Cross-cultural,
cross-linguistic projects consistently demonstrate that patterns of categorization
exist not as discrete categories based on criteria-attribute or feature principles, but
in terms of prototypical and peripheral examples arising from comparison of the
multitude of tokens.

These principles rooted in the usage-based framework are viewed here as basic
premises for approaching the phonological description of Eastern Khanty VH in
particular. It is most revealing to treat the phonological form of the language
system in its complexity as emerging from the multitude of conventionalized
frequent use patterns, without attributing the complexity to pre-existing rules, i.e. as a complex structure emerging in the process of relation/interaction of substance and form (Lindblom 1984, Hopper 1987, Keller 1994, Bybee 2001).

Language, as other types of ‘ritualized behavior’ (Tomasello 1993; Haiman 1994, 1998), may be and is indeed idiosyncratic, fluid, and adaptive to individual and societal needs. Based on evidence from language physiology and acquisition (Pierrehumbert 1994; Coleman 1996; Vitevich 1997; Erman and Warren 1999; Trieman 2000), it is assumed here that within this approach, the repetitions of uses may result in emergence of a pattern that is capable of dissociation from its original context to become a pattern for the production of new uses or a pattern for the assimilation of less repeated uses – conventionalization of inventory.

Articulatory gesture, as an event “that unfolds during speech production and whose consequences can be observed in the movements of the speech articulators” (Bybee 2001) is the basic unit of language sound form that is relevant for the analysis. Any production of a language utterance consists of a multitude of articulatory gestures that are strung together in an online speech event, and there is a natural tendency to overlap, and to co-articulate the gestures. Every gesture is a coordinated set of muscle moves of articulator(s) and in their abstract sense of revealing the distinct features of the articulatory events, gestures could be likened to phonemes in the level at which they represent natural speech.

Traditional terminology is strongly biased towards thinking of speech in terms of segments (Bybee 2001). Thus, discussion of insertion and deletion of segments and assimilation is often couched in the sense of a kind of transformation of one segment into another. In contrast, the articulatory gesture approach allows us to discuss the patterns in terms of routinized reduction, or temporal compression of gestures within a word or a phrase, where the transition between segments becomes a simultaneous co-articulation with a “blanket affect” of the position of the tongue for the adjacent
segments (Bybee 2001). This view of modification in timing makes it possible to relate speech to the “well-rehearsed motor events”, where repetition increases efficiency or fluency because sequences of events can be anticipated and one event can begin before the preceding one is completed. This view implies that phonological representations are self-organizing and emergent units and can be expected to manifest gradience and dynamics in properties. Uniformity and universality of language units is not strictly required.

Most of the changes in the form/meaning of the entities that are associated with these conventionalized frequency-motivated speech patterns are seen to be reductive, both substantively and temporally (Pagliuca and Mowrey 1995), where substantive reduction is in the magnitude of a muscular gesture, and temporal reduction is in the duration of the sequence of gestures.

In case of Eastern Khanty backness harmony as well as other phonological patterns, conventionalized articulatory automation and reduction are taken here to be in the center of description and explanation. Thus, for example, the Khanty full-reduced vowel alternation (section 1.3.) is best described by referring to reduction by lessening of the magnitude as well as the timing of muscular activity in a gesture. Since a vowel is essentially a steady state in the articulation, vowel reduction in Khanty unstressed syllables is manifested by substantive laxing of vowels, i.e. lower articulation of high vowels and more central articulation of back and front vowels as well as temporally shortening of them compared to full vowels in stressed syllables.

Eastern Khanty VH is, perhaps, also best approached from the framework of articulatory gestures. Vowel harmony is understood here as a property of the phonemic representation of roots and as a process necessary for derivation and inflection. In articulatory terms, a single set of gestural patterns, conditioned by root-initial steady state articulation, then prevails in the production of the whole
mono-root word. That is, a certain gesture, a set of articulatory muscular states of the tongue-body is held approximately constant across all the steady states of the word. Moreover, as follows from the analysis of some of the phonotactic patterns such as velar/uvular stop-V[front] sequences and palatalization in some CV[+/-front] sequences, the above prevailing muscular (tongue-body) state is also an active component of co-articulation of consonants, representing a local articulatory maximum of muscular events.

In articulatory gesture terms, the essential issues in the discussion of the Eastern Khanty vowel harmony are the types of articulators involved in the production of vowels and tract variables (Browman & Goldstein 1992):

<table>
<thead>
<tr>
<th>Tract variables</th>
<th>Articulators involved</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>lip aperture</td>
</tr>
<tr>
<td>TBCL</td>
<td>tongue body constrict location</td>
</tr>
<tr>
<td>TBCD</td>
<td>tongue body constrict degree</td>
</tr>
<tr>
<td>upper and lower lips, jaw</td>
<td></td>
</tr>
<tr>
<td>tongue body, jaw</td>
<td></td>
</tr>
<tr>
<td>tongue body, jaw</td>
<td></td>
</tr>
</tbody>
</table>

In production of the Eastern Khanty front and back vowels, the main articulatory difference is in the location and degree of the constriction by the body of the tongue. In front vowels, the location is more advanced towards the teeth and is more extended in degree, whereas in back vowels the body of the tongue is more retracted towards the velum, and the constriction is less in degree:

kim-in ‘bottom edge of the coat’-2SG
läl-im ‘in/exhale’-PST0.1SG
qaq-in ‘younger brother’-2SG
quł-im ‘stay overnight’-PST0.1SG

Once the location and the degree of constriction is set for the steady state of the root-initial vowel, in normal on-line speech production, the configuration remains approximately constant for all consequent vowel steady states and, to an extent, for much of the consonant articulation gestures. Thus, backness harmonization is a quite predictable and expected co-articulation effect that in
Eastern Khanty had conventionalized, gradually became a dominant production pattern shared by the majority of the speakers in the majority of speech events. For the purposes of this descriptive chapter, the stages, motivations of this process of conventionalization of vowel harmony pattern will not be discussed here in any detail. It is worth noting, however, that this type of articulatory change in gestures must be reflected in acoustic-perception and ultimately registered in the mental representation of the speakers. The basic principle that is relevant here is that the sound change originated as an articulatorily motivated phenomenon, and gradually developed to become conventionalized in the lexicon and morphology, which could be exemplified by Eastern Khanty backness harmony.

### 1.2.2 Consonant assimilation by vowel backness harmony

Traditionally (Karjalainen 1909; Tereskin 1961; Gulya 1966) sets of lexical units are cited that represent minimal pairs differentiated by the place of the velar/uvular stops:

| qol      | ‘1.conifer tree, 2.skill/capacity’ |
| quł      | ‘fish’                                |
| köl      | ‘1.word, 2.language, 3.news’          |
| kül      | ‘a acme/hole on deer skin’           |

I propose, however, that in the case of [k] and [q], the differentiation that is more relevant and apparent is that in the root-vowel backness value, rather than in the place of articulation of the word-initial stop. Across the data, the voiceless velar stop /k/ is consistently associated with the front vowel environment (99,1%)\(^7\), whereas voiced uvular /q/ associates with the back vowels (99,3%). The exclusions manifesting [k]-V[back] or [q]-V[front] collocations are few and the majority of them occur in loans:

| kap̲’usta   | ‘cabbage’ (Russ [kap̲’usta])            |
| kəlo’ja     | ‘galosh’ (Russ [kal’oša])              |
| kəlx’os     | ‘kolkhoz’ (Russ [kalx’os])             |

\(^7\) Counterexamples are few comparatively recent loans from Russian: kat’ær ‘motor boat’, kolyos ‘kolkhoz’.

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The probability of this type of token is thus very low, and there is a good articulatory reason for it, as well as some empirical evidence.

In articulatory terms, the combination of a velar stop and front vowels is preferable to that of uvular stop and front vowels. In Eastern Khanty, where there is highly productive and robust backness VH, co-articulatory place assimilation between velar/uvular stops and vowels can be reasonably expected as natural. An indirect piece of evidence in support of prevalent Eastern Khanty C-V assimilation/harmonization may be frequent palatalization of consonants in front vowel environment:

\[
\text{āł’míl’-tā ‘lift’-INF} \quad \text{amlωγωl-ta ‘sit down’-INF}
\]

Word-initial, or syllable onset position does not appear a relevant factor, as there are sufficient examples where the velar/uvular consonants are word-medial and -final, or in the syllable coda, explicitly showing that velar in V[front] environment and uvular in V[back] environment are by far more probable than the alternative (velar-V[back], uvular-V[front]):

\[
\text{pāŋk ‘grouse’} \quad \text{paŋq ‘fly-agarics’}
\]

\[
\text{kōsō-kō-tā ‘search’-INCH-INF} \quad \text{qaŋta-qa-ta ‘climb’-INCH-INF}
\]

Thus, the allomorph pairs of affixes containing either a velar or uvular stop, for example, the Inchoative affix in the second example line above, are a natural and expected extra manifestation of the general tendency for backness harmony.

1.2.3 Phonology of Loanwords

1.2.3.1 Loanwords and vowel harmony

Eastern Khanty has been in extended contact with the languages that are affiliated with unrelated language families, such as Turkic (Chulym Turkic and upper Ob/Tom Tatar) and Slavic (Russian and Ukrainian). Extended cultural interaction has resulted in a number or mutual loans between these languages. The
loanwords are interesting in respect to the way they are adopted by the Eastern Khanty speakers, particularly with regard to their phonology.

The anticipated scenarios of this process of interaction would include: a) preservation of the foreign phonological features of the loans in the target-language, b) change of the source-language features adapting to the target-language features, and c) a combination of thereof to various extents.

The phonological patterns of primary interest are VH and basic phonotactic patterns (CV co-occurrence, CC(C) clusters).

In considering the degree and type of combination of the conservative and the novel phonological features in loans, such factors as lexical frequency, age of loan, socio-linguistic status of the speakers could be of importance.

Having selected backness VH and such prevailing phonotactic patterns as CV[+/−front] co-occurrence restriction (/k/V[front]) and avoidance of consonant clusters by epenthesis, the following distribution pattern of phonological features appears in the data:

Table 8
Loan Lexicon in VH and C-VH

<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>k’öskä ‘cat (Rus. k’oška)’</td>
<td>klap’i ‘bugs (Rus. klap’i)’</td>
<td>kant’or ‘office (Rus. kant’ora)’</td>
</tr>
<tr>
<td>K’irti ‘cards (Rus. K’arti)’</td>
<td>kap’usta ‘cabbage (Rus. kap’usta)’</td>
<td>kalx’osnik ‘kolkhoz-worker (Rus.)’</td>
</tr>
<tr>
<td>k’atkä ‘barrel (Rus. k’atka)’</td>
<td>kal’oja ‘galosh (Rus. kal’oja)’</td>
<td>keräs’in ‘kerosene (Rus. keräs’in)’</td>
</tr>
<tr>
<td>qan ‘tsar/king (Turk. xan)’</td>
<td>kalx’os ‘kolkhoz (Rus. kalx’os)’</td>
<td>sawr’ani ‘meeting (Rus. sawr’ani)’</td>
</tr>
<tr>
<td>kap’ejkä ‘kopex (Rus.köpejka)’</td>
<td>kamsam’ol ‘komsomol (Rus.)’</td>
<td></td>
</tr>
<tr>
<td>k’anw’etkä ‘candy (Rus.könfetka)’</td>
<td>karant’aj ‘pencil (Rus.karand’aj)’</td>
<td></td>
</tr>
<tr>
<td>kön’k’iyan ‘skates (Rus. kön’ki)’</td>
<td>r’umka ‘shotglass (Rus’r’umka)’</td>
<td></td>
</tr>
<tr>
<td>sainw’ar ‘teapot (Rus samow’ar)’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>pir’ik ‘wig (Rus. par’ik)’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>süf’ja ‘judge (Rus. süd’ja)’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>l’ekar ‘doctor (Rus. l’ekar’)’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>t’owra’k ‘goose (Rus. t’öpra’k)’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>pat’a’s ‘stamp (Rus. pet’a’t)’</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
It is evident in the above that in the loanwords the native target-language features tend to dominate over the novel source-language features. Particularly, backness VH has high probability to be maintained in the loans at the expense of the source-language disharmonic vowel qualities. The first column in the table manifests frequent shifts in the source vowel qualities to adapt to the target CV[+/-front] (/k/V[front] vs. /q/V[back]) pattern, which in many cases of /k/-initial tokens implies fronting of the source back vowels. The post-initial vowels then are highly likely to also be fronted from the source articulation to comply with the target backness value of VH.

The second column exemplifies the less frequent, but apparently gradually increasing group of loans where one source-language feature is preserved at the expense of the target-language convention, namely the /k/V[front] CV pattern. The other source features adapt to the target articulation patterns: backness VH.

Finally, the third column illustrates the least common and least probable condition, but one that is nevertheless attested. The source-language articulation persists, overriding the target-language conventions, CV co-occurrence restrictions and backness vowel harmony.

It is notable that among the disharmonic instances, phonologically novel/loan tokens of higher frequency dominate, whereas the group of harmonic loans complying with the main target-language (Eastern Khanty) phonological patterns is made up of less frequent archaic lexical units.

Also, most of the disharmonic/novel loans belong to the more recent loan-group, which incidentally corresponds to the tendency of increased bilingualism and the decrease in the overall (average) native language proficiency. Predictably enough, the more harmonic, conventional target-pattern loans in large part belong to the earlier loan-group, borrowed when the language situation was characterized by lesser bilingualism and higher average native language proficiency.
1.2.3.2 Loans and anti CC(C) cluster epentheses.

The speakers of Eastern Khanty may epenthesize a vowel, normally a mid-central /ə/ or a high front unrounded /i/, into the loans to prevent the non-Khanty consonant clusters. The epenthesis is similar to the pattern in the native vocabulary when clusters are created on morphemic boundaries in the process of derivation or inflection. This commonly applies to loanwords as well. However, more interesting is the epenthesis in borrowed word-initial onset clusters. Firstly, these clusters are highly infrequent in the Eastern Khanty native lexicon, and secondly, the epenthetic vowel would thus become the first root vowel, which is of key import in VH formation. There seem to be three possible epenthesis scenarios: a) the epenthesized vowel is constant and all the post-initial vowels shift in articulation complying with VH; b) the epenthesized vowel is constant, but the post-initial vowels in the loan preserve their articulation from the source-language and do not comply to VH; c) the epenthesized vowels vary in anticipatory co-articulation to the post-initial vowels in the loan to comply, to some extent, to VH.

An extra factor to consider in the process of epenthesis into word-initial loan clusters is the Eastern Khanty phonotactic patterns that describe the probability of co-occurrence of certain consonants in the environment of the certain vowels, for example, /k/ and /q/ in the exclusive environment of front and back vowels, respectively. This phonotactic pattern may be referred to as a consonant-VH (CVH).

What is then observed in the actual data does not allow us to completely exclude any of the above three scenarios, but makes it possible to point out the most probable ways of assimilation of the loanwords with word-initial clusters:
In the table above, column (I) demonstrates that, firstly, epenthetic vowels do vary /i/ vs. /ə/ (II, III); and secondly, in case of /i/ this epenthetic vowel does show sensitivity to the VH with the source-language original root vowel and to the /k/V[front] phonotactic pattern. This is partially supported by the examples such as pı́r’ık ‘wig’ (Rus. [par’ık]), where there is no anti-cluster epenthesis, but there is an anticipatory front articulation of the originally back root-initial unstressed /a/ to harmonize with the stressed front root-vowel /i/ to comply with the backness VH and the prevailing phonotactic pattern /k/V[front].

Column (II) shows that the epenthesized /ə/ may generally comply with the backness VH pattern of the source-language original root vowel, but results in an improbable phonotactic co-occurrence /k/V[back]. The examples not containing epenthesis also show that in the cases of harmonic source-language loan vowels, the phonotactic pattern /k/V[front] is first to be neglected, rendering it less strong than VH.

Column (III) shows that although the database does not have attested examples of a disharmonic epenthetic vowel, it nevertheless shows that VH does fail in a number of loanwords where the source-language original root contains disharmonic vowels.

<table>
<thead>
<tr>
<th>I</th>
<th>II</th>
<th>III</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Epenthesis +VH/+CVH</strong></td>
<td><strong>Epenthesis +VH / -CVH</strong></td>
<td><strong>(Epenthesis) -VH / -CVH</strong></td>
</tr>
<tr>
<td>k(i)r’ık ‘sin’ (Rus. grex)</td>
<td>kər’an ‘crane’ (Rus. kran)</td>
<td>kər’an ‘kerosene’ (Rus. kera’s’in)</td>
</tr>
<tr>
<td>kəl’up ‘club’ (Rus. klub)</td>
<td>kəl’x’os ‘kolkhoz’ (Rus. kalxos)</td>
<td>səwr’ani ‘meeting’ (Rus. sabr’ania)</td>
</tr>
<tr>
<td>pı̀r’ık ‘wig’ (Rus. par’ık)</td>
<td>kəł’x’os ‘kolkhoz’ (Rus. kalxos)</td>
<td>kər’an ‘kerosene’ (Rus. kera’s’in)</td>
</tr>
<tr>
<td>k’öskä ‘cat’ (Rus. K’öf[k]a)</td>
<td>kəmsam’ol ‘komsomol’ (Rus. kamsamol)</td>
<td>səwr’ani ‘meeting’ (Rus. sabr’ania)</td>
</tr>
<tr>
<td>K’aṭkä ‘barrel’ (Rus. K’aṭka)</td>
<td>kəp’usta ‘cabbage’ (Rus. kap’usta)</td>
<td></td>
</tr>
<tr>
<td>IV</td>
<td>klap’i ‘bed-bugs’ (Rus. klap’i)</td>
<td></td>
</tr>
</tbody>
</table>
Finally, row (IV) klapˈi ‘bedbugs’ (Rus. [klapˈi]) shows that the epenthesis is not altogether mandatory and otherwise improbable word-initial onset clusters though rarely but do occur in the loanwords.

It has to be noted that most of the examples of epenthesis manifesting the anticipatory articulation that do comply both with the vowel in the stressed source-language root and with phonotactic CV pattern belong to the group of older/earlier loans, and, in many of the examples, decreased lexical token frequency is the case. In contrast, examples of epenthesis violating either VH or the phonotactic CV pattern are predominantly found in newer loans, which have higher lexical token frequency.

### 1.2.4 Disharmony

As justly noted in Harrison (2001), the instances of disharmony in harmonic languages typically have been treated as exceptional or anomalous, rather than an expected and natural part of the system. Once observed in its natural on-line language context, “harmony” is relative, with features such as gradience and variation being omnipresent and essential. Variation is multifaceted and continuous, from idiophonic events – to idiolects, -sociolects, -dialects. Such issues as age, gender, social status, bilingualism, language contact/ change/ death, each individually and in combination with others, affect the degree of optionality, extent and kinds of disharmonic patterns in harmonic systems.

In Siberia, vowel harmony is commonly attested in indigenous languages, which have been observed not only to tolerate disharmony, but to generate it in a productive manner (Altai-Sayan Turkic languages: Harrison 2001, Anderson & Harrison 2000; Harrison, Dras, Kapicioglu 2002).

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8 Examples like *komsomol, club, crane*, and *kolcoz* are clearly the notions introduced in the mid XX century in course of the political, social and economic reform.
The disharmonic instances and patterns are to be considered an expected natural feature of the harmonic systems. Similarly to the observations for Siberian Turkic languages (Harrison 2000), the Eastern Khanty disharmonic tokens should be viewed not as exceptional deviations, but as an integral part of the theoretical model of harmony. The following conditions are to be viewed as relevant in accounting for the Eastern Khanty disharmonic instances:

- Optional application of the harmonic articulation pattern and co-articulation.

Apart from the dialectal variation in features of VH, the optionality of VH application is attested within the same sub-dialects, sociolects and even individual speakers and smallest speech communities of the Eastern Khanty.

- Originally disharmonic gestures in loans.

This condition is discussed in more detail in the section on loanwords below.

- Disharmony provoked by consonant phonotactics.

Certain phonotactic patterns may interfere/interact with the vowel harmony, such as the Eastern Khanty voiceless velar stop co-occurrence pattern with [BACK] vowels (/k/V[front] vs. /q/V[back]). The examples of conflicting or interacting VH and CVH patterns are extremely rare and are attested exclusively in the domain of loanwords (Cf.1.2.4 Loanwords and vowel harmony). In some loans, the word-initial /k/ requires a front vowel to follow to comply with the dominant pattern of C[velar/uvular]-V[BACK] collocations, which is obtained either in accord with or in contrast to the vowel harmony pattern:

- wär-läy ‘blood’-Abess. ‘bloodless’
- apa-läy ‘father’-Abess. ‘fatherless’
- änım-läy ‘sister’-Abess. ‘without sister’

- qo’yäł-am ‘the one who walked’
- änäm-äm ‘the one who got old’
- är-käš-am ‘the one who had sung’

- kel’ati ‘pretzel’ (Russ)
- kölx’osnik ‘kolkhoz-worker’ (Russ)

- k’öskä ‘cat’ (Russ)
- k(i)r’ik ‘sin’ (Russ)
- kölx’osnik ‘kolkhoz-worker’ (Russ)
- köl’up ‘club’ (Russ)

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Since /k/ is native to Khanty, and is thus shared both by the source-language and target-language, it is preserved in the loanwords, whereas the following root-vowel is frequently a subject to co-articulatory alteration (fronting), to accommodate the dominant native C[velar/uvular]-V[BACK] pattern. This may also be evidence for the Eastern Khanty preference of the stronger conventionalized progressive co-articulatory gesture assimilation to the weaker regressive/anticipatory assimilation.

- Disharmony conditioned by morphology.

One example of morphologically conditioned vowel disharmony is well-attested in many Khanty dialects, namely the passive suffix /-uj/. It does not appear to have a harmonic allomorph and occurs in the constant back form in violation of VH in the front root-vowel verb forms:

```
loγ-να tʃoqɬ-s-uj-ǝm  ‘I was kicked by a horse’
mä iлим-1-uj-ǝm     ‘I am ashamed’
```

Another example of frequently attested morphological disharmony in our data is the diminutive suffix /-ali/, which tends frequently to preserve the frontness of the post-lateral high unrounded vowel, resulting in disharmonic instances after back root-vowel strings:

```
jäŋk-äli  ‘nail’-Dim
awt-ali   ‘hair’-Dim
qar-ali   ‘calf’-Dim
qaq-im-ali ‘brother’-SG/1SG-Dim
äj-ku-j-ali ‘lad, young man’-Dim
```

The last example (äjkuj-ali ‘lad, young man’-Dim) is illustrative of also another type of morphology-conditioned disharmony, namely that found in multi-root compounds, where the backness harmony does not normally extend across the
original roots’ boundary. Thus, the compounds, regardless of their age and lexical frequency, preserve the original quality of the root vowels:

äjqu ‘lad, young man’ – (high frequency old compound: äj ‘young’; qu ‘man’)
ämpjom ‘wild cherry berry’ – (high frequency old compound (native botany):
ämp ‘dog’; jom ‘berry’)
äspaj ‘poplar’ – (low frequency old compound (native botany term):
äsp ‘dog’; jom ‘berry’)
ämpmoq ‘puppy’ – (high frequency old compound (native household term):
ämp ‘dog’; moq ‘baby’)
äŋkäŋy ‘Mo-Fa’ – (high frequency old compound (native kinship nomenclature):
äŋkä ‘mother’; jäŋ ‘patrilineage head’)
äsjaj ‘Ob-river Khanty’ – (high frequency old compound (native ethnonym):
äš ‘Ob river/ big river’; jaŋ ‘people’)
ilæjoqæ ‘back and forth’ – (high frequency old compound (native manner modifier):
ilæjoqæ jolilwæl ‘walks back and forth’)
köγput ‘big family kettle’ – (high frequency old compound (native household item) köγ ‘stone’ – put ‘kettle’)
qatluŋwä ‘ceiling’ – (high frequency old compound (native construction term) qat ‘house’ – luŋwä ‘top/roof’)

Backness VH does not apply in compounds even though other processes do.
Below, a glide /j/ is inserted between the V-final root and V-initial affix, which is an omnipresent word-internal anti-hiatus process).

kujämp ‘male-dog’ – (high frequency old compound: ku ‘male’; ämp ‘dog’)

Equally, VH does not apply across the root boundary in compounds, although the word-final voiceless stop is deleted before the word-initial stop.

kipŋɔr ‘twice, double’ – (kip(pä) ‘twice’ - ŋɔr ‘layer’)

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High token frequency of lexemes, native etymology, and some word-internal phonological processes indicate that the tokens are most likely stored, mentally represented as single individual lexical units. This increasing semantic and functional blending is very likely to be manifested in further formal, phonological blending of the compound members. There is still, however, certain opacity within the compounds regarding backness VH, which does not apply across the root edge.

1.2.4.1 Preverbs and Backness vowel harmony

<table>
<thead>
<tr>
<th>Preverbs</th>
<th>Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>ārəy ‘sideways, dispersed’</td>
<td>ārəy artta ‘to divide, to take apart’</td>
</tr>
<tr>
<td>nuq ‘upwards, surface’</td>
<td>nuq etältäntä ‘to come to surface, to sight’</td>
</tr>
<tr>
<td>toyi ‘away, outwards’</td>
<td>toyi jeritä ‘to cross out, to strike out’</td>
</tr>
<tr>
<td>jornam ‘straight’</td>
<td>jornam wertä ‘to straiten up, to make strait’</td>
</tr>
</tbody>
</table>

Similar to compounds above, preverbs are an integral part of the frame, mental representation of these high-frequency tokens would normally entail close formal blending of the components, however, most of the examples of high frequency preverb-verb collocations fail to manifest the application of backness VH in either direction: root → preverb or preverb → root.

1.2.5 Other possible Vowel Harmonization Processes

There is an evidence of other types of vowel assimilation processes in Eastern Khanty of both progressive and regressive directionality that are of a finer and more fluid character and which may take place against the background of VH.

These processes include:

- An extremely productive progressive affix V height assimilation to the root V, observed in affixes, where the target V in the affix harmonizes to the trigger V in the root.
joŋl-əm ‘hunting bow’-SG/1SG  sir-im ‘part’-1SG
jöŋ-əm ‘perch’- SG/1SG  ik-im ‘uncle’-1SG
jo-s-əm ‘walk’-PST2-1SG  wəl-s-im ‘live’-PST2-1SG
tʃök-əl-tä ‘to grieve’ (tʃök ‘grief’)  tʃüy-il-tä ‘to faint’ (tʃüy ‘fog’)
jal-əl-ta ‘to make wet’ (jaləŋ ‘wet’)  likr-il-tä ‘to make sledge (Caus.)’ (likər ‘sledge’)
ont-əl-ta ‘to discover’ (ont ‘interior’)  tin-il-ta ‘to sell’ (tin ‘cost, price’)

The counterexamples appear to be the instances of root-vowel alternation (Cf. 1.3 Vowel Alternation), where the affix-vowel harmonizes to the original, uninflected root-vowel, rather than to the derived root-vowel of the inflected form:

utf-əm ‘sheep’-SG/1SG  atʃ ‘sheep’
imp-əm ‘dog’-SG/1SG  ämp ‘dog’

Co-articulatory anticipatory (regressive) height (raising) and backness (fronting) assimilation of the word-initial root-V to the V’s in the following syllables is much more complex and less frequent, and is associated with other processes: stress reassignment, syllable constituency changes imposed by inflection/derivation (Cf. 1.3 Vowel Alternation):

al-ta ‘install’ – INF  →  ilt-i ‘Install!’ – Imper
kätl-tä ‘catch’ – INF  →  kitl-i ‘Catch!’ – Imper

1.3 Vowel alternation

One of the common phonological processes in Eastern Khanty is word-initial root-vowel alteration both in syllables without consonant onset and those with.

ärəyta ‘to sing’  –  irkä ‘Sing!’ – Imper.2SG
atʃ ‘sheep’  –  utfəm ‘my sheep (SG1SG)’
ayətta ‘to vomit’  –  uyəm ‘I vomited (PST0.1SG)’  –  iyə ‘Vomit!’ – Imper.2SG
tfətəm-ta ‘to pour’  –  tfətfəmim ‘I poured it (PST0.1SG/SG)’  –  tfətʃi ‘Pour!’ – Imper.2SG’
The most frequently attested root-initial vowel alterations are the following (VH allomorphoric pairs are considered within the same group):

/\u03b9/

- in the noun roots: atj ‘sheep’ ➔ utj-øm ‘sheep-1SG’
  - wan ‘shoulder’ ➔ wun-øm ‘shoulder-1SG’
  - ämp ‘dog’ ➔ imp-øm ‘dog-1SG’
  - läjøm ‘axe’ ➔ lìjøm ‘axe-1SG’

/i/

- in the verbal roots: arta ‘to divide’ ➔ irti ‘divide’-Imper.2SG
  - alta ‘to install’ ➔ ilti ‘Install!’-Imper.2SG
  - lalomta ‘to steal’ ➔ lilma ‘Steal!’-Imper; lulum-øm ‘stole’-1SG
  - läkta ‘to shoot’ ➔ lika ‘Shoot!’-Imper.2SG
  - kätltà ‘to catch’ ➔ kitli ‘Catch!’-Imper.2SG

Nominal inflection

- awøt ‘hair’ ➔ uwtøm ‘hair-1SG’
- wan ‘shoulder’ ➔ wunøm ‘shoulder-1SG’
- jayøm ‘wood’ ➔ juymøm ‘wood-1SG’
- qam ‘joining socket’ ➔ qumøm ‘joining socket-1SG’
- pam ‘grass’ ➔ puimøm ‘grass-1SG’
- ämp ‘dog’ ➔ impøm ‘dog-1SG’
- wänøm ‘face’ ➔ winøm ‘face-1SG’
- nàj ‘fire’ ➔ nijøm ‘fire-1SG’
- jàmøt ‘1. needle pad, 2. felt’ ➔ nimøm ‘needle pad, felt-1SG’
- qaløg ‘grandson’ ➔ qilyøm ‘grandson-1SG’

Verbal Inflection

/a/ ~ /u/ ~ /i/

- alta ‘extend’ ➔ ultìm ‘extend’-PP ➔ ilti ‘Extend!’-Imper.2SG
- wan’tà ‘gather’ ➔ wun’tøm ‘gather’-PP ➔ win’ta ‘Gather!’-Imper.2SG
- lalømta ‘stand’ ➔ lulumøm ‘stand’-PP ➔ lilma ‘Stand!’-Imper.2SG
- jànta ‘sew’ ➔ jintì ‘Sew!’-Imper.2SG
- jàyøta ‘dig through’ ➔ jìyìti ‘Dig through!’-Imper.2SG

[-altenat] jaýìmta ‘wave away’ ➔ jaýmøm ‘wave’-PP ➔ jaýimi ‘Wave!’-Imper.2SG

- wän’tä ‘cut’ ➔ win’tì ‘Cut!’-Imper.2SG
- ältä ‘carry’ ➔ ilti ‘Carry!’-Imper.2SG
- jän’tä ‘drink’ ➔ jintà ‘Drink!’-Imper.2SG
- kàrtä ‘sew together’ ➔ kirtì ‘Sew together!’-Imper.2SG
- kàsltä ‘settle’ ➔ kislì ‘Settle!’-Imper.2SG
kältä ‘grab’ ~ kitli ‘Grab!’-Imper.2SG
[[-altenat] äwrikintä ‘escape’ ~ äwrikintä ‘Escape!’-Imper.2SG
käritä ‘turn’ ~ käriti ‘Turn!’-Imper.2SG
käsliintä ‘marry’ ~ käsliinä ‘Marry!’-Imper.2SG
kätłøwtä ‘handle’ ~ kätłøwti ‘Handle!’-Imper.2SG

/u/ in the noun roots: oγ ‘head’ → uγ-əm ‘head’-1SG
oŋq ‘sulfur’ → uŋq-əm ‘sulfur’-1SG
kön ‘polar fox’ → kün’-əm ‘polar fox’-1SG

/o/ in the verbal roots: lotta ‘to buy’ → luti ‘Buy!’-Imper.2SG
ot’ta ‘to swim’ → ut’a ‘Swim!’-Imper.2SG
l’öyöttä ‘to swear’ → lüyätä ‘Swear!’-Imper.2SG

/o/ in the verbal roots: wosta ‘to jump’ → wəsə ‘Jump!’-Imper.2SG
qowəta ‘to put out’ → qəwəti ‘Put out!’

Imper.2SG

conversely: təyta ‘to throw’ → toyəm ‘threw’-PST0.1SG
exclusively with TAM inflection.

Nominal inflection
kön’ ‘polar fox’ ~ kün’əm ‘polar fox’ + SG/1SG
soγ ‘sturgeon’ ~ suγəm ‘sturgeon’ + SG/1SG
jom ‘wild cherry’ ~ juməm ‘wild cherry’ + SG/1SG
wont ‘forest’ ~ wunəm ‘forest’ + SG/1SG
[[-altenat] joγəl ‘hunting bow’ ~ joγəlm ‘hunting bow’ + 1SG
joγən ‘river’ ~ joγənəm ‘river’ + SG/1SG
joγ ‘perch’ ~ jōyəm ‘perch’ + SG/1SG
köṭγə ‘knife’ ~ köṭγəm ‘knife’ + SG/1SG

Verbal Inflection
/o/ ~ /u/ jolta ‘do shaman act’ ~ jula ‘Do shaman act!’-Imper.2SG
qojta ‘spawn eggs’ ~ quja ‘Spawn eggs!’-Imper.2SG
qolta ‘hear’ ~ quli ‘Hear!’-Imper.2SG
[[-altenat] joγəmta ‘hit’ ~ joγəm ‘Hit!’-Imper.2SG
qoływəta ‘spoil’ ~ qoləyə ‘Spoil!’-Imper.2SG
qomlaltə ‘rock’ ~ qomlalti ‘Rock!’-Imper.2SG
Vowel alternation appears to occur mainly as a result of noun/verb inflection/derivation. Apart from the traditionally valid historical motivation for the alternation in these inflected/derived forms, a phonological account of at least some of the above vowel alternations may be possible.

Some of the listed alternation patterns could be accounted for by the reassignment of stress in inflection, where stress change triggers vowel reduction in the unstressed syllable: /o/ → /ə/; /e/ → /ə/. This indeed can be the case especially in the case of verbal derivation, forming imperative from mono-, bi-syllabic verb stems with a stress shift to word-final in resultant imperative form:
wósta ‘to jump’ ~ wósá ‘Jump!’-Imper.2SG  
qówóta ‘to put out’ ~ qówótí ‘Put out!’-Imper.2SG  
émártā ‘scoop’ ~ émrí ‘Scoop!’-Imper.2SG  
jérítä ‘draw’ ~ jéríjí ‘Draw!’-Imper.2SG

The example jóję́rgómta ‘lie’ ~ jóję́rgómtí ‘Lie!’-Imper. may appear as a rare polysyllabic exclusion, however, the stress change is still valid rendering all pre-stress vowels reduced.

The absence of vowel alteration correlates to absence of stress shift in:

wétráltä ‘chase’ $\rightarrow$ wéträlti ‘Chase!’-Imper.2SG

A similar explanation can be proposed to account for the other types of alterations listed above. The overall general pattern appears to be that of raising of the stressed word-initial root vowel in the mono- and bi-syllabic stems in the presence of inflection (shift in the number of syllables), which are not accompanied by a stress shift to the last syllable. Thus, the most frequent /a/ $\rightarrow$/u/ alteration is most probable in mono- and bi-syllabic inflected nouns with a back root-vowel:

áwọt ‘hair’ ~ úwıtóm ‘hair’ + SG/1SG  
pam ‘grass’ ~ púmím ‘grass’ + SG/1SG

whereas the alteration /â/ $\rightarrow$/i/ is most probable in mono- and bi-syllabic inflection with a front root-vowel:

wàń’om ‘face’ ~ wìn’móm ‘face’ + SG/1SG  
nàj ‘fire’ ~ níjóm ‘fire’ + SG/1SG

It should be noted, that if inflection involves further syllable number increase, the root-vowel alteration does not occur:

qám ‘socket’ ~ qúmóm ‘socket’+SG/1SG, vs. qámłám ‘socket’+PL/1SG  
pam ‘grass’ ~ púmím ‘grass’+ SG/1SG, vs. pámłám ‘grass’+ PL/1SG
In verbal morphology, a similar general raising pattern applies. The alteration /a/ → /u/ is most probable in mono- and bi-syllabic derived verbal forms with both back and front root-vowel when word-stress shift does not take place:

ál-ta ‘extend’ ~ últ-im ‘extend’-PP
wán’-ta ‘gather’ ~ wúl’t-óm ‘gather’-PP
láłm-ta ‘stand’ ~ lúlm-óm ‘stand’-PP
áγñt-ta ‘to vomit’ ~ úγñ-ám ‘vomit’-PST0.1SG
tʃáʃm-ta ‘to pour’ ~ tʃúʃ-m ‘pour’-PST0.1SG

The alteration /a/ → /i/ is probable in mono- and bi-syllabic derived verbal forms with both back and front root-vowel when there is a shift in word-stress:

ál-ta ‘extend’ ~ iltí ‘Extend!’ -Imper.2SG
wán’-ta ‘gather’ ~ win’t-á ‘Gather!’-Imper.2SG
láłm-ta ‘stand’ ~ lilm-á ‘Stand!’-Imper.2SG
árény-tä ‘to sing’ ~ iɾk-á ‘Sing!’-Imper.2SG
áγñt-ta ‘to vomit’ ~ iγñ-á ‘Vomit!’-Imper.2SG
tʃáʃm-ta ‘to pour’ ~ tʃitʃ-i ‘Pour!’ -Imper.2SG

But the alternation does not occur in the polysyllabic forms jáγñmta ‘wave away’ ~ jáγñmi ‘Wave!’-Imper.2SG with no stress reassignment in the imperative.

The alteration of rounded root-vowel /o/ → /u/ is within the general raising pattern in mono- and bi-syllabic derived verbal stems with no stress shift:

jól-ta ‘do shaman act’ ~ júl-a ‘Do shaman act!’ –Imper.2SG
qój-ta ‘spawn eggs’ ~ qúj-a ‘Spawn eggs!’ –Imper.2SG
qól-ta ‘hear’ ~ qúl-i ‘Hear!’ –Imper.2SG

Whereas polysyllabic stems containing full vowels have low probability of manifesting this alteration pattern:

jóγñmta ‘hit’ ~ jóγñmi ‘Hit!’-Imper.2SG
qólyðälta ‘spoil’ ~ qólyðla ‘Spoil!’-Imper.2SG
qómlalta ‘rock’ ~ qómlalti ‘Rock!’-Imper.2SG

The alteration may appear in possession-inflected nominal stems:
kōn’ ‘polar fox’ ~ kūn’om ‘polar fox’ + SG/1SG
jom ‘wild cherry’ ~ jūm’om ‘wild cherry’ + SG/1SG
wōnt ‘forest’ ~ wūnt’om ‘forest’ + SG/1SG

and person/number-inflected verbal stems (which is consistent with common etymology of nominal possessive and verbal person/number inflection affixes):

jól-ta ‘do shaman act’ ~ jūl-l-om ‘do shaman act’-PRST-1SG
qój-ta ‘spawn eggs’ ~ qūj-wal-t ‘spawn eggs’-PRST-3SG
qól-ta ‘hear’ ~ qūl-om ‘hear’-PRST-1SG

but unlikely in polysyllabic stems:

jóγøn ‘river’ ~ jóγøn-am ‘river’+SG/1SG
kōṭʃøγ ‘knife’ ~ kōṭʃk-äm ‘knife’+SG/1SG

1.4 Vowel deletion

Reduced vowels frequently undergo deletion (complete reduction) in the non-first syllables as a result of inflection with vowel-initial affixes:

aŋø-ta ‘to untie’-INF → iŋti ‘Untie!’-Imper.2SG
ŋøms ‘mind’ → nəms-øŋ ‘clever (mind-Com)’
aløŋ ‘beginning’ → ulø-al ‘beginning’-SG/3SG
awøt ‘hair’ → awt-ali ‘hair’-Dim
äγøn ‘chin’ → iγn-äm ‘chin’-SG/1SG

/i/ can also be occasionally deleted in non-initial unstressed syllables:

iki ‘old man’, imi ‘old woman’ → imγøn ikkøn wəlγøn
‘old man and woman once lived’

Word-final vowels, predominantly reduced, are deleted before the vowel-initial words within the general articulatory reduction tendency:

äntø ‘no, not’ → änt əlawə ‘doesn’t sleep’
utø ‘shore-Lat’ → ut iməlta ‘to sit an a shore’
1.5 Consonants

1.5.1 Inventory

Table 11
Consonant Inventory

<table>
<thead>
<tr>
<th>Stops</th>
<th>Alveolar</th>
<th>Palatal</th>
<th>Velar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labial</td>
<td>Apical</td>
<td>Dorsal</td>
<td>Cacuminal</td>
</tr>
<tr>
<td>p</td>
<td>t</td>
<td>t’</td>
<td>k/q</td>
</tr>
<tr>
<td>t’</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>w</td>
<td>j</td>
<td></td>
<td></td>
</tr>
<tr>
<td>s</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>lateral</td>
<td>l</td>
<td>l’</td>
<td></td>
</tr>
<tr>
<td>nasal</td>
<td>m</td>
<td>n</td>
<td>n’</td>
</tr>
<tr>
<td>fricatives</td>
<td>j</td>
<td></td>
<td></td>
</tr>
<tr>
<td>nasal</td>
<td>m</td>
<td>n</td>
<td>n’</td>
</tr>
</tbody>
</table>

1.5.2 Phonemic Description

1.5.2.1 Labial

/p/ – bilabial stop, articulated predominantly as voiceless, most frequently word-initial, may occur in any vowel environment and preceded by sonorants:

<table>
<thead>
<tr>
<th>Word</th>
<th>Meaning</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>paj</td>
<td>‘aspen’</td>
<td>‘aspen’</td>
</tr>
<tr>
<td>pıtta</td>
<td>‘to get angry’</td>
<td>pıtta_</td>
</tr>
<tr>
<td>poyal</td>
<td>‘small harbor’</td>
<td>poyal</td>
</tr>
<tr>
<td>put</td>
<td>‘kettle’</td>
<td>put</td>
</tr>
<tr>
<td>pól</td>
<td>‘fish trap, dam’</td>
<td>póľ</td>
</tr>
<tr>
<td>lop</td>
<td>‘door’</td>
<td>lop</td>
</tr>
</tbody>
</table>

/w/ – voiced bilabial approximant, most frequent word-initially:

<table>
<thead>
<tr>
<th>Word</th>
<th>Meaning</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>wanta</td>
<td>‘to gather, take’</td>
<td>wánta</td>
</tr>
<tr>
<td>wifya</td>
<td>‘to press, strangle’</td>
<td>wifja</td>
</tr>
<tr>
<td>woyal</td>
<td>‘thin’</td>
<td>woyal</td>
</tr>
<tr>
<td>wuta</td>
<td>‘to see’</td>
<td>wuta</td>
</tr>
<tr>
<td>wolta</td>
<td>‘to live’</td>
<td>wolta</td>
</tr>
</tbody>
</table>

9 In upper Yugan river dialect.
lawtøq  ‘straight, smooth’  läwøt  ‘seven’
lørøw  ‘wide (fish-net cell)’  petiw  ‘crack’

/m/ – sonorant bilabial nasal stop, palatalized in front vowel environment:
mana  ‘to tell tales’  mānītā  ‘to bend’
min  ‘box’  min  ‘we (1Du)’
monqita  ‘to get mount on top’  möŋqäm  ‘snake’
multa  ‘to curse’  múl  ‘hat’
mørarm  ‘wet’  werø  ‘during, in course of’
nomta  ‘remember’  nim  ‘lower one’
pankam  ‘can-my (1SG)’  pānām  ‘cranberry-my (1SG)’

1.5.2.2 Alveolar
/t/ – voiceless stop, more apical in front vowel environment and more dorsal in back vowel environment:

tarøg  ‘stark’  tārøn  ‘evil spirit’
tiŋota  ‘to say’  tiŋtā  ‘to work out’
toŋørta  ‘to lock, close’  töŋoltā  ‘to insulate’
tur  ‘throat, glottis’  tūr  ‘crack, opening’
møŋøtā  ‘to shake, tremor’  tertā  ‘to bake, fry’
qot  ‘where’  kōt  ‘hand’
qøtl  ‘day’  kūtā  ‘surprise particle’

/s/ – voiceless fricative, more apical in front vowel environment and more dorsal in back vowel environment:
saj  ‘duck species’  sāj  ‘calm, concealed’
sir  ‘part, share’  sil  ‘near, close’
søy  ‘to lock, close’  söy  ‘plat, bunch’
suŋi  ‘water opening in ice’  suŋk  ‘sun’
søyi  ‘manner, way’  søγa  ‘fixture, belt’
søs  ‘duck species’  wes  ‘mammoth’
wosta  ‘to jump’  wāskitā  ‘to hunt ducks’

54
/n/ – sonorant nasal stop, persistently differentiated by speakers and previous studies into alveolar-dental /n/ and alveolar-palatal /ŋ/, though exact minimal pairs are not attested:

nawɔta  ‘to carry, take’  nāwsātā  ‘swing, wobble’
noŋtiw  ‘support, stand’  nōŋɔr  ‘saddle’
nur  ‘revenge’  nūr  ‘wood stick’
ńɔrlita  ‘to make a bridge’  nertā  ‘to moan’
qan  ‘duck species’  pānī  ‘and, again’
onntə  ‘inside’  pānkā  ‘to dry up’

Alveolar-palatal /ŋ/ is clearly associated with the back rounded vowel environment, i.e. is highly unlikely to occur in the environment of front or unrounded vowels:

ŋoŋta  ‘to peck’
ŋuŋquantə  ‘to peck each other’

/l/ – sonorant lateral approximant, similarly to /n/ differentiated into alveolar-dental /l/ and alveolar-palatal /ʎ/:

lawtəq  ‘smooth/even’  lāwtsātā  ‘to feed, make drink’
līta  ‘into the sleeve’  litā  ‘eat, drink’
lōy  ‘1. horse, 2. ring’  lōy  ‘MS+s, cousin’
lul  ‘mouth’  lūl  ‘front edge of overcoat’
lōwaš  ‘storage shack’  lewɔs  ‘conifer’
lōltə  ‘to get wet’  lāwɔltā  ‘to wait’

Alveolar-palatal /ʎ/ is markedly more associated with the back or back rounded vowel environment, i.e. it is clearly less frequent in the environment of front or front rounded vowels:

luent  ‘palm of hand’  īy  ‘type of arrow’
loŋy  ‘steep cliff, river bank’  lōk  ‘road, track’
lînt  ‘saliva’  lîp  ‘sparrow’
lumpl  ‘skis’  lũŋwɔ  ‘blanket’
1.5.2.3 Alveolar-palatal

/tʃ/ – voiceless alveolar-palatal affricate. Dictionary-based collocation frequencies shows co-articulatory preference of rounded to unrounded vowels (70%), low to high vowels (75%):

<table>
<thead>
<tr>
<th>Word</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>tʃatʃ</td>
<td>‘duck species’</td>
</tr>
<tr>
<td>tʃiː</td>
<td>‘hill, bump’</td>
</tr>
<tr>
<td>tʃoŋ</td>
<td>‘porridge’</td>
</tr>
<tr>
<td>tʃuŋiŋ</td>
<td>‘stormy’</td>
</tr>
<tr>
<td>tʃɔyim</td>
<td>‘dough’</td>
</tr>
</tbody>
</table>

/tʃæntʃ | ‘knee’ |
/tʃiːwʌ | ‘birch tree chips’ |
/tʃoʊk | ‘l. grieve, 2. torture’ |
/tʃuŋ | ‘fog’ |
/tʃæ | ‘vine of berries’ |

/ɾ/ – sonorant alveolar-palatal trill, articulated more apical/palatal in front vowel environment and more dorsal/velar in back vowel environment:

<table>
<thead>
<tr>
<th>Word</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>ɾayta</td>
<td>‘to drop, slide’</td>
</tr>
<tr>
<td>ɾiwi pələw</td>
<td>‘flop’</td>
</tr>
<tr>
<td>ɾoŋqintəw</td>
<td>‘bell’</td>
</tr>
<tr>
<td>ɾuqata</td>
<td>‘snarl’</td>
</tr>
<tr>
<td>ɾæpɔyta</td>
<td>‘to brush branches’</td>
</tr>
</tbody>
</table>

| ɾäγ | ‘garbage’ |
| ɾiŋkətæ | ‘to flit/flicker’ |
| ɾʊŋki | ‘sticky’ |

1.5.2.4 Palatal

/t’/ – voiceless stop, dorsal, extremely rare (loans) in the front rounded vowel environment:

<table>
<thead>
<tr>
<th>Word</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>t’ar</td>
<td>‘pile, stock’</td>
</tr>
<tr>
<td>t’iɣar</td>
<td>‘snout’</td>
</tr>
<tr>
<td>t’oɣa</td>
<td>‘to mix, mess hair’</td>
</tr>
<tr>
<td>t’u</td>
<td>‘that’</td>
</tr>
<tr>
<td>t’oŋa</td>
<td>‘to ring’</td>
</tr>
<tr>
<td>t’ut’i</td>
<td>‘breast’</td>
</tr>
<tr>
<td>want’</td>
<td>‘narrow’</td>
</tr>
</tbody>
</table>

| t’æppa | ‘already’ |
| t’ikəɾat | ‘this much’ |
| t’okat | ‘tar (Rus. [d’ogat])’ |
| telγ | ‘empty, hollow’ |
| wet’t’a | ‘to sue up, attach’ |
| köt’ | ‘badger’ |
/j/ – voiced palatal glide, has no apparent distributional restrictions:

<table>
<thead>
<tr>
<th>Word</th>
<th>Meaning</th>
<th>Word</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>janta</td>
<td>‘to sew’</td>
<td>jäntä</td>
<td>‘to drink wine’</td>
</tr>
<tr>
<td>jir</td>
<td>‘sacred gift/sacrifice’</td>
<td>jir</td>
<td>‘edge, rib’</td>
</tr>
<tr>
<td>jöy</td>
<td>‘roots to weave traps’</td>
<td>jöy</td>
<td>‘bass (fish)’</td>
</tr>
<tr>
<td>juγ</td>
<td>‘tree’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>jœθ</td>
<td>‘early’</td>
<td>jel</td>
<td>‘stream, creak’</td>
</tr>
<tr>
<td>saŋta</td>
<td>‘duck species’</td>
<td>sāj</td>
<td>‘calm, concealed’</td>
</tr>
<tr>
<td>qojta</td>
<td>‘to want’</td>
<td>köjtä</td>
<td>‘to fuss’</td>
</tr>
</tbody>
</table>

/-overlay lateral affricate typical for Yogan river dialect variety, and less

frequent in other Eastern Khanty dialects:

<table>
<thead>
<tr>
<th>Upper Yogan</th>
<th>Lower Yogan</th>
<th>Vasyugan, Vakh, Alexandrovo</th>
</tr>
</thead>
<tbody>
<tr>
<td>kuł</td>
<td>kut</td>
<td>qul</td>
</tr>
<tr>
<td>qoł</td>
<td>qot</td>
<td>qat</td>
</tr>
<tr>
<td>ɬålética</td>
<td>tältä</td>
<td>tältä</td>
</tr>
</tbody>
</table>

/n‘/ – dorsal-alveolar-palatal, in the front rounded vowel environment non-
contrastive with alveolar nasal /n/:

<table>
<thead>
<tr>
<th>Word</th>
<th>Meaning</th>
<th>Word</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>n’arγ</td>
<td>‘soft ligament’</td>
<td>n’ärγ</td>
<td>‘wet, not ready’</td>
</tr>
<tr>
<td>n’ir</td>
<td>‘winter shoes’</td>
<td>n’ir</td>
<td>‘cliff, cape’</td>
</tr>
<tr>
<td>n’oγi</td>
<td>‘meat’</td>
<td>n’oγɔr</td>
<td>‘murky stuff’</td>
</tr>
<tr>
<td>n’ulɔm</td>
<td>‘wound’</td>
<td>n’uljakɔ</td>
<td>‘sideways, diagonally’</td>
</tr>
<tr>
<td>n’alta</td>
<td>‘to skin, rip off’</td>
<td>n’eltä</td>
<td>‘to swallow’</td>
</tr>
<tr>
<td>min’</td>
<td>‘box’</td>
<td>kön’</td>
<td>‘polar fox’</td>
</tr>
<tr>
<td>ɭin’t’</td>
<td>‘saliva’</td>
<td>wän’t’</td>
<td>‘narrow’</td>
</tr>
</tbody>
</table>

/l’/ – sonorant dorsal approximant, rare word-initially, in the front vowel
environment homophonous with alveolar-dental /l/:

<table>
<thead>
<tr>
<th>Word</th>
<th>Meaning</th>
<th>Word</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>l’aqata</td>
<td>‘to scream’</td>
<td>l’äqtä</td>
<td>‘to shoot, through’</td>
</tr>
<tr>
<td>l’opɔqɔ</td>
<td>‘properly, well’</td>
<td>l’ikäntɔtä</td>
<td>‘to shoot, though (middle)’</td>
</tr>
<tr>
<td>l’ɔwqi</td>
<td>‘ticklish’</td>
<td>l’ewɔytä</td>
<td>‘to whisper’</td>
</tr>
<tr>
<td>lɔlta</td>
<td>‘to get wet’</td>
<td>lāyɔlta</td>
<td>‘to wait’</td>
</tr>
</tbody>
</table>
1.5.2.5 Velar

/k/ – voiceless cacuminal stop, in the front vowel environment typically articulated as velar /k/, in the back vowel environment – as uvular /q/ (1.2.3 Consonant assimilation by vowel harmony):

[qan’t’a] ‘to be sick/ unwell’  [kän’tä] ‘to loose weight, get thinner’
[qi’t’a] ‘to stay, remain’  [kittä] ‘to send, to hurry (trans.)’
[qol] ‘1.conifer tree, 2.skill/capacity’  [köl] ‘1.word, 2.language, 3.news’
[qolta] ‘to hear, sense, feel’  [kölitä] ‘to say too much, lie’
[quisa] ‘fish’  [kül] ‘a pustule/hole on deer skin’
[qol] ‘died (2SG)’  [keläŋ] ‘with dew, covered with dew’
[l’aqata] ‘to scream’  [l’äkäkätä] ‘to start shooting’
[n’alqat] ‘cartridge’  [niŋkäm] ‘worm (1SG)’
[n’alq] ‘joy’  [nipik] ‘book’

/q/ – has very low frequency in word-final and pre-C positions, as it normally undergoes the reduction in gesture either to /ɣ/ or /k/. /q/ does not occur followed by consonants other than another /q/.

/ɣ/ – voiced cacuminal fricative, articulated dorsal-velar in the front vowel environment, and more cacuminal-uvular in the back vowel environment, does not occur word-initially:

lągəlîta  ‘to dive, run around’  läŋɔltä  ‘to wait’
lųŋəŋ  ‘with cedar, of cedar’  liŋlä  ‘Wait!’ –Imper.2SG
lųŋ  ‘1. horse, 2. ring’  löŋ  ‘MS+s, cousin’
lulwųŋ  ‘horse furnace’  miŋäŋ  ‘bent, not straight’

/ɣ/ does not occur in pre-consonantal position. /ɣ/ undergoes frequent gesture reductive/assimilative processes to [q], [k], [w], however, based on widest distribution /ɣ/ may still be assumed as underlying:
äŋkäjàq-ŋon ‘grandfather’-Du qujämp-ŋon ‘male dog’-Du ik-ŋon ‘oldman’
juŋ / luŋ ‘3SG’ [juw / luw]

/ŋ/ – sonorant nasal, articulated as dorsal-velar in the front vowel environment, and as cacuminal-uvular in the back vowel environment, does not occur word-initially or as a syllable onset:

<table>
<thead>
<tr>
<th>pronunciation</th>
<th>meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>pəŋq</td>
<td>‘fly agarics’</td>
</tr>
<tr>
<td>qɨŋtə</td>
<td>‘Climb!’ –Imper.2SG</td>
</tr>
<tr>
<td>oŋqəŋ</td>
<td>‘with tar’</td>
</tr>
<tr>
<td>oŋst</td>
<td>‘hole in the tree trunk’</td>
</tr>
</tbody>
</table>

/ŋ/ undergoes occasional gesture reductive/assimilative processes to /n/, /k/.

1.5.3 Apical-Dorsal-Cacuminal differentiation


<table>
<thead>
<tr>
<th>pronunciation</th>
<th>meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>qul</td>
<td>‘fish’</td>
</tr>
<tr>
<td>lɔŋ</td>
<td>‘horse’</td>
</tr>
<tr>
<td>pɨŋ</td>
<td>‘mole’</td>
</tr>
<tr>
<td>qint</td>
<td>‘fish trap’</td>
</tr>
<tr>
<td>qul</td>
<td>‘fish’</td>
</tr>
<tr>
<td>lɔŋ</td>
<td>‘horse’</td>
</tr>
<tr>
<td>t’ut’i</td>
<td>‘breast’</td>
</tr>
<tr>
<td>təs</td>
<td>‘goods’</td>
</tr>
</tbody>
</table>

1.5.4 Processes in Consonants

Voiced obstruents in Eastern Khanty are not attested phonemically, except for the velar/uvular fricative /ɣ/. Occasionally, in some idiolects and idiophones,
obstruents may be phonetically voiced in the intervocalic position, or when preceding the sonorants. However, the data on systematicity of these voiced articulations is insufficient to consider it in the discussion of phonological patterns/processes. Phonemic geminates are infrequent, exemplified by occasional homorganic clusters attested frequently in morphological derivation/inflection, i.e. at the morphemic boundaries; and less often – morpheme internally (Cf. Gemination).

Some of the attested alterations are of a reductive nature; that is, resulting from reductions of articulatory gestures in continuous natural speech.

### 1.5.4.1 Consonant assimilation

Consonant assimilation in the Eastern Khanty is mainly of a co-articulatory, gesture reduction nature, triggered by the vowel or consonantal environment.

#### 1.5.4.1.1 Palatalization

The assimilation triggered by the vowel environment is predominantly palatalization. Most of the consonants enjoy allophonic variation in co-articulation with front and back vowels. Palatalization is likely in the environment of all the front vowels but especially of /i/ and /e/. Most susceptible to palatalization are the labials (/p/, /w/ and /m/) as well as velar /k/. To lesser extent uvular /ɣ/ and /ŋ/ also assimilate. Dorsal /t’, /j/, /n’, and /l’/ are always palatalized, and apical /n/, /t/, /s/ and /tʃ/ are less susceptible to palatalization:

<table>
<thead>
<tr>
<th>Consonant</th>
<th>Allophone</th>
<th>Palatalization</th>
</tr>
</thead>
<tbody>
<tr>
<td>/pirná/</td>
<td>‘cross’</td>
<td>/p’irná/</td>
</tr>
<tr>
<td>/winká/</td>
<td>‘wine’</td>
<td>/w’inká/</td>
</tr>
<tr>
<td>/miyiw/</td>
<td>‘knocker’</td>
<td>/m’yiw/</td>
</tr>
<tr>
<td>/kiriw/</td>
<td>‘big boat’</td>
<td>/k’iriw/</td>
</tr>
<tr>
<td>/köyi/</td>
<td>‘cuckoo’</td>
<td>/k’öyi/</td>
</tr>
<tr>
<td>/peltá/</td>
<td>‘cut’</td>
<td>/p’eltá/</td>
</tr>
<tr>
<td>/weli/</td>
<td>‘deer’</td>
<td>/w’eli/</td>
</tr>
<tr>
<td>/met/</td>
<td>‘fatigue’</td>
<td>/m’et/</td>
</tr>
<tr>
<td>/kej/</td>
<td>‘mole’</td>
<td>/k’ej/</td>
</tr>
<tr>
<td>/wint’änjí/</td>
<td>‘little finger’</td>
<td>/wint’änjí/</td>
</tr>
</tbody>
</table>
Palatalization-like place assimilation may also occur at co-articulation of the apical /t/, /l/ and /n/ and immediately preceding dorsal /t’/, /j/, /l’/ and /n’/:

\[
\begin{array}{ll}
\text{/län’tä/} & \text{[län’tä]} \quad \text{‘put up, stick in’ – INF} \\
\text{/l’al’n’ø/} & \text{[l’al’n’ø]} \quad \text{‘war’-Loc} \\
\text{/men’t/} & \text{[men’t]} \quad \text{‘daughter in law’ – Pl} \\
\text{/nej-løy/} & \text{[nejløy]} \quad \text{‘niece’ -Abess} \\
\text{/n’in’t’-ta/} & \text{[n’in’t’ta]} \quad \text{‘to rest’ – INF} \\
\end{array}
\]

1.5.4.1.2 Reductive assimilation

In the course of co-articulatory gesture contraction, the voiced bilabial approximant /w/ assimilates to voiceless bilabial stop following the nasal stop /m/:

\[
\begin{array}{ll}
\text{/wojøm-wøl/} & \text{[wojømpøl]} \quad \text{‘fall asleep’–PRST.3SG} \\
\text{/wurt-am-wøl/} & \text{[wurtømpøl]} \quad \text{‘push’-MMNT-PRST.3SG} \\
\end{array}
\]

Another co-articulatory gesture reduction process involves the voiced uvular approximant /ɣ/, which in the environment of voiceless stops /t/, /k/, /q/ and an affricate /tʃ/ yields a voiceless velar or uvular stop, /k/ or /q/:

\[
\begin{array}{ll}
\text{/pert-ɣøn/} & \text{[p’ertqøn]} \quad \text{‘board’-Du} \\
\text{/nipik-ɣøn/} & \text{[nipikkøn]} \quad \text{‘letter’-Du} \\
\text{/kotʃ-ɣøs-øm/} & \text{[k’utʃkosøm]} \quad \text{‘tune up’-PST3-1SG} \\
\text{/øγ-øøl/} & \text{[oqqøl]} \quad \text{‘head’-Du/PST1.3SG} \\
\end{array}
\]

The final type of assimilation resulting from co-articulatory gesture reduction presented here is frequently attested in Eastern Khanty; however, the probability of this process is less clear, since occurrence of this reduction is as probable as non-occurrence. If conditions are met, either the uvular fricative /ɣ/ or the stop may be produced:

i) as itself /ɣ/:

\[
\begin{array}{ll}
\text{/alitø-øøl-øøs/} & \text{‘overcome’-ITER-PST1.3SG} \quad \text{[alitøøøls]} \\
\text{/way-ø/} & \text{‘Ask!’-Imper} \quad \text{[wiø’ø]} \\
\text{/wøγ-øøm/} & \text{‘strength’-SG/1SG} \quad \text{[wøγøøm]} \\
\end{array}
\]
ii) as a voiceless velar stop /k/ or a voiceless uvular stop /q/:

\[
/\text{wänli-ɣəl-ktəsəm}/ \quad \text{‘stumble’-ITER-INCH-PST-1SG} \\
/\text{ray-a}/ \quad \text{‘Slide!’-Imper} \\
/\text{jɔy-ən}/ \quad \text{‘home’-Loc} \\
/\text{tʃəy-a}/ \quad \text{‘Kick!’-Imper} \\
/\text{θəy-a}/ \quad \text{‘Hammer in!’-Imper} \\
/\text{sesəy-əm}/ \quad \text{‘trap’-SG/1SG} \\
/\text{kɔtʃəy-əm}/ \quad \text{‘knife’-SG/1SG}
\]

\[
/\text{wa}_n\text{li-}_k/ \quad \text{‘stumble’-ITER-INCH-PST-1SG} \\
/\text{ra}_q/ \quad \text{‘Slide!’-Imper} \\
/\text{jɔ}_q/ \quad \text{‘home’-Loc} \\
/\text{tʃu}_q/ \quad \text{‘Hammer in!’-Imper} \\
/\text{s}_q/ \quad \text{‘trap’-SG/1SG} \\
/\text{k o}_q / \quad \text{‘knife’-SG/1SG}
\]

iii) occasionally as a voiced bilabial approximant /w/, most probable after high rounded /u/:

\[
\text{ju}_w/ \quad \text{‘3SG’} \\
\text{ju}_w-\text{o-}t̪ \quad \text{‘come’-PRST-3PL} \\
\text{jù}_w-\text{t} \quad \text{‘come out’-IMPP}
\]

\[
\text{ko_t}_w/ \quad \text{‘(s)he glows’} \\
\text{kit}_w/ \quad \text{‘Burp!’-Imper.2SG} \\
\text{kù}_w/ \quad \text{‘Burp!’-Imper.2SG}
\]

\[
/\text{ses}_q/ \quad \text{‘trap’-SG/1SG} \\
/\text{k o}_q / \quad \text{‘knife’-SG/1SG}
\]

1.5.4.2 Consonant metathesis

In co-articulation of stops with fricatives /tʃ/ and /t/ these gestures may metathesize. This pattern appears extremely productive with a high probability for new combinations, resulting in a new articulation. Fricative-final stems are frequently followed by the voiceless stop-initial affixes, which makes the probability of metathesis high:

\[
/\text{kopotwɔl}/ \quad \text{‘(s)he glows’} \quad /\text{kɔtʃ/} \quad \text{‘to glow’} \quad /\text{kotʃ ‘glow’- tɔ INF/} \\
/kʊtf}/ \quad \text{‘Burp!’-Imper.2SG} \quad /\text{kitʃ ‘to burp’- tɔ INF/}
\]

In the above, root-final fricative /tʃ/ metathesizes with the initial stop /t/ of the INF marker /-tɔ/. Upon metathesis /t/ may occasionally undergo deletion:

\[
/\text{kɔntʃ}/ \quad \text{‘Search!’-Imper.2SG} \quad /\text{kantʃ ‘to search’- tɔ INF/}
\]

Here, the root-final fricative and the affix-initial stop metathesize, and the stop is then deleted in co-articulation between the nasal and the fricative.
However, metathesis may be revealed in some of the derived/inflected forms, such as Imperative. Since the INF affix /-tä/ is not present, the stem-final C, to which the Imper.2SG V-affix (either /-ä/ or /-i/) is adjoined, appears to be the fricative /tʃ/, rather than a stop /t/. Compare: kittʃä ‘to burp’ and kitʃä ‘Burp!’-Imper.2SG. Further evidence can be observed in the inflected forms: kitʃä ‘to burp’ vs. kitʃ-l-äm ‘burp’-PRST-1SG; kitʃ-wäl ‘burp’-PRST.3SG.

1.5.4.3 Consonant epenthesis

There appears to be a strong tendency to avoid vowel hiatus resulting from lexical (compounds), derivational and inflectional combinations. Such hiatus is prevented by epenthesis of a consonant, most frequently a glide /j/: 

- imi ‘woman’ ~ imi-j-ä ‘to woman’ (‘woman’-Epenth-ILL)
- körmitä ‘to walk/step’ ~ körmi-j-ä ‘Walk/step!’ (‘walk/step’-Epenth-Imper.2SG)
- mätä ‘to give’ ~ mä-j-i ‘Give!’ (‘give’-Epenth-Imper.2SG)
- qälita ‘to dig’ ~ qälî-j-i ‘Dig!’ (‘dig’-Epenth-Imper.2SG)
- lölitä ‘to measure length’ ~ lölî-j-i ‘Measure!’ (‘measure’-Epenth-Imper.2SG)
- arita ‘to brake’ ~ ari-j-i ‘Brake!’ (‘brake’-Epenth-Imper.2SG)

Epenthesis of a voiced uvular fricative /ɣ/ between a V-final stem and a V-initial affix is much less frequent. It appears only to be attested in the cases where an imperative is derived by adding a single vowel imperative affix to coda-less monosyllabic verbal stem ending in a reduced vowel:

- jätä ‘to become’ ~ jə-ɣ-i ‘Become!’ (‘become’–Epenth-Imper.2SG)
- jötä ‘to come’ ~ jO-ɣ-i ‘Come!’ (‘come’–Epenth-Imper.2SG)
- litä ‘to eat’ ~ li-ɣ-A ‘Eat!’ (‘eat’–Epenth-Imper.2SG)

1.5.4.4 Consonant deletion

As mentioned above, most processes in Eastern Khanty are reductive in nature, manifested as articulatory gesture reduction to the point of deletion.
Consonant clusters at morpheme boundaries are particularly susceptible to this reduction. Morpheme-final stops preceding other morpheme-initial consonants are normally articulatorily reduced (lenited) and frequently deleted:

\[
\text{[alimta]} \quad \text{‘to overcome’ /alimt ‘overcome’ + ta INF/}
\]
\[
\text{[kä rityon]} \quad \text{‘two boats’ /kät ‘two’ + rit ‘boat’-Du/}
\]

The scope of this reductive process covers the morphemes and whole lexical units:

\[
\text{[jaq minsta wəγə pant]} \quad /wəγ-ət + pant/
\]
\[
\text{‘people put money(Pl) in the box’ ‘money’-Pl ‘put’}
\]

1.5.4.5 Consonant Clusters

There is a strong tendency in Eastern Khanty to avoid consonant clusters, however, there are a few cluster patterns that have a fairly high probability to occur.

Tri-consonantal clusters have very low token frequency and have strong restrictions on location, co-occurrence and order of articulatory gestures. Thus, word-initial clusters have the lowest/zero frequency, attested almost exclusively in some idiolectal/idiophonic articulations of some loanwords containing clusters, however, typically most of the word-initial loan clusters are repaired with an epenthetic vowel, most frequently the reduced central /ə/. A more detailed account of consonant clustering is given below in the section on syllable structure (Cf. Syllable Structure).

1.5.4.6 Gemination

Most frequently attested in nominal derivation, consonant gemination is often encountered in the /y/-final nominal stems by some vowel-initial affixation, e.g.: /-
Comitative, where the voiced uvular fricative /γ/ is replaced by the velar stop /k/ preceding the reduced /ə/ of the affix:

- woγ ‘power’ ~ wök-k-ən ‘powerful, strong’ /wọγ ‘power’ + ən Com/
- juy ‘tree’ ~ juk-k-ən ‘woody’ /juy ‘tree’ + ən Com/
- kọγ ‘stone’ ~ kık-k-ən ‘of stones’ /kọγ ‘stone’ + ən Com/

Similarly in number and possessive inflection:

- mọγ ‘earth’ ~ mọk-kəlọγ ‘land’-Du/1Pl
- juy ‘tree’ ~ juq-qən ‘tree’-Du
- jaγ ‘people’ ~ jaq-qəłam ‘people/family’-Du/1SG

Geminant consonants are fairly frequent in the nominal and verbal stems most probably due to historical etymology. There are no minimal pairs where consonant gemination or consonant length would be a lexically differentiating feature:

- ällä / āllä / òllö ‘big’
- waqqinta ‘to hit oneself on something’
- willä ‘as if, like’

Cases of consonant gemination across morphemic boundaries or as a result of reductive (vowel deletion) processes are also quite frequent:

- at-ta ‘order’ – INF
- ät-tä ‘heat up (metal)’ – INF
- al -ta ‘to extend/prolong-INF’
- al-l-am ‘extend’-PRST-1SG
- wät ‘ski binding’
- wät-tə-tä ‘to bind skis’-INF

1.5.4.7 Multiple processes

The phonological processes described above may apply in sequence or simultaneously. Since all of these are in essence conventionalized patterns of articulatory gesture reduction in the processes of on-line speech events, it is hardly feasible for the purposes of this chapter to make judgments as to the precedence of any one of the processes over another; thus, they are just noted below without
statements about application hierarchy. Thus, in the first two example lines, nominal possessive inflection (affix /-m/) manifests deletion of the unstressed reduced /ʊ/ in the noun-root; voiceless articulation of the root-final voiced uvular fricative /ɣ/ following the voiceless fricative; the possessive affix has a -VC form /-äm/ when following the C-final noun stem, where the V is co-articulated as a front vowel complying with the backness VH pattern, and following the roundedness harmonization pattern ([-äm/-im] – first line vs. [-äm]-second line) with the rounded/unrounded root-vowel:

| sesēɣ-äm     | ‘trap’-SG/1SG    | [s’eskām / s’eskim] |
| kōtʃēɣ-äm    | ‘knife’-SG/1SG   | [k’ōtʃkām]         |
| lŏkən - ā    | ‘Get out!’ –Imper.2SG | [lûyŋ’ā]         |

In the third example line, illustrated by an imperative form of the verbal stem lŏkən- ‘get out’, there are such phonological processes as root-vowel alternation /ö/-/ü/ associated with stress re-assignment, reduced unstressed /ʊ/ deletion, and voiced uvular fricative articulation /ɣ/ of the velar voiceless stop /k/ in the environment of a vowel /ö/ and a sonorant /n/.

1.5.5 A Case of Dialectal Variation

One of the outstanding differentiating features within Eastern Khanty is the /j/-/l/ variation between the dialect groups of Vasyugan / upper-middle Ob and dialects of lower-middle Ob / Vakh / Yugan and further north-west river dialects. The essence of the variation is the correlation of the palatal glide /j/-initial Vasyugan and upper-middle Ob lexical units to the lateral approximant /l/-initial units elsewhere. That is, the correlation is not a “blanket” type, but rather restricted to a set of environments, where the word-initial /j/ correlates to word-initial /l/:
### Table 12

/\i-j\l/ dialectal variation

<table>
<thead>
<tr>
<th>Vasyugan, upper-middle Ob</th>
<th>Lower-middle Ob, Vakh, Yugan</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Table 12</em></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### i) Changes

<table>
<thead>
<tr>
<th>Word</th>
<th>Word</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>jayọnta</td>
<td>layọnta</td>
<td>‘to row’</td>
</tr>
<tr>
<td>jalmita</td>
<td>lalmita</td>
<td>‘to steal’</td>
</tr>
<tr>
<td>jar</td>
<td>lar</td>
<td>‘meadow’</td>
</tr>
<tr>
<td>jänt</td>
<td>länt</td>
<td>‘cereal’</td>
</tr>
<tr>
<td>jeltä</td>
<td>leltä</td>
<td>‘to sit in a boat’</td>
</tr>
<tr>
<td>ikör</td>
<td>likör</td>
<td>‘sled’</td>
</tr>
<tr>
<td>jit</td>
<td>lit</td>
<td>‘sleeve’</td>
</tr>
<tr>
<td>jọy</td>
<td>lọy</td>
<td>‘ring’</td>
</tr>
<tr>
<td>jäl*</td>
<td>l’äl*</td>
<td>‘war’</td>
</tr>
</tbody>
</table>

#### ii) Changes

<table>
<thead>
<tr>
<th>Word</th>
<th>Word</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>lajọyta</td>
<td>‘to hang’</td>
<td></td>
</tr>
<tr>
<td>lawtọq</td>
<td>‘smooth, even’</td>
<td></td>
</tr>
<tr>
<td>läŋki</td>
<td>‘squirrel’</td>
<td></td>
</tr>
<tr>
<td>lewọt</td>
<td>‘soft, weak’</td>
<td></td>
</tr>
<tr>
<td>liyti</td>
<td>‘to look’</td>
<td></td>
</tr>
<tr>
<td>liwọs</td>
<td>‘wide, baggy’</td>
<td></td>
</tr>
<tr>
<td>lọy</td>
<td>‘horse’</td>
<td></td>
</tr>
<tr>
<td>l’äktä</td>
<td>‘to shoot’</td>
<td></td>
</tr>
</tbody>
</table>

#### iii) Changes

<table>
<thead>
<tr>
<th>Word</th>
<th>Word</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>lawọt</td>
<td>‘rain’</td>
<td></td>
</tr>
<tr>
<td>lewi</td>
<td>‘hook, latch’</td>
<td></td>
</tr>
<tr>
<td>liwọt</td>
<td>‘saliva’</td>
<td></td>
</tr>
<tr>
<td>łow</td>
<td>‘arrow’</td>
<td></td>
</tr>
<tr>
<td>łọy</td>
<td>‘cliff’</td>
<td></td>
</tr>
<tr>
<td>łök</td>
<td>‘road’</td>
<td></td>
</tr>
<tr>
<td>lũnti</td>
<td>‘robin’</td>
<td></td>
</tr>
</tbody>
</table>

As seen in i) and ii) the correlation covers both, the apical alveolar-dental lateral approximant /l/ and the dorsal-cacuminal palatal approximant /l'/, but excludes the apical alveolar-palatal /l/ seen in (iii).

The exact distributional properties for /j/ in Vasyugan / upper-middle Ob dialects in correlation to /l/ in lower-middle Ob /Vakh / Yugan are not immediately
apparent, as in many cases most of the phonetic environments in tokens where the correlation exists (i) and where it does not (ii), are shared. Moreover, there are a number of polysemous units, such as joʃ / loʃ, where the correlation exists in one sense (‘ring’) and does not in the other (‘horse’).

Leaving aside such issues as the origin and evolution of this /j/-/l/ correlation in Eastern Khanty, we can note, by way of general observation, a preference by /j/ in Vasyugan for a subsequent back vowel environment vs. front vowel environment preferred by /l/:

\[
\begin{align*}
\text{/l/} & \ellschaft \text{/j/} \\
\text{[a, ä, ø, e, i, o, ö, ü]} & \ HttpStatusCode \text{[a, ä, ø, e, i, o, ö, u]}
\end{align*}
\]

In some of the shared environments there is an apparent frequency discrepancy between palatal glide-initial and lateral approximant-initial tokens. That is, although /a/ occurs following both /j/ and /l/, it more frequently collocates with /j/ than with /l/. Similarly, /ɔ/ and /i/ are more frequent following the glide word-initially than the lateral approximant. Conversely, /ʊ/ and to an extent /ö/ are less frequent following the glide than they are following the lateral approximant.

The post-vocalic (CV_C) environment for /j/ is more diverse than that for /l/:

\[
\begin{align*}
\text{/l/} & \_classification \text{/j/} \\
\text{[s, j, m, w, l, η, k, γ, n’, q]} & \text{[s, j, m, w, l, l’, η, k, γ, n, r, t, t’, tʃ, q]}
\end{align*}
\]

Similarly to the immediate vocalic environment, the shared consonantal CV_C environment for /j/ and /l/ varies in terms of frequency, for example, /ŋ/ and /q/ have higher frequency in /j/-initial tokens than in /l/-initial, whereas /m/ and /k/ have the opposite tendency.

Overall, /j/ generally appears to have higher frequency of collocation with more retracted postvocalic CV_C environments: uvular, velar, and alveolar-palatal,
whereas /l/ has higher collocation frequency with more advanced CVC environments: bilabial, alveolar, and alveolar-palatal. In case of voiceless velar/uvular stops, /j/ collocates more with uvular [q], whereas /l/ collocates more frequently with velar [k]. Concurrently, there are frequent collocations of word-initial /j/ with postvocalic dorsal-cacuminal palatal approximant /l’/ and dorsal-cacuminal palatal voiceless stop /t’/ and lack of the collocations with word-initial /l/.

These CVC collocation features correlate appropriately with general preference of /j/-V[back] collocations vs. preference of /l/-V[front] collocates mentioned above. Viewed in complex, these features and collocation tendencies are generally in concert with other phonemic patterns of Eastern Khanty, backness vowel harmony and C[velar/uvular]/V[BACK] co-articulatory harmonization. Preference of collocation of the alveolar-dental lateral approximant with front steady states (front vowels) and apical-dorsal (advanced tongue-body) articulatory maxims (i.e. bilabial, dental, alveolar, alveolar-palatal, and velar (of velar-uvular set) consonants) is articulatorily well-justified, in its opposition to preferred co-articulation of the palatal glide with back steady states (back vowels) and dorsal-cacuminal (retracted tongue-body) articulatory maxims (alveolar-palatal, velar, and uvular consonants). The articulatory gesture framework proposed for the description of the Eastern Khanty vowel harmony, appears an equally revealing descriptive tool for this example of dialectal variation. This variation most likely represents a change in process, where such additional factors as lexical token frequency are certainly an important explanatory resource. However, at this stage, lexical frequency factors have to be left outside of the description due to a still limited corpus size of Eastern Khanty and thus unreliable token frequency data.
1.6 Syllable structure

In describing the syllable structure of the Eastern Khanty, the first important distinction that has to be made is between the initial and non-initial syllables. The validity of many phonotactic patterns and phonological processes appears to hinge upon this distinction. Thus, consonant clusters may have different probability word-initially, -medially and -finally. Syllable onset requirements also differ based on whether the syllable is word-initial or medial.

1.6.1 Syllable onset

Vowel initial syllables are attested exclusively word-initially, and even in this position V-initial lexical tokens are definitely less frequent, i.e. the average V-initial group is much less numerous and frequent than the average C-initial group. As a consequence of the next-to-zero probability of the word-medial onsetless syllable, vowel clusters are highly improbable. In cases of a potential cluster at the morphemic edge resulting from blending (compounding) of the two lexical units into one lexical-phonological unit (derivation/inflection), it is prevented either by the articulatory reduction/deletion of the word final vowel in the blend, or by consonant epenthesis:

<table>
<thead>
<tr>
<th>Example</th>
<th>Morpheme Breakdown</th>
</tr>
</thead>
<tbody>
<tr>
<td>ö.yä.li</td>
<td>‘daughter’-Dim</td>
</tr>
<tr>
<td>ö.yä.l.nä</td>
<td>‘step-daughter’</td>
</tr>
<tr>
<td>q’u.jät.tä</td>
<td>‘to marry (for female)’</td>
</tr>
<tr>
<td>q’u.jämp</td>
<td>‘he-dog’</td>
</tr>
<tr>
<td>u.rä.ca</td>
<td>‘old river bed’-ILL</td>
</tr>
<tr>
<td>ö.yi + äli</td>
<td>‘daughter’ + Dim</td>
</tr>
<tr>
<td>ö.yi + ælnä</td>
<td>‘daughter + (step)’</td>
</tr>
<tr>
<td>qu + että</td>
<td>‘man/male’ + ‘go out’</td>
</tr>
<tr>
<td>qu + ämp</td>
<td>‘man/male’ + ‘dog’</td>
</tr>
<tr>
<td>uri + a</td>
<td>‘old river bed’ + ILL</td>
</tr>
</tbody>
</table>

The minimal syllable in Eastern Khanty is thus a V, while the non-word-initial syllable is CV:

<table>
<thead>
<tr>
<th>Example</th>
<th>Morpheme Breakdown</th>
</tr>
</thead>
<tbody>
<tr>
<td>e.nä</td>
<td>‘thick’</td>
</tr>
<tr>
<td>e.lä</td>
<td>‘a while, temporary’</td>
</tr>
<tr>
<td>i.ta</td>
<td>‘Say!’ –Imper.2SG</td>
</tr>
<tr>
<td>a.mä.ta</td>
<td>‘to make sit, to sit’</td>
</tr>
</tbody>
</table>
As mentioned above, the V-initial words are markedly less frequent\(^{10}\) than C-initial, thus the basic syllable structure for Eastern Khanty may be amended to (C)V(C):

<table>
<thead>
<tr>
<th>Vowel</th>
<th>Phoneme</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>rit</td>
<td>'canoe'</td>
<td>tšat.tša</td>
</tr>
<tr>
<td>saj</td>
<td>'duck species'</td>
<td>täl.tä</td>
</tr>
</tbody>
</table>

### 1.6.2 Coda consonant clusters

Eastern Khanty, similarly to other Khanty dialects (Nikolaeva 1999), appears to avoid tautosyllabic consonant clusters (C-clusters), which translates into extremely low probability of consonant clusters at the morphemic edges, word-initial and word-final position. In cases when CC-clusters result from derivation/inflection, vowel epenthesis is employed robustly and productively. The epenthetic vowel is most frequently /ə/:

wəlt-ə-w ‘plain’ (wəlt ‘to plain’) mor-ə-qə-tə-s-ət ‘brake’-INCH-TR-PST2-PL
köt-ə-t ‘hands’ (Pl) (köt ‘hand’) rəγəmt-ə-γəl-əm ‘drop’-PST1-1SG

Not all the CC-clusters, however, are equally likely to undergo epenthesis. Those that have a sonorant, most probably homorganic, may be retained without epenthesis:

<table>
<thead>
<tr>
<th>Cluster</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>wəlt-ə-lə-əm ‘dash’-RFL-PST2SG</td>
<td></td>
</tr>
</tbody>
</table>

The word-medial CC-clusters not containing a sonorant that appear in the data are the clusters containing identical, geminant consonants:

<table>
<thead>
<tr>
<th>Cluster</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ət.tə] - atta</td>
<td>‘to order’</td>
</tr>
<tr>
<td>[ət.tə] - ättä</td>
<td>‘to heat up metal’</td>
</tr>
<tr>
<td>[waq.ən.tə] - waqqinta</td>
<td>‘to hit, smash (RFL)’</td>
</tr>
</tbody>
</table>

---

\(^{10}\) Dictionary-based frequency search shows an average normalized V-initial class being 60-70% smaller than an average normalized C-initial class.
Thus, the C[son]C-clusters are well attested and highly probable, whereas the CC-clusters have very low probability. This holds only for the non word-initial syllables though, as in word-initial position any CC-clusters are highly improbable, and those few attested are loans.

Tri-consonantal, CCC-clusters are attested, albeit with quite a low frequency, and they generally appear to follow the CC-cluster pattern, that is: i) do not occur word-initially, but -medially as a result of derivation/inflection; ii) normally undergo epenthesis; iii) may not require epenthesis if they contain a homorganic sonorant(s); iv) at the syllabic level the CCC-clusters are interrupted by a syllable break, with the CC-clusters are in the coda and single C in the onset:

\[
\begin{align*}
\text{äm.p.n’ä.lom} & \quad \text{‘field leak (dog-tongue)’} \\
\text{wan’t’qoy} & \quad \text{‘elongated (narrow-long)’} \\
\text{wänk.min} & \quad \text{‘in a crawling manner (-Conv.)’}
\end{align*}
\]

\[
\begin{align*}
\text{jirt.mōta} & \quad \text{‘to get gloomy (weather)’} \\
\text{jō.nəlt.tā} & \quad \text{‘to let/make knit (Caus.)’} \\
\text{jaŋk.wä.səy} & \quad \text{‘duck species (water-duck)’}
\end{align*}
\]

In attested tokens containing a CCC-cluster requiring epenthesis, the epenthetic vowel appears to occur in a pattern that is sensitive to the morpheme boundaries, that is between a stem-final CC-cluster and a C-initial (or CC-initial) derivational/inflection affix, but not morpheme-internally, thus neglecting syllable boundaries:

\[
\begin{align*}
[\text{kə.səl.tə.lin}] & \quad \text{kəs-ə-ltə-l-in} & \quad \text{‘run’-ə-CAUS-PRST-SG.2SG} \\
[\text{qal.təw.təl.min}] & \quad \text{qalt-ə-wtə-l-min} & \quad \text{‘stay-night’-ə-CAUS-PRST-1Du} \\
[\text{təl.ɣəm.əs}] & \quad \text{təly-ə-mt-əs} & \quad \text{‘winter’-ə-MMNT-ə-PST2.3SG}
\end{align*}
\]

Word finally, the CCC-clusters appear in on-line natural speech events, when in a general articulatory reduction tendency of word-final unstressed syllables, word-final vowels, particularly reduced /ə/ and /ø/, appear under-articulated, further reduced, devoiced, or deleted:

\[
\begin{align*}
\text{tələy-tə-ɣəl-s-ətə} & \quad \text{‘scream-TR-MMNT-PST1-SG3SG’} & \quad - [\text{tə.ləy.tə.ɣəl(ə)s(ə)l(ə)}] \\
\text{kəs-wəət-əɣəs-ət} & \quad \text{‘run-ITER-PST3-3Pl’} & \quad - [\text{kəs.wəət.əɣəs(ə)t}] \\
\end{align*}
\]
These articulation instances thus manifest not phonemic, but rather phonetic, production variation resulting in extrametrical CCC-cluster tokens.

The basic syllable template thus appears to be (C)V(C) for word-initial and (CC)V(C) for word-medial and -final syllables.

1.6.3 Basic syllable template

Based on the above, the schematic representation of Eastern Khanty basic syllable template for word-initial syllable may have the following formalism: (C)V(CC)

\[
\begin{align*}
\text{onset} & \quad \text{nucleus} \quad \text{coda} \\
C & \quad V & \left[ \begin{array}{c}
\text{place} \\
\text{son} & \text{[-son]} \\
\text{[-son]} & \text{son}
\end{array} \right]
\end{align*}
\]

- for word-medial and -final syllables: C(C)V(CC)

\[
\begin{align*}
\text{onset} & \quad \text{nucleus} \quad \text{coda} \\
C(C) & \quad V & \left[ \begin{array}{c}
\text{place} \\
\text{son} & \text{[-son]} \\
\text{[-son]} & \text{son}
\end{array} \right]
\end{align*}
\]

1.7 Stress

Stress in Eastern Khanty is dynamic. In bi- or poly-syllabic words, the stress is often assigned to the word-initial syllable. This pattern, however, may interact with the quality of the vowel, syllable quality, consonant clustering, resulting in different stress assignments (Schiefer 1975; Honti 1995). Typically, if the first and the second syllables are comparable in vowel quality (all full, or all reduced) and syllable quality (all open, or all closed), stress appears on the word-initial syllable.
The word-stress may also occasionally fall on the second syllable. This typically occurs in the following cases:

i) when in bi-syllabic words the first syllable has a reduced vowel, or when the first syllable is closed whereas the second syllable is open or/and has a full vowel:

- mə.nˈa ‘Go!’ Imper.2SG
- jo.ɣˈa ‘Come!’ Imper.2SG
- lə.ŋˈas ‘get/come inside’-PST2.3SG
- ko.ɪˈas ‘be over’-PST2.3SG

ii) when in polysyllabic words the first syllable is closed and/or contains a reduced vowel, and where the second syllable is closed containing a full vowel:

- pə.ɤˈat ‘height’
- kə.ɣˈat ‘length’

It is typical for poly-syllabic words to have multiple stresses, with one normally being stronger than the other. In these cases, the stress is rarely on the adjacent syllables (first and second); rather, they are separated by at least one or two syllables (first and third, or second and fourth). The primary stress is most frequently the first in the word, that is word-initially (first, second syllable), whereas the secondary stress, or at least of an equal quantitative feature, follows the primary one, that is towards the word end (third, fourth, etc. syllable).

In tri-syllabic words, stress appears to fluctuate between the first and the second syllable and no decisive pattern appears to be clear (Itkonen 1955; Schiefer 1975). It appears that for these words, the stress information is less predictable and is most probably stored with each specific lexical unit or groups of units associated by analogous relation:

a) stress falls on word-initial syllable when all the vowels in the word are comparable in their quantitative status (reduced), or when the first-syllable vowel is full and the second-syllable vowel reduced:

- wə.ɿ.wəs ‘life’
- jə.ɤ.ɿə ‘with many branches’
- ˈa.ɿ.ɿ.ɿ.ta ‘to curse’
- wˈə.əs.kil.ta ‘to hunt ducks’
b) stress falls on the second syllable when the first-syllable vowel is reduced, whereas the second-syllable vowel is full:

\[l\ddot{a}.k\acute{a}.k\ddot{o}.t\ddot{a} \quad \text{‘to start beating’} \quad p\ddot{e}.k\acute{i} \quad \text{‘doll’} \]
\[n\ddot{a}.r.t\acute{a} \quad \text{‘to pull’} \quad m\ddot{a}.t\acute{a}.l\acute{i} \quad \text{‘something’} \]

\[l\acute{k} \ddot{a}.\acute{k} \ddot{o}.t\acute{a} \quad \text{‘to start beating’} \quad p\acute{k} \ddot{a} \ddot{t} \quad \text{‘doll’} \]
\[n\acute{a}.r.t\acute{a} \quad \text{‘to pull’} \quad m\acute{a}.t\acute{a}.l\acute{i} \quad \text{‘something’} \]

\[n\acute{e}.k\acute{a}.k\ddot{o}.t\ddot{a} \quad \text{‘to start beating’} \quad p\ddot{e}.k\acute{i} \quad \text{‘doll’} \]
\[n\acute{a}.r.t\acute{a} \quad \text{‘to pull’} \quad m\ddot{a}.t\acute{a}.l\acute{i} \quad \text{‘something’} \]

\[l\acute{k} \ddot{a}.\acute{k} \ddot{o}.t\acute{a} \quad \text{‘to start beating’} \quad p\acute{k} \ddot{a} \ddot{t} \quad \text{‘doll’} \]
\[n\acute{a}.r.t\acute{a} \quad \text{‘to pull’} \quad m\acute{a}.t\acute{a}.l\acute{i} \quad \text{‘something’} \]

\[l\acute{k} \ddot{a}.\acute{k} \ddot{o}.t\acute{a} \quad \text{‘to start beating’} \quad p\ddot{e}.k\acute{i} \quad \text{‘doll’} \]
\[n\ddot{a}.r.t\acute{a} \quad \text{‘to pull’} \quad m\ddot{a}.t\acute{a}.l\acute{i} \quad \text{‘something’} \]

\[n\acute{e}.k\acute{a}.k\ddot{o}.t\ddot{a} \quad \text{‘to start beating’} \quad p\ddot{e}.k\acute{i} \quad \text{‘doll’} \]
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\[l\acute{k} \ddot{a}.\acute{k} \ddot{o}.t\acute{a} \quad \text{‘to start beating’} \quad p\ddot{e}.k\acute{i} \quad \text{‘doll’} \]
\[n\ddot{a}.r.t\acute{a} \quad \text{‘to pull’} \quad m\ddot{a}.t\acute{a}.l\acute{i} \quad \text{‘something’} \]

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\[n\ddot{a}.r.t\acute{a} \quad \text{‘to pull’} \quad m\ddot{a}.t\acute{a}.l\acute{i} \quad \text{‘something’} \]

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\[n\ddot{a}.r.t\acute{a} \quad \text{‘to pull’} \quad m\ddot{a}.t\acute{a}.l\acute{i} \quad \text{‘something’} \]

\[l\acute{k} \ddot{a}.\acute{k} \ddot{o}.t\acute{a} \quad \text{‘to start beating’} \quad p\ddot{e}.k\acute{i} \quad \text{‘doll’} \]
\[n\ddot{a}.r.t\acute{a} \quad \text{‘to pull’} \quad m\ddot{a}.t\acute{a}.l\acute{i} \quad \text{‘something’} \]

\[l\acute{k} \ddot{a}.\acute{k} \ddot{o}.t\acute{a} \quad \text{‘to start beating’} \quad p\ddot{e}.k\acute{i} \quad \text{‘doll’} \]
\[n\ddot{a}.r.t\acute{a} \quad \text{‘to pull’} \quad m\ddot{a}.t\acute{a}.l\acute{i} \quad \text{‘something’} \]

\[l\acute{k} \ddot{a}.\acute{k} \ddot{o}.t\acute{a} \quad \text{‘to start beating’} \quad p\ddot{e}.k\acute{i} \quad \text{‘doll’} \]
\[n\ddot{a}.r.t\acute{a} \quad \text{‘to pull’} \quad m\ddot{a}.t\acute{a}.l\acute{i} \quad \text{‘something’} \]

\[l\acute{k} \ddot{a}.\acute{k} \ddot{o}.t\acute{a} \quad \text{‘to start beating’} \quad p\ddot{e}.k\acute{i} \quad \text{‘doll’} \]
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\[l\acute{k} \ddot{a}.\acute{k} \ddot{o}.t\acute{a} \quad \text{‘to start beating’} \quad p\ddot{e}.k\acute{i} \quad \text{‘doll’} \]
\[n\ddot{a}.r.t\acute{a} \quad \text{‘to pull’} \quad m\ddot{a}.t\acute{a}.l\acute{i} \quad \text{‘something’} \]

\[l\acute{k} \ddot{a}.\acute{k} \ddot{o}.t\acute{a} \quad \text{‘to start beating’} \quad p\ddot{e}.k\acute{i} \quad \text{‘doll’} \]
\[n\ddot{a}.r.t\acute{a} \quad \text{‘to pull’} \quad m\ddot{a}.t\acute{a}.l\acute{i} \quad \text{‘something’} \]

\[l\acute{k} \ddot{a}.\acute{k} \ddot{o}.t\acute{a} \quad \text{‘to start beating’} \quad p\ddot{e}.k\acute{i} \quad \text{‘doll’} \]
\[n\ddot{a}.r.t\acute{a} \quad \text{‘to pull’} \quad m\ddot{a}.t\acute{a}.l\acute{i} \quad \text{‘something’} \]

\[l\acute{k} \ddot{a}.\acute{k} \ddot{o}.t\acute{a} \quad \text{‘to start beating’} \quad p\ddot{e}.k\acute{i} \quad \text{‘doll’} \]
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The above has to be treated as a prevailing tendency in stress patterns, or as a probabilistic treatment of stress patterns, which does not preclude some exceptions, since there are occasional tokens, with stress falling on third, fourth syllables in abovementioned conditions:

\[p\ddot{u}.k\acute{i}.n\ddot{i}.\ddot{n}o.m \quad \text{‘hare’-SG/1SG} \quad m\acute{o}.\ddot{a}.n.t\ddot{a}.l\ddot{a}.t\ddot{i} \quad \text{‘why, what for’} \]
\[s\ddot{o}.n\ddot{i}.n\ddot{i}.\ddot{n}o.t \quad \text{‘bark container’-PL} \quad w\acute{o}.j\ddot{a}.l\ddot{j}.\ddot{a}m \quad \text{‘sleep’-IMPRF-PS.1SG} \]

It has to be noted that the stress in Eastern Khanty is not phonologically relevant in the sense that there are no minimal pairs where the word-stress is a distinctive feature either lexically or grammatically. However, the information about the word-stress may prove important in the analysis of some of the
alteration, reduction processes such as vowel-alteration in the word-initial syllable, vowel and consonant reduction/deletion.

It can also be seen that the examples of the word-stress assignment variation can be grouped based on their formal/functional/semantic analogy. That is, there can be a fairly strong stress assignment prediction based on the similarity of phonological and grammatical/semantic features of the tokens. Thus, the similarity of the vowel features (first V reduced), syllable features (first syllable closed, second open) and compatibility of lexical distribution (frequency) of məná ‘Go!’-Imper.2SG and jəyá ‘Come!’-Imper.2SG, as well as of ləŋás ‘get/come inside’-PST2.3SG and koláš ‘be over’-PST2.3SG, prompt high probability of the similar stress assignment in all of the derivations and inflected forms of these tokens, as well as the other tokens sharing the above features with them. And indeed ləŋáwəl ‘get/come inside’-PRST.3SG and koláwəl ‘be over’-PRST.3SG have similar word-stress, as well as other tokens in analogous grammatical/semantic forms: məná ‘Go!’-Imper.2SG vs. wəlá ‘Live!’-Imper.2SG, wərə ‘Do/make!’-Imper.2SG, etc.
WORD CLASSES. MORPHOLOGY.

Introduction

Looking at the small sample of the naturally occurring Eastern Khanty language data below, it is possible to identify some speech string constituents (words) that could be grouped, based on a consistent set of criteria, into classes.

a. nu ej  to'y'oj-na to'y'oj-na men- s- ñw qul-kan-tʃa-tati  illati
   OK one spring-Loc spring- Loc go-PST2-1PL fish-find-INF-Sup down
   'Once in the spring..., in the spring we went down to fish'

b. 'arinaw- a  m'en- s- ñw
   faraway-ILL go-PST2-1Pl
   'Far away we went'

c. k'ollem  q'otl kam muy'uj-na qul-t'atî
   Num 3 day IndPrn perhaps-Loc fish-Sup
   'For three days approximately. To fish'

d. kantʃɔ-qlu-s-ñw pelki- welk-átʃ ej qotl  j'ɔyр-a tʃ'ayinti- s- ñw
   find-fish-PST2-1Pl half- get-IMPP one day home-ILL prepare- PST2- 1Pl
   'We were half-done fishing one day preparing to be headed home'

e. nu jɔm-ak'i  k'all-ñw
   ok well-Pred spend night- 1Pl
   'OK, so we stay for one more night'

f. mà sart w'el-s-ñm  ʃillà
   1SG pike kill-PST2-1SG big
   'I caught a pike fish, big one'

g. terka-s-im iwes-nɔ
   fry-PST2-1SG/SG skewer- Loc
   '(I) fried (it) on skewers'
h. mā āt’-im wajəɣ liɣəlt
1SG brother animal aim.PST0.3SG
‘My brother aimed at an animal’

i. wajəɣ un-ə nok tʃutʃ panə nunəɣəɣ
animal head-3SG up turn.PST0.3SG and run.PST0.3SG
‘The animal turned up his head and ran away’

The criteria that can be used for the differentiation and class assignment of words may include semantic and grammatical/syntactic features of the constituents such as: complexity of meaning; temporal stability; compactness; content/function, or in other words, lexical words vis-à-vis grammatical morphemes; etc. These criteria more often than not exhibit consistent correlation or implicational association among themselves, and imply gradience, lack of feature discreetness and of discreetness in category assignment.

**Word-class membership**

For the purposes of this description, class-assignment will be based on a constellation of criteria in their interaction, with a prototype principle of a continuum between central and peripheral members being at the core of the categorization. These operational criteria will be blocked in groups of features (Givon 2001) such as:

- lexical vs. grammatical

Differentiation will be made between morphemes expressing and coding culturally shared and relatively temporary stable concepts and real-world experiences of the speakers vs. morphemes expressing and coding new concepts and experiences in the process of derivation from the existing lexical morphemes, or expressing the relations between the lexical morphemes in speech events, correlating to relations between concepts and affairs in the world. The features to
be utilized here will include: free/bound, phonological size, stress, semantic complexity, class size and membership.

- morphological distribution features

  This differentiation refers to comparative co-distribution or combinatorial probabilities between prototypical class members and various grammatical morphemes, such as: most typical (frequent) collocations with types of affixes and/or bound morphemes (clitics).

- syntactic distribution features

  Differentiation is made based on the prototypical (frequent) syntactic positions and co-positions in parts of discourse, clauses.

- semantic features

  Main differentiating features refer to concepts expressed by the tokens by which speakers categorize and classify the real world experience such as: temporal stability of the prototypical features of the concepts and events, semantic complexity of the prototype, concreteness of the features of the prototype, relative semantic compactness of the prototypical members within the class.

2. Nouns

Referring back to the example of the Eastern Khanty narrative above, one class of words that is universally the first and most easily set apart based on criteria of class membership, is nouns. Thus, such words as: toγi ‘spring’, qotl ‘day’, qul ‘fish’, sart ‘pike-fish’, wajɔγ ‘animal’, oγ ‘head’, ät’im ‘brother’ may be assigned to one word-class. These words appear to belong to the group of free lexical morphemes of rather large phonological size, i.e. compared to such word-
classes as postpositions and adverbs, nouns are more often polysyllabic, and they frequently carry derivational and inflectional morphemes. These words are also most frequently under stress in the clause, though not the only stressed clause constituents, as verbs may also carry clause stress.

2.1 Lexical Nouns

Words like toγι ‘spring’, qotl ‘day’, qul ‘fish’, sart ‘pike-fish’, wajɔγ ‘animal’, oγ ‘head’, iweg ‘skewer’ and ât’im ‘brother’ identified above as free lexical noun. These nouns demonstrate group similarities in their morphological make up, types of derivational and inflectional morphology that they are used with, etc. They are also similar semantically, because they share features that are prominent in this class.

2.1.1 Nominal grammar & syntax

Among the syntactic characteristics defining Eastern Khanty nouns, the one that is based on grammatical roles of nouns or noun phrases in the clause, is the principle one. In the short narrative discourse excerpt at the onset of this chapter, the most typical grammatical relations of nouns are:

- **Subject:**
  0. mä ât-im wajɔγ liγl-t
     1SG brother-1SG animal aim-PST0.3SG
     ‘My brother aimed at an animal’

- **Direct Object:**
  1. mä sart w’el-s-əm ëllä
     1SG pike kill-PST2-1SG big
     'I caught a pike fish, big one'

- **Indirect Object:**
  2. terka-s-im iweg-no
     fry-PST2-1SG/SG skewer-Loc
     '(I) fried (it) on skewers'
Nominal predicate:

3. məɣi  min’-nə-ki?
   which box-Loc-PRED.
   ‘In which box is it?’

4. tim  min’-nə-ki.
   DEM box-Loc-PRED.
   ‘In this box.’

These grammatical roles are formally expressed by a complex Eastern Khanty morphology: case, number, and possession. In many cases, constituent order may play differentiating role in defining the exact relations of the referents in the clause, particularly in light of absence of Acc. and Gen. in of nominal modifiers:

ämp qat ‘dog house’
way put ‘metal pot/kettle’
t’u qotl ikisä-ɣən qoləm kətəŋ wel-s-əɣən wajəŋ kät ämp-ɣən wel-s-ət
DET day man-Du three swan kill-PST2-3Du animal 2 dog-Du kill-PST2-3Sg
‘That day grandfather and grandchild killed three swans’

As seen in the above (more cf.: 9. Noun Phrase), in the noun phrase, the head-noun is most frequently final in the phrase, thus making all the modifiers preceding the head:

Table 1
Head-Modifier Order of the NP

<table>
<thead>
<tr>
<th>Modifier</th>
<th>Head</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>Noun – Possessor Modifier</td>
<td>ämp</td>
<td>qat</td>
</tr>
<tr>
<td>Noun – Modifier</td>
<td>way</td>
<td>put</td>
</tr>
<tr>
<td>DET – Modifier</td>
<td>tom</td>
<td>way</td>
</tr>
<tr>
<td>Numerical – Modifier</td>
<td>qoləm</td>
<td>kətəŋ</td>
</tr>
<tr>
<td>Quantifier – Modifier</td>
<td>ärki</td>
<td>qul</td>
</tr>
</tbody>
</table>

‘dog house’
‘metal pot/kettle’
‘that money’
‘three swans’
‘a lot of fish’
2.1.2 Nominal morphology

In discussion of Eastern Khanty nominal morphology, we will differentiate between the two types of morphological relationships: derivation and inflection. This differentiation is by far not dichotomously discrete and is rather understood in the sense of prototype, which allows certain instances to obtain at different loci along the continuum between the prototypes. Derivation and derivational morphology will be understood as pertaining to the relationship between lexical units within or across word-classes, whereas inflection and inflectional morphology pertain to the relationship between formal representations of the lexical unit in linear speech.

2.1.2.1 Derivation

In derivation, certain lexical units will be said to derive from other lexical units, sometimes manifesting a change in word-class affiliation. Such derivation will always manifest novel/altered semantics of a derived lexical unit, as compared to the base, with reference to a derivational meaning associated with a particular conventionalized morphological process (derivational pattern). For example, the prototypical derivational meaning ‘collective; pertaining to the base form and/or quality’ is associated with the denominal (occasionally with deverbal) noun derivation with the affix -s(ä) / -(a)s / -(ə)s: əsät (əs-sä-t) ‘mother and her people (children/daughters/family)’, änisät (äni-sä-t) ‘sisters or (many of sister’s kind)’; kiläs ‘tent’ (kilta ‘to assemble, cover, build a make shift shelter’). This is an instance of derivation, as it implies considerable semantic shift/innovation, less semantic regularity, high relevance to the base lexical unit semantics, more specific pragmatic context, possible word-class alteration. On the other hand, other instances of derivation, such as derivational meaning ‘Diminutive’ associated with
denominal noun derivation with the affix -äli (ämp ‘dog’ – ämpäli ‘doggy’; pay ‘son’ – payal ‘sonny’), is less of a prototypical derivation, further along the continuum towards inflection, as it represents less of a semantic shift, i.e. less of a novel concept, and the same word-class, although it still requires a fairly specific pragmatic context.

Describing more specifically the Eastern Khanty nominal derivation patterns, two classes of derivational patterns are observed: derivation by affixation and derivation by compounding. The former derivation pattern is a more frequent and typical in Eastern Khanty, whereas the later could be seen as more peripheral.

2.1.2.1.1 Affixation

With rare exceptions, Khanty uses suffixes for derivation. In earlier descriptions of the Eastern Khanty nominal derivational suffixes (Tereskin 1961; Gulya 1966; Nikolaeva 1999), there are reported distributional patterns, i.e. particular suffixes associate with a certain base word-class (denominal noun derivational suffix, deverbal, etc.). These distributional patterns are, perhaps, to be treated with a degree of flexibility, or rather treated probabilistically. Thus, in our data, noun derivation suffixes do have higher probability of occurring with a base of a certain word-class; however, counterexamples are also attested, sometimes of considerable productivity. We therefore will not emphasize this distributional differentiation, but rather mention prototypical (higher probability) of base word-class – suffix collocations.

Among the most productive noun derivation affixes are:

• /-s(ä) / -(a)s / -(ə)s/ mentioned above, that can most optimally be described as pertaining to the quality(ies) denoted by the base lexical unit, prototypically a noun, with a certain collective sense:
jóysát ‘father and his kind (father and his family, children/sons)’ ← jó ‘father’
al.§is ‘litter (group of infants of the same birth)’ ← alų ‘beginning’

- /-i/ manifests, or emphasizes a central quality/feature of the base, prototypically a noun and less frequently a verb:
  wati ‘twists of snow/sand, ripples on water (wat ‘wind’)
  uri ‘old river bed’ ← ur ‘edge’
  köfki ‘sword’ ← köfak ‘knife’
  won’li päj ‘a pile of wood chips’ ← won’ol ‘wood chip, flake’
  qosi mori ‘a constellation’ ← qos ‘star’
  loyi mori ‘a herd of horses’ ← loy ‘horse’
  k∅li ‘light, bright, transparent’ ← k∅ltä ‘to appear, to be seen’
  unlį ‘rapids, shallow part’ ← unlţa ‘to move over, to cross river’

- /-(∅)w(∅)/ most frequently deriving a sense of an entity, an instrument to enable the base (the base is prototypically a verb, less frequently a noun), as well as an entity associated with the base:
  uγriw ‘stick’ ← oyrtä ‘to twist out, extract’
  wiŋliw ‘hook’ ← wiŋlta ‘to grab, catch’
  w∅ltw ‘plain’ ← w∅lta ‘to plaine wood’
  jintiw ‘needle’ ← janta ‘to saw’
  köntjiw ‘comb’ ← köntţā ‘to brush hair, scratch’
  qotjwe ‘straps, ties, furnace’ ← qotţa ‘to tie up, attach, strap’
  amtow ‘cradle’ ← amɔta ‘to sit (trans.) someone’
  t∅omkiw ‘cut on a tree, a mark’ ← t∅omkita ‘to make cuts on trees’
  jolwɔ ‘patch’ ← jolta ‘to patch up’
  köswɔ ‘a twig used to make a rim’ ← kösw ‘rim, arch’
  kötwɔ ‘half, middle’ ← köt ‘gap, area in between’

- /-∅lnoŋ/ has a fairly restricted distribution collocating mainly with the kin nomenclature terms and has a derivational meaning ‘one side relation, ‘step’ to the base (noun)’:

---

11 ‘Sitting’ is associated with cradle here as babies are sited in the traditional Khanty wooden cradles rather than laid.
jəɣəł / jəɣəlnəŋ ‘step father’ MoSi-H; FaBr’  ⟷  jəɣ ‘father/head of patrilineage’
paɣəlnəŋ ‘step-son’  ⟷  paɣ ‘son’

• /-(Ə)l/ is a less frequent suffix, deriving a sense of an entity or notion with the quality of the base (nominal), or resulting from/enabling the base (verb).

Etymologically, it may be in relation to another suffix of higher productivity /-t/ below:

- won’əl ‘wood chip, wood flake’  ⟷  won ‘hook’
- qomtəl ‘width, thickness’  ⟷  qomt ‘wide, thick’
- wayəl ‘thin plank, twig’  ⟷  wayta ‘to split, cut’
- jəɣəl ‘hunting bow’  ⟷  jəɣəta ‘to throw, hit, cut, stab’
- qıt’l ‘leftover, a little bit’  ⟷  qıt’t’a ‘to remain, to be left, to stay behind’

• /-t/ is a more productive suffix, deriving a sense of an entity/notion enabling/resulting from the base (prototypically a verb). Etymologically, the suffix may be related to an independent lexical unit ot ‘thing’, which synchronically, however, has extremely low token frequency and appears to be completing the grammatization into a derivational nominal affix:

- aɣət ‘vomit’  ⟷  aɣəta ‘to vomit’
- wərt ‘long stick, pole’  ⟷  warta ‘to push away (intrans.) oneself, to pant’
- jöŋət ‘spindle’  ⟷  jöŋəta ‘to weave’

• /-(I)m(Ə)/ is a less frequent nominal suffix, deriving the sense of entity/notion enabled by the base (compatible productivity with verbal and nominal base):

- körəm ‘step’  ⟷  kör ‘foot/leg’
- tʃəyim ‘dough’  ⟷  tʃəyta ‘to ferment’

• /-s(Ə)w/ is a less frequent suffix, deriving a sense emphasizing a quality of the base (adverb, noun):

- wänəw ‘proximity, eve’  ⟷  wänə ‘near, proximal’

• /-äli/ is a very productive suffix, deriving a diminutive or/and affectionate sense. Synchronically, the affectionate use is dominant over the purely diminutive,
as often the contextual implication is pertaining more to the empathy, rather than the actual size or age of the referent\textsuperscript{12}:

\begin{itemize}
  \item qujali ‘dear husband’  \textarrow{\longleftarrow} qu ‘husband, male’
  \item niñāli ‘dear wife’  \textarrow{\longleftarrow} ni ‘wife, woman’
  \item änāli ‘dear sister’  \textarrow{\longleftarrow} äni ‘sister’
  \item ämpāli ‘good/favorite dog (adult hunting dog)\textsuperscript{13}’ vs. aj ämpāli ‘little doggy’\textsuperscript{14}:
  \item köťkāli ‘favorite knife, little knife’  \textarrow{\longleftarrow} köťkak ‘knife’
\end{itemize}

\textbullet\ \text{-wsə/} is a very productive and frequent suffix, deriving a sense of an entity or a process that characterises the event denoted by the base (typically a verb):

\begin{itemize}
  \item at’iwsə ‘front yard’  \textarrow{\longleftarrow} at’ita ‘to fence off’
  \item winwəs ‘piece of cloth, strip’  \textarrow{\longleftarrow} wäntä ‘to cut, tail’
  \item werwəs ‘job, occupation’  \textarrow{\longleftarrow} wertä ‘to work’
  \item etwəs ‘pimple’  \textarrow{\longleftarrow} että ‘to appear, rise’
  \item wəlwəs ‘life’  \textarrow{\longleftarrow} wəlta ‘to live’
  \item kan’wəs ‘disease’  \textarrow{\longleftarrow} kan’t’a ‘to be sick’
  \item wəlwəsə ‘settlement, camp site’  \textarrow{\longleftarrow} wəlo ‘place, location where a thing belongs’
\end{itemize}

\textbf{2.1.2.1.2 Compounding}

Compounding is a very productive nominal derivation pattern in Eastern Khanty. Semantically, the Eastern Khanty compounds manifest the hyponymic relation to their second member, i.e. the compound is a token of the second member’s type. There is a dependent-head relation, where the first compound member, the dependent, modifies the second, the head. This pattern is generally consistent with the Eastern Khanty syntactic-semantic pattern of modifiers preceding the modified. Most of the compounds are semantically endocentric, i.e. the head of the compound is prototypically its semantic center:

\textsuperscript{12} /-ali/ is also productive in adjectival and adverbial derivation, never, however, manifesting the word-class shift:
  \begin{itemize}
    \item ajolt ‘little by little, in small increments’ – ajoltali ‘in very small increments’
    \item tʃiːməl ‘a little’ - tʃiːməli ‘a tiny bit’
  \end{itemize}

\textsuperscript{13} The context implies a grown trained hunting dog: tʃu ämpəli tiyla jus ‘the dog took off in that direction (following the scent/sound of an animal)’

\textsuperscript{14} The context implies small-size dog manifested by the modifier aj ‘small’ with the referent ämpəli ‘doggy.’
wəγjoy ‘ring’ ← wəγ ‘metal, iron’ + joy ‘ring, round shape’

Thus, ‘metal ring’ is the ‘ring shape’ made of ‘metal’.

There are, however, numerous instances of compounds which are not semantically transparent, and which have their semantic center outside the compound. Many of such instances have diachronically transparent etymologies, but synchronically they are lexically opaque:

qalwəlni ‘spider’ ← qalwəltə ‘to catch with a net’ + ni ‘woman’
qułpɔtʃəqqu ‘hawk’ ← qul ‘fish’ + potʃəq ‘tail’ + qu ‘man’
āmŋ’äləm ‘wild onion’ ← āmp ‘dog’ + n’äləm ‘tongue’
qatjoy ‘log house walls’ ← qat ‘house’ + joy ‘ring’

None of the above referents has to be of particular gender; thus gender of the head is not relevant. Many speakers also fail to make association with the dependent compound member semantics when attempting a folk etymology. In the last example, the compound referent is actually never ‘ring-shaped’.

The first component of compounds, the dependent member, may have various word-class affiliation. It is most frequently a nominal and occasionally a verb, whereas the second member, the head, is always a noun.

• N+N:
körjuy ‘fire wood’ ← kör ‘oven’ + juy ‘wood’
körköy ‘brick’ ← kör ‘oven’ + köy ‘stone’
qatkörü ‘house roof’ ← qat ‘house’ + körö ‘cover, holster’
worler ‘vein, blood vessel’ ← wər ‘blood’ + ler ‘line, strip’
köyput ‘big family kettle’ ← köy ‘stone’ + put ‘kettle’
āmpjom ‘a wild cherry berry’ ← āmp ‘dog’ +jom ‘cherry’

• Adj+N:
wɔrtul ‘cranberry’ ← wɔrtə ‘red’ + ul ‘berry’
jəmwaŋ ‘silver’ ← jəm ‘good’ + wəŋ ‘metal’
ājku ‘lad, young man’ ← āj ‘young’ + ku ‘man’

15 Based on oral folk tradition and archeological artifacts, the early Khanty constructions may indeed have had a round shape; however, this knowledge is not shared by the majority of the modern Eastern Khanty speakers.
Lexical units comprising a compound preserve their phonological independence as they are prototypically not transparent to word-internal phonological processes, such as VH, palatalization, etc. (cf. 1.2.5 Disharmony).

Syntactically, the head member of a compound is its morphosyntactic locus, i.e. it carries phrasal inflection. However, there is no government or agreement within the compounds, as there is none within syntactic phrases, between the modifier and the head:

äspaj 'poplar' (ä ‘Ob river/ big river’ + paj ‘aspen tree’)

5. rıt äspaj-nat wer-ös
boat poplar-Instr make-PST2.3SG
‘He made a boat out of a poplar’

6. nuŋ rıt äspaj-wən-nat wer-s-əm
2SG boat poplar-Du-Instr make-PST2-2SG
‘You made a boat out of two poplars’

äŋkäjəy ‘Mo-Fa’ (äŋkä ‘mother’ + jəy ‘patrilineage head’)

7. mä äŋkäjəy-(əm)-əm wəl-s-əm
1SG grandfather-(1SG)-Loc live-PST2-1SG
‘I lived at (my) grandfather’s place’

8. mä äŋkäjəq-qən-əm wəlil-s-əm
1SG grandfather-Du-Loc stay-PST2-1SG
‘I stayed at both grandfathers’ places’

qujämp 'male-dog' (qu ‘male’ + ärp ‘dog’)

9. (juŋ) qujämp-(əl) por
(3SG) he-dog-(3SG) bite.3SG
‘He bit his dog(male)’

10. (juŋ) qujämp-wən-əm por-i
(3SG) he-dog-Du-Loc bite-PS.3SG
‘His two dogs(male) bit him’

2.1.2.2 Inflection

As was mentioned above, Eastern Khanty nouns may function as arguments of the proposition (subjects, direct and indirect objects), adjuncts and nominal modifiers, and as nominal predicates. This functional diversity manifests the variety of inflectional categories that Eastern Khanty nouns show. Suffixation is
The dominant pattern in Khanty inflectional morphology, and the inflectional categories include number, possession and case.

```
qul-potf-εq-quis-ali-nǝ  |  jǝm-wǝq-jeq-qǝlam-❧ǝǝ
fish-back-Der-male-Dim-Loc  |  good-metal-ring-1SG/Du-Carr
‘by a little hawk’  |  ‘without my two silver rings’
```

The linear order of the affixes follows the following ordered pattern:

```
stem
{(base)n – base – (Der)} – (number) – (possession) – (case)
```

That is, the derivational affix is always the closest to the noun stem, followed by inflectional affixes, where the number suffix always precedes the case suffix, and the possessive suffix (combining the person/number of possessor and number of possessed information) always precedes the case suffix.

Occasionally, the derivation and inflection processes may necessitate epenthesis of a glide /j/ or a reduced /ǝ/ to prevent consonant clusters and vowel hiatus, respectively (cf. 1.4.3 Consonant epenthesis; 1.4.5 Consonant Clusters).

As illustrated by the above, the inflectional dimensions that are pertinent to the discussion of Eastern Khanty nouns are number, possession and case. These inflectional dimensions share a functional property and are in complementary distribution, i.e. may not be simultaneously present in the word. That is, a word may not simultaneously show more than one of such affixes, e.g. more than one number, possession, or case\(^{16}\) affix.

**Fig.1. Noun Inflection Dimensions.**

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Eastern Khanty Noun Inflection Dimensions:
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\(^{16}\) There are rare occasions of nouns that have what seems to be two different case markers. These are instances of lexicalization, where a case marker (normally a more archaic form) gradually becomes fused with the noun stem, so as to become conceptualized as part of the stem by the speakers, and receives a second case marker corresponding to its grammatical role in a particular speech event.
2.1.2.2.1 Number

Eastern Khanty marks three number distinctions. The singular is predictably the unmarked, the dual is marked with the suffix /-γən/ and the plural with the suffix /-(ο)т/:

<table>
<thead>
<tr>
<th></th>
<th>SG</th>
<th>Du</th>
<th>Pl</th>
</tr>
</thead>
<tbody>
<tr>
<td>qu</td>
<td>‘man’</td>
<td>qojγən</td>
<td>qojət</td>
</tr>
<tr>
<td>juγ</td>
<td>‘tree’</td>
<td>joqqən</td>
<td>juγət</td>
</tr>
</tbody>
</table>

Table 2
Sample Number Paradigm

Prototypically, a singular form expresses a single referent, a participant of the proposition. Dual refers prototypically to two referents that are perceived as homogenous instances of the same type of entity:

11. käт qojγən ār qul tuy-kən
two man-DU many fish bring-PST0.3Du
‘Two men brought a lot of fish’

This example shows, that once the number of the entity expressed by the noun is specified by a quantifier such as ar ‘many’, the formal expression of the plural number on this noun (qul ‘fish’) is unnecessary.

The innate and contextual semantic properties of some of the lexical units, however, may affect the number inflection. While concrete nouns prototypically may be inflected for any number, the mass, group and abstract nouns occur less frequently in Du or Pl.

Table 3
Number in mass, group and abstract nouns
jiŋq ‘water’
qammat ‘width’
qatʃəm ‘water from melting snow/boiled water’
jay ‘people’
mori ‘flock’
parə ‘herd/flock/group’

Nouns that express the concepts that exist in pairs have lower probability of occurring in the Du number, whereas singular is expressed by evoking conceptual division of a pair:

<table>
<thead>
<tr>
<th>Number in pair nouns</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SG</strong></td>
</tr>
<tr>
<td>sem pələk / sem-ləɣ ‘1 eye (eye-half/Abes)’</td>
</tr>
<tr>
<td>pas pələk ‘1 mitten (mitten-half)’</td>
</tr>
</tbody>
</table>

Combinations of numerals and quantifiers with nouns may render the number inflection on the head noun excessive, since quantitative referentiality is evident from the combination of the numeral and the head noun stem:

är juy ‘many trees’
är qu ‘many people’

12. ṭu il p'eley-na min q'olləm qasi ‘amas-l-əw
DET ahead half/side-Loc 1Pl three man sit-Prst-1Pl
‘Before that, we..., the three of us are sitting there...’

Although the head noun is formally singular in these examples, the numeral provides enough reference, which is manifested by the PL agreement on the predicate ‘sit’.

Occasionally, and where possible, a mass/group noun is used instead of a plural form:

qu, kasi, ni ‘male, man, woman’ – jay ‘people’
This type of pairs is, however, not numerous, and does not appear to display properties of suppletive sets, as distributionally, both group and Pl-inflected forms, are unrestricted and their use can be attributed to inter-speaker variation.

There are also a few examples of homonymic semantic pairs, where a noun of the same form may refer either to a singular entity or a group/collective of entities:

juyp ‘1. tree, 2. forest’

13. tüüt pirnə juy ont-nam ti mən-i
DET after forest inside-ALL1 DET go-PS.3SG
‘After this we went to the woods’

Nouns that are conventionally conceptualized together as a group (not necessarily homogenous), if conceived as paired in a given context, i.e. simultaneously occupying the stage and acting together, may be inflected for Du or PL and trigger respective argument-agreement on the predicate.

14. j’aq-qən å s’aq-qən nur’uyte-l-kən
bear-DU Conj. cub-DU run-PRS-3DU
‘A bear with a cub are running’

15. øjlənə im-ɣən ik-kən wəl-l-ɛɣən
once woman-DU man-DU live-PRS-3DU
‘Once there lived an old man and his wife’

Single referents, (bear and cub) and (old woman and old man), respectively, are inflected for DU as they are conceptualized as a unit, as a family, a couple. Since a group, a long-married couple, is conceptualized as one cultural and discourse entity, there is, perhaps, a certain structural tendency towards over-regularization resulting in homogenous number-marking of the referents. The actual constituency of the group, though, is evident from the formal features of the predicate – 3Du.

<table>
<thead>
<tr>
<th>SG</th>
<th>DU</th>
<th>PL</th>
</tr>
</thead>
<tbody>
<tr>
<td>im-ɣən ik-kən</td>
<td>(kät) im-ɣən ik-kən</td>
<td>(ərk) imi-t iki-t</td>
</tr>
<tr>
<td>woman-DU man-DU</td>
<td>(two) woman-DU man-DU</td>
<td>(many) woman-Pl man-Pl</td>
</tr>
<tr>
<td>‘old man and his wife’</td>
<td>‘two old men with wives’</td>
<td>‘men and wives’</td>
</tr>
</tbody>
</table>

Table 5

Double Dual Marking
Similar patterns can be observed both for the dual and plural numbers, where a number of entities are viewed as one unified cultural, social, discourse agent, and it can be formally expressed by dual/plural of a title-member of the group, an entity used for identification of the whole group:

16. ḫwugs-àywluw juw-ỵt wɔ̀r-tà mɔ̀n-ɡɔ̀n
   father-Coll-DU oar wood do-INF go-PST0.3DU
   ‘A father and his son went to make an oar’ (Tereskin 1961)

In the above case, the Du form of the noun ‘father’, refers to the culturally grounded concept of prototypical family settlement pattern, in which a son (older) would normally reside in his father’s patrilineal patrilocal clan settlement, women would marry out. Thus, a plural form of ‘father’ would refer to ‘father and his people, his breed’, and dual would refer to ‘father and one person of his breed’, i.e. ‘father and son’. The predicate, again, indicates or confirms the constituency of the group – Dual. Incidentally, since the situation of father residing with his daughter(s) is highly improbable within the established cultural pattern, such dual form of ‘father’ is very unlikely to mean ‘father and daughter’, unless, perhaps, it is absolutely evident in the context (never accounted in the available data).

The example below illustrates a less frequent pattern, in which a married couple with children resides in the wife’s patrilocal area, and the wife is used for group-reference:

17. wɔ̀r ọ̀ntọ̀ wɔ̀l-t ọ̀s-àt
   forest inside live-PST0.3PL mother-PL
   ‘Once in the forest there lived a woman with her family’ (Tereskin 1961)

Here, the plural of ‘mother’ refers to ‘woman, her spouse and child(ren)’, which is confirmed further in the discourse:

18. t’u jaq-ɡɔ̀n ẹ̀j ọ̀ɡọ̀-ali tɔj-ɡɔ̀n
   DET people-DU one son-DIM have-3DU
   ‘This couple had one son’
Dual of the noun jaŋ ‘people, clan’ refers to a married couple, also confirmed further by the dual of the predicate. Dual of a mass noun jaŋ ‘people’ is of interest in itself and is indicative of the original semantics of ‘patrilineage’ further extended to generic ‘people’ (qantəq jaŋ ‘Khanty people’, rut’ jaŋ ‘Russians’). This example, manifests the semantic specification ‘two people’, ‘two of the same patrilineage family’.

### 2.1.2.2.2 Possession

In possession, the inflectional suffix makes reference to the number and person of the possessor as well as to the number of the entity possessed.

<table>
<thead>
<tr>
<th>Possessor</th>
<th>The possessed entity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sg</td>
</tr>
<tr>
<td><strong>Sg</strong></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>qul-əm</td>
</tr>
<tr>
<td></td>
<td>'my fish'</td>
</tr>
<tr>
<td>2</td>
<td>qul-ən</td>
</tr>
<tr>
<td></td>
<td>'your fish'</td>
</tr>
<tr>
<td>3</td>
<td>qulp-əl</td>
</tr>
<tr>
<td></td>
<td>'his/her fish'</td>
</tr>
<tr>
<td><strong>Du</strong></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>qul-ən</td>
</tr>
<tr>
<td></td>
<td>'your(2) fish'</td>
</tr>
<tr>
<td>2</td>
<td>qul-ən</td>
</tr>
<tr>
<td></td>
<td>'your(2) fish'</td>
</tr>
<tr>
<td>3</td>
<td>qul-ən</td>
</tr>
<tr>
<td></td>
<td>'their(2) fish'</td>
</tr>
<tr>
<td><strong>Pl</strong></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>qul-əŋ</td>
</tr>
<tr>
<td></td>
<td>'our fish'</td>
</tr>
<tr>
<td>2</td>
<td>qul-əŋ</td>
</tr>
<tr>
<td></td>
<td>'your fish'</td>
</tr>
<tr>
<td>3</td>
<td>qul-əŋ</td>
</tr>
<tr>
<td></td>
<td>'their fish'</td>
</tr>
</tbody>
</table>

As was mentioned in the discussion of the Eastern Khanty phonology and phonotactics, singular entity number inflection is often associated with the root-vowel alternation (cf. 1.3 Vowel alternation).
19. әj mәta тәt-nә mиш ik-әm-nәt jүj ont-nәm mәn-mәn
one IndPn time-LOC 1DU man-1SG-COM forest inside-ALL2 go-PST0.1DU
’Once, me and my husband went to the woods’

20. wotәqәr-nә amp-әәn paqә amp-nәt njutва-әγәn
outside-LOC dog-3DU other dog-COM fight-PST0.3SG
’Outside, their dog got into a fight with some other dog’

At this point, a few prototypical examples of the use of possessive constructions are shown above, i.e. those expressing the common ownership possession situations. These, however, do not exhaust the list of functional features of the Eastern Khanty possessive constructions. The detailed discussion of their usage is offered below in the section on pragmatics and text cohesion.

2.1.2.2.1 Alienable / Inalienable Possession

Some of the lexical units occur in the data always marked for possession. Such are, for example, the kinship nomenclature and body parts terms. These are considered in Khanty as inalienably possessed and as such, have low probability of being conceptualized and used in natural language discourse as separate from the ‘possessor’. Kinship terms were discussed in some detail above (Cf. 2.1.1.2 Semantic fields):

әнki-m ‘Mo’; qәqi-m ‘Br < Ego’
apә-m ‘Fa’ опi-m ‘Si > Ego’
atʃә-m ‘Br >Ego’ tʃәkәj-әm ‘Si < Ego’

The only attested instances of the use of these terms without possession inflection are the uses that are not prototypical in terms of denoting the actual kin. Thus, the term әнki ‘mother’ occurs in the name of one of the chief deities-progenitors of some of the areas of Yugan, Vasyugan and Vakh rivers: puγәs әнki ‘the mother of Pugos sisters/daughters’, still assigned possession by the preposed
The term qaq‘ ‘younger brother’ occurs uninflected for possession, when used as one of the taboo terms for bear:

21. män-nə jiyata-l-im, qaqi wajaɣ
   1SG-LOC see-PRST-1SG brother animal
   ‘I see it there, there is a bear there’

Body parts are always inflected for possession, and are not conceptualized separate from the possessor, even in artificial, elicitation speech situations.

22. tfə oy-əl nuy alm-s-ətte, män-nə tfə liyəltə-s-əm
   then head-3SG up move-PST2-3SG/SG 1SG-LOC DET take_aim-PST2-1SG
   ‘Then he raised his head, I took aim’

23. jəmaki-aki, kür-əm patayata-s-im
   well-PRD feet-1SG get.cold-PST2-1SG/SG
   ‘OK, my feet got cold’

2.1.2.2.3 Case

Eastern Khanty does not formally mark structural case in nouns in the function of subject or direct object. That is, there is no inflection to formally differentiate nouns in the grammatical relation of subject from nouns in the grammatical relation of object.

24. wajaɣ sayilt-wəl
   animal run-PRS.3SG
   ‘The bear runs’

25. mà sart wel-s-əm
   1SG pike kill-PST2-1SG
   ‘I caught a pike fish’

Thus, in the examples above, both the noun wajaɣ ‘animal’ in the grammatical relation of Su, and the noun sart ‘pike’ in the grammatical relation of DO have no case inflection.

The role of possessor, formally expressed in many languages by Genitive, is also not case-marked in Eastern Khanty nouns. The possessor noun is simply preposed to the possessed.

26. sidar tf’ōnwa p’ōtʃkän ajrit-nə olay-wəl
   Sidor late gun canoe-LOC lay-PRS.3SG
   ‘Late Sidor's gun lies in the boat’
At the same time, the core arguments are not inflected for case, there are a number of inflectional categories corresponding to relations, such as: Locatives, Latives, Instrumental, Comitative, and Abessive.

27. p’otśkan-öm ajrit-no
gun-1SG canoe-LOC ‘The gun is in the boat’
28. mà ajrit-a n’ürüyt-öm,
1SG canoe-ILL jump-PP ‘I jumped into the boat’

Thus, there is a certain asymmetry in the Eastern Khanty nominal case inflectional dimension. While none of the structural cases have special inflectional categories, the numerous inherent or semantic cases are all individual inflectional categories. In other words, grammatical relations in Eastern Khanty are not marked by nominal case inflection, at least not in the simple active-direct clause. The detailed discussion of the Eastern Khanty grammatical relations in active-direct, passive and ergative clauses will be offered later (cf. Grammatical Relations).

<table>
<thead>
<tr>
<th>#</th>
<th>name</th>
<th>marker</th>
<th>Example</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Nominative</td>
<td>Ø</td>
<td>ämp amös-wäl dog sit-PRST.3SG</td>
<td>‘Dog sits’</td>
</tr>
<tr>
<td>2</td>
<td>Accusative</td>
<td>Ø</td>
<td>mà ämp poro-j-öm 1SG dog bit-EP-PST0-1SG</td>
<td>‘I bit the dog’</td>
</tr>
<tr>
<td>3</td>
<td>Allative 1</td>
<td>-pa</td>
<td>ej qotl joy-pa tʃayinti-s-əw one day home-All1 get-PST2-1PL</td>
<td>‘one day we prepare to head home’</td>
</tr>
<tr>
<td>4</td>
<td>Allative 2</td>
<td>-nam</td>
<td>ämp qot-nam mən-wəl dog house-All2 go-PRS.3SG</td>
<td>‘dog goes to the house’</td>
</tr>
<tr>
<td>5</td>
<td>Elative</td>
<td>-i</td>
<td>ämp qot-i mən-wəl dog house-ELA go-PRS.3SG</td>
<td>‘dog goes away from the house’</td>
</tr>
<tr>
<td>6</td>
<td>Prolative</td>
<td>-oγ</td>
<td>juy-oγ wer-əm wood-PRL make-PP</td>
<td>‘it is made of wood’</td>
</tr>
</tbody>
</table>

Table 7

Noun Case Paradigm

---

17 This case marker is attested most frequently in the Yugan river dialect data, but is also present in Vasyugan, predominantly as an inflection on demonstratives.


| 6 | Illative | -a | ämp qot-a taŋ-wəl
dog house-ILL enter-PRS.3SG | ‘dog goes into the house’
|    |  | mä ämp-ā mi-j-əm
1SG dog-ILL give-EP-PST0.1SG | ‘I gave (food) to the/a dog’
| 7 | Locative | -nə | ämp qot-nə aməs-wəl
dog house-LOC sit-PRS.3SG | ‘dog sits in the house’
|    |  | män-nə juɣ-nat mattiyt-i
1SG-LOC stick-COM hit-PS.3SG | ‘I hit it with a stick’
| 8 | Comitative | -nat | män-nə juɣ-nat mattiyt-i
1SG-LOC stick-INSTR hit-PS.3SG | ‘I hit it with a stick’
|    |  | mä ämp-nat mən-l-əm
1SG dog-COM go-PRS-1SG | ‘I go with a dog’
| 9 | Abessive | -ləɣ | mä ämp-ləɣ mən-l-əm
1SG dog-ABES go-PRS-1SG | ‘I go without the/a dog’
| 10 | Translative | -ka | ämp juɣ-qa jiɣ
dog stick-TRNSL become-PST0.3SG | ‘dog turned into a stick’
| 11 | Instrumental Object | -(t)ə | män-t kotʃak-a wera-s
1SG-ACC knife-InstrO make-PST2-3SG | ‘He made me a knife’

### 2.1.2.2.3.1 Nominative

Considering the morphosyntactic coding of the semantic roles of referents in the proposition, we see that in Eastern Khanty, nouns are normally unmarked for case both in the Agent and Target semantic roles.

- The semantic role of Agent.

#### Agent of State:

28. pun-əl nayil
wool-3SG short
‘The hair is short’

29. wajəj lək əntim, lənki lək ənt-im, metali lək ənt-im
animal footprint NEG squirrel footprint no-PP some footprint no-PP
‘Not an animal footprint, not a squirrel print, no prints at all’

#### Agent of Event:

30. mə pat-l-uj-əm
1SG be cold-PRS-PS-1SG
‘I am cold’
32. kür-äm patayata-s-im
   feet-1SG get_cold-PST2-1SG
   ’My feet started to get cold’

Agent of Action:
31. ämp-äm srazu awsintanti-yil-wəl
dog-1SG immediately sniff-INCH-PRS.3SG
   ’The dog starts sniffing around right away’

- The semantic role of Target:

Target of Event:
33. pun jeyatata-l-im
   hair look-PRS-1SG/SG
   ’I looked at the hair’

Target of Action:
34. pun nirimta-s-im tiyla-ti
   hair pull-PST2-1SG/SG here-ELA
   ’I pulled the hair towards me’

- The semantic relation of Benefactive:

Benefactive of Action:
35. ämp lit-o-t-ə mi-jä
   dog eat-thing-InstrO give-Impr.2SG
   ’Give the dog some food!’

In this example, ämp ‘dog’ being a beneficiary of ‘giving’ is in the unmarked Acc. case, whereas the object of giving is in the InstrObj case. This is a very strong pattern in Eastern Khanty existing in all propositions describing events with Benefactive relation.

- NP possessor (animal, squirrel) is not marked for case and as any nominal noun modifier is simply juxtaposed (preposed) to the head noun it modifies:
36. wajay vöök öntim, läŋki vöök öntim, métalö kök öntim
   animal footprint Neg squirrel footprint Neg some footprint Neg
   ’Not an animal footprint, not a squirrel print, no prints at all’
2.1.2.3.2 Allative1

An NP inflected for this case codes the goal, towards which the movement occurs:

37. ämp wrä-y-tə joy-pa  
   dog pull-PST0.3SG home-ALL1  
   ‘The dog was eager to go home’

38. nuy-pa liyɔlt-s-im joyo-s-im  
   up-ALL1 take.aim-PST2-1SG shoot-PST2-1SG  
   ‘I took aim and shot’

As follows from the second example, this and other semantic (locative) cases may occur not only on nouns, but on adverbs, as well as other word-classes, such as numerals below:

39. potom os nuyä-tä-wäl  nillä-pä wet-pä nuyä-tä-wäl  
   after again move-INCH-PRST.3SG five-ALL1 four-ALL1 move-INCH-PRST.3SG  
   ‘Then, again he moved, 4-5 times he moves like this’

In case of numerals, this case inflection expresses a sense of repetition, X-times, where X is the value of a numeral (kät ‘two’ → kit-pa ‘twice’).

2.1.2.3.3 Allative2

Similarly to Allative1, this case expresses the direction/goal/target, towards which the movement occurs. As mentioned above, this marker is more productive in Yugan dialect, and less so in Vasyugan and Alexandrovo. In such more south-eastern dialects as Vasyugan and Alexandrovo, where the two Allative markers appear to co-exist, Allative1 is more frequent than Allative2, which appears to collocate with demonstratives more frequently than nouns.

40. (Yugan) kot-i-nam / rit-nam / ma-nt-ɔm-nɔm juy-tə  
   house-ALL2 / boat-ALL2 / 1SG-ACC-1SG-ALL2 come-3SG  
   ‘He came towards the house / towards the boat / towards me’

41. (Vasyugan) tʃi-nām joyo-s-im  
   that-ALL2 throw-PST2-1SG/SG  
   ‘I threw it there’
42. (Vasyugan)  
\texttt{tʃi-nəm-pə  awsəntanti-ʃil-wəl}  
that-ALL2-ALL1 sniff-INCH-PST1.3SG  
‘It smells towards there’

The last Vasyugan example is of particular interest, as it shows an occurrence of both Allative case markers, the Allat2 and then Allat1, on one constituent, the DET. ‘that’. This example, most probably, manifests a process of lexicalization of Allat2 in Vasyugan Khanty, where it frequently (almost exclusively: 97% collocations of /-nam/ is with tʃi) blends with the DET. ‘that’ to form the locative sense ‘there, over there’, and thus, the Allat1 is used to emphasize the sense of direction/goal. Thus, in Vasyugan Khanty, it is likely, that Allat1 /-pa/ is in the process of substituting for Allat2 /-nam/.

\subsection*{2.1.2.2.3.4 Elative}

A noun inflected for Elative typically has a sense of direction of movement away from a landmark, the source of movement:

43. \texttt{təj-ə mən-ə pərik-a}  
away-ELA go-Impr.2SG behind-ILL  
‘“Get off!”’

44. \texttt{qot-i kem-nəm / rıt-i itn-am}  
house-ELA street-ALL2 / boat-ELA go-PST0.1SG  
'Away from the house / boat I go'

\subsection*{2.1.2.2.3.5 Prolative}

A noun inflected for Prolative either has a sense of an entity, typically concrete, out of which something is made, or a direction away from a source of movement/change:

45. \texttt{juy-oı wer-əm}  
wood-PRL make-PP  
‘It is made out of wood’
That is, the difference in use between the Prolative and Elative is that, in the schema involving a Landmark and movement, Elative marker -i profiles the Landmark and path away from it (X), whereas Prolative marker -oŋ profiles the path towards a Landmark and from inside a Trajector (Cf. Fig. 2.):

**Fig. 2. The Elative and Prolative schemas.**

<table>
<thead>
<tr>
<th>Profile X: Elative (-i)</th>
<th>Profile Y: Prolative (-oŋ)</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Elative Diagram" /></td>
<td><img src="image" alt="Prolative Diagram" /></td>
</tr>
</tbody>
</table>

### 2.1.2.2.3.6 Illative

Nouns inflected for Illative (Dative) have a sense of a place, towards and inside which a movement the movement/change is made, i.e. a movement into the Landmark (Fig. 3.):

**Fig. 3. Illative/Dative Schema.**
This target/container semantics of the Eastern Khanty Illative is conceptually wide and also includes the domain commonly taken in other languages by Dative, i.e. the target/container may be both an animate and inanimate referent, participant of the proposition:

48. tom kor pelk-ä ur-s-ɔm
   that swamp side-ILL cross-PST2-1SG
   ‘I went across to the other side of the swamp’

49. ämp-äli aj pelk-ä i pirik-a men-ɔs
   dog-DIM one side-ILL and behind-ILL go-PST2.3SG
   ‘The dog got off and away’

50. ämp-ä mij-ɔn’?
    dog-ILL give-PST0.2SG
    ‘Have you fed the dog? (Lit. Did you give the dog something?)’

2.1.2.2.3.7 Locative

The Locative case in Eastern Khanty is, perhaps, the most robustly used, covering both the domain of inherent and contextual inflection (Haspelmath 2002), i.e. functionally utilized both:

i) as a semantic, inherent case, a universally applicable inflection conveying independent semantic information (spatial and temporal location/coordination)

ii) as a structural case, typically necessitated by pragmatic/syntactic environment (‘special’ ergative agents and agented passives)

<table>
<thead>
<tr>
<th>Distribution</th>
<th>Function</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>NP + Locative</td>
<td>Spatial Location</td>
<td>ämp qot-ŋø omɔs-wɔl</td>
</tr>
<tr>
<td></td>
<td></td>
<td>dog house-LOC sit-PRS.3SG</td>
</tr>
<tr>
<td></td>
<td></td>
<td>‘dog sits in the/a house’</td>
</tr>
<tr>
<td>i)</td>
<td>Temporal Location</td>
<td>nu ej toŋ-ŋø ... toŋ-ŋø men-s-ɔw</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OK one spring-LOC spring-LOC go-PST2-1PL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>‘Once in spring…. in spring we went …’</td>
</tr>
</tbody>
</table>

Table 8: Functional distribution of the Eastern Khanty Locative case
These functional inflectional domains are, by far, not discrete, but rather viewed as a continuum between prototypes, where usage of particular tokens may represent an extension into the adjacent domain, manifesting a conventionalization of a novel usage pattern, a probable grammaticalization route. Such was, most probably, the case of usage of the Loc with participles to temporally locate/coordinate multiple events. Also an example of extension of the functional domain of Locative is the use of Loc in conjunction with special arrangement of pragmatic and syntactic features in passive and ergative constructions, where pragmatic demotion of the agent, loss of conventional agentive features such as discourse prominence, volition and control correlates to increase in structural complexity and other properties, such as control over referentiality in adjoined clauses.

Statistically, the usage of the Locative as a semantic case in narrative discourse (54%) is comparable to its usage as a structural case (46%), i.e. the combined frequency of Loc. case usage in spatial (34%) and temporal semantics (20%), is just slightly higher than the combined frequency of its usage in passive (18%) and ergative constructions (28%).

This differentiates the Locative from other cases in Khanty, as no other case has its functional domain as diverse and as robust as the Locative. This case, perhaps, is the only inflection expressing a stative relation in Eastern Khanty. In light of the above, Khanty locative is to be defined most abstractly as ‘having to do with the
domain of a referent’ or as ‘an event in relation to the domain of a referent, its spatial, temporal location’. This makes Locative, as the most abstract and de-semanticized, a case of choice for increasingly more grammaticalized functions, a structural case in ergative and passive constructions, such as (ii) in Table 8.

Some of the locative meanings are often expressed analytically, with the help of numerous Eastern Khanty postpositions. In such cases, the postpositions, commonly expressing relative location to the Landmark, are inflected for Locative or Lative cases:

<table>
<thead>
<tr>
<th>Table 9</th>
<th>Locative Postpositions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Proximity</strong></td>
<td>kutin ‘near’</td>
</tr>
<tr>
<td></td>
<td>potoŋ ‘side’</td>
</tr>
<tr>
<td><strong>Post-essive</strong></td>
<td>potʃ ‘back’</td>
</tr>
<tr>
<td><strong>Front-essive</strong></td>
<td>tempin ‘front’</td>
</tr>
<tr>
<td></td>
<td>ɨpi ‘front’</td>
</tr>
<tr>
<td><strong>Inessive</strong></td>
<td>tiḇpi ‘inside’</td>
</tr>
<tr>
<td><strong>Illative</strong></td>
<td>tiḇpi ‘inside’</td>
</tr>
<tr>
<td><strong>Elative</strong></td>
<td>tiḇpi ‘inside’</td>
</tr>
<tr>
<td><strong>Super-essive</strong></td>
<td>oɣti ‘head’</td>
</tr>
<tr>
<td><strong>Sub-Essive</strong></td>
<td>pittə ‘bottom’</td>
</tr>
</tbody>
</table>

These nominal clitics are differentiated from nominal case inflections mainly based on the degree of grammaticalization, i.e. whereas proper case markers are synchronically completely delexicalized, postpositions are, perhaps, best seen in
the process of grammaticalization. Their lexical semantics of mostly anthropomorphic nature is still visible, though often no longer perceived in natural usage by the speakers. Their use as postpositions originates via metaphorical extension of biological/anatomic nomenclature to inanimate entities. Thus, ‘on top the house’ is not immediately perceived as ‘lit. on the head of the house’, as equally, ‘under the house’ is not perceived as ‘lit. on the house’s buttocks’ and ‘behind the house’ is not ‘lit. on the house’s back’, etc. It normally takes some provoked reflection on behalf of speakers to recover the etymology of these words. Finally, another formal differentiation from proper nominal cases is that the postpositions themselves are inflected with nominal cases (Locative and Lative) to specify their exact spatial relation.

2.1.2.2.3.8 Comitative

Nouns inflected for the Comitative case typically have associative semantics, i.e. an event participant, animate or inanimate, that is associated with the agent and has an equal or, more typically, lesser significance in the event, often a concrete inanimate entity used/manipulated by the agent in the event:

51. mä pöt|[kän-na] liyîlta -l-im juy-ən oy-ol il wer-l-ət 1SG gun-COM take.aim-PRS-1SG 3SG-LOC head-3SG down do-Iterat-3SG/SG ‘I tried to take a shot with my gun, but he sees me and hides his head’

52. motor-nal num mətəŋ mọtʃə jọg|-uy motor-COM upper forest upto come-PST0.1PL ‘We reached the upper forest by a motorboat’

53. min lɛŋ-em-nat əj jaqqel-am-nə internat-i nək wej-oj-mən 1PL brother-1SG-COM one parents-1PL-LOC school-ELA up take-PS.1DU ‘Me and my small brother were taken by our parents from the boarding school’

2.1.2.2.3.9 Abessive

Noun inflected for Abessive typically has a sense of an absent participant, i.e. an entity or a quality that is absent in the event:
54. män-läŋ noŋ män-wal
   1SG-ABES up go-PRS.3SG
   ‘(S)he left without me’

55. kör-läŋ qu
    leg-ABES man
    ‘A one legged man / without legs’

2.1.2.2.3.10 Translative

A noun that occurs inflected for Translative case typically expresses a participant in the event that is a result of some transformation, i.e. an entity that something transforms into:

56. pin-ka āl jal-l-itay
    bunch-TRNSL Neg stand-Imper.2PL
    ‘”Don't stand in a crowd!”’

In this example, the speaker wants to prevent his interlocutors from forming a crowd (turning into a pile) using the Translative case marker with the noun expressing the target of transformation ‘bunch, pile, crowd’. Thus schematically, Translative is used to mark the Landmark in a situation, where the Landmark and path/process towards it is profiled.

57. juŋ mustim ajni-ka ju-s
    3SG beauty young.woman-TRNSL become-PST2.3SG
    ‘She became a beautiful young woman’

2.1.2.2.3.11 Instrumental Object

The Instrumental-Objective case inflection typically renders a noun with a sense of a participant in the di-transitive Action, prototypically an inanimate entity that undergoes some kind of transfer or a manipulation where it changes location/ownership. It is frequently the Target of giving, replacing, presenting, and awarding. Differently from traditional Target of transitive Action of Indo-European di-transitive constructions, where an animate Beneficiary is expressed by Dative and an inanimate Target is coded by Acc, in Eastern Khanty the InstrObj case marks the inanimate Target (‘bullet’), whereas the Acc marks the Beneficiary
of the transfer, either animate or inanimate (‘gun’).

58. pòtjkän-äm nál-ǎ punka-s-im
gun-1SG bullet-IntsrO load-PST2-1SG
‘I loaded my gun with a bullet’

59. tawaj män-l-òw pòtjkän-òt nà-yàl-i poni-tat i tawaj män-l-òw
let's go-PRS.1PL gun-PL bullet-PL-InstrO load-Impr.2Pl and let's go-PRS-1Pl
"Let's go, load you'all's guns with bullets and let’s go!"

60. kint-a hit-ò oł pan..., backpack-ILL food-InstrO thing put
'She put some food in the back pack…'

In this sense, the Khanty InstrO construction can be likened to the English ‘The attorney presented the jury with a evidence’ or to the Russian ‘Oni nagradili ego medalju (They awarded him a medal)’ or in fact ‘Ja zarjadil ruzhje pulej (I loaded my gun with a bullet)’.

2.1.3 Nominal semantics

Semantic properties that are prototypical for nouns and that are also shared by the above exemplified tokens will be referred to, generally, as semantic features.

2.1.3.1 Semantic features of nouns

Among the semantic features that are commonly shared by the majority of the examples of the noun class are the following:

- Semantic concreteness in a temporal and a spatial plain:
  Words of group (i), e.g.: sart ‘pike-fish’, qul ‘fish’, wajɔ̀ ‘animal’, oɣ ‘head’, iwes ‘skewer’ and āt’im ‘brother’ are all concrete entities existing in a relatively stable manner both spatially and temporarily. Some of them, group (ii), may exist more in the temporal rather than the spatial plain, e.g.: qotl ‘day’, toɣ i ‘spring’.

There are also a number of nouns, of group (iii), that due to the innate abstractness of the concepts that they represent, are less amenable to assignment in either of the
two planes, e.g.: meγ ‘fatigue’, wòγ ‘strength’, nur ‘revenge, grudge’, ṇorṇś ‘mind, mental faculty’, etc. These features will prove relevant for the discussion of nominal morphology, particularly number inflection, to be discussed below.

<table>
<thead>
<tr>
<th>Plain/example</th>
<th>sart ‘pike-fish’</th>
<th>qotl ‘day’</th>
<th>meγ ‘fatigue’</th>
<th>jiŋq ‘water’</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temporal</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>-/+</td>
</tr>
<tr>
<td>Spatial</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>+</td>
</tr>
</tbody>
</table>

- Animacy appears as a semantic feature in Eastern Khanty, further extending the specificity of concrete entities:


  Inanimate: iwares ‘skewer’.

  There is further differentiation of the animate entities into human/non-human (āt’im ‘brother’ vs. sart ‘pike-fish’, qul ‘fish’, wajγ ‘animal’) and into male/female (āt’im ‘brother’ vs. āni ‘sister’). Although neither of the two subfeatures is obligatorily distinguished formally (e.g. by any of the pronominal forms), if a need for gender differentiation arises, it is made by formal means available in the system, namely nominal compounding:

  ämpqu ‘dog-male’ (ämp ‘dog’ + qu ‘man/male’)

  Jantaqu ‘tailor (male)’
  Jantañi ‘tailor (female)’
  Jantot ‘thing to sew/sewing work’
  (janta ‘sew’ + ku ‘male’)
  (janta ‘sew’ + ni ‘female’)
  (janta ‘sew’ + ot ‘thing’)

  These features, although prototypically formally undifferentiated, prove relevant in conditioning grammatical relations such as possession, number,
subjecthood, verbal agreement, etc., and will be evoked again later in the description.

- Artefactness, a semantic feature that unites some of the examples within the class of nouns is related to semantic concreteness and animacy:
  
  - iwes ‘skewer’  
  - juy ‘stick’  
  - rit ‘boat’

- A distinction between mass and countable nouns hinges upon a constellation of semantic features and usage probabilities. Most of the concrete nouns, animate and inanimate, may be used in the Dual and Plural:

<table>
<thead>
<tr>
<th>SG</th>
<th>DU</th>
<th>PL</th>
</tr>
</thead>
<tbody>
<tr>
<td>iwes ‘skewer’</td>
<td>iweskən ‘skewer-DU’</td>
<td>iwes(ə)ıt ‘skewer-PL’</td>
</tr>
<tr>
<td>qotl ‘day’</td>
<td>qotlyən ‘day-DU’</td>
<td>qotlət ‘day-PL’</td>
</tr>
<tr>
<td>ät’am ‘brother-1SG’</td>
<td>âťəyəm’am‘brother-1SG/DU’</td>
<td>ât’ləm ‘brother-1SG/PL’</td>
</tr>
<tr>
<td>oь ‘head’</td>
<td>oγkən ‘head-DU’</td>
<td>oγət ‘head-PL’</td>
</tr>
</tbody>
</table>

Mass, and abstract nouns are improbable in any number other than singular:

<table>
<thead>
<tr>
<th>SG</th>
<th>DU</th>
<th>PL</th>
</tr>
</thead>
<tbody>
<tr>
<td>jinəq ‘water’</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>sälənə ‘salt’</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>meγ ‘fatigue’</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>wöγ ‘strength’</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

These nouns may be attested in the dual or plural context, but only in reference to possessors of the concepts that they express:

61. muγu nur-əyələn kənəw-ətən ?
    WH evil-SG.2Du avenge-2DU
    “Which evil did you(two) avenge me for?”
Some of the mass nouns that express concepts implying group membership have low probability of non-singular usage:

### Table 13

<table>
<thead>
<tr>
<th>Group-membership nouns</th>
</tr>
</thead>
<tbody>
<tr>
<td>SG</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>jaɣ <code>people</code></td>
</tr>
<tr>
<td>jaɣi mori <code>crowd of people</code></td>
</tr>
</tbody>
</table>

Another differentiation that is made in Eastern Khanty nouns is between nouns expressing unique individual entities or tokens – proper nouns, and those expressing types or classes of entities in general sense – common nouns:

### Table 14

<table>
<thead>
<tr>
<th>Proper/Common noun differentiation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proper</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>wat’joɣan <code>Vasyugan river</code></td>
</tr>
<tr>
<td>wes emtœr <code>Mammoth lake</code></td>
</tr>
<tr>
<td>tœrom <code>Torem (upper god/deity)</code></td>
</tr>
<tr>
<td>sœwœs (iki) <code>Sawsiki (gaint forest deity)</code></td>
</tr>
<tr>
<td>saʃka <code>Sashka (male name)</code></td>
</tr>
<tr>
<td>loŋwœσekikik <code>month of geese and ducks</code></td>
</tr>
</tbody>
</table>

- Cultural context underlies all the classifications of the Eastern Khanty nouns, which in large part is typologically universal and shared by other cultures areally and in general. However, local cultural specifics may render some of the sub-classifications, such as that of pair entities below, unique or at least distinct from the areal linguistic (cultural) environment. The cultural specifics have linguistic implications for the way nouns are classified into semantic fields, frames, nested prototypes or hierarchical classifications of semantic features, where differentiations may apply by implication.

\[ qu \text{ `male`} > qu / kasi `human` > animate > concrete (countable, common) > noun \]
Equally, linguistic (cultural) semantic fields and frames may have implications and prototypical associations that will be unique for the Eastern Khanty. For example, the noun coding a name of the month loŋwásekiki ‘geese-ducks month’ evokes, as does any other calendar token, the whole frame, lineal order and all the constituent tokens, such as kojemiki ‘fish-egg spawning month’, wariki ‘fish-weir month’, urniki ‘month of crows’, etc. However, unlike the Russian 12 month calendar, the Eastern Khanty month/season names, numbering between 10 to 14, evoke a number of cultural associations, implications born in the host of occupational, migration and other cultural and even locality specifics. Upon cross-community comparison, even at a micro scale (within one river basin), it is evident that all the essential features (such as constituency, homogeneity, nomenclature of this frame) are subject to considerable variation across localities, occupation groups, and even individual clans, families and age/gender strata within social groups. Thus, the above month/season names imply and indeed originate from their respective natural and occupational events, and hence, may vary in their duration (from 1 to 5 weeks, both between different “month” and from year to year), order (some may exchange order or be omitted temporarily or permanently), number, etc. across different areas of the river basin (due to climate specifics), across families specializing on particular occupations (hunting and fishing on big vs. small rivers, tributaries), age/gender groups (occupation, bilingualism, linguistic/cultural assimilation).

2.1.3.2 Semantic fields

To exemplify the cultural context and relativity in the nominal semantics of the Eastern Khanty, the best-suited semantic field is, perhaps, that of kinship nomenclature. At first approximation, it is notable that Eastern Khanty kinship terminology, as in any language is in its essence, a product of conflicting and
interacting tendencies. The first tendency is for these terms to identify the social roles of the real world entities, participants of the Ego's social environment. Their main function is to delimit and regulate individuals' social behavior. This tendency, presumably stable and universal, in its functional nature, implies a high degree of stability and schematicity as an important social feature. On the other hand, it is immediately evident, that the import of the individual experience of every Ego in the conceptualization and consequent application of this terminology is significant. In other words, as with any other linguistic knowledge, kinship terminology is a product of interaction of acquired social knowledge and individual cognitive experience. In cognitive functional terms, kinship terminology represents a conceptual schema, a cultural frame, that is instantiated individually, both as a whole and as a network of interrelated components, in every speech event by every speaker. In the empirical plane, every usage of the kinship terminology reflects an individual instance of the kinship frame, where there can be discrepancies between usages in different speakers due to a host of "real world" factors affecting the form and function of the component terms, e.g.: the actual individual kinship situation, language proficiency, traditional vs. modern lifestyle, non-prototypical mapping of social roles to kinship relation (FaBr=Fa), etc. Ego may have an acquired knowledge of the missing components of the frame from linguistic experience, but not from the individual "real world"; and since this part of the frame is not grounded in usage, it is most likely to produce non-prototypical usage (collapsing of terms, misuse, borrowing, etc.) or, indeed, no terminological representation.

Generally, Eastern Khanty kinship terminology appears to be quite extensive, containing a multitude of separate, etymologically unrelated lexical units. The

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18 It is important to note that the most qualified information concerning the kinship terminology and marriage patterns comes predominantly from female language assistants, which represents a specific reference point, possibly different from that of a male speaker.
extent and diversity of the terms manifest a multitude of differentiating features of various levels, such as, generation, relative age, gender, lineal vs. collateral, consanguine vs. affinal, dead vs. alive. The above-mentioned functional nature of the kinship terminology in unwritten Eastern Khanty confirms that the extent and diversity of the terminology reflects the degree of importance and utility of this linguistic system in the everyday life of the speakers. Thus, for example, ‘Father's Father’ is the only member of the Eastern Khanty system that makes differentiation “dead-alive”, which is consistent with the patrilineal character of the Khanty socium (male head of the family and patrilocal residence pattern). In the kinship data, Khanty terms could be classified into single lexeme terms and a variety of compound terms that would combine the terms from the first group into complexes or/and supplement them with descriptive attributes (Table 15):

<table>
<thead>
<tr>
<th>Single Lexeme</th>
<th>Compounds</th>
</tr>
</thead>
<tbody>
<tr>
<td>aŋki- = Mo</td>
<td>aŋka-jaŋ = MoFa</td>
</tr>
<tr>
<td></td>
<td>aj- enki- = MoSi- StepMo</td>
</tr>
<tr>
<td></td>
<td>'small mother'</td>
</tr>
<tr>
<td></td>
<td>paŋ-paŋ = ss</td>
</tr>
<tr>
<td></td>
<td>oŋi- oŋi = dd</td>
</tr>
</tbody>
</table>

As a part of the Khanty linguistic system, the compound kin terms confirm the linguistic patterns characteristic of the whole system below, that is, kin terms demonstrate grammatical properties that hold for the rest of the language system.

i) kin are categorized as inalienably possessed by the Ego and, similarly to body parts, are attested only inflected for possession, signaling the number and person of the possessor, and the number of the possessed:

<table>
<thead>
<tr>
<th>oŋ-əm</th>
<th>aŋk-əm</th>
</tr>
</thead>
<tbody>
<tr>
<td>head-1SG/SG</td>
<td>mother-1SG/SG</td>
</tr>
<tr>
<td>kur-əŋləm</td>
<td>atŋ-əŋləm</td>
</tr>
<tr>
<td>leg-1SG/DU</td>
<td>brother-1SG/DU</td>
</tr>
</tbody>
</table>
ii) in compounds the linking kin term acts as a modifier of the target term, and similarly to all other modifiers precedes the modified noun (also true for last names\textsuperscript{19}):

\begin{align*}
\text{ämp qat} & \quad \text{aŋka-jay} \\
\text{dog} & \quad \text{mother-father (grandfather on mother's side)} \\
\text{šllš sart} & \quad \text{pay-pay} \\
\text{big pike-fish} & \quad \text{son-son (grandson by the son)}
\end{align*}

Instances of overlapping of the terms' semantic domains are numerous in the recorded data and they illustrate a true utility of this part of the lexicon in individual's cognitive activity of adapting the available lexical resources (in its system of the semantic frame of kinship) to organize/manage and communicate the individual's social environment.

Kinship terms, being nouns and profiling regions in a domain (kin), are also peculiar for their capacity to profile relations deeply inherent in their semantics (they are frequently called "relational nouns" (Langacker 1998)). Kinship terms are also interesting in that they illustrate the concept of Frame/ICM (Fillmore) in the sense that usage of any term in the network evokes the whole schema and other constituents of the frame with various degree of specificity/salience. That is, whenever the kinship term is used, the process can be construed as evoking the whole kinship system and a certain reference Path between the Ego (the universal reference point with regards to which the kinship is identified) and other kin along this Path. The area where cross-linguistic/cross-cultural variation is observed, however, is in the degree and type of profiling of the specifics of referents (kin) required by a language to satisfactorily perform the search (Path) of a particular kin denoted by the kin term with regards to Ego. Such variation is intimately

\textsuperscript{19}The Khanty preferred order of last name preceding first name 'Igorenka Sashka' complies with Mod-N order, which is the distinct from the source language for this introduced name system - Russian, where the opposite order is a norm.
interrelated with the cultural peculiarities of a particular society, such as marriage patterns (exogamy), social organisation (patriarchal), etc. That is, a society actively catering for observance of exogamic, patrilocal/patrilineal arrangement would, as Eastern Khanty shows, employ available linguistic means to make clear the distinction between individuals who have a potential for marriage and those who do not.

Considering Eastern Khanty kinship terms, their mutual interrelation and relation to the known Khanty social behavior patterns is visible.

<table>
<thead>
<tr>
<th>FaBr - iki</th>
<th>MoBr - oli</th>
</tr>
</thead>
<tbody>
<tr>
<td>FaSi - anja</td>
<td>MoSi - ani</td>
</tr>
</tbody>
</table>

It is noticeable that the gender of the reference kin is prototypically significant in the nomenclature. Similarly, atʃi = Br+, FaBr+s+, FaBr-s+ vs. MoBr-s+ = iki; kaki = Br-, FaBr+s-, FaBr-s- vs. MoBr+s-, MoBr-s- = tʃekí; opi = Si+, FaBr+d+ vs. MoBr+d+ = il’tʃi; and finally tʃekaj = Si-, FaBr+d-, FaBr-d- vs. MoBr+d- = il’tʃi. The significant opposition here is lineal vs. collateral kinship. As noted earlier by A.L.Kroeber (1909), a custom of identifying in nomenclature the lineal and collateral relatives is largely co-extensive with exogamous practices. Data on Khanty kinship terminology and ethnographic records suggest exogamy with patrilineal descent, and bifurcate collateral differentiation is consistently an important systemic feature.

The lineal vs. collateral differentiation is also illustrated by the similarity of terms denoting collaterals on husband’s side and lineal relations, whereas the collaterals on the wife's side are consistently differentiated from the male's lineal relations. It was noted above that in the Khanty patrilocal residence pattern, the son's family settles in proximity to the father's family. Thus, the son's wife generally enters the father's clan. The marriage is commonly described with
regards to a man: 'he brought the woman home'; and with regards to a woman: 'she went behind man's back', 'she went to the other/unknown man'. The marriage when a husband would enter the family of the bride (xot wen xu 'son-in-law in the house of wife's father') was exclusively rare and considered unorthodox.

Diachronic analysis illustrates some of the dynamics in this domain of Eastern Khanty vocabulary. Borrowings from Russian and Tartar are used parallel to Khanty terms or substitute for them, disseminating by implication to compound reference terms. These lexical changes in the domain of collateral kin terms are occurring more intensively, most probably due to the strong patriarchal societal features.

Correlating the observed kinship terminology features to the overall Eastern Khanty language system patterns, it is visible for example, that overt gender differentiation of kin exists almost at all levels, whereas it is absent in the language system as a grammatical or lexical feature, e.g.: the 3SG pronoun is neutral to gender, no modifiers differentiate gender, neither S-V nor V-O agreement inflections differentiate gender, etc. The domain of kinship is thus the only area in the language that elaborates such a distinction.

It can be observed in the narrative discourse that there is a consistent gender differentiation in the collective term with the sense – 'immediate family, i.e. spouse and child(ren)'. That is, there exists a set of closely related derivations differentiating 'father/husband and child(ren)' from 'mother/wife and child(ren)'.

Woman's family.
Text #13 (Tereskin 1961):
62. wur ont-ø wøl-t ø-s øt.
   wood inside-LOC live-PST2.3PL mother-Coll-PL
   'Once there lived a family (mother’s folks) in the woods.'

---

63.  
tu  jakkən  pəɣ-ali  toj-γən.
   DET   couple   son-DIM   have-PST0.3DU
'This couple had one small son.'

64.  ājlā-nā  qu  wont-a  mān-āɣən  os  ā-s-āɣən  jok  kit-kən
    once-LOC  man  woods-ILL  go-PST0.3SG  but  mother-Coll-DU  home  stay-PST0.3DU
   'Once the man left for the woods, but the mother and son stayed.'

Here, in (62), the term ōsōt (Lit. mother-Coll-Pl "mother's people") is used as a reference to the family, where the female (mother) is in some way more prominent and serves as a reference point for the family. In (64), the term ōsāγən (Lit. mother-Coll-Du "two of mother's kind") serves as a reference for "mother + son", which is evident from (63).

Suffix /-(ə)s-/ has collective/mass semantics, attested mainly in the domain of kinship terminology:

65.  wor  ont- noop  kāt  āti-γən  wəl-γən
    wood  inside-LOC  two  brother-Coll-DU  live-3DU
   'There lived two brothers in the woods'

Perhaps, etymologically this collective suffix is related to other nominative suffixes with qualitative semantics: alŋ-əs 'off-springs' ~ alŋ 'beginning/end'; toγər-əs 'patch of young pine trees' ~ toγər 'to cover'; qor-əs 'outlook' ~ qor 'image'.

This type of collective reference is made in the 1SG narrative as well, thus demonstrating a self-identification in reference to one of the parents.

66.  əj  ōlāŋ  min  ōs-s-āɣən  mān-yāl-mān  ul-ati
    one morning  1DU  mother-Coll-DU  go-PST1-1DU  berry-Sup
   'One morning we, me and my mother went to the woods for berries'

It is seen in the narrative discourse, however, that there are certain restrictions to the use of these collective terms. It is notable that in narratives the term ōsā- is used only in the direct-quotations, in male speech (when spoken by husbands or
children), describing a situation as perceived by or in connection with the male family members (husbands/children):

67. tɔy-l-ə, ata, mə əs-əl-əm ...
see-Impr.2SG brother 1SG mother-Coll-DIM-1SG
"Look brother, my wife and child(ren) are there..."

68. əjlə-nə qu-ən mən-γən pəni ə-s-əli-nə serəkə at-kən
once-LOC man-DU go-3DU and mother-Coll-DIM-ILL seriously say-3DU
'Once the men left and warned their wives and children'

The respective symmetric reference term is also attested. The following group-reference term is attested for the man's family:

69. jəy-s-əγən luw juy wer-tə mən-γən
people-Coll-DU bow wood make-INF go-PST0.3DU
'The father and son went to make a bow.'

In this case, the term jəy-s-əγən (Lit. father/our people-Coll-Du ‘two of father's/our people’) is used in reference to ‘father and son’.

It should also be noted that the discourse functions and propositional-semantic content associated with situations describing marital practices in the narratives is, to an extent, indicative of the traditional conceptualization of marriage and family in Eastern Khanty. Thus, the types of verbal constructions found in the marriage context appear illustrative of this conventionalized cultural frame. Thus, the choice of verb’s lexical semantics, as well as the choice of verbal constructions, is in correlation with the cultural frame of marriage – the conventionalized practice of patriarchal/patrilocal residence.

70. a) mə jən ol-ən jəm-am-a at-əm ma-nt-əm jəs-tə:
1SG ten year-LOC become-PP-ILL father-1SG 1SG-ACC/Rfl say-PST0.3SG/SG
‘When I was 10 my father told me: …’

b) “mə noŋ-at kit-1-əm, pərkənike, panə noŋ-at rut’ iki-ja mə-l-əm”
1SG 2SG-Acc send-Prst-1SG shop-assistant and you-Acc Russian man-ILL give-Prst-1SG
‘I'll send you to study for a shop-assistant and give you away to marry a Russian man’”
71. “ati mā kitʃ-am əntə rut’ iki-ja mən-ta ’”
father 1SG want-1SG Neg Russian man-ILL go-INF
“I don’t want to go to the Russian man”.

72. əntə mən-ŋ-an wój-nā tūl-uj-ŋ-
Neg go-Cond-2SG force-COM take-PS.2SG
'If you are not going (to marry), you'll be taken by force''. (Tereskin 1961)

Tsingala dialect (Kulonen 1989):
73. nuŋ mej-āj-ën pun-ŋ etōp maχmoχu-ja
2SG give-PS.2SG hair-COM grow forest.man-ILL
'You were given (to marry) to a forest animal-man with a hairy body'.

Konda dialect (Kulonen 1989):
74. jey-ān-nō mej-ājān, tūt-ōm ... noŋ-at
father-2SG-LOC give-PS.2SG take-PRS.1SG you-ACC
'If you are given (to marry) by your father, then I take you'.

That is, the woman/wife is given by her family to go and live with the
man/husband, i.e. acts as a patient of ‘giving’, ‘taking’ and ‘keeping/having’
(Target).

The man/husband, on the other hand, is the one who decides or is allowed to
take and have/keep the woman/wife at his residence, i.e. acts as a purposeful agent
of 'taking' and 'keeping/having', or as a recipient of 'giving' in 3 last examples
above.

75. “ tul, ḍjumin ni wij-āyān ...”
look-Imper.2SG DET wife take-PST0.3SG
"Look, he took such a wife..." (Kalinina 1970)

76. ivān ilā-nō noməyə-wəl: “mā timin mustim ni taja-kan- im ...”
Ivan once-LOC think-PRS.3SG 1SG DET beauty wife keep/have-PST0-
1SG/SG
'Ivan thought then: "I had such a beauty of a wife"'.

Konda dialect (Kulonen 1989):
77. jey-ān-nō mej-āj-ën, tūt-ōm ... noŋ-at
father-2SG-LOC give-PS.2SG take-PRS.1SG you-ACC
'If you are given by your father, then I take you'.

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In more categorical terms, in this type of social behavior (the cultural frame of ‘marriage’), the social role of wife and mother correlates most frequently/exclusively to the semantic role of Target/Undergoer, while the social role of husband and father most frequently correlates to the semantic role of Agent/Recipient. The only consistent discrepancy from the above correlation in this frame, is the ‘wife = agent’ correlation in the case of motion verb constructions, where ‘wife/bride’ is the Agent of ‘going’, both in literal, physical relocation, and in a more abstract sense, that of transferring oneself from the general domain of the Father to the general domain of the husband: *ikija m̠nta* ‘towards husband/man go’; become associated with the general domain of Husband's Father, as implied by the frame:

However, the above spatial/abstract transition is not really agentive, in the sense of volition and control, as the cultural frame implies that the agent (woman) is not the one who really makes the decision to move, but complies with the external will. The agent (woman) in reality never acts alone, being taken to a new location by the man.

This discussion may be concluded with the statement that the key differentiations in the Khanty kinship terminology is mutually informed and

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22 'bride' - is more precise, as the cultural frame implies that the status of ‘wife’ is complete only upon arrival to- and observing certain rituals at the new family location (new house), normally 'husband's' clan residence.

23 Patrilocal setting - the husband=son normally resides with, or in the immediate proximity to his Father.
conditioned by the important patterns in the social behavior. Such prominent differentiation as gender (sex) is omnipresent at all levels in the kinship terminology system, but is otherwise absent from the Khanty grammatical system.

Kinship terminology is a dynamic adaptive and highly “subjective” cognitive system serving the multi-fold purpose of delimiting the individual's domain of kin relations by mapping the social frame of kinship to ‘real-world’ kinship environment on one hand, and identifying, regulating, communicating social relations in the community on the other.

It is a tendency in kinship terminology for nuclear terms to be more or less universal across speakers, whereas more peripheral terms tend to be increasingly individualized with regards to semantics. This is because the individual real-world circumstances define (corrupt) the correspondences between the term, the actual biological kin and social roles, which, in turn, has implications in affecting larger areas in the domain, i.e. semantic and lexical shifts in compounds, linking routes, etc.

The Eastern Khanty kinship terminology system itself demonstrates an immediately observable relation to social behavior patterns, in that, in its functional utilitarian nature, it appears both an instrument and indicator of social changes, such as cultural and linguistic assimilation.
3. **PRONOUNS**

Eastern Khanty pronouns are a closed class of proforms, that are used robustly to substitute instances of an open class (Shopen 1985), that of nouns and/or noun phrases.

1. әj aj ni mәn-nә qит’-qәs
   one small woman 1SG-COM stay-PST2.3SG
   ‘One girl (small woman) stayed here with me’

Among the Eastern Khanty pronouns there are virtually all subtypes that are typically differentiated for this class of words.

### 3.1.1 Personal Pronouns

Personal pronouns are used primarily to refer to the speech act participants, i.e. 1 and 2 SG, dual and plural:

2. ul-әм torim-nә нән-ән ma-n loьosә-yaς-ән.
   sleep-3SG dream-LOC 2SG-LOC 1SG-ACC hit-PST3-2SG
   ‘You hit me in my dream’.

3. tom pel’k-әй sawsәki mә-әй jә-wәл.
   DET side-PRL Siwsәki 3PL-LOC go-PRS.3SG
   ‘Sewsәki [wood goblin] is coming here (to us) from that side of the river.’

4. нәң tәt әl jәrk-itәn.
   2DU DET NEG make.noise-Imper.2DU
   ‘Don’t (you two) be naughty’

They are also used in reference to other referents whose identity is available to the speakers either from the linguistic context or situationally (i.e. 3SG, dual and plural):

5. mә pәtʃkәn-нат liйilta -l-im, jәy-ән oь-ol il wer-l-әtә
   1SG gun-COM take.aim-PRS-1SG 3SG-LOC head-3SG down do-Iterat-3SG/SG
   ‘I tried to take a shot with my gun, but he sees me and hides his head’

6. әlлә нәй-әлә muйиnә jәk әntә әрәтәl-әә niй-әli-kәn
   elder woman-3SG-LOC how 3PL NEG ask-IMPP girl-DIM-DU
   ‘No matter how much the elder woman tried to calm them down, the girls…’
The exact paradigm of the Eastern Khanty personal pronouns looks as follows:

<table>
<thead>
<tr>
<th></th>
<th>Sg</th>
<th>Du</th>
<th>Pl</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>mā</td>
<td>min</td>
<td>məŋ / məŋ</td>
</tr>
<tr>
<td>2</td>
<td>nōŋ</td>
<td>nin</td>
<td>nəŋ / nəŋ</td>
</tr>
<tr>
<td>3</td>
<td>joy / loy</td>
<td>jin / lin</td>
<td>jəŋ / ləŋ // jıŋ / lıŋ</td>
</tr>
</tbody>
</table>

### 3.1.1.1 Inflection

Pronominal forms may be co-referential with any argument or adjunct in the proposition, and their syntactic functional domain is very wide; hence, Eastern Khanty pronouns have extended case paradigms, almost identical to that of nouns, with the exception of Accusative case marker, non-existent in the noun paradigm:

<table>
<thead>
<tr>
<th></th>
<th>Sg</th>
<th>Du</th>
<th>Pl</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>mā</td>
<td>nōŋ</td>
<td>jōy</td>
</tr>
<tr>
<td>2</td>
<td>mānt</td>
<td>nin</td>
<td>jin</td>
</tr>
<tr>
<td>3</td>
<td>māna</td>
<td>noŋa</td>
<td>jina</td>
</tr>
<tr>
<td>Acc</td>
<td>mānt</td>
<td>nōŋat</td>
<td>jōyat</td>
</tr>
<tr>
<td>Loc</td>
<td>mānnə</td>
<td>nōŋən</td>
<td>jōynən</td>
</tr>
<tr>
<td>Illat</td>
<td>mānnə</td>
<td>nōŋən</td>
<td>jōynən</td>
</tr>
<tr>
<td>Allat</td>
<td>mānnəpə</td>
<td>nōŋənəpə</td>
<td>jōynənapə</td>
</tr>
<tr>
<td>Com</td>
<td>mānnə</td>
<td>nōŋən</td>
<td>jōynən</td>
</tr>
<tr>
<td>Inst.O</td>
<td>mānnə</td>
<td>nōŋə</td>
<td>jōynən</td>
</tr>
<tr>
<td>Prolat</td>
<td>mānəy</td>
<td>nōŋəy</td>
<td>jōynəy</td>
</tr>
<tr>
<td>Abess</td>
<td>mānəy</td>
<td>nōŋəy</td>
<td>jōynəy</td>
</tr>
</tbody>
</table>

There is a regional variation of the initial consonant /j/ ~ /l/ between south-eastern Vasyugan and Upper Alexandrovo vs. more northern dialects of Vakh and Yugan.
3.1.1.1 Nominative

The nominative case is predictably the case of the Agent semantic role, of either
matrix (7) or linked clauses (8), used to express the SAP – 1 and 2 person.

7. **non wiŋ-at ̄gy-n-äŋ waj-y, mä waŋ-l-äŋ kör-äŋ waj-y.**
   2SG call-Impr.2SG feather-Attr animal 1SG call-PRS-1SG leg-Attr animal
   ‘You call the winged animals, and I call the earthly animals.’

8. **mä wəl-t-am tʃ’ars-a poroyoŋ-l-ən.**
   1SG live-IMPP-1SG sea-ILL fly-PRS-1DU
   “We’ll fly to the place, where I live, at the sea”

Whereas the Eastern Khanty nouns are normally unmarked for case both in the
Agent and Target semantic roles, the pronouns in the semantic role of Target of the
action are marked by the Acc case marker (cf. Accusative below). However, there
are occasional examples where the pronominal Target argument is coded
morphosyntactically similarly to the pronominal Agent (cf. (9), (10), (11) vs. (12),
(13)), by the Nom. case.

Agent of State:

9. **ajpä qunta mä werəŋ wəl-m-am-na**
   once when 1SG small be-PP-1SG-LOC
   ‘Once, when I was small…’

Agent of Event:

10. **mä pat-l-uj-əm**
    1SG be.cold-PRS-PS-1SG
    ‘I am getting cold’

Agent of Action:

11. **qunə mä nöŋ-ə loyos-l-əm**
    when 1SG 2SG-Instr.O hit-PRS-1SG
    “When did I hit you?”

Target of Action:

12. **pəŋ-əŋ-nə qoy iuy waya-γən.**
    son-3SG-LOC long 3SG call-PST0.3SG
    ‘Her son called (for) her for a long time’
13. mā non qiṭšk-ali-nati utiγā-1-əm
1SG 2SG knife-DIM-COM cut-PRS-1SG
‘I will cut you with a knife’

14. tim puγol-oγ min-t poγi-la-wəlt mən-itəγ mən-itəγ
DET village-PRL 1PL-ACC chase-Tr-PRS.3PL go-Impr.2PL go-Impr.2PL
‘(They) chase us away from this village: “Go, go!”’

This is not a typical way of marking the semantic role of Target and appears to be associated with the negotiation of the pragmatic properties of the referents, where the argument structure is a manifestation of the pragmatic dynamics of the referents in discourse (cf. 10.). In (12), the Agent referent ‘her son’ is pragmatically marked – topicalized (secondary topic, or otherwise), whereas the Target referent ‘3SG’, though referential, i.e. contextually accessible, is nevertheless a part of the assertion in the proposition, and is also not an SAP.

Pronominal NP possessor may be unmarked for case and as any nominal modifier may be simply juxtaposed to the head noun which it modifies:

15. mā səγəput-am əl tuy-i.
1SG pot-1SG NEG carry-Impr.2SG
‘Don’t carry away my pot’

3.1.1.1.2 Accusative

What is more typical and traditionally (Tereskin 1961; Gulya 1966) described for the Khanty language, is coding the role of Target by the Accusative case marker (14), (16):

Target of Action:

16. nən-at məγi nemp-ə way-wəlt?
2SG-ACC what name-Instr.O call-PRS.3PL
“What name do they call you?”

17. jājəm-nati mənt tuyi jəγə-m-ti
axe-COM 1SG-ACC away chop-MMNT-3SG
‘(He) will chop me with an axe’
Compared to (13) above, in (16), the Target referent ‘2SG’ is not only contextually accessible, but also activated, being a part of the presupposition. The rest of the proposition is predicating some information about it, focusing on the Instrumental referent ‘name’ coded by the InstrObj case, whereas the Agent referent is either irrelevant or unambiguous and thus elided.

Target of transitive Action:
18. muyl’a  tji’iti  jäl’iγwən,  mą-n  tʃəqə  kən’kə-mtə-s-ən.
   “Why do you do that? Got me really scared.”

Benefactive of di-transitive Action:
19. pələnə  jəγ-ə  mın-t  rək-ə  totqəl-wəlt
   ‘Occasionally people give us some flour’

As for the status of this morpheme as a case marker, it is not entirely clear, if the reference ‘the accusative case marker’ is altogether adequate. It is clear from the available data, that this marker or the grammar it serves to code is not grammaticalized for Eastern Khanty nouns, i.e. it is not present in the noun case paradigm. Thus, its functional distribution is limited to personal pronouns. It is also clear, that in the domain of personal pronouns, the function it codes is that of the Target role in the active direct transitive clauses. It is also known, that Accusative case is not characteristic for most of the genetically related Finno-Ugric languages. Moreover, in some of these languages, like Finnish, a similar phenomenon exists, where there is a marker on pronouns in the semantic role of Target, which is referred to as definite P marker (A.P.Volodin, 2006) and is not considered a case marker, but rather a marker of definiteness. While, confirming the definite pragmatic status of all the referents marked by this morpheme in the available Eastern Khanty data, for the purposes of this descriptive work, the nature and

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25 Personal communication. I would like to acknowledge professor Volodin’s comments concerning the Khanty case system.
appropriateness of the reference terms for it will not be discussed in any further
detail.

3.1.1.1.3 Locative

The Locative case prototypically marks spatial/temporal relations of the
referents, often locating the event or other referents with regard to the SAP:

20. nuŋ kul'-ä mä-no jul-əm-lat-int-əs
   upward get.up-Impr.2SG 1SG-LOC mouth-1SG get.burnt-MMNT-PST2.3SG
   ‘Get up, my( at me) mouth has got all dry’

21. tʃ’u kəsi-nə nuŋ joiₚ-il jõyã-nã tʃutʃi-mtə-tə.
   DET man-LOC upward bow-3SG 3SG-LOC raise-MMNT-PST0.3SG/SG
   ‘That man aimed his bow at him’

Apart from the typical spatial locative semantics, Loc case is frequently used to
mark the semantic role of Agent in the so-called Eastern Khanty Loc-Agent
(ergative) constructions, as well as the Agent of the agented passive constructions
(cf. 10.3. Non-canonical Constructions):

22. t’u sart man-ən kippä päntʃältə-yəl-iɣ.
   DET pike-fish 1PL-LOC twice boil-PST3-1PL
   ‘We boiled that pike-fish twice’

Agented passive:

23. män-no ləŋki lɔŋəl-ŋɨ kayɾəmtə-s-i, jõy-ən mä-nt kôt-äm-ŋɨ perə-s.
   1SG-LOC squirrel tail-PRL grab-PST2-PS.3SG 3SG-LOC 1SG-ACC hand-PRL bite-PST2.3SG
   ‘I grabbed a squirrel by the tail, and it bit me on the hand’

3.1.1.1.4 Illative

Similarly to nouns, in pronouns, the Illative/Dative case most commonly marks
the recipient of the object transfer, target in the change of possession, addressee of
speech act, direction of movement:

24. jõŋ-əl’i jõy-ã təŋta-ɣən
   mouse-DIM 3SG-ILL say-PST0.3SG
   ‘The mouse said to her’
25. sart  n'ǝγǝs-t-an  pirǝ,  mɯɡlǝl  mǝn-ä  qǝj-i.
pike-fish  scale-IMPP-2SG  after  liver  1SG-ILL  leave-Impr.2SG
‘After you scale the pike, leave the liver for me’

3.1.1.1.5 Allative

Very similarly to the Illative/Dative, the Allative case /-pa/ marks the direction of movement, and less often object transfer:

26. mǝnǝ-pǝ  tom  t’arǝs-pa  ɬǝγǝllǝ-ǝn
1SG-ALL  DET  sea-ALL  fly-Imper.1DU
‘Let’s fly to the sea, to my place’

Allative, appears a less frequent and less productive case marker, whose functional-semantic domain overlaps with that of the Illative/Dative.

3.1.1.1.6 Comitative

The Comitative case marker /-nä(ti)/ is found on the referents whose co-presence in the event is seen as salient:

27. t’ä  mǝn  jǝγ-näti  oγtǝɡ  urij-a  mǝn-s-ǝγ
DET  1PL  3PL-COM  Okhteurij-ILL  go-PST2-1PL
‘We went with them to Okhteurij’

28. mǝn  juv-na  aj  kǝl  tǝlǝwǝ-γǝs-in
1DU  3SG-COM  small  word  say-PST3-3DU
‘We, (me) and her, talked for a while’

3.1.1.1.7 Instrumental.Objective

The Instrumental-Objective case of the pronominal arguments is attested mainly in the Vakh Eastern Khanty dialects marking the referents with the semantic role of Target of the transitive Action:

29. quntǝ  mǝ  nǝn-ǝ  loγǝs-1-ǝm
when  1SG  2SG-InstrO  hit-PRS-1SG
“When did I hit you?” (Tereskin 1961)
30. tiyl-ä juy-ä, må nön-ä jäwil-l-əm.
here-ILL come-Imper.2SG 1SG 2SG-InstrO feed-PRS-1SG
‘Come here, I will feed you’  (Tereskin 1961)

31. app-al-no juy-i jāwə-tə, jøyol juy-ä werə-ɣən.
father-3SG-LOC 3SG-InstrO feed-PST0.3SG bow 3SG-ILL make-PST0.3SG
‘Father fed him, made him a bow’  (Tereskin 1961)

32. təryuŋ qojnakəm juy-i way-wəl
suddenly somebody 3SG-InstrO call-PRS.3SG
‘Suddenly somebody calls him’(Tereskin 1961)

3.1.1.1.8 Prolative

The Prolative case marker /-oy/ expresses the source of movement or object transfer:

33. män-oy qoqqəpa āl mən-ä
1SG-PRL far NEG go-Imper.2SG
“Don’t go far away from me”

34. mä jin-øy siy-ä mən-s-əm
1SG 3PL-PRL away-ILL go-PST2-1SG
‘I went away from them’

3.1.1.1.9 Abessive

The Abessive case characterizes the situation with respect to absence of some referent in the State, Event, Action:

35. män-ly wər-wəl
1SG-ABES do-PRS.3SG
‘(S)he works without me’

3.1.1.2 Reflexive Forms of Personal Pronouns

Eastern Khanty personal pronouns also have the so-called reflexive forms (alternatively: emphatic and reflexive forms (Gulya 1966) or definite-possessive forms (Tereskin 1961)).
The morphological makeup of these forms is the following, the stem of the personal pronoun is affixed with the marker /-tɨ/, most probably with an emphatic semantics, and a possessive suffix corresponding in number and person to the stem personal pronoun is added:

\[ X + /-tɨ/ + \text{POSS}.x \]

Where \( X \) is the base personal pronoun, and \( x – \) is the possessive affix corresponding to \( X \).

These forms are used quite robustly in various syntactic positions and their functional characteristics are quite diverse. When occurring in the Agent, or Target semantic role, they have prototypical reflexive substantive meaning: ‘I myself’, ‘you yourself’:

36. \( jōy-t-il \) küm lüyt-əs
\( 3\text{SG-RFL-3SG out exit-PST2.3SG} \)
‘Then he himself went out’

When appearing as arguments in the function of the nominal attributive modifier, these forms have a possessive – reflexive meaning: ‘my own’, ‘your own’:

37. mā mān-t-im sem-yəl-əm-nə t’i təyî əjnäm wu-yal-im
\( 1\text{SG 1SG-RFL-1SG eye-DU-1SG-COM DET place once see-PST3-1SG} \)
‘I saw this all with my own eyes’

Finally, when occurring as arguments functioning as an adverbial modifier, these forms have a manner modifier meaning ‘I alone’, ‘just them’:

38. ālvāli jōy-t-il ələntə-s
\( \text{Alvali 3SG-RFL-3SG go.to.bed-PST2.3SG} \)
‘Alvali went to bed by himself (alone)’

39. jəl-il-ā nun-t-ən lökk-əl-əy
\( \text{go-MULT-Imper 2SG-RFL-2SG road-3SG-PRL} \)
“Walk your own way!”
More complete paradigm of these forms is as follows:

<table>
<thead>
<tr>
<th></th>
<th>Sg</th>
<th>Du</th>
<th>Pl</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>mäntim</td>
<td>mintimən</td>
<td>məntəŋ / mıtəŋ</td>
</tr>
<tr>
<td>2</td>
<td>nöŋtin</td>
<td>nin</td>
<td>nəntin / nɨntin</td>
</tr>
<tr>
<td>3</td>
<td>joŋtil / loŋtil</td>
<td>jìntin / lintin</td>
<td>jəŋtil / ləŋtil // jìŋtil / lìŋtil</td>
</tr>
</tbody>
</table>

Table 3

| Reflexive Forms of Eastern Khanty Personal Pronouns |

There is also another form of the personal pronoun (so far only in the 3SG), which appears to have a similar reflexive (emphatic)/possessive semantics. Morphologically, it represents the base of the personal pronoun (here 3SG) affixed with the marker /-nam/-näm/:

40. töŋə wətʃ'-imt-əɣəŋ tʃu rəɣəw jöɣ-nämpə wətʃ'-imt-əɣəŋ.
    fire take.fire-Mmnt-PST0.3SG DET right.away 3SG-RFL took.fire-Mmnt-PST0.3SG
    ‘The fire started, and it (the grass tuft) took the fire itself’

41. juj toɣi jöɣi-tə, jöɣ-näm utwisöŋ küm popoɣla-ɣəŋ.
    bile away throw-IMPP 3SG-RFL window out jump-PST0.3SG
    ‘(He) threw the bile away, and (himself) jumped outside through the window’

42. aʃ-il mən-əɣəŋ əɾəŋ puɣl-a…
    elder_brother-3SG go-PST0.3SG other village-ILL
    ‘The elder brother left for the other village,…’

    töt jöɣ-näm jay-ɫəl käs-tə töt wəɬ-m-əɣəŋ.
    DET 3SG-RFL people-3Pl find-IMPP DET live-INCH-PST0.3SG
    ‘…found his (own) family there and started to live there’

43. kəsi-nə nuɣ jöɣ-əl jöɣ-nämə pərtäɣ wəj-tə.
    man-LOC upward bow-3SG 3SG-RFL back take-PST0.3SG
    ‘The man put his (own) bow down’

This pronominal form appears mainly either in the Agent semantic role (40, 41), or as a possessive/attributional modifier to the nominal argument, in which case it is juxtaposed (commonly pre-posed (42) but may also occur as a postposition (43)) to the modified head. The marker /-nam/-näm / is quite infrequent and only occurs on another pronominal form, definite collective pronoun əjnäm ‘all’
3.1.2 Demonstrative Pronouns

3.1.2.1 Inflection

There are four main forms of the Eastern Khanty demonstratives: *timi* ‘this one here’, *tomi* ‘that one there’; and *t’it* ‘this’, *t’ot* / *t’ut* ‘that’.

<table>
<thead>
<tr>
<th></th>
<th>Proximal</th>
<th>Remote</th>
</tr>
</thead>
<tbody>
<tr>
<td>Definite/Visible</td>
<td>timi</td>
<td>tomi</td>
</tr>
<tr>
<td>Indefinite/Invisible</td>
<td>t’it</td>
<td>t’ot / t’ut</td>
</tr>
</tbody>
</table>

Similarly to personal pronominal forms, demonstratives could be co-referential with arguments or adjuncts in a variety of syntactic functions, and thus have an extended case paradigm.
Table 5
Case Paradigm of the Eastern Khanty Demonstrative Pronouns (Definite/Visible)

<table>
<thead>
<tr>
<th></th>
<th>Sg</th>
<th>Du</th>
<th>Pl</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Proximal</td>
<td>Remote</td>
<td>Proximal</td>
</tr>
<tr>
<td>Nom</td>
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</tr>
<tr>
<td>Loc</td>
<td>timinə</td>
<td>tomīna</td>
<td>timiγənna</td>
</tr>
<tr>
<td>Illat</td>
<td>timija</td>
<td>tomija</td>
<td>timiγənā</td>
</tr>
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<td>Com</td>
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<td>timiγənā</td>
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<td>timijōy</td>
<td>tomijōy</td>
<td>timiγənōy</td>
</tr>
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<td>tomilōy</td>
<td>timiγənlōy</td>
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<tr>
<td>Transl</td>
<td>timiyo</td>
<td>tomīyo</td>
<td>timiγənōy</td>
</tr>
</tbody>
</table>

More typically, however, the demonstratives robustly collocate with nouns, in which case they behave similarly to other nominal modifiers, i.e. appear preposed to the head noun, uninflected for case, whereas the head noun carries the case agreement inflection (45-47):

- Dem.Prn.Def. modifying the NP with the Agent semantic role of the matrix clause marked by Nom. case:

49. tom pul pun lajā-wəl
    that (Nom) piece hair hang-PRST.3SG
    ‘There’s that bunch of animal hair hanging’

- Dem.Prn.Def. modifying the NP with the Target semantic role Ø-marked for case:

50. tʃ’u l’a-nə rātʃ tʃ’al’eγtä-γən³ tim werəŋ-ot-ət.
    that time-LOC old man scream-PST0.3SG this little-thing-PL
    ‘Then the old man screamed to these children.’

- Dem.Prn.Def. modifying the Locative role marked by Loc. case:

51. tompolək-nə
    that side-LOC
    ‘On the other side’

- Dem.Prn.Def. modifying the ‘target’ Locative role marked by Illative/Dative case:
52. in-ta qoji-m-ŋ-an, tom kölləŋ-ä joy-ä, män-ä tʃeləyt-ä.
eat-INF want-PP-2SG-LOC that bank-ILL come-Impr.2SG 1SG-ILL call-Impr.2SG
‘If you want to eat, come to that bank, call for me.’

• Dem.Prn.Def. modifying the ‘source’ Locative role marked by Ablative2 case:

53. tom-pel’k-oɣ sawəsiki məŋ-ä jə-wəl.
that-side-PRL Sevsiki 1PL-ILL go-PRST.3SG
‘Sewsiki [wood goblin] is coming here from that side of the river.’

Table 6

| Case Paradigm of the Eastern Khanty Demonstrative Pronouns (Indefinite/Invisible) |
|-------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
|                               | Sg              | Du              | Pl              |                 |
| Nom                           | tʃ’it            | tʃ’ut            | tʃ’itkən       | tʃ’utqən       | tʃ’itət         | tʃ’utət         |
| Loc                           | tʃ’itən          | tʃ’utən          | tʃ’itkənə       | tʃ’utqənə       | tʃ’itətnə       | tʃ’utətnə       |
| Illat                         | tʃ’itə            | tʃ’utə            | tʃ’itkənə       | tʃ’utqənə       | tʃ’itətnə       | tʃ’utətnə       |
| Allat                         | tʃ’itəplə        | tʃ’utəplə        | tʃ’itkənəplə    | tʃ’utqənəplə    | tʃ’itətnəplə    | tʃ’utətnəplə    |
| Com                           | tʃ’itənə         | tʃ’utənə         | tʃ’itkənənə     | tʃ’utqənənə     | tʃ’itətnənə     | tʃ’utətnənə     |
| Prolat                        | tʃ’itəy          | tʃ’utəy          | tʃ’itkənəy      | tʃ’utqənəy      | tʃ’itətnəy      | tʃ’utətnəy      |
| Abess                         | tʃ’itələy        | tʃ’utələy        | tʃ’itkənələy    | tʃ’utqənələy    | tʃ’itətnələy    | tʃ’utətnələy    |
| Transl                        | tʃ’itəy          | tʃ’utəy          | tʃ’itkənəy      | tʃ’utqənəy      | tʃ’itətnəy      | tʃ’utətnəy      |

54. tʃ’u pirnə joy (kəntəŋ - jay - al’it) puyəl
that after 3PL Khanty-people village
aj pel’øy-na amtət qat, tʃət / tʃət wəl-mət.
one side-LOC build-PST.3PL house that live-PP-3PL
‘After that they built the house close to the village and lived there.’

• Coding Target argument in Nom. case:

55. nəŋ tat āl sərk-itən.
2DU that NEG make.noise-Impr.2DU
‘Don’t be so naughty (Lit.: Your two such (like that) don’t make noise).’

The antecedent of the Dem.Prn. maybe the VP or a clause, as in the interrogative (56b) and (c), where the cataphoric ‘this’ in (b), and anaphoric ‘this’ in (c) are referential with the VP ‘got me really scared’ in the second part of (b).

56. a) kəsi-nə səm-əl joy lokkinta-ɣən.
man-LOC heart-SG/3SG home stop-PST.3SG
‘The man’s heart stopped.’
b) muyl’a tfitti jāl’iy-wən, mān tfəqə kən’kə-mtə-s-ən?
why this act-PRST-2SG 1SG-ACC very frighten-Mmnt-PST2-2SG
“Why do you do this? Got me really scared.”

c) mələ nōŋ mān-ə aj tf’iti kōtq’ kāl-ən, mā ej tf’iti səm-əm jəyəmâyil-kal
manner 2SG 1SG-LOC one this do-PST1-2SG 1SG one this heart-1SG stop-PST1.3SG
“Back then, you did the same to me, then my heart was stopping like that.”

• Coding Locative in Loc. case in adjunct relation:

57. innə mā jo-s-im, nōŋ tf’u-nə-ŋ
just 1SG go-PST2.1SG 2SG that-LOC-2SG/SG
‘I just came/arrived, you, that instance,…’

nomiŋ jəŋəs küm tot-limili-t-ən.
exactly shit outside take.out-PST2-2SG
‘…are throwing away the wastes.’

This example shows a rare temporal deixis marking by Dem.Prn.Indef. in
Loc. case to express spatial/temporal location and for 2SG-possession to express
identification of the temporal location with a referent of the proposition (2SG),
literally: ‘at that (moment) of yours’.

However, more frequently, Dem.Prn.Indef. are used not independently, but in
modifying function with NP arguments with various semantic roles.

• Dem.Prn.Indef. modifying the Agent semantic role marked by Nom. case:

58. tf’u jay jəq jōŋ-it.
that people home come-PST0.3SG
‘Those people came into the house.’

59. tfu-pirnə tfu.qu pəq’-əl-a tfutq jəloq-wəl.
that-after that man son-3SG-ILL that say-PRST.3SG
‘After that, that man says that to his son: …’

60. tf’u ni qat-a jəq’a-ən t’u aj nīŋ-āl’i-kən-ə
that woman house-ILL go-PST0.3SG that little woman-DIM-DU-ILL
tol’k-əqəs.
tell-PST3.3SG
‘That woman came [back] into the house [and] told those little girls’
61. tʃ’u-pirnə tʃ’u rātʃ qat-a kōŋa-ɣən.
that-after-LOC that old man house-ILL enter-PST0.3SG
‘After that the old man came into the house.’

Dem.Prn. modifying NPs with the Agent semantic role include also
modification of the Agent of a dependent clause (temporal, spatial, conditional or
relative):

62. qunta tʃ’u jəɣ im-l-ət in-tə, rātʃ juk-i
when that people sit-PRS-3PL eat-IMPP old man forward-ILL
‘When those people got down to dinner, the old man…’

ma-ɣən kūm tʃ’eltəɣən niŋi-t-ə.
go-PST0.3SG out scream-PST0.3SG woman-PL-ILL
‘…ran outside and screamed to the women..’

63. tʃ’u l’ān əjəmkıtəm qu-j-t əntə qoɣ norəɣək-min,
that time young man-EP-PL Neg long think-CNV
‘Then not thinking much, young men…’

nɔɣ wer-ət, mən-ət təɣəla, qo wəl-ət tʃ’u jəɣ
arrow do-PST0.3PL go-PST0.3PL that-ILL where live-PST0.3Pl that people
‘…made arrows and went where those people lived’

Dem.Prn. also modify the Agent of the matrix clause inside a dependent clause,
which in turn, is also a part of the matrix clause26:

64. qunto qat təɣə-ŋə i-m-əl, rātʃ ɯwəɣt-ətə qat təɣət
when house fire-LOC eat-PP-3SG oldman see-PST0.3SG house fire
‘When the house burnt down, the old man saw, while the house was burning,’

i-m-əl-oɣ, tʃ’u jəɣ entəw wəlaka məɣ-ə il-mən-t.
eat-PP-3SG-PRL that people waist up.to ground-ILL down-go-PST0.3PL
‘…those people got under the ground up to the waist.’

• Dem.Prn.Indef. modifying the Agent role marked by the Loc. case:

65. tʃ’u kəsi-ŋə nuy jɔɣ-ɪl jɔɣ-ənə tʃutʃi-mtə-tə.
that man-LOC upward bow-3SG 3SG-LOC raise-Mmnt-PST0.3SG/SG
‘That man aimed his bow at him.’

26 [[When the house burned down]]dep1, the old man saw [that [while the house was burning]]dep3, those people got under the ground up
Matrix 1: ‘the old man saw that while the house was burning, those people got under the ground up to the waist’;
Matrix 2: ‘those people got under the ground up to the waist’.

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körög-nc oγ-il il māyn’imt-ťo.
eagle-LOC head-3SG/SG downward bow-PST0.3SG
‘The eagle got its head down.’

- Dem.Prn.Indef. modifying NP with the Target semantic role Ø-marked for case:

66. μyvl’a t’iti jāl’iγ-won, mān tšaq kān’ka-mt-ś-ōn.
why this act-PRST-2SG 1SG-ACC very frighten-Mmnt-PST2-2SG
‘Why do you do this? Got me really scared.’

67. mōŋ app-al-aw-ŋ t’i kōntęj jąγ wel’-ś’il’.
1PL father-3SG-PL-LOC this Khanty people kill-PST2-3PL/SG
‘Our fathers killed these Khanty people.’

68. jōγ jō-γit wel’-tā tʃu rātš i tʃu kā niŋ-kōn.
3PL come-PST0.3PL kill-INF that old.man and that two woman-Du
‘They have come to kill that old man and those two women.’

69. kōntęj rātš-ŋ jąj-ęm wąj-ťo
Khanty old man-LOC axe-3SG take-PST0.3SG

tʃ’u on’aŋm rātš’ jąj-ęm-ŋ oγ-il-ț-ō joγam-țo.
that old old man axe-3SG-COM head-3SG-InstrO hit-PST0.3SG
‘The old Khanty man took an axe and hit that old man on the head with the axe.’

70. qunt’i rātš tʃ’i kōl tıγm-al-nō, quj-öt l’iśiśm puγal-ț.
when old man this word say-PP-3SG-LOC man-PL laugh-CNV get.up-PST0.3PL
‘When the old man said these words, the young men got up laughing.’

The last example prompts, the frequent use of this Dem.Prn.Indef. with the semantics of message cataphorically preceding the direct report, or less often, anaphorically following it:

71. rātš ęj niŋ-ą tšiti tölka-γōn.
old man one woman-ILL this say-PST0.3SG
‘The old man said to one woman this: …’

72. qörög kāsi-j-a tʃ’iti tölōγ-wəl.
eagle man-EP-ILL this say-PRST.3SG
‘The eagle says this to the man:…’
73. werọn-ot-at puγəl jor-na puγ-wəl-t, tʃitu tʃ’el’-wəl-t. little-thing-PL village center-LOC jump-PRST-3PL this scream-PRS-3PL ‘The children are jumping in the street and are screaming this: …’

74. jọr-äl’i tʃu ti jọy-a tọlọy-wəl. mouse-DIM that 3SG-ILL say-PRS.3SG ‘The mouse says the following: …’

75. kəsi tʃ’u ti körk-ā tọlọy-wəl. man that eagle-ILL say-PRS.3SG ‘The man says that to the eagle: …’

76. əjpə kəsi-j-a körọy tʃ’u ti tọlọy-wəl. once man-EP-ILL eagle that say-PRS.3SG ‘Once, the eagle says that to the man: …’

77. əŋkä-ŋə pəli-t-ə jəwə-tə, tʃu ti juy-ə tọlọy-wəl. mother-LOC breast-PL-InstrO feed-IMPP that 3SG-ILL say-PRS.3SG ‘Mother (breast-) fed him and so says this to him: …’

78. pəγ-l-a tʃu ti tọlọy-wəl. son-3SG/SG-ILL that say-PRS.3SG ‘She says that to her son: …’

79. tʃ’u-pirnə rātf juy-im jəγ-a tʃ’u ti tọlọy-wəl. DET-after oldman come-PP people-ILL that say-PRS.3SG ‘Then the old man says that to the foreigners: …’

• Dem.Prn.Indef. modifying the Locative role marked by Loc case:

80. əj qəsi qutʃ’kil’-tə mən-m-āl’-ŋə, tʃ’u tọγ-ə-j-a jọyâ’-γən. one man hunt-IMPP go-PP-3SG-LOC that place-EP-ILL come-PST0.3SG ‘One man went hunting and got to that place.’

There are a number of strong collocations of Dem.Prn.Rem.Indef. with the postposition (grammaticalized noun pɨ ‘back’ in the Loc. case) used to express temporal modification of the event, such as: tʃ’u pirnə ‘after that’:

81. tʃ’u pirnə körön-əγ oγ-il that after eagle-TRNSL head-3SG/SG ‘The eagle then, raised his head.’

82. tʃ’u pirnə qörọy tʃu ti kəsi-ja tọlọy-wəl. that after eagle that man-ILL say-PRS.3SG ‘After that, the eagle says the following to the man: …’
83. qǝsi tʃajǝyntä-ɣǝn,  tʃ’u piri nǝ jin poroɣy₁-kǝn.
man get.ready-PST0.3SG that after 3DU fly-PRST-3DU
‘The man got ready, and then they flew.’

84. tʃ’u piri nǝ qoroɣ wǝl-tǝ tǝɣǝ-ja poroɣ lǝl-kǝn joq juq-qin.
that after eagle live-IMPP place-ILL fly-PST0.3DU home come-PST0.3DU
‘After that, the eagle went to that place where he lived, and they got back home.’

85. tʃu piri nǝ jin mǝn-kǝn.
that after 3DU go-PST0.3DU
‘After that they (two) left.’

or with the noun ‘time’ – tʃu länǝ ‘at that time’:

86. quntǝ intot tetɣ wer-l’-ǝtǝn i qat pam-natǝ
when food inwards do-PRS-2DU and house grass-Com
‘After you cook the food and…’

tʃ’ǝki-l-tǝn, tʃ’u länǝ küm luyti-tǝn.
fill-PRS-2DU that time out go-PRST.2DU
‘…fill the house with the hay, then go outside.’

Occasionally, the Russian borrowing reno (Russ. vremja ‘time’) is used in the
Eastern Khanty Loc. case – tʃ’u remǝnǝ ‘right then’ (87) as well as other temporal
and spatial modifiers (88):

87. tʃ’u remǝnǝ al’wǝ il ruylimtä-ɣǝn nöröytä-ɣǝn.
that time-LOC Alva down jump-PST0.3SG run-PST0.3SG
‘Right then, Alva jumped down and running’

88. tøɣǝ wǝtʃ’-imt-ayǝn  tʃ’u rayǝw jɵynä-mǝo wǝtʃ’-imt-ayǝn.
fire take.fire-Mmnt-PST0.3SG that right.away 3SG-RFL took.fire-Mmnt-PST0.3SG
‘The fire started, and it [the grass tuft] itself lit up that instant’

•  Dem.Prn.Indef. modifying the Locative role marked by the Illative/Dative
case:

89. qu-j-ǝt  tʃ’u puyi-l-a jø-yi t jøyǝn.
man-EP-PL that village-ILL come-PST0.3PL night
‘The young men came to that village at night.’
• Dem.Prn.Indef. modifying juxtaposed noun in the function of nominal modifier:

90. tʃ’u qəsɪ-nə appa-kəl əŋkä-kəl ən’äm-kən
    that man-Loc father-3SG/Du mother-3SG/Du get old-PST0.3DU
    ‘That man’s father and mother got old…’

91. jəŋjəŋ-ni-nə tʃu ni lopifaj en-tno, mənä-ɣən jəŋ qat-il-a.
    water-woman-Loc that woman cloth put-PST0.3SG go-PST0.3SG 3PL house-3Pl-ILL
    ‘The mermaid put on that woman’s clothes and went to their home’

92. tʃ’u-pirnə tʃu rātʃ i kā nịŋ-kən wəj-əl’ tʃu
    that-after that old man and two woman-Du take-3SG that
    ‘After that old man and two women took…’

    jəŋ wel’i-t, mən-ət jəŋ puyl-əl-a.
    people reindeer-Pl go-PST0.3Pl back village-3SG-ILL
    ‘…those people’s reindeer and went to their village.’

93. tʃ’u iki səɣə-put wəj-tə noroytä-ɣən.
    that old.man kind-pot take-IMPP run-PST0.3SG
    ‘(She) took the old man’s pot and ran away.’

Finally, quite rarely, demonstratives (only Indefinite in these data) occur in the predicate function in a way similar to nominal predicates, using the predicator/adverbializer affix /-iki/. In this case, the demonstrative is anaphoric with the antecedent NP of Target, Instrument, nominal or verbal modifier semantics:

94. ämp-ət tʃ’ut-iki znachit wajəɣ men-ayən
    dog-PL that-PRD means animal go-PST0.3SG
    ‘The dogs are here like that, so the animal has gone out’
4. ATTRIBUTIVE NOMINAL MODIFIERS

4.1 Adjectives

Further utilizing word-class assignments based on a constellation of interacting criteria, with a prototype principle at the core of the categorization, we can identify an Eastern Khanty class of nominal modifiers with attributive semantics, adjectives.

1. аlla нi-ηa jоγ-н̄m wer̄̄n̄̄t̄-эl jern̄̄s-el oγ̄-ja p̄n-tə
   big woman-LOC home-All1 child-3SG dress-3SG inside-ILL put-PST0.3SG
   ‘The elder woman put her children in her dress’

2. пuʃk-ȁl’i āтм уl̄m wer̄-γ̄n
   bird-DIM bad dream see-PST0.3SG
   ‘The little bird saw a bad dream’

3. n̄ m̄n̄-γ̄n oraŋ пuyl-a
   woman go-PST0.3SG strange village-ILL
   ‘The woman left for the other village’

4. ѐj аj n̄ m̄n-н̄ q̄t’-q̄s
   one small woman 1SG-LOC stay-PST2
   ‘One girl (small woman) stayed here with me’

Identification of adjectives as an independent word-class rarely yields undisputed outcomes, and Khanty is not an exception. As it will be shown below, most of the Eastern Khanty candidates for adjectives appear contestable based on at least some criteria.

4.1.1.1 Semantic features

The analysis of the semantics of the Eastern Khanty nominal modifiers yields fairly prototypical semantic groupings, conventionally put forward for the class of adjectives:
• dimension: äj ‘small/young’; ëllë ‘big/old’; qo ‘long’; wän/wàñ ‘short’; wat’/wan’t ‘narrow’; jar kor ‘tall/high hill’.
• physical shape: wan’ ‘thin’, kól ‘thick’; qoma ‘wide’; qo¥ ‘long’; n’ayl ‘short’; walaq ‘bent, not straight’.
• taste: ewést ‘sweet’, wat’ër ‘bitter’, sënaŋ ‘salty’.
• tactile quality: pësto ‘sharp’, matël ‘dull’; ñty ‘cold’; n’am’ay ‘soft’; telk’ay ‘smooth/even’; wël’ék ‘smooth/clean/open’;
• value: jëm ‘good/correct’, ätóm /atóm ‘bad/defective’;

There are also examples of Eastern Khanty adjectives that would fall in the group of those with typologically less prototypical semantics:
• evaluative & human propensity: wij ‘crafty, naughty, mischievous’; sükaŋ jernas ‘nice shirt’; ariŋ ‘different/strange/foreign’;
  jertin ‘expensive’; äjan kotl ‘good/lucky day’; sëmon qasi ‘brave/hearty man’; namasläq qasi ‘dumb person’; äjloŋ-kollöŋ ‘untalkative, unsociable (äj ‘small/little’, kól ‘word’)
• living states:
  + age: ukum, werəŋ, ‘young/small’; përoŋ, ësiŋ, ën’ämë, ëllë ‘old (human/animate)’.
  + health: mërokkë / möryêm ‘healthy, recovered’; këtsay ‘sick’;
  + life: tʃ’önwë ‘late/diseased’.

Curiously, although there are considerable lexical means of expressing color in Eastern Khanty, most color terms are derived from nouns, either by affixation or by metaphoric extension, rather than being a part of a non-derived proper adjective closed class. This is a less frequent phenomenon typologically (Dixon 1977; Givon
Eastern Khanty color terms are mainly denominal derivatives: наж ‘white dog (naj ‘fire/light’); ворто-ul ‘red berry (вор ‘blood’); воста ‘yellow’ (вост ‘mammoth tusk’); сарным ‘golden (золото ‘gold metal – most probably from сарень ‘Zyryan people’) coin’; пёрт ‘black-berry’ (пёр ‘fur’); сож ‘black berry (сож ‘coal’); сож-пун’ ‘gray furred/haired (сож ‘frost’). Simile, in analytical constructions, is often employed to specify colors:

5. наро пым qорасо
   ‘green like wet grass’

The semantic function of the Eastern Khanty adjectives is typologically common for this word-class (Shopen 1985; Givon 2001; Haspelmath 2002), namely, that of modification of nouns, i.e. expressing a quality of the modified nominal referent. Thus, adjectives here denote some salient, relatively stable in temporal terms feature of an entity.

### 4.1.1.2 Syntactic features

In the prevailing majority of the instances, the Eastern Khanty adjective is prototypically a clause constituent that immediately precedes the noun that it modifies (93.5%) as in (1-5), and less prototypically follows it (6.5%) as in (6):

6. тув’ул билю т’йла-ъин
   ‘The big fire burns well’

The less rigid word order normally implies that the modified nominal participant is higher on identifiability scale, i.e. is contextually accessible (more cf.10.2.Information Structure).
Leaving outside this discussion such nominal modifiers as quantifiers (or limiting modifiers), this section will deal predominantly with the so-called *descriptive adjectives* as prototypical representatives of the class.

Syntactically, Eastern Khanty adjectives function either as nominal modifiers or as predicates:

- **Nominal modifiers.** In this function adjectives typically precede the modified noun not carrying any of the nominal inflections (number, case, possession):

  7. tom ukum ot wij kuliltɔ-ɣəl
     DET small thing naughty behave-PST0.3SG
     'That baby (small thing) is naughty...'

  8. āllə sart rətʃ män-nə lövölı-s-im
     big pike oldman 1SG-LOC get.ready-PST2-1SG/SG
     'I got big pike ready'

  9. jal-s-im tʃinam nayi ɑmp-ām
     stand-PST2-1SG DET white dog-1SG
     'I stand there, white dog at my side'

  10. tam ni sükən jernas jan-wel
      DET woman nice shirt sew-PRS.3SG
      'That woman makes a nice dress'

- **Predicates.** In this function, adjectives may either appear as the matrix nominal predicate itself, uninflected either for nominal or verbal categories, or as a nominal part of the complex verbal predicate containing either an auxiliary verb in a finite form or a nonfinite (typically imperfective participle) verb form.

  +As a simple nominal predicate, an adjective may either appear in its bare, uninflected form, or with a predicator/adverbializer affix /-(a/ə)ki/.

  - **Bare adjective-predicate is much less frequent (15%)**:

  11. pun-əl nayil
      hair-3SG short
      'The hair (his) is short' (nayil *adj.* ‘short’)
12. nimlim wäsim, tʃoŋa sarmali
   ski-1SG take-1SG snow shallow
   ‘I took my skis, snow is shallow’ (sarm adj. ‘shallow’)

The last example represents an infrequent case of adjectives carrying a nominal derivational (Dim) affix /-ali/.

- Adjective with a predicate/adverbializer affix /-(a/o)ki/ is a more typical, productive and frequent nominal predicate in Eastern Khanty (42%):

13. juŋ wujan-oki
   3SG proud-PRD
   ‘She is proud/fat’ (wujan adj. ‘fat/proud (woj n. ‘fat’))

14. nu jəm-aki
   ok good-PRD
   ‘Ok, well’ (jəm adj. ‘good’)

- There are occasional examples of reduplication of the predicate/adverbializer affix /-(a/o)ki/ attested in south-eastern dialect of Vasyugan, in approximately 7% of the instances of nominal predicates:

15. toyi jor ʒllɔ-ki-oki
   place swamp.hill big-PRD-PRD
   ‘That place there is big’ (ʒllɔ adj. ‘big’)

16. jəm-ak'i-oki
   good-PRD-PRD
   ‘Ok, then’ (jəm adj. ‘good’)

The exact function of such reduplication is unclear, for, as follows from the comparison of (14) and (16), at least in some of the usages, functional distribution is parallel. The most plausible hypothesis is that the first /-(a/o)ki/ in these instances is actually a derivational affix deriving adverbs from adjectives, whereas the second one is the predicate affix signifying the nominal predicate syntactic function. The use of first /-(a/o)ki/ as an adverbial derivational affix is quite regular (cf. 5.
Adverbial Modifiers):

17. pirtaŋ un-kas-im toŋa jəm-aki
   back cross-PST1-1SG also good-PRD
   ‘I crossed back also well’

   + Adjective as a nominal part of complex verbal predicate (Adj+V). In these
   instances the predicate contains an adjective, either affixed by /-(a/ə)ki/ (70%) –
   (17-18) or not (30%) – (19), and followed by a finite verb form, most typically
   wertə ‘do’ (22-23) or jəyta ‘become’ (18, 20, and 21).

    fast pike gut-EP-PRL Alva-LOC stomach-3SG sick-PRD become-PST0.3SG
    ‘Alva’s stomach got sick after eating the greasy pike-fish guts’

19. tom ukum ot wij küllilt-əyəl
    DET small thing naughty behave-PST0.3SG
    ‘That baby is naughty (crafty/mischievously behaves)’

20. qəm sāri meleq-qi jə-wəl
    IndPn later warm become-PRST.3SG
    ‘Soon it’ll get warmer outside’

21. os t’u suyıtow-ət pāni t’u jərtaŋ-əqi jəy-ət
    also DET medication-Pl and DET expensive-PRD become-PRS.3PL
    ‘But medication is getting expensive’

   In case of the verb ‘do’, the semantics of the expressed event is typically causative.

22. pāni oŋpi kəl-əqi wer-l-i
    and door open-PRD do-PRS-PS.3SG
    ‘And he opens the door (does open)’

23. oŋpi kəl-əqi wər-s-ıtəən
    door open-PRD do-PST2-PS.3PL
    ‘(they) opened (did open) the door’

   There are occasional references to a certain diminutive/deficient aspect in the
   semantics of the nominal predicates suffixed with /-(a/ə)ki/, i.e. a certain
   expression of the weakness of the attributed quality in the modified entity
   (Kuznetsoy 2004). This, however, is only revealed in the translation of the Eastern
Khanty examples into a contact language (most frequently Russian):

sasam-aqi ‘a little hard/tough (Russ. твердоватый (tverdovatyj))’
qinaŋ-aqi ‘a little solid (Russ. крепковатый (krepkovatyj))’
mele-qi ‘a little warmer (Russ. потеплее (poteplee))’

This gradience nuance in the semantics of /-(a/ə)ki/ predicates, however, cannot be attributed to the marker /-(a/ə)ki/ itself. Examples are abundant, where this type of adjectival predicates exists without any such ‘feature weakness’ in the semantics of the adjectival predicates:

24. ilim toŋ li-wol, şto uy-ol-pa qolən-aqi
   shy be-PRS.3SG “that” head-3SG-All1 bald-PRD
   ‘(He) feels shy, that his head is bald’

25. os t’u suŋtow-øt pəni t’u jertən-aqi jəv-øt
    also DET medication-PL and DET expensive-PRD become-PRS.3PL
    ‘but medication is getting expensive’

26. kur-kən qaŋə qətəŋ-əki-γən, ọγ qətəŋ-əki, qun qətəŋ-əki
    feet-DU sort hurt-PRD-DU head hurt-PRD stomach hurt-PRD
    ‘My feet and such hurt, my head aches, my stomach hurts’

It is most likely, that the ‘feature weakness’ in some translations of the instances originates from the interaction of discourse pragmatic, emotional and semantic aspects of the utterance, and that this semantic feature is to be attributed to the domain of epistemic modality of the whole proposition, rather than semantics per se of the particular nominal predicate or predicator affix /-(a/ə)ki/.

4.1.1.3 Morphological features

With regard to their morphological makeup, Eastern Khanty adjectives can be described as having both derivational and grammatical morphological elements. First, all of the Eastern Khanty lexical units with attributive or nominal predicate function, denoting a salient, temporary stable feature of an entity, may be categorized with regard to their morphological complexity into two major groups:
i) morphologically simple, i.e. those of a closed class of non-derived nominal stems, and ii) morphologically complex, i.e. those derived by affixation, compounding, and combination of the former and the latter.

4.1.1.3.1 Derivational

This morphological classification implies that all examples can be classified as belonging to either a group of non-derived tokens whose etymology is no longer transparent, or to a group of those that are derived, i.e. represent the usages of the noun-, rarely other adjective- , and verb-stems accompanied by a variety of nominal affixes.

4.1.1.3.1.1 Non-derived adjectives

Non-derived Eastern Khanty adjectives, adjectives proper, are a closed class of mono- and bi-syllabic stems, fairly stable inter-dialectally. Consistently with typological generalizations (Dixon 1977), this Eastern Khanty closed class of adjectives includes lexical units of mainly prototypical adjectival semantic groups, such as:

- **dimension**: āj ‘small’; őllő ‘big/old’; qoy ‘long’; wən ‘short’; wat’ ‘narrow’; enə ‘thick’;
- **age**: ukum ‘young/small’; ərés ‘old (human/animate)’;
- **value**: jəm ‘good, correct’; ätäm /atəm ‘bad, defective’;
- **human propensity**: wij ‘crafty, naughty, mischievous’; töyər ‘greedy’

A more complete list of the class members would include the following units: enə 'thick'; kölö 'slippery'; ələ 'melted'; pəstə 'quick, sharp'; sərə 'strong/tough'; wən 'short'; qoy 'long'; kösəy 'oblique'; mənəy 'crooked'; nomrəy 'entire'; sər 'front'; nörəy 'strange'; ököm 'small'; őllő 'big'; tärem 'hard'; jəm 'good'; āj 'little';
qomli 'nimble'; lōwət 'weak (not tight)'; tät 'ready'; n'amək 'soft'; warək 'open'; pöyrək 'round'; moyəl 'free'; mələy 'blunt, stupid'; söləy 'mellow'; n'eɣəlt 'low'; qal 'fragile'; jor 'straight'; töɣər 'greedy'; pırs 'old'; jələw 'new'; m'al 'deep'.

4.1.1.3.1.2 Derived adjectives

The majority of Eastern Khanty adjectives are derived from noun stems with the help of a variety of affixes. The affixes normally fall into two main classes: derivational and relational or grammatical (Bybee 1985; Melchuk 1997; Croft 2001; Givon 2001; Haspelmath 2002). Since, as it was already mentioned, Eastern Khanty nominal modifiers do not carry any agreement with the head, relational affixation in this context is non-existent in Eastern Khanty. As for derivational affixation in Eastern Khanty nominal modifiers, it is fairly diverse, as is the repertoire of changes in grammatical categories, and/or significant meaning alterations that they manifest.

4.1.1.3.1.2.1 Denominal

The most typical way of deriving nominal modifiers in Eastern Khanty is denominalization. Observing possible strategies of semantic grouping of the Eastern Khanty denominal nominal modifiers (adjectives), it is evident that these semantic groups generally resonate with cross-linguistic semantic domains proposed typologically (Haspelmath 2002). Following is the list of the Eastern Khanty denominalizers – derivational affixes found on nominal modifiers:

- /əŋ/ has relational /proprietary/ material semantics to the effect “endowed with”: werenəŋ ot ‘small children (welä ‘baby’)’; aŋtan ‘having ribs (aŋtəi ‘rib’)’; aŋtan ‘having horns (aŋtə ‘horn’)’; äjän-kölän ni ‘talkative/sociable woman’ (äj ‘news’; köl ‘word’); almən ‘sleepy (almə ‘sleep’)’; lilən ‘alive (lil ‘life, breath’)’; oppən ‘fast flowing (oŋ ‘current’)’; səmən qasi ‘courageous man
(səm “heart”).

27. tam ni sük-on jernas jan-wel
   DET woman nice-ATTR dress sew-PRS.3SG
   'That woman makes a nice dress' (sük-on adj. ‘nice (süy ‘beauty’))

28. ar-an pel’k-öy qasi
   Strange-ATTR side-PRL human
   ‘stranger, foreigner (ar-an adj. ‘alien, strange (ar ‘many, various’))’

29. jöy öy-an qo
   3SG daughter-ATTR man
   ‘He is a man of many daughters (öy-an ‘having daughters (öyi ‘daughter’))’

30. tot top əj alm-an qo
    DET only one sleep-ATTR man
    ‘There is only a sleepy man there (alm-an ‘sleepy (aləm ‘sleep’))’

31. jöy tšipän-an qo
    3SG shaman man
    ‘He is a man of shaman abilities (tšipän-an ‘having shaman abilities, tšipän ‘shaman’)

Schematically this process of derivation may be represented as follows:

NP = Y-/-əŋ/ X

where, X and Y are nouns, and affixation of /əŋ/ to Y manifests its semantics of a
nominal modifier to X, with the feature Y attributed as salient to X.

This affix is very productive in all Khanty dialects, as well as in related Finno-
Ugric languages. The meaning of this affix may be approximately described as
identifying a feature that is saliently, or even inalienably present in an entity. In
Finno-Ugric literature it is often assigned possessive semantics (Gulya 1966). This
is true for the majority of the available examples of the Eastern Khanty denominal
adjectives derived with this affix, to the extent that the head is seen to possess a
feature expressed by the modifier, i.e. in the example below, it is the ‘place’ that
possesses ‘squirrels’ and ‘lynx’ as a salient feature, and not alternatively, the
‘squirrel’ or ‘lynx’ whom the place belongs to (though it may be hard to
distinguish the directionality of possession in these real-world situations):

läŋkĩŋ tạγi ‘place with squirrels’  kimlāγŋ tạγi ‘place with lynx’

A similar affix is used in closely related Mansi to express possessive semantics (Balandin, Vaxrusheva 1957; Kuznetsov 2004). In remotely related Finnish, affix /-inen/ has the semantics of possession and of group affiliation (Bubrikh 1955), which finds parallels in the semantics of the Eastern Khanty adjectives with the /-ōn/-ōŋ/ affix. In quite consistent form, this affix is present in virtually all Finno-Ugric languages, with identical or very similar semantics, which is felt very strongly as an indication of common etymology (Bubrikh 1955; Serebrennikov 1962). This derivational affix, most probably, of proto-Finno-Ugric diachronic depth, is also etymologically connected to the Eastern Khanty Locative affix /-(ɔ)n(ɔ)/ and Comitative /-(ɔ)ŋ(ɔ)/, being also consistently present in the prevailing majority of the Finno-Ugric languages. In existing Finno-Ugric literature, the formal affinity of these attributive, Locative and Comitative markers is explained by their fairly evident conceptual proximity, i.e. joint/concurrent co-existence at a location (Bubrikh 1955; Serebr ennikov 1962). Leaving aside this discussion of the exact grammaticalization route, it can be said that the extension of a proto-affix’s functional domain from possessive to Comitative and Locative, and to derivation of type or group affiliation nominals based on a salient feature, i.e. nominal modifiers, seems very plausible.

• /i/ with proprietive semantics: layirti rit adj. ‘heavy boat (layɔrt ‘heaviness/weight/something heavy’); nayi amp adj. ‘white (naj ‘fire/light’) dog’; mori ot adj. ‘wet thing’ (maram ‘wet/humid’; marata ‘to get wet’); alqi qasi adj. ‘weak man (alita ‘to manage/overcome’)’; ej jeri adj. ‘medium size (jer ‘line, bar’)’; jɔŋki tɔγi adj. ‘wet place (jɔŋk ‘water’)’; qali jernas adj.
‘insufficient, weak dress/shirt (qal ‘weak, fragile’).’

Schematically, derivation may be represented in the following manner:

\[ NP = Y-\text{/i/} X \]

where, X and Y are nouns, and affixation of /i/ to Y manifests its semantics of a nominal modifier to X, with the feature Y attributed as currently salient to X.

This suffix is also common to many Ugric and Finnic languages where it has the same semantics and functional distribution. It is possible that the functional domain of the suffix /-i/ is subject to diachronic reduction, gradually taken over by another, functionally related suffix /-əŋ/. This was noticed previously for related and more remote Khanty dialects (Tereskin 1961; Gulya 1966; Kuznetsov 2004).

Semantically, the exact properties of the attribute expressed by these lexical units represent an interaction of the semantics of a stem, which the unit is derived from, and the semantics of the modified noun. This aspect refers to the nature of adjectives as a lexical class, i.e. the fact, that any attribute may only be conceived/experienced indivisibly with the entity that it is modifying, that is, “directly when it is bundled coherently, together with all other properties, into a noun-coded entity” which is attributed a certain prominent feature expressed by the adjective (Givon 2001: 53). This implies that, for example, the derivational affix /-i/ is used with base-stems of various semantic properties: abstract, collective, temporal, concrete, etc., and the exact semantic output is the stem and interaction of both the modifier and the head, the whole of the noun phrase: jəŋki toŋi adj. ‘wet place (jəŋk ‘water’); pəmì altəl ‘pile of hey’ (pam ‘grass’); kulı/nögy aŋəl’ ‘sleds loaded with fish/meat’ (kulı/nögy ‘fish/meat’); sat-al rätʃ ‘hundred-year-old man’ (sat-al ‘hundred years’); il-nowtì vremja ‘old times’ (il-nowt ‘old(low) age/epoch’); itnì kun’əl ‘dawn’ (itən ‘evening’); älŋi qos ‘morning star’ (älŋə ‘morning’).
• /ləɣ/ with privative semantics, correlating to the abessive case (cf. 2.1.2.2.3.9. Abessive): aŋaləɣ mes’ ‘cow without horns (aŋət ‘horn’); pelloy ‘deaf (pel ‘ears’); semloy ‘blind (sem ‘eyes’); piris pelloy semloy ratʃ’ ‘deaf and blind old man’; wernəli otlay ‘without children’ (werən adj. ‘small’ – wereŋ ot n. ‘small children’).

Schematic representation of this derivation may look as follows:

\[ \text{NP} = Y-/ləɣ/ \ X \]

where, X and Y are nouns, and affixation of /-ləɣ/ to Y manifests its semantics of a nominal modifier to X, with the lack of feature Y viewed as currently salient in X.

• /-(a)w/ pə – with relational/proprietary semantics: alqü turaw ni adj. ‘woman with weak voice, hoarse voiced (alqü ‘strength-less’; tur ‘voice’); ärki pönkaw waja ‘animal with many teeth (pönk ‘tooth’); aŋ joyataw adj. ‘identical in size’; aŋ pälätaw adj. ‘equal in height’.

32. arinaw(a) (taɣ) mën-s-ɔw
   far place go-PST2-1PL
   ‘We went far away’ (arinaw adj. ‘far/remote/foreign (araŋ ‘strange’))

Schematic representation of this derivation may look as follows:

\[ \text{NP} = Y-/aw/ \ X \]

where, X and Y are nouns, and affixation of /-aw/ to Y manifests its semantics of a nominal modifier to X, with some feature Y saliently present in X.

Frequently (90% of instances), these nouns have more than one attribute, or represent a certain attribute nesting feature:

33. ärki pönk-aw waja
    many tooth-/aw/ animal
    ‘animal with many teeth’

34. aŋ joyat-aw ;amp-ɣən
    one size-/aw/ dog-DU
    ‘dogs of the same size’

In these examples, first two elements (ärki pönk ‘many teeth’ and aŋ joyat ‘one/same size’) are already Modifier-Noun pairs, and thus it can be said that the
affix /-aw/ in a way, refers to the whole NP ‘many teeth’ or ‘one size’, deriving the modifier to the head noun ‘animal’ or ‘dogs’ based on a salient feature ‘many teeth’ or/and ‘one size’:

\[
\begin{array}{c}
\text{NP} \\
\text{NP[attr]} + /aw/ \\
(\text{Prn, Adv, Num}) \\
\text{ärki} & \text{pönk-äw} & \text{wajaŋ} \\
\text{many} & \text{teeth} & \text{animal}
\end{array}
\]

- /-ɔɣ/ – with a relational/proprietive semantics: mālɔɣ ‘blunt, sealed, blank’; mɔlɔɣ ‘free, separate, detached’; sɔlɔɣ ‘ friable, gunpowder’ (sɔl’ ‘small (multiple objects: stones, money, pellets)’); qölɔɣ ‘cavernous’ (qol ‘opening, crack, crevice’ (qoləŋ ‘with a crack, crevice’)); wālɔɣ ‘single/unmarried, vacant, empty’ (wəl ‘single twig’); nārɔɣ ‘raw, unprocessed, bare’ (nər ‘damp, wet’)

35. nārɔɣ pam qorašəw
   wet grass image
   ‘green like wet grass’

Schematic representation of this derivation may look as follows:

\[
\text{NP} = \text{Y-} /ɔɣ/ \ X
\]

where, X and Y are nouns, and affixation of /-ɔɣ/ to Y manifests its modification of X, with the feature Y attributed as saliently present in X.

- /-tə/ – with relational/proprietary semantics: pestə ‘sharp, quick’, pəɣtə
‘black’ (pəɣə ‘fur of an animal’); wərtə ‘red’ (wər ‘blood’).

Schematic representation of this derivation:

\[
\text{NP} = \text{Y-} /tə/ \ X
\]

where X and Y are nouns, and affixation of /-tə/ to Y manifests its modification of X, with the feature Y attributed as saliently present in X.

- /-aki/: has a general adverbial/predicative derivational semantics: ājäki adj.
‘of little importance (äj ‘small’); ärki ‘numerous (ar ‘many, various’); alqi adj.
‘weak (alita ‘to manage/overcome’; ältä ‘to carry’):

36. alqi tur-aw ni
    weak voice   woman
    ‘woman with a weak voice’

Schematic representation of this derivation may look as follows:

NP = Y-/aki/ X
where affixation of /-aki/ to Y manifests its modification of X, with the feature Y
attributed as salient in X.

• Examples of multiple derivational processes show that adverbial/predicator
affix /-(a/ə)ki/ is the only one that appears to co-occur with other derivational
affixes of nominal modifiers. The linear order is always such that /-(a/ə)ki/ follows
other derivational affixes (above).

(juŋ) wujanja{kǐi ’she is fat/proud’ ← (wuj-anj adj ‘fat/proud’) ← (woj n ‘fat’)

4.1.1.3.1.2.2 Deverbal

Deriving adjectives from verb stems in Eastern Khanty is a fairly infrequent
process. Among the most productive affixes used for this purpose there is:

• /-t/ that occurs in deverbal nominal modifiers with a resultative/patientive
semantics: juŋ wan’-t-əki ‘stick is thin, narrow’ ← wan’-t’a ‘to cut, trim’.

Here, the deverbal nominal modifier is wan’ t ‘thin, narrow’ with a nominal
predicate function, with the predicator affix /-aki/.

More productively, verbal stems are used in the function of nominal modifiers by
means of nominalization in participial resultative and relative constructions (cf.:
4.2.2. Nominalization. below).
4.1.1.3.2 Grammatical

4.1.1.3.2.1 Degree of comparison

Eastern Khanty lexical units with attributive semantics do not have morphological ways of expressing the degrees of comparison. Rather, a fairly stable and productive analytical construction is employed to express the semantics of comparison of two or more entities based on some salient, relatively temporally stable feature.

37. a) jöy mən ninə ṣillə-ki.
   3SG 1SG [from] big-PRD
   ‘(S)he is older/bigger than me’.

   b) jöy mən ninə āj-āki.
   3SG 1SG [from] small-PRD
   ‘(S)he is younger/smaller than me’.

38. loj mes ninə jem-āki
   horse cow from good-Pred
   ‘The horse is better than the cow’.

   The Eastern Khanty analytical construction of comparison may schematically be represented in the following way:


   As in Payne’s (1999) typological identification of the elements of the analytical comparative construction, in this Eastern Khanty comparative construction, X – is the subject of comparison, Y – is a standard of comparison, Z – is an attribute/feature of comparison, and the lexical unit ninə is a structural element – a marker of comparison. Similar definitions of the constructional elements were proposed in previous studies of Siberian languages (Vasiliev 1980; Cheremisina & Solovar 1995).

   In syntactic terms, this construction represents a normal simple clause, where X – is an S argument, typically expressed by nominal or pronominal NP in Nominative case, Y – is an oblique expressed by a nominal or pronominal NP in Accusative case, a modifier to the nominal predicate Z expressed by an adjective
with a derivational/predicator affix /-aki/. The marker of comparison /niŋə/ is a postposition with, most probably, Ablative semantics (cf. (39)).

39. tim-al niŋə sem-laŋ
   DET-3SG from eye-ABES ‘(S)he is blind from birth’ (Steinitz 1980)

   Ablative-like semantics of such formal markers of comparison is typologically common in Uralic (Collinder 1940; Bubrikh 1955; Serebrennikov 1962; Steinitz 1980; Tereskin 1981; Déscy 1990), as well as in genetically unaffiliated languages (Payne 1999).

40. tim qat tom (qat) niŋə ëllä-ki
   DET[prox] house DET[dist] (house) from big-PRD ‘This house is older than that one (house)’.

   Treatment of the marker /niŋə/ as a special comparative case marker (Karjalainen, 1964) does not seem plausible in light of (39), where this unit is outside a comparative context and has an evident ablative semantics (temporal metaphor).

   As to the order of the elements of the construction, while the clause-final position of the attribute – nominal predicate suffixed by /-aki/ is fixed, in compliance with overall Eastern Khanty SOV pattern (cf. 10.
Simple Verbal Clauses & Argument Structure), the order of the *standard* and the *subject* may vary (compare (36, 37, 39, 40) vs. (6)).

41. tom rit-al nino mä rit-ôm ñllä-ki
   DET(dist) canoe-3SG from 1SG canoe-1SG big-PRD
   ‘My canoe is bigger than his canoe’

This word order variation is attributed to discourse-pragmatic, information structuring patterns of Eastern Khanty reviewed in detail below (cf. 10.
Simple Verbal Clauses & Argument Structure and 10.2. Information Structure). It has to be noted though, that the order standard-marker remains fixed regardless of other constituent ordering (36, 39) vs. (40). In accordance with the Eastern Khanty case-marking pattern, only pronominal arguments with the Target semantic role of the active clause have the Accusative case, while nouns in this position are unmarked for case, or are in Nominative (cf. Pronouns). Following this pattern, the standard of comparison expressed by a pronoun appears marked for Accusative case (36, 41).

42. man(t) ninə əj-əki
   1SG-ACC from small-PRD
   ‘(S)he is younger/smaller than me’

In (42) above, the 3SG. S-argument is frequently omitted from overt expression in the clause, whereas the word-final voiceless stop /t/ is reduced gesturally (dropped) preceding the C-initial word.

The superlative degree of comparison in the Eastern Khanty adjectives is expressed only analytically with the help of the adverb tʃəkə ‘very, extremely’:

43. tʃəkə sem-en-ka tiyl-ä əj’ jöy-itən
   very brave-PRD here-ILL Neg come-Imper.2PL
   ‘Do not come close too bravely’

44. tim qat tʃəkə jəm-aki
   DET house very good-PRD
   ‘This house is very good’

Similarly, the negative degree, a weak feature presence/prominence, is expressed with the help of the adverb tʃiməl ‘a little, not much’, sometimes affixed with the Diminutive suffix /-ali/: 

45. a) juɣ tʃimlali wujən-aki
    3SG a.little fat-PRD
    ‘(S)he is a little fat’

    b) jöɣ wujən-aki
    3SG fat-PRD
    ‘(S)he is fat’
Occasionally, the meaning of ‘the most’, i.e. the superlative degree of feature prominence, is expressed at the clause level by the use of aspect affixation and by preverbs (mostly spatial), such as noq and quntʃay ‘out, away, completely’, thus manifesting some of the adverbial/modal function on the predicate:

47. t’u woroŋ qu ọyị quntʃay kól-aqị wär-s-i
   DET forest man door completely open-PRD do-PST2-PS.3SG
   ‘Then the bear opened (made open) the door completely’

4.2 Other means of expression of attributive semantics

4.2.1 Noun Juxtaposition

   Similar to languages that lack an independent class of adjectives (adjectival-noun, e.g.: Quechua; adjectival-verb, e.g.: Mandarin Chinese (Shopen 1985)), and to languages that have a closed class of adjectives, Eastern Khanty frequently uses nouns to express some adjectival functions, by placing a modifier noun before the modified noun:

48. ni quj-el mes jøŋ-k-o mø-s
   woman man-3SG cow water-INSTR.O give-PST2.3SG
   ‘Жена дала мужу молока’ (mes jøŋk ‘молоко (корова-вода))’

49. wajay lök əntim, länki lök əntim, metali lök əntim
    animal track NEG squirrel track NEG none track NEG
    ‘Not an animal track, no squirrel tracks, no tracks at all’ (wajay ‘animal’)
52. moʒәt kiŋlәŋ pun
   “maybe” lynx hair
   ‘Perhaps, it’s a lynx hair’ (kiŋlәŋ ‘lynx’)

So, morphologically, there is nothing distinguishing the modifier and the modified. The only cue remaining is the relative position of elements, in Eastern Khanty the modifier obligatorily precedes the modified. This strategy of noun modification is extremely prevalent in the languages of the world: English log house, stone wall, etc.; Eastern Khanty way put ‘metal kettle/pot’, or key put ‘stone kettle/pot’. In these collocations both elements are uninflected noun stems.

Based on the sort of internal semantic relations, a more or less finite set of attributing feature type groups can be made. The biggest and most immediately apparent of such groups is characterized by the relation similar to that of possession, i.e. when one entity, the modified, belongs in some way to the domain of the other, the modifier. This general semantic possessive relation may be detailed further using semantic prototypes. Thus, some N-N collocations can be viewed as approximating the prototypical affiliation to location: as’ jaŋ ‘Ob river people’, torәm qat puyol ni ‘a woman from Alexandrovo village (god’s house village)’; or prototypical part-whole relation: qas oŋ ‘human head’, sar poŋ ‘pike fish guts’, qat oŋtә ‘door of the house’; or a prototypical ethnic/cultural affiliation: jaryәn jay tәy ‘the place of Nenets people’, ser’әn rәt ‘big family plank boat (Zyrjan-people boat)’, qantәŋ jay kotʃәŋ ‘Khanty people knife’; or prototypical agent-product/result relation: mes jәŋk ‘cow water (milk)’, wajәŋ lәŋ ‘animal footprint’, qәŋ oŋ ‘tsar’s daughter’; or prototypical material-object relation: juy qәŋkәŋ ‘wooden sled’,
sørnimway trop ‘silver (silver metal) pellet’; or, finally, prototypical possession proper relation: tʃu ni lopįʃaj ‘that woman’s clothes’; töyɾ qat ‘rabbit’s house’. Further, detailed semantic grouping is possible to the point of single class-members and individual token-usages.

Some of the collocations merge in frequent usage into what appears to be noun compounds, consisting of two nominal stems, where the relation of modification/attribution exists between the first element – modifier noun, and the second noun – the head. In these cases, the head noun codes more temporarily stable, generic qualities, whereas the modifier may be said to code a variable. Khanty N-N compounds appear to manifest prototypical compound lexical unit features, such as:

- rigid constituent order (true for any Khanty noun phrase);
- single stress, which appears on the first (modifier) element of the compound;
- single meaning, which is not always etymologically transparent, i.e. not inferable from the meaning of the elements of the compound. A compound refers to a real-world entity that is not deconstructable;
- the inflectional morphology attaches to the whole unit and not to its components:

  a) quł potʃəq qu ‘hawk (fish tail male)’, but qu potʃək quł*
b) kōy jāŋəl ‘bottle (stone liquid)’, but jāŋəl kōy*
c) mes jəŋk ‘cow water (milk)’, but jəŋk mes*
d) kōy put ‘large iron pot (stone/clay kettle)’, but put kōy*
e) kōy sem ‘glass bead (stone eye)’, but sem kōy*
f) kōr kōy ‘brick (oven stone)’, but kōy kōr*
g) kōr juy ‘fire wood (oven wood)’, but juy kōr*
h) kōy qat ‘prison (stone house)’, but qat kōy*
i) ämp qat ‘doghouse (dog house)’, but qat ämp*

In Eastern Khanty, there is no agreement between the nominal head and modifier, and constituent order is generally rigid and grammatically significant at
various syntagmatic levels (NP, VP, PP, SOV). Thus, all the typical compound features are to be viewed in a cluster and en par with such criteria as idiomaticity, frequency of collocation and productivity. Again, none of these additional features may be viewed as a key criterion for assigning a N-N collocation a single lexical unit (compound) status, rather they should be considered as mutually supplementing and informing each other in locating a collocation along the continuum towards a prototypical lexical unit status. Thus, idiomaticity alone does not necessarily entail lexical compound status (Haspelmath 2002), nor does collocation frequency, as there is unlikely an objective universal frequency threshold, after which a collocation may be granted a status of compound. In the set of examples of N-N collocations above, (a) through (i) may all be viewed as compounds. Their constituent order is rigid. When produced in isolation, they have a single stress on the first stem; they denote a single real-world entity (or a type thereof); and all inflectional morphology is suffixed only to the last stem. However, they can also be viewed as a continuum from a prototypical compound lexical units (a)-(d) – with high idiomaticity, high collocational frequency and productivity, low transparency (‘iron pot’ is not made of ‘stone’, nor is ‘bottle’, and ‘hawk’ may be a female) to the least fossilized (g)-(i), which are less idiomatic, more transparent, more freely produced (invented) in non-compound (N[modifier] – N[head]) collocations for immediate needs of the speech situation (juɣ qat ‘wooden house/shelter’, mɔɣ qat ‘earth house (dugout)’, kɔɣ qat ‘stone house’).

In cases of multiple modifiers, the general typological claim (Bybee 1985; Shopen 1985; Givon 2001; Croft 2001) holds true in Eastern Khanty, that the more inherent, durable, generic is the feature coded by the modifier, the closer this modifier is to the head:
And in case of juxtaposed noun-modifiers, their proximity to the head cannot be altered by any other (adjective, nominalization, Rel.Clause) modifier, due to the nature of noun, i.e. coding the most time-stability, compactness, etc. (cf. Noun).

4.2.2 Nominalizations

This chapter will also consider nominalized verb forms that are also frequently used for noun modification in Eastern Khanty, directly preceding the modified noun (Potanina 2005). These nominalizations are participial verb forms, of either imperfective (marker /-tə/) or perfective (/-/m/) aspect:

53. pent-əm pam qat-a joγ tow-tä, əraŋ niŋl-ä təγ-ayəŋ intot tetəγ werä
dry-PP grass house-ILL back bring-INF other woman-ILL say-PST0.3SG food inward do-Impr.SG
‘He told the other woman to bring dried grass home’

54. put köγr-əm pirne qul wel-tə jaγ jö-γası-t
pot cook-PP after fish kill-IMPP people come-PST3-3PL
‘When the food had been cooked, fishermen came’

These examples of participial constructions above, represent a common process in Eastern Khanty, in which a finite verb clause or verbal phrase is converted into a component of a noun phrase, in our case an attributive nominal modifier.

55. qul wel- tə qu
fish kill-IMPP man
‘fisherman’

56. jol-tə qu
shamanize-IMPP man
‘shaman’

57. jol- t-al təγi-j-oy löγ-əs, osew-a at-wał’ ...
shaman-IMPP-3Sg place-EP-Prol finish-PST2.3SG Osip-ILL say-PRST.3SG
‘He finished shamanizing and said to Osip:…’

58. weli li-tə wajəγ
reindeer eat-IMPP animal
‘wolf’
59. kantsin-tɔ juy
write-IMPP wood
‘pencil’

60. töγɔt wer-tɔ juy
fire do-IMPP wood
‘match’

61. jöt-tɔ ot
buy-IMPP thing
‘purchase’

62. ala-tɔ ot
lie-IMPP thing
‘lying’

63. altawta-m werɔŋ ot
make sleep-PP little thing
‘made –sleep baby’

64. wal-tɔ tayi
be-IMPP place
‘the place of living’

65. wal-m-il tayɔ-j-a jö-γɔs-ɔ.
be-PP-3PL place-EP-ILL come-PST3-3PL
‘They came to the place of living’

66. tiy-am tayi
be born-PP place
‘place of birth’

67. lık-ken n’ula pit -em tayi
track-DU together become-PP place
‘crossroads/juncture (lit. place, where roads cross/join)’

68. alintɔ-tɔ qat
sleep-IMPP house
‘bedroom’

69. mà onɔltɔγɔl-tɔ qat-pa mɔŋ-tati əntɔ koj-l-ɔm
1SG learn-IMPP house-All1 go-INF NEG want-PRS-1SG
‘I do not want to go to school’
These are effectively nonfinite attributive relative clauses, which can modify any of the nominal arguments: the Agent role, Target, or Locative. The attributive function is far from the most frequent function of the participial constructions (nominalizations) in Eastern Khanty, but we will note it here, as pertinent to the discussion of the nominal modifiers above. Similar to simple noun nominal modifiers, relative clauses in this function precede the modified head noun. However, there are occasional infrequent examples of such clauses following the head:

70. mə qoləntəl-əm merəm muyuj jateswe-wəl æŋk-im  
    1SG listen-PRST-1SG tale DET tell-PRS.3SG mother-1SG  
    'I listen to the tale that is told by my mother'

Normally, relativization in Eastern Khanty is such that the grammatical role of the relativized nominal argument is not overtly marked, i.e. the gap relativization strategy. These Eastern Khanty constructions normally do not have relativizers and are immediately juxtaposed to the modified head. In the rare cases of the relative clause following the head (70), the relativizer does occur in the form of interrogative pronouns, such as muyuj ‘what, which’, and the relative clause itself is typically finite rather than pre-posed participial (more cf.: Complex Clause: Relative Clauses).

A relative clause modifying a head noun is a somewhat typologically rare function of nominalization (Comrie & Thompson 1985: 394). The evidence of nominalization may come from the use of the possessive (person/number), or case marker. How nominalization can function as a relative clause can be conceptualized as two juxtaposed nominal elements [Nom] [Nom] (cf. 4.2.1.Noun Juxtaposition), the modifying relationship between them being inferred by the language users (rather than being specified by the grammar, as it is in languages with specific relative clause morphology), “just as the modifying relationship is
inferred in a noun-noun compound such as tree-house, in which the two nominal elements simply happen to be single nouns” (Comrie & Thompson 1985: 394). Below (cf. Complex Clause.) there will follow a separate section detailing the structural and functional patterns of Eastern Khanty relative clauses, where formal, semantic and pragmatic features of these nominal modifiers will be outlined more precisely.
5. Adverbial Modifiers

5.1 Adverbials

Eastern Khanty adverbial modifiers are the least homogenous semantically, morphologically and syntactically, similarly to what is observed cross-linguistically (Givon 2001; Shopen 1985) for this word-class. In Eastern Khanty, adverbial meanings may be represented by a continuum of the language’s formal means: from morphology – to a lexical unit – to a phrase – to a clause. For example, such adverbial meaning as coding a point or episode in time, i.e. various temporal aspects of events, may be expressed morpho-syntactically by:

i) bound morphemes – TAM verbal affixes such as momentative -ǝyta- (cf. 8. Verb):
   1. kǝ ramp-ǝyta-ɣǝn
      get angry-Mmnt-PRS.3SG
      ‘(S)he got instantly angry’

ii) free lexical units, such as qoɣ ‘for a long time’, or ǝjpä ‘once’:
   2. ǝjpä in qulkǝntʃǝ mǝn-kǝn.
      once 3Du fish.get-INF go-PST0.3Du
      ‘Once they went fishing’

   3. pɔɣ-ǝl-ǝn ɡoɣ jüɣ waɣa-ɣǝn
      son-3SG-LOC long 3SG call-PST0.3SG
      ‘Her son called for her for a long time’.

iii) phrase- or clause-size units:
   4. kǝrdii jətul wor-pa jəlili-wǝl jət-ot-a
      “every” day forest-PRL go-PRS.3SG food-thing-ILL
      ‘every day he goes into the forest for food’

   5. ju yanuñ qaŋǝmal pǝrni tül nomiɫ ǝǝsvi ki n’ǝn’kǝmte-ǝt-ǝtǝ.
      tree-ILL-up climb-PP-3SG after then from up Syvsiki tease-INCH-PST0.SG/3SG
      ‘Once up the tree, he started teasing old man Syvsiki.’
Morphological coding of adverbial meanings in Eastern Khanty, such as verbal TAM affixation, will be reviewed in detail in the chapter on verbal morphology (cf. 8.Verbs) below, while the main focus of this chapter will be the Eastern Khanty single-word lexical adverbials.

5.1.1 Single-stem Lexical Adverbials

Using the established prototype feature-constellation word-class assignment parameters, we can identify the examples of verbal modifiers in Eastern Khanty:

<table>
<thead>
<tr>
<th>Term</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>pesterday</td>
<td>‘fast’</td>
</tr>
<tr>
<td>worey</td>
<td>‘in vain, useless’</td>
</tr>
<tr>
<td>tʃokə</td>
<td>‘very, strongly’</td>
</tr>
<tr>
<td>jəmə(ki)</td>
<td>‘well’</td>
</tr>
<tr>
<td>əjəro</td>
<td>‘together, at once’</td>
</tr>
<tr>
<td>âtmə (aki)</td>
<td>‘badly’</td>
</tr>
<tr>
<td>wijнати</td>
<td>‘purposefully’</td>
</tr>
<tr>
<td>əjəɣ</td>
<td>‘together, jointly’</td>
</tr>
<tr>
<td>qoTeqe</td>
<td>‘where (Loc)’</td>
</tr>
<tr>
<td>tet</td>
<td>‘here (Loc)’</td>
</tr>
<tr>
<td>tot</td>
<td>‘there (Loc)’</td>
</tr>
<tr>
<td>kōmən</td>
<td>‘outside, outdoors (Loc)’</td>
</tr>
<tr>
<td>ilən</td>
<td>‘in front (Loc)’</td>
</tr>
<tr>
<td>qoɣen</td>
<td>‘far away, long ago’</td>
</tr>
<tr>
<td>jọqqaŋ</td>
<td>‘back home (Loc)’</td>
</tr>
<tr>
<td>ilen</td>
<td>‘down there (Loc)’</td>
</tr>
<tr>
<td>nomen</td>
<td>‘up there (Loc)’</td>
</tr>
<tr>
<td>nuɣ/ nuq</td>
<td>‘upwards (Lat)’</td>
</tr>
<tr>
<td>qolepa</td>
<td>‘where, towards (Lat)’</td>
</tr>
<tr>
<td>təγepə</td>
<td>‘here (Lat)’</td>
</tr>
<tr>
<td>kūmpə</td>
<td>‘outside, outdoors (Lat)’</td>
</tr>
</tbody>
</table>

5.1.1.1 Semantic features

In their semantics, Eastern Khanty adverbials, typically for their class, modify the semantics of a verbal predicate, or often of the whole proposition (exceeding the scope of a single verb), in respect to some salient feature, with regard to which the event is viewed. Such features typically include: the manner in which the event
unfolds, an instrument involved, some relevant spatial or temporal characteristic of
the event, some epistemic or deontic venture point specifics. Finally, some Eastern
Khanty adverbials have the semantics of modifying or adding to an attributive
nominal modifier with respect to intensity or a degree – adjective modifiers. In
many instances, any categorization of the exact semantic features of Eastern
Khanty adverbial modifiers is ambiguous, as in their individual usages they can
combine semantics of manner and instrument, manner and epistemicity, manner
and time, etc. Thus, frequently, the adverbial il ‘down’ with spatial semantics,
when preceding the non-motion verbs adds more to the manner or epistemic value
(completeness, emphasis) in which the event is to be construed, rather than to
understanding of its spatial characteristics, compare a) vs. b):

6. a) t’u sawàrkì il wàl-m-àn  b) toγu-l il wiγil-s-im
DET frog down kill-PP-LOC vs. DET-3SG down go-PST2-1SG
‘They killed that frog (definitely)’ ‘I went down there’

Similarly, adverbial modifier toγi ‘away’ interacts with the semantics of the
motion verb contributing a typical spatial modification, when in a more common
collocation with a motion verb (in the first case), and a manner modification (in the
second case) when collocating less typically with the non-motion verb:

7. sёwàski jàjm-il toγi pàkàt–ta, sem-àl toγi pёŋà-kàt–ta.
Syvsiki axe-3SG away throw-3SG eyes-3SG away rub-INCH-PST0.3SG
‘Syvsiki threw his axe away and started to rub his eyes’

In this respect, the following discussion of the semantic groups of Eastern
Khanty adverbials will have an underlying prototype principle at their core,
implying that central, more frequent instances would fall within group boundaries,
whereas peripheral, less frequent usages could fall closer to the adjacent group’s
prototype.
5.1.1.1 Manner

There is a wide variation in semantic range of Eastern Khanty manner adverbial modifiers, interacting in individual propositions with the semantics of individual verbs that they most typically precede and modify.

8. сысик и альва вед-кен.
   ‘Syvsiki and Alva lived together.

9. сыкем-кэ тиғл-ә ал’ югит-ән
   ‘Do not come close too bravely’

The following narrative sequence (a-b) seems particularly illustrative, as the only difference between the two clauses is exactly the adverbial modifier of manner:

10. a) әмп-әли аж пелк-ә и пир-кэ мен-ә
    dog-DIM one side-ILL and behind-Trnsl go-PST2.3SG
    ‘The doggy also got off and away’

11. b) әмп-әли велк-әли аж пелк-ә и пир-кэ пором-с-әм
    dog-DIM quietly-DIM one side-ILL and back-Trnsl step-PST2-1SG
    ‘The doggy moved away quietly’

Some of the examples may fall both into the group of manner modifiers and those with various aspectual and Aktionsart semantics. For the purposes of this description, they will be reviewed here in the Manner semantic group, however, it is possible that they be grouped separately for a finer semantic classification.

11. тәрүг южнәкәм жу-и өйкәл.
    suddenly somebody 3SG-ELA call-PRS.3SG
    ‘Suddenly somebody calls him.’

12. ос тәкәм әнә кәл-әгән
    again too.much NEG be.seen-PRS.3SG
    ‘Again, we don't see him’

13. ан’и-лә кош-ә алы-кәә-то, әңәкәр әри жөлләйinta-ән.
    sister-SG/3SG-LOC while-LOC take-INCH-IMPP sled away break-PST.3SG
    ‘As soon as the sister started to drag the sled, it broke up.’
14. שקו kiriw weri-γων,  τάγας ημι-τιμ - ατ il-pa il siliq-τα
big boat make-PST0.3SG people which - thing down-ALL1 down put-PST0.3SG
‘He made a big boat, for people to put all sorts of things down there’.

Here, the first case of il ‘down’ accompanied with the Lat case marker is a
prototypical spatial adverbial modifying the meaning of the verbal predicate with
respect to direction/destination of ‘putting’, while the second case of il ‘down’
adds more to the manner/Aspect/Aktionsart specifics of the predicate.

Other Eastern Khanty manner modifiers include:

pestäγ ‘fast’               wöynäti ‘by force’
woräγ ‘in vain, useless’           səmti ‘to one’s face’
ơŋp ‘simultaneously, at once’          saräγ ‘quickly, soon’
ơŋy ‘together, jointly’          üŋa ‘free, gratis’
ơŋmäp ‘in concert’             äjaltäli ‘slowly, quietly’
ơŋuk ‘in single file’          ən’aqqä ‘tediously’
ơŋp ‘at once’                  qon’tsa ‘on the back’
ơŋqa ‘jointly’                 qomta ‘face down’
tšimäl ‘a little’             muŋti ‘throughout’
seräk ‘firmly, tightly’       körä ‘on foot’

There is also a group of adverbials derived from demonstrative pronouns used
referentially for manner modification: timnil ‘in this manner’; tomnil ‘in that
manner’; tīt ‘like this’:

15. tit-ə wer-min
DET-ADV do-PST0.1PL
‘That’s how we did it’

16. niŋ-kəŋ tʃut-i wəl-kəŋ.
woman-DU DET-ADV live-PST0.3DU
‘That’s how they lived’

5.1.1.1.2 Spatial/Locative adverbials

Locative adverbials are also most frequently used immediate preposed to the
verbal predicates and add to the meaning of the predicate or the whole proposition
with respect to the spatial characteristic of the event, i.e. its static location or
direction of movement or object transfer.

17. al'wali nuγ kul'äγ-әn, än'ilä to1oy-wәl.
   Alwali up get_up-PRST.2SG sister-3SG-ILL say-PRST.3SG
   ‘Alvali gets up and says to his sister’

18. än'i-l-ә juγ-qәnkikәr niγ tel'-tә.
   sister-3SG-Loc wood-sled down.to.bank bring-IMPP
   ‘The sister brought the sled down to the river bank’.

   woman-water-Loc shoe-3SG outside hang-PST0.3SG
   ‘The mermaid hung his shoes outside.’

20. tf'ә pirә kәrәn-әγ oy-il nuγ kәskи-mtә-tә.
   DET after eagle-Transl head-3SG upward lift-Mmnt-PST0.3SG
   ‘The eagle then, raised his head up.’

21. sәwsiki qәt-a joγ jәŋә-mәl, sәt pәγә kөntә-kәt-әt
   Syvsiki house-ILL back come-PP-3SG pike guts search-Inch-3SG/SG
   ‘Syvsiki got back home, went on looking for the pike-fish guts’

The last example is illustrative of the use of the adverbial joγ ‘back (home),’
which, in the above example is used after a noun qәt ‘house’, and appears to
undergo the process of delexicalization from a more restricted nominal meaning of
‘home’:

22. әnk-әl әγ-al-nә joγ kitʃ-kәn.
   mother-3SG son-3SG/SG-LOC home stay-PST0.3DU
   ‘Mother with her son stayed home.’

• to a more abstract adverbial meaning of ‘back to the point of origin, to
  initial position’:

23. wajәy-nә oγ-ol joγ nirimtә-s-tә
   animal-LOC head-3SG home pull-PST2-3SG/SG
   ‘The animal hid its head back inside’

Similarly to manner adverbials, there is also a group of spatial/locative
adverbials that are derived from demonstrative pronouns and used referentially:
tiš ‘here (Loc)’; toť ‘there (Loc)’; tōyopâ/iîyâ ‘towards here (Lat)’; tolâl ‘from there (Lat)’; tōrâl ‘from here (Lat)’.

24. tjōkâ semen-kə tiyl-ä  âl’ jōyi-tən
very brave-ADV DET-ILL NEG come-PST.2DU
‘Do not come close (here) too bravely’

25. toyo-j men-ə, pirik-a
away-ELA go-Imper behind-ILL
‘Get off! (Go away!’

Other Eastern Khanty spatial/locative adverbials include:

qoteqe ‘where (Loc)’
wânəy ‘near (Lat/Loc)’
kûmân ‘outside, outdoors (Loc)’
qolepa ‘where, towards (Lat)’
ilân ‘in front (Loc)’
qoltaynâm ‘where from (Lat)’
qoγân ‘far away’ (Loc)
kûmpâ ‘outside, outdoors (Lat)’
jâqân ‘back home (Loc)’
pořtày ‘back (Lat)’
ilen ‘down there (Loc)’
joqà ‘back home (Lat)’
nomen ‘up there (Loc)’
ilâpà ‘in front, forward (Lat)’
utən ‘at depth (Loc)’
nîypà ‘down towards river (lat)’

5.1.1.3 Time (aspectual)

Similarly to manner adverbials, time (aspectual) adverbials are quite diverse semantically and formally, coding various temporal aspects of events, and thus adding to the semantics of the whole proposition rather than just a predicate that these adverbials most frequently precede:

26. itjâ män-ä intə məj-a
now 1SG-ILL food give-IMPER.2SG
‘Now give me some food’

27. qultən jâl’iyps-akəl- mân
tomorrow fight-INCH-PRS.1DU
‘Tomorrow we start fighting’

28. köröy əł’ən jâl’yâs-əm-âl’-nə joynâmə ran’ît’ werâ-ən.
eagle earlier fight-PP.3SG-LOC 3SG-RFL wound do-PST.3SG
‘Earlier, the eagle got himself wounded when fighting’
29. it tôna qu-j-el wont-oγ juγa’-γən
    in.evening man-EP-3SG forest-PRL come-PST0.3SG
    ‘In the evening her husband came from the forest’

30. ä’liŋ weriŋl-əm-əl, möröγ qotl mətä-kölp-əntə jöγ-a tölöγ-wəl.
    in.morning wake up-PP.3SG all day some.kind-word-NEG 3SG-ILL say-PRS.3SG
    ‘Having waken up in the morning, she does not say a word to him’

The temporal point may be of a more abstract sort:

31. il-länə jöγrəγ ju-wəl
    fore-time-LOC wolf walk-PRS.3SG
    ‘At one point a wolf was passing by.’

32. əjpä app-al wont-a mənɑ-γən,
    once father-3SG forest-ILL go-PST0.3SG
    ‘Once father went into the forest’

33. pirpït-äl’-nə mörök-kə jöγä-γən,
    by then-3SG-LOC healthy-PRD become-PST0.3SG
    ‘Finally the eagle got better’

There are a number of Russian loans used for adverbial modification, especially
in the south-eastern Khanty dialectal area – most affected by linguistic
assimilation:

34. äm-päm srazu awsïntanti-γ-il-wəl
    dog-1SG immediately sniff-INCH-PRS.3SG
    ‘The dog starts sniffing around right away’

35. män-əŋ täs qɔtšəγ-nati tuγi ʃəγ-l-əm
    1SG-LOC now knife-COM away cut-PRS-PS-1SG
    ‘I’ll cut with a knife now’

Some temporal adverbial meanings are coded in referential manner by
demonstrative pronouns tʃu ‘this, such’, meta ‘measure, extent’ supplemented by
Locative/Lative case markers and spatial postpositions:

36. tʃ’u-pirnə jəγ (kəntəγ-jaγ-al’it) pugəl əj pel’əγ-na amti-t qat
    DET-after 3PL Khanty-people village one side-LOC build-PST0.3PL house
    ‘After that they built the house close to the village’
37.  tʃ’u-lä-nə qa-nə jok-ən rätiʃ tʃ’utı joloγ-w-əł.
DET-3SG-LOC house-LOC home-LOC old man DET say-PRS-3SG
‘Then in the house the old man says’

38.  mata-pirnə əŋk-əl tʃet loγ-a ut-ə kulä-γən,
measure-after mother-3SG DET harbor.shore-ILL across go-PST0.3SG
‘At last his mother got onto the shore’

Other Eastern Khanty temporal adverbials include:
witʃ ‘forever, always’  joγən ‘at night’
qoɣ ‘for a long time’  qotive ‘by day’
qoγən ‘long ago’  munya ‘last time’
wän ‘shortly’  t’utoγ ‘then’
qota ‘still’  pälänə ‘sometimes’
tʃökın ‘as soon as’  elə ‘for a while’
qunta ‘when’  kimtəkə ‘soon’

5.1.1.1.4 Epistemic and Deontic – evaluative

Similarly to the temporal adverbials, Eastern Khanty modal adverbials, both epistemic and deontic, have their semantic scope extending over the whole proposition, expressing the speaker’s attitude to how truthful, certain or possible is the described event, or what his/her subjective assessment of, or attitude toward this event is.

39.  jɔγ-in  l’àyil’-tə — körnäm juj.
3SG-LOC eat-PST0.3SG only bile
‘He tried it, it was (nothing but) bitter with bile.’

Most of such epistemic adverbial meanings are expressed in Eastern Khanty by single-word lexical adverbials.

40.  tʃ’i-n-äw-əl küm ruyu-mtə-s  kätʃ kōt-əm nitʃätɔ-s-tɔ
that-LOC-DR-3SG out jump-Momnt-PST2.3SG almost hand-1SG bite-PST2-3SG/SG
‘Then, it jumped right from out there, almost bit my hand’

Many of such lexical items are loans from Russian:

41.  moʒət qimlay pun
maybe lynx hair
‘ Might be a lynx hair ’
42. a) nomoγ-s-ələm toli nöγās
   think-PST2-1SG/PL perhaps meat
   ‘I think: "perhaps it's a meat smell"'

   b) toli loγ toli nöγi muγuli kam altal-əγin
   perhaps bone perhaps meat some IndPrn drag-PST0.3SG
   '"Could be a bone smell, or meat smell, something was carried around here"'

Deontic adverbials are frequently derived with the use of the
adverbializer/predicator affix /-aki/ from evaluative adjectives such as, jəm
‘good’, atəm ‘bad’, etc.:

43. pirt-əγ unka-s-im toʒə jəm-aki
   back-PRL cross-PST2-1SG also good-PRD
   ‘I crossed back, well’

5.1.1.1.5 Intensification/Modification adverbials

There are some single-word Eastern Khanty adverbials (tʃəkə ‘very’, tʃiiməl ‘a
little’) that are used predominantly for the purpose of intensification of the
meaning of either an attribute or a predicate, both nominal and verbal:

44. tʃəkə jəm-aki
   very good-PRD
   ‘This is really good’

45. tʃuyi tʃəkə t’ələγə-s
   thunder very roar-PST2.3SG
   ‘Thunder roars very much’

46. muyl’a tʃ’iti jàl’iy-wən, mä-n tʃəkə kən’kə-mtə-s-ən.
   why DET act-PRS-2SG 1SG-ACC very frighten-Mmnt-PST2-2SG
   ‘Why do you do that? Got me really scared.’
5.1.1.2 Syntactic features

In the prevailing majority of their instances of use, Eastern Khanty adverbials prototypically immediately precede the head that they modify (94%), and less prototypically follow it (6%):

47. qunta tʃ’u jay im-l-ǝt in - tǝ, rätʃ juk-ı ma-ǝn küm tʃ’ǝlǝgta-ǝn
when DET people sit-PRS-3Pl eat-IMPP oldman forward-ELA go-PST0.3SG out cry-PST0.3SG
‘When those people got down to dinner, the old man ran outside and screamed’

Canonically for its word-class, Eastern Khanty adverbials function as verbal modifiers adding to the semantics of either a matrix predicate or a co-ordinate/subordinate predicate:

48. sǝwsiki nuʃ läyǝ-m-ǝl-na, al’wǝ-na per jöy-ä søm-tǝ il l’amǝγta-tǝ.
Syvsiki up look-PP-3SG-LOC Alwali-LOC ash 3SG-ILL eyes-PL down drop-PST0.3SG
‘When Syvsiki looked up, Alva dropped ashes down right into his eyes’

The rare cases when the adverbial follows the modified head are mainly instances of location/spatial adverbial modification or adverbials of manner:

49. tıl-ı joγ-pa
take-Imper.2SG home-ALL1
‘Take it home’

50. tʃu pirnǝ os wǝl-ǝkǝtǝ-kǝn ǝjǝγ.
DET after again live-INCH-PST0.3DU together
‘After that, they started to live together again’

51. jal-s-im tʃinǝm, nǝyǝ ämp-ǝl
stand-PST2-1SG there white dog-DIM
‘I stood there, white dog at my side’

In these cases, however, the adverbials are more frequently preceding the modified heads (3% for location/spatial, and 8% for manner), half of which are subordinate nonfinite adverbial clauses with independent heads – inherently less rigid syntactically (cf. 5.1.2.1. Subordinate clauses with adverbial semantics) and (cf. 11.Complex Clause. Subordination).
5.1.1.3 Morphological features

With regard to their morphological makeup, Eastern Khanty single-word adverbials can be categorized with regard to their morphological complexity into morphologically simple, i.e. those of a closed class of non-derived stems; and morphologically complex, i.e. those derived by affixation.

5.1.1.3.1 Derivational

Within this morphological classification, all instances fall either into the group of non-derived adverbials (or those with non-transparent etymology), or the derived units (those representing the usages of the other word-class stems accompanied by adverbializer affixes.

5.1.1.3.1.1 Non-derived adverbials

A group of Eastern Khanty single-word adverbials may most probably be regarded adverbs proper – a closed class of modifiers used exclusively in the adverbial function with location/spatial, temporal and adjective modification semantics. These adverbs are morphologically simple, consisting of a single stem, and these include:

- tʃəkə ‘very, strongly’
- tʃiməl ‘a little’
- tet ‘here’
- tot ‘there’
- nuŋ ‘up’
- š Jury ‘down’
- qoŋ ‘for a long time’
- wän ‘shortly, a little’
- joŋə ‘next year’
- witʃ ‘forever, always’

There is an open group of non-derived, i.e. morphologically simple adverbials representing instances of use of another word-class tokens in the adverbial function, without any morphological modification:

**Conversion: nouns → adverbials:**

- itən ‘evening, in the evening’:
52. a) itn-əɣ jəɣ  
   evening-Trnsl become-PST0.3SG  
   ‘Evening came’

b) itən quj-el wont-əɣ jʊɣə-ɣən  
   evening man-3SG forest-PRL come-PST0.3SG  
   ‘In the evening, her husband came back from the forest’

älon ‘morning, in the morning’:

53. a) älon jəɣ  
   morning become.PST0.3SG  
   ‘Morning came’

b) älon əŋkəl mən-əɣən jəŋ-ə  
   morning mother-3SG go-PST0.3SG water-ILL  
   ‘In the morning, mother went to bring water’

jəŋən ‘night, at night’; qotl ‘day, during the day’; mălăyəlt / mala ‘past, completed’ +
qotl ‘day’ → mălăyəlt qotl / mălă qotl ‘yesterday’.

5.1.1.3.1.2 Derived adverbials

The majority of Eastern Khanty adverbial meanings are expressed by
predominantly single-word nominal forms derived with the help of a variety of
affixes. Eastern Khanty adverbial modifiers most frequently represent quite
robustly used nominal modifiers in prototypical pre-verbal position, and typically,
though not necessarily, morphologically marked by affixes corresponding to
meaning alterations that they manifest.

Among most productive affixes are the following:

- Affix /-əɣ, -əɣ, -əɣ/ apparently without distinct semantic restrictions and
  appearing with temporal, locative/spatial and manner adverbials:

  pestəɣ ‘fast, quickly’  ← pestə adj.‘fast, quick, sharp’;
  øjəɣ ‘together, jointly’  ← øj num.‘one’;
  pərṭəɣ ‘back(wards)’  ← pərt / pirt n.‘back, backside’;
  wānəɣ ‘near (Lat/Loc)’  ← wān adj.‘short, nearest, proximal’;
  qotloɣ ‘by day, during daytime, tomorrow’  ← qotl n.‘day’;
  mātʃəɣ ‘always’  ← mātʃə / mōtʃə / məʃə postpos.‘until’: tələɣ mətʃə ‘until winter’;

54. tʃ‘u jəɣ  entəw wəlaka mətʃə məɣ-ə il-məŋ-t.  
   DET people waist measure up to ground-ILL down-go-PST0.3Pl  
   ‘…those people got under the ground up to their waists.’
• Affix /-øn, -ø/ appearing predominantly either with adverbials of locative/spatial semantics, or, by extension, with temporal adverbials:

kömøn ‘outside, outdoors (Loc)’ ← kóm / küm n.’outside, outdoors, street’;
iløn ‘in front, before (Loc)’ ← il n., adj.’front’;
qøyøn ‘far away, long ago’ ← qøy adj.’long, far’;
joqøøn ‘back home, indoors (Loc)’ ← joq adv.’back to point of origin, back home’;
iløn ‘down there (Loc)’ ← il adv.’down’;
nomøn ‘up there (Loc)’ ← n., adj.’upside, upper’;
wänøn ‘near (Lat/Loc)’ ← wän adj.’short, nearest, proximal’.

55. körøy il-øn jäløysø-m-å1-nø jøy-nåmø ran’it’ werå-øn.
eagle front-LOC fight-PP-3SG-LOC 3SG-RFL injure.INF do-PST0.3SG
‘Earlier that eagle got himself wounded when fighting.’

• Affix /-øp, -pa/ appearing almost exclusively with adverbials of locative/spatial semantics:

øjøp øj.‘one’;
qølepø塬 where, towards (All1)’ ← qol adv./prn.’where, when’;
teyøpø塬 ‘here (All1)’ ← tet adv.’here’;
kümpø塬 ‘outside, outdoors (All1)’ ← küm n.’outside, outdoors, street’;
joypø塬 ‘back home, indoors (All1)’ ← joy adv.’back to origin point, back home’;
iløpø塬 ‘in front, forward (All1)’ ← il n., adj.’front’;
niyøpø塬 ‘downwards, to the riverbank (All)’ ← niy adv.’down to the river’;
nuypø塬 ‘upwards (All1)’ ← nuy adv.’up’;
iløpø塬 ‘downwards (All1)’ ← il adv.’down’.

56. månø tá liyølta-s-øm, nuý-pa liyølt-s-im joyo-s-im
1SG-LOC then take.aim-PST2-1SG up-All1 take.aim-PST2-1SG shoot-PST2-1SG
‘I took aim, I raised up the gun (took aim) and shot’

• Affix /-øki, -aki, -øqø/ – appearing more frequently in adverbials with manner or modal semantics:

jømøki ‘well’ ← jøm adj.’good’;
ätmøki ‘badly’ ← ätmø adj.’bad’;
älnøwtøki ‘on mornings’ ← älnøw adv.’in the morning’:

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57. nu jômaki metali ònt-im
   OK good-PRD some NEG-PP
   ‘Well then, there's nothing’

- Affix /-i, -i/:  

wijnati ‘slyly, craftily’ ← wijnat adj. ‘mischievous, crafty’ ← wij n. ‘mischief, slyness’;  
wöynätı ‘strongly, forcefully’ ← wöynät adj. ‘strong, forceful’ ← wöy n. ‘strength, force’;  
semti ‘clearly, obviously’ ← semt n. ‘eyes PL’; səmti ‘directly, in the face’ ← səm n. ‘heart’.

58. niŋ-äli-kəŋ wijnati küm l’uŋi-t-ən-nə ʃərə-γlə-pən
   girl-DIM-DU maliciously outside leave-IMPP-3DU-LOC make.noise-PST0.2DU
   ‘Girls went out and kept making noise.’

These most productive derivational adverbial affixes show identity to morphological features described above for the Eastern Khanty nominal modifiers (cf. 1.1.3.1.2.Derived adjectives) in that the adverbial affixes listed in this chapter are formally identical to derivational affixes of nominal modifiers. Thus, adverbial affix /-əɣ/ is corresponding to adjectival affix /-əɣ/ with relational/proprietive semantics, adverbial affix /-ən/ – to adjectival affix /-ən/ with relational/material semantics, adverbial affix /-i/ to adjectival affix /-/i/ with proprietive semantics. In this respect the differentiation between Eastern Khanty nominal and verbal modifiers is rather functional than formal. In their etymology, both nominal and verbal modifiers are predominantly nouns. However, the important differentiating feature of the adverbial modifiers is that unlike Eastern Khanty nominal modifiers, it is not typical for this function to be expressed by a morphologically unmarked noun juxtaposed to a predicate.

5.1.2 Other means of expression of adverbial semantics

5.1.2.1 Subordinate clauses with adverbial semantics

Another very frequent form of adverbial modification in Eastern Khanty is the use of subordinate clauses, mainly with nonfinite predicate, typically preceding the
matrix clause, or at least the modified predicate. These are most frequently participial clauses, of either imperfective (marker /-tə/) or perfective (/-əm/) aspect, or converbial clauses.

Adverbial subordinate clauses of temporal semantics:

59. quntə ajəm-kitəm quj-t joɣ ju-m-il-na, kəntʃə-əkə-tə qat-əl
when young man-EP-Pl home come-PP-3Pl-Loc search-Inch-PST0.3Pl house-3SG
‘When young men came home, they started to look for their house’

60. quntə qat tøjö-ənə i-m-əl, rətʃə unəɣ-tətə qat tøjöt i-m-əl-oy,
when house fire-LOC eat-PP-3SG oldman see-PST0.3SG house fire eat-PP-3SG-PRL
 tj’u jay entəw wəlaka moy-ə il-mən-ə
DET people waist up-to ground-ILL down-go-PST0.3PL
‘When the house burnt down, the old man saw that while the house was burning those people got under the ground up to the waist’.

These adverbial subordinate clauses may have their Agent referents either coreferential with the Agent role of the matrix clause, as in (59), or as an independent event participant as in both cases of (60).

These temporal nonfinite constructions may have a temporal subordinate clause marker in the form of an interrogative pronoun, most commonly quntə ‘when’ (59, 60). Adverbial subordinate clauses of locative/temporal semantics and subordinator:

61. juy-a-nuy qaŋ-əm-al pirnə tuənom səwsiki n’ən’ka-mtə-kət-atə.
tree-ILL-up climb-PP-3SG after then above Syvsiki tease-Mmnt-INCH-3SG/SG
‘Having gotten up the tree, he started teasing oldman Syvsiki’.

Adverbial subordinate clauses of manner semantics:

62. tj’u l’ànə ajəmkitəm quj-t æntə qoɣ nomøysøk-min, noɣ wer-ət
DET time young man-Pl NEG long think-CNV arrow do-PST0.3Pl
mən-ət tøyl-ə, qo wəl-ət tj’u jay
go-PST0.3Pl DET-ILL where live-PST0.3Pl DET people
‘Not thinking much, young men made arrows and went where those people lived’
Eastern Khanty subordinate adverbial clauses of manner most frequently imply simultaneity of two or more states/events, which is frequently expressed in Eastern Khanty by a converbial clause (59). However, the most productive Eastern Khanty subordination device – participial constructions are equally frequent as adverbials of manner as well.

Similarly to nominalizations in the function of attributive nominal modifiers (cf. 2.1.2.2. Nominalizations), Eastern Khanty clause-size adverbial modifiers are not clause arguments, but rather juxtaposed adjunct elements with the modifying relationship inferred by the language users, conceptually just as the modifying relationship between a single-word verbal modifier adding some adverbial information, to the predicate.

A more detailed account of the Eastern Khanty subordinate clauses will follow below (cf. 11.Complex Clause: Subordination).
6. NUMERALS

Eastern Khanty numerals form a clearly distinct word-class, which could be viewed as closed, as it has a finite number of basic stems, which, however, can be used in various combinations to form indefinite amount of compound units to express hypothetically infinite numbers. Based on a host of morphological and functional-semantic criteria, these numerals can be readily differentiated into two main sub-types: cardinal and ordinal, and three additional sub-types: multiplicative, fraction and distributive.

6.1.1 Cardinal Numerals

6.1.1.1 Morphological and Semantic Features

Eastern Khanty cardinal numerals may be classified within their class of lexical units into morphologically simple, or underived (column A in Table 1), and those derived from the latter by compounding (columns B and C in Table 1):

Table 1
Cardinal numerals 1 through 30

<table>
<thead>
<tr>
<th>A (1-10)</th>
<th>B (11-20)</th>
<th>C (21-30)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ǝj ‘1’</td>
<td>jöŋǝrki ǝj (^{27}) ‘11’</td>
<td>qosǝrki ǝj ‘21’</td>
</tr>
<tr>
<td>kätkǝn ‘2’</td>
<td>jöŋǝrki kätkǝn ‘12’</td>
<td>qosǝrki kätkǝn ‘22’</td>
</tr>
<tr>
<td>qolǝm ‘3’</td>
<td>jöŋǝrki qolǝm ‘13’</td>
<td>qosǝrki qolǝm ‘23’</td>
</tr>
<tr>
<td>nälǝm ‘4’</td>
<td>jöŋǝrki nälǝm ‘14’</td>
<td>qosǝrki nälǝm ‘24’</td>
</tr>
<tr>
<td>wet ‘5’</td>
<td>jöŋǝrki wet ‘15’</td>
<td>qosǝrki wet ‘25’</td>
</tr>
<tr>
<td>qut ‘6’</td>
<td>jöŋǝrki qut ‘16’</td>
<td>qosǝrki qut ‘26’</td>
</tr>
<tr>
<td>läwǝt ‘7’</td>
<td>jöŋǝrki läwǝt ‘17’</td>
<td>qosǝrki läwǝt ‘27’</td>
</tr>
</tbody>
</table>

\(^{27}\) According to Tereskin (1961) the form jöŋǝrki in some of the Vakh river speech communities is produced as jöŋǝrki where the stem-final velar nasal /-ŋ/- of jöŋ ‘10’ is produced as a very weak voiced uvular /-ŋ/- intervocally, however, in more complex units like qolǝmjöŋ ǝj ‘31’ /ŋ/ remains /ŋ/.
It is evident from the above Table 1 that numerals ‘1’ through ‘8’, ‘10’, ‘20’, ‘100’ are monostem underived lexical units, whereas ‘9’, and the higher numerals ‘11’ through ‘19’, and ‘21’ through ‘30’ are complex compound units. As it was observed in earlier descriptions of Khanty (Tereskin 1961), the numeral ‘9’, and those containing the notion of ‘9’, such as higher numerals ‘19’, ‘29’, etc. represent a compound of 3 stems with a certain consistent syntax (cf. 5.1.2. Internal Syntax of Numerals):

1. αj - αr-jöŋ αj - αr - qos αj - αr - qolóm - jöŋ
   1 – many/more – 10 1 – many/more – 20 1 – many/more – 3 – 10
   ‘9’ ‘19’ ‘29’

   In other words, the pattern here may be described as ‘one more towards…’. The element ‘many/more’ most probably has the etymological relation to the quantifier örki ‘many/much/a lot’ (1), also used as a quantifier in nominal phrases (2) (cf. also Quantifiers), an adverbial modifier (3), which is evident from the compound numerals such as qosörki wet ‘25’ in (4) below:

2. kät qoj oy ar qul tuy-kəŋ
two man-DU many fish bring-PST0.3Du
‘Two men brought a lot of fish’

3. mä äray - joyo-s-im
1SG much/many saw-PST2-1SG/SG
‘I cut it up with a saw’

4. qos-örki wet
20-many/much-5
‘25’
Numeral compounding in the group ‘11’ through ‘18’ (column B in table Table 1) and ‘21’ through ‘28’ (column C in Table 1), and further ‘31’ through ‘38’, ‘41’-‘48’, ‘51’-‘58’, etc. (column B in Table 1) appear to differ from nominal compounding (cf. Compounding.) in that semantically, unlike nominal hyponymic relation to the second member, numerals may be said to display hyponymic relation to the first, i.e. numeral compound of this type is a token of the first rather than the second member’s type. Thus, ‘25’ is a token of the type of ‘20’ rather than ‘5’, and in the dependent-head relation, the second compound member is the dependent modifying the first, the head. This pattern appears as a deviation from the general Eastern Khanty syntactic/semantic pattern of modifiers preceding the modified.

Similar to other word-class compounding, the elements of the numeral compounds preserve their phonological independence and are not transparent to word-internal phonological processes, such as Vowel Harmony, palatalization, etc. [Cf. 1.2.5 Disharmony]. Thus, for example in *qolmjöŋ qut* ‘36’, while both *qolm* ‘3’ and *qut* ‘6’ contain the back vowels, *jöŋ* ‘10’ contains the front.

The round decimals ‘30’ through ‘70’ (column A of Table 2) are also compounds, but of a slightly different nature, namely they represent a combination of a basic simple number of ‘3’ through ‘7’ and the ‘10’, thus manifesting the regular, nominal-type compounding strategy with hyponymic relation to the second member, i.e. these numeral compounds are tokens of the second member’s type. Thus, ‘30’ is a token of the type of ‘10’ rather than ‘3’, and the first member of the compound is the dependent modifying the second, the head.
### Table 2
Sample tokens of the decimals 30 through 99

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>qolˈmjoŋ ‘30’</td>
<td>qolˈmjoŋ əj ‘31’</td>
<td>ajərnálájoŋ ‘39’</td>
</tr>
<tr>
<td>näləyjoŋ ‘40’</td>
<td>näləyjoŋ əj ‘41’</td>
<td>ajərwetjoŋ ‘49’</td>
</tr>
<tr>
<td>wetjoŋ ‘50’</td>
<td>wetjoŋ əj ‘51’</td>
<td>ajərqutjoŋ ‘59’</td>
</tr>
<tr>
<td>qutjoŋ ‘60’</td>
<td>qutjoŋ əj ‘61’</td>
<td>ajərlawətjoŋ ‘69’</td>
</tr>
<tr>
<td>ləwetjoŋ ‘70’</td>
<td>ləwetjoŋ əj ‘71’</td>
<td>ajərnilsat ‘79’</td>
</tr>
<tr>
<td>nilsat ‘80’</td>
<td>nilsat əj ‘81’</td>
<td>nilsat ajərjoŋ ‘89’</td>
</tr>
<tr>
<td>ajərsat ‘90’</td>
<td>ajərsat əj ‘91’</td>
<td>ajərsat ajərjoŋ ‘99’</td>
</tr>
</tbody>
</table>

Similar to the round decimals, round hundreds ‘100’ through ‘800’ (column A of Table 3) are also compounds of a basic simple number of 2 through 8 and the stem ‘100’ sat.

### Table 3
Sample tokens of the hundred and hundred+units 100 through 1000

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>sat ‘100’</td>
<td>sat əj ‘101’</td>
<td>sat ajərjoŋ ‘109’</td>
</tr>
<tr>
<td>kəsatqən ‘200’</td>
<td>kəsatqən əj ‘201’</td>
<td>kəsatqən ajərjoŋ ‘209’</td>
</tr>
<tr>
<td>qolˈmsat ‘300’</td>
<td>qolˈmsat əj ‘301’</td>
<td>qolˈmsat ajərjoŋ ‘309’</td>
</tr>
<tr>
<td>näləmsat ‘400’</td>
<td>näləmsat əj ‘401’</td>
<td>näləmsat ajərjoŋ ‘409’</td>
</tr>
<tr>
<td>wetsat ‘500’</td>
<td>wetsat əj ‘501’</td>
<td>wetsat ajərjoŋ ‘509’</td>
</tr>
<tr>
<td>qutsat ‘600’</td>
<td>qutsat əj ‘601’</td>
<td>qutsat ajərjoŋ ‘609’</td>
</tr>
<tr>
<td>ləwətsat ‘700’</td>
<td>ləwətsat əj ‘701’</td>
<td>ləwətsat ajərjoŋ ‘709’</td>
</tr>
<tr>
<td>niləysat ‘800’</td>
<td>niləysat əj ‘801’</td>
<td>niləysat ajərjoŋ ‘809’</td>
</tr>
<tr>
<td>ajərərəs ‘900’</td>
<td>ajərərəs əj ‘901’</td>
<td>ajərərəs ajərjoŋ ‘909’</td>
</tr>
</tbody>
</table>
All the intervening values employ regular compounding strategies discussed above, with the systematic exception of units ending with ‘.9’ (column C of Table 3) above and (Table 4) below, which are applying the subtraction strategy instead of addition. Conceptually similar to the form for ‘90’ above, the form for ‘900’ a̱jərtərəs (1 more (of the type (of hundreds)) towards 1000) is using the concept ‘on of the type towards…’ with underlying subtraction notion.

<table>
<thead>
<tr>
<th>…9-ending numerals over hundreds</th>
</tr>
</thead>
<tbody>
<tr>
<td>sat a̱jərsat a̱jərjón ‘199’</td>
</tr>
<tr>
<td>kāsatqən a̱jərsat a̱jərjón ‘299’</td>
</tr>
<tr>
<td>qoləmsat a̱jərsat a̱jərjón ‘399’</td>
</tr>
</tbody>
</table>

6.1.1.2 Internal Syntax of Numerals

Departing from Comrie’s and Guirardello-Damian’s (2004) premise that numerals, especially higher numerals, have internal syntax, some observations regarding the internal syntax of the Eastern Khanty syntax can be made.

5. kā-sat-qən qoləm-jón nīləy
   \((2 \times 100) + (3 \times 10) + 8 = 238\)

Comrie and Guirardello-Damian (2004) is based on generalizations concerning addition in the internal syntax of numeral expressions by Greenberg (1978), namely (26) “If in a language, in any sum the smaller addend precedes the larger, then the same order holds for all smaller numbers expressed by addition” and (27) “If in a language, in any sum the larger addend precedes the smaller, then the same order holds for all larger numbers expressed by addition” (Greenberg 1978: 273). In these, according to Comrie and Guirardello-Damian (2004), an evident cognitive principle is involved, that is “the very first element gives me a reasonably close approximation to the final result, and every successive item gives
a further approximation’ whereas ‘the opposite order leaves the hearer in the dark till the last item is reached’ (Greenberg 1978: 274).

We can see then, that in the Eastern Khanty, there is a combination of arithmetic processes with sequential ordering of elements at different levels of the numeral system. The first and most robustly employed process is that of addition.

i) In the case of addition, numerals ‘11’ through ‘18’ and ‘21’ through ‘28’, there is larger addend preceding the smaller addend: \( \text{jóq-ørkî kàtkwûn ‘10-(+)2=12’} \), \( \text{jóq-ørkî qôlem ‘10-(+)3=13’} \), \( \text{qos-ørkî nàlêm ‘20-(+)4=24’} \), \( \text{qos-ørkî wet ‘20-(+)5=25’} \), etc. Further on, the non-round decimals ‘31’ through ‘38’, ‘41’ through ‘48’, and such, also display larger addend preceding the smaller: \( \text{nàlêyjôq ñj ‘40(4x10)+1=41’} \), \( \text{qutjôq ñj ‘60(6x10)-1=61’} \), as do the non-round hundreds: \( \text{sat ñj ‘100+1=101’} \), \( \text{nàlêmjôt ñj ‘400(4x100)+1=401’} \), \( \text{nîlêjûsat ñj ‘800(8x100)+1=801’} \), \( \text{âjôrîtùs ñj ‘900(1-(+)1000)+1=901’} \).

Thus, exemplified by the (1) given at the onset of the chapter, it can be generalized that, the Eastern Khanty higher numerals have consistent tendency for larger addends precede smaller addends.

There is also a phenomenon of suppletion within the overall pattern exemplified by decimal ‘20’ (compare \( \text{qos ‘20’} \) vs. \( \text{qôlem-jôq ‘30’, nàlêy-jôq ‘40’, wet-jôq ‘50’, qut-jôq ‘60’, lâwet-jôq ‘70’} \) and decimals ‘80’ and ‘90’ (compare \( \text{nil-sat ‘80’, ñj-ør-sat ‘90’} \) representing a local mini-pattern.

There is, however, a local scale systematic deviation from this general addition pattern in that ‘9’ and all higher numerals containing it are applying subtraction, rather than addition.
ii) In the case of ‘9’, ‘19’, ‘29’ and further higher numerals ending with ‘..9’, there is a smaller subtracted preceding the larger subtractor: äj-ør-jōŋ ‘1-(more to)-10’ or ‘by 1 → 10’, äj-ør-gos ‘1-(more to)-20’, or ‘by 1 → 20’, äj-ør-golm ‘1-(more to)-30’ or ‘by 1 → 30’, etc. Note incidentally, that in cases of ‘90’ and ‘900’ the internal semantic pattern of ‘one more towards …’ is interpreted at a more extended scale, as ‘one more (of a kind) towards’, i.e. ‘90’ is äj-ør-sat ‘1-(10 more to)-100’ meaning ‘one more (decimal) towards 100’; and ‘900’ is äj-ør-tərəs ‘1-(100 more to)-1000’ meaning ‘one more (hundred) towards 1000’.

Other processes consistently employed include multiplication by 10 and its exponents.

iii) Multiplication is at the core of the round decimals ’30’ through ‘70’: qoləm-jōŋ ‘3x10=30’, wet-jōŋ ‘5x10=50’, læwet-jōŋ ‘7x10=70’.

Curiously, the round decimal ‘80’ follows here a somewhat similar pattern to ‘90’ (above): i.e. nil-sat ‘8(reduced)-100=80’, literally ‘eight towards hundred’, which does not replicate schematically in ‘800’: niləy-sat ‘8(full)-100=800’ which appears consistent with its group employing multiplication (compare: qoləm-sat ‘3x100=300’, nāləm-sat ‘4x100=400’), where too, the smaller addend precedes the larger: wet-sat ‘5x100=500’. In multiplication the smaller multiplied precedes the larger multiplier.

6.1.1.3 Regarding the Base of the Eastern Khanty Numeral System

Following Comrie (2005) framework for identifying the arithmetic base of the language’s numeral system, defining the base as numerical value to which various arithmetic processes (operations) are applied (Comrie 2005), it is evident that in Eastern Khanty, ‘10’ is the most readily available candidate for the arithmetic base.
Exemplified by *nālōjōñ nilōy ‘48*, Eastern Khanty uses ‘10’ to produce ‘40’ by multiplication by ‘4’: *nālōj-joñ ‘4x10’* and adding ‘8’: *nilōy*. It is exactly ‘10’ that is used here as a base for multiplication, rather than ‘4’, as this base (‘10’) is recurrent in other decimal numerals: *wēt-jōñ øj ‘51 ‘5x10 + 1)*, *qutjōñ lāwet ‘67 ‘6x10 + 7)*, etc. Moreover, ‘10’ is used to produce ‘9’ by subtraction of ‘1’: *øj-ør-jōñ ‘1-(more to)-10’*, and to produce ‘11’ through ‘18’ by addition: *jōñ-ørki nālōm ‘14 ‘10 + 4)*, *jōñ-ørki wēt ‘15 ‘10 + 5)*. Furthermore, ‘10’ is used as a base for exponentiation of it to the power, though expressed by the words of unrelated etymology, in the case of ‘100’ *sat* – a borrowing from Arian *sto*, *sotnja*, in the case of ‘1000’ *tərōs* – most probably also a borrowing from Arian *t’arōs*, and in the case of ‘1 000 000’ – a compound of the indigenous modifier *nemlōy* ‘nameless’ and the latter Turkic borrowing for ‘1000’: *nemlōy t’arōs* ‘Lit. nameless thousand’. The morphonologically opaque, etymologically non-transparent suppletive form *qos* ‘20’, could be said to fall under the general ‘10-base’ pattern, as it appears at the ten, decimal position, and all ‘intervening values are expressed by adding a number less than ten to this word’ (Comrie 2005): *qosørki lāwet ‘27 ‘20+7)*, *qosørki nilōy ‘28 ‘20+8)*. Moreover, in its type of decimals between ‘19’ and ‘79’, this suppletive form occupies the slot taken by regular transparent forms derived by multiplication of ‘10’, compare underlined: *qosørki lāwet ‘27 ‘20+7)* vs. *qutjōñ lāwet ‘67 ‘6x10 + 7)* vs. *lāwōtjōñ lāwet ‘77 ‘7x10 + 7)*, with the only differentiating feature being the overt presence of the element *ørki* ‘more/much’, making the ‘twenties’ thus somewhat distinct.
The decimal forms ending with ‘...9’, such as: ‘19’, ‘29’, ‘39’, etc., as well as the forms ‘90’ and ‘900’ should not be treated as exceptions as they most probably represent a kind of conceptual extension of the form for ‘9’ – αj-ae-r-jöŋ (1 more to 10) treated as a schematic pattern to form: ‘19’ – αj-ae-r-qos (one more to 20); ‘29’ – αj-ae-r-qolom-jöŋ (1 more to 3x10); and even further extension in ‘90’ – αj-ae-r-sat (one more (of the type(of decimals)) to hundred) and in ‘900’ – αj-ae-r-taş (one more (of the type(of hundreds)) to thousand).

Finally, another suppletive, but transparent decimal form ‘80’ nil-sat (8 (to hundred) uses the phonologically reduced form of ‘8’ – nila, preceding the form for ‘100’ – sat. The reduced form of ‘8’ is the only feature that differentiates it from the form for ‘800’ – nilaysat, produced by regular multiplication of the base ‘100’ – sat by ‘8’ – nila. The form for ‘80’ (and intervening values: ‘81’ - nilsat αj, etc.) is the only occasion synchronically, where the numerals containing ‘8’ are irregular (‘18’ – jöŋærki nila; ‘28’ qosærki nila, etc.), unlike numerals containing ‘9’ consistently employing subtraction. Though, the etymology of this form is not clear, it can be speculated that it is probably a relic of the earlier extinct system where ‘8’ and forms containing ‘8’ had subtraction-like pattern similar to that of ‘9’, which was gradually normalized to the dominant pattern. Perhaps, indirect local evidence of ongoing (completing) normalization could be seen in recently reported (Tereskin 1961) parallel forms for ‘89’: a ‘9’-type αjærjærsat (1 more to (1 more to 100)) and regular addition-type nilsat αjærjöŋ (80 + (1 more to 10)). Also, the cross-dialectal comparative analysis provides evidence in favor, showing that in the northern dialects (Nikolaeva 1999), although admittedly mutually unintelligible, nevertheless obviously closely related, there is a
synchronously attested form for ‘18’ – *nijɨl-xu:s* ‘8-20) that follows the same pattern as ‘19’, both in Northern and Eastern Khanty, as well as the form for ‘80’ – *nijɨl-soːt* (8-100).

### 6.1.1.4 Functional Characteristics of Cardinal Numerals

In the data available, Eastern Khanty cardinal numerals do not carry any of the inflectional morphology. Their most frequent syntactic function is that of nominal modifier, in which they appear juxtaposed to the modified head nominal similarly to all other modifiers (cf. Lexical word-size modifiers.).

The head nominal modified by the numeral ǝj ‘1’ typically will not carry any number inflection:

6.  `
`mờːm ǝj jőɣən kan’yal.

only 1 night be_ill-PST3.3SG

‘She was ill only one night’ (Gulya 1966).

The numeral ǝj ‘1’ often functions as an indefinite nominal quantifier/determiner, which is a cross-linguistically typical phenomenon:

7. ǝj rätʃ i kä niŋ - kən ǝjəɣ wəl-t.

one old man “and” two woman-Du together live-PST0.3Pl

‘A man and two women lived together.’

In combination with a demonstrative, numeral ǝj ‘1’ has the opposite function of a definite or deictic determiner, which typically functions as an anaphoric referring argument with an antecedent, frequently a phrase- or a clause-size, in the immediately preceding discourse:

8. a)  tʃ’ars-a jőyo-min-ə, qöröɣ noməl ili-pa l’iwtʃ’i-mt-äɣən.

sea-ILL come-CNV-LOC eagle from above down-All1 descend-Mmnt-PST0.3SG

‘They arrived at the sea, the eagle got down from up high very fast.’

b)  qɔsi-ŋə səm-əl ǝj ɭokkinta-ɣən.

man-LOC heart-3SG/SG home stop-PST0.3SG

‘The man’s heart stopped.’
c) qöröy kəsi-j-a tʃ’iti tölö-y-wal: "məla nəŋ aʃ tʃ’iti
eagle man-EP-ILL DET say-PRS.3SG then 2SG one DET
‘The eagle says to the man: - “Back then, you did the same to me.

d) kötəx-kəl’-ən, mä aʃ tʃ’iti səm-əm joy amləyi-kal
do-PST1.2SG 1SG one DET heart-3SG/SG home stop-PST1.3SG
‘…My heart was stopping then like that too’.

The meaning of the collocations aʃ tʃ’iti here appears close to the English
‘this one’, or ‘like this’.

The head modified by the numeral kät(qən) ‘2’ will prototypically be used in
Du number inflection form:

9. t’u amsg-l-əm kəniŋ-qən mən-nə ju-s-γən
   DET sit-PRS-1SG two woman-DU 1SG-LOC come-PST2-3DU
   ‘While I was sitting, two women came to me’

Finally, nominal heads modified by all other numerals implying plurality will
prototypically not be used with PL number inflection form, but rather in the
uninflected for number Sg. form (cf. 2.1.2.2.1. Number.):

10. nu jəmaki põtʃkan-əm pon-s-im wət əmp-əm we-s-im
   OK good-PRD gun-1SG load-PST2-1SG four dog-1SG take-PST2-1SG
   ‘Ok then, (we) got the guns loaded, took our four dogs.’

Numerals can be used to modify any grammatical relation in the clause: the
NP[S/A] as in (9) above, NP[O] as in (10) above, NP[time] as in (6) above and
(11) below:

11. niŋ iki aʃ-pel’k-a qilʧʃ’iʌt-a
   2SG old.man one-side-ILL move-Imper.2SG
   You, old man, move away (to one side)

Less frequently (approx. 2% of numeral use in the data), numerals also may
function as core arguments of the clause, an NP[Su] or NP[DO], acting as a
nominal NP:

12. qoləm jal-l-əw kollontə-l-əw
    three stand-PRS-1PL listen-PRS-1PL
    ‘We stand there 3 of us, and listen’
Numerals are also frequently used in the function of adverbial modifiers (cf. 1.1.1. Single-word Lexical Adverbials) bearing productive adverbial suffixes such as /-pa/ such as in (13) below:

13. əjɨpä qunta mà wērəŋ wəl-m-əm-na
    one-ADV when 1SG small be-PP-1SG-LOC
    ‘Once, when I was small…’

    mən-käl'-əm kəskän tɛl'-i'll-tə, wəl-käl-əm ə11ə sart.
    go-PST1.1SG spoon.bait pull-ITR-IMPP catch-PST1.1SG big pike
    ‘I went fishing with a spoon-bait and caught a big pike fish’

Finally, numerals are used as definite quantifier nominal modifiers within the noun phrase, such as ‘both’ which entails also the use of bound Du number modifier on the head argument and bound Du number agreement modifier on the predicate:

14. atʃ'ı-sa-qəŋ kittə niŋjntə-kən.
    brother-Coll-DU both get_married-PST0.3DU.
    ‘Two brothers got married.’

This quantifier is evidently derived from a numeral kät ‘2’ with the suffix /-tə/ and a rise in the root vowel /ə → i/.

### 6.1.2 Ordinal Numerals

Ordinal numerals are derived from the cardinal stems with the suffix /-mət/ and, in some stems, a change in the quality of the root vowel, similar to that observed in derivation of the definite quantifier above: kät ‘2’ → kitmət ‘second’. In compound numerals the derivational suffix is added to the leftmost element of the compound: qosərki wət-mət ‘twenty fifth’. Ordinal numerals typically function either as definite nominal modifiers, or as adverbial modifiers, where, in the latter case, they also attach the affix /-ək/-əy/ associated with
adverbializer/predicative derivational affix /-əki/ (cf. Derived Adverbials; Derived Adjectives):

15. ajmət iki lal’-wəl, kitmət iki aməs-wəl.
first man stand-PRS.3SG second man sit-PRS.3SG
‘The first old man is standing, the second old man is sitting.’ (Gulya 1966)

16. qulmətəy sajəw t’ars-a pan-γəs
third-time net see-ILL throw-PST3.3SG
‘[the old man] flung [put] the trawl for the third time in the sea’ (Gulya 1966)

6.1.3 Multiplicative Numerals

There is a group of numerals frequently referred to as multiplicative numerals (Tereskin 1961; Gulya 1966) that can be defined based on their morphological and functional features. These numerals are derived from cardinal numerals with the suffix /-pa/ of a common adverbial functional range and which is etymologically related to the suffix of Allative case (cf. Derived Adverbials; 2.1.2.2.3.Case). They typically function as adverbial modifiers with the scope ranging from modification of the predicate or verb phrase, to the whole proposition. The multiplicative numeral with the stem aj ‘1’ is typically used in the thetic type clauses that set up the stage and open a narrative or an event line:

17. al’wə-qən än’i-sə-kən wəl-lə-qən.
Alvali-DU sister -Coll-DU live-PRS-3DU
‘There lived Alvali and his older sister.’

18. aji-pə än’i-l jöγ-ä toloγ-wəl’.
one-ADV sister-SG/3SG 3SG-ILL say-PRS.3SG
‘Once his sister says to him.’

Other numeral stems denote repetitive action of the same kind, thus bearing the multiplicative aspectual and Aktionsart semantics. None of the verbal predicates in the examples below show verbal bound morphemes with this semantics:
19. potom os nüγät-kätä-wäl nillä-pä, wet-pä nüγät-kätä-wäl
after again move-INCH-PRS.3SG five-ADV four-ADV move-INCH-PRS.3SG
‘Then, again he moved, 4-5 times he moves and hides like this’

20. jowǝt-pa qǝsi-nǝ jöyi-tä koi-tǝ.
seven-ADV man-LOC shoot-INF want-PST0.3SG
‘Seven times the man wanted to shoot.’

6.1.4 Fractions

Fraction numerals are derived analytically, by using an appropriate cardinal
numeral stem and for expression of the notion of ‘half’ – the lexeme pelǝk :
qolǝm äl panǝ pelǝk ‘3 and a half years’. In case of singular, a proper noun may
be used to denote the whole, collocating with pelǝk to denote a fraction:
tʃ’as panǝ pelǝk ‘an hour and a half’. The whole (or multiple wholes) and a
fraction are conjoined by the conjunction panǝ ‘and’.

Incidentally, pelǝk may also be used to denote not exactly a half, but rather any
part, including the quarter:

21. süŋk awǝl toram pelǝk mɔrti willä ǝllǝ tögyǝ öล-i.
sun quarter sky part completely as big fire light-PS.3Sg
‘The quarter of the sky, where the sun (is), is burning like a big fire’ (Gulya 1966).

6.1.5 Distributive Numerals

Finally, in Gulya (1966) there is also identified a rare group of distributive
numerals, derived from cardinal numerals with the suffix /-tǝl/ and used
prototypically for referring to the homogeneous or identical entities distributed in
equal quantity: ajǝtǝl ‘one by one’, kitǝtǝl ‘in twos/pairs’, wetǝtǝl ‘in fives’:

22. welit kitǝtǝl jaγ-nǝ likǝrt-ǝ jórät-ǝt
reindeer-PL in twos people-LOC sleigh-ILL tie-PS.3PL
‘In twos the reindeer are harnessed by men to the sleighs’ (Gulya 1966)
Interestingly, the distributive ‘in twos’ does not affect the grammatical agreement between the NP[Su] ‘reindeer’ and the predicate, which is expressed in the PL with corresponding bound PL number modifier on the argument ‘reindeer’ and PL verbal agreement inflection on the predicate ‘tie’. Thus, the distributive numeral ‘in twos’ functions here as an adverbial modifier of manner, and not as a nominal modifier, as numeral quantifier or determiner type modifier would be corresponding in number to the modified head nominal and to verbal inflection (cf. 6.1.1.4. Functional Characteristics of Cardinal Numerals).
7. Postpositions

There is an open class of Eastern Khanty lexical units that can be taken as a distinct word class or at least as an identifiable lexical category. Mainly for expressing spatial semantics, Eastern Khanty makes a frequent and robust use of a group of nouns, which may serve as a readily available empirical base for the analysis of grammaticalization in this system. This group of nouns occurs juxtaposed as postpositions to nominals and are traditionally referred to as postpositions (Tereskin 1961; Gulya 1966). They can be categorized into two subtypes: (i) synchronically non-transparent tokens, and (ii) those whose nominal etymology is clear and which illustrate grammaticalization/delexicalization in progress.

7.1 Etymologically Non-transparent Postpositions Proper

The first subtype is a closed and very restricted group of units of former nouns, which are synchronically completely delexicalized and used exclusively as spatial postpositions, including: motStë, wëlaka ‘upto, to the point’; sayi(t) ‘manner’; qoyat ‘along’; sëpi ‘across’; mërë ‘during’; qut’na ‘home’; muyti ‘via’; pëtëno ‘for the sake’.

- motStë and wëlaka - with identical semantics of a landmark, measure ‘upto’:

1. ajqu-na nërkäl-möŋkäm os jööm-i, çëntw-ël motStë mëy uja mën-iğen
   lad-LOC serpent again hit-PS.3SG waist-3SG upto ground under go-PST0.3SG
   ‘The young man hit the serpent so hard, that it went into the ground up to his waist’
   (Tereskin 1961)

2. qunto qat töyö-na i-m-ël, rätj uwaŋtëno qa töyöt i-m-ël-oŋ, when house fire-LOC eat-PP-3SG oldman see-PST0-3SG house fire eat-PP-3SG-PRL
   ‘When the house burnt down, the old man saw that while the house was burning,’
DET people waist up to ground-ILL down-go-PST0.3Pl
‘those people got under the ground up to their waists’

3. **sayi(t)** – with the semantics of ‘manner, mode, means’:

   rut’ **sayi** jalt-a
   Russian way tell-Imper.2SG
   ‘Tell it in Russian’

4. jöy** loq(ol) sayi mën-s-äm**
   3SG track(3SG) way go-PST2-1SG
   ‘I followed (went by) his tracks’

The postposition sayi may occasionally take possessive inflection suffixes when collocating with personal pronouns as modifiers within a postpositional phrase:

5. mä nin **sayit-äm wer-s-im**
   1SG 2DU way-2SG do-PST2-1SG
   ‘I made it according to you (two)’ (Gulya 1966)

6. jöyän **qoyat ajrit-na män-l-äm**
   river along canoe-COM go-PRS-1SG
   ‘I go along the river in a boat’

   It should be mentioned that etymologically this postposition could plausibly be related to the noun qoy ‘the length’ also attested as a nominal attributive modifier qoy ‘long’ (cf. 4.1.Adjectives) with the relational/proprietary suffix /-(a/o)t/ (cf.4.1.1.3.2.Derived Adjectives).

• **səpi** – with the semantics of a landmark ‘across’ which the motion, action is taking place:

7. küm / loq **səpi män-əs**
   out / road across go-PST2.3SG
   ‘(S)he went across the street’
• \textit{mero} - with the semantics of a temporal reference point for the event:

8. tü qotl \underline{mero} øj kol-po ønt at-wal
   DET day during 1 word-TOP Neg say-PRS.3SG
   ‘During this day (s)he would not utter a word’ (Tereskin 1961)

• \textit{qut’na} - with the semantics of a certain reference to point of origin ‘home’

9. ming qat \underline{qut’na} ju-s-øw
   1Pl house back come-PST2-1Pl
   ‘We came back home’

   The etymology of this postposition could plausibly relate it to the noun \textit{qat/ qot/ qut} ‘house, home’ inflected for the Loc case, which makes it functionally and etymologically akin to the postpositional use of \textit{joø} ‘home’.

• \textit{muøti} – with the semantics of a landmark ‘via’ which the movement is taking place:

10. os korliki-j-oø \underline{muøti} körø mën-tä mas-wal
    again Korlik-EP-PRL via leg-ADV go-INF need-PRS.3SG
    ‘And one should go on foot via Korlik’ (Tereskin 1961)

• \textit{patøna} – with the semantics of beneficiary ‘for the sake’ of whom the event/action occurs:

11. müüli \underline{patøna} ?
    what for the sake
    ‘What for?’ (Tereskin 1961)

   The functional differentiating feature of the non-transparent postpositions proper from other postpositions is that, unlike the postpositional use of proper nouns, these units prototypically do not appear inflected for any of the noun inflection categories apart from those mentioned above (\textit{sayi}).
7.2 Postpositional Use of Nouns

This group represents a type of frequent usage of nouns in postposition to nominals, where the semantics of the postposed noun is extended and abstracted so that it approximates that of bound spatial case morphemes. These slightly over a dozen nouns appear to fall within certain generally definable semantic domains, which seems to be the factor making these nouns available for usage as postpositions. That is, synchronically, all these postposable nouns are attested within their prototypical nominal semantic-functional range:

- as free content lexical morphemes;
- frequently carrying derivational and inflectional morphology;
- frequently under stress in the clause;
- in semantic roles typical for their class of nouns: Agent, Target, Beneficiary, nominal predicate, associated with appropriate nominal grammatical categories, such as case, number, and possession;
- with semantic features commonly shared by the majority of the examples of the noun class: concrete and relatively stable in temporal and spatial plane.

All of these nouns are also frequently attested as functional units:

- syntactically rigid, if not bound grammatical morphemes;
- typically unstressed in the clause, or sharing a stress with the preposed nominal;
- typically not carrying nominal derivational or inflectional morphology, apart from infrequent use of spatial cases and possessive markers;
- with relational semantics (most frequently spatial), bearing very abstract semantic association with their respective nominal concreteness and spatio-temporal stability.
Below, a few most productive postpositional nouns are considered in their function as relational grammatical morphemes, contrasted with their use as proper lexical nouns:

- *qas*-, *säj*-, *tföntsf*-, *pir*-, *potf*-\(^{28}\) with common semantics of ‘behind, the backside, back,’ appearing similarly in spatial case inflected forms: ILL/Dat *qasa* / *säjä* / *tföntsf* / *potfa* ‘towards the back, behind’ and Loc *qasōnō* / *sājnō* / *tfōnnō* / *pirnō* / *potfnō* ‘at the back, behind, after’.

12. oypí *qasa* jola-γən
door  behind  stand-PST0.3SG
'(S)he stood behind the door'

The stem *qas* has a typical meaning of ‘an obstacle, a figure blocking the view’, from which an extension ‘a space behind-, blocked from view by- something’ is arrived at. Similarly, the stem *säj* has almost identical meaning ‘an obstacle, a curtain, a concealed space’ (being a conceptual core of such cognates as: *säjwōl* *qulkāntsľ* ‘to fish with a fishing net’; *sājŏn* *welō* ‘covered living space, sleeping area’), deriving spatial relation semantics synonymous to *qas*: ‘a space behind’:

13. juy *sāj-ŋə* kən’imta-γən
tree  behind  hide-PST0.3SG
'(S)he hid behind the tree'

The other synonymous postpositions involve somatic lexical units used in conceptually extended manner to express spatial relations:

14. qat *tšōn-ŋə* amēs-l-ŋə
house  back-LOC  sit-PRS-2SG
'You sit behind/at the back of the house'

15. mä *tföntsľ* lōγ-əm qafš-qi iki
1SG back-bone-1SG  hurt-PRD PRD
'My backbone (spine) hurts'

\(^{28}\) Yungan Khanty.
16. ämp qot potʃ-na omɔs-wal
dog house back-LOC sit-PRT.3SG
'The dog is sitting behind the house'

17. må potʃ-əm qɔtʃʊ-qi
1SG back-1SG hurt-PRT
'My back hurts'

- pirt(t)- also has the semantics of ‘backside’, but is equally frequently used for expression of both space and temporal relations, appearing in spatial case forms: ILL/Dat pirta ‘behind’ and Loc pirna ‘at the back, behind, after’. The stem pir has the typical meaning of ‘rear, back, butt’ and in a typologically common way is available for metaphorically extended use for the expression of spatial (and further metaphorized from spatial to temporal relations):

18. öt-əm pirt-a nirimtä-s-im i naʃimta-s-im
hand-1SG back-ILL pull-PST2-1SG/SG and curse-PST2-1SG
‘I pulled my hand back and cursed’

19. ämp-äli òj pelk-ä i pir-ka men-əs
dog-DIM one side-ILL and behind-TRSL go-PST2.3SG
‘The doggy got off and away’

20. pirt-ay unkə-s-im toʃə jəmaki
back-PRL cross-PST2-1SG also good-PRT
‘I crossed back, well’

21. məta piɾna əŋk-əl tʃet loɣa ut-ə kulä-ɣən,
measure after mother-3SG harbor shore-ILL go-PST0.3SG
‘At last (after a while) his mother got onto the shore’ (Tereskin 1961)

22. jöɣ mən-m-əl piɾ-ənə mä atʃ-im jö-s
3SG go-PP-3SG back-LOC 1SG brother-1SG come-PST2.3SG
‘After he went away my elder brother came’ (Gulya 1966)

As follows from the last two examples, this postposition may not exclusively follow a proper noun, but any nominative or noun phrase, such as Dem.Prn., abstract noun, nominalization and the participial clause. It is also represented by the examples above, that in the prepositional usage, pirt most frequently has temporal relation semantics, whereas when used as a preverbal modifier, it typically has the spatial relation semantics.
• sil- / ponœl- / poton- with the semantics of ‘proximity, near’, also in appropriate case forms: Loc silnœ / potonœ ‘near’. The stem sil has a typical meaning of ‘side, the outside’ from which the extension of ‘near’ is derived.

23. imi tʃoʃal sil-ønø sapaq-ønø kás-øwø
woman oven near-LOC boots-DU search-PRS.3SG
'The old woman is searching for boots behind the oven' (Tereskin 1961)

The other postpositions with synonymous semantics ponœl and poton are originally somatic nouns typically denoting either human or animal body parts, which are used in a metaphorical extension in postposition to nominals to express spatial relations.

24. ni-ønø s açi put loq ponœl-ønø rœkæt-i
woman-LOC clay kettle road side drop-PS.3SG
'Woman dropped the clay-jar near the road'

25. mœ ponœl-ømm qœtʃø-qi
1SG side-1SG hurt-PRD
'My side hurts'

26. āmp qœt poton-ønø amøs-wøl
dog house side-LOC sit-PRS.3SG
'The dog sits near the house'

27. mœ poton-ømm qœtsø-qi
1SG side-1SG hurt-PRD
'My side hurts'

• əlnœnœ- / oyti- with the common semantics of ‘the space above, or on top of’:

28. pœt-əli joyœn əlnœnœ-ønø amøs-wøl
bird-DIM river top-LOC sit-PRS.3SG
'The bird sits on the river surface'

The stem əl has the meaning of ‘body, corpus’: mœ əlmø qœtʃøqi ‘my body aches’; and from it əlnœnœ has a typical meaning of ‘surface, the top of smth. (‘body’+proprietary affix (cf. 4.1.1.3.1.2.Derived Adjectives.))’

The other postposition sharing the same functional-semantic domain is the noun oy with the typical meaning ‘head (human or animal)’, which is used in an extended manner to express spatial relation ‘above, on top’.

29. āmp qœt oyti-ønø amøs-wøl
dog house head-LOC sit-PRS.3SG
'They dog sits on top of the house'

30. mœ oy-ømm qœtʃø-qi
1SG head-1SG hurt-PRD
'My head aches'
• *köt-* with the semantics of ‘a gap, a threshold, a place between smth’ appearing in ILL/Dat inflected form *kötä* ‘towards the place between smth’; in Loc form *kötŋa* ‘in between smth’; and in Allat form *kötöy* ‘from in between smth’:

31. tʃu ñllä jɔy jɔry-an kötöy mən-wəl
   DET big tree root-LOC between go-PRS.3SG
   'S)he goes between the roots of the big tree'

• *uʃ- / pittə*\(^1\) with the common semantics of ‘the space below, or at the bottom of smth.’, with respective case forms: ILL/Dat *uʃa* ‘towards under smth’; Loc *uʃnə* ‘in between smth’; and in Allat form *uʃọy* ‘from under smth’:

32. əŋq-al jəŋ uʃ-ọy nyu wiyl-a-yən 33. mə uʃ-əl joʃo-s-im
   mother-3SG water bottom-PRL up go-PRS.3SG 1SG butt-3SG shoot-PST2-1SG
   'His mother got out from under the water' 'I shot him in the butt'

34.  ámb pqt  pittə-na
   dog house bottom-LOC
   'The dog is under the house'

• *ont- / tiypii*\(^1\) with the common semantics of ‘the space inside of smth.’, with respective case forms: ILL *onta* ‘towards inside’; Loc *ontnə* ‘inside smth’; and in Prolat form *ontọy* ‘from inside’:

35. əjpə quj-qasə-qən mən-kən juy - ont-a
   once husband-man go-PST0.3DU forest-in-ILL
   'Once men went into the forest'

36. mə  ont-əm / sol-əm qọtʃə-qı
   1SG inside-1SG ache-PRD
   'My inside hurts'

37.  ámb pqt  tiypii-ja taga-wəl
   dog house inside-ILL enter-PRS.3SG
   'The dog is entering the house'

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• *ilpi- / tempin-* with the common semantics of ‘the space in front of smth.’, with respective case forms: ILL *ilpija* ‘towards the front’; Loc *ilpina* ‘in front of smth’:

38. rit *ilpi-nø* ims-i
    boat front-LOC sit-Imper.2SG
    'Sit in front of the boat'

39. ämp qot *tempin-nø* omøs-wøl
    dog house front-LOC sit-PRS.3SG
    'The dog sits in front of the house'

• *tayi-* has the most extended semantics, implying the extensive metaphorical extension from the original nominal semantics of ‘the domain generally associated with the referent’, with respective case forms: ILL *tayija* ‘towards the place’; Loc *tayina* ‘in the place’.

40. jolt-al *tayij-øy* löy-øs, osøw-a at-wøl
    shaman-3SG place-PRL finish-PST2.3SG Osip-ILL say-PRS.3SG
    ‘He finished shamanizing and said to Osip’
    (Lit.: shamanizing place (he) finished) (Steinitz 1980: 561)

41. *tayi* jor øllä-ki iki
    place hill big-PRD PRD
    ‘That hill place is big’

42. mä il-alintø-l-øm iy-nø män-t
    1SG down-lie-PRS-1SG bear-LOC 1SG-ACC
    nuyliti-ta *tayi* øntø wu-ta-m-a.
    up-eat-IMPP place Neg see-IMPP-1SG-ILL
    ‘I lie down, not to see the bear devouring me’
    (Lit: …the bear’s devouring me place) (Gulya 1966)

43. wal-m-il *tayø-ja* jö-øs-ø.
    be-PP-3Pl place-ILL come-PST-3Pl
    ‘They came to the place of living’

44. møø püt-käli lulpan-ø *tayi* koløntøgaloø
    1Pl bird-DIM sing-IMPP place listen-PRS.3SG
    ‘We listened to the singing of birds’
    (Lit.: …to singing place of the birds we listened)

45. jetørki köjø *tayø-ja* jö-øs
    grous sing place-ILL come-PST-3SG
    ‘He came to the place of grousing’

In these pairs of examples, those on the right represent a more original use of *tayi* with the typical nominal stable semantics of ‘place, location’. The examples with nominalizations (participial clauses) on the left represent postpositional use of *tayi* grammatically functioning as the head of postpositional phrase with a very abstract metaphorical semantics: ‘general relation to the domain of reference’ of

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the nominal element of the PP. That is, in the examples on the left, *taɣɨ* does not carry any spatial semantics, but rather merely indicates the object of sense perception expressed by the predicates (seeing, listening).

Thus, it is evident that the majority of the Eastern Khanty spatial postpositions derive from the body part nomenclature, or somatic lexical field representatives. In this light, the metaphorical extension from body to object and spatial relation is a well attested cognitive behavior. As follows from the two subtypes of the postpositions listed above, there is a common tendency for the concrete nouns, most frequently of basic semantics – human/animal anatomy terms to undergo various degrees of metaphorical extension widening their functional-semantic scope. In their metaphorized, usage these terms characterize the typical 3-dimensional space, with the characterized objects being conceptualized as a body, human or animal, with the *face* or *belly* being in the front (*→* ‘in front’); *back* or *butt* – at the back (*→* ‘behind’); *head* – on top (*→* ‘top/on top’); *backside* or *butt* – below (*→* ‘under’); *side* being at a side (*→* ‘near/outside’); while *gut* or *intestines* being inside (*→* ‘inside’). Further on, in a typical metaphorical extension process, some of the extended spatial usages extend yet further to the temporal dimension, with the ‘behind’ in space conceptually assimilated to ‘behind’ temporally. In this, the event appears to be conceived as a tangible entity, following which (at whose back) the next event may occur. The minority group of postpositional nouns of non-anatomical terms, such as *taɣɨ* ‘place’, is interesting as it forms a separate group of its own, already representing a certain degree of spatial abstraction (*place*). However, in some of its postpositional usages (42), this term is further extended to the more spatio-temporal context, thus obtaining an even more abstract general sense of ‘event’, hence the translations could run: ‘*shamanizing* (*event*)’(40), ‘*bear/s devouring me* (*event*)’(42), and ‘*bird singing* (*event*)’(44). In
this process of metaphorical extension, as evident from the first subtype, these nouns may undergo considerable de-lexicalization becoming etymologically non-transparent to the speakers, gradually fossilized in its function of postposed grammatical morpheme with underlying relational semantics.
8. VERB

A class of verbs is prototypically referring to the least time-stable entities, i.e. coherent bundles of experience relatively limited in their duration (Givon 2001: 52).

1. waj oy uy-²l nok \textit{t}jutj pans \textit{nuray}l ay
   animal head-3SG up turn.PST0.3SG and run.PST0.3SG
   ‘The animal turned up his head and ran away’

   In Eastern Khanty, the members of this word-class prototypically express events of state or change in state, location, componentiality of more temporary stable entities denoted by nouns.

2. nu ej toy'oj-na toy'oj-na men-s-ow qul-kan-tja-tati illati
   OK one spring-LOC spring-LOC go-PST2-1PL fish-find-INF-Sup down
   ‘Once in spring..., in spring we went down to fish’

3. mä sart wel-s-am
   1SG pike kill-PST2-1SG
   ‘I caught a pike fish’

   As outlined at the onset of the morphology section, the criteria that are used here for the differentiation and class assignment include semantic and grammatical/syntactic features: complexity of meaning; temporal stability; compactness; content/function, or in other words, lexical words vis-à-vis grammatical morphemes; etc. These criteria may often imply a certain gradience and lack of feature discreteness.

   Eastern Khanty verbs are an open class of typically free lexical morphemes expressing and coding culturally shared and relatively temporary stable concepts and real-world experiences of the speakers, normally of the largest phonological size (in their actual natural use). Thus, the words \textit{t}jutj ‘turned’, \textit{nuray}l ay ‘ran away’, mens-ow ‘went’, wels-om ‘killed’ in the example clauses above are all members of the verb class sharing a number of common features.
8.1 Semantic Features

Eastern Khanty verbs, typically for this class, express experiences that are typically less durable temporarily and more defuse spatially compared to other word classes, such as, for examples, nouns. Thus, in (1) above, ‘animal’ and ‘head’ are intuitively more temporarily stable and durable and more compact spatially than ‘turning’ and ‘running’. There is, naturally, considerable class-internal variation in conceptualized temporal stability and duration, that is, mensəm ‘(I) went’ would typically imply more duration than welsəm ‘(I) killed’ or tfutsəm ‘(I) turned’. Due to the fact that they typically express events or changes in state that occur to more temporarily stable and durable entities: inanimate objects, animals, humans, ideas, etc., verbs may often involve a certain complexity, typically in some way associated with individual and/or cultural routines, conventions, stereotypes, etc.

4. 3llö sart man-nə öyö-li-s-im
   big pike 1SG-LOC get ready-INTR-PST2-1SG/SG
   'I got the big pike ready'

5. terka-s-im iws-nə
   fry-PST2-1SG/SG stick-LOC
   'I fried it on sticks'

Thus, for example, in (4) above, ‘preparing’ and ‘frying on skewers’, would typically imply for any Eastern Khanty speaker a certain scenario, an ordered sequence of subevents, subchanges: taking fish ashore, washing, scaling, gutting, cutting if necessary, and pickling in the salt brine. Also, by extension, this shared routine would also normally involve some indirect but strongly associated events, such as carefully storing the fish and thoroughly disposing of leftovers not to attract big predators.
As follows from the very semantic definition of this word class, verbs typically describe events, changes and states of more temporarily stable entities expressed by nouns, predicating some information about them, and as such, verbs to a large extent are dependent or associated with these nouns. That is, the exact meaning of the verb is discernible more fully and precisely only from the meaning of the whole proposition. More information regarding semantic features of verbs will follow in the chapter on Simple Verbal Clauses and Argument Structure (cf. 10.Simple Verbal Clause).

8.2 Syntactic Distribution Features

Even based on an extremely limited data set given at the onset of this chapter, it is possible to note a pattern in the prototypical syntactic positions and/or co-positions of constituents expressed by various word classes in the local parts of discourse, clauses. This particularly refers to verbs, as they appear to quite persistently occupy the clause-final positions, with the exception of (5), where there is more information following the finite matrix verb in the clause. In both cases they are adverbial modifiers, one of purpose qulkantfatati illati ‘to catch fish’ and one of manner iwesnə ‘on skewers’ in (5). A more detailed account of the features of Eastern Khanty adverbial modifiers is given above (cf. 5.Adverbial Modifiers) and in some sections below (cf. 11.Complex Clause: Adverbial Clauses). For the purpose of this discussion, it can be said that in Eastern Khanty, the prototypical clause-final position is a very reliable cue for identifying verbs, both in the typical finite form, and in subordinate clauses produced by a variety of Eastern Khanty nominalizations (cf. 9.Noun Phrase) and (11.Complex Clause).

Overall, similarly to the discussion of the verb’s semantic features, its syntactic characteristics are most accurately seen in the discussion of verbs’ actual usage as the center of the proposition, i.e. simple verbal clause.
8.3 Morphological distribution features

Firstly, the representative majority of the tokens are comparable based on the comparative co-distribution or combinatorial probabilities of class members and various grammatical morphemes, such as: typical collocations of the stems with bound morphemes, either derivational or inflectional.

8.3.1 Derivation

In discussion of the morphology of the lexical units belonging to the class of verbs, some of them will be said to derive from other lexical units, sometimes manifesting a change in word-class affiliation.

As it was mentioned in the description of the nominal derivation above, suffixes are the dominant, if not only type of affixation in Eastern Khanty, used in both derivation and inflection. Here we overview the inventory of affixes used in production of verbs from either nominal or more basic verbal stems – two dominant word classes used in verbal derivation in Khanty. It should be said though, that with a rare exception, these derivational affixes are not easily distinguishable into denominal and deverbal, and in many cases into clearly derivational or inflectional. Thus in the outline of the verbal derivation to follow, we will list these affixes commenting on the most frequent and typical semantic value that they import in the resultant verbs. As mentioned at the onset of the morphology chapter, resonant to J. Bybee (1985), the distinction between derivational and inflectional morphology is treated here as a gradual rather than discrete distinction on the basis of relevance. That is, the derivational / inflectional distinction and the hierarchical distributions within these two morphological categories result from difference in the degrees of relevance. The other factors, after Bybee (1985), are the necessity for inflections to have more (full) general applicability to lexical items of the class, and the amount of semantic change added
by the affix: the greater the semantic difference between the base and the derived from, the more the likelihood of the affix being derivational.

8.3.1.1 Bound Verbal Derivational Morphemes

Among the few affixes that were attested more often in the function of denominal verb derivation, there are: (/-ta/-tä/, the infinitive marker (cf. 8.4.Nonfinite Verb Forms)). Below, I will briefly review these most frequent derivational affixes and will discuss their function in more detail further on (cf. section 8.3.1.1.2.1.Voice and Aspectual Affixation):

A) one of the productive modes of denominal verb derivation is the conversion of nominal stems into verbal stems by means of verbal derivational and/or inflectional bound morphemes but without special denominational derivational morphemes. This is exemplified below by the use of infinitive marker /-ta/ with nominal stems: on’tf-ta ‘intr. to get shallow’ ← on’tf ‘shallow’; qos-ta ‘to urinate’ ← qos ‘urine’; qor-ta ‘to skin/peel/uncover’ ← qor ‘1. image; 2. peel/skin’; n’alata ‘to lick’ ← n’äläm ‘tongue’; man’t’a ‘to tell tales’ ← man’t ‘tale’; piqim-ta ‘to rot’ ← piqim ‘rotten’; poyal-ta ‘to dam’ ← poyal ‘pond’; sőy-tä ‘to plait’ ← sőy ‘plait’; (moq) pîrnä-tä ‘to baptize a child’ ← pîrnä ‘cross’:

6. öy- sól pîrnä-ta panel-as daughter-3SG christen-IMPP curb-PST2.3SG ‘(S)he prayed/crossed/swore’ 7. pîrnä-nu qu cross-ATTR man ‘Man with a cross’

8. pamö söy / qoq söy grass wisp / long plait ‘Wisp of grass’ / ‘long plait’ 9. uy-am sőy-l-äm hair-1SG plait-PRS-1SG ‘I will plait my hair’
Thus this verbal derivation could be represented schematically as:

\[ [X] \{n, \text{adj}, \text{adv}\} - \alpha \]

\[ [[[X]] V - \text{event/action associated with } \alpha , \] \]

where:

\[ [X] \] - is the stem;
\[ \{n, \text{adv}\} \] - the stem can be nominal;
\[ \alpha \] - the meaning of the stem;

\[ [[[X]]] V \] - the derived lexical unit keeps the stem and acquires verbal functional and morphological features.

B) /-/m/ ewli-m-tä ‘to smell up (something)’ \( \leftarrow \) ewäl ‘smell’; orta-m-tä ‘to get rich/prominent’ \( \leftarrow \) ort ‘headman’; qotl-om-tä ‘to dawn’ \( \leftarrow \) qotl ‘day’;

C) /-/tɔ/ päm-tä-ntä ‘to steam(something)’ \( \leftarrow \) päm ‘heat’ (cf. pämältä ‘to sweat’); söj-tä-ntä ‘1.intr. to char; 2.tr. to chat’ \( \leftarrow \) söj ‘coal’; enä-tä-ntä ‘to get fat’ \( \leftarrow \) enä ‘fat’;

D) /-/i/ qaŋʃ-i-ta ‘to write up (make motley)’ \( \leftarrow \) qaŋʃə ‘motley, many-colored’; n’ayl-i-ta ‘to shorten’ \( \leftarrow \) n’ayal ‘short’ (cf. noylitanta ‘intr. to shorten’);

E) /-/s/ n’olɔy-s-ənta ‘to lick Refl.’ \( \leftarrow \) n’olɔy ‘mucus/slime’;

F) /-/ʃ/ qosa-ʃ-ta ‘to glimmer/shine’ \( \leftarrow \) qos ‘star’; qatʃa-ʃ-ta ‘to crackle intr’ \( \leftarrow \) qotʃata ‘to crackle Refl’;

G) /-/l/ minäyläntä ‘to bend down (oneself)’ \( \leftarrow \) minäytäntä ‘to bend (something), to miss’; weräyläntä ‘to wake up’ \( \leftarrow \) weräytäntä ‘to waken up’;

H) /-/t/ minäy-t-äntä ‘to bend, miss’ \( \leftarrow \) minäy (nöləw) ‘curvy (nose)’; woj-t-anta ‘to smear with fat, to grease’ \( \leftarrow \) woj ‘fat, grease’;

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I) /-lt/  
werä-lt-ältä ‘to make someone work’ ⇐ wertä ‘to work’; wurtama-lt-
anta ‘to stretch (something)’ ⇐ wurtamtanta ‘to stretch (oneself)’;

J) /-ys/ piltäysiltä ‘1. to help (occasionally)’ ⇐ piltäntä ‘1. to help’; pojta
tsita ‘to open’ ⇐ poŋlam ‘my side’ (cf. poŋlamtanta ‘to open up’);

K) /-yt/ qoroytanta ‘to skin’ ⇐ qorta ‘to uncover/peel’; n’öläytäntä ‘to swallow
up’ ⇐ n’öläntä ‘to swallow’;

L) /-il/ täliltä ‘to smoke (occasionally)’ ⇐ tältä ‘to smoke’; nawtilta ‘to drift
(occasionally)’ ⇐ nawọta ‘to swim/drift’;

M) /-mt/ moglamtanta ‘to wrap up, to roll up’ ⇐ moŋlita ‘to wrap, to roll’;
wotfamtanta ‘to brush/whisk up’ ⇐ wotfita ‘to brush/whisk off’;

N) /-nt/ wotfqamtanta ‘to scratch oneself, to scrap oneself’ ⇐ wotfayta ‘to
scratch, to scrap’; täjäntä ‘to get tied/fit/bind’ ⇐ täjätä ‘to tie/fit/bind’;

P) /-yal/ weräysäylältä ‘to settle, to set camp’ ⇐ weräysältä ‘to place, to set’;
 n’olaysayaltanta ‘to lick (Refl/intr)’ ⇐ n’alata ‘to lick’ (cf. n’äläm ‘tongue’);

Q) /-yil/ söŋkiltä ‘to hammer/ram in/whip (Mult.)’ ⇐ söŋẹtä ‘to hit/nock/whip
(sngl)’; wayọyilta ‘to descend/get down’ ⇐ wayọlta ‘to descend/get down (sngl);

R) /-int/ moqintanta ‘to give birth’ ⇐ moq ‘baby, cub’; moŋlintanta ‘to wrap
oneself up’ ⇐ moŋlita ‘to wrap’; poqqintanta ‘to burst up (by itself)’ ⇐ poqata ‘to
burst (by itself)’; póglintanta ‘to open (by itself)’ ⇐ pógl-am ‘my side’;
S) /-qat/ **moq-int-aqat-anta** ‘to start giving birth’ \(\leftrightarrow\) **moq-int-anta** ‘to give birth’; **weräylä-kät-äntä** ‘to start/be waking up’ \(\leftrightarrow\) **weräyl-äntä** ‘to wake up’;

T) /-wəyt, -pəyt/ **werwäytäntä** ‘to work a little/awhile’ \(\leftrightarrow\) **wertä** ‘to work/do’; **wojtawayta**nta ‘to grease up a little’ \(\leftrightarrow\) **wojtanta** ‘to grease’; **pirnälwäytäntä** ‘to pray a little’ \(\leftrightarrow\) **pirnältä** ‘to pray’.

Thus this verbal derivation could be represented schematically as:

\[
\text{[X]} \{\text{n, adj, adv, v}\} - \alpha \\
\downarrow
\text{[[X]} - \hat{i}, -\hat{m}, -s, -\gamma, -l, -\hat{t}, -\hat{m}t, -\hat{t}t, -\gamma s, -\gamma t, -\hat{y}l, -\gamma al, -\hat{t}lt, -(\alpha)q\alpha(t), -w\alphayt] V - \text{event/action associated with } \alpha,
\]

where:

- [X] - is the stem;
- \{\text{n, adj, adv, v}\} - the stem can be nominal, adverbial, or verbal;
- \alpha - the meaning of the stem;
- [[X]} - \hat{i}, -\hat{m}, -s, -\gamma, -l, -\hat{t}, -\hat{m}t, -\hat{t}t, -\gamma s, -\gamma t, -\hat{y}l, -\gamma al, -\hat{t}lt, -(\alpha)q\alpha(t), -w\alphayt] V - the derived verb keeps the stem and acquires verbal functional and morphological features.

### 8.3.1.1.1 Nominal vs. Verbal derivational affixes:

As follows from the above, among the most productive verbal derivational affixes, are /-i/, /-a/, /-t/, /-l/, /-m/. These affixes derive verbs both out of nominal bases as well as from verbal. Thus, the affix /-i/, for example, is used to derive verbs that describe an action characterized by the central feature of its nominal base; that is, the feature central in the nominal base is either a salient feature in the event/action or a desired result of it: **qañtf-ız-ta** ‘to write up, decorate’ (**qañtfo** ‘motley’), **n´øyf-ız-ta** ‘to shorten’ (**n´øyal** ‘short’). Incidentally, affix /-i/ is also a very productive in nominal derivation, where it manifests a salient feature of the base (typically a noun and less frequently a verb): **wat-ı** ‘twists of snow/sand,
ripples on water (\textit{wat} ‘wind’), \textit{köf}k-i ‘sword’ (\textit{köf}k ‘knife’). Similarly, a very productive verbal derivational affix /-t/ with semantic features quite akin to the /-i/ above, derives verbs where the meaning of the nominal base is a salient feature of either the event itself or of its result: \textit{punta-ta} ‘to grow fur, feathers’ $\leftarrow$ \textit{pun} ‘fur, hair, feather’; \textit{poyal-ta} ‘to dam’ $\leftarrow$ \textit{poyal} ‘pond’. Affix /-t/ is also a very productive in nominal derivation, typically deriving a sense of an entity resulting from the base (prototypically a verb): \textit{ayə-t} ‘vomit’ $\leftarrow$ \textit{ayə-ta} ‘to vomit’; \textit{war-t} ‘long stick, pole’ $\leftarrow$ \textit{war-ta} ‘to push away oneself, to pant’. There are a few other derivational affixes that spread their functional domain over both verbal and nominal derivation: verbal /-l/ \textit{minäy-l-äntä} ‘to bend down (oneself)’ $\leftarrow$ \textit{minäy-täntä} ‘to bend (something), to miss’; \textit{weräy-l-äntä} ‘to wake up’ $\leftarrow$ \textit{weräy-täntä} ‘to waken up’ vs. nominal /-l/, deriving a sense of an entity with a salient quality of the base, or resulting from the base: \textit{qomt-əl} ‘width, thickness’ $\leftarrow$ \textit{qomt} ‘wide, thick’, \textit{qit-l} ‘leftover, a small bit’ $\leftarrow$ \textit{qit-ta} ‘to remain, to be left, to stay behind’; verbal /-m/: \textit{ewl-im-tä} ‘to smell up (something)’ $\leftarrow$ \textit{ewl} ‘smell’ vs. nominal /-m/ deriving the sense of entity enabled by the base: \textit{kör-mə} ‘step’ $\leftarrow$ \textit{kör} ‘foot/leg’, \textit{tʃə-y-im} ‘dough’ $\leftarrow$ \textit{tʃə-y-ta} ‘to ferment’.

Thus, many of the Eastern Khanty derivational affixes, particularly those that trigger the change in the lexical category (word-class) affiliation of the resultant forms, appear to have wide functional domain, deriving both verbal and nominal forms from both verbal and nominal bases.
8.3.1.1.2 Verbal derivation

Considering the most frequent and productive Eastern Khanty verbal affixes cited above, it is apparent that the semantic addition of these affixes to the derived forms varies even within the groups of examples representing the distribution of one affix, and more so among the affixes.

8.3.1.1.2.1 Voice and Aspectual Affixation

It was observed in the descriptions of the Finno-Ugric languages, particularly for the Ugric branch including Hungarian, Mansi and Khanty, that the verbal derivation affixes that have aspectual semantics, tend to fall into an opposition that is characterized not along the completion/perfectivity axis, but rather along a certain quantitative continuum. That is, these affixes rather have an ability to express instantaneity (inceptivity/inchoativeness), punctual or transitory action, as well as an ability to express repetitiveness, duration, dispersion, etc. (Majtinskaja 1966). As for those that have voice semantics, there are those that express middle, passive and reciprocal meanings, as well as transitivity and causativity (Majtinskaja 1966).

Affixes with voice semantics

Among the affixes with a semantics associated with either increase or decrease of valency, transitivization or de-transitivization, there are the following:

- affix listed as (H), /-t/ – derives transitive verbal stems from nominal bases with a sense of event/action characterized by affecting an entity (direct object) in a way that will make the salient feature of the nominal base also salient in the affected entity: minäɣ-t-äntä ‘to bend, miss’ ← minäɣ (nölw) ‘curvy (nose)’;
  woj-t-anta ‘to smear with fat, to grease’ ← woj ‘fat, grease’; pil-t-äntä ‘1. intr.'
to help; 2. tr. to add’ ← pil ‘comrade’; juy-t-anta ‘to get covered with trees’ ← juy ‘tree’ (juyintanta ‘to make firewood’):  

10. man’t’ man’t’-l-əm 
tale tell-PRS-1SG ‘(I will) tell (you) a fairy tale’

V [transitivity] [X]n → [X -t] V woj ‘fat, grease’ woj-t-anta ‘to smear with fat, to grease’

- affix listed as (C), /-tə/ has a general denominative verb derivation function; however, the resultant verb forms are predominantly transitive: päm-tä-ntä ‘tr. to steam (something)’ ← päm ‘heat’ (cf. pämältä ‘to sweat’); qora-ta-nta ‘to cover’ ← qora ‘cover, holster’. Rarely, the derived verbs do not differentiate transitivity, or rather are able of being used both transitively and intransitively: söj-tä-ntä ‘1.intr. to char; 2.tr. to chat’ ← söj ‘coal’; jöj-ta-nta ‘1.intr. to let rot; 2.tr. to suppurate’ ← jöj ‘pus’; qanťfa-ta-ta ‘to be many-colored’ ← qanťfa ‘motley, many-colored’ (cf. qanťf-int-anta ‘to write’ ← qanťf-i-ta ‘to write up (make motley)’); pun-ta-ta ‘to grow fur, feathers’ ← pun ‘fur, hair, feather’; äręy-ta-ntä ‘to promise’ ← äręy-tä ‘to perform ritual songs’:

11. jöỹ män-ä loỹ äręy-t-əs 
3SG 1SG-ILL horse promise-TR-PST2.3SG ‘(S)he promised me a horse’

Among the derived transitive forms, there are also occasional cases with a certain causative sense: onal-ta-nta ‘to teach’ ← onalta ‘1. to know/be able; 2. to
get used to/learn’; \( eñä-tä-ntä \) ‘to fatten’ \( \leftrightarrow \) \( eñä \) ‘fat’; \( ejäm-tä-ntä \) ‘to glue/stick together’ \( \leftrightarrow \) \( ejäm \) ‘glue’ (cf. ejmitäntä ‘to glue up (smear with glue)’);

- affix listed as (D), /-i/ deriving transitive verbs mainly from the nominal base stems with a certain causative meaning. That is, the derived verbs express the event of affecting an entity, the syntactic direct object, to achieve the state characterized by the base stem (13, 12): \( n’aɣl-i-ta \) ‘to shorten’ \( \leftrightarrow \) \( n’aɣl \) ‘short’ (cf. noylitanta ‘intr. to shorten’); \( møyl-i-ta \) ‘to wrap, roll’ \( \leftrightarrow \) \( pám møylì \) ‘bundle of things/clothing’ (cf. ‘intr./refl. to wrap (oneself)’); \( ejm-i-tëntä \) ‘to glue’ \( \leftrightarrow \) \( ejmöntëntä \) ‘to glue/stick together’:

12. nipik qäŋʃ-i-jä
   receipt write-Imper.2SG
   ‘Write a receipt!’

   \[ \text{[transitivity/causativity]} \]
   \[ [X] n \, v \longrightarrow [X-i] \, V \]
   \[ n’aɣl \) ‘short’ \( \quad n’aɣl-i-ta \) ‘to shorten’

- affix listed as (E), /-s/ – is similar to the previous denominal affix /-i/-, i.e. deriving mainly transitive verbs from the nominal stems, has a certain causative sense, in that the derived verbs typically express the action/event of directly affecting an entity to achieve or result in the state characterized by the base nominal stem (cf.: (13) vs. (14)): \( n’oløy-s-etànta \) ‘to lick Reflex.’ \( \leftrightarrow \) \( n’oløy \)
‘mucus/slime’; amə-s-ta ‘Intr. to sit/stand (objects)’  amətta ‘Tr. to sit/stand/place’:

13. kiriw-nə äjqu amə-s-wəl
   boat-LOC boy sit-PRS.3SG
   ‘A boy is sitting in a boat’

14. öγ-äli-n äl oγti-jə imt-i
   daughter-DIM-2SG knee top-EP-ILL sit-Imper.2SG
   ‘Put your daughter on your knees’

V
[transitivity/causativity]
[X]   n, v    [X-s] V
n’oləγ ‘mucus/slime’   n’ləγ-s-tənta ‘to lick’

• affix listed above as (F), /-γ/ is used frequently to derive verbs from the nominal base stems, but also attested in deverbal verb-derivation, where it derives intransitive verbs from transitive or reflexive base verbal stems: qosa-γ-ta ‘to glimmer/shine’  qos ‘star’; qatfa-γ-ta ‘to crackle Intr’  qotfata ‘to crackle Refl’; waylə-γ-ta ‘to get out (from the woods to the river bank)’  waylta ‘to descend’; sarn’a-γ-ta ‘to shine/glitter’  sarni ‘shiny’; porqa-γ-ta ‘to smoke (by itself)’  porqi ‘smoke’ (cf. porqamtanta ‘to fumigate’):

15. lukət wayl-əγ-tə jiməŋ qotl
   wood.grouse fly-DR-IMPP saint day
   ‘The day of wood grouse flight’

V
[intransitivity]
[X]   n, adj, v    [X-γ] V
qos ‘star’   qosa-γ-ta ‘to glimmer’
- affix listed as (G), /-l/ – derives intransitive verbs from the transitive verbal stems: minäɣ-l-äntä ‘to bend down (oneself)’ \(\rightleftarrows\) minäɣ-t-äntä ‘to bend (something), to miss’; weräɣ-l-äntä ‘to wake up’ \(\rightleftarrows\) weräɣ-t-äntä ‘to waken up’; pirińə-l-tä ‘to pray’ \(\rightleftarrows\) pirińä-tä ‘to baptize/christen’; tajalta ‘to bear/endure’ \(\rightleftarrows\) tajata ‘to keep/hold’; ŋoqəltä ‘to peck up (once)’ \(\rightleftarrows\) ŋoqta ‘to peck’.

Compare (16) vs.(17):

16. jöɣ pirińä-ɬ-ɑs
   3SG pray-DR-PST2.3SG
   ‘(S)he prayed/crossed/swore’

17. moq-əl pirińä-ta panel-ɑs
   baby-3SG christen-PP curb-PST2.3SG
   ‘(S)he christened his/her child’

\[
\begin{array}{c}
\text{V} \\
\text{[intransitivity]} \\
\text{[X]} \text{v} \quad \rightarrow \quad [X-\text{l}] \text{ V}
\end{array}
\]

pirińä-tä ‘to baptize/christen’
pirińə-ɬ-tä ‘to pray’

- affix listed as (I) above, /-lt/-wt/- – with the causative meaning, deriving transitive verbs out of intransitive and reflexive verbal stems: joyma-ɬt-anta ‘to make busy’ \(\rightleftarrows\) joyməta ‘to be busy’; jola-ɬt-anta ‘to thaw up Trans.’ \(\rightleftarrows\) jolata ‘to thaw’; waja-ɬt-anta ‘to put to sleep’ \(\rightleftarrows\) wajata ‘to sleep’; tōgtä-wt-äntä ‘to fill up Trans’ \(\rightleftarrows\) tōgtəta ‘to befill Refl/Intr’; n’aγra-ɬt-anta ‘to pull something’ \(\rightleftarrows\) n’aγrata ‘to pull oneself’; poqa-ɬt-anta ‘to burst (something)’ \(\rightleftarrows\) poqata ‘to burst (by itself)’; polqa-ɬt-anta ‘to pour (something)’ \(\rightleftarrows\) poloyta ‘to fall (fine snow)’; pämä-ɬ-tä ‘to sweat’ \(\rightleftarrows\) päm ‘heat’ (cf. pāmtäntä ‘to steam
(something)’); ortama-lt-anta ‘tr. to get (someone) rich’  ortamta ‘to get rich’;
majlø-lt-anta ‘tr. to give/present’  majlta ‘intr. to be a guest:

18. jöɣ män-ä samint-ɔɣ majlø-lt-ɔs
   3SG 1SG-ILL head.scarf-TRNSL present-DR-PST2.3SG
   ‘He gave me a head scarf’

19. mä jiɣ way-ɔlt-ɔl-ɔm
   1SG bear lower-DR-PRS-1SG
   ‘I killed a bear’

20. jöɣ meltʃø qan’t’a-lt-ɔl-tø
   3SG always scare-DR-PRS-3SG/SG
   ‘(S)he always scares him/her’

V
[transitivity/causativity]
[X]v → [X –lt] V
wajata ‘to sleep’ waja-lt-anta ‘to put to sleep’

• affix listed as (N), /-nt-/ deriving typically intransitive verbs with a frequent
  associated reflexive semantics out of transitive verbal stems: nayi-nt-anta
  ‘Refl/intr to swear/curse’  nayita ‘tr. to curse/swear at someone’;
tögäli-nt-ãntä ‘Refl/intr. to pinch/squeeze’  töjältä ‘tr. to pinch/squeeze’;
qola-nt-anta ‘to obey/listen to’  qolta ‘to hear’; 
ŋoqantanta ‘intr/Refl. to peck’  ŋoqta ‘to peck’;
 ámboŋɔntã ‘tr./Refl. to wind/twine/twist’  ámbɔt ‘to plait’;
etɔntɔntã ‘intr/Refl. to appear’  ettã ‘to get out’:

21. mä-n wɔŋɔ sãri etɔ-ntɔ-yäl
   1SG-ACC pock-marks appear-DR-PST1.3SG
   ‘I got covered with pock-marks’

It has been observed for Hungarian (Majtinskaja 1959: 97) that for many verbal
affixes that affect transitivity, it is common that they either contain /-t-/ or consist
solely of the component /-t-/. This element is also fairly common in the abovementioned Khanty aspectual/voice affixes: /-(l, -w, -n)-t-/ (Ossipova and Shalamova 2000). It is also fairly evident that the affix /-t-/ is historically common Ugric affix affecting transitivity and voice of the verbal stem:

\[
V \\
[\text{intransitivity/reflexivity}] \\
[X] V \rightarrow [X - nt] V \\
erätä ‘to get out’ \rightarrow \text{et-nt-antä ‘intr/Refl. to appear’}
\]

- affix listed as (R), /-int/ derives verbs from verbal bases, typically with the derived sense of an event/action directed at the agent or involves affecting the agent, i.e. with middle or reflexive semantics: \textit{moq-int-anta} ‘to give birth’ \(\leftarrow\) \textit{moq} ‘baby, cub’; \textit{moŋl-int-anta} ‘to wrap oneself up’ \(\leftarrow\) \textit{moŋli-ta} ‘to wrap’; \textit{poŋl-int-anta} ‘to open (by itself)’ \(\leftarrow\) \textit{poŋl-am} ‘my side’ (cf. \textit{poŋla-mt-anta} ‘to open up’); \textit{poroy-int-anta} ‘to blacken/fill with smoke’ \(\leftarrow\) \textit{porqa-mt-anta} ‘to fumigate’; \textit{poq-q-int-anta} ‘to burst up (by itself)’ \(\leftarrow\) \textit{poqa-ta} ‘to burst (by itself)’; \textit{juy-int-anta} ‘to make firewood’ \(\leftarrow\) \textit{juy-t-anta} ‘to get covered with trees’; \textit{qaŋtʃ-int-anta} ‘to write’ \(\leftarrow\) \textit{qaŋtʃi-ta} ‘to write up (make motley)’; \textit{söŋk-ont-øtä ‘intr./tr./Refl. to hammer/ram/nock’ \(\leftarrow\) \textit{söŋø-ta} ‘to hit/nock/whip (single)’; \textit{al-int-ta} ‘to lie down (punctual)’ \(\leftarrow\) \textit{ala-ta} ‘to lie/sleep’:

22. jəɣ nomœs-int-øɡ-{lɔ}-yal-t, öø-øli qan’t’a-γ-inta-wəl
3PL think-RFL-TR-TR-PST3-3PL daughter-DIM scare-TR-RFL-PRS.3SG
‘They thought the girl will get scared’

23. itøn li-s-ʊɣ pəni al-int-œs-ʊɣ
evening eat-PST2-3PL and lie-RFL-PST2-3PL
‘In the evening, they ate and went to bed’
24. jay wajay-ot al-wal-ot
   people animal-PL sleep-PRS-3Pl
   ‘People and animals sleep’

   V
   [reflexivity/middle]
   [X]n, v → [X–int] V
   poŋlam ‘my side’ poŋl-inta ‘to open (by itself)’

   • affix listed as (J), /-ɣs-/ is similar in its function to the affix /-nt-/ but much less
     frequent, derives intransitive and reflexive verbs out of transitive verbal stems:
     pon’a-ɣs-anta ‘to (get) entangle(d)’ ← pon’ta ‘to tie up tr.’; ala-ɣs-il-ta ‘to lie
     about Refl/intr.’ ← alata ‘to lie’; jola-ɣs-ayal-ta ‘to be getting fixed Refl/intr.’
     ← jolta ‘to fix/repair tr.’; There is also a certain aspectual sense associated with
     the derivation with the help of this affix: piltäɣsiltä ‘to help (occasionally)’ ←
     piltäntä ‘to help’; poŋtaysita ‘to open’ ← poŋlam ‘my side’ (cf. poŋlamtanta ‘to
     open up’); poŋlayənta ‘to dam’ ← poŋlata ‘to dam up’; löyətjäysətä ‘to
     look/watch (occasionally)’ ← löyətjäntä ‘to look/watch’; aliysila ‘can/be able
     (mult)’ ← alita ‘to be able/master’:

25. pirt-ay löyətjä-ɣs-əl-əm
   back-PRL look-RFL-Mult-PST0.1SG
   ‘I kept looking back’

   V
   [intransitivity/reflexivity]
   [X]v, n → [X–ɣs] V
   jolta ‘tr. to fix/repair’ jola-ɣs-ayal-ta ‘Refl/intr. to be getting fixed’
Aspectual Affixes:

- affix listed as (L), /-il/ – deriving both transitive and intransitive verbs from verbal base stems, with the resultant sense of occasionality /habituality of events/actions: täliltä ‘to smoke (occasionally)’ ← tältä ‘to smoke’; metiltä ‘to get tired (occasionally)’ ← mettä ‘to get tired’; n’ayraylîta ‘to admire/marvel (habitually/occasionally)’ ← n’ayrayta ‘to admire/be amused’; man’t’ilta ‘to tell tales (habitually)’ ← man’t’a ‘to tell tales’; ärk-il-tä ‘to sing habitually/from time to time’ ← ärây-tä ‘to sing’; wàlq-il-ta ‘to live about’ ← wàl-ta ‘to live’; jöktä ‘to dance repeatedly’ ← jöktä ‘to dance’; jolq-il-ta ‘to say habitually’ ← jolq-ta ‘to say’. This affix with multiplicative, repetitive semantics has a common functional distribution in Finno-Ugric languages (Serebrennikov 1960: 31). It is used equally well in combination with the verb stems with inherent multiplicativeness/repetitiveness, resulting in a certain redundancy with no apparent restrictions (Ossipova and Shalamova, 2000): künft-il-tä ‘to scratch, scribble’ ← künftäntä ‘to scratch’; jäsånl-il-tä ‘to chatter’ ← jäsånl-tä ‘to chat about’; jis-il-tä ‘to howl’ ← jis-tä ‘to howl, cry’.

26. mä tʃakə met-s-əm  
1SG very tire-PST2-1SG  
‘I am very tired’

27. mä met-il-s-əm  
1SG tire-HAB-PST2-1SG  
‘I am (usually) getting tired’

28. mä qans’a täl-l-əm  
1SG pipe smoke-PRS-1SG  
‘I am smoking a pipe (now)’

29. mä qans’a täl-il-l-əm  
1SG pipe smoke-HAB-PRS-1SG  
‘I (occasionally) smoke a pipe’

30. mä n’ayray-l-əm  
1SG amuse-PRS-1SG  
‘I am amused’

31. mä öyəja n’ayrayl-il-l-əm  
1SG girls admire-HAB-PRS-1SG  
‘I am admiring girls’
V
[habituality/occasionality]
[X] v → [X–il] V
täl-tä ‘to smoke’ täl-ił-tä ‘to smoke (occasionally)’

This affix collocates frequently with the above mentioned voice affixes /-nt-/
and /-ys-/: wägli-nt-il-tä ‘to stumble now and then’ ← wägli-tä ‘to stumble’; kötfä-
ys-il-tä ‘to track down’ ← kötfä-tä ‘to track’; pilř-ys-il-tä ‘to help now and then’
← pilř-tä ‘to help’; as well as with the aspectual affixes /-waʃ/-paʃ-/: älm-il-
wäyt-äntä ‘to weigh up a little’ ← älm-il-tä ‘to weigh’ (äläm-tä ‘to weigh up’);
n’orq-il-waʃt-anta ‘to swim about for a while’ ← n’orq-il-ta ‘to be swimming’
(n’oray-ta ‘to swim’).

• affix listed as (M), /-mt/ – deriving mainly transitive verbs from mainly verbal
bases, however, intransitive derivations are attested, as well as nominal bases.
The resultant verbs have a completed/bounded sense (cf. (32) vs. (33)): mögla-
mt-anta ‘to wrap up, to roll up’ ← mögli-ta ‘to wrap, to roll’; wotfa-mt-anta ‘to
brush/whisk up’ ← wotf-ta ‘to brush/whisk off’; poqla-mt-anta ‘to open up’ ←
poql-am ‘my side’ (cf. poqlintanta ‘to open (by itself)’); porqa-mt-anta ‘to
fumigate’ ← porqi ‘smoke’ (cf. porqaʃta ‘to smoke (by itself)’); ali-mt-ta
‘can/be able/manage’ ← ali-ta ‘to be able/master’:

32. tinta-ta ŋnta ali-ʃ-em
   pay-INF Neg canPRS-1SG/SG ‘I won’t be able to pay for this’
33. nuq älm-tä ŋnta ali-mt-ʃ-im
   up lift-INF Neg managePRS-1SG ‘I cannot lift this up’
[completedness/boundedness/transitivity]

\[X\] V  \[X-mt\] V

moŋli-ta ‘to wrap, to roll’  moŋla-mt-anta ‘to wrap up, to roll up’

- affix listed as (T), /-wayt-/-payt-/ – has a wide semantic range, which is true cross-linguistically within the Ugric language branch (Descy 1990: 65), with the dominant meaning of low intensity, attenuation, weakness of the salient feature, as well as instantaneity and rapid completion of the action: *wer-wäyt-äntä* ‘to work a little/awhile’ \(\leftarrow\) *wer-tä* ‘to work/do’; *wojta-wayt-anta* ‘to grease up a little’ \(\leftarrow\) *wojt-anta* ‘to grease’; *pîrnäl-wäyt-äntä* ‘to pray a little’ \(\leftarrow\) *pîrnäl-tä* ‘to pray’; *pîltä-wäyt-äntä* ‘1. to help (fast); 2. to add (fast)’ \(\leftarrow\) *pîlt-äntä* ‘1. to help; 2. to add’; *poylaysa-wayt-anta* ‘to dam for a while/a little’ \(\leftarrow\) *poylays-anta* ‘to dam’ (but not *poyal-wayt-anta* \(\leftarrow\) *poyal-ta* ‘to dam up’), i.e. semelfactive is not combinable with the perfective meaning; same in: *poy-wayt-anta* ‘to blow for a while/a little’ \(\leftarrow\) *poy-ta* ‘to blow’ (but not *poyol-wayt-anta* \(\leftarrow\) *poyol-ta* ‘to blow away’); *mojay-wayt-anta* ‘to whinge a little’ \(\leftarrow\) *mojay-ta* ‘to whinge’; *öy-wäyt-äntä* ‘to gurgle a little’ \(\leftarrow\) *öy-tä* ‘intr. to gurgle’; *köläm-päyt-äntä* ‘to row for a while’ \(\leftarrow\) *köläm-tä* ‘to row’. This affix derives from both the transitive verbal stems: *piqım-payt-anta* ‘to let rot a while’ \(\leftarrow\) *piqım-ta* ‘to rot Intr’; *wot'-wayt-anta* ‘to swipe off a little’ \(\leftarrow\) *wot'-ta* ‘to swipe off’; *tfelki-wäyt-äntä* ‘to stroke for a while’ \(\leftarrow\) *tfelki-tä* ‘to stroke’; and from the intransitive stems: *röjkä-wäyt-äntä* ‘to drag along for a while’ \(\leftarrow\) *röjkä-tä* ‘to
drag along’; *n’ayti-wayt-anta* ‘to sneeze a little’ $\leftarrow$ *n’aytita* ‘to sneeze’; *wal’ay-wayt-anta* ‘to boil for a bit’ $\leftarrow$ *wal’ayta* ‘to boil’; *qäs-wäyt-äntä* ‘to trod for a while’ $\leftarrow$ *qästä* ‘to trod’. In denominal verbal stems, the semantics of weakness and low intensity is fairly evident: *qulíta-wayt-anta* ‘to dirty a little’ $\leftarrow$ *qulí-t-anta* ‘to dirty’ (quli ‘dirt’):

34. jøŋk qol-wäyt-øs
   water run.out-MMNT-PST2.3SG
   ‘Water suddenly ran out’

   In the prevailing majority of the examples, this affix derives the instantaneity and rapid completion meanings from the transitive verbal stems (Ossipova and Shalamova 2000): *wel-wäyt-äntä* ‘to bit up fast’ $\leftarrow$ *weltä* ‘to bit/kill’; *jär-wäyt-äntä* ‘to tie up fast’ $\leftarrow$ *järtä* ‘to tie up’; *in-wäyt-äntä* ‘to eat up fast’ $\leftarrow$ *intä* ‘to eat’.

\[
\begin{array}{c}
\text{V} \\
[X\text{-wayt}] \\
\text{öy-tä ‘intr. to gurgle’} & \text{öy-wäyt-äntä ‘to gurgle a little’}
\end{array}
\]

In the semantics of low intensity and weakness, this affix may also collocate with other aspectual affixes, such as the above voice affixes /-lt-/ and /-nt-/: *wata-lt-wayt-anta* ‘to dry cure a little’ $\leftarrow$ *wata-lt-anta* ‘to dry cure’ (*watta* ‘to blow (wind) Intr’); *waqa-lt-wayt-anta* ‘to clap/slap a little’ $\leftarrow$ *waqa-lt-anta* ‘to clap/slap’ (*waqata* ‘to clap/slap Intr’); *äytä-nt-wäyt-äntä* ‘to cut oneself a little’ $\leftarrow$ *äytä-nt-äntä* ‘to cut oneself’; *wotqa-nt-wayt-anta* ‘to scrape oneself a little’ $\leftarrow$ *wotqa-nt-anta* ‘to scrape oneself’ (*wotayta* ‘to scrape’).
• affix listed as (B), /-m/ – derives the verbs out of nominal stems, often adding either some completion or punctual meaning (compare (35) vs.(36) and (37) vs.(38)): qotl-əm-ta ‘to dawn’ ← qotl ‘day’; öyä-m-tä ‘Intr. to gurgle (once)’ ← öytä ‘Intr. to gurgle’; qos-am-ta ‘to urinate a little’ ← qosta ‘to urinate’; nöyĩm-tä ‘to rock (cradle) once’ ← nöyötä ‘to rock (cradle)’;  ypos-m-ta ‘to peck a little’ ← yposa ‘to peck’:

35. ewl-äm l’öy-wäl smell-1SG spread-PRS.3SG ‘My smell spreads’
36. mä ewl-m-l-im 1SG smell-PNCT-PRS-1SG ‘I (will) smell (something) up’

37. nörytila-min mä qosq-əm-s-əm run-CNV 1SG warm-DR-PST2-1SG ‘Running I warmed up’
38. nörytila-min qur-əm qosq-əl-s-im run-CNV feet-1SG warm-DR-PST2-1SG ‘Running I warmed my feet’

V [completion/punctuality]
[X] v, n ——> [X –m] V
qotl ‘day’ qotl-əm-ta ‘to dawn’

• affix listed as (P), /-yal-/ – derives intransitive verbs slightly more frequently than transitive (60% vs. 40%), from verbal base stems, expressing repeated, habitual events with a certain sense of duration, deriving from both, the intransitive: kärito-yəl-tä ‘to toss and turn now and then’ ← käri-tä ‘to turn’; wöyi-tä-yal-tä ‘to be making an effort repeatedly’ ← wöyi-tä ‘to make an effort’; qosqam-ta-yl-tä ‘to be warming up now and then’ ← qosqam-ta ‘to warm up’; käsoł-yəl-tä ‘to resettle repeatedly’ ← käsoł-tä ‘to stumble’; and transitive verb stems: tfiym-tə-yəl-tä ‘to be stifling repeatedly’ ← tfiym-tə-tä ‘tr. to drown’; nöyr-ə(ml)-ə-yəl-tä ‘to be pressing, squeezing’ ← nöyr-tä ‘to
press, squeeze’; *weräysäáltä* ‘to settle, to set the camp’ \( \leftarrow \) *weräysäáltä* ‘to place, to set’; *n’olaysayaltanta* ‘to lick Refl/intr.’ \( \leftarrow \) *n’alata* ‘to lick’ (cf. *n’äläm* ‘tongue’); *n’olöysöyolta* ‘to smack lips, to lick Refl.’ \( \leftarrow \) *n’olöysönta* ‘to lick Refl.’; *man’t’ōyolta* ‘to tell tales (habitually)’ \( \leftarrow \) *man’t’a* ‘to tell tales’; *qotlökətəyolta* ‘to be starting to dawn’ \( \leftarrow \) *qotlökənta* ‘to start dawning’ (*qotlɒnta* ‘to dawn’):

<table>
<thead>
<tr>
<th>Verb</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>qotlə-kətə- yal-əs</td>
<td>dawn-INCH-DUR-PST2.3SG</td>
</tr>
<tr>
<td>wöyt-äyal-tä</td>
<td>‘to be making an effort repeatedly’</td>
</tr>
</tbody>
</table>

This affix may collocate with the voice and aspectual affixes. Frequently, with the voice markers /-ys/- and /-nt/-: *jantə-ys-ə-yəl-ta* ‘to be fixing/mending repeatedly’ \( \leftarrow \) *jantə-ys-ə-nta* ‘to fix, mend’ (jant-ta ‘to sew’); *jolə-ys-ə-yəl-ta* ‘to be patching repeatedly’ \( \leftarrow \) *jolu-tə-ta* ‘to patch’. Among the aspectual affixes, frequent collocations are with /-wayt/-/payt/-: *n’atfī-ta-yal-wayt-a-nta* ‘to be toiling’ \( \leftarrow \) *n’atfī-ta- yal-ta* ‘to toil’ (*n’atfī-ta-nta* ‘to make toil’).

- **affix listed as (Q), /-yil/ –** derives both transitive and intransitive verbs from the verbal bases with the resulting sense of homogenic multiplicative, repeated event: *sön-kil-tä* ‘to hammer/ram in/whip (Mlt)’ \( \leftarrow \) *sögə-tä* ‘to hit/nock (SG)’; *waylə-yil-ta* ‘to descend/get down’ \( \leftarrow \) *waylə-ta* ‘to descend/get down (SG)’.
41. īl waɣl-aɣil-tə lök
   down descend-DUR-IMPP path
   ‘A path for getting down to the river’

42. mä joɣan-a waɣl-l-əm
   1SG river-ILL descend-PRS-1SG
   ‘(I will) get down to the river’

V
[multiplicative/repetitive]

[X]v
sōŋ-tä ‘to hit/nock/whip (single)’

sōŋ-kil-tä ‘to hammer/ram in/whip (Mult.)’

• affix listed as (S), /-(ə)a(kə)a/- has the general sense of Inchoative, that is the beginning of an event/action (compare (44) vs. (45)). It very often collocates with the affix /-t-/, sometimes referred as ‘determinative’ (Ossipova and Shalamova 2000). It derives both intransitive: moqintaqatanta ‘to start giving birth’ ← moqintä ‘to give birth’; weräyläkätäntä ‘to start/be waking up’ ← weräyläntä ‘to wake up’; qotləqətəntä ‘to start/dawn’ ← qotləmtä ‘to dawn’; jolq-akat-anta ‘to start talking’ ← jolaya- ‘to talk’; käs-əkə-tä ‘to start searching’ ← käs-tä ‘to notice, search’; and transitive verb stems: wan’tʃ-aqat-anta ‘to start gathering’ ← wan’t-ə ‘to gather, take’; qaŋ-aqa-t-anta ‘to start ripping’ ← qaŋ-ta ‘to rip’; goqaqaqatanta ‘to start pecking’ ← goqta ‘to peck’:

43. qotl-əqat-əs
   dawn-INCH-PST2.3SG
   ‘It began to dawn’

44. juɣ män-ä waɣ kit-akat-əs
   3SG 1SG-ILL money send-INCH-PST2.3SG
   ‘(S)he started sending me money’

45. nipik kitə-əs
   book send-PST2.3SG
   ‘(S)he sent me a book’

V
[inchoative]

[X]v
moqintaqatanta ‘to start giving birth’

moqintänta ‘to give birth’
This affix may collocate with the transitivizer affix /-lt-/ mentioned above: 
\textit{lawtfa-lt-aqat-anta} ‘to start lapping’ $\leftarrow$ \textit{lawtfa-lt-anta} ‘to lap’; and with the 
detransitivizer affix /-ys-/: \textit{la-ys-aqat-anta} ‘to start hobbling’ $\leftarrow$ \textit{la-ys-ta} ‘to 
hobble’.

- affix listed (K), /-γt/ deriving mainly transitive verbs from verbal base stems 
with the resultant sense of completeness/boundedness of the event/action 
(compare (1) vs. (47)): \textit{qoroytanta} ‘to skin’ $\leftarrow$ \textit{qorta} ‘to uncover/peel’;
\textit{n’öläyntä} ‘to swallow up’ $\leftarrow$ \textit{n’ölä} ‘to swallow’; \textit{qojmɔytɔnta} ‘to start up 
subsiding’ $\leftarrow$ \textit{qojɔnta} ‘to subside’:

\begin{align*}
46. & \begin{array}{ll}
\text{t’ä} & \text{wänŋa qojmɔ-ytɔ-ŋal} \\
\text{DET} & \text{soon subside-CMP-PRS.3SG}
\end{array} & 47. & \begin{array}{ll}
\text{jəŋŋ} & \text{qojɔm-pal} \\
\text{water subside-PST0.3SG}
\end{array} \\
\text{‘So, the water will drop low soon’} & \text{‘The water in the river drops’}
\end{align*}

\begin{align*}
\text{V} & \text{[completeness/boundedness]} \\
[X] \text{v} & \text{[X -γt] V} \\
n’ölä ‘to swallow’ & n’öläyntä ‘to swallow up’
\end{align*}

In a number of Uralic languages, including the areally adjacent Selkup, in many 
of verbal stems an inherent aspect of the expressed event is identified, namely 
\textit{presence or absence of the internal boundary, or a tendency towards completion} 
(Helimsky 1980; Kuznetsova 1995). This internal boundedness/completion of the 
verbal stem plays a role in the process of derivation. In this light, many of the 
above aspectual affixes have higher probability of collocating with either 
bounded/completed and others with unbounded/incompleted stems in deriving 
verbs of a certain resultant aspectual semantics. It is also possible, that many of the
non-derived verbal bases may not have this inherent aspectual differentiation and may thus function as both, transitive and intransitive, perfective and imperfective.

Thus, in Eastern Khanty the unbounded/incompleted verbal stems are derived by the following affixes: multiplicative, durative /-il/, /-ɣə/: 

\[ V \quad \text{[unbounded/incompleted]} \]
\[ [X] \rightarrow [X /-il/, /-ɣə/] \]

The bounded/completed verbal stems are derived by the following affixes: inchoative, momentative, unexpected, attenuative: /-(ə)q(ə)t-/, /-mt-/, /-wəɣt-/: 

\[ V \quad \text{[bounded/completed]} \]
\[ [X] \rightarrow [X /-(ə)q(ə)t-/, /-mt-/, /-wəɣt/] \]

The characteristic feature of these verbal stems is the ability to be used as imperfective participles, while the bounded/completed stems are more probable as perfective participles. Compare (48) vs. (49):

48. ἀرأγ-τα τo sing’ – ἀرأγ-τα ‘the singing one’

49. ἀรก-ἀμ-τα ‘to become singing’ – ἀรก-ἀμ-ἀμ "the one who became singing"

8.3.1.1.2.2 Verbal affixes linear ordering

The reviewed affixes follow hierarchical patterns in the linear ordering, i.e. that in Eastern Khanty, voice affixes precede the aspectual ones (Ossipova and Shalamova 2000). In accord with the general typological patterns of agglutination language, Eastern Khanty systematically strings affixes on a stem, with some hierarchy underlying the ordering. For instance, considering the derivational progression (i) below, it is seen that from the base form (i)1 there are two attested derivations (i)2a. and (i)2b. with affixes /-t/ (that affects the valency of the verb) and /-m/ (which adds some incompleteness/imperfectivity semantics to the verb).
These affixes appear to be in complementary distribution. Also, judging from further derivations (i)3a., (i)3b. and (i)3c., the affix /-m/ is always the closest to the verb stem preceding /-il/ (which adds some completedness/resultativeness) in (i)3a., and /-kət/ (which adds some inchoative meaning) in (i)3b., and /-lt/ (which affects the valency of the verb) in (i)3c.

(i) 1. köyʁtä ‘Intr. to boil’  → 2a. köyʁrtä ‘Tr. to boil’
    → 2b. köyʁmtä ‘to be on boil’  → 3a. köyrmiltä ‘Intr. to boil up’
    → 3b. köyrmkäntä ‘Intr. to start boiling’
    → 3c. köyrmältäntä ‘Tr. to boil/heat up’

Similarly, in the derivational progression (ii), it is seen that from the base form (ii)1. there are three attested derivations (ii)2a., (ii)2b. and (ii)2c. with the affix /-il/ (that adds multiplicative/habitual meaning) in (ii)2a., the affix /-kət/ (which adds inchoative meaning) in (ii)2b., and the affix /-ɣt/ (which adds completive/singular meaning) in (ii)2c. These three affixes also appear to be in complementary distribution, and also, judging from further derivations (ii)3a., precede other affixes, like /-ɣəlt/ (adding multiplicative as well as some imperfectivity meaning) in (ii)3a.

(ii) 1. kitʃä ‘to burp’  → 2a. kitʃiltä ‘to burp (mult)’
    → 2b. kitʃkəntä ‘to start burping’  → 3a. kitʃkəntəɣəltä ‘to be starting burping(mult)’
    → 2c. kitʃkətəntä ‘to burp (single)’

The ordering of the affixes in the derived verbs was traditionally considered in the Finno-Ugric literature to be conditioned by historical considerations, i.e. the earlier affixes are located closer to the stem than the later ones. Thus linear ordering of the verbal affixes reflects their history (Décsy 1990:77). Leaving the historical hypothesis aside, it can be argued here that to a great extent the order of
the affixes, or rather their distance from the stem is indicative of their semantic import in the derived verbal form, as posited in Bybee (1985). More precisely, we refer to Bybee’s position that the degree of morpho-phonological fusion of an affix to a stem correlates with the degree of semantic relevance of the affix to the stem, that is “the semantic relevance of an affix to a stem is the extent to which the meaning of the affix directly affects the meaning of the stem” (1985: 6).

It should be said that as follows from the few derivation examples above (i) and (ii), most of the affixes may appear in immediate postposition to the base stem. However, in cases of multiple affixation, it is evident that some of them consistently pattern closest to the stem, whereas others attach to already derived stems. Among the affixes that appear closest to the stem are: /-m/, /-tɔ/, /-l/, /-s/, /-ɣ/, /-l/, /-t/. Firstly, these affixes predominantly derive verbs from nominal bases, but in prevailing majority of the cases they also appear to bear at least some aspectual (Aktionsart) or voice semantics.

One of the core ideas underlying this discussion is that aspectuality of verbal forms is a complex interaction of the inherent aspectuality of the lexical verb stems with the often multiple derivational affixes, and of the utterance, in an overall episode of the discourse.

It may also be noted that among the aspectual affixes, those that have the semantics Aktionsart, Iterativity, Repetition and Durativity precede those that have Inchoative and Low Intensity semantics.

n’oray-ta ‘swim’ → n’orq-il-ta ‘swim around’ → n’orq-il-wayt-anta ‘swim around for a while’.

With denominal verbs, the denominal derivational affix is closest to the stem, preceding those of voice and aspectuality: lintfi ‘saliva’ → lintfi-t-anta ‘to slobber over’ → lintfi-ta-wayt-anta ‘to slobber over a little’.
The maximal attested collocation of the aspectual affixes in one derived verb does not exceed two, whereas the overall collocation of affixes does not exceed three – one voice and two aspectual: *löŋkä-It-äyäl-äkät-äntä* ‘to (suddenly) start babbling for a while’.

Thus, the schematic representation of the linear order of derivational affixes in a maximally extended (derivationally) Eastern Khanty verb may look as follows (Fig.1):

![Fig.1. Eastern Khanty Verbal Affix Linear Ordering.](image)

### 8.3.1.2 Inflection

In the examples of the typical Eastern Khanty simple clauses (50), (51) and (52) below, it is seen that the intransitive predicates ‘go’ and ‘curse’, and the transitive predicate ‘pull’ consist of a stem and a set of affixes, for example, in the case of (52), the tense affix /-s-/; the voice suffix /-uj-/; and the person-number affixes /-əm-/.

50. kem pəlk-a jɔyə-s-əm
DET side-ILL go-PST2-1SG
‘I went there to the other side’

51. köt-äm pirt-a nirimtä-s-im i nayimta-s-əm
hand-1SG back-ILL pull-PST2-1SG/SG and curse-PST2-1SG
‘I pulled my hand back and cursed’

52. jöy-ən (mä) wel-s-uj-əm
3SG-LOC 1SG hit-PST2-PS-1SG
‘I was hit by him’

In the discussion of the Eastern Khanty verbal inflection immediately below, we will adhere to this order of description of the verbal inflectional categories:
Tense (Aspect-Mood) – Voice – Person-Number, as it is exactly the sequential order of verbal suffixes consistently attested in the data.

8.3.1.2.1 Tense

In the example sentences reviewed so far, it is seen that Eastern Khanty has a fairly extended grammaticalized system of Tense, consisting of 5 distinct Tense forms: the Present-Future Tense (53) with the marker /-l-/; the Past (0) Tense respectively with a zero marker (54); the Past (1) Tense with the marker /-ɣa'l-/ (55); the Past (2) Tense with the marker /-s-/ (56); and the Past (3) Tense with the marker /-ɣas-/ (57):

53. \textit{jejeta-l-im} süy metali
    look-PRS-1SG birch something
    ‘I look and see some birch’

54. \textit{muɣul} kan pat-e\textit{ɣi}n sem-əl kəl-a\textit{ɣi}n
    some IndPn stand.still-PST0.3SG eyes-3SG be.seen-PST0.3SG
    ‘It sat there for some reason (doesn’t move), I could see his eyes’

55. tʃ’u sart-na mä-n qatʃ kəmlayta-ɣal
    DET pike-LOC 1SG-ACC a little turn.over-PST1.3SG
    ‘That pike almost got my out (of the boat)’

56. nomoy-s-əɭəm muɣul
    think-PST2-1SG/PL something
    ‘I was wondering whatever happened’

57. āl’ôŋ nuɣkül’-m-áɭ-ŋə, jôŋ-áɭ-ʒə jāsiŋlə-ŋə, mään
    morning wake.up-PP-3SG-LOC mouse-DIM-ILL tell-PST0-3SG
    uləm torim-nə nən-ən loɣosla-yən-ən
    sleep dream-LOC 2SG-LOC 1SG-ACC hit-PST3-2SG
    ‘In the morning, having woken up, the bird told the mouse the dream: “You hit me in my dream”’

We will review these forms in detail in the same order.
8.3.1.2.1.1 Present-Future

As follows from (53) and other examples reviewed so far, the Eastern Khanty Present-Future code the relation between two points along the linear time axis, that is between the reference point of the time of speech and the event time, which either coincides with the absolute time, the time of speech (58), (59), (60 a), or follows it (61)-(62).

58. mä sali-l-əm tʃiməl
   1SG lie-PRS-1SG a little
   ‘I am lying a little’

59. quj-ali aj-ni-na nūl qwel-wəl
    man-DIM small-woman-COM RCPR hug-PRS.3SG
    ‘A boy and a girl are hugging’

60. a) məyuli wər-wən?
    what do-PRS.2SG
    ‘What are you doing’

   b) pər’-t nara-l-əm, əlləwtəki tɔytə pən-l-əm, ʃtopi əntə pat-wəl joŋq
    plank-Pl lay-PRS-1SG on top snow put-PRS-1SG so.that Neg freeze-PRS.3SG ice
    ‘(I)am laying planks, and will put some snow over, so that the ice does not freeze’

It appears that the differentiation between the Present and Future is not essential here and thus is not grammaticalized. In this respect, perhaps one could speak of the main feature of the event coded by this tense form as being Imperfective, Not-Completed, Unbounded. Thus, it is mainly salient that the event is Non-Past, i.e. the event-time not preceding the reference-time of the speech-event (Fig.2).

![Fig.2. Present-Future Tense Schema.](image-url)
There is, though, an analytical construction used to specify that the event is in future, that is that the event-time follows the reference-time of the speech (61).

61. mä ti ji-tä pit-l-əm
    1SG this eat-INF become-PRS-1SG
    ‘I will eat this later’

62. potom jəs-ta pit-l-im
    later tell-INF become-PRS-SG/1SG
    ‘(I) will tell (you) (this story) later’

This analytical construction is an infinitival construction of a quite common sort, typologically, namely, having the content lexical verb is in the form of infinitive, whereas the grammatical information is coded on the auxiliary verb, in this case on the verb *pit- ‘begin/become’. This construction was noted in earlier descriptions of the Eastern Khanty, and the lexical semantics of the auxiliary was identified on the basis examples in Past Tense forms (Gulya 1966: 109), that is that ‘begin/become’ is the only lexical meaning of this verb in the Past context:

63. lọŋ-ta pit-käl-mən
    read-INF begin-INCH-PST0-1Pl
    ‘[Afterwards] we began to read’ (Gulya 1966)

Apart from these, fairly straightforward functions, the Present-Future is also used to code the so-called narrative present, or historical present, that is where the event time coincides with the time of speech, although the event itself is preceding it considerably (present in the past):

64. a) mä ilkä-s-im katʃəm-ta löγ parəm-ta
    1SG go-PST2-1SG hunt-INF track path.make-INF
    ‘I went breaking a ski track’ ….

    b) jal-l-əw küm əntə laɣil-wəl
    stand-PRS-1PL outside NEG look-PRS.3SG
    …‘We wait, it doesn't look out’

In (64a-b), the events clearly belong to the past, years ago (64a), i.e. the event-
time precedes the speech-time equated to reference-time. However, at a certain point, when the narration reaches high intensity and dynamicity, the reference-time shifts to the event-time, making the event-time seemingly coincide with the speech-time (64b). This is used quite frequently in narration to achieve a certain emersion effect, putting both the speaker and the hearer on the event scene (65a-b).

**Fig.3. Eastern Khanty ‘historical past’ use of Present-Future Tense.**

<table>
<thead>
<tr>
<th>Event-Time</th>
<th>past</th>
<th>present</th>
<th>future</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>speech-time</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>reference-time</td>
</tr>
</tbody>
</table>

65. a) jögr-äl’i  jöy-ä  toloγ-γän
mouse-DIM  3SG-ILL  say-PST0.3SG
…‘The little bird said to her’

b) jögr-äl’i  tʃuti  jöγ-ä  toloγ-wəl
mouse-DIM  DET  3SG-ILL  say-PRS.3SG
…‘The little bird says the following to her’

Here, the general time of the narration (a fairy tale conventionally told as long-ago past) is the past (65a), however, a few clauses down in the narrative, the situation in the story becomes more dynamic and emphatic (a heated exchange between the two main characters leading to a key point), and the Present-Future Tense form is employed.

**8.3.1.2.1.2 Past 0 (Ø-suffix)**

Out of four grammaticalized Eastern Khanty past tenses, the first one reviewed here is curiously enough an unmarked Past Tense (PST0), also referred to as *Suffixless Past* in the previous descriptions of Khanty (Tereskin1961; Gulya 1966).

66. toil  loγ,  toil nöyi, muγulikam altal-əγin
perhaps bone perhaps meat something drag-PST0.3SG
“Bone smell, meat smell, something was carried around here”
67. wont  kitʃ-əɣin
    hunting_forest  search-PST0.3SG
   ‘(It went) around the forest looking for something’

As follows from (66)-(67) above, the Eastern Khanty Past0 Tense codes the relation between two points along the linear time axis, i.e. between the speech event reference-time and the event-time that precedes it (Fig.4):

**Fig.4. Eastern Khanty ‘historical past’ use of Present-Future Tense.**

The main salient feature is that the event-time generally precedes the speech-time that is this tense form codes unspecified past.

68. os  jelkämtä-s-im jɔɣi-ja il jon-əɣin
    again circle.around-PST2-SG/1SG trunk-ILL down get-PST0.3SG
   ‘I went around again, it found a hollow tree trunk and got inside’

This feature of indefiniteness of the remote past event makes this tense form an ideal candidate for use in the genre of story telling, particularly in the thetic-type introductory, stage-setting clauses ‘Once upon a time…’:

69. a) əjpa quj-qəsə-kən mən-kən wont-a niŋ-ətəŋ-a toloɣ-qən
    once husband-man-DU go-PST0.3DU forest-ILL woman-3DU tell-PST0.3DU
   ‘Once the men went to the forest, (and) told their women,…’

   b)* tapal quj-kəsə-kən mən-kən wont-a ....
    last year husband-man-DU go-PST0.3DU forest-ILL
   ‘Last year the men went to the forest…’

Since, the event-time is indefinite, unspecified, the collocation with the temporal determiners other then the indefinite ones is less probable (69a-b).

The unspecificity of the past event-time coded by this tense form is also evident
particularly in the interrogative clauses with temporal modifier-focus (70a-c):

70. a) qunta tiy-ən?
    when be.born-PST0.2SG
    ‘When were you born?’

    b) muŋuli iki-na tiy-ən?
    woman month-LOC be.born-PST0.2SG
    ‘What month were you born in?’

    c) mä urn-iki-na tiy-əm
    1SG crow-month-LOC be.born-PST0.1SG
    ‘I was born in crow-month’

Since the focus temporal constituent is by definition pragmatically unidentifiable belonging to the part of the proposition containing pragmatic assertion – new information, the use of unspecified past tense form is very appropriate. In the answer utterance, though still in focus, the temporal modifier urn-iki ‘month of crow’ is already identifiable from the traditional Eastern Khanty nomenclature of season names. However, the use of the unspecified past tense form (PST0) is still appropriate as the event-time of ‘birth’ is still largely indefinite and remote in the past, that is the year of birth of a senior-aged speaker is unknown, rendering the event as still largely unspecified in the remote past. In contrast, the more exact specification of the past event-time by a specific temporal modifier calls for the use of different tense forms.

8.3.1.2.1.3 Past1 (-ɣal-)

The next Past Tense form (PST1) shares some features with the PST0 just reviewed.

71. əpjä qunta mä wərən wəl-m-am-na mən-käl-əm kəskän tel-il-tə
    once when 1SG small be-PP-1SG-LOC go-PST1-1SG spoon-bait pull-ITR-INF
    ‘Once, when I was small, I went fishing with a spoon-bait’
The common point is that they code the relation between the reference point of the time of speech and the event-time that considerably precedes it (Fig.5):

**Fig.5. Eastern Khanty Past1 Tense.**

<table>
<thead>
<tr>
<th>Event-Time</th>
<th>Speech-time</th>
<th>Reference-time</th>
</tr>
</thead>
<tbody>
<tr>
<td>past</td>
<td>present</td>
<td>future</td>
</tr>
</tbody>
</table>

As follows from (71), the Past Tense form (PST1) is also used to code the past events that are not exactly definite or specified (hence the temporal modifier ojpa ‘once’). Some of the earlier descriptions implied that this form is used to code “…a completed action of long duration in the past, relatively further back in time” (Gulya 1966: 110). However, based on the available data this can only be considered a possible tendency at best, as examples are ample where this past tense marker is attested with the verb stems having inherently punctual, momentative and such semantics. Thus, (72) and (73) below immediately follow the (71) above:

72. wel-käl-am əllə sart.
    kill-PST1-1SG big pike
    ‘I caught a big pike fish’

73. tʃu sart-na mä-n qaʃ kəmlaytə-yal
    that pike-LOC 1SG-ACC almost turn.over-PST1.3SG
    ‘That pike almost got me turned over out of the boat’

74. mä-nä oγ-əl-täkə pọtʃən-nə joγə-käl-im
    1SG-LOC head-3SG-PRL gun-COM shoot-PST1-SG/1SG
    ‘I shot it in the head with the gun’

Thus, both the Past Tense forms PST0 and PST1 code the absolute rather than relative time, a relation between the reference speech-time and the remote past event-time. The differentiating feature between these forms is exactly the degree of specificity or definiteness of the remote past event. The suffixless PST0 form is
used to express an event generally in the past, covering a wide plain of the past but with a sense of an identifiable event in the past, possibly unknown. In the words of language speakers “either last year, or longer ago”. The PST1 form marked with a suffix /-ɣal-/ is used to express an event that was definitely in the remote past, but unknown: “long ago, but it is unknown when”.

75. küj-öɣ mən-äγən *(məlayəl) *(top al)   
swamp-PRL go-PST.3SG (yesterday) (last year)   
‘(S)he left over swamps’
Comm.: “it is known that it was long ago, possibly yesterday but unlikely, last year – is more likely”

76. küj-öɣ mən-kəl *(məlayəl) *(top al)   
swamp-PRL go-PST.3SG (yesterday) (last year)   
‘(S)he left over swamps’
Comm.: “time is unknown, use of temporal modifiers ‘yesterday’, ‘last year’ is unlikely”

So, the best available definition could be, that PST0 expresses remote unspecified or irrelevant past (75), whereas PST1 is remote unidentifiable or unknown past (76).

8.3.1.2.1.4 Past 2 (-s-)

The next Past Tense form (PST2) shares the features of ‘past’ with other already reviewed forms PST0 and PST1 (77).

77. kem pəlk-a jəɣə-s-əm   
there side-ILL come-PST2.1SG   
‘I came there to the other side’

The commonality is these forms’ coding the relation between the reference point of the time of speech and the event-time that precedes it (Fig.6):

Fig.6. Eastern Khanty Past2 Tense.
The important feature of the PST2 Past Tense form is that it codes a relation to the preceding event-time, that is most recent, most closely related to the present (78c).

78. a) “tawaj, im-a” – kəwərit.
   let you, sit-Imper.2SG says(PRS.3Pl - Russ)
   ‘Go on, sit in’: they say.

b) “əntə, əsəkəri mas-wəl”
   Neg fast need-PRS.3SG
   ‘No, I get to hurry’

c) nu, tʃi ajit mən-s-ət, qəntə qu kitə-əs
   Ok that boat go-PST2-3SG Khanty man stay-PST2
   ‘Ok, the boat went on, and the Khanty man stayed’

d) ill-apa tʃərə məntə-wəl
   front-All1 fast go-PRS.3SG
   ‘He goes swiftly forward’

In (78c), both predicates ‘went’ and ‘stayed’ are inflected for PST2 Past Tense form, expressing the immediate succession of events: following that of ‘saying’ in (78a-b) – expressed by the Present-Future Tense /-l-/; and preceding that of ‘going’ in (78d) – also expressed by the Present-Future Tense /-l-/wəl-/.

Moreover, on many occasions, this Past Tense marker in usage expresses more of a sense of completion of an action; that is an Aspectual meaning, rather than a Temporal one. Compare (79a) and (b):

79. a) mən-nə oγ-am qəntʃ-wəl
   1SG-LOC head-1SG be.ill-PRS.3SG
   ‘My head is ill’

b) mən-nə oγ-am qəntʃ-m-əs
   1SG-LOC head-1SG be.ill-CMPL-PST2.3SG
   ‘My head got ill’

Also in short conversational sequences representing comments of the viewed situations and videos (80), (81) and (82), there is some evidence of the use of the
PST2 Past Tense form to express a very recent completed event, typically still closely associated with the present by its immediate consequences.

80. a) jöɣ öyöl-wəl n’an’ kötʃɔɣ-na
   3SG cut-PRS.3SG bread knife-COM
   ‘He is cutting bread with a knife’

   b) jöɣ kötʃɔɣ-na kö-täm jərimka-s
      3SG knife-COM hand-1SG cut-PST2.3SG
      ‘He cut his hand with the knife’

   Thus, in (80b) the implication is that the event has just occurred, and the consequences can be evident (blood from the cut, etc.).

81. a) muɣuli wer-wən?
    what do-PRS.2SG
    ‘What are you doing? (now, on the video)’

   b) tʃum amə-l-əm.
      fish.basket sit-PRS.1SG
      ‘I am setting a fish basket’

   c) amə-s-əm.
      sit-PST2-1SG
      ‘I’ve set it up now’

   In (81c), commenting on the video of himself, the speaker states the completion of the action described as an on-going in (81b) with the Present-Future Tense form.

82. a) muɣuli wer-wən?
    what do-PRS.2SG
    ‘What are you doing? (now, real time)’

   b) n’an’ pen-l-im eləwətəki olintəɣ-na toɣər-l-əm, nəm-ək jəntə-l-ə
      bread dry-PRS-1SG on.top cloth-Instr enclose-PRS-1SG soft-PRD become-PRS-3SG
      ‘I am covering the bread with a cloth on top, so that the crust is softer’

   c) nəm-əki jə-s
      soft-PRD become-PST2.3SG
      ‘(so that) it became soft’
In (82c), commenting on the performed actions, the speaker describes the projected soon result of the action using the PST2 Past Tense form.

83. a) innə mä jo-s-im, noŋ tʃ’un-əŋ
   just 1SG come-PST2-1SG 2SG this-2SG
   ‘I just came, (and) you, already, right at this very moment, …’

b) nomiɣ jɔɣas küm tot li-m-ilti-s-əŋ
   wastes outside DET disappear-TR-CAUS-PST0-2SG
   ‘…are taking away the wastes’

Finally, in (83a), the very recent past event, corroborated by the temporal modifier innə ‘just’, is expressed by the PST2 Past Tense form with the predicate josim ‘(I) came in’, whereas in (83b), the same PST2 Past Tense form is used with the predicate totlimiltisən ‘(you) taking out’ to express the event-time almost as much as coinciding with the speech-time.

8.3.1.2.1.5 Past 3 (-ɣas-)

Finally, the last past tense form (PST3) codes the relation between the reference point of the speech time and the event-time that recently precedes it.

84. (mä) malayən / tapal / qoyon loyojtaɣal-qas-im
   (1SG) yesterday/last year/long ago wash.self-PST3-1SG
   ‘I washed (myself) yesterday / last year / long time ago’

85. (mä) tim qolt köyl loyojta-qas-im
   (1SG) this day dishes wash-PST3-1SG
   ‘I washed the dishes today, already’

However, this recent event-time is more remote than that of previously described PST2, and is less likely connected with the present (Fig.7):

Fig.7. Eastern Khanty Past3 Tense.
In earlier descriptions of related Eastern Khanty dialects, this past tense form was described as “indicating an action concluded in the past before the occurrence of another action denoted by the..” PST2 past tense form (Gulya 1966: 110). This generally coincides with the data available to us, and with the language intuitions of the speakers (86, 87):

86. körk-öɣ  mən-käs  (məlayəl)  ??(top al)?
swamp-PRL  go-PST1.3SG  ??(yesterday)?  ??(last year)?
‘(S)he left along the swamp’
*Comm.: “just happened, almost now, but longer ago than mən-əs, perhaps in the morning, or yesterday, but unlikely too long”.*

87. körk-öɣ  mən-əs  ??(məlayəl)?  ??(top al)??
swamp-PRL  go-PST1.3SG  ??(yesterday)?  ??(last year)??
‘(S)he left along the swamp’
*Comm.: “just happened, almost now”.*

That is, the event expressed by the PST3 past tense /-ɣas-/> is quite recent to the speech-time, but nevertheless relatively remote. Whereas the past tense form PST2 is used to express the most recent event, absolutely the closest to the speech-time, or even expressing the completion of a bounded in its nature event that is coinciding with the speech-time. This observations accord in their essence with the notes on the use of tense forms for the closely related Vakh dialect by Tereskin namely, that the use of the affix /-s-/> denotes the relation of unconditional and absolute closeness to the speech-time, whereas the use of the form /-ɣas-/> denotes the relation of only relative proximity to the speech-time, or that the fact of this proximity is unspecified or irrelevant for the speech event” (1961: 81).

88. al’wə toloɣ-wəl:  təɣ  nuy  läyil’il’-ä,  mä  sænəm  wəɣ-łə  trop  käs-käs-əm
Alwa  say-PRS.3SG  here  up  look-Imper  1SG  gold  metal-ATTR  pellet  find-PST3.1SG
‘Alwa says: Look up here, I found a golden pellet’

89. sæwsiki  nuy  läyə-m-əl-nə,  al’wə-na  per  jöy-ä  sæm-t-ə  il  l’äməyə-tə
Sewsiki  up  look-PP-3SG-LOC  Alwa-LOC  ash  3SG-ILL  eye-Pl-ILL  down  drop-PST0.3SG
‘Syvsiki looked up, Alva dropped ashes right into his eyes’
In (88), the verbal predicate käskäs‘found’ in the direct speech is marked with the PST3 Past Tense denoting the event recently preceding the direct speech-time indicated by the predicate toloywəl ‘says’ introducing the direct speech quotation. The use of the /-ɣas-/ marker of the PST3 Past Tense by the speaker indicates that the exact event-time of ‘finding’ is irrelevant, unspecified (after all, it turns out to be a lie, to attract attention) except for the fact of it being relatively quite recent. Most of the story, however, is told in the PST0 Past Tense (89), characterizing the genre of folk-story, where the time of the events is indefinitely in the remote past.

8.3.1.2.1.6 Remarks on Tense

The Eastern Khanty diversity in verbal tense category can be represented in the classification of Table 1, which is an elaboration of the traditional early reviews of the Khanty tense forms, such as that by Tereskin (1961: 81):

<table>
<thead>
<tr>
<th>Absolute Temporal Plane</th>
<th>Relative Temporal Distance</th>
<th>Further Relative Specificity/Relevance</th>
<th>Relative Unspecified/Irrelevant</th>
<th>Absolute Definite/Relevant</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAST</td>
<td>Recent</td>
<td>-ɣəs-</td>
<td>-s-</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Remote</td>
<td>-ɣəl-</td>
<td>-Ø-</td>
<td></td>
</tr>
<tr>
<td>PRESENT-FUTURE</td>
<td></td>
<td>-l- / -wən-(2SG) / -wəl-(3SG)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

It is evident that the main temporal opposition in Eastern Khanty is Past-Non Past. It is manifested in fairly poorly grammaticalized specification of the Present and Future events on one hand, and quite expensive multi-factorial grammaticalized specification of the Past Tense events, on the other hand.

In the Past Tense plane, the main lines of specification are relative temporal distance: Relative Temporal Proximity vs. Relative Temporal Remoteness; and
relative Specificity/Relevance to the speech-event: Relative Specificity/Relevance vs. Relative Unspecificity/Irrelevance. That is, the Relatively Recent past event that is more definite in its temporal location and/or more relevant for the speech-time is probably to be expressed by the PST2 Past Tense marker /-s-/; whereas the Relatively Recent past event that is less definite in its temporal location and/or less relevant for the speech-time is probably to be expressed by the PST3 Past Tense marker /-ɣs-/.

Further on, the Relatively Remote past event that is more definite in its temporal location and/or more relevant for the speech-time is probably to be expressed by the PST1 Past Tense marker /-ɣl-/, whereas the Relatively Remote past event that is less definite in its temporal location and/or less relevant for the speech-time is prototypically expressed by the PST0 suffixless Past Tense.

90. a) tʃɪmlali amis-min-na, ni məná-ɣən juya-tə
   a little  sit-CNV-LOC woman go-PST0.3SG gather.woods-PST0.3SG
   ‘After sitting, the woman went to gather woods’

b) äj-qu-j-äli app-al-a tölöy-wəl
   little-man-EP-DIM  father-3SG-ILL say-PRS.3SG
   ‘The boy says to his father’

c) mə ñəŋ-k-äm uya-s-əm
   1SG   mother-1SG see-PST2-1SG
   ‘I saw my mother’

d) app-al-a jäsənə-tə, qot ui-tə
   father-3SG-ILL tell-PST0.3SG where see-PST0.3SG
   ‘He told his father where he saw his mother’

e) app-al-na jäləm jöyö-tə, oypi qasa kən’imta-ɣən
   father-3SG-ILL axe sharpen-PST0.3SG head behind hide-PST0.3SG
   ‘Father got his axe sharp, and hid behind the door’

In the typical folk story genre mon’t ‘fairy tale’ (often specified by those who tell it that it was not witnessed by the speaker, but rather told as hearsay), the
speaker uses the PST0 Past Tense form. This is very adequate, as, being a mon't', the exact temporal characteristics of the event-time are unknown by definition. However, also quite typically, the direct speech in (90c) is prefaced by the Present Tense form /-wəl-/ in (90b), as a common rhetoric device, the ‘historical present’. In the (90c), the use of the PST2 Past Tense form is appropriately expressing the relatively close distance between the event-time of ‘just seeing the mother’ and the speech-time quoted kin the direct speech. Then, in the (90d), the narration resumes prototypically in the PST0 Past Tense.

This kind of the unmarked or zero past form as opposed to the marked present is a fairly rare typological feature, found, for example, in only 2 out of 50 languages in the Perkin’s sample (Bybee 1985: 155). It should be noted though, that this unmarked or zero past, most frequent for the monologue-type, ‘story’ speech genres, is but one of Eastern basic 3 past tense forms.

With regard to morphology of the tense markers, it is apparent that the remote and recent unspecified/irrelevant past tense forms /-γəs-/ and /-γəl-/ have a common element /-γ-/ , which appears to add certain sense of relative temporal unspecificity/indefiniteness of the event. Thus, it appears that this quality of relative unspecificity/indefiniteness of the relation of precedence of the past event-time to the speech-time is marked formally in Eastern Khanty, whereas the specificity/relevance is the unmarked feature.

Having obtained the formal marker for the meaning of relative specificity/relevance of the event-time to another event – the speech-event, we may posit that this is plausibly an anterior marker, with its prototypical meaning of “current relevance” (McCawley 1971; Li and Thompson 1982). A formal comparison could be drawn of this anterior affix /-γ-/ to the derivational verbal
affix /-ɣ/-/q/-/k/- with some aspectual semantics of reflexivity/intransitivity discussed above (cf. 8.3.1.Derivation.). It nevertheless seems feasible to discuss it in the section on tense, as, after Bybee, its meaning deals primarily “…with the time of an event or situation relative to another time, the moment of speech”, and unlike aspect it “…does not affect the internal temporal contours of the situation” (1985: 160). However, unlike the prototypical anterior, Eastern Khanty does not cross-classify with present and past, but associates solely with the past tense, thus proving dependent on the past, and never on the Present and Future, marked by a single affix /-l-/ (with the possibility to specify future by the non-bound morphology). Thus, the Eastern Khanty inflectional anterior may not be expected to occur outside the past tense inflection.

Outside the anterior marker /-ɣ-/, the remaining morpheme for the Recent Past Tense remains /-s-/ whereas the morpheme for the Remote Past Tense is either /-l-/ or zero (Table 1). Having disposed of the two out of four gradations in the past event-time by the formal anterior inflection, Eastern Khanty still has fairly undisputed differentiation into recent and remote past tense. While not unique, this is a fairly typologically infrequent feature (Bybee 1985: 156).

<table>
<thead>
<tr>
<th>PAST</th>
<th>Recent</th>
<th>-s-</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Remote</td>
<td>-l-</td>
</tr>
</tbody>
</table>

Finally, it should also be mentioned in a discussion of tense that in actual usage, the tense forms may occasionally appear in seemingly non-transparently random combinations, the motivation for which at this stage could only be hypothesized:

91. a) ти’у ни qat-a jona-ýơn, ти’у aj niŋ-äli-kon-ә tolok-øyəs
that woman house-ILL come-PST0.3SG that small girl-DIM-DU-ILL say-PST3.3SG
‘That woman came into the house, and said those little girls:’
b) tom pel’k-oɣ səwsiki məŋ-ä jo-wəł
that side-PRL Sywsiki 1PL-ILL come-PRS.3SG
‘Sywsiki is coming here from the other side of the river’

c) aj-ni-kən kəntʃ’-intə-qən
small-woman-DU be.frightened-MMNT-PST0.3PL
‘The girls got frightened’

In (91a), the Remote Definite/Relevant Tense (PST0) is used on the predicate ‘came’, followed by the Recent Unspecified/Irrelevant Tense form (PST1) on the predicate ‘said’. Further use of the Present-Future Tense form (PRST) in the direct speech quotation in (91b) is well documented and typologically prevalent case, followed by the return to the expected and dominant in the narration PST0. The actual utility of the Recent Unspecified/Irrelevant Past (PST1) in the second part of (91a) prefacing the direct speech quotation may only be assumed to signify a certain shift towards the historical present of the direct speech, expressed by the recent past tense form typically used in Eastern Khanty to express “an action completed in the past before the occurrence of another action” (Gulya 1966: 110). It would be expected, however, that the Recent Specified/Relevant Past PST2 would be used subsequently, which was not the case.

8.3.1.2.2 Mood

Eastern Khanty has a fairly limited mood/modality inflectional paradigm. Most of the modal meanings tend to be expressed by the non-bound morphemes, in analytical constructions. Thus, Interrogatives are formed with the help of the WH-words, interrogative pronouns, substituting the clause constituent (cf.: 10.Simple Clause). Negatives are fairly commonly typologically formed by positioning the negative particle directly in front of the negated syntactic constituent (more on negation and its scope cf. 10.Simple Clause). Nevertheless, there is a clearly
differentiated Mood inflectional category consisting of three members: the Indicative (92), the Imperative (93) and the Conditional (94) Mood markers, in their typical understanding of markers “…on the verb that signal how the speaker chooses to put the proposition into the discourse context” (Bybee 1985: 165). These markers of the mood category have a typologically consistent common feature – “they signal what the speaker is doing with the proposition” and have “the whole proposition in their scope” (Bybee 1985: 110).

92. niml-im porom-s-im
skis-1SG step-PST2-1SG/SG
‘I stepped on skis’

93. sär-i jɵyata-l-im
wait-Imper.2SG look-PRS-1SG
‘Wait a minute, I look’

94. tä quł, n’an’, jaj, int ot wəl-wəl, in-tä jə-n-an, iny-ä
there fish bread tea food-thing be-PRS.3SG eat-INF want-Cond-2SG eat-Impr.2SG
‘There is fish, bread, tea here, if you want to eat, then eat!’

The Indicative Mood fairly expectedly typologically is the unmarked one, not having any overt formal expression (92). The Imperative Mood, also quite regularly typologically occurs predominantly in the 2 person (93) in all three Eastern Khanty numbers, also complying with the Eastern Khanty verbal double conjugation paradigm: so called subjective and objective (cf. 8.3.1.2.4. Person-Number). Finally, there is also grammaticalized Conditional Mood, also representing the complete verbal conjugation paradigm (94).

The types of modalities such as those marking the degree of commitment of the speaker to the truth of the proposition, the epistemic modality; and those describing certain conditions on the agent with regard to the main predication, i.e. agent-oriented deontic modalities of permission, obligation, ability, desire and intention, are not inflectional categories in Eastern Khanty, but are rather marked by the non-
bound morphology. This is corresponding to the strong empirically tested typological tendency for markers designating “conditions on the agent of the sentence” not likely to be verbal inflections, whereas the markers that designate “the role the speaker wants the proposition to play in the discourse” will often be inflectional (Bybee 1985: 111).

8.3.1.2.2.1 Imperative

Formal means of the above Mood category of Eastern Khanty designate the kind of speech act is being performed by the utterance, having the whole proposition in their scope, i.e. referring to the illocutionary force of the utterance in which the proposition occurs (Bybee 1985: 111). By far the most frequent form of the Imperative Mood in Khanty is the 2SG (95):

95. polina tjä män-ä, metä sayî, män-ä!
Polina this go-Imper.2SG somehow way go-Imper.2SG
‘Polina, go, somehow, go!’

Normally, the marker of the Imperative Mood for the 2SG is the single vowel affix /-a-/ with the corresponding Backness VH allophone /-ä-/ (cf. 1.2.Vowel Harmony).

96. a) mä solîm tʃîmâl   b) nu ka şas, solî-i-a
1SG lie-PRS-1SG a little ok then now lie-EP-Imper.2SG
‘I am lying here a little’       ‘Ok, go on lying then’

In (96b), the marker of the Imperative Mood is the suffix /-a-/ preceded by the epenthetic glide /-j-/ to prevent the vowel cluster between the V-final verb stem solî- ‘lie’ and the Imperative marker (cf. 2.3.3. Consonant Epenthesis). Occasionally, the epenthetic consonant is /-ɣ/-, typically following the stem-final vowels /-i/-, as in (97) below:

97. saʃqo, män’t tʃînäm tuy-a!
Sashka 1SG-ACC there bring-Imper.2SG
‘Sashka, take(walk) me there!’

98. valentin qolant-a!
jas män-nä joroy-l-im
Valentin listen-Imper.2SG now 1SG-LOC tell-PRS-1SG
‘Valentin, listen! I’ll tell now’

The stem-final vowel tends to be deleted in the polysyllabic stems ending in /a/, as in the example (98) above.

Quite often in Eastern Khanty Imperatives, there is shift in the quality of the root vowel, as in the (99) below, covered in more detail in the Phonology chapter (cf. 1.3. Vowel Alternation).

99. dawaj, iml-a!
let you sit-Imper.2SG
‘Get in (sit in)!”

The Eastern Khanty Imperative is not attested in persons other than 2, except for the single occurrence of the 3SG form män-äti ‘(s)he go!’ of the verb män- ‘go’ mentioned in the early description based on the Vakh dialect of Khanty (Gulya 1966: 121).

Leaving this single occurrence outside this discussion, it should be noted that depending on the pragmatic status of the referent of the proposition expressed by the argument with the Target semantic role, the Eastern Khanty Imperatives have two paradigmatic sets corresponding to those in the Indicative Mood (cf. 8.3.1.2.4. Person-Number). These two sets express the agreement between the imperative verbal predicate and the argument with the semantic role of Agent in case of the so-called *subjective* or *indefinite* conjugation, and between the imperative verbal predicate and both the argument with the role of Agent and that with the role of Target (Table 3):
Table 3

Imperative conjugation paradigm, 2nd person of the intransitive ម៉ាំ-‘go’ and the transitive តល់-‘say’.

<table>
<thead>
<tr>
<th>Ag</th>
<th>Indefinite/Subjective</th>
<th>Definite/Objective Conjugation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Trg=Sg</td>
</tr>
<tr>
<td>Sg</td>
<td>-a</td>
<td>-i</td>
</tr>
<tr>
<td></td>
<td>ម៉ាំ- ‘You(Sg) go!’</td>
<td>តល់- ‘You say it’</td>
</tr>
<tr>
<td>Du</td>
<td>-itən</td>
<td>-itən</td>
</tr>
<tr>
<td></td>
<td>ម៉ាំ- ‘You(Du) go!’</td>
<td>តល់- ‘You(2) say it’</td>
</tr>
<tr>
<td>Pl</td>
<td>-itəɣ</td>
<td>-itəɣ</td>
</tr>
<tr>
<td></td>
<td>ម៉ាំ- ‘You(Pl) go!’</td>
<td>តល់- ‘You(Pl) say it’</td>
</tr>
</tbody>
</table>

100. a) នឹការ ឈាម- ‘Hey, Khanty manner speak-Imper.2SG’
     ‘Hey, speak Khanty!’

    b) ឈាម- ‘You(two) speak Khanty!’

    c) ឈាម-  ‘Tell these two (stories) in Khanty!’

There are also increasingly prevalent analytical imperative constructions using the Russian borrowing ដារ ‘let me/you/(s)he/us’ followed by the regular Indicative Present-Future tense-marked predicate with respective person-number inflection.

101. ដារ ឈាម-  ‘Let us(two) sit!’

102. ដារ, យយ-  ‘Let us(two) run fast!’
103. dawaj, pirtaŋ noroytə-l-əw  
      let us back run-PRS-1PL  
      ‘Let us(two) run back!’

These are evidently Russian syntactic borrowings as, apart from containing the lexical loan *dawaj* ‘let…’ they replicate quite closely the formal makeup of the verbal predicate, i.e. the Indicative Future Tense:

| Russ: | davar po-bež-im  
| Khanty: | dawaj noroytə-l-əw  
| ‘Let us run’ | ‘Let us run’

8.3.1.2.2.2 Conditional

Another formal inflectional mood category of the Eastern Khanty, that signals the intention of the speaker with respect to the proposition in the context of the speech situation (Bybee 1985: 168), is the one expressing what is referred to as the commitment to the truth of assertion (Bybee 1985: 169) – the Conditional Mood.

104. nöŋ surt-əŋ toŋ siul-ŋ-än, mʊyl-əl män-ä pən-i  
      2SG pike-2SG gut-Cond-2SG liver-3SG 1SG-ILL leave-Imper.2SG  
      ‘If you gut this pike-fish, leave the liver for me’’ (Tereskin 1961: 92)

8.3.1.2.2.2.1 /-ŋ/-Conditionals

The most frequent form of expression of the Conditional Mood in the Eastern Khanty is the bound verbal morpheme /-ŋ/- occupying the position normally taken by the Tense marker preceding the person/number on the finite predicate of the adverbial subordinate clause, as in (104) above.

The Eastern Khanty conditional is extremely infrequent in the data. It is reviewed on the basis of the Vakh dialect in earlier descriptions (Tereskin 1961: 91; Gulya 1966: 121), as forming a complete paradigmatic set. The set represents
the conjugation expressing the agreement between the person/number of the argument with the Agent role and the verbal predicate, by means of pronominal inflections following the Conditional Mood marker /-/ŋ-/ (Table 4):

<table>
<thead>
<tr>
<th>Ag</th>
<th>Agent</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sg</td>
<td>Du</td>
<td>Pl</td>
</tr>
<tr>
<td>1</td>
<td>toloɣ-ŋ-am</td>
<td>toloɣ-ŋ-amːn</td>
<td>toloɣ-ŋ-oɣ</td>
</tr>
<tr>
<td></td>
<td>‘If I say,…’</td>
<td>‘If we (2) say, …’</td>
<td>‘If we (Pl) say, …’</td>
</tr>
<tr>
<td>2</td>
<td>toloɣ-ŋ-an</td>
<td>toloɣ-ŋ-in</td>
<td>toloɣ-ŋ-in</td>
</tr>
<tr>
<td></td>
<td>‘If you say,…’</td>
<td>‘You (2) say, …’</td>
<td>‘If you (Pl) say, …’</td>
</tr>
<tr>
<td>3</td>
<td>toloɣ-ŋ-al</td>
<td>toloɣ-ŋ-in</td>
<td>toloɣ-ŋ-il</td>
</tr>
<tr>
<td></td>
<td>‘If (s)he say,…’</td>
<td>‘If they (2) say, …’</td>
<td>‘If they (Pl) say, …’</td>
</tr>
</tbody>
</table>

In Eastern Khanty, the conditional, as in the majority of other languages, refers to the epistemic modality, i.e. the judgment by the speaker concerning the propositional information – its truth or certainty (more cf. 11.2.2. Reality Condition Relation).

The /-/ŋ-/ -conditional (104) expresses the temporal relation of either simultaneity or precedence of the speech-time to the event-time of both the subordinate if-clauses, and the matrix then-clauses of the attested /-/ŋ-/ conditionals.

The formal marker /-/ŋ-/ of the Conditional mood consistently occurs on the verbal predicate of the if- adverbial clause, and not in the then- matrix clause, consistently with the widely attested typological tendency (Bybee 1985: 188). However, this is not necessarily the case for the past Eastern Khanty conditionals (cf. 8.3.1.2.2.2.2./töŋ/-Conditionals).
In the Eastern Khanty Conditionals, the verbal predicate is formally insensitive to the pragmatic status of the Target argument, i.e. the two paradigmatic sets of verbal conjugations (Subjective/Indefinite vs. Objective/Definite) merge into a single conjugation set, expressing only the agreement between the Agent role and the predicate (cf. Table: 4 above).

8.3.1.2.2.2 /töŋ/-Conditionals

There is another analytical expression of the conditional, which uses a non-bound morpheme töŋ.

105. jöɣ wal-ŋ-al töŋ, timint wer ŋantə wal-ɣas
    3SG live-Cond-3SG Cond this business Neg be-PST1.3SG
    ‘If (s)he were alive, such a thing would not have happened’ (Gulya 1966: 122)

In (105) above, the Conditional is marked by the inflectional morpheme /-ŋ-/ and the non-bound morpheme töŋ. The whole of the proposition has a certain perfectivity sense.

106. mà jöɣ-pa møn-s-əm töŋ
    1SG home-All1 go-PST2-1SG Cond
    ‘I should have gone home (but did not)’ (Gulya 1966)

Sentence (106) above and the other examples below demonstrate that the marker /-ŋ-/ is not the essential one here, and rather, the modal sense is expressed by the marker töŋ (more cf. 11.2.2.Reality Condition Relation).

The implicit negative matrix of the counter-fact conditional is more evident in the examples like (107) with the explicit reason proposition in the subsequent but-clause (more cf. 11.2.2.Reality Condition Relation):

107. mà təɣ jö-s-əm töŋ, uy-əm kötʃ-əki
    1SG here come-PST2-1SG Cond head-1SG hurt-PRD
    ‘I should have come here, but I have a headache’ (Gulya 1966: 122)
As follows from the above set of examples of the counter-fact töŋ-Conditionals, the position of the conditional marker töŋ itself appears to be fairly free and unrestricted. It precedes the verbal predicates (105) or follows them (106), (107) and precedes the S (105) or following it (106, 107). However, a certain pattern can be identified. In examples (106, 107), the clause structure is fairly straightforward: (S)(O)V töŋ (with the Agent being elided but unlikely to appear after the predicate). Whereas in (105) the Perfective/Conditional marker töŋ appears amidst the clause arguments. However, (105) could be viewed as complex clause, i.e. containing two clauses rather than one. Example (105), as mentioned above, contains two Conditional markers instead of one, that is the Imperfective Conditional suffix marker /-ŋ-/ and the Perfective/Completed non-bound marker töŋ. Such excessive conditional marking in these clauses is rather to be viewed as evidence of a combination of two conditional clauses. Thus, (105) is the combination of the Imperfective /ŋ/-Conditional clause ‘with him alive’ and the Perfective/Completed töŋ-Conditional ‘this would not have happened’, with an established implicit negative matrix ‘but X did’.

Similarly, (108) may also be seen as a combination of the extremely contracted Perfective töŋ-Conditional ‘we would have been at that place’ with an implicit negative matrix ‘but X did not’ and the Imperfective /ŋ/-Conditional clause ‘this is good’.

108. tʃu tayi-nə töŋ jəm wɑl-nə-al
DET place-LOC Cond good be-Cond-3SG
‘There, it would have been good’ (Gulya 1966: 122)
Finally, (109) should appear similar to the (108) above, in that it may represent a combination of the contracted Perfective/Completed töŋ-Conditional ‘would it have been another man’ with an implicit negative matrix ‘but X did not’ and the Past Tense PST1 /yas/ negative clause ‘(he) did not behave like this’.

109. peräŋ qasi töŋ titi anta köt-kəs
    ‘Somebody else would not have behaved like this (but (s)he did)’ (Gulya 1966)

Thus, syntax-wise in (106, 107), töŋ could be said to be clause-initial, whereas in (105), töŋ is clause-final.

As for the Conditional marker töŋ itself, it could be related to the attributive nominal töŋ ‘straight, correct, true, honest’ and its adverbial derivation töŋqə ‘straightly, truly, honestly’. Further on, a hypothesis could be forwarded as to the etymological affinity of both, bound Imperfective /-ŋ-/ and non-bound Perfective/Completed töŋ Conditional markers. However, limited available data do not allow pursuit of this in any adequate detail at this stage.

8.3.1.2.3 Voice

Eastern Khanty grammatical voice is to be viewed here within the common functional typological understanding of having to do with the “…vast multi-dimensional functional domain … of transitivity and de-transitivization” (Givon 2001: 91). In this vein, it will be part of the premise that the de-transitive voice is coded by constructions sharing the functional sub-domains (semantic and pragmatic), as markedly distinct from the unmarked default active-direct (transitive) voice. The constructions of the primarily semantic functional sub-domain typically (Givon 2001: 91) include the reflexive, reciprocal, middle-voice
and adjectival resultative, whereas those of the primary pragmatic functional domain include the passive, antipassive, and inverse.

The exact functional, semantic and discourse-pragmatic features of these voice constructions will be dealt with further below (cf. 10.2.Information Structure.), whilst here merely their formal make up will be reviewed, as Eastern Khanty inflectional categories.

8.3.1.2.3.1 Passive Voice

As it was mentioned above, Eastern Khanty active-transitive is the neutral unmarked clause type. Passive, however, is an inflectional category that has a formal marker, verbal suffix /-uj-/ taking the linear position after the Tense suffix:

110. a) puran pensin-nat pon-i, b) awat-at jur-i
   skidoo gasoline-COM put-PST0.PS.3SG sledge-COM tie-PST0.PS.3SG
   c) juta ämp-γən wej-in
      together dog-DU take-PST0.PS.2SG
      ‘We put some petrol in the skidoo, tied sledge to it, and took dogs with us’

These constructions use finite verb forms to express actions/events that are inactive from the point of view of the referent with the Target semantic role who is often characterized as a single surviving topical argument after demotion of the Agent:

111. min lel-əm-nat aj jaqqal-əm-no internat-i noq wej-oi-mən kanikul-nam
    1PL brother-1SG-COM one parents-1SG-LOC school-ELA up take-PS-1Du holiday-All2
    ‘I and my brother were taken by our parents from the boarding school for holidays’

As follows from (110 a and b, and 111) the passive voice inflectional marker /-uj-/ does not comply with the Eastern Khanty vowel harmony pattern, thus producing a regular paradigmatic inflectional set (Table 5):

<table>
<thead>
<tr>
<th>Trg Prs/Nmbr</th>
<th>Sg</th>
<th>Du</th>
<th>Pl</th>
</tr>
</thead>
</table>

Table 5

Eastern Khanty Passive Verbal Inflection Paradigm

266
The person/number inflectional markers following the passive voice suffix are principally consistent throughout. In active-direct intransitive and transitive clauses (cf. 8.3.1.2.4.Person-Number), and conditional clauses (cf. 8.3.1.2.2.2.Conditional), the markers are essentially a bound pronominal co-referential inflection expressing the so called subjective conjugation, i.e. agreement between the argument with the Agent role and the verbal predicate. In case of the passive clause type, this argument controlling the predicate agreement is the referent of the proposition undergoing a change, animate/inanimate referent with the Target role.

<table>
<thead>
<tr>
<th>Trg Prs/Nmbr</th>
<th>Sg</th>
<th>Du</th>
<th>Pl</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>por-ujəm</td>
<td>por-ujmən</td>
<td>por-ujəŋ</td>
</tr>
<tr>
<td></td>
<td>‘I was bitten’</td>
<td>‘We(2) were bitten’</td>
<td>‘We(Pl) were bitten’</td>
</tr>
<tr>
<td>2</td>
<td>por-ujən</td>
<td>por-ujtən</td>
<td>por-ujən</td>
</tr>
<tr>
<td></td>
<td>‘You were bitten’</td>
<td>‘You(2) were bitten’</td>
<td>‘You(2) were bitten’</td>
</tr>
<tr>
<td>3</td>
<td>por-I</td>
<td>por-(uj)(a)ən</td>
<td>por-(ə)tət</td>
</tr>
<tr>
<td></td>
<td>‘(S)he was bitten’</td>
<td>‘They(2) were bitten’</td>
<td>‘They(2) were bitten’</td>
</tr>
</tbody>
</table>

At the same time the referent with the semantic role of the Agent, initiating the change/event, either animate (110, 111, 112) or inanimate (113), is coded as a peripheral participant in the passive, marked by the Loc. case, or elided, but not controlling the verbal agreement:

112. aj ämp-æli män-nə kur-ɣət-ti katl-i
   small dog-DIM 1SG-LOC leg-DU-COM hold-PST0.PS.3SG
   ‘…The doggy was held by me by its legs’

113. Ø rut’ wer-əm əntən-nə welä-jən, rut’ wer-əm əntən-nə welä-jən
    (2SG) Russian make-PP arrow-COM kill-PS.2SG Russian make-PP spear-COM kill-PS.2SG
    ‘You were killed by an arrow made by a Russian, by a spear made by a Russian’

Table 6: Passive conjugation of the Transitive Verb *por-‘bite’*
In (113) the referent with inanimate agent semantics is expressed by the full NP marked by an oblique (Locative, Comitative, Instrumental) case, while the referent with Target semantic role, a 2SG, controls 2SG predicate agreement inflection, but elided from the overt expression (more on the pragmatics and syntactic functioning of the passive voice cf. 10.2. Information Structure).

As follows from the (110, 112) above, typified in Table 6 and further exemplified in (115) and (116) below, the 3SG passive voice marker is consistently distinct from other person/number markers, in that it represents the maximally morphologically reduced morpheme /-i/, most probably contracted from the general passive /-uj-/. Typologically, this is a quite common phenomenon, consistently manifested in the Eastern Khanty system. Thus, in the active-direct intransitive clause type, the agreement for the 3SG Agent argument is expressed by a zero (cf. 8.3.1.2.4. Person-Number) for all the Tense forms (cf. for example (86), (87) and (91a-b) – where the bare Tense suffix expresses the 3SG predicate agreement). In the same way, in (116) below, the suffix /-i/ simultaneously marks the suffixless PST0 Past Tense, the passive and the 3SG person/number agreement on the predicate.

The passive clause type is also quite common with the so-called communication verbs, where what is said, the Message, a direct quotation in (114), is essentially equated to the Target in semantics. Having been in Acc. case in the active-direct transitive clause, it is promoted to Nom. case in the passive gaining control over predicate agreement. The Agent, or the Addressee, is marked with an oblique case (typically Locative) in (114), whereas the Recipient/Addressee (Dixon 1994) of the Message is often omitted (114):

114. tü imi-nə pirit-ı
   DET woman-LOC say-PST0.PS.3SG
‘That woman asks: “…(message)…” (It is asked by a woman…)’

There is a group of attested passive constructions with motion/posture verbs that can be revealing of the notion of transitivity in Khanty. These verbs are apparently neither prototypically intransitive, as they are strongly associated with another argument (location), nor are they prototypically transitive, as the second core referent is usually marked by one of the oblique cases and has locative semantics:

115. tüt  pîrnə  juɣ  ont-nam  ti  mən-i
   DET  after forest  inside-All2  DET  go-PST0.PS.3SG
   ‘After this we went to the woods (After that into the forest it was gone)’

116. tîti  qûlən  jiɣəl  saɣi  mən-l-i
   DET  Kulen-Yogal  way  go-PRS-PS.3SG
   ‘So they drove along the river Kulen-Yogal (Like so it was gone along Kulen-Yogal)’

The motion verbs are seen to behave transitively having the locative referent as one of the core arguments coded by the Nom. case (116) in the passive. Such “transitive” behavior occurs not exclusively in the domain of passive, but is also attested in active-direct clauses, where these locative arguments with motion/posture verbs occasionally co-occur with the objective conjugation, non-Agent agreement inflection on the predicate (cf. 10.Simple Clause).

8.3.1.2.4 Person-Number

While the inflectional markers of the category of tense were discussed above (cf. 8.3.1.2.1.Tense), in this section we will review the person-number inflectional affixation. It is clear in the examples reviewed thus far, that in Eastern Khanty, the agreement is obligatory between the Nom-marked semantic role of Agent and the verbal (both intransitive and transitive) predicate (117), while the agreement between the Acc-marked semantic role of Target and transitive predicate is not (compare (118 a) and (b) below).

117. juɣ  pirt-a  nirimtä-s-əm
‘I pulled a stick back’

This agreement between the semantic role of Target and transitive predicate appears to be contingent upon the properties of the Target argument, its pragmatic properties of identifiability for the speakers from the context or the situation (118).

118. a) mä wajaɣ wel-s-əm
   1SG animal kill-PST2-1SG
   ‘I killed an animal’

b) mä wajaɣ wel-s-im
   1SG animal kill-PST2-1SG
   ‘I killed the animal’

Verbal predicates are always inflected with the agreement marker (of pronominal etymology) coreferential with the Nom. Agent argument (117, 118). Transitive predicates may also have agreement marker coreferential with the Acc. Target argument (118), expressing its pragmatic identifiability and activation. No agreement between the transitive predicate and the Acc. Target argument manifests the Target’s unidentifiability and inactiveness; this referent’s unavailability to interlocutors, either from context, or from the situation (more cf. 10.Simple Clause, 10.2.Information Structure).

### 8.3.1.2.4.1 Subjective Conjugation

Example (119) below, illustrates the straight-forward person-number verbal predicate inflection, marking the agreement between the Nom-marked semantic role of Agent and the predicate. As follows from the set (120 a-d) below, these verb-suffixed pronouns facilitate the frequent Eastern Khanty omission of the Agent arguments.

119. ämp-äli əj pelk-ä i pirik-a mən-əs
    dog-DIM one side-ILL and behind-ILL go-PST2.3SG
    ‘The doggy also got off and away’

120. a) kem pəlк-a joyə-s-əm    b) kem pəlк-a joyə-s-ən
Any Eastern Khanty verb has a complete person number inflectional paradigm, traditionally referred to as “Subjective” or in other terms “Indefinite Conjugation” represented in (Table 7) below that is recalls the noun possessive (person-number of the possessor) paradigm (cf. 2.1.2.2.2. Possession):

The term “Subjective Conjugation” is fairly transparent, referring to traditional notion of “verbs agreeing with the subject” (Tereskin 1961; Gulya 1966). The term “Indefinite Conjugation” refers to the notion of definiteness of the referent with the semantic role of Target, where the absence of the Target-predicate agreement (presence of only Agent-predicate agreement) is treated as indicative of the pragmatic feature of definiteness (in this case [-indefiniteness]). This issue of Agent vs. Target agreement pronominal inflections, and their role of referential coherence and information structuring will be dealt with in more detail further on in their respective sections (cf. 10.Simple Verbal Clause; 10.2.Information Structure).

Evident in (120c) and considered in Table 7, a quite common for languages of various typologies, the 3SG Agent agreement inflection is expressed by a null morpheme. In (119) above, there is only the Past2 morpheme following the verb
stem *mən* ‘go’, whereas the 3SG person-number inflection is zero. Similarly, in the altered (Present Tense) (121) below, there is only a Present-Future Tense suffix /-wəl-/ following the stem.

121. ämp-äli pirik-a  mən-wəl
dog-DIM behind-ILL go-PRS.3SG
‘The doggy got away’

However, the very allomorph of the Present-Future Tense marker /-wəl/ is indicative of the 3SG. As in other person-number forms, it is reduced to /-l-/; Cf. (122) below.

122. mä wor ont-a  men-l-əm
1SG wood inside-ILL go-PRS-1SG
‘I am going to the woods’

Thus, the Present-Future Tense paradigm of the verb *mən*- ‘go’ looks as in Table 8:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Table 8</strong></td>
<td><strong>The Present-Future Tense Agent (subjective) verbal conjugation paradigm of the intransitive verb <em>mən</em>- ‘go’</strong></td>
</tr>
<tr>
<td><strong>S/A</strong></td>
<td><strong>Sg</strong></td>
</tr>
<tr>
<td>1</td>
<td>-əm</td>
</tr>
<tr>
<td>2</td>
<td>-ə</td>
</tr>
<tr>
<td>3</td>
<td>-ə</td>
</tr>
</tbody>
</table>

Similarly, for the Past (2) Tense, from (120a-e), the paradigm remains largely the same with the exception of the Tense affix /-s-/ (Table 9):

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Table 9</strong></td>
<td><strong>The Past(2) Tense Agent (subjective) verbal conjugation paradigm of the intransitive verb <em>mən</em>- ‘go’</strong></td>
</tr>
<tr>
<td><strong>S/A</strong></td>
<td><strong>Sg</strong></td>
</tr>
<tr>
<td>1</td>
<td>-əm</td>
</tr>
<tr>
<td>2</td>
<td>-ə</td>
</tr>
<tr>
<td>3</td>
<td>-ə</td>
</tr>
</tbody>
</table>
8.3.1.2.4.2 Objective Conjugation

As mentioned in the preceding section, in transitive verbs, the absence of the pronominal agreement marking between the verbal predicate and the argument with the semantic role of Target is traditionally considered a way of formally expressing the indefiniteness of the Target participant (hence the traditional reference to the Subjective conjugation as Indefinite (Tereskin 1961; Gulya 1966, et al.)), whereas the presence of the marked agreement with the number of the Target argument is a means of identifying the definiteness of this referent (hence the traditional reference to the Objective conjugation as Definite). The modified (123a-b) and (c-f) illustrate the inflection of the transitive predicate in agreement with the Agent argument in person and number, and with the Target argument in number.

123. a) mä wajaɣ wel-s-መ (b) mä wajaɣ wel-s-im
   1SG animal kill-PST2-1SG 1SG animal kill-PST2-1SG
   ‘I killed an animal’ ‘I killed the animal’

c) mä qa wajaq(-qat) wel-s-መ (d) mä qa wajaq(-qat) wel-s-øylam
   1SG 2 animal(-DU) kill-PST2-1SG 1SG 2 animal(-DU) kill-PST2-DU/1SG
   ‘I killed some 2 animals’ ‘I killed those 2 animals’

e) mä wajaɣ-Ọt wel-s-መ (f) mä wajaɣ-Ọt wel-s-əlam
   1SG animal-PL kill-PST2-1SG 1SG animal-PL kill-PST2-PL/1SG
   ‘I killed some animals’ ‘I killed those animals’

In case of marked Target agreement, the Agent agreement markers and the Target agreement markers form an individual set of portmanteau morphemes distinct from the Agent agreement set (Table 10).

<table>
<thead>
<tr>
<th>Table 10</th>
<th>Target (Objective/Definite) verbal conjugation paradigm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ag =</td>
<td>Trg=SG</td>
</tr>
<tr>
<td>Ag=S G</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>
Respectively, the Past(2) Tense Target agreement paradigm (between the semantic role of Agent, semantic role of Target and the transitive predicate) of a sample transitive verb *wel*- ‘kill’ may be represented as follows (Table 11):

### Table 11

Past(2) Tense Target (*Objective/Definite*) verbal conjugation paradigm of the transitive verb *wel*-‘kill’.

<table>
<thead>
<tr>
<th>Agent =</th>
<th>Trg=SG</th>
<th>Trg=Du</th>
<th>Trg=Pl</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ag=SG</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>wel-s-im</td>
<td>wel-s-øylam</td>
<td>wel-s-øyłamόν</td>
</tr>
<tr>
<td>‘I killed it(one)’</td>
<td>‘I killed them(two)’</td>
<td>‘I killed them’</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>wel-s-in</td>
<td>wel-s-øylin</td>
<td>wel-s-øylin</td>
</tr>
<tr>
<td>‘You killed it(one)’</td>
<td>‘You killed them(two)’</td>
<td>‘You killed them’</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>wel-s-øyta</td>
<td>wel-s-øylin</td>
<td>wel-s-øylin</td>
</tr>
<tr>
<td>‘(S)he killed it(one)’</td>
<td>‘(S)he killed them(two)’</td>
<td>‘(S)he killed them’</td>
<td></td>
</tr>
<tr>
<td>Ag=Du</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>wel-s-øyta</td>
<td>wel-s-øyłamόν</td>
<td>wel-s-øyłamόν</td>
</tr>
<tr>
<td>‘We(2) killed it(one)’</td>
<td>‘We(2) killed them(two)’</td>
<td>‘We(2) killed them’</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>wel-s-øyta</td>
<td>wel-s-øylin</td>
<td>wel-s-øylin</td>
</tr>
<tr>
<td>‘You(2) killed it(one)’</td>
<td>‘You(2) killed them(two)’</td>
<td>‘You(2) killed them’</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>wel-s-øyta</td>
<td>wel-s-øylin</td>
<td>wel-s-øylin</td>
</tr>
<tr>
<td>‘They(2) killed it(one)’</td>
<td>‘They(2) killed them(two)’</td>
<td>‘They(2) killed them’</td>
<td></td>
</tr>
<tr>
<td>Ag=Pl</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>wel-s-øyta</td>
<td>wel-s-øyłąy</td>
<td>wel-s-øyłóy</td>
</tr>
<tr>
<td>‘We killed it(one)’</td>
<td>‘We killed them(two)’</td>
<td>‘We killed them’</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>wel-s-øyta</td>
<td>wel-s-øylin</td>
<td>wel-s-øylin</td>
</tr>
<tr>
<td>‘You killed it(one)’</td>
<td>‘You killed them(two)’</td>
<td>‘You killed them’</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>wel-s-øyta</td>
<td>wel-s-øyłal</td>
<td>wel-s-øyłal</td>
</tr>
<tr>
<td>‘They killed it(one)’</td>
<td>‘They killed them(two)’</td>
<td>‘They killed them’</td>
<td></td>
</tr>
</tbody>
</table>

Verbal agreement is instrumental in the omission of clause constituents. The Agent argument is frequently omitted as a free clause constituent, being expressed
by the pronominal person-number inflection on the predicate or by zero agreement in case of 3SG. argument (124).

124. män-ä  tiypil nöröy-wäl
    1SG-ILL here swim-PRS.3SG
    ‘(S)he swims towards me here’

Hence, clauses in Khanty are commonly devoid of an overt Agent argument, and the Agent information is formally accessible from the pronominal inflection on the predicate.

Omission of the Target argument is also attested whenever the context provides enough information about this pragmatically active referent, and then the clause can consist of only a predicate as in (126).

125. mä  sart wel-s-öm
    1SG pike kill-PST2-1SG
    ‘I caught a pike fish’

126. terkä-s-im    iwes-na
    fry-PST2-SG/1SG stick-COM
    ‘I fried it on a stick (made a kebab)’

The omission of the identifiable and active referent with the Target role is expected only when accompanied/licensed by the definite/objective conjugation, i.e. Target-predicate agreement. Such omission of the Target is naturally far less frequent than Agent omission. More on the issue of argument structure and motivation of predicate agreement (Objective/Definite Conjugation) below (cf. 10.Simple Verbal Clause.; 10.1.1.2.Core Semantic Roles and Their Grammar; 10.2.Information Structure).

8.4 Nonfinite Verb Forms

Eastern Khanty has four verb forms that are regarded as nonfinite, which will be referred to as: the infinitive, the imperfective participle, the perfective participle, and the converb. The terms that are used here in reference to these verb forms are largely due to the convention that had settled in the Uralic literature
(Steinitz 1937; Zhivotikov 1942; Tereshkin 1961; Rédei 1965; Gulya 1966; Honti 1984) as a heritage of the Indo-European descriptive tradition. A more detailed review of their functional features will be a part of the forthcoming sections on Simple and Complex Clauses, while in this section a brief overview of the structural and semantic features will be offered. As it will be indicated below, with regards to their usage these forms may be placed at different loci along the nonfiniteness continuum, and they could also be opposed to the finite verb forms based on a set of criteria. These criteria will be summarized below upon the revision of their main features.

8.4.1 /-ta/ – Infinitive

Eastern Khanty infinitives are typically attested in complex clauses, where they are most frequently used as a nonfinite predicate of the embedded dependent clause with various adverbial semantic relations towards the event expressed by the matrix clause (Filtchenko 2000):

127. pirt-a untʃ-a tʃɔi ʊntʃ kali
    back-ILL cross-INF snow no little/enough
    ‘There's just enough snow to cross back’

128. mä ilkä-s-im katʃɔm-ta lɔq porɔm-ta
    1SG go-PST2-1SG hunt-INF track path_make-INF
    ‘I went to break a ski track’

    In (128), the infinitive parɔmta ‘to break track’ expresses the purpose of the event/action of the matrix finite predicate ‘(I) went (to break track)’.

    As follows from the example (128) above, infinitives may also occur as parts of the noun phrase or a part of the complex nominal predicate, where they also typically express the purpose of the modified head nominal: katʃɔmta lɔɣ ‘tracks (to hunt)’.
Similarly, in (130), infinitives quite robustly contribute to the nominal lexical units derived by means of nominalization.

The nominal intot ‘food’ is derived from the verb ‘to eat’ in the infinitive form and the noun ot ‘thing’, which is one of the most grammaticalized nominalizers in Eastern Khanty, resulting in a complex nominal intä+ot = intot ‘a thing to eat, eating matter’. Apart from the nominalizer ot ‘thing’, there is another Eastern Khanty noun that is used in similar function qu ‘man, person’. Functional distribution between these two nominalizers is evidently along the inherent animacy status of the referent:

That is the animate entities acquire the etymologically animate nominalizer qu, whereas the inanimate nominalizer ot (with culturally conditioned border cases, such as small children ‘small ones’ are traditionally grouped with inanimate).

It can be posited that the infinitives in all three groups of examples express the event/action in its most abstract sense, devoid of the explicitly coded specifics of temporal relations (tense), relation of the speaker towards truth of the proposition (mood), pragmatic relations between the referents of the proposition (voice), and finally the exact identity of the core arguments (person/number).
As follows from the above examples, the formal features of the Eastern Khanty infinitive are as follows: bound infinitive marker, affix /-ta/, naturally with the V-Harmony allophone /-tä/ that attaches to the base stems containing the front vowels.

\[
\begin{align*}
\text{wər-ta} & \quad \text{vs.} \quad \text{wel-tä} \\
\text{do-INF} & \quad \text{hit/kill-INF}
\end{align*}
\]

The infinitive affix takes the position that in the finite verb forms is normally taken by the affixes of tense, voice, mood and person/number.

\[
\begin{align*}
\text{wər-ta} & \quad - \text{l-i ‘(it) is/will be done’} \\
\text{do-INF} & \quad - \text{ta ‘to do’} \\
& \quad - \text{η-əm ‘if I do something’}
\end{align*}
\]

\[
\begin{align*}
\text{wel-tä} & \quad - \text{s-i ‘(s)he was killed’} \\
\text{hit/kill-INF} & \quad - \text{tä ‘to hit/kill’} \\
& \quad - \text{am töŋ ‘I should have killed’}
\end{align*}
\]

The infinitive marker is the subject to the regular Eastern Khanty morphophonological processes (cf. Phonology), such as, progressive assimilation to the stem-final consonant, mainly to the affricate /-tʃ-/, with which the INF-affix initial /-t-/ is co-articulated (assimilates) completely: \(köŋʃ+ta = köŋʃä ‘to scratch’\); \(käŋʃ+ta = käŋʃä ‘to search’\); \(qaŋʃ+ta = qaŋʃə ‘to rip’\); \(unʃ+ta = unʃə ‘to cross’\).

The etymology of the Eastern Khanty infinitive marker is typologically common, at least within the Finno-Ugric family of languages. As follows from even a brief comparative analysis of nonfinite verb form affixes (Collinder 1965; Filtchenko 2000), their common etymology implies use of one of the Locative or Lative case affixes with the de-verbal nominal derived with the affix /-t-/: Estonian – Locative /-da/; Voda and Livv – Locative /-də/ and /-tə/; Vepps, Saami, Erzja, Moksha, Mari, Udmurt, Komi – Inessive-Lative, Illative cases (Bubrikh 1955;
Kask 1966; Hjamjalajnen 1966; Laanest 1966; Adler 1966; Vajari 1966; Kert 1966; Feoktistov 1966; Kovedjaeva 1966; Tepljashina 1966; Lytkin 1966). In all north-western Khanty dialects, infinitive markers have similar etymology, that is a derivational affix /-t-/ followed by the Locative or Lative affix /-a/ or /-i/:

MiddleOb: *motti wer-ta mosl* ‘Something has got to be done’; Kazim: *xən voj pa xul katal-ti raxal?* ‘When game and fish can be produced?’; Shuriskar: *xot xuvat lari-ti pitas* ‘He started to spin around the house’; Obdor: *tam xatl velpsla-ta* ‘Today we are going hunting’ (Koskareva 1990).

As for the more adjacent Eastern Khanty dialects, the infinitive affix is universally /-ta/, most plausibly of Illative case nature.

\[
[X]{v, n, adj, adv} \rightarrow \alpha \\
\uparrow \infinitive\\n[[X] ta] V \rightarrow \text{event/action associated with } \alpha ,
\]

where:
\[
[X] \rightarrow \text{the stem, possibly with voice and/or aspect derivational affixes, but without tense, mood, person/number;}
\]
\[
{v, n, adj, adv} \rightarrow \text{the base stem could be verbal or nominal;}
\]
\[
\alpha \rightarrow \text{the meaning of the base stem;}
\]
\[
[[X] ta] V \rightarrow \text{the resultant infinitive form has the stem and formal infinitive marker.}
\]

Apart from regular Eastern Khanty infinitive marker /-ta/, there are also fairly rare occasions of the use of the affix /-tati/. These infrequent (under 5%) instances appear exclusively in the context of expression of the purpose of the matrix event, that is the /-tati/ infinitives always have the semantics of the adverbial of purpose. Incidentally, these infinitive forms serve as further evidence of the Lative etymology of the regular infinitive marker, by demonstrating their functional-
distribution similarity (Gulya 1966: 37), compare (132) vs. (133) against (134) vs. (135):

132. jöɣ juy-a mən-ɑs
   3SG tree-ILL go-PST2.3SG
   ‘(S)he went to the woods’

133. jöɣ juy-a-ti mən-ɑs
   3SG tree-ILL-/ti/ go-PST2.3SG
   ‘(S)he went to the woods’

134. mä onəltəɣəl-ta mən-l-əm
   1SG learn-INF go-PRS-1SG
   ‘I am going to study’

135. mä onəltəɣəl-ta-ti mən-l-əm
   1SG learn-INF-/ti/ go-PRS-1SG
   ‘I need to go to study’

The use of /-(a)ti/ brings in the sense of purposeful, targeted acting in the situation nearing the sense of necessity/obligation in both the Lative-inflected nominals and in the infinitives. This use of the /-ti/ affix with the infinitive is seen here as a “natural” evidence of the nominal nature of this verbal form and the Lative etymology of the formal marker of infinitive (Gulya 1966: 37).

8.4.1.1 /-nta/ Infinitives

Eastern Khanty, particularly the south-eastern-most Vasyugan Khanty is distinct from other Khanty dialects in the frequent use of the infinitive marker /-nta-/ instead of the cross-dialectally prevalent /-ta-/ (Ossipova and Shalamova 2000). It appears that the Vasyugan infinitive affix /-nta-/ is most probable in the derived verbal forms, particularly those that were derived from nominals with the affix /-t(ə)-/, compare (136 vs. 137):
136. ewli-m-tä ‘to smell up (something)’ ↔ ewäl ‘smell’

vs.

137. päm-tä-ntä ‘to steam (something)’ ↔ päm ‘heat’

There are a few counterexamples to this, i.e. where the use of denominal affix /-t-/ does not license the /-nta-/ infinitive marker, but instead the generic Khanty /-ta/ is used:

138. pun-ta-ta ‘to grow fur, feathers’ ↔ pun ‘fur, hair, feather’

139. qaŋtfä-ta-ta ‘to be many-colored’ ↔ qaŋtfä ‘motley, many-colored’

Such counterexamples, however, have extremely low frequency. The exact motivation for not using the /-nta/-Infinitive as in the prevailing majority of the cases is not entirely clear and will not be detailed here.

Also, the Aspectual (Aktionsart) affixes /-waɣt-/ , /-qat-/ and the voice affixes /-lt-/ , /-nt-/ , /-mt-/ , /-ɣt-/ co-occur with the /-nta/ infinitive marker, compare:

wer-wäɣt-äntä ‘to work a little/awhile’ vs. werta ‘to work/do’

ŋoqa-qat-anta ‘to start pecking’ vs. ŋoqta ‘to peck’

moŋli-nt-anta ‘to wrap oneself up’ vs. moŋlita ‘to wrap’

n’aŋra-lt-anta ‘to pull something’ vs. n’aŋrata ‘to pull oneself’

wotʃa-mt-anta ‘to brush/whisk up’ vs. wotʃta ‘to brush/whisk off’

qoro-ɣt-anta ‘to skin’ vs. qorta ‘to uncover/peel’

At the same time, the denominal/deverbal affixes /-m-/ , /-i-/ and the aspectual (Aktionsart) affixes /-ɣɔl-/ and /-il-/ do not trigger the use of the infinitive affix /-nta/, and instead, the regular affix /-ta/ is used. Compare (140a) and (141a) with /-ɣɔl-/ , /-il-/ vs. (140b), (141b) without:
140. a) n’ol-ɣs-ɣl-ta ‘to smack lips, to lick Refl’  vs.  b) n’ol-ɣs-ɑnta ‘to lick Refl’

141. a) täl-ɪl-tä ‘to smoke (occasionally)’  vs.  b) täl-kätä-ntä ‘to start smoking’

Above, in the (a) examples, the use of the affix /-ɣl-/ or /-il-/ cancels or prevents the use of the /-nta/ infinitive marker licensed by the affixes /-ɣs-/ and /-kət-/ in (b) examples. It should be noted that both these affixes add similar semantics of iterativity, durativity, repeatedness.

\[
\begin{align*}
V & \quad [\text{infinitive}] \\
[X \ -ta\ ] & \quad \rightarrow \quad [[X]\-nta] \\
\{ & \quad -\text{wayt-(-paγt-)} \\
\{ & \quad -\text{(o)qa(t)-} \\
\} & \quad -\text{mt-} \\
\} & \quad -\text{lt-, -nt-, -ɣs-, -ɣt-} \\
\text{quray-ta ‘to rumble in the guts’} & \rightarrow \quad \text{quray-wayt-anta ‘to rumble in the guts a bit’}
\end{align*}
\]

where:

\[
[X\{ \quad ] \quad - \text{is the stem of the verb with voice & aspect affixes}
\]

\[
[[X]-nta] \quad - \text{acquiring by the stem with these affixes of the infinitive affix -nta}
\]

8.4.2 Participles

Existing typological surveys of the Finno-Ugric languages observe the comparative diversity of the participial forms in these languages, which is interpreted as an indication of the fact of existence of the participial forms at a diachronic depth of the common Proto-Uralic languages (Serebrennikov 1964; 1967). These participial forms were analyzed with regard to the comparative frequency of the participial markers. The example of participial marker of higher frequency is /-m/, and due to its presence in most of the languages of the family it is hypothesized to have existed in its modern function at a stage as early as Proto-Uralic (Serebrennikov 1967). This marker is currently used productively and
consistently in many Finno-Ugric languages in the function of a perfective participle: Komi mun-om ‘the one who has left’, Udmurt myn-em ‘the one who has left’, Mari lud-mo ‘the one that has been read’, Mansi ala-m ‘the one who has been killed’, north Khanty man-em ‘the one who has gone’. Among the lower frequency nonfinite markers there is the marker /-t/ which is used consistently either in the function of infinitive (cf. 8.4.1/-ta/ – Infinitive) or imperfective participles (Serebrennikov 1964: 167-175; 1967: 211-217).

8.4.2.1 /-tə/- Participle

The so-called Eastern Khanty imperfective participles (Tereskin 1961; Gulya 1966) are used fairly frequently throughout the types of discourse.

142. a) ämp wräy-tə joy-pa, b) tom qor pəlk-a ur-s-əm
   dog pull-IMPP home-All1 that swamp side-ILL cross-PST2-1SG
   ‘The dog pulling home, I crossed to the other side of the swamp’

   Similarly to infinitives, these participles are typically used in complex clauses, where they are most frequently participial predicates of embedded dependent clauses with either adverbial semantics of time (143) or manner (142) to the event expressed by the finite matrix clause, or in the attributive semantics typically to one of the core arguments of the matrix clause, normally the Target role (Filtchenko 2000).

143. a) atʃiŋ məŋ-əɣən ərəŋ puŋl-a b) tit joy-nam jay-ləl kös-tə …
   brother go-PST0.3SG other village-ILL DET 3SG-RFL family-3SG find-IMPP
   c) tit wəl-m-əɣən
   there live-Mmnt-PST0.3SG
   ‘The elder brother left for the other village, there having found his family, he lived’
Co-reference with the matrix Agent argument is not mandatory, the Agent of
the participial clause may be independent of the matrix Agent (cf. 11.Complex
Clause):

144. qant-tə  pıt-tə  pənî  puyol-pa  āรก i  pərsyə  je-s-i
sick-IMPP  become-IMPP  and  village-All1  many  strange  become-PST2-PS.3SG
‘I am getting sick, and there are more and more strangers in the village’

The event-time of the participial clauses typically overlap with that of the
matrix predicate (143, 144). While the reference-time for the matrix predicate is
the speech-time, the reference-time for the participial predicate is rather the event-
time of the matrix predicate, to which it is typically in relation of simultaneity
(Fig.8):

![Fig.8. Eastern Khanty Imperfective Participle.](image)

The state-of-affairs coded by this participle consistently has the incomplete,
imperfective semantics, i.e. the expressed event does not yet reach its typical,
projected or otherwise completion. This marker is most likely etymologically
connected with the above-mentioned infinitive marker /-ta/ and thus the schema for
forming these participles may look similar:

\[
\begin{align*}
[X] \{v, n, \text{adj, adv}\} & - \alpha \\
\text{participle} & - \text{event/action associated with } \alpha, \\
[[X] tə/tə] v & - \text{the base without person-number, tense and mood;} \\
[X] & - \text{the base may be verbal, nominal, adverbal;} \\
\{v, n, \text{adv}\} & - \text{the meaning of the base;} \\
\alpha & - \text{the resultant imperfective participial form retains the base with added} \\
[[X] tə/tə] v & - \text{formal marker.}
\end{align*}
\]
The imperfectiveness of these participles, however, is more a prototypical feature, rather than mandatory (cf. 142). Naturally the output aspectual semantics of these forms is rather a result of the interaction of the inherent semantics of the lexical base, that of verbal derivational/aspectual affixes, and finally, the overall propositional meaning.

The nominal nature of these participle forms is manifested by the use of nominal inflectional categories, affixes of possession:

145. a) nuɣ kul’-ä mä-nä jul-äm lät-int-äs
   up get-Imper 1SG-LOC mouth get-burnt-Mmnt-PST2.3SG
   ‘Get up, my mouth has got dry…’

   b) äln-əwt-äki töyöt pöy-min il’-ä wer-tä-m səɣə
   morning-ATTR-PRD fire blow-CNV forward-ILL make-IMPP-1SG along
   ‘…blowing to make a fire every morning’

and case markers attaching to the stem after the participial marker:

146. poka jöɣ juy-ət-al-oɣ, rätʃ pült-əlm pərtay ləyt-int-əwəl
   while 3SG go-IMPP-3SG-PRL oldman hole-3SG-PRL through get-Cmpl-PRS.3SG
   ‘While she is leaving, the oldman gets through the hole inside there.’

In (146), the participle juy-ət ‘going/coming’ has the possessive affix of the 3SG, manifesting referential agreement with the preceding independent 3SG Agent argument of the participial clause jöɣ ‘(s)he’, which is followed by the Ablative2 (Prolative) case marker. This case may be taken as illustrative of the occasional redundancy in the Eastern Khanty system. In this complex clause, the imperfective /-tə/-participle (used typically to code an event simultaneous to that of the matrix clause) is inflected for Ablative(Prolative) case with the sense of ‘through, along’ (thus within a common space-time metaphorization adding to the sense of simultaneity), and finally the clause opens with the Russian adverb poka with the sense of ‘while’ (again specifying simultaneity).
This apparently redundant usage of case markers with the participial embedded clause predicates appears to contribute to the aspectual specifics of this predicate. The salient temporal specifics of the event expressed by this predicate in relation to the event expressed by the matrix predicate will be reviewed in more detail further below (cf. 11.Complex Clause).

Apart from Ablative, another case marker that even more frequently used with the /-tɔ/-participial predicates is the Locative:

147. a) əllə niŋ-əl-nə muxiyən joq ənət-ərəlt-əl-tə
   big woman-3SG-LOC how home Neg calm-Mltpl-IMPP
   ‘No matter how much the elder woman tried to calm the girls down,…’

b) niŋ-äli-kən wijna küm liyi-t-ən-n sər-gə-kən-pən
   woman-DIM-DU maliciously outside leave-IMPP-3DU-LOC make.noise.PST0.2DU
   ‘… the girls got outside and made noise’

While the first imperfective participle in the (a) part of (147), the embedded adverbial clause of manner/time, is uninfl ected for any of the nominal categories, the second of the two imperfective participles in the (b) part, liyi-t-ən-nə ‘leaving’ has the possessive 3Du inflection expressing the reference agreement with the 3Du Agent of the participial clause niŋālikən ‘2girls’ followed by the Locative case inflection /-nə/. The use of the Locative here is to be understood as temporally (and indeed spatially, i.e. ‘outside’) locating the event of the matrix clause ‘made noise’. The exact import of the Locative inflection on the participial predicate is to be seen as setting the local discourse stage for the event predicated by the matrix clause, resulting also in a certain aspectual specification of the event expressed by the participle predicate itself (cf. 11.Complex Clause).

The syntactic functions of these participial constructions are quite common typologically, with the most frequent being the adverbial clauses (142, 143, 144, 146, 147), and relative clauses (152, 148):
When the food had been cooked, fishermen (fish killing people) came.

Eastern Khanty also robustly uses imperfective participles to produce complex lexical units, in which a finite verb is nominalized into a component of a noun phrase:

149. weli li-tə wajəɣ
too  eat-IMPP animal
‘wolf (deer eating animal)’

150. öɣət wer-tə juy
do-IMPP tree
‘match (fire making stick)’

8.4.3 /-əm/ - Participle

The most frequent Eastern Khanty nonfinite verb form will be referred to as the perfective participle:

151. a) potʃk-äm trop-na pan-əm
gun-1SG buckshot-COM load-PP
‘My gun loaded with a buckshot, …’

b) aj pelk-a porom-s-im jal-s-əm jal-m-əm jal-m-əm
one side-ILL step-PST2-1SG/SG stand-PST2-1SG stand-PP-1SG stand-PP-1SG
‘… I moved away and stood there waiting and waiting’

These forms represent nonfinite verbs formed with the /-əm/ marker attached to the verbal stem at a position normally taken by the tense, mood, voice, person-number markers.

152. a) pötʃkä-li-m näl-ə pon-əm b) wiliɣ joɣ ju-s-əm
gun-DIM-1SG bullet-InstrO load-PP quietly home come-PST2-1SG
‘The gun loaded with a bullet I got home little by little’

Similarly to the nonfinite forms reviewed so far (8.4.1./-ta/ – Infinitive, 8.4.2.1/-tə/ - Participle), these participles are used in complex clauses as participial
predicates of embedded dependent clauses with either adverbial semantics of time (153a) or manner (151, 152) to the event expressed by the finite matrix clause, or in an attributive function, a relative clause typically but not exclusively modifying one of the core arguments of the matrix clause, most frequently the Agent (Filtchenko 2000).

153. a) őjpä qunta mä werəŋ wəl-m-am-na, 
    ‘Once when I was small,…’

   b) mən-kāl’-əm kəskän tel’-il’-tə wel-kāl-əm əllo sart
   go-PST1-1SG spoon_bait pull-Iter-IMPP kill-PST1-1SG  big pike
   ‘I went spoon-bait fishing and caught a big pike’

In the example above, the participle wəl-m-am-na ‘being’ has the 1SG inflection marker expressing agreement with the 1SG Agent argument of both, the embedded participial clause of time (a), and the finite matrix clause (b). Similarly to imperfective participle forms (cf. 8.4.2.1./-t/ - Participle), the possessive coreference with the matrix Agent argument is not mandatory, and the Agent of the participial clause may be independent of the Agent of the matrix (for more detail cf.11.Complex Clause):

154. qunti rātʃ t’i köl tiiy-m-al-na quj-ət l’isiy-min puyjal-ət
    when oldman DET word say-PP-3SG-LOC man-Pl laugh-CNV get.up-PST0.3Pl
    ‘When the old man said this, the young men got up laughing’

In (154), the 3SG Agent of the embedded participial clause is independent of the 3Pl Agent of the matrix clause. The participial clause is setting a temporal context for the matrix clause, having the function of the adverbial modifier of time. The Loc case marker on the participle following the possessive 3SG inflection confirms the nominal nature of it, establishing the temporal location for the event of the matrix clause.

With regard to the temporal plane, the event-time of these participial
constructions is typically preceding that of the matrix predicate as in (151a), (152), (154), i.e. while the reference-time for the matrix predicate is the speech-time, the reference-time for the participial predicate is rather the event-time of the matrix predicate, which it typically precedes (Fig.9a):

**Fig.9(a). Eastern Khanty Perfective Participle.**

![Diagram](image)

Reference-time = Matrix predicate event-time

The event coded by this participle consistently has completive, perfective aspectual semantics, i.e. the expressed event normally reaches its typical, projected completion. However, the perfectivity of these participial forms is more of a typical feature, frequently attested but not obligatory as in (155b) and (153a). Thus, the schema for the typical temporal relations expressed by these participial forms could be amended to accommodate both the relation of precedence and coincidence with that of the matrix clause (Fig.9b):

**Fig.9(b). Eastern Khanty Perfective Participle.**

![Diagram](image)

This \(-\omega m/\) marker is most likely of common Finno-Ugric etymology, as it is the most common participial marker in Finno-Ugric languages (Filtchenko 2000) (cf. 8.4.2.Participles). The schema for forming these participles may look similar:

\[
\begin{align*}
[X\{v, n, adj, adv\}] - a \\
\text{participle} \\
\text{[perfective]}
\end{align*}
\]
The temporal/aspectual semantics of these participles is the result of the interaction of the verbal base inherent semantics, the verbal derivational/aspectual affixes, and the overall propositional meaning encompassing the temporal/aspectual meaning of the matrix predicate. Thus, the event-time of embedded relative clause participial predicate, as kätl-om ‘holding’ in (155) below, may mean both, coincidence with the speech-time (a) and precedence (b) to the speech-time, depending on the temporal value of the matrix predicate ul- ‘I see’:

155. a) mä ul-l-om köt kätl-om soy
   1SG see-PRS-1SG hand hold-PP walking stick
   ‘I see the hand that holds the walking stick’

   b) mä ul-s-om köt kätl-om soy
   1SG see-PST2-1SG hand hold-PP walking stick
   ‘I saw the hand that held the walking stick’

The relation of the event-time of the matrix predicate to the reference speech-time defines the event-time of the participial predicate to the speech-time.

Apart from the prevalent use of the nominal inflectional categorial affixes of possession and case, the nominal nature of these participial forms is further manifested by their usage in the function of nominal predicates with respective derivational bound morpheme /-aki/ (cf. 4.1.Adjectives: 4.1.1.2.Syntactic Features) attaching after the participial marker:
In (156), clause (a) has the perfective participle *pon-am* ‘loaded’ with the nominal predicator affix */-aki*/ corresponding to its function of the nominal predicate in this clause. This marker and the function are typical of the Eastern Khanty attributive nominal modifiers, i.e. adjectives. The aspectual meaning of this participial predicate is clearly perfective, expressing the event preceding that of the main clause, as well as that of another participial predicate – (b). In (b), the participial predicate *jäľ-əm* ‘standing’ is inflected with 3SG possessive marker – *jäľ-m-äľ* – to make explicit reference to the Agent role of this clause, independent of both, the Agent of the preceding (a) and the subsequent (c). The event-time of the participial clause predicate in (b) precedes that of the matrix clause.

Here, the participial clause (156b) illustrates another phenomenon in the Eastern Khanty system that is close to redundancy in its essence, namely a reduplication of the whole predicate to express a durative, homogenous or repetitive event. The redundancy in this case is of a system-structural nature. As mentioned above (cf. 8.3.1.1.2.1.Voice and Aspectual Affixation), this durative, repetitive meaning could well be expressed by one (or more) of many of the aspectual affixes available in the system of Eastern Khanty, for example: *jäľ-yəl-əm* ‘standing (durative/repetitive)’. Instead, reduplication is employed, a fairly frequent formal tool in the narratives.
Apparently the stems used in the /-əm/-participial forms typically, though not exclusively, refer to the inherently bounded ones and serve to express the taxis relations, typically of precedence to the matrix event-time (157, 158):

157. jur-əm ämp uy-əl
   tie-PP dog bark-PRS.1SG
   ‘The tied dog is barking’

158. mas-kəl tun-ta wel-əm jorki wet’ länki i kä sas’-qən
   need-PST1.3SG sell-INF kill-PP ten five squirrel and two ermine-DU
   ‘She needed to sell the produced fifteen squirrels and two ermines’ (Kalinina1970:11)

The use of case markers with the perfective participles in (153a) and (154) is frequent, and similar to what was observed for the imperfective participles, manifests the nominal character of these forms, by the metaphorical use of the spatial case markers to temporally locate the event of the embedded participial clause with regard to the event-time of the matrix clause. This use of case inflections appears to further specify the salient internal temporal and/or actions type features of the event. That is, they contribute to the aspectual specifics of this predicate. The salient temporal specifics of the event expressed by this predicate are reviewed in the section on the Complex Clause below (cf. 11.Complex Clause).

Apart from the predictable Locative case in (153a) and (154), Ablative, is used:

159. rätʃ uwəytə-to qat tôyôt ji-m-əl-øy, ʧu jay entəw
    oldman see-PST0.3SG house fire eat-PP-3SG-PRL those people waist
    ‘…the oldman saw that while the house burned, those people…’

    wəlaka məy-ä i ɬ - mən-t
    up to earth-ILL down go-PST0.3Pl
    ‘… got under the ground up to the waists’

In (159), the embedded adverbial clause of time, the perfective participle ji-m-əl-øy ‘eating’ has the possessive 3SG inflection expressing the reference agreement with the independent 3SG Agent role of the participial clause tôyôt
‘fire’, followed by the Ablative/Prolative case inflection /-øy/. The Ablative here emphasizes temporal simultaneity that locates the event of the matrix clause at the discourse stage, and results in a certain durative but bounded aspectual specification of the event expressed by the participle predicate itself.

The syntactic functions of these participial constructions are quite predictable typologically, with the most frequent being the adverbials of time (153, 154, 146, 147), and manner (151a, 152a, 156b) (cf. 5.1.2.1. Subordinate clauses with adverbial semantics), and relative clauses (155, 157, 158), (cf. 4.2.2. Nominalizations):

160. put köyr-am pirnə qul wel-tə jə jə-yəs-ət
    pot cook-PP after fish kill-IMPP people come-PST3-3PL
    ‘When the food had been cooked, fishermen came’

As mentioned above for the imperfective participle (cf. 8.4.2.1./-tə/ -Participle.), Eastern Khanty also frequently uses perfective participles to produce complex lexical units, in which a finite verb is nominalized into a component of a noun phrase (cf. 4.2.2. Nominalizations):

161. tiy-am taɣi
    be born-PP place
    ‘place of birth (lit. the place of being born)’

162. lök-kən n’ula pit-əm taɣi
    track-DU together become-PP place
    ‘crossroads/juncture (lit. place of joining roads)’

8.4.4 /-min/ - Converb

Finally, the least frequent Eastern Khanty nonfinite verb form is the converb marked with the affix /-min/:

163. qat-a liŋa-min tawaj tuŋə qor əŋkər-tə-yalin
    house-ILL come-CNV let straight image look-TR-3DU
    ‘Entering the house, they started looking at everything’
These forms represent a nonfinite verb formed with the /-min/ marker attached to the verbal stem at the position normally taken by the tense, mood, voice, person-number markers: köynil-min ‘stammering’.

Most of the Finno-Ugric languages have at least some converb forms with the /-m/ markers, as for example, in Finish (Bubrikh 1955), where they are said to be derived from the action nominals in spatial case forms. In the north-western Khanty dialects, these converbs have the marker /-man/ (Cheremisina and Kovgan 1989). In Eastern Khanty, the converb marker /-min/ has the allophone /-min/ consistent with the observed vowel harmony variation (cf. (164 a) vs. (164b)):

164. a) män’tʃä-ylä-min     b) nawsa-ita-min
       hide-RPT-CNV      misfire-CAUS-CNV
       ‘hiding’          ‘misfiring’

There are also occasional examples in the north-eastern areas of the Eastern Khanty dialectal area, where this converb affix has the allophone marker /-møn/:

165. t’u tøyr-ali jis-møn küm-pä møn-øs
       DET hare-DIM cry-CNV outside-ILL go-PST2.3SG
       ‘The hare got out weeping’

As follows from (164) above, the converb base may contain a stem with voice (b) and aspectual (a) affixes. Thus, the schema for these converb forms may look as follows:

\[
\begin{align*}
[X]\{v, n, \text{adj, adv}\} - & \alpha \\
[\text{Converb}] \\
[[X] -\text{min}] v & - \text{the action/event associated with } \alpha \\
\text{where:} \\
[X] & - \text{the stem without the person-number, tense or mood markers;} \\
\{v, n, \text{adv}\} & - \text{the base-stem is likely verbal, but may be nominal or adverbial;} \\
\alpha & - \text{the meaning of the base-stem;} \\
[[X] -\text{min}] v & - \text{the resultant converbial form with the formal marker.}
\end{align*}
\]
As in the case of other Eastern Khanty nonfinite forms reviewed above (8.4.1./-\textipa{ta}/ – Infinitive and 8.4.2.1/-\textipa{tə}/ - Participles), these converb forms are used in complex clauses as subordinate predicates of the embedded nonfinite clauses with adverbial semantics of time (163) or manner (165) to the event coded by the finite matrix clause (Filtchenko 2000).

The event-time of the converbial clause is in the dominant majority of the cases in relation of simultaneity to the event-time of the matrix clause finite predicate:

166. mä əŋkäm pəl’ntsə-na tʃəqə qan-min əla-qal
1SG mother-1SG hospital-ILL very be.ill-CNV lie-PST1.3SG
‘My mother was lying very sick in the hospital’  (Kalinina 1970(1))

167. ivän-nə jil’-min tən-int-ita, jə at’e-kəl məlayəl mən-qin jəy-na
Ivan-LOC go-CNV know-PST0.3SG DET brother-3SG yesterday go-PST0.3Du home-LOC
‘Ivan went and learned that his two brothers went home’ (Kalinina 1970(4))

Rather than being able to express the various taxis temporal relations to the event-time of the matrix predicate, these converb forms are generally consistent in their simultaneity. However, due to a variation in the inherent boundedness of the event expressed by the base stem, and with the import of the voice-aspectual affixes possible with the verbal stem, the converbs may have an explicit expression of the internal temporal or manner nature of the event/action. Thus the converbs with the unbounded bases tend to express the incomplete, ongoing event:

168. aj-pä mä amis-kal’am kom-ən, l’iy-min jəy-ont-a
one-All1 1SG sit-PST1-1SG outside-LOC look-CNV forest-inside-ILL
‘Once, I was sitting outside looking into the forest’

169. ivän pət-min utamən-kəl’-wəl
Ivan hurry-CNV get_down-DUR-PRS.3SG
‘Ivan goes down to the shore in a hurry’  (Kalinina 1970)

170. töyi kútʃə-ə jol jol-min aməs-wəl
fire near-LOC shaman shamanise-CNV sit-PRS.3SG
‘Near the fire, there is a shaman sitting, practicing sorcery’  (Kalinina 1976)
And consequently, the converbs with the bounded bases express the completive aspect of the event:

171. a) *pot-min*  b) *qils-a*  c) *toyi wer-käl-män*
    
    *hurry-CNV  shelter-ILL  come-CNV  fire  do-PST1-3DU*
    
    ‘Having come back to the shelter in a hurry, we made a fire’

172. *n’ur-na*  *jar-min*  *kaj-s-øtan*
    
    *belt-COM  tie-CNV  leave-PST2-3PL*
    
    ‘They left him there tied by the belt’ (Kalinina 1970)

Incidentally, in (171), there are two converbial forms. In the first case (a), the converb *pot-min* ‘hurrying’ has the unbounded base producing a sense of an uncompleted event simultaneous with the matrix event-time. In the second case (b), the converb *jo-min* ‘coming’ has the bounded base and results in a sense of a completive event somewhat preceding that of the matrix event-time. Neither of the converbs have any voice-aspect affixation, being formally the verbal base followed by the converb marker /-min/.

Thus, with regard to temporal plane, the event-time of the converbial constructions typically coincides with that of the matrix predicate (165, 166, 168, 169, 170, 171(a)). However, due to the inherent boundedness of some of the base stems, a sense of precedence may result (163, 167, 171(b), 172) (Fig.10):

![Fig.10. Eastern Khanty Converbs.](image)

This feature of Eastern Khanty converbs is typologically prevalent. Nedjalkov (1990) observed their exemplification in the typical dependent taxis that expresses temporal relation towards the independent predicate. It is also noticeable that there
is a certain correlation between the voice/transitivity status and the aspectual status of the base stem. Thus, transitive stems are typically bounded and tend to express a degree of precedence of the verb event-time to the matrix event-time (172), whereas the unbounded stems are typically intransitive and tend to express simultaneity (168).

The negation with converbs is expressed by a simple juxtaposition of the negative particle *anta* to the negated clause constituent:

173. *tfulä-na ajämkitêm qji-t ânto koy nomëysal-min, noy wer-ät…*
   that-LOC young man-Pl Neg long think-CNV arrow make-PST0.3Pl
   ‘Then, the young men, not thinking long, made arrows…’ (Kalinina 1976)

In the majority of cases, the Agent of the embedded converbial clause is coreferential with the Agent of the matrix clause (163, 165, 166, 167, 168, 169, 170, 171, 172, 173). However, there are occasional, fairly rare examples with the converbial Agent referents independent of the Agent of the matrix clause.

174. *loqa-paj-a amös-min jis-min illä-nô woqî ju-wäl*
   garbage-pile-ILL sit-CNV cry-CNV time-LOC fox come-PRS.3SG
   ‘While he (hare) was sitting in the trash pile, weeping, there passed a fox’

In (174), both of the converbial constructions, *amös-min* ‘sitting’ and *jis-min* ‘weeping’ have the 3SG Agent argument ‘hare’ non-coreferential with the Agent argument *woqî* ‘fox’ of the matrix clause. This type of independent converbial clause is much less frequent, approximately 10% of all converbs.

Unlike participial forms reviewed above (cf. 8.4.2.Participles), Eastern Khanty converbs do not take nominal inflectional categories such as possessive or case markers. They are also never used as nominalized elements of complex lexical units. These features may be viewed as testifying to their nature as the least nominal of all Eastern Khanty nonfinite verb forms. The syntactic functions of
these converbial constructions are clearly consistently adverbial modification of time or manner.

8.4.5 Overview of the Eastern Khanty nonfinite verb forms

The main unifying principle that groups these forms into a single category is their opposition to the finite verb forms based on the following criteria. First, they are never marked for such verbal inflectional categories as tense (as described in 8.3.1.2.1.Tense), mood (as indicated in 8.3.1.2.2.Mood), voice (8.3.1.2.3.Voice), verbal person/number conjugations29 (8.3.1.2.4.Person-Number). In case of participles, they are frequently marked with the nominal bound morphology (case, possession), which correlates to their nominal syntactic behavior. Second, they are typically not used as a single matrix predicate, the head of the matrix verb phrase. Within the nonfinite clauses, whose heads these nonfinite forms are, there is a consistent decrease in canonical clause features, such as subjecthood properties of the Agent argument, deficiency in verbal features, and, on the contrary, increase in nominal, which generally correlates to the typical dependent status of these clauses in relation to their finite matrix predicates (cf. 11 Complex Clauses).

29 With the exception of possessive markers on participial forms, which, however, follows the nominal rather than verbal pattern (more detail cf. 8.4.2./-ta/ - participle, 8.4.3. /-em/ - participle).
9. NOUN PHRASE

The noun phrase in Eastern Khanty is a grammatical construct which prototypically has a noun (or a nominalization, or a proform co-referential with a noun) as the semantic and syntactic head. Optionally it has one or more modifiers to the head whose semantic role is either Agent or Target, or less prototypically of the predicate and adjuncts. Thus, the (1) below consists of a set of noun phrases (tom ǝllǝ kör qoy qat, flagnat ‘that big brick (oven stone) house with a flag’; joyn pelkanǝ ‘on the river bank’; kontoraiki ‘office’), each with a noun as a head (qat ‘house’, pelka ‘side/bank’, kontora ‘office’), modified in some cases by demonstratives (tom ‘DET’), adjectives (ǝllǝ ‘big’) and other nouns (kör qoy ‘brick’; flagnat ‘with a flag’; joyn ‘river’), and having a semantic roles and grammar both prototypical (Agent, Target) and more peripheral (Location, Predicate) for the class of noun.

1. NP[S]
   NP
   NP
   NP
   NP
   Dem Adj N[comp] N N N N
   tom ǝllǝ kör-qoy qat, flagnat, joyn pelka-nǝ kontora-iki
   DET big oven-stone house flag-LOC river side-LOC office-PRD
   ‘That big brick-house with a flag on the river bank is the office’
9.1 Heads and Modifiers

This chapter will focus primarily on the structural and functional features of the noun phrases with a proper noun as the head accompanied by a modifier. Noun phrases with names and proforms functioning typically as heads without modifiers are naturally present and frequent in Eastern Khanty, however, their features are typologically common and regular, and thus a general overview will suffice here. In their nature, proforms (pronouns) and names refer to some specific unique real world or context entities – tokens (Givon 2001), which explains their frequent use without modifiers. Lexical nouns, on the contrary, appear to refer more to kinds or classes of entities – types, which calls for often needed further specification, that is, modification serving to narrow the domain of reference (Givon 2001).

9.2 Types of Eastern Khanty modifiers

Eastern Khanty noun modifiers appear to demonstrate correlation to well established cross-linguistically valid types (Givon 2001; Shopen 1985; Comrie & Smith 1977), namely: Quantifiers, Determiners, Adjectival Phrases, modifying nouns, relative clauses, noun-complements (adverbial embedded clauses modifying nouns), postpositional phrases, which can be grouped based on their morphosyntactic features into bound modifiers, lexical word modifiers, phrase modifiers, and clause modifiers.

9.2.1 Bound modifiers

Among the Eastern Khanty bound modifiers, the following can be identified: number markers (cf. 2.1.2.2.1. Number.), case-markers (cf. 2.1.2.2.3. Case.), and determiners (Cf. 2.1.2.2.2. Possession and 3.1.3. Demonstrative Pronouns).

The functional scope of these bound modifiers may extend over lexical semantics, phrasal semantics, clausal semantics, and pragmatics. Thus number modifiers interact very closely with the noun’s lexical semantics. For example,
Dual and Plural mark prototypically two or more referents that are perceived as homogeneous or comparable instances of the same type of entity; and combinatorial options of the number bound modifiers may be affected by the innate and contextual semantic properties of some of the lexical units. That is, mass, group, and abstract nouns are not typical in Du or PL form. This close semantic interaction of the bound number modifiers with the noun stem is reflected, in an iconic manner, in the ordering of its inflectional affix, most proximal to the stem (Cf. 2.1.2.2.1. Number.). At the same time, at the phrasal and clausal level, the presence of the bound number modifier entails various functional combinatorial and agreement patterns. At the phrasal level, Du or PL bound modifiers on the noun in the noun phrase prototypically entail collocation with another modifier:

i) with a numeral (‘one’, ‘two’ or ‘3, 4, 5…’ respectively) (cf. 5. Numerals); or with a quantifier (‘each’, ‘any’, ‘another’, etc. in case of Sg; ‘both’ in case of Du; ‘many’, ‘few/a little’, ‘all’, etc. in case of PL):

2. a) aj aj ni
   one small woman
   ‘one girl (small woman)’

   b) kaʃnə qu
   every man
   ‘every man’

3. a) kät aj ni-qən
   two small woman-DU
   ‘two girls (small women)’

   b) kitte q′n-ja-qən
   both man-EP-DU
   ‘both men’

4. a) wet aj niŋ-ät
   five small woman-PL
   ‘five girls (small women)’

   b) är q′j-at
   many man-EP-PL
   ‘many men’

ii) with the possessive determiner (which displays the grammatical agreement pattern between the possessor and possessed based on the person and number of the possessor and number of possessed) – (cf. 2.1.2.2.2. Possession):

5. a) imp-əm
   ‘my dog’

   b) ämp-öγ
   ‘our dog’

   c) ämp-löγ
   ‘our dogs’
iii) occasionally with nominalizations such as rare relative clauses following the head noun and having formal relativizer (which often displays agreement in the number with the head noun) – (cf. 4.2.2. Nominalizations):

6. mä kolente-l-əm merəm muyuí jateswe-wəl aŋk-im
   1SG listen-PRS-1SG tale DET tell-PRS.3SG mother-1SG
   'I listen to the tale that is told by my mother'

7. mä kolente-l-əm merəm-qən muyulə-ɣən jateswe-wəl aŋk-im
   1SG listen-PRS-1SG tale-DU DET-DU tell-PRS.3SG mother-1SG
   'I listen to two tales told by my mother'

At the clausal level, bound number modifiers on the noun in the noun phrase mark a salient semantic property that is at the core of the obligatory grammatical agreement between the semantic role of Agent and Target, and the predicate. That is, verbal conjugation builds around the number and person status of the Agent referent. It should also be mentioned that in the semantic role of Target, the referent expressed by a noun phrase may bare the status generally describable as definiteness (pragmatic identifiability, accessibility, activation), which is marked, however, on the predicate rather than the noun phrase itself, i.e. by the presence or absence of the objective/definite verbal conjugation affixation (cf. Verbal Conjugation.; Simple Verbal Clause and Information Structure).

9.2.2 Lexical word-size modifiers

The typology of the word-size Eastern Khanty modifiers is fairly common, consisting of a quite prototypical set of members, including:

- Determiners

A host of Eastern Khanty lexical units could be generally identified functionally to form the type of modifiers typically referred to as determiners, including:

- deictic determiners such as ‘this’ and ‘that’:
8. tʃ’u sar-na mā-n qaṭʃ kəmlaytə-γal.
   DET pike-LOC 1SG-ACC almost turn-over-PST1.3SG
   ‘That pike almost got me out of the boat’

9. tim tɔy i ətɔm-āki
   DET place bad-PRD
   ‘This here is a bad place’

➢ indefinite determiner, such as ‘a’, ‘some’:

10. nu əj toɣ’oj-nə men- s- əw quł-kan-tʃa- tati illati
    OK one spring-LOC go- PST2-1PL fish-find-INF- Sup down
    ‘Once in spring..., in spring we went down to fish’

11. metali lok ənt-im
    some footprint Neg-PP
    ‘There's not a single footprint around’

➢ possessive determiners: ‘my’, ‘your’, etc.:

12. nu jɔmaki pɔtʃkän-ām pon-s-im mān-ām əmp-ām we-s-im
    OK well gun-1SG load-PST2-1SG 1SG-1SG dog-1SG take-PST2-1SG
    ‘Ok then, I got them guns loaded, took our 4 dogs’

13. wɔtʃqɔr-nə əmp-lən paqo əmp-ŋat njutwat-ɔγən
    outside- LOC dog- DU/SG other dog -COM fight-PST0.3SG
    ‘Outside, their dog got into a fight with some other dog’

   It can be seen that possessive marker can be of two kinds: a bound affix following the stem and marking the person-number of possessor (13); and a free preposed personal pronoun in the possessive form, as in (12).

These determiners do not collocate as modifiers of the same nominal head with a noun phrase, i.e. they appear to be in complementary distribution:

    OK one some spring-Loc go-PST2-1PL fish-find-INF-Sup down
    ‘Once in (a) spring..., in spring we went down to fish’

15. * tim metali tɔy i ətɔm-āki
    DET some place bad-PRD
    ‘This here is (some) bad place’
This can be seen as evidence of their belonging to the same functional type. Deictic determiners do occur modifying the nominal head also marked for possession; however, this possession is typically marked with a bound possessive modifier, rather than by a word-size independent one:

16.  tfi am-p-oe m-a-n poro-s
    DET dog-2SG 1SG-ACC bite-PST2.3SG
    ‘This dog of yours bit me’

17. * tfi no-oe am-p (oe) m-a-n poro-s
    DET 2SG dog (2SG) 1SG-ACC bite-PST2.3SG
    ‘This your dog bit me’

- Adjectives (cf. 4.1. Adjectives):

18. jal-s-im tfinam nayi am-p-al
    stand-PST2-1SG there white dog-DIM
    ‘I stood there, white dog is by my side’

19. ju- kali w-a-s-im
    stick small take-PST2-1SG/SG
    ‘I took a small stick’

- Juxtaposed, or compounding nouns (cf. 2.1.2.1.2. Compounding):

20. aj-qu war-t-ul k-en-tja m-an-wol
    small-man red-berry get-INF go-PRS-3SG
    ‘The boy (small man) is going to get cranberry’

21. kimlay pun k-a-s-im
    lynx hair find-PST2-1SG
    ‘(I) got myself some lynx hair’

22. ma ilka-s-im katjem-ta lok parom-ta
    1SG go-PST2-1SG hunt-INF track path_make-INF
    ‘I went breaking a hunting ski track’

- numerals (cf. 5. Numerals):

23. nu jomaki potskan-am pon-s-im wet am-p-am we-s-im
    OK well gun-1SG load-PST2-1SG four dog-1SG take-PST2-1SG
    ‘Ok then, I got them guns loaded, took my four dogs.

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24. t’u amós-l-ōm qa nǐŋ-q̱ōn mān-nā ju-s-γ̱ōn
DET sit-PRS-1SG two woman-DU ISG-LOC come-PST2-3DU
‘While I was sitting, two women came to me’

quantifiers (cf. 1.1.2.5.1.1.1. Quantifiers):

25. matkôm kōwa wēl-min-nō, puʃk-āl’i
some time live-CNV-LOC bird-DIM
ātōm ulōm werā - γ̱ōn,
bad dream do-PST0.3SG
‘They lived for some time, the little bird saw a bad dream…’

26. āl’ōŋ jāl’ōŋ - əkōta - t, kōlō n’ul wel’-øt.
in.morning fight-INCH-PST0.3PL all RCPR kill-PST0.3PL
‘They started fighting in the morning and all got each other killed.’

Functional scope of these modifiers ranges from just pragmatics in case of demonstratives; to lexical and phrasal semantics in case of compound nouns; to phrasal semantics and pragmatics in the case of adjectives, numerals, and quantifiers.

Neither demonstrative ((27a) vs. (b); cf. 3.1.3. Demonstrative Pronouns), nor adjectival modifiers including more typical gap relative clauses following the head ((28a) vs. (b); cf. 4. Attributive Nominal Modifiers), nor Noun complements ((29) vs. (30); cf. Nonfinite Verb Forms) display any grammatical agreement with the head:

27. a) tũ’u sart b) tũ’u sarta-γ̱ōn
DET pike DET pike-DU
‘That pike’ ‘Those two pikes’

28. a) araŋ pel’k-ōŋ qasi b) araŋ pel’k-ōŋ qasi-j-at / qu-j-at
‘stranger (strange side man)’ ‘strangers (strange side men)’

29. mā onaltayl-tø qat-pa mən-tāti øntø koj-l-ōm
1SG learn-IMPP house-All1 go-INF NEG want-PRS-1SG
‘I do not want to go to school (learning house)’
30. (werəŋ otət) onəltəŋəl-tə qat-ət-pa mən-tətə əntə koj-wəl-t
   (children) learn-IMPP house-PL-All1 go-INF NEG want-PRS-3PL
   ‘(Children (small things)) they do not want to go to schools (learning houses)’

9.2.3 Phrase-size modifiers

There are a number of Eastern Khanty nominal modifiers that formally exceed
the size of a single lexical word and have an internal structure of their own, similar
to that of the noun phrase, i.e. functionally categorized into head and modifier
elements.

9.2.3.1 Adjectival Phrases

As follows from the example (1) at the onset of this chapter, there can be more
than one attributive nominal modifier preceding the modified head noun. Also, this
attributive nominal modifier may in its turn be preceded by an adverbial intensifier
specifying more/less than normal salience of the attributed feature in an entity
expressed by the modified head nominal (cf. 4.1.Adjectives).

31. tom tʃəkə əllə wərtə kör-koy qat, joŋən pelkə-nə kontora-iki
   DET very big red oven-stone house river side-LOC office-PRD
   ‘That very big red brick-house with a flag on the river bank is the office’

Formally, the set of attributive modifiers preceding the head ‘house’ is to be
considered an Adj.Phrase, with a syntactic structure: (Adv) (Adj)n Adj, implying an
ordered syntax with an optional intensifier – (Adv) and more than one – (X)n
optional functionally kin constituents.

It should be noted that examples of noun phrases with multiple Adj modifiers
are scarce in the natural Eastern Khanty data. However, when these do occur, the
relative ordering of these attributive modifiers appears to generally fall within the
typologically common semantic-pragmatic relation pattern (Bybee 1985; Givon
2001). Namely, the more salient, central to the meaning, and inherent, and stable is
the feature, the closer to the head noun is the modifier that expresses it.
As stated in the section on attributive adnominal modifiers (cf.4.1.Adjectives), the differentiation of the Eastern Khanty nominal modifiers into Adjectives proper and Nouns functioning as nominal modifiers is not always clear cut. It was noted above (Cf. 4.2.1.Noun Juxtaposition), that Eastern Khanty noun modifiers are represented along a continuum from the most adjective-like derived noun-modifiers with denominalizer affixes at one end, to word-size juxtaposed nouns as modifiers, and further to fully fused modifying noun-constituents of noun-noun compounds sharing a single stress with the head at the other end of the continuum.

32. jøŋki toyi
   water place
   ‘Wet place’

33. kimlay pun kæ-s-im
    lynx hair find-PST2-1SG
    ‘What myself some lynx hair’

34. way put mej-a!
    iron kettle give-Imper.2SG
    ‘Give me the big (metal) kettle!’

These juxtaposed nouns as modifiers appear to express the most stable and salient features of the entity expressed by the modified head nominal, and thus take the syntactic slot closest to the head ((34) – above, and (35) here).

35. ëllæ sørni way trop
    big silver metal pellet
    ‘big silver pellet’

It is possible to consider these modifiers as part of the functional continuum of attributive nominal modifiers and thus a part of the phrase-size modifier type – Adj.Phrase.
9.2.4 Clause-size modifiers

9.2.4.1 Relative Clauses

The most typical representatives of the type of Eastern Khanty clause-size modifiers are Relative Clauses (Cf. 4.2.2. Nominalizations). Eastern Khanty relative clauses have syntactic and semantic features of a clause. They are typically preposed to the head (pre-nominal) and have a nonfinite participial predicate:

36. torəm-na  qurt-əm  ot-ət  pajl-əŋ  wajy-qa  jə-y-ət
   ‘Kids, scared in the skies, turned into birds’

The grammatical role of the relativized nominal is not marked, and the relativizers are typically absent.

However, as mentioned above (cf. 9.2.1. Bound modifiers), on rare occasions, there are non-prototypical relative clauses that follow the head noun, have formal relativizer and finite predicate:

37. jōy-a  qotin-ə-wəl  mā  təluŋ-l-əm  məyuli  pir-əy-wəl
   3SG-ILL  listen-TR-PRS.3SG  1SG  say-PRS-1SG  what  ask-PRS-3SG
   ‘She listens to my answers to what she asks’

38. mā  kolente-l-əm  merəm  məyuj  jateswe-wəl  āŋk-im
   1SG  listen-PRS-1SG  tale  DET  tell-PRS.3SG  mother-1SG
   ‘I listen to the tale that is told by my mother’

All Eastern Khanty relative clauses in the data, regardless of their pre- or post-nominal position are restrictive, in the sense that they narrow the domain of reference (Givon 2001), i.e. eliminating possible vagueness in the unique identification of the head nominal, even in cases where it may be semantically compatible with the referents in the proposition. Thus, the relative clauses in Eastern Khanty are functionally within the domain of definite determiners, marking their head as identifiable, active and accessible referents in the
interlocutors discourse universe (cf. Complex Clause: 11.2.3. Finite Relative Clauses). And thus, the functional scope of these modifiers is that of clausal semantics and pragmatics.

9.3 NP Constituency and Ordering

9.3.1 Ordering of Eastern Khanty modifiers:

As follows from the above typology of the nominal modifiers, and as it was already mentioned briefly in the chapter on nominal modifiers (cf. 4.1. Attributive Nominal Modifiers), and consistent with examples at the beginning of this chapter, there can be more than one attributive adnominal modifier in the noun phrase.

Morphosyntactically, the Eastern Khanty modifiers may be:

- Bound: number and case markers, possessive markers
- Free:
  - Word-size: Determiners, Quantifiers, Numerals, Adjectives, Nouns as modifiers
  - Phrase-size: Adjectival Phrases
  - Clause-size: Relative Clauses

- Pre-nominal: Determiners; Quantifiers; Numerals; Adjectives and Adjectival Phrases; Relative Clauses, Nouns as modifiers
- Post-nominal: Finite Relative Clauses with relativizers.

There is a fairly consistent hierarchical pattern of ordering of the modifiers and intensifiers within the larger Noun Phrase, which may be formally represented as:

NP: (Det) (Quant) (AdjP) (RelC) (N-mod) N (RelCI)

9.3.2 Joint event participation and Noun Phrase conjunction

There are occasional examples in the Eastern Khanty natural data of more than one NP in the clause having the same or comparable semantic role and
morphosyntactic coding. Thus, in the (39c)) below, both the SAP and the 3SG (girl) participated in a single event of talking with equal or comparable roles:

39. a) t’u am-s-l-əm qa niŋ-qən män-nəj ju-s-γən
   DET sit-PRS-1SG two woman-DU 1SG-LOC come-PST2-3DU
   ‘While I was sitting, two women came to me’

   b) aj aj ni män-nəj qit’-qas
   one small woman 1SG-LOC stay-PST3.3SG
   ‘One girl stayed here with me’

   c) min jöy-na aj kəl tələwə-γəs-in
   1Du 3SG-COM small word say-PST3-3DU
   ‘We talked to him for a while, the two of us’

Such joint event participation is differentiated from equal or comparable participation in similar or equal events, in which case each event is coded, respectively, by an individual proposition, even in cases of formally identical concepts:

40. nədə jətəbi qəsi tuti wəl-tə-l-əti
   “it is need that” man DET live-CAUS-INF/SUP
   ‘It was needed, so that humans lived there’

   jətop wajaŋ wəl-γ-əti qul wəl-γ-əti
   ‘so that animals lived there, fish as well’

Thus in (40), all three participants (‘humans’, ‘animals’ and ‘fish’) are coded as participating in separate events, presumably since ‘there’ can mean different individual domains for every one of the participants.

Joint participation may be coded in Eastern Khanty in two manners, by conjoined NPs in Dual number (41) and by the Comitative case on one of the NPs (cf. (39c) above) and (42) below):

41. a’l’wə-qən ən’i-sə-kən wəl-lə-qən
   Alvali-DU sister-COLL-DU live-PRS-3DU
   ‘There lived Alvali and his older sister’
Joint equal participation in the event may be expressed by the conjoined NPs in a variety of formal representations, which could be viewed along a formal continuum:

i) two compounding conjoined nouns with reduplicated Du number marking and Du Agent-predicate agreement pattern:

43. nin-kون - quq-qون toj-l-إ jإ pٰy-ال’i
woman-DU-man-DU have-PRS-3DU little boy-DIM
‘The husband and the wife had a son’

In these examples, both nouns bear the Du number affix, though they express a single referent of each kind, i.e. ‘one woman’ and ‘one man’, manifesting a kind of grammaticalized normalization of identical formal means of representing the most typical equal joint participation in the event. Compounding is a reflection of the high frequency collocational use of these lexical units, which also display some other features such as single stress:

44. kٰt im-qون-rأ’t-qون wإل-إ-qون
two old.woman-DU-old.man-DU live-PRS-3DU
‘Once, there lived an old man and an old woman’

ii) two independent (not compounding) conjoined nouns with reduplicated Du number marking and Du Agent-predicate agreement pattern:

45. il’ nowأ-na put’k-إ’i-kون jإن-إ’rإ’t-kون welإ-qون.
down old.days-LOC bird-DIM-DU mouse-DIM-DU live-PST0.3SG
‘In the old days there lived a little bird and a mouse’

iii) two independent conjoined nouns without number markers and with Du Agent-predicate agreement pattern:
iv) two, or more independent nouns not marked for number, with a formal conjunction and Du Agent-predicate agreement pattern:

46. pamə səɣəl’ jōmentʃ’əɣ sem ajka wəl-l-kən.
   grass tuft bird_cherry eye together live-PRS-DU
   ‘A tuft of grass and a wild cherry live together’

47. səwsiki i al’wə ajqə wəl-qən
   Syvsiki “and” Alva together live-PST0-3DU
   ‘Syvsiki and Alvali lived together’ (Kalinina 1970)

48. əj rāťʃ i kā niŋ-kən ajəɣ wəl-t
   one old man “and” two woman-DU together live-PRS.3PL
   ‘An oldman and two women lived together’

The predicate agreement inflection in all these examples is typically contingent upon the real number of the participants in the event, rather than number marking on them, and thus it is not sensitive to the extravagant (double) number marking of types (i) and (ii).

The double number marking appears to be restricted only to Du (there are no examples of double/multiple Pl markers) and to the contexts implying typical equal participants in a group of two – married couples or imitations of such (‘bird and mouse’ in (45)). As examples of the types (iii) and (iv) demonstrate, just co-habitation at a place or even household do not trigger the double Du number marking (neither ‘grass and berry’ seem to be a couple, nor are males ‘Syvsiki and Alvali’, or ‘oldman and two old women’).

As for the linear order of the conjoined nouns, at least to some extent it is a matter of cultural conventions. In some cases there is a more or less fossilized order, almost lexicalization of two conjoined NPs into a single complex one, or indeed a compound. Thus, in description of married couples it appears that females come before males: ‘woman and man’, ‘wife and husband’, ‘old lady and old man’, ‘grandma and grandpa’. Thus even though the ‘woman’ is initial in the first clause in the narrative (49), in the immediately subsequent (50), the ‘man/father’ is
the assertion part of the proposition, a sentence-focus type utterance, and the
‘woman/mother’ is still such, in the next:

49. nin-kən - quq-qən toj-l-ən āj pəγ - āl’i
woman-DU-man-DU have-PRS-3DU little boy-DIM
‘The husband and the wife had a son’ (Tereskin 1961)

50. əjpə aγ - al wont - a mənə - γən,
once father-3SG forest-ILL go-PST.3SG
ənk-āl pəγ-al-nə jəγ kitʃ-kən
mother-3SG son-3SG-LOC home stay-PST.3DU
‘Once father went into the forest, mother with her son stayed home’ (Kalinina 1970)

In (50), though the referent ‘man/father’ is the clause-initial Nom-marked
Agent (the position typically reserved for the topical referent), the referring
expression ‘father(his)’ appears to show that the overall discourse topical referent
is the ‘boy/son’. Further on, the narration is more about the boy, whose mother is
kidnapped by a mermaid and whose father is tricked. Moreover, the title of the
story is ‘The Boy’.

Generally, however, it appears that the pragmatic properties of the referents
have at least some relevance on the linear order of the conjoined NPs. In (51), the
‘old woman’ is the clause-initial Nom-marked Agent argument, and a part of the
presupposition in the subsequent clause sequence (52). Most of the narration to
follow is about the ‘oldman’ no less then the “old woman” (53), while the whole
story is titled “Oldman and his eyes”.

51. kāt im-qən-rāt’-qən wəl-lə-qən
two old.woman-DU-old.man-DU live-PRS-3DU
‘Once, there lived an old man and an old woman’

52. imi woro-pa jil-illə-wəl jəm-antʃəγ wan’-ti
old.woman forest-ILL go-MLTPL-PRS.3SG cherry-wild.rose gather-INF
‘Old woman goes into the woods, picks wild cherry and wild rose berries’

53. rāt’ qatəγ-lə-wəl qaγlo-ŋati
oldman goes-MLtpl-PRS.3SG sled-COM
‘Oldman just goes tobogganing’
In yet another example (54), the male ‘Alvali’ is initial in the conjoined NPs set. In the clause to follow (55), this referent, with the semantic role of Beneficiary (Addressee) marked by Illative case, is expressed by the 3SG personal pronoun rendering it more pragmatically prominent.

54. а'лв'а-qон âн'i-sа-kоn воl-lо-qоn  
   Alvali-DU sister-COLL-DU live-PRS-3DU  
   ‘There lived Alvali and his older sister’

55. оj-pа âн'i-l jоy-ä tolo-wоl'.  
   one-All1 sister-3SG 3SG-ILL say-PRS.3SG  
   ‘Once his sister says to him’ (Kalinina 1970)

In the narration to follow, both these referents are equally persistent anaphorically, however, ‘Alvali’, a recurrent character in the folk oral tradition, is more topical with most of the propositions being in relation of predication about him.

The correspondence of the initial position in the set of conjoined NPs to the high pragmatic status (cataphoric persistence) of the discourse referent is not a rigid one-to-one relation, but rather a tendency, which appears to be neglected in some cases:

56. пама саgоl jоmentj'аg sem аjка воl-l-kоn.  
   grass tuft wild_cherry eye together live-PRS-DU  
   ‘A tuft of grass and a wild cherry live together’

57. оjpa jоmentj'аg sem нuг kul’-аgоn  
   once wild.cherry eye upward get. up-PRS-3SG  
   ‘Once the berry got up’

58. тоgоt ilо wer-оkоt-аgоn.  
   fire forward make-INCH-PST0.3SG  
   ‘It started to make a fire’ (Tereskin 1961)

In the (56) above, though the ‘grass tuft’ is the initial NP in the conjoined set, the other one, ‘wild cherry’ is the topical Agent participant in the immediately subsequent discourse (57-58). And further on in the narration, they equally share
the stage.

Similarly, in the first clause in the narrative (59) below, ‘Syvsiki’, being the initial NP in the conjoined NP set, shares the overall topicality with another referent ‘Alvali’, and the rest of the narrative asserts new information about both of them to comparable extent.

59. səwəsiki i al’wə əjqə wəl-qən
    Syvsiki “and” Alva together live-PST0-3DU
    ‘Syvsiki and Alvali lived together’

60. əjpä in qul-kən-tʃə mən-kən.
    once 3DU fish get-INF go-PST0.3DU ‘Once they went fishing’

61. jəy jə-min-nə, qul pəntʃaltə-kən, sart poqə səwsiki jəy-nəm-ə wə-tə
    home go-CNV-LOC fish boil-PST0-3DU pike guts Syvsiki home-RFL-ILL take-3SG
    ‘When they got back home, they boiled fish, Syvsiki kept the pike's guts’

62. səwsiki küm mən-m-əl, pirmə al’wi-nə sart poqə iy-tə, jəy-nəm kənlimtə-ɣən
    Syvsiki out go-PP-3SG after Alvali-LOC pike guts eat-IMPP 3SG-RFL hide-PST0.3SG
    ‘When Syvsiki left the house, Alva ate the pike's guts and hid from Syvsiki’

It is nevertheless a fairly persistent pattern in Eastern Khanty, for the initial NP in the conjoined NP set to correspond to the referent that is pragmatically more prominent in the subsequent discourse. Thus the referent ‘oldman’ is initial in the conjoined set in (63), and is also a more prominent agentive referent in the whole discourse, making decisions and affecting the events:

63. əj rətf i kā niŋ - kən əjəy wəl- t.
    one old man “and” two woman-DU together live-PRS.3PL
    ‘An oldman and two women lived together’

64. əjpä ittın amis-m-əl-nə əmp uyäńt-əkətə-ɣən.
    once in.evening sit-PP-3SG-LOC dog bark-INCH-PST0.3SG
    ‘Once in the evening they were sitting and a dog started to bark’

65. rətf əj niŋ- l-ā tölöy-wəl.
    oldman one woman-3SG-ILL say-PRS.3SG
    ‘The old man says to one woman’ (Kalinina 1970)
In the last type (iv), the NPs are formally connected by a free conjunction morpheme ɬ, a Russian loan ‘and’. Although there is a native conjunction ɬanə with similar semantics, the Russian loan is almost exclusive in this function of conjoining NPs as well as clauses (cf. 11.Complex Clause) in Eastern Khanty.30

66. səwsiki i al’wə əjqə wəl-qən
   Syvsiki “and” Alva together live-PST0-3DU
   ‘Syvsiki and Alvali lived together’

67. əj rätʃ i kä nɨŋ-kən əjəɣ wəl- t.
   one old man “and” two woman-DU together live-PRS.3PL
   ‘An oldman and two women lived together’ (Tereskin 1961)

The linear ordering pattern discussed above applies to formally conjoined (with the conjunction morpheme) NPs equally well, i.e., the more pragmatically prominent discourse referent tends to be initial in the conjoined NPs set.

Apart from conjoined NPs of the above four types (i-iv), there is also another type of coding co-participation in the event – the Comitative marking of the second referent.

68. a) tʃ’u kəsi-nə appa-kəl əŋkə-kəl ən’äm-kən,
   DET man-LOC father-3SG/DU mother-3SG/DU get.old-PST0.3DU
   ‘That man’s father and mother got old,…’

 b) körɵy-na(t) əjka wəl-im-kən,
   DET eagle-COM together live-Mmnt-PST0.3DU hunt-IMPP go-INCH-PST0.3DU
   ‘…and they started to live together with the eagle, they went hunting together’

In (68a), conjoined NPs ‘father and mother’ of the above type (ii) with double Du number marking on both NPs trigger 3Du agreement on the predicate ‘get old’, in compliance with the established pattern. In the subsequent (68b), these referents are topical and expressed predictably by elision, whereas the referent ‘eagle’ is expressed respectively by a full NP marked for Comitative case. At the same time, the agreement on the predicates ‘live’ and ‘go hunting’ remains 3Du, i.e. with the

30 Among the Eastern Khanty, the native conjunction ‘panə’ is still used productively in Yugan Khanty.
topical elided NPs ‘father (and) mother’, which testifies to the status of the Com-marked NP in this clause as an adjunct of a locative or similar nature, rather than a core participant.

Similarly, in (69), the proform NP ‘we’ is in the Nom-marked Target role controlling the 3Du agreement on the passive predicate ‘were taken’, whereas, the co-present Com-marked NP ‘with my younger brother’ is more of a specification-type adjunct in this clause.

69. min lel-em-nat jaqqel-am-nød internat-i nok
   1DU brother-1SG-COM parents-1PL-LOC school-ELA up
   ‘My younger brother and I were taken by our parents from the boarding school…’

   wej-ojmøn kanikul-nam
   take-PS.1DU holidays-All2
   ‘…for holidays’

The Com-marked referent co-present in the event always follows the core unmarked NP, and it is very unlikely to bear high pragmatic prominence in the discourse, normally manifesting a referent typically high on agentivity, co-present or co-participating in the event in a role comparable to that of the primary topical referent, typically an SAP, but not to an equal extent sharing the focus of attention. This is less so in cases like (69) above, where most of the prior narration was about the ‘eagle’ and a ‘man’ equally, or at least sharing the status of discourse center, and only in this closing complex clause, the ‘eagle’ appears as an adjunct with the ‘man’s father and mother’, by being expressed by the full NP ‘eagle’. Perhaps, (69) represents a local micro-context topic-shift, where a new referent ‘father and mother’ briefly takes on topicality, being expressed by elision and the predicate agreement inflection.

Overall, the abovementioned formal features on conjoined NPs appear to correlate with general typological principles (Haiman 1985; Givon 1991) that single multiparticipant events tend to be coded by single clauses with conjoined
Agent or Target arguments, whereas separate events are coded by separate (possibly conjoined) clauses (Givon 2001). At the same time, it is true in Eastern Khanty that a Com-marked conjoined NP more often marks a referent that is in some way deficient as compared to the primary unmarked referent, and is not fully equal in inherent capacity to act equally in the event. It is lower on the animacy and/or agentivity hierarchy (inanimate-animate, animal-human, children-adults).

It is a well attested typological universal for inter-NP (or prefixed to second NP) conjoining morphemes to be typical for the VO languages and for post NP-set (or suffixed to second NP) conjoining morphemes to be typical for the VO languages (Givon 2001). Eastern Khanty, however, appears to be an OV language, in which the functional domain of the native bound conjoining morpheme (Com) is restricted to expression of the unequal participation of either similar or, often dissimilar referents, whereas the functional domain of the loan free prefixed conjoining morpheme (‘and’) is primarily to express more equal single-event participation by similar referents. Admittedly, the OV Eastern Khanty has a fairly extended history of areal contact with a VO Russian, and some Turkic languages, and the very conjunction ‘and’ is a Russian loan.

9.4 Noun Phrases Produced by Nominalization

Eastern Khanty makes a robust use of nominalizations (nonfinite clauses) in nominal functions. Nominalization is understood as a grammatical process by which a final verb clause is converted into a noun phrase via reduction in the degree of finiteness. As it was stated above, Eastern Khanty nominalizations may take on a variety of nominal functions within another matrix clause (cf. 4.2.2. Nominalizations).

70. pöftkäli-m näl-ə pon-səm wiliŋ joŋ ju-səm (pon-səm)
gun-1SG bullet-InstrO load-PP quietly home come-PST2-1SG (load-PST2-1SG)
‘The gun is loaded with a bullet, I got home little by little’ (‘I loaded’)
71. **t’su pirnə liləŋ jāy kal-am jay-na(t) pítʃa wer-καʔ-yal (kal-yal)**
   DET after alive people die-PP people-COM hello do-INCH-3Pl (die-PST3.3SG)
   ‘After that, alive people and the **dead** people started to say hello’
   (‘They died’)

72. **n’in’-t’e qotəl wāl-yal (n’in’-yal)**
   rest-IMPP day be-PST3.3SG (rest-PST3.3SG)
   ‘It was a day of **rest**’ (Tereskin 1961)
   (‘she rests’)

73. **to’yu wer-ta mas-wəl**
   fire do-INF need-PRS.3SG (do-PRS.3SG)
   ‘We need to make a fire’
   (‘she does’)

74. **wel’-ta jəm-aki**
   live-INF good-PRD
   ‘Life is good (To live is good)’

75. **t’u tiγr-ali jis-man küm-pā mən-əs (jis)**
   DET hare-DIM cry-CNV outside-ILL go-PST2.3SG (cry-PST2.3SG)
   ‘The hare got out weeping’
   (‘she cried’)

76. **kör pöγ-m-al, pöγ-m-al, tōγa wəʕʃ-int-yən (pöγ-ʔən)**
   oven blow-PP-3SG blow-PP-3SG fire light-Mmmt-PST0.3SG (blow-PST0.3SG)
   ‘Him blowing and blowing in the oven, the fire started’
   (‘he blew’)

77. **poka luγ lüy-ʕt-ʕal-ōy rāt’ pült-ʕal-ōy**
   ‘while’ 3SG walk.out-IMPP-3SG-PRL oldman whole-3SG-PRL
   pərtay laγtəmɑ-wəl (lüy-wəl)
   back get.out-PRS.3SG (walk.out-PRS.3SG)
   ‘While she was walking out, the oldman got out the whole’
   (‘she walked out’)

78. **mä əkem wāl-m-am-ne kan’-yal -em (wāl-yal-em)**
   1SG little be-PP-1SG-LOC be.ill-PST3-1SG (be-PST3-1SG)
   ‘When (being) little, I had been ill’ (Gulya 1966)
   (‘I was’)

Comparing the underlined nominalized forms (70-78) with their finite counterparts, we see that consistent with general typological observations (Hopper & Thompson 1984), Eastern Khanty nominalizations could be best described as the “syntactic adjustment from the finite verb-clause prototype to the nominal prototype”, in that the prototypically finite verb loses its TAM morphology, becoming a head noun and acquires respective nominalizing morphology (PP,
IMPP, INF, Conv), and determiners (possessive and case markers). Thus, by losing the grammatical feature of finiteness, nominalized forms acquire the nominal feature of nonfiniteness (Givon 2001). All Eastern Khanty nominalization forms could be placed along a continuum with regard to the presence or absence of finiteness/nonfiniteness aggregate features. Thus, at the more finite, i.e. verbal end, there are participial constructions (70) that appear to have such aspectual semantics assigned to them, as imperfectiveness/activeness in the semantics of the /-tə/ participles, and perfectiveness/passiveness in the semantics of the /-əm/ participles. Yet the less finite /-ta/ infinitives (73-74) which display even fewer verbal features and more nominative functional ones, are followed by the nominalized verbal form of /-min/ converb (75). Finally, at the nonfiniteness nominal end there are participial constructions like (76) with bound possessive determiner markers, and, perhaps, at the nonfiniteness extreme, there are the most nominalized participial forms like (77, 78) with bound possessive determiners and case markers.

Judging by the wide formal variety and frequent use of the nominalizations, Eastern Khanty appears fairly close to extreme nominalizing (embedding) languages like Turkic (Anderson 1998; 2002) and Carib (Gildea 1998), where all subordinate clauses are in one way or the other nominalized (except for the extremely infrequent post-nominal finite relative clauses with formal relativizer (Cf. 9.2.4.1.Relative Clauses)). Among the signs of clause nominalization, are formal nominalization markers: INF, PP, IMPP, Conv; object or adjunct case-marking of the whole clause. Occasionally, there is an adjunct case-marking of the Agent of the nominalization clause.

The most frequent nominal functions of nominalized clauses are:

- attributive nominal modifier: (70, 71);
- adverbial of manner and time: (75, 76, 77, 78);
- Target argument of the matrix clause (73);
- Agent argument of the matrix clause (72, 74).

Thus it is indeed reasonable to posit that such languages as Eastern Khanty, like other often quoted extreme nominalizing languages (Ute, Chuave, Quechuan), have rigidly fixed preposed nominalizations, frequent case and possessive determiner markers of the embedded nonfinite clause, explicit formal nominalization markers, subordinate clauses that are grammaticalized to the extreme (Givon 2001). The only finite distinction present in nominalizations in Eastern Khanty is that of simultaneity vs. sequentiality, and even then not straightforward and contingent on transitivity, lexical semantics and exact individual sentential context (cf. for more detail 11.Complex Clauses).
10. SIMPLE VERBAL CLAUSES & ARGUMENT STRUCTURE

10.1 Semantic Features and Grammatical Relations

The Eastern Khanty simple, declarative, affirmative, active-direct clause will be viewed here as a typologically relevant reference point for the description of the Eastern Khanty syntax. Similar to any other description, at the core of this one is a description of the most typical predicates and semantic groupings which define the semantic typology of the clauses. The most frequent types of verbal predicates will be reviewed with reference to the number and kinds of semantic roles and grammatical forms in typically coded states-of-affairs. Thus, the description will center around typical semantic structure and the morphosyntactic features of the clauses coding them.

Typical Eastern Khanty states-of-affairs coded by the simple verbal clauses can be differentiated into States, Events and Actions. States are understood as propositions typically signifying no change over time, either of a limited duration or permanent (1):

1. mä tem puŋol-na jöŋ al ᱫl-s-ꈮ
   1SG DET village-LOC 10 year live-PST2-1SG
   ‘I was (resided) in this village for 10 years’

   The verb most frequently used in this type of clause in the function of the predicate is ᱫl- with the sense ‘live, exist, be’, which can be considered a prototypical predicate.

   Events typically express a change over time, usually from the initial state to another, either bounded – from a distinct initial state to a distinct terminal state, or unbounded – a process without emphasized event boundaries (2):
2. pült öl-äɣ jɔɣ-äɣi.
   hole big-TRNSL become-PST0.3SG
   'The the hole got big'

The Event is characterized by the absence of evident volition and control (2) and (5)) and the most prototypical verbal predicate for this type of clause is jɔɣ- ‘become’.

The Action proposition expresses a state-of-affairs typically initiated by a volitional, controlling, active agent. Based on the analysis of the available corpus of Eastern Khanty clauses, it is evident that Action is the most frequent semantic type of the proposition (90-92%), while Events and States account for 4-5% of clauses each (3):

3. mä n’an’ wer-s-ǝm
   1SG bread make-PST2-1SG
   'I baked bread'

The verb that can be considered the prototypical Action predicate for this type of clause is wer- ‘do/make’.

10.1.1.1 Semantic Roles

The semantic classification of proposition is based, naturally, on the type of the verbal predicate, which is defined by the number and typical semantic roles of its main participants. It should be born in mind that a definition of this sort is subject to basic limits, such as potentially infinite specification of possible semantic roles and a consequent rational need for prioritizing for description purposes of the major prototypical roles over minor cases (Givon, 2001: 106). With regard to their essential relevance for coding the Eastern Khanty state-of-affairs, semantic roles can be grouped into larger classes of the “core” and “peripheral”. The core semantic roles will include the entities that act either volitionally or not in the state-of-affairs, or are undergoing a change, and are of key importance for the
state-of-affairs conceptualization, i.e. Agent and Target. The peripheral roles are those that are either animate participants who are in some way less relevant in the state-of-affairs, or inanimate participants used for performing an Action, or are referred to for spatial/temporal orientation of the State/Event/Action, and those for whose benefit the state-of-affairs occurs, i.e. Associative, Instrumental, Locative, and Benefactive. The important principle in differentiating the roles into core and peripheral will be the extent of their significance for the morphosyntactic make up of the proposition, or the extent of their grammatical consequences (Givon, 2001: 107). As it will be shown below, this mapping is the subject to change in voice manipulations.

Eastern Khanty semantic roles of referents of proposition could be differentiated in the cross-linguistically relevant manner in accordance with their formal differentiation by the system’s morphosyntactic inventory as follows:

- **Agent** – an animate participant in the State; or acting volitionally initiating the Action and being of key importance and responsibility for its successful/desired completion (mä ‘I’ in (1, 3, 4), ènkäl ‘mother’ in (7)):

4. mä quł ter-l-öm iwäs-nä, tüyü-nä
   1SG fish fry-PRS-1SG stick-COM fire-COM
   ‘I fried fish on skewers on the fire’

This may also be an animate participant in the Event, who is not, however, its volitional and controlling initiator, but rather its experiencer (ämp ‘dog’ in (5)):

5. ämp loyo-na kaya-s
   dog bone-COM choke-PST2.3SG
   ‘A dog choked on a bone’

- **Target** – either animate or inanimate participant in the Action, being in the situation, or registering the change of state as a result of an Action (kalw ‘net’ in (3), quł ‘fish’ in (4) and pötfkänäm ‘my gun’ in (6)):
6. pōt[kăn-äm ənto pon-am-aki  
gun-1SG Neg load-PP-PRD  
‘My gun is not loaded’

- **Associative** – typically an animate participant, whose role can be likened to that of the core participants (Agent, Target), but who is in some way less relevant in the State/Event/Action (öyəlnä ‘with her daughter’ in (7) or watley ‘without wind’ in (8)):

7. ənk-äl öy-əl-nä əwlältə-wəl  
mother-3SG daughter-3SG-COM hug-PRS.3SG  
‘Mother is hugging with her daughter’

8. etər, wat-ləy qotəl wəl-yəl  
bright wind-ABES day be-PST1.3SG  
‘It was a bright and calm (windless) day’ (Gulya 1966: 135)

- **Instrument** – typically inanimate participant in the Action, that is used by the Agent for performing the Action (tüyünä ‘on the fire’ in (4), and loyona ‘on a bone’ in (5)) (iwäsnä ‘on skewers’ in (4));

- **Locative** – typically an inanimate (less frequently animate) landmark, for typically spatial (less frequently temporal) orientation of the State/Event/Action (puyolnə ‘in the village’ in (1), juyisəppə ‘across the river’ in (3), in mänöy ‘from me’ (9)):

9. män-o>y qoqqə-pə āl män-ä  
1SG-PRL far-All1 Neg go-Imper.2SG  
“Don’t go far away from me”

Also an animate participant towards whom an entity is transferred, a recipient, or a participant for whose benefit the State/Event/Action occurs (wereŋ otama ‘for my child’ in (10), and kofkaka ‘for the cat’ in (11), nōŋə ‘you’ in (12)):
10. mä wöl-l-öm tol’ka män-äm weren ot-am-a
   1SG live-PRS-1SG only 1SG-1SG small thing-1SG-ILL
   ‘I am living only for my child’s sake’

11. mä koʃka-ka moloka naŋalta-yas-əm
   1SG cat-ILL milk pour-PST3-1SG
   ‘I poured some milk for the cat’

- **Manipulee-Instrument** – typically an inanimate participant in the Action, that undergoes manipulation, most often transfer by the agent to another animate participant (*woqitɔ* ‘a fox’ in (12)):

12. min nöŋ-ä woqi-tə məj-əl-l-əmən
   1DU 2SG-ILL fox-InstrO give-DUR-PRS-1DU
   ‘We (2) give you a fox’ (Gulya 1966: 56)

   Occasionally, a certain alteration in the affiliation of the semantic roles with the semantic core or periphery occurs, when, for example the referent with the semantic role of Agent appears to shift towards the periphery, while the referent with the semantic role of Locative/Beneficiary appears to shift towards the core of the proposition, as in (13), where the Target referent appears clause-initially, unmarked for case and controlling the 3Pl verbal predicate agreement, while the Agent appears marked similar to Locative:

13. pəŋ-ali-t oŋ-il-na joy-1-ə wer-o\n    son-DIM-PL father-3SG-LOC bow-3SG-InstrO make-PST0.PS.3PL
    ‘The father made a bow for his sons’

   The Agent referent may be altogether omitted as irrelevant or predictable, thus shifting ultimately away from the semantic core of the proposition towards periphery, such as in (14), where in the passive clause with motion verb predicate, the oblique Locative semantic role appears to approach the semantic core somewhat similar to the Target, whereas the Agent is elided.
Finally, the Target may be found to be elided from explicit coding being expressed overtly only by verbal predicate agreement inflection, as in (15), where Agent appears marked formally as an oblique, i.e. by Loc. case, thus testifying to its certain demotion from the core of the proposition towards the periphery, while the Target is elided as more topical.

Thus, it can be seen from the last set of examples (13-15), that in certain propositional frames such as passive or the so called Loc-Agent constructions (cf. further below 10.3. Non-canonical Constructions), the affiliation of semantic roles to the core or periphery, particularly with regard to their formal morphosyntactic features, may change. These alterations in the affiliation of the semantic roles with the core or periphery grammar will be generally referred to as voice manipulations, and will be discussed in more detail below.

10.1.1.2 Core Semantic Roles and Their Grammar

10.1.1.2.1 Coding of the core Roles and Agreement (Argument Structure)

In this description, the morphosyntactic coding of the semantic roles in Eastern Khanty simple verbal clause will be taken to manifest their grammatical functions, signaling the affiliation of the semantic roles either with the state’s-of-affairs semantic core or periphery.

The semantic roles and their grammatical functions can be distinguished in Eastern Khanty by the available morphosyntactic markers, including word order, case marking and verbal co-referential predicate agreement inflections (16):
The cases essential for distinguishing the semantic roles are Nom(Ø), Acc(Ø-for nouns and /-t/-marked for pronouns), Loc, InstrObj, InstrCom, ILL (cf. 2.1.2.2.3.Case).

In the active transitive Action clause (16), the referent with the semantic role of Agent typically appears clause-initially (SOV), expressed by the argument in the Nom. case, that controls co-referential Agent-predicate agreement (arrow in (16) between the verb and the clause initial 1SG Agent argument). The referent with the semantic role of Target, usually expressed by a nominal argument in the Acc. case, appears in pre-V position and follows the Nom-Agent argument (SOV). The Target argument may control agreement inflection on the predicate (arrows in (16) between the verb and the Acc-Target argument ‘my dog’). Co-referential Agent-predicate agreement inflection is frequently the only formal expression of the Nom-Agent argument, in cases when this referent is situationally or textually accessible.

The agreement is obligatory between the Nom-Agent and the predicate while the agreement between the Acc-Target and transitive predicate is contingent upon the pragmatic properties of the Acc-Target referent. More precisely, transitive verbs, while always agreeing with the Nom-Agent argument, may also have agreement with the Acc-Target argument as in (16), expressing pragmatic identifiability, accessibility and high degree of activation of this referent in the

31 So called object conjugation marking the person-number of the Agent (1SG) and the number of Target (SG).
32 The Accusative case in Eastern Khanty nouns is zero-marked, i.e. morphologically indistinguishable from the Nominative. Pronouns, however, have what is referred to the Acc. marker /-t/:
interlocutors' discourse universe. Contextually, it would imply that this referent was recently mentioned, discussed or is unambiguous in the situation (cognitively available to interlocutors). Absence of the agreement between the predicate and the Acc-Target argument manifests pragmatic unidentifiability, inactiveness of this referent indicating that it is unavailable to interlocutors, either from context, or from the situation. This is evident from the pragmatic context of such a clause, where a new or unidentifiable referent is introduced into the discourse expressed by an Acc-Target argument in the part of the proposition that asserts new information. Thus, for example (17) will be unacceptable in the pragmatic sense of a Comment asserting new information and containing a brand-new Target referent. The Acc-Target argument codes here an identifiable, accessible discourse referent with relatively high degree of pragmatic activation, such as the discourse-active Target referent coded by a noun in the Acc. (18):

17. mä sart wel- s- im
   1SG pike kill- PST2-1SG/SG
   'I caught *a pike-fish', but rather 'I caught the pike-fish'.

   Syvsiki-LOC Alva search-INCH-PP-3SG-LOC find-3SG/SG house head-ILL
   'Syvsiki went looking for Alva, and found him on the roof of the house'

In case of marked Target-predicate agreement, the Agent agreement markers and the Target agreement markers form a set of portmanteau morphemes – distinct from the Agent-predicate agreement paradigmatic set (cf.: Verb: 8.3.1.2.4.Person-Number), and hence is the reference to the so called Khanty Subjective (Indefinite) and Objective (Definite) conjugations (cf. Verb: 8.3.1.2.4.2.Objective Conjugation) (cf. also Tereshkin 1961; Gulya 1966).

In the Finno-Ugric literature, the most frequently cited property of the Target (also referred to in sources as Object) that is essential in co-occurring with the agreement on the predicate is definiteness and specificity, which is commonly
understood as having to do with the formal grammatical properties of this argument such as possessive constructions, pronouns, constructions with demonstratives, embedded clauses, elided/zero objects (Tereshkin 1961; Gulya 1970; Honti 1984; Nikolaeva 1999; among others). However, while these properties are indeed typical of the Target arguments that co-occur with the Target-predicate agreement in Eastern Khanty, they do not always trigger such agreement. Numerous examples are attested where Acc-Target arguments with the above “definiteness” properties need not co-occur with the Target-predicate agreement, as for example, the definite, specific (preceded by demonstratives) and possession-marked Acc-Targets (19-20):

19. mä tfu qul wel-yäl-om
   1SG  DET  fish  kill-PST1-1SG
   'I caught that fish'

20. wajɔŋ oy-əŋ noq tʃutʃ panɔ nurɔŋlɔŋ
   animal head-3SG up turn.PST0.3SG and run.PST0.3SG
   'The animal turned up his head and ran away'

A host of pragmatic and semantic properties of the referent, expressed by the Acc-Target argument appear to be of import. Such properties may be revealed while observing the syntactic behavior of the arguments in narratives. The Acc-Target arguments that co-occur with the Target-predicate agreement are more flexible in their constituent position (21b), or are altogether elided (c), whereas the Target argument without agreement is fixed in its overt pre-V position (a).33

21. a) mä sart wel-s-əm əllɔ
   1SG pike kill-PST2-1SG big
   'I caught a pike fish, big one'

   b) əllɔ sart ratʃ män-ə lɔyoli-s-im
   big pike old man 1SG-LOC get.ready-PST2-1SG/SG
   'I got the big pike ready'

33 Khanty is an SOV language and unidentifiable Targets are always rigidly fixed in SOV order clauses. However, there are cases where pragmatically active and identifiable Target referents may cause OSV and occasional SVO order, frequently originating from the increasing Russian interference.
c) terkä-s-im iwes-nə
fry-PST2-1SG/SG stick-LOC
'I fried it on sticks'

Reflexives can be bound by the Agent argument or the Target argument that co-occurs with the agreement, while the Target argument without the agreement cannot control it. The reflexive/possessive affix on the locative 'house' in (22a) may refer both to the Agent 'animal' and the Target 'dog', accompanied with Target-predicate agreement, whereas in (b) this affix may only refer to the Agent 'animal', and not the Target 'dog', hence only the Agent-predicate agreement. (This example also demonstrates the marking of the Agent argument by the Loc. case, the so-called Loc-Agent, to be discussed below).

22. a) wajay-nə āmp joγ nirimtā-s-tā tʃimin ont-qat-al
   animal-LOC dog home pull-PST2-3SG/SG there inside-house-3SG
   'The animal hid the dog inside his (bear's) / (dog's) house.'

   b) wajay-nə āmp joγ nirimtā-s-ŋān tʃimin ont-qat-al
   animal-LOC dog home pull-PST2-3SG there inside-house-3SG
   'The animal hid a dog inside his (bear's) house' / *(dog's) house.'

In Target-focus clauses, WH-question/answer sequences only Agent-predicate agreement is attested (not Target-predicate agreement).

23. a) āmp kojoyi por / *por-ɔttə
dog who bite.3SG / *bite-3SG/SG
   - Who did the dog bite?

   b) (āmp) (tam) iki por / *por-ɔttə
   (dog) (DET) man bite.3SG / *bite-3SG/SG
   - (The dog) bit a (this) man.

   c) (āmp) män-t por / *por-ɔttə
   (dog) 1SG-ACC bite.3SG / *bite-3SG/SG
   - (The dog) bit me.

   d) (āmp) atʃ-im por / *por-ɔttə
   (dog) brother-1SG bite.3SG / *bite-3SG/SG
   - (The dog) bit my brother.

   e) (āmp) Andrei por / %*por-ɔttə
   (dog) Andrei bite.3SG / %*bite-3SG/SG
   - (The dog) bit Andrei.
(It has to be noted, that for the majority of the answer utterances in the sequence above, the most typical will be just the presence of the Focus referent, i.e. the Target argument, sometimes followed by the predicate, but more often not).

The combination of the above functional features, and especially the latter collocation of Target-focus clauses with Agent-predicate agreement, indicate the importance of the discourse-pragmatic function of the Target argument for the Target-predicate agreement. The sequence (23) also shows that Target role coded by both, the proper nouns and by the pronouns may occur without the Target-predicate agreement. The pragmatic status of focus (in itself associated with lack of specificity) appears strongly of relevance in predicate agreement. The correlation of the syntactic flexibility, omissibility, control over reflexivization, inferability (pragmatic identifiability, activation through a relation such as possession to an already active referent), are consistent with overall pragmatic prominence (degree of topicality) of the Target argument and presence of Target-predicate agreement. On the other hand, the correlation of syntactic rigidity, obligatory overtness, inability to control reflexivization and uninferability is consistent with the pragmatic function of focus of the Target argument and absence of Target-predicate agreement (Lambrecht 1994; Nikolaeva 1999; Givon 2001).

Verbal agreement is instrumental in the omission of clause constituents. The Agent is frequently omitted as a free clause constituent, being expressed by the coreferential person-number inflection (16) on the predicate or by zero agreement in the case of a 3SG argument:

24. män-a tiypil nöriy-wał
1SG-ILL DET swim-PRES.3SG
'(S)he swims towards me here'
Whenever the Agent is overt, it is seen to be emphasized (pragmatically marked) as an established brand-new or reactivated discourse referent, for example in a topic-shift (24) vs. (16); or thetic or presentational\textsuperscript{34} clause type, as in (25):

25. əʒ məta ɭat-na miŋ ikəm-nat juŋ
    one IndPn time-LOC 1DU husband-COM tree
    ont-nam nin-ta mən- tə jəŋ-məŋ
    inside-All2 rest-INF go-INF become- 1DU

"Once, me and my husband decided to go to the woods to relax"

Here, in what is the first clause of the narrative, the discourse participants are introduced for the first time as central referents of the narrative, making them available for predication in subsequent discourse thus, making them discourse-active. This type of clause is commonly associated with indefinite temporal/spatial adverbial phrases in a conventionalized discourse-setting, such as 'once (upon a time)', etc.

Hence, clauses in Khanty are commonly devoid of an overt Agent, and the Agent information is formally accessible only from the co-referential inflection on the predicate. Omission of the Target argument is attested whenever the context provides enough information about this pragmatically active referent, and then the clause can consist of only a predicate or the VP as (21c) above.

The omission of the identifiable and active Target referent is expected only when licensed by the \textit{definite (objective)} conjugation, indicated by the Target-predicate agreement inflection. Such omission of the Target is naturally far less frequent than Agent omission, as often the Target is part of the pragmatic assertion or new information, rather than part of the presupposition. Even when identifiable, it is still often overtly present. Formal presence of the Target is motivated by the very nature of this semantic role, which differs from that of the Agent by a host of

\textsuperscript{34} The thetic/presentational clause type (Lambrecht 1994) has as its purpose not a predication of a property of an argument, but the introduction of a new referent into the discourse for subsequent predication.
properties, such as lack of autonomy (Keenan 1976) indicated by greater
dependence on the argument of the Action or property expressed by the predicate.

10.1.1.2.2 Clauses with Simple Intransitive Predicates

The typical Eastern Khanty simple intransitive verbal clause (5, 7), implying a
single core participant, has the referent with the semantic role of Agent expressed
either by a Pronoun (65%) or an NP (35%) in the Nominative case, typically the
animate Agent of an Action (Ag=Prn/NP=Nom=S) (28):

26. tom rätʃ uʃə pereti mən-wəl
   DET oldman already in.front go-PRS.3SG
   ‘That oldman is already going in front’

   The action verb group would also include the communication verbs, where a
   conscious deliberate effort is implied (27).

27. Valentin, qolə-m-ta! ʃas mən-nə joroŋ-l-im
    Valentin listen-MMNT-Imper.2SG now 1SG-LOC tell-PRS-1SG
    ‘Valentin, listen, (I’ll be telling now’

   Quite often, the Agent referent, due to its topical pragmatic function (cf. more
   10.2.Information Structure), is elided as a clause constituent (28).

28. il-pə noroytə-wəl
    back-ILL run-PRS.3SG
    ‘(S)he runs back’

   The Agent of the intransitive Action may be an inanimate entity (29), acting as
   a typical Agent. These cases represent a typical metaphorical extension, where an
   Agent proper is not explicit, and an instrument (transport or weapon) has the
   features of an Agent, the Nom-marked clause-initial constituent controlling the
   verbal agreement:

29. ti aj-rət mən-s-ət
    DET small-boat go-PST2-3SG
    ‘That canoe goes on (the oldman in canoe)’

   In Eastern Khanty, referent with semantic role similar to the Dative of mental
   state is also classified as the Agent, as it has no distinct formal expression (30):
30. (mä) əntə on-l-əm
    (1SG) Neg know-PRS-1SG
    ‘(I) don’t know/remember’

The Eastern Khanty intransitive clauses also include the existence states-of-affairs coded by the State predicates (31) or by the copula verbs (32), where the semantic role of Agent may be paralleled semantically to the Patient of State (Givon 2001: 104-106):

31. pay-am tʃi-nám olay-wəl
    son-1SG DET-All2 lie-PRS.3SG
    ‘My son lies there’

32. mən-ən wəl-käs im-äli Marfa, səm-loy im-äli
    1PI-LOC live-PST1.3SG woman-DIM Marfa eye-ABES woman-DIM
    ‘There was this old lady Marfa at our place, the blind old lady’

Merging with the domain of intransitive states (‘be sick’ in (33)) are the states-of-affairs representing an event of change resulting in a State (33), (34):

33. ti qu-j-an kan’-kas i qala-qas
    DET man-EP-LOC be.ill-PST1.3SG “and” die-PST1.3SG
    ‘That man was sick and died’

34. qantə qu qitʃ-as
    Khanty man stay-PST2.3SG
    ‘That Khanty man remained’

In these states-of-affairs, the Agent of the State/Event lacks in explicit volition and control over the State/Event, and thus may not be classified as, for example the Agent of action of long duration.

Some of the Eastern Khanty intransitive verbs and simple verbal clauses fall within a peripheral, transitional area between the prototypically intransitive and prototypically transitive ones. Such are, for example, many of the motion and communication verbs (clauses), having a core role of the Agent coded as topical Nom-marked clause-initial constituent (often elided) and controlling the predicate agreement (3Pl in (35), and 1SG in (36)). There is another participant that is
important in the event, with the general semantic role of Locative\textsuperscript{35} – the spatial landmark for the motion ((35) ‘go’, (37) ‘run’), or existence (36) of the Agent; the metaphorical landmark of cognition, or emotional and propositional attitude ((35)‘laugh’, (38) ‘believe’), or of perception (39) ‘hear’.

35. a joŋ-

pa potom maŋ-

-wał, tʃillà maŋ-

-ał tʃmayta-

-wał  

and home-All1 “then” go-PRS.3PL very 1PL-ILL laugh-PRS.3PL

‘And then (they) will go home, and will be laughing at us there’

36. əmtor-

nä wəl-l-im  

lake-LOC live-PRS-1SG

‘(I) live on the lake’

37. män-

nä noroŋtol-

wəl, kak tʃɔlaytā-

-wał!  

1SG-ILL run-PRS.3SG “so” yell-PRS.3SG

‘It (the bear) runs to me, and yells so loudly’

38. mä nuŋ-

-a əntə ɔyəl-

-l-əm  

1SG 2SG-ILL Neg believe-PRS-1SG

‘I don’t believe you’

39. mĩn  jīy-

-i əntə qol-wayta-

-wəl  

1PL 3PL-ELA Neg hear-ATTEN-PRS.3SG

‘We won’t be hearing them’

10.1.1.2.3 Clauses with Copula Predicates

The prototypical type of Eastern Khanty intransitive clauses is the one coding the existence of a referent, that is, the existential clauses, where the following patterns obtain:

40. a) qojyəl  wəl-

-lə?  

where be-PRS.3SG

‘Where was it?’

b) tʃarimowə-

-ə wəl-käs  

Charimova-LOC be-PST1.3SG

‘In Charimova it was’

\textsuperscript{35} Here, for the purposes of this description, the variation of locative semantic relations such as Ablative (35), Locative (36), Illative (37, 38), Allative (39), and Prolative will be referred to with the general term “Locative semantic role”.

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The examples (40a-b), and ((41, 42, 43) below, illustrate the Eastern Khanty clauses with the copula verb, representing semantically some temporally stable states-of-affairs of some extended duration (permanent or temporary).

41. \textit{wajaɣ oŋta kāntʃim wəl-kal}  
\hspace{1cm} animal Neg thin be-PST3.3SG  
\hspace{1cm} ‘The animal was not a thin one’

42. \textit{jöɣ tʃəkə qatʃə wəl-yal}  
\hspace{1cm} 3SG very sick be-PST1.3SG  
\hspace{1cm} ‘(S)he was very ill’ (Gulya 1966: 136)

The verbal predicate here, serves the grammatical function of expressing ‘State’ predication itself. Most of the lexical-semantic import typically comes from the non verbal clause constituents, for example attributives ‘thin’ in (41) and ‘sick’ in (42), adverbials ‘in Charimova’ in (40b) and ‘this year’ in (43a), which are providing substance for the ‘State’.

43. a) \textit{tim al ul wəl-wəl?}  
\hspace{1cm} DET year berry be-PRS.3SG  
\hspace{1cm} ‘Are there any berries this year?’

b) \textit{ul oŋt-im}  
\hspace{1cm} berry Neg-PP  
\hspace{1cm} ‘There are no berries’ (Gulya 1966: 134)

Apart from the common use of the verb \textit{wəl-} with the sense ‘live, exist’ (44-45):

44. \textit{mā tuy-puyol wəl-l-əm}  
\hspace{1cm} 1SG lake-village live-PRS-1SG  
\hspace{1cm} ‘I live in the Lake village’

45. \textit{jöɣ wəl-wəl əŋk-āl – ap-al-na}  
\hspace{1cm} 3SG live-PRS.3SG mother-3SG – father-3SG-COM  
\hspace{1cm} ‘(S)he lives with his parents’

This existential verb is also used freely in reference to the inanimate referents (46-48), being extended in usage in this function, and to an extent de-semantisized.

46. \textit{tøyøj-nə wəl-ɣal}  
\hspace{1cm} autumn-LOC be-PST1.3SG  
\hspace{1cm} ‘It was in spring’
47. etar, wat-lay qotal wal-yal
   bright wind-ABES day be-PST1.3SG
   ‘It was a bright and calm day’ (Gulya 1966: 135)

48. wor-ont-na jam wal-yal
   woods-inside-LOC good be-PST1.3SG
   ‘It was good in the forest’ (Gulya 1966: 135)

In some cases (49) and (50), no copula-predicate is used, and the predication function is performed by the juxtaposing nouns (or nominalizations) without formal expression of predication function.

49. ti - rut’ in-t - ot
   DET Russian eat-IMPP - thing
   ‘This is Russian food’

50. qantay in-t - ot - qul, n’an’, noy, jaj...
   Khanty eat-IMPP - thing fish bread meat tea
   ‘Khanty food is fish, bread, meat, tea’

   These examples appear usually in the context of a dialogue, with the discussed referent being situationally available, pointed at, i.e. highly identifiable, topical.

   The copula remains optional in other TAM forms, such as the past tense (51a).

51. a) qaqi wajay (wal-kal) ?
   brother animal (be-PST1)
   ‘(Was it) a bear?’

   b) anta alla, ej al
   Neg big one year
   ‘(Yes), Not a big one, one year old’

   Similar to copula verb clauses are the States with the nominal predicates marked with the Predicator-Adverbializer affix /-aki/.

52. tiylati olay-wal trop-na pon-amaki
   DET-Sup lie-PRS.3SG pellet-COM load-PP-PRD
   ‘Here it lies, loaded with buckshot'
Nominal predicates may be of various kinds, attributive nominal modifiers (52), locative modifiers (53), adverbials of manner/evaluative (54), quantitative modifiers (55):

54. tiyl-a kari-mta-s-im jom-aki-aki
here-ILL pull-INTNS-PST2-1SG/SG good-PRD-PRD
‘I pulled it in well’

55. tam qaŋtɔɣ jay ärki-iki
there Khanty people many-PRD
‘There are many Khanty people there’

Interesting in this respect is the Eastern Khanty means of coding the negative existence:

56. män-nɔ tʃimlæli tʃi-nám jɔyo-s-im, tʃut-na-pa ɔnt-im-äki
1SG-LOC a little there-All2 shoot-PST2-1SG DET-COM-TOP Neg-PP-PRD
‘I shoot there a little, and nothing happens’

57. qrugom welkältä-l-im, maŋ nɔyɔs lök ɔnt-im-äki
around walk-PRS-1SG which sable track Neg-PP-PRD
‘I walk around, there is no sable track’

In (56, 57), the non-existence is coded by the perfective participle derived from the negative particle ɔntɔ and affixed with the predicator/adverbializer affix /-äki-/ (more cf. 10.4.Negation).

On the whole, it appears that, there are three available strategies of coding the existence state, the existential verb wǝl- ‘to be’, predicator-adverbializer affix /-äki/-, and the nominal predicate without a copula or predicator affix. Consistently with cross-linguistic observations (Givon 2001), the juxtaposed nominal predicates (no copula or predictor affix) are very rare and tend to express the most time-stable, salient, inherent qualities, as for example, traditional Russian or Khanty
food in (49, 50), while the predicates containing the verb \textit{wəl-} ‘live, exist’ appear
to code more temporary qualities or states (47, 48). Notably, the ‘attributive
nominal modifier + copula’ predicates (adjectival) tend to code more durable
temporary states (41, 42), whereas, ‘locative + copula’ predicates (adverbial) more
frequently express less durable temporary states (40(b), 43(a), 46). Finally, the
adverbializer-predicator affix is used more in the adverbial modification function,
rather than the proper predication. It is usually adjacent to the main verbal
predicate and specifying, either the manner (52), location (53), manner/evaluative
(54), or quantity (55). Similarly, in case of negation (56, 57), these states-of-affairs
do not express the main State/Event/Action itself, but rather modify the
State/Event/Action with regards to its manner or effect, that is, effects of
‘shooting’ in (56) and of ‘walking around’ in (57).

Another Eastern Khanty verb considered in this section on copula clauses is the
verb \textit{jo-} ‘get, become’, which is used typically to express an event of change,
transformation (58, 59).

58. \textit{jaγ joŋk-ä qirqa-qə-ɔt, qul-a jɔŋ-ət}
\textit{and} \textit{water-ILL fall-INCH-PST0.3PL fish-ILL become-PST0.3PL}
‘People started to fall into the water, turned into fish’

59. \textit{juq-q-əŋ wor-a qir-əm-əti wajja qə jɔŋ-ət}
\textit{tree-EP-ATTR forest-ILL fall-PP-3PL animal-TRNSL become-PST0.3PL}
‘Those (kids) who fell into the forest, turned into animals’

Most frequently these predicates are used in the past tense or perfective aspect
in a proposition expressing a permanent or temporary State as a result of an Event
of change.

In the above Eastern Khanty intransitive propositions, transformation states-of-
affairs with the predicate ‘become’, as in the case of clauses with copula verbs, the
single core participant has the semantic role of the Agent. Though the overall
semantics of these states-of-affairs makes this single core referent semantically akin to the undergoer of an event of change, morphosyntactically this referent is still coded by the noun in Nominative case (58), or a whole clause with nominalization (59), and thus is classified here as Agent.

In this group of examples with the transformation predicate ‘become’, the resultant state-of-affairs, a time-stable, permanent, concrete entity is coded typically by an NP marked for the Translative case in the nominal part of the complex nominal predicate, while the verb  jə-  ‘become’ bears the grammatical information. The less time-stable, permanent state is typically coded by the adjectival lexeme, which is the nominal part of the complex nominal predicate containing the verb ‘become’ (60, 61):

60. qatim sart poγaj-γy al’wi-nə  kön-əl  kətjəyn  jəyä-γən.
   after pike guts-PRL Alva-LOC belly-3SG sick become-PST0.3SG
   ‘Alva’s stomach got sick after eating the pike-fish guts’ (Kalinina 1970)

61. jəq-ən  əllə  jäm-əl  peṣto  jəyə-tə,  āl’wə-jä  mənä-γən
   home-LOC big axe-3SG sharp become-IMPP Alva-ILL go-PST0-3SG
   ‘At home he got a big axe sharp and went to Alva’

More frequently, however, the nominals are used with the predicator affix /-əki/, functioning already as a nominal predicate with the copula ‘become’ acting more as an auxiliary coding TAM semantics of incompleteness, unboundedness, and imperfectivity (62, 63, 64):

62. muγuli  wəl-ta,  qaṃ  sari  melə-ki  jə-wəl
   what live-INF outside wait warm-PRD become-PRS.3SG
   ‘What am I to do, soon it’ll get warmer outside’

63. os  t’u  suyətəwət  jərtinə-qi  jəyə-tə
   again DET medication expensive-PRD become-PST0.3PL
   ‘But medication is getting expensive’
64. pirpit-äl-nə morök-kə jəyä-yən
   back-3SG-LOC healthy-PRD become-PST0.3SG
   ‘Finally (s)he got better’

Quite rarely, in the context of the future or imperfective, the verb *pit-* ‘become’ is used in the similar function of the verbal part of the complex nominal predicate containing a noun, adjective or a participle denoting the resultant state (65).

65. qatʃn-tə pit-tə päni puγol-pa ārki persəy jə-s-i
   sick-IMPP become-IMPP and village-All1 many strange become-PST2-PS.3SG
   ‘I am getting sick, while there are more and more strangers in the village’

10.1.1.2.4 Clauses with simple transitive predicates

The typical Eastern Khanty transitive simple clause is a clause coding a transitive state-of-affairs, the action with two core event participants, an animate volitional active Agent, and a concrete inanimate/animate Target, and a verbal predicate coding a completed change (Action) V.

\[
\begin{array}{ccc}
A & O & V \\
\text{Agent} & \text{Target} & \text{Predicate} \\
\end{array}
\]

66. məŋ sart telka-s-iw
   1PL pike fry-PST2-1PL
   ‘We fried a pike-fish’

The transitive clauses fall into six semantic types according to the coded action:

i) Agent’s creation (establishment) or destruction of an entity coded by the argument with the semantic role of Target:

67. (mä) n’an’ ter-s-əm
   1SG bread make-PST2-1SG
   ‘(I) baked bread’

68. (jöy) in-t- ot wer-käs
   3SG eat-IMPP - thing make-PST1.3SG
   ‘((S)he) made some food’

69. tim kät-kən muɣuli-kam qantʃi-sə-kən
   DET two-DU what-IndPrn write-PST2-3DU
   ‘These two wrote something’
ii) Agent’s considerable effect on the physical shape of the Target:

71. (jiɣ) oy-al tuɣoj joyuɣom-s-o ta jajom-na
   3PL head-3SG away chop-PST2-3Pl axe-COM
   ‘(They) cut the head off with an axe’

72. jöɣ n’an’ oyọla-s kọtʃọɣ-nä
   3SG bread cut-PST0.3SG knife-COM
   ‘He cut bread with a knife’

73. (mä) joŋ petʃọɣ-s-o m, qalɔw amal-ati
   1SG ice cut-PST2-3PL net set-INF/Sup
   ‘(I) smashed ice to set the fishing net’

iii) change in spatial location of the Target:

74. (mä) qallwoɣ quł tuɣoj we-s-o m
   1SG net-PRL fish away take-PST2-1SG
   ‘(I) took the fish from the fishing net’

75. mä nuŋ kā qint-aɣlan tuya-s-im
   1SG 2SG two bag-2SG/DU carry-PST2-1SG
   ‘I carried your two bags’

76. (mä) jir maj-li-s-o m
   1SG offering give-TR-PST2-1SG
   ‘(I) offered a sacrifice’

iv) Agent’s effecting either the external or internal characteristics of the Target:

77. miŋ sart telka-s-iw
   1Pl pike fry-PST2-1Pl
   ‘We fried a pike-fish’

78. (mä) watʃanɔ jerim-s-im qöɣ-(n)a
   3SG little.finger scratch-PST2-3SG stone-COM
   ‘(I) scratched my little finger with a glass’

79. (jöɣ) quł nöɣəs
   3SG fish scale.PST0.3SG
   ‘((S)he) scaled fish’
v) Agent’s sense perception of the Target:

80. jöɣ män-uwayta-yal
   3SG 1SG-ACC see-PST3.3SG
   ‘(S)he saw me’

81. ämp-am iyła-pa suŋqotoŋ œwöläy-aɣi
    dog-1SG down-ILL smell smell-PST0.3SG
    ‘My dog smelled something down there’

vi) Agent’s communication to the Target:

82. jöɣ män-ä tʃi toloɣ-qəs
    3SG 1SG-ILL DET say-PST1.3SG
    ‘(S)he said this to me’

83. mä jöɣ-ä jöyötkalt-aɣ-im
    1SG 3SG-ILL scold-PST3-1SG/SG
    ‘I scolded her yesterday’

In the examples so far (66-83) and further below, it can be seen that the grammatical expression of the semantic roles in Eastern Khanty may vary, but certain patterns of Form-Function correlation are grammaticalized in the system of case inflections. The animate volitional active Agent is typically coded by Nom. case, while the concrete animate/inanimate Target is coded by the Acc. case (unmarked for nouns). Another significant indicator of semantic role is word-order and the predicate (cf. 8.3.1.2.4.Person-Number and 10.1.1.2.1.Coding of the core Roles and Agreement (Argument Structure)).

In the typical transitive Eastern Khanty active clause (3, 4, 106, 107), the referent with the semantic role of Agent, is expressed by a Pronoun (70%) (106, 107, 117, 118), or an NP (30%) and appears in Nominative case (Ag=Prn/NP=Nom). This pattern of the Eastern Khanty coding the Agent role will henceforth be referred to as Agent’s Nominative voice of the active clause controlling the predicate agreement inflection. Less frequently (119, 56) this Agent referent appears inflected for Locative case (Ag=Prn/NP=Loc), still controlling the predicate agreement inflection. This is the case of the Loc-Agent construction (so-
called “ergative”) representing a pragmatically marked alteration in the coding of Agent’s semantic role to be detailed below (cf. 10.3.2. The Loc-Agent Constructions.), and will henceforth be referred to as the Agent’s Locative voice. Finally, the Agent of the passive constructions (13, 15) above, and (117, 118) below, also appearing in the Locative case but no longer controlling the predicate agreement inflection (Ag=Prn/NP=Loc≠S) is to be further detailed below (cf. 10.3.1. The Passive Constructions). The latter, Loc marking of the Agent referent may serve as formal indicator of the de-transitive (passive) voice constructions (cf. further 10.3. Non-canonical Constructions).

Apart from the case marking (Nom. and less frequently Loc.), the Agent semantic role, is most typically clause-initial (1-5, 119, 7, 10, 11, 12, 106, 107). In the cases when it is not, and another referent occurs clause-initially (for example the Target semantic role (21b), or the Locatives in various grammatical functions (purpose, temporal, location adverbials: (85) (88b)), these referents are usually seen as pragmatically prominent, having a degree of pragmatic salience, discourse topicality (cf. 10.2. Information Structure and 10.3. Non-canonical Constructions).

The referent with the semantic role of Target, is typically expressed by either an NP (80%) unmarked for case (3, 4, 11, 106, 98), or by a Pronoun (20%) in the Accusative case (119), (Trg=(NP=Nom, Prn=Acc)). Expectedly, in passive constructions (13, 15), the semantic role of Target appears in the Nominative case, controlling the agreement inflection of the predicate (Trg=NP/NP=Nom), replacing the Agent role in this grammatical function (more cf. 10.3.1. The Passive Constructions).

10.1.1.2.5 Reflexives

There are Eastern Khanty constructions exemplified by (84a) through (84d) that imply an action where participants with the semantic roles of Agent and Target, are coreferential, i.e. the Agent performs some action upon itself. Thus, in comparison
to the active direct transitive (84a) with non-coreferential Agent ‘1SG’ and Target ‘bread’, the clauses (84b-d) code various situations where the Agent and the Target are coreferential:

84. a) mä n’än’ (%mil-näm / toyoj) ö yö-krä%-m kötʃjy-nä
   1SG bread (touch-RFL/away) cut-PST1-1SG knife-COM
   ‘I cut bread with a knife (%incidentally/on purpose)’
   Active direct transitive action (optional adverbials specify degree of intentionality).

b) mä köt-äm (mil-näm / toyoj) ö yö-krä%-m kötʃjy-nä
   1SG hand-1SG touch-RFL/away cut-PST3-1SG knife-COM
   ‘I cut my hand with a knife (incidentally/on purpose)’
   Reflexive or middle event with the Nom-Agent’s body-part is the Acc-Target (optional adverbials specify degree of intentionality).

c) män-nö köt-äm (mil-näm /%toyoj) ö yö-krä%-m kötʃjy-nä
   1SG-LOC hand-1SG (touch-RFL/away) cut-PST3-1SG knife-COM
   ‘I cut my hand with a knife (incidentally/%on purpose)’
   Reflexive or middle event with the Loc-Agent of lower control/volition and the Agent’s body-part being the Acc-Target (optional adverbials specify degree of intentionality).

d) mä kötʃjy-nä män-nämä (mil-näm / toyoj) ö yö-krä%-m
   1SG knife-COM 1SG-RFL (touch-RFL/away) cut-PST3-1SG
   ‘I cut myself with a knife (incidentally/%on purpose)’
   Reflexive event with the active direct transitive clause; the Target referent with the reflexive pronominal inflection /-nämä/ is coreferential with the Nom-Agent (optional adverbials specify degree of intentionality).

While (84b) is formally still very much a transitive Action, with the Target role ‘hand’ technically non-coreferential with the ‘1SG’ Agent role, the underlying state-of-affairs still implies identity of the core participants. The verbs used in these clauses are typically used in the active constructions with two core participants, but the underlying state-of-affairs appears to deviate from prototypical transitivity in that the Agent acts on itself. The required second participant slot is filled by the referent that in one way (part of (84b-c)) or another (explicit “self” reference (84d)) refers back to the Agent referent. Unlike (84b), which allows for volitional, purposeful event of acting on oneself, the Loc-Agent voice in (84c)
codes less intentional, defocused Agent and typically has a ‘reading’ of the less volitional, intentional Event/Action (more cf. 10.3. Non-canonical Constructions). Finally, example (84d), morphosyntactically identical to the (84a) (apart from the Target role lexical content) displays an explicit rendering of the Target role as coreferential with the Agent role, coded by the invariable reflexive marker *nämä* postposed to the 1SG personal pronoun. Generally, the reflexives of the (84d) kind are by far more frequent in Eastern Khanty than those of the (84b-c) kind, and may be regarded as more typical. That is, the use of the reflexive form of the pronoun (affixed with *nämä*) is more generic and common, whereas the use of the possessive marked NP is more specific, less frequent.

85. puyl’a (nuŋ) nun-nämä patǝlt-awon?
why (2SG) 2SG-RFL freeze-PRS.2SG
‘What are (you) freezing yourself for?’

In (85), the 2SG reflexive-pronominal Target is referential with the elided Agent role, which is apparent from the Agent-controlled agreement inflection on the predicate.

86. qu jøy-nämä-ti jǝŋq-nǝći tʃayən-ayi
man 3SG-RFL-DET vodka-COM poison-PST.3SG
‘The man poisoned himself with vodka’

87. qantǝy jǝq jøy-nämä-ti jǝŋq-wǝł-t / tʃayən-wǝł-t
Khanty people 3PI-RFL-DET vodka-PRS-3PL poison-PRS-3PL
‘Khanty people are drinking / poisoning themselves to death with vodka’

In (86-87), the Agent role is coded by the full NP in the Nom. case controlling predicate agreement, while their coreferential Target referents are coded as pronouns with reflexive marker *nämä*, postposed with the demonstrative *ti* ‘this’, which is used to express the emphatic reflexive sense (cf. 3.1.1.2. Reflexive Forms).
Some of the reflexive meanings are coded in the derived verbal forms with the help of intransitive verbal affixes, such as /-in/- or /-int-/, which typically render a derived form in some reflexive sense (cf. 8.3.1.1.2.1. Aspectual and Voice Affixation):

88. a) jay wajay-ät al-wəl-ät
people animal-PL lie-PRS-3PL
‘People and animals sleep (lie)’

b) itən li-s-uɣ pəni al-int-əs-uɣ
evening eat-PST2-3PL and lie-DR-PST2-3PL
‘In the evening, they ate and went to bed (laid themselves to sleep)’

Example (88a) represents a regular State, with the single Agent referent in the Nom case controlling the agreement inflection on the predicate. In (88b), the presence of the verbal affix /-int-/ on the predicate with the same root as in (88a), implies some sense of Action (as opposed to State), transitivity, although the proposition still has a single argument, the elided Agent controlling the 3Pl agreement inflection on the predicate.

Another, more recent form of coding of the reflexive meaning is the use of uninflected infinitival form of a loan lexical verb followed by the auxiliary verb wer- ‘do’, which carries all the grammar inflections. Generally, the verb wer- ‘do/make’ could be considered as the prototype of the Action clause, similar to the way the verb wəl-‘be/live/exist’ can be seen as the prototype of the State, and the verb jə(y)- ‘become’ is the prototype of the Event.

89. a) mə kəfnə qotl pritsa wer-l-əm
1SG “every” day “shave(RFL)” do-PRS-1SG
‘I shave every day’

b) nɪŋ-əm-nə mə-n kəfnə qotl prit’ wer-wəl
woman-1SG-LOC 1SG-ACC “every” day “shave(tr)” do-PRS.3SG
‘My wife shaves me every day’
The reflexive sense in (89a) is coded by the use of the appropriate de-transitive (reflexive) infinitive form of the loan verb (cf. prit’sa (Russ. бриться) ‘to shave (intrans.)’ vs. prit’ (бриться) ‘to shave (trans.’)). This is clearly a contact induced innovation in the total bi-lingual environment, which manifests code-switching, gradual language assimilation. In (89a), the Agent referent is the single participant, expectedly in Nom. case and controlling the predicate agreement inflection. In (89b), the proposition has two participants, the Agent role marked for Loc case and the Target role in Acc case (unmarked for nouns). This is a Loc-Agent voice construction which has pragmatic motivation (cf. 10.3.2.The Loc-Agent Constructions.).

The native Eastern Khanty lexicon appears to allow only typical active direct action construction in both the (89a) and (89b) cases, with overt ‘beard’ or ‘hair’ as Target roles:

c)  mä käfnä qotl lus-im toqoj jor-l-im
   1SG “every” day beard-1SG away cut-PRS-1SG/SG
   ‘I shave (cut) my beard every day’

d)  niŋ-am-ŋo mä lus-im käfnä qotl toqoj jor-l-at
   woman-1SG-LOC 1SG beard-1SG “every” day away cut-PRS-3SG/SG
   ‘My wife shaves (cuts) my beard every day’

10.1.1.2.6 Reciprocals

This type of Eastern Khanty constructions is used to code reciprocity, using the reciprocal particle /nül/ in postposition to the agentive argument whose reciprocal event participation is described (90b):

90. a)  ti qu sart wel-äyi
   DET man pike kill-PST0.3SG
   ‘This man killed a pike fish’

   Active direct transitive action.

     b)  ti qu-j-at nül wel-wal-t
     DET man-PL RCPR kill-PRS-3PL
     ‘These men are killing each other’
Reciprocal transitive event with the reciprocal particle nül roughly similar in meaning to ‘each other’ and 3Pl predicate agreement inflection.

The fact of reciprocal participation of numerous Agents in the event is also reflected in the use of the predicate agreement inflection (PL or DU) (91). Often though, in the narrative speech, this agreement appears to be the default 3SG (92, 93). Since the discourse environment does not appear to show any considerable variation, the reciprocal marker nül bears a reciprocal meaning heavy enough to license the default 3SG inflection. On the other hand, the Pl predicate agreement may also code a more individual action of each member of the group of Agents similarly on all other members, whereas the Sg agreement may code a more homogenous, indiscriminate mass acting (compare (91) vs. (92, 93)).

91. quj-әt nül jojoj-wәlt
   man-PL RCPR beat-PRS.3PL
   ‘The men are beating each other’
Reciprocal transitive event with the reciprocal particle nül ‘each other’ and the 3Pl predicate agreement inflection.

92. ämp-әt nül pәr-wәl
   dog-PL RCPR fight-PRS.3SG
   ‘The dogs are fighting’
Reciprocal transitive event with the reciprocal particle nül ‘each other’ and 3SG predicate agreement inflection.

93. ämp-әt nül ron’-wәl
   dog-PL RCPR bite-PRS.3SG
   ‘The dogs are biting each other’
Reciprocal transitive event with the reciprocal particle nül ‘each other’ and 3SG predicate agreement inflection.

Alternatively, some reciprocal senses may be coded by the use of Comitative-Instrumental case affix marking the argument that codes the co-participating Agent-like referent with the semantic role of Associative (cf. 2.1.2.2.3.Case). A type of the Eastern Khanty intransitive Event with more than one participant typically has apart from the core role of the Agent, a second participant associated
with the Agent, and acting with the Agent either in homogenous (94), or in a reciprocal manner (95c), (96b), (97b):

94. 

\[ \text{1Du Tajka Nazonkin-na wer-s-ämin loq-nō} \]

‘We, with Tajka Nazonkina work on the road’

*Intransitive action with the Nom-Agent and the Com-Assoc. role and Du predicate agreement.*

95. a) 

\[ \text{man-DIM small woman kiss-PRS-3SG/SG} \]

‘Young man is kissing a young woman’

*Direct transitive action with the Nom-Agent and the zero-marked Acc. of the nominal Target.*

b) 

\[ \text{man-DIM-LOC small woman kiss-PRS-3SG/SG} \]

‘Young man is kissing a young woman’

*Direct transitive action with the Loc-Agent voice and zero-marked Acc. of the nominal Target.*

c) 

\[ \text{man-DIM small woman-COM kiss-TR-PRS-3DU} \]

‘Young man and a young woman are(2) kissing’

*Reciprocal event coded by the de-transitive clause (de-Tr verbal affix /-nt/) with two agentive core arguments: the Nom-Agent and Com. case-marked agentive Associative co-participant, and de-transitive verbal predicate inflected for 3Du agreement.*

While the co-participant is marked with the Com-Instr. case, the predicate agreement inflection is indicative of the number of the participants: two in case of 3Du in (95c) and (97d). In some cases, however, this person-number agreement inflection may appear to be the default 3PL both, for 3dual and 3plural participants as in (96b), which is a prevalent phenomenon in Khanty. More noteworthy, however, are the cases, where the co-participation is not reflected in the predicate agreement inflection, cf. (97c) vs (97d).

96. a) 

\[ \text{mother-3SG-LOC small thing-3SG kiss-PRS-3SG/SG} \]

‘Mother is kissing a child’

*Direct transitive action with Loc-Agent voice and zero-marked Acc. of the nominal Target.*

b) 

\[ \text{mother-3SG small thinkg-3SG-COM kiss-TR-PRS.3PL} \]

‘Mother and her child are(Pl) kissing’
Reciprocal event coded by the de-transitive clause (de-Tr verbal affix /-
nt-/) with two agentive core arguments: the Nom-Agent and Com-marked agentive Associative co-participant, and de-transitive predicate inflected for 3Pl agreement.

Finally, the co-participation in the event could be coded by both the use of the reciprocal particle postposed to the co-participating agentive referent in the Associative semantic role as well as with marking of this argument with Comitative-Instrumental case inflection (97c).

97. a) qu-ja-nə nɨŋ-âl ówəl-1-ətə
   man-EP-LOC woman-3SG hug-PRS-3SG/SG
   ‘The man is hugging his wife’

Direct transitive action with the Loc-Agent voice and zero-marked Acc. nominal Target.

b) əŋk-âl öy-əl-nâ ówəl-áltə-əl-kən
   mother-3SG daughter-3SG-COM hug-TR/RFL-PRS-3DU
   ‘The mother and her daughter are(Du) hugging’

Reciprocal event coded by the de-transitive clause (de-Tr verbal affix /-lt-/) with two agentive core arguments: the Nom-Agent and Com-marked agentive Associative co-participant, and de-transitive predicate inflected for 3Du agreement.

c) əŋk-âl öy-əl-nâ ówəl-áltə-wəl
   mother-3SG daughter-3SG-COM hug-TR/RFL-PRS.3SG
   ‘The mother is hugging with her daughter’

Reciprocal event coded by the de-transitive clause (de-Tr verbal affix /-lt-/) with two agentive core arguments: the Nom-Agent and Com-marked agentive Associative co-participant, and de-transitive predicate inflected for 3SG agreement.

d) quj-ali aj ni-ŋə nül ówəl-wəl
   man-DIM small.woman-COM RCPR hug-PRS.3SG
   ‘The young man and a young woman are hugging’

Reciprocal event coded by the regular transitive clause with the Nom-Agent and Com-marked agentive Associative co-participant; reciprocal particle /nül/; and transitive predicate inflected for 3SG agreement.

The difference in coding of seemingly identical reciprocal events (97b, c, d) is formally in the verbal agreement inflection: 3SG vs. 3Du/3Pl. The underlying motivation for this difference may be in the conceptualization of the degree of involvement and control of the participants in the event. Thus in (b), both of the agentive participants have comparable participant status, with comparable degree
of control and volition, which is reflected in 3Du agreement inflection on the predicate ‘hug’. In (97c), however, the degree of involvement and control in the event could be viewed as unequal. The event still implies co-participation which is reflected by the Com-Instr. case marker of one of the participants, the Associative ‘daughter’. However, the event still lacks adequate reciprocity, in the degree of control or volition, which is reflected in the use of the 3SG agreement inflection, pointing at the unmarked more agentive participant ‘mother’. In (97d), the use of the Com-Instr case marker on the Associative role signals co-participation with light (potential) reciprocity, while the particle /nül/ signals the proper (heavy) reciprocity, most likely to license the use of the default 3SG predicate agreement.

10.1.1.2.7 Clauses with di-transitive predicates

In the Eastern Khanty ditransitive clauses coding Actions with three or more participants, the participants of the proposition find a variety of formal means of expression, case forms and linear order. Below, all possible ditransitive situations belong to one of five types of ditransitive clauses, implying five respective schemas for grammatical coding of the semantic roles.

98. ämp-ä int-öt mə-yəs-in?
dog-ILL eat-thing give-PST3-SG/2SG
‘Did you give food to the dogs?’

99. tʃəkäj-äm-ä kənwaŋk-ät wə-l-əm
younger.sister-1SG-ILL sweet-PL buy-PRS-1SG
‘I will buy sweets for my younger sister’ (Tereskin 1961: 48)

100. nən-əli-t-ä jernäs-ət jən-s-ət
woman-DIM-PL-ILL dress-PL sew-PST2-3PL
‘They made dresses for the girls’ (Tereskin 1961: 48)

(i) In (98-100) the Agent is coded pronominally in the Nominative case (Ag=Prn=Nom). The second core participant is in the semantic relation of Benefactive and is expressed by the NPs koʃka ‘cat’ and ämp ‘dog’, tʃəkäj ‘sister’
and *niyalit* ‘girls’ in the Illative case (Ben=NP=ILL). The animate referent in the semantic relation of Benefactive, due to its animate nature is the recipient of the spatial transfer of an inanimate Target participant. If the Benefactive is inanimate, however, the sense of recipient appears absent, with only the sense of spatial transfer, movement remaining (compare (101) vs. (102).

101. mä øŋk-im-ä räk tu-s-ǝm  
   1SG mother-1SG-ILL flour bring-PST2-1SG  
   I brought flour for my mother’

102. mä puŋol-ǝ mǝn-s-ǝm  
   1SG-ACC village-ILL go-PST2-1SG  
   I went to the village’

Finally, the referent of the proposition with the semantic role of Target is expressed by the NPs, *moloka* ‘milk’ and *intot* ‘food’, *kǝnwǝk* ‘sweets’ and *jernäs* ‘dresses’ unmarked for case (Acc). The Target is distinguished from the Agent by the animacy status contrast (Target=inanimate vs. Agent=animate), as well as by the predicate agreement controlled by the Agent. This first pattern of grammatical coding of the semantic roles of the referents covering this group of examples (98-100) and (103, 105) could be schematically represented as follows (Fig.1):

**Fig.1. Di-transitive event-proposition schema (i).**

As in (98-100, 101), the Agent is frequently elided from overt expression, being available contextually and formally from the co-referential predicate agreement

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inflection. Examples (103) and (104) below may also be considered to follow the pattern (i), only difference being the use of a rare Illative-Purposive case form /-ati/ to mark the Benefactive relation:

103. tim ul-t əŋk-im-ätı qəjlo-l-am
    DET berry-PL mother-1SG-ILL/Purp leave-PRS-SG/1SG
    ‘These berries I will leave for my mother’ (Tereskin 1961: 48)

104. qoi-at nöŋ tim welı wə-l-in?
    who-ILL/Purp 2SG DET deer take-PRS-SG/2SG
    ‘Who are you buying this deer for?’ (Gulya 1966: 55)

What distinguishes this rarely used ILL-Purp. form from the more common ILL. is a certain modal sense of purpose and/or obligation present in the ILL-Purp. marked proposition (cf. 11.1.1.2.1.Deontic modality complements).

The schema (Fig.1) also covers the situations of communication, where what is said, the ‘message’ is functionally akin to the inanimate object of transfer, the Target role (105):

105. pǝɣ-ali əp-əl-a ěrgölti, əŋk-il wu-m-al təɣi
    son-DIM father-3SG-ILL tell.PST0.3SG mother-3SG see-PP-3SG place
    ‘The boy told his father (the place) where he saw his mother’

Example (106) is significant in that apart from the animate Benefactor (full NP unmarked for case) of the Target of transfer (Pron=Acc.; Ø=full NP) there is also a proper spatial landmark coded by the NP ‘village’ in the Illative case.

106. mä əŋk-im puɣol-a qul tu-s-əm
    1SG mother-1SG village-ILL fish bring-PST2-1SG
    ‘I brought fish to the village for my mother’

Incidentally, once the spatial landmark is not present (compare (109)), the Benefactor occurs inflected for Acc. in the case of pronoun or uninflected for case in the case of a noun, whereas the inanimate object of manipulation appears inflected for InstrObj case (cf. 2.1.2.2.3.Case), exemplifying the model (iii) below.
(ii) The next pattern is illustrated by examples (107-108) below, and represents a quite rare type in the Eastern Khanty data (1%). The referent with the semantic role of Agent is expressed either by an NP or a Pronoun in the Nom case (Ag=NP/Prn=Nom). The Benefactive is expressed either by a Pronoun or an NP in the Illative case (Ben=NP/Prn=ILL), and the Target is coded by an NP in the Instrumental-Objective case (Trg=NP=Instr/Obj) – Fig.2:

107. min nöŋ-ä woqi-tə məj-əl-ə-mən
    1DU 2SG-ILL fox-InstrO give-DUR-PRS-1DU
    ‘We(2) are giving you a fox’ (Gulya 1966: 56)

108. iki əj niŋ-ä tut-ə jəyi-γən: …
    oldman one woman-ILL this-InstrO say-PST0.3SG
    ‘The oldman says this to one of the women: …’

Fig.2. Di-transitive event-proposition schema (ii).

109. mä əŋk-im qul-t-ə tu-s-əm
    1SG mother-1SG fish-PL-InstrO bring-PST2.3SG
    ‘I brought fish to my mother’

(iii) The third pattern covers the Eastern Khanty transitive clauses exemplified by (109-110) and (111), where the Agent is typically expressed pronominally or by an NP in the Nominative case (Ag=NP/Prn=Nom).

110. män-t noyi-tə tu-s
    1SG-ACC meat-InstrO bring-PST2.3SG
    ‘(S)he brought me meat’ (Tereskin, 1961: 50)

111. jöy män-t noyi-tə mə-s
    3SG 1SG-ACC meat-InstrO give-PST2.3SG
    ‘(S)he gave me meat’
Frequently, the Agent referent is elided from overt expression (112-113):

112. oɣp-il tɔman-ə pən-s-ətə
door-3SG lock-InstrO lay-PST2-SG/3SG
‘He locked the door with a lock’ (Tereskin 1961: 52)

113. män-t int-öt-ə mij-ä
1SG-ACC eat-thing-InstrO give-Imper.2SG
‘Give me some food’

The Benefactive is expressed either by the Pronoun in the Acc. case (111), (113), or the NPs unmarked for case (110-109), (112) (Ben=NP/Prn=Acc):

114. min nöŋ-at nän-ə mə-l-mən
1Du 2SG-ACC bread-InstrO give-PRS-1DU
‘We(two) give you bread’ (Gulya 1966: 76)

The referent with the semantic role of Target is typically coded by an NP in the Instrumental-Objective case (110-115) (Trg=NP/Prn=InstrObj) – Fig.3:

115. pətʃkän-əm näl-ə punka-s-im
gun-1SG bullet-InstrO load-PST2-SG/1SG
‘I loaded my gun with a bullet’

Fig.3. Di-transitive event-proposition schema (iii).

(iv) The next pattern exemplified by (116-120) covers approximately 13% of the Eastern Khanty transitive clauses, and appears to be a pragmatically marked (10.3.Non-canonical Constructions) variant of the pattern (iii), structurally identical apart from the Loc. case marking of the referent with the semantic role of Agent (Ag=NP/Prn=Loc):
116. jöy-ǝn män-t sumany-ǝ  maj-l-ǝs
   3SG-LOC 1SG-ACC headscarf-InstrO give-TR-PST.3SG
   ‘(S)he gave me a headscarf’ (Tereskin 1961: 52)

117. jöy-ǝn män-t kät qul-γǝn-ǝ  mǝ-γäs
   3SG-LOC 1SG-ACC two fish-DU-InstrO give-PST.3.3SG
   ‘He gave me two fish’

118. jöy-ǝn ñaj-ni  köγǝr-ǝŋk-ǝ  mǝ-l-tǝ
   3SG-LOC small-woman boiled-water-InstrO give-PRS-SG/3SG
   ‘He gave soup to the girl’ (Gulja 1966: 56)

   The Benefactive is typically expressed by the Pronoun in the Accusative case
   (116, 117, 119, 120) or an NP unmarked for case (118) (Ben=Prn/NP=Acc/Ø):

119. noŋ-ǝn  män-t  qul-ǝ  mǝ-γäs-ǝn
   2SG-LOC 1SG-ACC fish-InstrO give-PST.3.2SG
   You gave me fish’

120. pälǝnǝ  jay-ǝn  min-t  râk-ǝ  totqǝl-wǝlt
   sometimes people-LOC 1PL-ACC flour-InstrO give-PRS.3.3PL
   ‘Occasionally people give us some flour’ (Tereskin 1961: 53)

   The Target is typically coded by an NP in the Instrumental-Objective case
   (Trg=NP=InstrObj) Fig.4:

   **Fig.4. Di-transitive event-proposition schema (iv).**

   ![Diagram](image)

   X  Y  Z  V
   -t- -t- -t-
   Agent  Benefactive  Target  Predicate
   Clause-Initial  Post-Ag, Pre-Target  Pre-V  Clause-Final
   NP/Prn  Prn/NP  NP  Verb
   Loc  Acc/Ø  Instr/Obj  Di-Trans

121. jöy-ǝn män-t  jöy-ä  maj-l-ǝs
   3SG-LOC 1SG-ACC 3SG-ILL give-TR-PST.2.3SG
   ‘(S)he gave me to him/her as a present’ (Gulya, 1966: 75)
There is a rare example in the available data that within this pattern offers an alternative way of coding of the Benefactive semantic relation and the Target semantic role (121). It is the ILL. case coding of the pronominal 3SG Benefactive and the Acc. case coding of the pronominal 1SG Target, which contrast the pattern’s Acc case marking of Benefactive and the InstrObj case marking of Target. This example could be likened to the pattern (i) and (ii) in its ILL case marking of the Benefactive. Such coding could be explained as a strategy to prevent potential ambiguity. The existence of two pronominal arguments, the Target and the Benefactive, could result in an ambiguity as to their roles in the state-of-affairs, as according to the pattern they were supposed to be both marked with the Acc. It should be noted that the InstrObj case never marks animate pronominal arguments, hence “Instrumental-Object”. The ambiguity is resolved here by the use of the Acc case for the Target, i.e. the object of manipulation/transfer (a rare action towards a human, i.e. an SAP manipulee), and by the use of the ILL case for the Benefactive, i.e. the spatial Landmark of the Target transfer. The word-order is also indicative of the distinctiveness of the action, with the Target argument used in the post-Agent slot of the general SOV linear order, while the Benefactive in the ILL. case is used in the pre-V slot, normally taken by adverbials (cf. 5.Adverbial Modifiers.).

(v) The last pattern is illustrated by the example (122b) above, and represents another pragmatically marked clause type, the passive voice, with an average frequency in the Eastern Khanty data of 10%.

122. a) pǝɣ-ali jis-wǝl, int-ot-a wayǝntǝ-wǝl, son-DIM cry-PRS.3SG eat-thing-ILL ask-PRS.3SG
    b) ap-ǝl-nǝ int-i pǝni joɣl-ǝwer-i
       father-3SG-LOC feed-PS.3SG and bow-InstrO make-PS.3SG
   ‘A boy is crying, asking for food, his father fed him and made a bow’ (Tereskin 1961:53)
The referent with the semantic role of Agent is expressed either by an NP or a Pronoun in the Loc. case or is not overtly expressed: \( \text{Ag=NP/Prn=Loc} \). The Benefactive relation is expressed either by a Pronoun or an NP in the Nominative case \( \text{Ben=NP/Prn=Nom} \) and controls the predicate agreement inflection. The Target is coded by an NP in the Instrumental-Object case: \( \text{Trg=NP=InstrObj} \) – Fig.5:

![Fig.5. Di-transitive event-proposition schema (v).](image)

This pattern will be considered in more detail in the section on the non-canonical constructions (cf. 10.3.Non-canonical Constructions), displaying marked grammatical coding of the semantic roles. The motivation for these morphosyntactic marking is iconic of the pragmatic markedness associated with notions of topicality, demotion, and control.

It can be seen in the above five models of the Eastern Khanty coding of the ditransitive states-of-affairs that the most frequent patterns of coding the participants with core semantic roles are as follows:

- the Agent semantic role is coded by Nom. (patterns (i), (ii), (iii)); less frequent pattern is the Loc-marking in case of the pragmatically motivated non-canonical constructions (Loc-Agent (pattern (iv)), and passive (pattern (v)));

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<td>Ag=Nom</td>
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<td>Ag=Loc</td>
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• the semantic relation of Benefactive (animate Recipient for whose benefit the action occurs) is coded by the Acc-marked pronouns or Ø-marked full NP (patterns (iii), (iv)); and less frequently by the Illative/Illative-Purp. (patterns (i) and (ii)); or Nom case in case of passive pattern (v);

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<tr>
<td>Ben=</td>
<td>Ben=ILL/ILL-Purp</td>
<td>Ben=Acc</td>
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• the semantic role of Target (manipulable inanimate object) is coded by InstrObj. case (patterns (ii-iv)); and less frequently by the Acc. (Ø=full NP) (pattern (i)); or InstrObj. case in the passive pattern (v);

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<tr>
<td>Targ=</td>
<td>Targ=Acc</td>
<td>Targ=InstrObj</td>
<td>Targ=InstrObj</td>
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Apparent in the above patterning is that in the Eastern Khanty ditransitive clause, the core semantic roles of the Agent and the Target are coded grammatically by the cases which are central, core in the argument structure of the clause (Nom, Acc), whereas the peripheral, spatial and instrumental cases typically code the participants which are less central to the semantics of the proposition, more peripheral semantic roles (ILL, ILL-Purp, Loc., Instr., InstrObj, etc). This represents the canonical di-transitive pattern of morphosyntactic coding of the semantic roles, grammaticalized in the Eastern Khanty case system, where the Nom case is used for the Agent; the Acc case (marked the pronouns and unmarked for nouns) or InstrObj is used to code the Target; while Illative or Illative-Purposive case is used to mark the animate Benefactive. Thus, the patterns (i) and (ii) are peculiar as they exemplify Benefective marked similarly to peripheral event participants by the spatial Illative or Illative-Purposive case. However, these patterns differ in the grammatical coding of the semantic role of Target: the Acc case of the pattern (i) and in the InstrObj of the pattern (ii), as exemplified by (98-100) above in comparison of (100) vs. (101). Unlike patterns (iv)-(v), in (i) and (ii), as in (99) repeated here, the referent coded by the argument in ILL. or ILL-
Pupr. case is what can be termed a remote Benefactive, at a local scale it is a designation-purpose landmark for the event of manipulation of an inanimate object, similar to a spatial landmark for object transfer.

99. tʃakaj-äm-ä   kənwat-át  wə-l-əm
   young.sister-1SG-ILL   sweet-PL   buy-PRS-1SG
   ‘I will buy sweets for my younger sister’ (Tereskin 1961: 48)

As such, this purposive designator is coded formally in a way similar to other spatial, temporal, etc. adverbials, that is, by NPs in spatial Illative case form (cf. for example, 5. Adverbial Modifiers.). In this same manner, nonfinite (participial and infinitival) subordinate clauses with purpose semantic relation are used inflected for the ILL. or ILL-Purp. cases in the function of adverbials (cf. (123) here, and 5.1.2.1. Subordinate clauses with adverbial semantics).

123. wäsk-ä  qatantə-l-əm,  jöyö-t-äm-ä
   duck-ILL sneak-PRS-1SG shoot-IMPP-1SG-ILL
   ‘(I) sneak on a duck, so that I could shoot it’

Patterns (i) through (iv) appear to show the dominant linear ordering of the semantic roles: Agent \( \rightarrow \) Benefactive \( \rightarrow \) Target \( \rightarrow \) Predicate, generally corresponding (with the exception of pattern (i)) to their grammar: case marking and predicate agreement control: Nom or Loc [+agreement]=(Agent) \( \rightarrow \) ILL [-agreement] or Acc [+/- agreement]=(Benefactive) \( \rightarrow \) Acc[+/-agreement] or InstrObj[-agreement]=(Target) \( \rightarrow \) V. This correspondence is followed, to an extent, in the passive pattern (v) as well, with the order: Nom[+agreement]=Ben \( \rightarrow \) Loc=Agent[-agreement] \( \rightarrow \) InstrObj=Target[-agreement] \( \rightarrow \) V.

Patterns (iii) and (iv) consistently show Acc/Ø case-marking of the Benefactive role, while patterns (ii-v) are consistent in InstrObj case marking of the inanimate Target role (the referents ‘fox’ in (107) and ‘fish’ in (109, 117, 119) are perceived as inanimate (dead)). The unmarked Acc case coding of both, the inanimate Target role and the animate Benefactive role in (106) within the pattern (i), could be
attributed to the economy principle, as in all available examples of this type any ambiguity concerning the semantic relation or grammatical function of the referents is improbable in light of differences in animacy, discourse or cultural status (Ben ‘mother’ vs. Target ‘fish’).

Considering the pattern (iv) vs. (i), (ii) and (iii), the pragmatic markedness of the proposition, the Loc-marking of the Agent referent does not affect the coding and overall status of other semantic roles in the proposition (cf. 10.3.2.The Loc-Agent Constructions.). Passive pattern (v), on the contrary, illustrates the effect of pragmatic operations such as voice on determining the status (core vs. peripheral) and grammatical coding of the semantic roles (cf. 10.3.1.The Passive Constructions).

Predicate agreement inflections, indicating the grammatical functions of the participants in the proposition, may also be indicative of the semantic status of the referents. That is, it is the core semantic roles (Agent and Target) that control the agreement in the clause, coded as bound morphemes of possessive etymology on the verbal predicate. Thus, for example, as established above and further confirmed below (cf. 10.1.1.2.1.Coding of the core Roles and Agreement (Argument Structure)), the semantic role of the Agent tends strongly to control the so called “subjective” Agent-predicate agreement inflection (cf. 8.3.1.2.4.1.Subjective Conjugation). Also following the outlined pattern, the semantic role of Target typically coded by the Acc. case may trigger the so-called “objective” Agent-Target-predicate agreement inflection, once this Target referent has the appropriate pragmatic status (cf. 8.3.1.2.4.1.Subjective Conjugation and 10.1.1.2.1.Coding of the core Roles and Agreement (Argument Structure)). In case of ditransitive propositions, this is typically the animate referent in the Benefactive semantic relation.
Thus, for example, in (115), repeated here for convenience, the objective Agent-Target-predicate agreement inflection shows coreference with the elided 1SG Agent role, and the SG of the Target role ‘my gun’, rather than the Instrument ‘bullet’. This is evident from the fact, that if the number of the Instrument referent changes, the Agent-Target-predicate agreement inflection remains SG (b):

115. a) poťʃkän-ām  nāl-ɑ  punka-s-im  
    gun-1SG  bullet-IntsrO  put-PST2-SG/1SG  
    ‘I loaded my gun with a bullet’

b) poťʃkän-ām  nāl-t-ɑ  punka-s-im  
    gun-1SG  bullet-PL-IntsrO  put-PST2-SG/1SG  
    ‘I loaded my gun with bullets’

There are some examples, however, where the objective agreement appears to be controlled by the argument of the proposition coding the referent with the semantic role of Target, the inanimate object of manipulation. Thus, in the example (124), it is most likely the ‘given’, i.e. the Target ‘what you want’ that is marked as SG. by the verbal predicate inflection. This assumption is based on the fact that the relative clauses such as the participial clause ‘what you want’ here, renders the relativized constituent as high in pragmatic status, that is, identifiable, accessible and active in the interlocutors’ discourse universe (cf. 10.2.Information Structure).

124. möyölä  koj-omp-in,  nöŋ-ɑ  mɑ-ɪ-lm  
    what  want-PP-2SG  2SG-ILL  give-PRS-SG/1SG  
    ‘What you want, I give to you’ (Gulya 1966: 86)

Similarly, in (104), repeated below, it is most probably the object of buying, ‘this deer’, being identifiable, active contextually and situationally, that controls the SG Agent-Target-predicate agreement (objective conjugation) of the predicate ‘buy’, because the focused referent ‘who’ of the question can not bear the required pragmatic status, i.e. definiteness, activation.

104. qoj-at  nöŋ  tim  weli  wɔ-ɪ-lm  ?
    who-Ill/Purp  2SG  DET  deer  take-PRS-2SG  
    ‘Who are you buying this deer for?’ (Gulya 1966: 55)
These examples characterize the pattern (i), as distinct from the other patterns, particularly such as (iii-iv), in that it is the semantic role of Target, the inanimate entity that is coded by the NP’s or nominalizations unmarked for case, and not the semantic role of the animate Benefactive coded by either NPs or pronouns marked for the Illative or Illative-Purposive case. Functionally thus, within the pattern (i), the Benefactive relation is construed in the proposition as peripheral, the adverbial in either spatial or purposive relation, while the Target role is construed as belonging to the semantic core of the proposition, the entity undergoing/registering the change. Within the patterns (iii-iv), on the contrary, the Benefactive is one of the core participants in the proposition, undergoing the change, while the Target is peripheral as the instrumental adverbial.

On the other hand, pattern (i) stands apart from the pattern (ii) in that the role of the inanimate Target is unmarked for case as opposed to its InstrObj case marking in the pattern (ii) where it is functioning as an instrumental adverbial. This morphosyntactic complexity of the Target role coding within the pattern (ii) appears to reflect iconically the fact of lesser semantic proximity of this referent to the core of the proposition, where Benefactive relation appears more salient at the propositional level.

10.1.1.3 Simple Clause Word Order

It is evident from (67, 68, 71, 74, 76, 77, 79) above that in Eastern Khanty, the Agent referent is often elided from the explicit expression, being marked by the co-referential agreement inflection on the verbal predicate. Nevertheless, it is also noticeable that the dominant and fairly rigid linear word order in the Eastern Khanty simple clause is SOV. Of course, in the discussion to follow, as in previous sections, it should be born in mind, that word-order is assumed to be a complex
multi-factorial domain, where generalizations are more often scalar rather than

Following the traditional word-order typology, the differentiation will be made
between the dependent and independent variables (Greenberg 1966):

a) Independent variable:

  WO in simple unmarked clause

b) Dependent WO Variable:

  WO in complex subordinate clause

  WO in NP

  Order of morphemes vis-à-vis lexical word-stems: morphotactics

Thus, the word-order in the Eastern Khanty independent, simple unmarked
indicative active-direct transitive clause is typically SOV:

125. ja-kən ā sa-kən nuruγte-l-kən
   bear-DU Conj. cub-DU run-PRS-3DU
   ‘A bear with a cub are running’
   Direct active intransitive clause: S-V.

126. ja-kən toм jiγi peləγ-na ut-a kərimtə-s-kən
   bear-DU DET river side-LOC forest-ILL turn-PST2-3DU
   ‘The bears(two) on the other side of the river turned into the forest’
   Intransitive clause with oblique elements: S-Obl-V.

127. jöγ sayillti-min mən-əs
   3SG run-CNv go-PST2.3SG
   ‘He took off running’
   Intransitive clause with embedded Adverbial nonfinite (Conv) clause: S-Obli(ConvCl)-V.

128. toγi jor öllä-ki iki
    there hill big-PRD PRD
    ‘That hill there is big’
    Intransitive state with nominal predicate: S-V_{nom}.
129. mä qul wel-s-əm
1SG fish kill-PST2-1SG
‘I caught a fish’
Active Direct transitive clause: S-O-V.

130. Igorenka Sashka-na samt-a tši-näm joyo-wəl
Igorenko Sashka-LOC mug-ILL this-All2 shoot-PRS.3SG
‘Sashka Igorenko shot at the mug’
Active direct transitive clause with an oblique: S-Obl-V.

131. tawaj mən-l-əw, pötfkän-ät nä-yl-i poni-tat i tawaj mən-l-əw
“let’s” go-PRS-1Pl gun-Pl bullet-Pl-InstrO load-Imper.2Pl “and” let's go-PRS-1Pl
“Let's go, load you'all's guns with bullets and let’s go”
Transitive imperative clause with an oblique element: (S)-O-Obl-V.

132. min toγu wer-ta mas-wəl
1Pl fire do-INF need-PRS.3SG
‘We need to make a fire’
Transitive clause with verbal complement (obligation/necessity), the infinitival CompCl is the second argument of the matrix clause: S-Ο[CompCl=OV[inf]]-V.

133. aj āmp-əli mä-nə qur-yət-i katl-i
small dog-DIM 1SG-LOC leg-PL-ELA hold-PST0-PS.3SG
‘I was holding the small dog by its legs (Lit.: Small fog by me by legs was held)’
De-transitive (passive) clause with oblique elements (Agent, Loc): S[Target]-Obl[Agent]-Obl[Loc/Manner]-V.

134. tuγ tpirn (min-nə) juy ontnam ti mən-i
DET after 1DU-LOC forest inside-All2 DET go-PST0-PS.3SG
‘After this (we) went to the woods (Lit.: After this(by us) the forest was gone in)’
De-transitive (passive) clause with motion verb and oblique element (Temp, Loc): Obl[Temp]-S[Loc]-V.

135. (nuŋ) mən-nə tšäs qötʃəy-nəti tuyi tʃoy-l-uj-ən
2SG 1SG-LOC now knife-COM away cut-PRS-PS-2SG
‘I’ll cut you up with a knife now (Lit.: You’ll be by me now with a knife cut up)’
De-transitive (passive) clause with oblique elements (Agent, Instr, Temp), and preverbal spatial adposition with aspectual sense: S[Target]-Obl[Agent]-Obl[Temp]-Obl[Instr]-Adp[Spat]-V.

As mentioned above (cf. 10.1.1.2.1.Coding of the core Roles and Agreement (Argument Structure), the information about the Agent role is often discernible from the predicate agreement inflection, which is an obligatory agreement in Eastern Khanty. This derives from the strongly preferred association of the topic
with the semantic role of Agent and the clause-initial position (cf. 10.2. Information Structure). Depending on its discourse-pragmatic status, the argument with semantic role of the Target may also be elided (cf. 10.1.1.2.1.Coding of the core Roles and Agreement (Argument Structure).

Eastern Khanty also displays quite strong correlation between the clausal word-order (SOV) and the order in the noun phrase (modifier-head, pre-nominal modification), thus supporting the general SOV cross-linguistic pattern (Greenberg 1966). As covered in the section on the noun phrase, all Eastern Khanty noun modifiers strongly tend to precede the modified head (cf. 9.Noun Phrase):

136. ̱ḻḻ ̱s̱̱ṟ̱ṉi̱ ̱w̱̱y̱ ̱ṯ̱ṟ̱p̱  
    big  silver  metal  pellet  
    ‘big silver pellet’

137. ʃ’u ̱s̱ṟṯ−ṉa  m̱̱ṉ  qatʃ  ḵ̱mḻ̱y̱ṯ̀−y̱aḻ  
    DET  pike-LOC  1SG-ACC  almost  turn.over-PST1.3SG  
    ‘That pike almost got me out of the boat’

138. ḵ̱ṯ  a̱j̱  ṉi̱ṉ−q̱̱ṉ  
    two  small  woman-DU  
    ‘two girls (small women)’

139. m̱̱  o̱y̱−m̱  q̱̱ṯ̀−q̱̱i̱  
    1SG  head-1SG  hurt-PRD  
    ‘My head aches’

140. m̱̱  ḵ̱ṯ̀−m̱  ḵ̱ṯ̱ṯ̀−m̱  s̱̱y̱  ḵ̱ṯ  u̱−ḻ−m̱  
    1SG  hold-PP  stick  hand  see-PRS-1SG  
    ‘I see the hand holding the walking stick’

There are examples, though, with the larger nominal modifiers such as Relative clauses which able to appear both in pre-nominal, harmonic OV order, as well as in the post-nominal, disharmonic VO order (141):

141. m̱̱  u̱−ḻ−m̱  ḵ̱ṯ  ḵ̱ṯ̀−m̱  s̱̱y̱  
    1SG  see-PRS-1SG  hand  hold-PP  stick  
    ‘I see the hand holding the walking stick’
This, on one hand, may be assumed to be the contact influence from the VO Russian language. On the other hand (142), it is an evidence of the existing scale in formal and semantic features of the Eastern Khanty relative clauses, where finite post-nominal instances combine the features of both subordination and coordination (cf. 11.2.3.Finite Linked Clauses with the Function of Relative Clause).

142. män-nọ onọl-l-ọm toṁ qu ju-wọl
   1SG-LOC know-PRS-1SG DET man walk-PRS.3SG
   ‘I know the man, who is walking there’

In any case, larger nominal modifiers such as relative clauses occurring in the post-head position, are consistent with the major word-order alteration pattern in Eastern Khanty, namely looser or flexible ordering of OV licensed by the pragmatic status of the Target role. More precisely, once the referent with the Target semantic role is pragmatically activated and accessible, it acquires certain word-order flexibility, i.e. allowed in SVO or OSV order (more cf. 10.1.1.2.1.Coding of the core Roles and Agreement (Argument Structure)).

10.1.1.4 Peripheral Semantic Roles and Their Grammar

As mentioned above, the semantic roles of Benefactive and Target both appear to be able to exist both within and outside the immediate semantic core of the proposition, depending on the context, being coded appropriately unmarked for case as core roles, or bearing respective case-marking typical for peripheral roles: Illative(Purposive), Instrumental-Object. Other Eastern Khanty semantic roles, however, consistently fall within the semantic periphery of the proposition.

Associative:

The section on reciprocals (10.1.1.2.6.Reciprocals) has already discussed Eastern Khanty intransitive clause that has a second participant which is associated
and acts homogenously with the Agent as in the repeated here (94), or reciprocally, as in (143a):

(94) m̃ɛ̂ŋ Tajka Nazonkin-na wer-s-ämin loq-nɔ  
1DU Tajka Nazonkina-COM work-PST2-3DU road-LOC  
‘We, with Tajka Nazonkina work on the road’

143. a) quj-äli tʃupi-ni-t-ɔn ajni-nɔ cf. b) quj-äli tʃupi-l-ɔn ajni  
man-DIM kiss-RFL-PRS-3DU girl-COM man-DIM kiss-PRS-3SG girl  
‘The young man and a girl kiss’ ‘The young man kisses a girl’

This second agent-like participant has the semantic role of Associative and is typically expressed in the function of a modifier to the predicate and as such to the whole of the proposition. This semantic role is grammaticalized in the Eastern Khanty in the so-called Comitative/Instrumental case with the marker /-na/.

Apart from the Comitative/Instrumental case marking of the Associative participant in (143a), the predicate itself is used with the transitivity altering voice affix /-nt/, adding to the reflexive/reciprocal sense of the coded event. Compare this to the regular transitive (143b) with no voice affix on the verbal predicate tʃupi- ‘kiss’. Similar contrast is seen in the (144a) vs. (144b), and (144c) vs. (144d).

144. a) əŋk-əl ọy-əl-nɔ əwlə-lə-kɔn  
mother-3SG daughter-3SG-COM hug-TR/RFL-PRS-3DU  
‘The mother with her daughter hug’

compare

b) əŋk-əl(-nɔ) ọy-əl əwlə-lə-ə  
mother-3SG(-LOC) daughter-3SG hug-PRS-3SG  
‘The mother hugs her daughter’

compare

c) əŋk-əl ọy-əl-nɔ nûl əwlə-ə  
mother-3SG daughter-3SG-COM RCPR hug-PRS-3SG  
‘The mother hugs with her daughter’
In the variation (144a-c), the first clause (a) has the Agent referent ‘mother’ expressed in the Nominative case, the Associative referent ‘daughter’ marked with the Comitative case, and the predicate ‘hug’ used with the transitivity altering voice affix /-lt/. This results in a reciprocal sense of the coded event (144a) shown also in co-referential 3Du Agent-predicate agreement, i.e. with both, the Agent and the Associative participants. As mentioned above (cf. 10.1.1.2.1.Coding of the core Roles and Agreement (Argument Structure) and 10.2.Information Structure), this clause structure contrasts with the transitive active (144b) where the Agent role ‘mother’ is in the Locative case, and the Target role ‘daughter’ is in the unmarked Acc. case, while the verbal predicate ‘hug’ is used without any voice affixes. This example also illustrates the so called objective (Target-predicate) agreement inflection, co-referential with the 3SG Agent role and the SG Target role. Finally, (144c) has the Agent ‘mother’ in the Nominative case, the Associative ‘daughter’ marked by the Comitative case, the verb ‘hug’ in a transitive form (144b) without voice affixes and showing agreement with the 3SG Agent, which is preceded by the special invariable reciprocal preverb nül. Example (144c) thus offers an alternative expression for the event (144a) with more emphasis on the ‘mother’ as a more active, deliberate, controlling animate entity, that is higher in agentivity.

The dominant peripheral character of the semantic role of Associative in the proposition is also indirectly evident in the fact that it shares the formal means of representation, the Comm/Instr. case marking with another peripheral semantic role, the Instrument:

145. mä n’ân’ öyö-käs-sm kötfey-nä
    1SG bread cut-PST3-1SG knife-COM
    ‘I cut bread with a knife’
**Instrument:**

As follows from (145) above, another frequent peripheral event participant is the semantic role of Instrument, an inanimate entity (145), (146) manipulated by the Agent in the Action. This semantic role is typically coded by the clause argument immediately preceding the verbal predicate, and with a general function of a modifier to the verbal predicate. Thus, similar to the Instrument ‘knife’ in (145), the referent ‘buckshot’ in (146) appears marked by the Com/Instr case and occurs in the preverbal position, generally specifying the manner in which the action is performed:

146. *man*-nə *trop*-na *pon*-im
    1SG-Loc buckshot-COM load-PST0.1SG/SG
    ‘I loaded it (the gun) with buckshot’

In addition to their occurrence in (di)transitive propositions, referents with the semantic role of the Instrument may occur in intransitive propositions, having the same function of modifying the verbal predicate. Thus in (147), the Instruments ‘skis’ and ‘sled’ appear preverbially marked for the ComInstr case and functioning as modifiers to the intransitive verbal predicate ‘go’:

147. *nimäl*-nä *män*-säm, *pir*-nə *pat*-t-əl-a *jıği*-na *män*-l-əm
    skis-COM go-PST2-1SG back-LOC freeze-IMPP-3SG-ILL sled-COM go-PRS-1SG
    ‘I went on skis, so that when the snow hardens, I could go on sledge’

In addition to the sense of purely objective inanimate tool manipulated in the Action, this semantic role also encompasses referents signifying body-parts, both animal (148) and human (149), which are acted upon in the way similar to instruments:

148. *nomän* kältäl-tə köt-əl, *pala*-nä kolantə-wəl,
    upwards curle-IMPP hand-3SG ear-COM listen-PRS.3SG
    ‘Its (dog’s) paw is pulled up, it listens with its ears’

149. *nuqa, jiyata*-l-im, *nuqa* köt-nä *we*-l-im,
    “let” see-PRS-1SG/SG  “let” hand-COM take-PRS-1SG/SG
    ‘Let me see it, let me take it with my hand’
Thus, both the Associative in (144c) and the Instrumentals in (145), (146), (147), (148) and (149) typically fall outside the semantic core of the proposition, coded by peripheral Com/Instr case, not affecting the transitivity of the proposition, and are not registering in the formal makeup of the verbal predicate (predicate agreement). Functionally, these referents act as modifiers for the predicate typically appearing immediately prior to it, specifying the manner in which the action occurs.

**Locative:**

The semantic role of Locative has a fairly rich and diverse domain, the instances of which share common basic sense of the spatial Landmark with regard to which a state-of-affairs occurs.

150. ṣa ṭoy puyol-na ṭəl-kal
    this lake village-LOC be-PST1.3SG
    ‘This was in Ozernoe village’

Within this common domain, there is a differentiation between Stative and Dynamic Locatives depending on the type of predication, that is, the propositions denoting existence or States co-occur with the stative Locatives (150, 151), while the propositions denoting Events, Actions, such as motion co-occur with the Dynamic Locatives (152, 153, 154, 155, 156).

151. mīn ṭajka-na wer-sä-min, ṭəl-kə
    1Du Tajka-COM do-PST2-1DU road-LOC
    ‘We worked on the road with Tajka’

All Locatives are coded by the arguments of the clause, typically functioning as spatial modifiers of the verbal predicate, most frequently directly preceding it (150, 154), but also occasionally following it (151, 152, 156).

152. sayəlda-min mən-at aj lək-ka.
    jump-CNV go-PST0.3PL one track-PRL
    ‘Went off leaping in a single file (single track)’
Vasja cellar-3SG open-PRD do-PST2-3SG head-3SG-PRL rag lay-PST0.3SG  
‘Vasya opened the cellar and over the top he laid a rag’

The specifics of the semantic relation of the Locative referent to the Agent or another core participant in the State/Event/Action is detailed by the Eastern Khanty system of locative cases. The stative Locatives are coded by the full NPs or pronouns in the Locative case as in (150).

154. məŋ-a pat-i nuruŋtə-l-kən  
1Pl-ILL hill-ELA run-PRS-3DU  
‘Down from the hill, towards us (it is) running’

Matrena fast go-PP-3SG cellar-ILL down fall-PP-3SG DET 2-DU away break-PST0.3SG  
‘Matrena having gone real fast, fell down into the cellar and broke up two (ribs)’

156. mä jöy-a toloy-wəl: “pərt-ay noroŋtə-l-əw, a to təmi qaqi wajay naverna.  
1SG 3SG-ILL say-PRS.3SG back-PRL run-PRS-1Pl “as” DET brother animal perhaps  
‘I am saying to her: “We should run back, as this could be a bear”’

The dynamic Locatives are coded by the NPs or pronouns marked by a set of Lative cases, such as Illative (155, 156) coding the direction “towards”, Elative (154) coding the direction “from”, Prolative (153, 156) coding the direction “along”, etc. (cf. 2.1.2.2.3.Case).

Frequently, the Locative roles of both stative and dynamic types are coded by the use of full NPs or pronouns affixed with postpositions, that is, postpositional phrases consisting of a nominal or pronoun and fully or partially delexicalized nominal either unmarked (157, 158), or marked for a Locative case (159) (cf.7.Postpositoins).

157. jöy lök-əl sayi mən-s-əm  
3SG track(3SG) way go-PST2-1SG  
‘I went by his tracks’

158. lök sapi mən-əs  
road across go-PST2.3SG  
‘(S)he went across the street’
Locative semantic role is also extended to code the temporal landmarks for the States/Events/Actions, having identical grammatical coding with the spatial Locatives, that is, the stative Locative cases (160, 161). They also function as temporal adverbials.

In Ozernoe, in the morning’

Occasionally, temporal Locatives may be coded by the whole clauses still having the same function of the adverbial modifier and preceding the main predicate and bearing Locative affix attached to the dependent participial predicate (162), (163) (cf. 5.1.2.1.Subordinate clauses with adverbial semantics).

Purpose:

An animate or inanimate referent can be used either with the already reviewed semantics of Benefactive (164) (cf. 10.1.1.2.7.Clauses with di-transitive predicates), or with the semantics of designation/purpose of the Action (165), both marked by the Illative case, and either preceding the predicate and the Target role argument (164), or following it (165):
Unlike the pure spatial dynamic Locative marked by the Illative case and coding motion or transfer towards a landmark as in (155) and (163) above, in (165) there is a metaphorical extension of the spatial landmark semantics to the purposive semantics. The semantics of the verbal predicate in (165) does not imply any movement or transfer. Thus, instead of the designation of spatial motion of (155) and (154), the Illative-marked referent represents the projected state-of-affairs in (164) and (165), the purpose designation of the Action, construed similarly to a spatial landmark and also functioning as an adverbial (purpose).

10.2 Information Structure

As a general observation on the information structuring in the Khanty narratives, it can be noted that the most frequent way of introducing a new referent in the beginning of the discourse is by a full NP or a free pronoun in a thetic-type clause (25). The referent, which is thereby discourse-identifiable and -active, is then-onwards marked by an unaccented pronominal coreference on the predicate (or a co-referential zero agreement in case of 3SG. argument on the predicate).

10.2.1 Topic and its Grammar in Eastern Khanty

In the following section, the Vasyugan Khanty text examples are used to corroborate the claim about the formal and semantic features of the established Agent participant contrasted with the new Agent participant, in relation to their discourse-pragmatic features. A referent is hereafter considered as pragmatically central, topical based on a host of properties such as: its belonging to the
presuppositional part of the proposition; its being contextually accessible and active; in dislocation tests ("as for" and "about") it produces the target clause\textsuperscript{36}; it is not carrying the clause accent, and the rest of the proposition appears to carry a relation of "aboutness" towards it (Lambrecht 1994).

In the selected narrative, in clause (166), the discourse topical referent, 1Pl. Agent, is activated and maintained (8 clauses in the narrative) as an unaccented co-referential inflection on the predicate:

166. nu ej toγoj-na... toγoj- nɔ men-s-ɔw̽ quł- kant-фа- tati ill-ati
    OK one spring-LOC spring-LOC go-PST2-1PL fish-find-INF-Sup down-PURP
    'Once IN SPRING..., in spring we WENT DOWN to fish'

Formal absence of this referent, as a free pronoun, may be attributed to a certain cataphoricity effect, as most of the participants, implied under 1PL here, are identified by full NPs and free accented pronouns further in the discourse. This 1PL central discourse referent is also inclusive of the author of the text (1SG SAP), which is a feature of the genre of autobiographical narrative, and thus, already has high situational accessibility. Once the referent is identified in the discourse as topical and has high activation status in the interlocutors’ discourse universe, it can undergo temporary or terminal de-activation as a result of activation of a new or competing active referent in the proposition:

167. nu jemaki kall-ɔw̽
    - OK spend.night-1PL
    'OK, so we stay for one more night'

168. mä sart wel-s-ɔm, ɔllə
    1SG pike kill-PST2-1SG big
    'I caught a pike fish, big one'

169. ɔllə sart ɾatʃ män-nə löyöli-s-im
    big pike oldman 1SG-LOC cut-PST2-1SG/SG
    'I got the big pike ready'

\textsuperscript{36} Kuno 1972; Gundel 1976; Lambrecht 1994.
Clause (168) demonstrates a change of the topical 1PL 'we' Agent referent, which is active and identifiable in (166), and is expressed by the 1SG verbal inflection in (168). As anticipated by the pattern, the change is marked by a free accented 1SG pronoun. The 1SG referent is maintained as topical further on, expressed only by the 1SG predicate inflection.

The stretch of discourse (170-174a) represents a sequence of changes of the topical status from the referent 'bear' to the 1SG Agent 'I' and it deviates from the established pattern in that the change is not marked by a full NP or free pronoun. Rather, each referent takes turns being maintained as topical coded by elision and predicate inflection. In (170) the 3SG Agent 'he/she/it' assumes the status of topic, marked by a free pronoun, as expected by the pattern, and is maintained in (171) marked by elision and the Agent-predicate agreement (zero in the case of 3SG). In (172), the 1SG reappears as topic not coded by a full pronoun but by elision and predicate inflection.

170. jōγ-a jijî jor-ŋa nuγ lɔγi-m-ayi
    3SG-ILL river middle-LOC up lie-PP-PRL
    'In the middle of the river he floats, just resting there'

171. lɔγi-wɔl
    lie-PRS.3SG
    'He stayed there (on the water)'

172. tʃiλaŋ-ta-s-im: rut’ sayi "medwed’
    cry-PST2-1SG/SG Russian way "bear"
    'I cried in Russian "bear!"'

173. "mɔǝt jiyi-ŋa kol-waŋ-ta-l-il"
    "maybe" 3Pl- LOC hear-ATTEN-PRES-3Pl/SG
    '"Maybe they would hear it"'

174. a) nu jiệk, jiyata-l-im,           (b) "aha, wajaw."
    - good look-PRES-1SG/SG   OK, animal
    'Ok, I look "OK, there it is"'
The absence of overt expression of both of the participants (‘man’ and ‘bear’) suggests that, at this point in the narrative, they together constitute the foreground in the narrative. As both literal (spatial) and pragmatic distance between them decreases, they are simultaneously on the stage. This also allows them to maintain a certain economy and dynamics in the narrative that is pertinent to the particular described situation. This is supported by the fact that this kind of “dynamic pragmatic alternation” is used again in the subsequent discourse for these same referents.

Example (173) presents an inner speech quotation, the thought of the narrator, where the 3PL Agent 'they' is marked with Loc case. The predicate in (173) is inflected for 3PL agreement with the Agent and for a definite singular agreement with the Target, i.e. 'it', (the bear). Since (173) is outside the narrative stream, it does not displace the 1SG Agent, the narrator from the topical position, and it continues as the pragmatic center in (174a) appropriately expressed by elision and 1SG predicate inflection. Similarly, (174b) quotes the inner speech of the narrator.

Thus, we can conclude with regard to the pragmatic organization of the Khanty narrative:
(i) The way to introduce a brand-new referent into the discourse, or to reactivate it as a participant in the discourse is by coding it by a full NP or a free pronoun with the Agent role in the clause-initial position and by the respective predicate agreement inflection. Inner speech quotations, asides and such, do not alter the pragmatic status of the arguments and do not require their formal reestablishment;
(ii) Once the referent is identifiable as topical at the current stretch in the discourse, it is expressed by an elision and objective Target-predicate agreement inflection;
(iii) More than one discourse referent can have compatible discourse prominence, representing closely associated participants simultaneously occupying the stage in
the narrative. They can alternate in the Agent role in conjoined or adjoined clauses, being marked only by elision and respective predicate agreement inflection. In these cases, the alteration of such pragmatic "equilibrium" is signaled by the reversion to marking of the current topical referent with an NP or free pronoun with the Agent role and the respective predicate agreement inflection.

The exceptions to the above grammar of the pragmatic functions and the semantic roles are:
(i) Clauses with no clear topical referent (Background setting, Thetic, Event reporting);
(ii) Clauses with no agentive argument, or with an inanimate referent in Agent role;
(iii) Clauses with the topical referent expressed by an argument with the semantic role of Target.

The above correlation between pragmatic functions and morphosyntax prevails over that between the semantic roles and morphosyntax. The latter is evident from the fact that, although the correlation between the pragmatic status of topic, the semantic role of Agent and the grammar (clause-initial order, Nom case and predicate agreement control), by far prevail, in some instances, arguments with the semantic role of Target correlate with a pragmatic topicality status and with the grammar of Agents (clause-initiality, Nom case and predicate agreement control). At the same time, in such constructions, arguments with the semantic role of Agent are oblique-case marked and do not control predicate agreement.

We can re-affirm the universal correlation (Lambrecht 1994) of the pragmatic status of a referent’s formal complexity, in that the continuum between a zero and maximal morphological explicitness is counter proportionate to the continuum between pragmatic centrality, activation and unidentifiability, inactiveness:
That is, in Eastern Khanty, the Agent argument is the one that normally has high activation status. It is typically the discourse topic, typically clause-initial position and is typically coded by an elision and predicate agreement. The new discourse referent may be either an Agent argument coded by a full NP controlling predicate agreement, or most frequently a Target argument coded by a full NP and absent predicate agreement.

It is thus fairly uncontestable that the referent with high discourse-pragmatic status, topical, normally occurs in Eastern Khanty coded by the clause-initial argument in the utterance, that is, when it does occur overtly coded. More typically the topical discourse referent is coded by elision and appropriate predicate agreement inflection. This tendency appears to be the essential strongest pattern of the Eastern Khanty discourse organization, overriding that of semantic role–grammar association, or pragmatic function–semantic role association, which is evident from the examples of the constructions such as voice constructions, where these mapping patterns are altered as compared to the canonical active direct clauses (cf. 10.3. Non-canonical Constructions).

175. min Tajka Nazankin-na wer-sä-min lök-nô
1Du Tajka Nazankin-COM do-PST2-1DU road-LOC
‘We worked on the road with Tajka Nazankina’

176. po uzkolejke, nu nochnoj smena, joyon,
‘along’ ‘narrow track’ well ‘night’ ‘shift’ night
‘Along the narrow track, well the night shift, at night’

177. do dvenadtsati tʃas-na wer-käš-min.
till ‘twelve’ ‘hour’-LOC do-PST3-1DU
‘(we) worked till 12 o’clock’
The topical referent, when overtly present, may be coded either by the full NP or the pronoun with the Agent role marked by the Nom. case controlling the predicate agreement inflection.

178. *qoi-kam tʃerä tʃil-wəl.*
    where-Ind very yell-PRS.3SG
    ‘Somewhere someone yelled real loud’

    Tajka 1SG-ILL say-PRS.3SG who-Ind some where-Ind go-PST.3SG
    ‘Tajka says to me: “Someone… seems to have gotten into something”’

180. *mä tolo-l-əm: “əntə tʃi əntə qași, tʃi qaqi wajə tʃil-wəl!*
    1SG say-PRS-3SG Neg DET Neg man DET brother animal yell-PRS.3SG
    ‘I say: “No! This is not a human, it’s a bear yelling”’

    3SG say-PRS.3SG Neg DET man yell-PRS.3SG
    ‘She says: “No, this is a human yelling”’

182. *mä jöy-a tolo-wəl: “pərt-əy norəyə-l-əw, a to təmə qaqi-wajə naverna”*
    1SG 3SG-ILL say-PRS.3SG back-PRL run-PRS-1Pl otherwise DET brother-animal perhaps
    ‘I am saying to her: “We should run, because this could be a bear”’

In the sequence (178-182), in the reported dialogue (179-182), the situationally accessible referent is established as topical for the next discourse episode, coded by the clause-initial indefinite pronoun in the Agent role ‘someone’ in the first reported speech utterance (179). It is further maintained in the reported speech utterances (180, 181, 182) coded by the clause-initial pronominal determiners *tʃi* and *təmə* ‘this’ in the Agent role controlling the predicate agreement. In similar manner, the author’s reporting of the conversation follows the same pattern. The topical referent has typically the Agent semantic role coded by the clause-initial NP (179) or pronoun (180, 181, 182) controlling the predicate agreement. The free pronoun coding in (180, 181, 182) is not reduced to elision, as the typical Topic
coding in the Eastern Khanty, in order to avoid ambiguity in the dialogue, that is, the rapid sequence of topicality shifts.

**10.2.2 Focus and its grammar in Eastern Khanty**

It is evident from the Eastern Khanty examples reviewed so far, that the position in the clause immediately preceding the verbal predicate is typically taken by the referent belonging to the part of the proposition containing pragmatic assertion, which can be very roughly equated to the new information. This semantics typically associates with the Target semantic role and is coded in preverbal position.

183. a) \((nuŋ)\) muɣuli wel-s-ən ?
   (1SG) what kill-PST2-2SG
   ‘What did you catch?’

   b) \((mä)\) sart wel-s-əm
   (1SG) pike kill-PST2-1SG
   ‘(I) caught a pike-fish’

Thus in (183b), the Agent referent is identifiable and active, recoverable both contextually and situationally, and has the pragmatic function of topic, with the rest of the proposition predicating some additional information about it. From the question, it is recoverable that a certain agent, the SAP ‘caught something’, that is, “SAP caught X”, where X stands for the new, not yet shared knowledge. It is also recoverable that the X is the second argument of the verb ‘catch’ with the role of Target, and it is anticipated that in the answering proposition it will be coded in the linear position immediately preceding the predicate, which is a typical position for the Acc-marked Target.

It was discussed in the section on topicality that every proposition coded by the utterance typically contains a part that is regarded as pragmatic presupposition (the shared knowledge), and a part that is regarded as pragmatic assertion (a unique, or not yet shared knowledge). In the discussion of the pragmatic assertion, the notion
of Focus will be used to very generally oppose the notion of Topic. The focus of the proposition coded by a clause in a given context is to be understood as the element of information whereby the pragmatic presupposition (shared knowledge) differs from the pragmatic assertion (not yet shared knowledge), it is the unpredictable or pragmatically unrecoverable element of the utterance (Lambrecht 1994: 207). This section will review various types of focus as different kinds of marking the pragmatic relation of focus in the pragmatically structured propositions. The function of Focus Marking is taken here to mark not so much an individual constituent of a clause as new, but rather to signal a focus relation between an element of a proposition and the proposition as a whole, where the Focus Relation is the relation holding between the proposition and the denotatum of a constituent of this proposition, without which the utterance of the proposition will fail to convey new information (Lambrecht 1994: 210).

In (183b) above, the NP sart ‘pike-fish’ is the pragmatic Focus, in that the referent of this NP is in the focus pragmatic relation to the whole of this proposition, adding some not yet shared, unrecoverable information.

The Eastern Khanty examples can be differentiated into three large structural types with regard to the association of the clause structure and the focus meaning.

(i) The clauses of the (183b) kind, with the focus identifying one of the arguments of the presupposed proposition, is going to be referred to as the Argument-Focus.

184. a) muylän  pan-ən  jerim-s-im?
      which  finger-2SG  scratch-PST2-SG/2SG
      ‘Which finger did your cut?’

     b) wətʃən  (jerim-s-im),  göv-nä  jerim-s-im
      small.finger (scratch-PST2-1SG/SG)  glass-COM  scratch-PST2-1SG/SG
      ‘(I cut) the small finger, scratched it with the glass’
The open presupposition evoked in the utterance (184) is ‘the speaker cut/injured the finger X’. The first assertion of the reply utterance (b) is ‘X=small finger’. The focus here is the preverbal Target argument ‘small finger’, not just the modifier ‘small’, as the ‘small finger’ is the single stem lexical unit in Eastern Khanty. Interestingly, the Target referent is identifiable with a certain degree of pragmatic activation, which follows from the ‘objective’ Target-predicate agreement inflection in both (184a) and (184b). It is still, however, in the pragmatic relation of focus to the whole of the proposition in (b). The second assertion in the reply utterance (b) is specifying another argument, the instrument ‘X=with a glass’, with the focus also being ‘with a glass’. The evoked presupposition, though not explicit, but implied is ‘speaker cut a finger with X’.

This type will also include the clauses such as (185), where the question (a) sets up the expectation with regard to the answer (b) where in the presupposed proposition “speaker is going to X” the focus is the Locative coded by adverbial NP:

185. a) qol-pa mən-l-ən ?
   where-ILL go-PRS-2SG
   ‘Where are you going?’

   b) (mä) joy-pa mən-l-əm, əmtər-nä
   (1SG) home-ILL go-PRS-1SG lake-LOC
   ‘(I am) going home, on the lake’

The clauses such as (186), where in the presupposed proposition (b) “speaker is talking to X” the focus is the Associative/Addressee of the communication predicate and is coded by the NP in the function of adverbial of manner:

186. a) əŋkoj, nun qoj-na joroy-wən?
   mother 2SG who-COM talk-PRS.2SG
   ‘Mother, who are you talking to?’

   b) (mä) ätinäm (joroy-l-əm)
   (1SG) RFL (talk-PRS-1SG)
   ‘(I am) (talking) to myself’
The range of the semantic relations of the adverbials that may bear the focus function is wide, including space as in (185b), purpose as in (187b), reason as in (188b), instrument/manner as in (189b) and time as in (190b).

187. a) muyul’a n’an’ jiya-s-in?
   why bread look-PST2-2SG
   ‘Why did you look at the bread?’

   b) (mä n’an’ jiya-s-im), kotf-ayi ili anto kotf-ayi
   (1SG bread look-PST2-1SG) burn-PST0.3SG “or” Neg burn-PST0.3SG
   ‘(I looked at the bread) (to check) if it burned or not’

188. a) Ivan muyul’a nayinta-wal?
   Ivan why swear-PRS.3SG
   ‘Why is Ivan swearing?’

   b) (Ivan nayinta-wal), qul il riy-wal-t put-oay
   (Ivan swear-PRS.3SG fish down jump-PRS-3Pl pot-PRL
   ‘(Ivan is swearing) (because) fish is jumping out of the pot’

189. a) muyuli-na (jöy töyör) wel-ta?
   what-COM (3SG hare) kill-PST0.SG/3SG
   ‘What with (how) did (he) kill (the hare)?’

   b) (jöy töyör) lis-nä, sesak-nä (wel-ta)
   (3SG hare) loop-COM loop.trap-COM (kill-PST0.SG/3SG)
   ‘(He killed the hare) with the loop, with the loop trap’

190. a) tji qunto wer-wan?
   DET when do-PRS.2SG
   ‘When are (you) doing this?’

   b) (mä) tji toyi-na, maj-iки-na (wer-s-em)
   (1SG) DET spring-LOC May-month-LOC (do-PRS2-1SG)
   ‘(I did) this in spring, in May’

As seen in (187) – (190) above and further below, the WH-words (muyul’- ‘why, how, which/what kind’, qo- ‘when, where’, etc.) may occur either clause-initially (183), (184), (185), (187), (189), (191), which is most typical, or preverbially (186), (188). Generally, these WH-words occur in the position of the
questioned clause constituent. Thus, in (187) and (188), the question word *muγul’a* ‘why’ refers to the reason/purpose adverbial modifier, that fall within the scope of focus. Since in (187), the Agent role refers to the 2SG SAP in the presuppositional part of the proposition with topic pragmatic status, it is elided and the WH-word appears clause-initially. While in (188), the topical Agent ‘Ivan’ is overt and clause-initial, and the WH-word questioning the constituent with ‘reason’ semantics appears preverbially, appropriately for the adverbial.

Apart from adverbials, nominal modifiers too, can fall within the scope of focus.

191. a) *muγalin sōj (wəl-wəl)?*  
which sound be-PRS.3SG  
‘What kind of sound (this is)?’

b) *pöțkän sōj (wəl-wəl)*  
gun sound (be-PRS.3SG)  
‘(This is) the sound of a gun shot’

In the utterances of the type (191b), the presupposition evoked in the clause is ‘The sound is of the X quality’ and the assertion in the reply (b) is ‘X=gun shot’ thus making the focus ‘(the sound) of a gun shot’.

Similarly, in (192), the quantifier-attribute may be the focus.

192. a) *muvina pit-ayi qul?*  
how get-PST0.3SG fish  
‘How (much) fish is getting (in the net)?’

b) *tfimləi (qul pit-ayi)*  
a little (fish get-PST0.3SG)  
‘A little (fish) (got in)’

The evoked presupposition here is ‘there is X-much fish getting in’, and the assertion of the reply utterance (b) is ‘X=a little’, and the focus is ‘a little (fish)’.

In the same way, in (193), the quantifier attribute of the Target NP is the focus, with the evoked presupposition being ‘the speaker poured X-much water’. The
reply utterance (b) asserts the quantity ‘X=four ladles (of water)’ rendering ‘four ladles (of water)’ as the focus.

193. a) matkura jəŋq nāyārā-s-ən?
   how much water pour-PST2-2SG
   ‘How much water did you pour?’

   b) nellä kowʃjik jəŋq (nāyārā-s-əm)
   four ladle water (pour-PST2-1SG)
   ‘(I poured) four ladles of water’

(ii) The type of clauses exemplified by (194) and (195) have the predicate itself, either verbal or nominal, as the focus, while the Agent argument is in the presuppositional part of the proposition.

194. a) muyalan pūṭški? tʃi umni?
   which bird DET crown
   ‘What kind of bird this is? This is a crow?’

   b) tʃi ənto umni, tʃi teley pūtki
   this Neg crown DET tomtit bird
   ‘This is not a crow, this is a tomtit’

   In the example (194), the nominal predicate is in the focus relation to the whole of the proposition. That is, the proposition is the comment about a certain topic referent ‘this’, the situationally and contextually shared, identifiable, active entity. The state-of-affairs denoted by the predicate establishes the relation of ‘aboutness’ towards the topical referent (Lambrecht 1994, 226), asserting the not yet shared, unrecoverable knowledge.

195. a) muväli tit?
   what DET
   ‘What is this?’

   b) tʃi jir (jöy) jir maj-li-wal
   DET gift (3SG) offering give-INTR-PRS.3SG
   ‘This is an offering. He is making an offering’

   In (194) and (195), both parts of the answer utterance (b) are the predicates which assert, establishing the relation of ‘aboutness’ towards ‘this’ and ‘he’
respectively, the identifiable, active, cognitively shared entity. The presupposition here is ‘this or he is the topic for comment X’, where ‘X=tomtit, offering, gives and offering’. The focus in these examples, are the predicates ‘tomtit, offering, gives and offering’, hence this type is to be referred to as the Predicate-Focus. This is best seen in the example (196), where the presupposition is that ‘the speaker is doing X’ and the assertion of the reply utterance (b) is that ‘X=breaking ice’. Thus, the focus is ‘breaking ice’.

196. a) muyuli wer-wən?
   what do-PRS.2SG
   ‘What are you doing?’

   b) (mä) jɔŋ petʃe-l-əm
   (1SG) ice break-PRS-1SG
   ‘(I am) breaking ice’

This type also includes modal predicates, where the assertion is the modality itself. In (197), the presupposition is that ‘the speaker is in some modal relation X to bread’, and the assertion is that the relation is desiderative ‘X=want’, and the focus is ‘want’.

c) n’an’ qojl-ən?
   bread want-2SG
   ‘Do you want some bread?’

d) (mä n’an’) qojl-əm
   (1SG) bread want-1SG
   ‘(I) want (bread)’

(iii) The final type is exemplified by (197), where the whole of the clause is the assertion and the presupposition is that a state-of-affairs generally takes place.

197. a) qonti jie’s?
   what become-PST2.3SG
   ‘What happened?’
In (197), the presupposition in the question could be said to be that a state-of-affairs could occur, or even can be absent altogether. The assertion, however, appears to extend over the whole of the proposition: ‘the fishing net ended’. The proposition thus has the pragmatic function of reporting the state-of-affairs, all of it being the focus: ‘the fishing net ended’. Both the Agent argument of the Event and the predicate fall under the scope of focus, hence this type is to be referred to as Clause-Focus.

The negative reply utterances such as (198b) also fall within this type, as the presupposition here is ‘something is the X’s work’ or ‘X did something’, while the assertion is ‘X=the speaker’, or ‘the speaker did something’. The reply proposition, however, is effectively the falsification of the presupposition: ‘It was not me, I did not do anything’. That is, in the reply proposition both, the Agent argument and the predicate itself are within the scope of the focus.

Interestingly, in the reply utterance (198b), the Agent role is coded here as the clause-initial argument marked by the Loc. case, that is, it has the oblique case marking, which is a feature of voice constructions. The main pragmatic function of these constructions is identified as demoting the Agent, making it less volitional, controlling, affecting and, importantly less topical for the given stretch of the discourse (normally for the length of one or two clauses) (cf. 10.3.Non-canonical Constructions). The non-topicality, the focus relation of the Agent argument in
(198b), is an important feature, the one by which the presupposition of (198a) is falsified, or made absent. Thus, it is not incidental or random that the morphosyntactic properties of this argument in (198b) are consistent with those of the ‘demoted’ Loc-Agent voice construction. On the other hand, the non-topicality of the role of Agent here, its coding by the Loc-marked NP aligns it with another marked Agent-demotion construction, the agented passive (cf. 10.3.1. The Passive Constructions).

Thus, in Eastern Khanty, the focus of the proposition may be any argument of the clause, including the Target argument (most frequently) typically in the preverbal position; the nominal and adverbial modifiers of time, space, manner, reason, purpose. This kind of examples of focus constructions forms the Argument-Focus type of propositions. The predicate, verbal, or nominal, or complex verbal containing complements may also be the focus, and this kind of examples form the Predicate-Focus type of propositions. Finally, the whole clause, with both, the Agent argument and the predicate may be within the focus scope and the presupposition may be either absent or restricted to some peripheral elements, and this kind of example forms the third type, the Clause-Focus.

10.3 Non-canonical Constructions

There are types of the Eastern Khanty clauses that consistently deviate from the prototypical formal coding of the semantic roles and marking of the grammatical relations of the arguments in the proposition outlined above. These include the Eastern Khanty passive constructions, representing approximately 13% of the clauses in the narratives, and the so-called “ergative” constructions, averaging 10% of the clauses. The structural properties of these constructions are neither typologically unique, nor previously undescribed. However, what is missing in previous accounts (Kulonen 1998) is a detailed discussion of pragmatics of these
constructions. The following section will examine in more detail the instances of these construction types in their narrative discourse environment in attempting to obtain a satisfactory functional explanation of their non-canonical morphosyntactic makeup.

10.3.1 The Passive Constructions

The functional domain of passive is shared in Khanty by two types of constructions with regard to their formal and semantic properties. Constructions of the first kind, referred to as stative passives, express situations that represent a state-of-affairs resulting from an Action. Structurally, they are represented in Eastern Khanty by the nonfinite verb forms in attributive function (perfective participle) and are referred to as resultative passive constructions. This correlation between the resultative, completion, perfective on the one hand and the passive on the other is well attested and described as originating from the “inactive nature of the passive subject (patient)...”, which has “the effect of shifting the perspective from the agent's side to the patient's, and accordingly from the beginning to the end of the event” (Shibatani 1985).

199. min atʃɪsa-kən men-kal-men wal-m-aw qat-a
    1DU brother-DU go-PST1-1DU live-PP-1Pl house-ILL
    ‘We, two brothers went to the house where we lived’

Northern Khanty participial constructions, similar in their features have been described in adequate depth by various Siberian scholars (Skribnik & Kovgan 1991; Cheremisina & Koshkareva 1991; Kovgan 1991). In Eastern Khanty, the main features of such constructions are essentially similar, they code a state-of-affairs that is construed within the perspective of another state-of-affairs, which is reflected in coding of the dependent state-of-affairs as the subordinate nonfinite clause embedded within the matrix finite clause (199) and (201, 202).
200. süymit-äli jal-wəl,
birch-DIM stand-PRS.3SG
‘There is a birch standing there’

201. tomkol tuγoj niläyt-əm jəlw… jəlw-əɣ.
bark away rip-PP fresh fresh-ADV
‘The bark is fresh ripped off, recently’

202. tot süymit niläyt-əm tʃontʃoŋ-na puŋ lajaw-wel-t.
that birch rip-PP bark-LOC hair hang-PRS-3PL
‘On that ripped birch bark there is some hair hanging’

In this sequence, the referent ‘bark’ is the clause-initial argument of the participial clause in (201), which is the rare example of the postposed participial relative clause modifying the referent ‘birch’, coded by the clause-initial Agent argument of the matrix State clause (200). Interestingly, in (202), the referent ‘bark’ appears to have topical status, and occurs in the Locative semantic role coded by the clause-initial full NP inflected for Loc. case and functioning as a spatial adverbial. At the same time, this referent is also the head argument of the preposed participial relative clause ‘ripped off’, exemplifying the passive, resultative construction, where the perfective participle has the passive connotation.

203. küm täl-s-im, kollo.
all pull-PST2-1SG/SG all
‘We pulled it out, all of it’

204. küm täl-m-āp, məɾəm perwij män-ə jāyō-m-əm näl parka-loy konamt-əyi.
out pull-PP-ADV only “first” 1SG-LOC shoot-PP-1SG bullet chest-bone hit-PST0.3SG
‘Having pulled it out, only the bullet that I shot first hit it in the chest bone’

In the sequence (203-204), the utterance (203) represents the canonical structure with the topical 1SG Agent coded by the elision and the 1SG predicate agreement. The identifiable and active inanimate Target role ‘bear’ is also elided, coded by the respective SG. Target-predicate agreement. In (204), there are two participial resultative constructions: ‘having pulled it out’ referring to the topical ‘bear’ and
functioning as temporal adverbial with the relation of precedence of the dependent event-time to the matrix event-time, and ‘that I shot first’ functioning as a relative clause modifying the referent ‘bullet’. In both cases, the heads of the participial resultative clauses are inanimate Target roles with the pragmatic function of topic within these clauses. In the second case (204), the referent with the Target semantic role (patient of change) coded as the head of the participial resultative clause is coreferential with the Agent argument of the matrix clause. In this embedded participial relative resultative clause, the referent with the semantic role of Agent (1SG) has the explicit free pronominal coding, marked by the Loc case, characteristic of the Eastern Khanty passive clauses (cf. immediately below).

Another, most typical kind of the Eastern Khanty passive constructions is the dynamic passive, structurally representing a morphologically passive finite verb form, coding the state-of-affairs that is inactive from the point of view of the argument controlling the predicate agreement, in case of (205) with the semantic role of Target:

```
205. min lel-em-nat jaqqa-la-am-no internat-i noq wej-ojman kanikul-nam
     1Pl brother-1SG-COM parents-1Pl-LOC school-ELA up take-PS1DU holidays-All2
     ‘My younger brother and I were taken by our parents from the boarding school for holidays’
```

This group of constructions can be differentiated into subgroups based on the status of the Agent referent marked by the Loc case.

The first type of agented constructions may describe situations with either one or more event participants. The affecting referent with the semantic role of Agent may be deficient in control, authority, and can be inanimate, as typified in fairy tales with supernatural agents/events and idiomatic expressions:

```
206. sem muyul-na ji-l l
     eye something-LOC eat-PRS-PS.3SG
     ‘The eyes are smarting with the smoke’ (Lit. the eyes are eaten by something)
```
The utterances of the (206) kind typically occur only in the passive form and are not attested as active direct transitive clauses (low probability of a context featuring the non-specific Agent ‘something’ as topical in a direct transitive action). The referent with the semantic role of Target is the clause-initial argument in Nom. case controlling the predicate agreement inflection. This referent is the one carrying the topical pragmatic function, with the rest of the proposition predicating some additional information about it. The predicate bears the passive derivational affix /-i/-/-j-/ preceding the otherwise regular intransitive person-number predicate inflectional marker (cf. Verb: 8.3.1.2.3.Voice).

The examples of the second type of the Eastern Khanty passives have no overtly expressed Agent argument:

207. puran pensin- nat pon-i,  
    skidoo gasoline-COM put-PS/3SG  
(We) put some petrol in the snowmobile (Lit. the snowmobile was filled with gas)

In (207), the inanimate referent with the semantic role of Target bearing the pragmatic status of topic is coded as the clause-initial full NP argument coded in the Nom case and controlling the 3SG predicate agreement. The agentive referent here has no overt coding being either irrelevant or unambiguous contextually.

In cases when the Agent referent, as the clause-initial Nom argument controlling predicate agreement of an active direct clause, is an inanimate entity or is devoid of control, authority, it obtains the semantic quality of Force. These are situations without the typical Agentive referent, corresponding to Event, descriptions of an Action that occurs without a visible cause, i.e. "automatically" (208). This makes these constructions, in a sense, akin to anti-causative37.

208. pami söy pă wetš-yel-ýal-i  
    hay bunch also light up-RFL-PST1-PS.3SG  
‘The hay bunch also caught fire’ (Lit. hay bunch also got lit up)

37 This type of constructions in the western dialects is referred to as “Automative use of causatives” by Kulonen (1989).
In (208), the inanimate referent ‘hay bunch’ with the semantic role of the Target is coded as the clause-initial full NP argument unmarked for case controlling the predicate agreement and bearing the topical status.

Sentences (205) and (206) testify to the agreement pattern in these passive constructions, with the 1Du agreement inflection on the passive verbal predicate corresponding to the 1Du of the Target argument in (205), and 3SG predicate agreement inflection – to the 3SG Target argument in (206) respectively.

There are two groups of verbs that are commonly found in these constructions (Kulonen 1989): a) verbs occurring in both active and passive forms, and having a causative/transitive sense in active, and describing event with the clause-initial Nom-marked argument taken by the Target semantic role in the passive, where the Agent role is the Loc-marked non-controlling argument; b) automative verbs, occurring only in the passive form or with inactive semantics (208). The function of these is similar to that of medial verbs (Kulonen 1989), in that they cannot be used to express an Action with an Agent, but have Event semantics instead. The agentless passive clause with inanimate Agent and automotive verbs are also frequently associated with a certain spontaneity of the event, which "is highly germane to passive defocusing (demotion) of an agent, as an event that is brought about by an unknown, or unmentioned agent is perceived as spontaneous" (Shibatani 1985: 838).

There is also a group of the Eastern Khanty passive constructions with motion/posture verbs that can be revealing for the notion of transitivity. These verbs are apparently neither prototypically intransitive, as they are strongly associated with the second core argument, nor are they prototypically transitive, as the second core argument has the Locative semantic role and maybe marked by one of the oblique cases (209):
Sentence (209) may also be seen as an instance of the impersonal passive construction, traditionally describing events, where the demotion of an Agent referent as Nom-marked agreement controlling argument of the active-direct clause happens without the promotion of another referent, (while in the personal passive there is a promotion of a referent, which normally is the Acc-marked non-controlling Target role in the active-direct to the Nom-marked controlling argument in the passive) (Comrie 1977; Shibatani 1985). So this sort of impersonal passive construction appears to demonstrate a demotion of the Agent referent outside of the semantic core of the proposition, expressing the Action of an indefinite Agent, unaccompanied by a promotion of an inactive/inanimate referent to the semantic core.

The underlying event structure here is the same in the passive and the active. The motion verbs are seen to behave here in a way transitively, having the locative referent as one of the core arguments and occasionally even displaying Target-like predicate agreement inflection. Such “transitive” behavior is attested not exclusively in the domain of the passive, but also in the active-direct (Kulonen 1989):

In the active-direct (210), both verbs, the transitive stem ‘chase, push’ and the intransitive stem ‘come’ are used in the transitive sense implying two core participants in the event. These occurrences are rare, demonstrating that in Khanty a participant (even that of a prototypically intransitive situation) can be made part of the semantic core for pragmatic purposes, “if the Loc/Ben constituent is
important for the situation and bears firm relation to the verb, its status can be emphasized grammatically by transitivization” (Kulonen 1989).

211. Ø äj-qu- no os jøy-t-i
   (3SG) young-man-LOC again come-TR-PST0.PS.3SG
   'The young man came to him again' (Lit. (he) was visited by the young man)

In (211), the referent with the semantic role of Agent is coded as a non-controlling argument marked for Loc case, while the Target referent bearing the topical pragmatic status is coded as the elided Nom-marked argument controlling the agreement inflection on the passive predicate.

In these Eastern Khanty motion verb passives, the passivization of the locatives appears possible, as the locatives denoting a certain landmark of motion (source, goal, relative orientation) are important, if not inseparable, core elements of the semantic frame of the proposition. And “all entities which correspond to the elements of a semantic frame or valence can be considered as focused to some extent...”, that is, “they are singled out as essential elements, requiring the listener's attention in decoding the message; they are highlighted against the background of all other entities which may be in the consciousness of the speech-act participants, but are not semantically coded” (Shibatani 1985: 832).

The Eastern Khanty de-transitive passive clauses represent an apparent deviation from the prototypical SOV word-order (212):

212. aj piyɾ-əm-no puran nøy-t-i
   one man-1SG-LOC "buran" pull-PRS-PS.3SG
   'My man started the skidoo (Lit.: By my man the skidoo was pulled (started))'

In these constructions, the argument controlling the obligatory verbal agreement inflection (a prototypical Agent grammar), normally codes a non-agent referent, rather than specifically the referent with the semantic role of Target (occasionally it is the role of Locative). At the same time, the Agent role, when overtly present, is coded as an oblique (peripheral) argument. Nevertheless, it often appears that the
Agent role, when overtly expressed, is often clause-initial, and appears to retain many of the typical subjecthood properties and, more importantly, high degree of pragmatic topicality. The examples of the passive clauses of the (212)-type exemplify agent-initial de-transitive passive clauses: Agent[^Loc^]-Target[^Nom^] → V, as well as topic-initial de-transitive passive clauses: Top-Foc-V. The implication of these passive constructions for the issue of word-order in Eastern Khanty is that grammar per se, does not seem to be as essential as the pragmatic status features for the clause-initial position, and word-order flexibility. That is, the discourse-pragmatic topicality and semantic role of Agent appears to be the more decisive factor for clause-initiality (212). Similarly, in light of absent Acc. case markers for full NP arguments (as opposed to pronominal), rigid OV order remains definitive for the Target semantic role, and this restriction lifts once the exact roles and relations of the participants are unambiguous.

10.3.2 The Loc-Agent Constructions.

Another type of the non-canonical clause is the so-called Eastern Khanty "ergative"\(^{38}\) construction type:

213. ӫллә сарт рә tête мән-ә өүөли-с-им
‘I got the big pike ready’

In (213), the referent with the semantic role of Agent is coded by the free pronoun controlling the 1SG agreement inflection of the active transitive predicate, but similarly to the passive clauses above, marked by the Loc case. The referent with the semantic role of Target is coded here by the full NP in the unmarked Acc case (for nouns). The OSV word order of (213) is pragmatically motivated, as the Target argument here bears at least some topicality status, being contextually

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\(^{38}\) The term "ergative" in reference to the described construction type is inherited from the previous descriptions (Balandin, Comrie, Kulonen). The type of constructions should be structurally and functionally similar to what Dixon (1994) referred to as marked nominative constructions, where the Agent has a marked case instead of the Target.
identifiable and active, which is manifested also by the SG (definite) agreement inflection on the predicate. This, however, does not always have to be the case in this type of constructions, and the Loc-marked Agent role may be more topical and clause-initial, compare (213) vs. (214) below:

214. qu-jali-nə aj ni tʃupi-l-tə
   man-DIM-LOC small woman kiss-PRS-3SG/SG
   ‘Young man is kissing a young woman’

As will be shown in this section, the traditional “ergative” may not be the most precise terminological choice for this construction type. For our purposes we will hereafter refer to it as the Loc-Agent constructions.

At first glance these constructions demonstrate great structural similarity to the canonical active-direct clause type, with two important exceptions; namely, the Agent argument is always overt, expressed by a full NP or a free pronoun, and it is always inflected for Loc case. This Locative marking of the Agent role, though not unique, is quite rare typologically. The more complete list of formal properties of this construction type is as follows:

(i) Frequency: average 10%

(ii) The argument with the semantic role of Agent is overtly present in the proposition, expressed by a free pronoun or a full NP (high on agentivity properties: identifiable, accessible, predominantly human/animate), marked with the Loc case

(iii) This Agent argument marked for Loc case is controlling the agreement inflection on the active verbal predicate.

(iv) The predicate of the proposition is a verb typically expressing a perfective action, often with an unclear affect on the Target role, as an underlying de-transitive: ('take aim', 'look', motion/posture, 'shoot' not implying 'hit', body part manipulation, these events are mainly intransitive)
The second core argument of the proposition with the semantic role of Target is expressed by a full Ø case-marked NP, mainly definite (possessive-marked, identifiable, accessible contextually); locus of motion or State, direction of Action (object of looking or target of shooting).

It can be seen that nothing in the grammar of these propositions precludes the use of the canonical active-direct clause type from expressing the same content. The question arises then in regards to the motivation of the choice of the non-canonical construction type?

A brief outline of the statistical, pragmatic, structural and semantic features of the Loc-Agent constructions are laid out in the table (Table 1):

<table>
<thead>
<tr>
<th>Agent-Loc</th>
<th>V</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Prs.Pronoun: 71%</td>
<td>motion verb: 6% (omitted) + Loc of motion direction + posture (sit/lie): 16% + Loc of whereabouts + perception (look/see, hear): 18% + what is perceived (seen/heard) is a separate clause 'take aim' - intransitive: 16% 'shoot' – 16% + 18% (omitted) + Lat/direction of shooting body parts (head/nose) manipulation (shake/hide/move/stick/ put) : 30% de-transitive/anticausative (cut): 6% + definite object NP (fish) no Trg argument: 18% Loc/Lat Trg: 41% locus of motion/ posture-direction of looking/ shooting definite NP=TrgO: 41% body part: 30% &quot;message&quot;of saying: 6% definite object NP (fish):6%</td>
<td></td>
</tr>
<tr>
<td>• Proper Nouns: 16%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Nouns (identifiable/accessible): 18% + NP animate/ non human 16% + NP inanimate 6%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 10.3.3 Eastern Khanty Non-Canonical Constructions in the Narrative

Better understanding of the exact motivating factors and functional characteristics of these non-canonical constructions could be achieved via the reference to such notions as discourse-pragmatic status, activation, accessibility, topicality, pragmatic foregrounding.
10.3.3.1 Passive Constructions in the Narrative Discourse

In the narrative, clause (215) below maintains the referent ‘we’ as discourse topic, according to the established pattern, by elision of the typically clause-initial Agent role and by predicate agreement inflection.

215. juta put wąj-mən pana li-tə - ot
together kettle take-1DU/SG and eat-IMPP- thing
‘We took with us a kettle and some food’

216. a) puran pensin-nat pon-i,  b) awət-at jur-i,
skidoo gasoline-COM put- PS/3SG sled-COM tie-PS/3SG
‘We put some petrol in the skidoo, tied the sled to it,…’

217. juta ämp-γən wąj-jin
together dog-DU take-PST0.1DU
‘…and took two dogs with us'
(Lit.: The snowmobile was fueled, sled attached and dogs tied up)

The canonical topic expression is altered in (216-217). The topical Agent referent of (215) is not overtly present, and the referent with non-agentive properties, the semantic role of Target, ‘skidoo’ is coded by the clause-initial full NP unmarked for case and controlling verbal agreement inflection in (216a). Such re-arrangement, at this stretch of the discourse, is necessitated by the pragmatic demand to establish and maintain a non-agentive referent as pragmatically prominent, topical, while the agentive referent, previously topical, is temporarily demoted, backgrounded as contextually obvious and of lesser import. The new topical Target role argument is elided in (216b), though still controlling the predicate agreement. The 1Du Agent role, however, effortlessly returns as the discourse topic as soon as the "special" passive re-arrangement is no longer maintained in the active-direct (217), still having the established pattern of topic expression, that is, by elision and verbal inflection.
Sentence (218) represents a sequence of passive and active-direct clauses, where in the passive (218a), the Agent referent is coded by the clause-initial full NP ‘my man’ marked by the Loc case, whereas the Target role 'skidoo' appears coded by the full NP and the 3SG predicate agreement.

218. a) ej pįŋr-əm-νə puran nɔŋt-i panə b) sar-nam mən
   one man-1SG-LOC skidoo pull-PS/3SG and ahead-All2 go.3SG
   ‘My man turned the skidoo on and went on forward’ (Lit: By my man the skidoo was started and he went forward)

In the coordinated (218b) conjoined by panə, however, the Agent role of (218a) 'my man' appears expressed by elision and 3SG agreement, which, according to the previously established pattern is consistent with topicality. The question as to which argument in (218a) the predicate in (218b) actually agrees with (as both the oblique-marked Agent and the Target are 3SG arguments) can be clarified by (218d) and (218e) below, which are in many ways similar.

In the active-direct (218c), the topical referent with the semantic role of Agent is coded by the clause-initial pronominal 1SG argument and 1SG predicate agreement inflection. It is then de-activated, pragmatically backgrounded in (218d) expressed by the Loc-marked 1SG pronoun, while the referent with properties testifying to its relatively lower agentivity is pragmatically foregrounded. This necessitates the special passive re-arrangement where this non-Agent role is coded by the clause-initial full NP controlling the predicate agreement.

218c) os mā awet-a əntə imt-əm
    but 1SG sled-ILL NEG sit-1SG

d) aj ämp-əli mān-νə kur-ŋət-i katɬ-i
    small dog-DIM 1SG-LOC leg-PL-ELA hold-PS/3SG
In the conjoined (218e), once the passive non-agent foregrounding stops, similar to (218b) above, the 1SG Agent referent re-appears as the topic coded by the elision in the active-direct clause.

Both sequences (218a) – (218b) and (218c) – (218e) contain active-passive-active clause combinations. In each of the passive clauses, the referent with the semantic role of Agent is expressed by the oblique-marked NP (nominal or pronominal). This referent, however, still enjoys a degree of pragmatic activation strong enough to allow this referent to re-appear as topical, coded by elision and the verbal agreement inflection in the immediately following discourse. That is, the Target role unmarked for case in the passive clauses increased their pragmatic activation during the passive clause(s), but it did not interrupt the pragmatic status of the Agent referent at the overall discourse level. This leads to the conclusion that passive is not used to establish a new discourse-topic. It is capable of setting the stage but does not promote the discourse pragmatic status of a referent.

Notably, one of the structural distinctions (216a-b) vs. (218a, d) is the overt expression of the Agent referent. I posit that the question of what requires the overt expression of the Agent role in some passive clauses could be approached via the analysis of the information structuring. It is evident from observing this stretch of discourse that the passives (lacking an overt Agent referent) are preceded and followed by active-direct clauses with the same Agent referent (1SG), which testifies to the identifiability and topical status of this referent in the interlocutors’ universe. It is also evident, however, that in cases of “agented” passives this Agent referent is an essential participant, and if elided, would render the proposition ambiguous. The overt presence of the Agent is thus needed for the adequate
processing of both the information/locution content and communicative/perlocution effect (humor) of the proposition.

The analysis of the following sequence (219a-b) reveals a similar pattern. In the (219a) the topical discourse referent, 1SG Agent is expressed predictably by elision.

219. a) opəl-əm qot mutʃə puran pir-i qəqət-əm,
       sister-1SG/SG home until skidoo back-ILL trod-1SG

          b) tü lat-ə aj āmp-əli mə-nə iə-ti asəi
              DET time-LOC small dog-DIM 1SG-LOC front-ELA let go-PS/3SG

         ‘I ran behind the skidoo all the way to my sister's house and the doggy was let go by me’

In the adjoined passive (219b), the Target role ‘small dog’ is expressed by the full NP unmarked for case and controlling 3SG predicate agreement, whereas the Agent role is expressed by the free Loc-marked pronoun. The topic of the (219b) is the Target argument ‘small dog’, whereas the 1SG Agent is temporarily backgrounded. However, the relevance of the Agent in the proposition (219b) is still manifested through its overt presence, apparently to minimize ambiguity (since the dog is "bound" on both sides, by the sled and by the human). In the active-direct (220) however, the 1SG Agent remains topical, expressed by elision and predicate agreement, and is coreferential with the Agent of the participial modifier clauses (inflected for 1SG).

220. puran pir-i qot-m-am-nə nəyət-əm, oəli təypil
       skidoo back-ELA trod-PP-1SG-LOC laugh-1SG yard inside

       ‘While running behind the skidoo I laughed…’

       ɬəŋ-m-am-a imat sar-nam nəyə-ta jəyəm
       enter-PP-1SG-ILL more ahead-All2 laugh-INF become-PST0.1SG

       ‘…and having entered the front yard, I laughed even more’

Finally, (221) demonstrates the so-called Khanty passivization of motion verbs, where the referent with the semantic role of Locative expressed by the full NP
appears as the only explicit argument, while the predicate agreement inflection is the 3SG.

221. tüt pirqə juy ont-nam ti mən-i
   DET after forest inside-All2 DET go-PST0.PS/3SG
   ‘After this we went to the woods’ (Lit.: the woods were went to)

The referent with the semantic role of Agent is again elided, but is identifiable and has a high degree of pragmatic activation, accessible both situationally and textually.

Now the discourse-pragmatic based generalizations regarding the use of passive in the Eastern Khanty narrative can be outlined:

i) clause type frequency in the narratives ~ 14%;
ii) passive is the clause type showing a deviation from the canonical active-direct arrangement, in that the referent with the semantic role of Target is typically clause-initial argument in the unmarked Nom case, controlling the agreement inflection on the predicate;
iii) the referent with the semantic role of Agent is marked by Loc case, or elided;
iv) semantically, the agentivity status of the topical argument of the passive (Target) is always relatively lower than that of the Agent argument;
v) pragmatically, the passive marks a change in the degree of pragmatic centrality of the referents, temporarily foregrounding the status of the non-Agent (Target), rendering it in the unmarked Nom case controlling predicate agreement; and backgrounding the status of the Agent;
v) however, while at the clausal level the pragmatic status of the referents is altered by the passive, at the level of overall discourse the agentive referent, temporarily demoted when relevant, or omitted when obvious/irrelevant),
maintains high activation status, which follows from its canonical topic expression by elision and predicate agreement in the passive-active clause sequences;

vii) (active-)passive-active clause sequences, when contrasted with the active-active ones, testify that passive is a marked construction type, requiring a special arrangement of the referents, which is outside the general pattern of mapping pragmatic function – to semantic role – to morphosyntax;

viii) all reviewed passive constructions demonstrate, that the alignment of \(<\text{pragmatic function}=\text{grammar}>\) in Eastern Khanty is the strongest, overriding that of \(<\text{pragmatic function}=\text{semantic role}>\) or that of \(<\text{semantic role}=\text{grammar}>\). That is, the canonical active alignment \(<\text{Topic}=\text{Agent}=\text{Nom (}\text{+agreement control})\) of the active-direct construction is altered in the passive construction to be \(<\text{Topic}=\text{Target}=\text{Nom} (\text{+agreement control})\>.

With regard to information structure, it was noted above that the preferred topic expression in Eastern Khanty is by unaccented co-referential pronominal inflection on the predicate (including zero agreement in the case of a 3SG predicate argument). It was also noted, that the referent with the role of Target, in the unmarked Nom case in the passive clause, has the relation of aboutness/centrality in the proposition.

However, it is seen that the referent with the role of Agent, demoted in the passive clause (from the typical clause-initial Nom argument controlling predicate agreement), retains, to a large extent, the set of pragmatic properties that allow it to emerge as topical in the immediately subsequent discourse (after passive) without any special topic promotion, that is, expressed by elision and predicate inflection – the preferred topic expression. Thus, the topicality of the Agent referent appears to have been maintained in the course of the passive construction.
This kind of "residue topicality" of the Agent referent in passive constructions correlates with the fact of retention by the Agent argument of the grammatical features normally referred to as subjecthood. That is, in the Eastern Khanty examples, there is a certain distribution of the so-called subjecthood properties between the promoted Target role on the one hand and the demoted elided or overt Loc-marked Agent role on the other. Defining the subject as an element of the clause possessing a convergence of properties characteristic of subjecthood (Li, 1976), such as: control of co-referential agreement in conjoined or adjoined clauses; control over nonfinite clauses embedded within the matrix clause; control over reflexivization, we see that in the Eastern Khanty narratives, in passive clauses with an overt Agent argument these properties often characterise the demoted Loc-marked Agent equally well as they do the promoted Target.

With respect to control of co-reference, we see that though the control over verbal inflection in a passive clause is by the promoted Target role, the control over embedded nonfinite clauses is typically by the demoted Loc-marked Agent. In the sequence (219b)-(220), in (219b) the passive demoted Loc-marked Agent associates both with the Agent of the embedded nonfinite clauses and with the 1SG. coreference in (220).

Control over reflexivization can be maintained both by the Agent and the identifiable, active Target that co-occurs with the Target-predicate agreement (objective/definite conjugation). The reflexives/possessives may refer both to the Agent and the Target, when accompanied by the Target-predicate agreement may bind the reflexives (cf. example (22) in 10.1.Semantic features and grammatical relations) repeated here as (222).

222. wajay-nə ämp joy nirimtä -s-tä tʃim in ont-qat-al
    animal-LOC dog home pull-PST2-3SG/SG there inside-house-3SG

'The bear hid the dog inside his (bear's) / (dog's) house.'
Thus, in the Eastern Khanty passive constructions, there is a certain curious distribution of grammatical and pragmatic properties, commonly assigned to subjecthood, between the demoted Loc-marked Agent and the promoted unmarked (for Nom) Target.

Pragmatically, we can speak of the continuum of topicality, or a certain foreground/background dynamic. In the passive clause, the non-Agent (Target) referent can be said to be temporarily foregrounded against the background of the active-direct discourse with a primary core discourse topical Agent referent being demoted, either omitted or expressed in the passive clause as an oblique argument. The above-mentioned possible distribution of both pragmatic and grammatical features between the two arguments is most relevant for just one type of the passive clause, namely, the one with the overtly expressed Loc-marked Agent role (agented passive) and less relevant for passive clauses with unexpressed/obvious/irrelevant (agentless) or unknown (impersonal) agent referents.

As evident, the predicates in the passive examples are typically transitive verbs implying two core arguments, one of which has high agentivity status, volition and control properties while the other lacks such properties and is affected in the event. This pragmatic and semantic context for passivization appears to resonate with the prototypical passive features of Shibatani's passive prototype (1985: 839) and Givon's "promotional de-transitivization" (Givon 2001: 126-128). These features include: (1) agent marked by an oblique case, conceptualised, but defocused at the level of syntactic encoding; (2) the syntax of the passive diverges from that of the active-direct; the range of non-agent roles that can be promoted to subjecthood in a passive clause tends to be restricted to semantic role of Target; and (3) passives tend to be restricted to semantically transitive verbs, those having both Agent and Target in the semantic frame, but syntactically, are typically intransitive. This list
of prototypical features places the Eastern Khanty passive clauses with overtly present agent arguments somewhat at the periphery, as such agented passive clauses appear to deviate from the prototype. Particularly, overt syntactic presence of the Agent referent in a passive clause upsets some of the prototypical features. Even so, these clauses appear to resonate with the general tendency of the passive, in its fundamental function of having "to do with defocusing of agents" (Shibatani 1985: 831).

The functional/pragmatic features that are commonly associated with, and motivate the agentless passives, such as: agent-unknown, Agent superfluous/obvious, agent absent for specific reasons (tact/delicacy), Agent is of lesser interest, spontaneity of the event, etc. (Shibatani 1985; Givon 2001), appear to apply, to various extent to all the Khanty constructions reviewed so far to form the domain of passive. Thus, based on the narrative discourse analysis, it can be observed, that agentless passives (217a-b), (221) describe a typical transitive event that implies the Agent, whose omission is contextually motivated by its superfluousness/lesser interest, which follows from its (the agent's) topicality in the immediately preceding and following active-direct clauses (215) and (217), expressed by elision and verbal inflection. Other features (agent unknown or absent for tact/delicacy, spontaneity, etc.) hardly apply to the agentless passive clauses in the narratives above, as in the majority of the cases the events described by agentless passives are rather volitional, authoritative, deliberate, premeditated (‘fuelling’, ‘tying together’, ‘tying up dogs’, ‘going to the forest’) and are generally devoid of adverse connotation. Agented passives (218a, d), (219b) describe events where the Agent referent is of high relevance and a new Agent referent has replaced the previously established one, or is important for the unambiguous interpretation of the proposition (218d), (219a).
Interestingly, when contrasted, the events described by the agented passives appear to imply more spontaneity and affectedness of the Target, than those described by theagentless passives (cf. (216a-b), (215), (221) and (218a, d), (219b). That is, a more prominent, new Agent referent implies a change, or dynamicity, or more affectedness for the Target, whose perspective, according to common interpretations, is dominant in the passive arrangement. In contrast, a known/superfluous Agent of the agentless passive is unlikely to imply spontaneity. This is consistent with the information structure pattern established at the onset of this section, in which elision/omission corresponds to "known/topical", whereas overt expression (full NP, free pronoun) corresponds to shift/change and "new" (cf. 10.2.Information Structure).

It is then reasonable to correlate the above-mentioned pragmatic continuum of topicality, foregrounding-backgrounding with a certain grammatical continuum, in the sense of considering various related forms as “... passives to the extent that they share properties of the passive prototype”, placing all these forms “... along the continuum between the passive and active-direct” (Shibatani 1985: 844). Such "fuzzy" treatment of the attested formal possibilities allows for a degree of flexibility and dynamicity typical of the language as a system, resonant with Shibatani's "change in progress" exhibited by the language forms, which "a discrete analysis of grammatical structure does not allow us to capture" (1985: 846).

10.3.3.2 Loc-Agent (Ergative) Constructions in the Narrative.

Clause (223) demonstrates the establishment of a new topical referent, the 1SG Agent in the Nom case, clause-initially, and controlling the 1SG predicate agreement.

\[
\text{223. mä sart wél- s- òm, òllå} \\
1SG pike kill-PST2-1SG big
\]

'I caught a pike-fish, a big one'
Clause (224) is the instance of the Loc-Agent clause type.

224.  ámblo sart män-nō löyoli-s-im
      big  pike 1SG-LOC cut-PST2-1SG/SG
      'I prepared the big pike'

As will be seen in the following analysis of the Loc-Agent clauses in the narrative, (224) is anomalous in having the Target argument in the clause-initial position. Such a position, preceding the Agent argument, is evidence of the increased pragmatic status of this Target referent. The referent "pike" here is identifiable and highly accessible textually, which is also evident from the marked SG. Target-predicate agreement. This results in a situation where there are two referents with a compatibly high degree of pragmatic activation. There are still, however, marked differences in the semantic properties of these referents, such as animacy/agentivity status, as well as their comparative discourse status. The 1SG, apart from being the SAP, is the author of the narrative and a central participant in the event. In (223), this human Agent appears clause-initially controlling predicate agreement. The established pattern would predict further maintenance of this referent as topical by elision and agreement inflection. However, counter to this expectation, in (224), this referent appears expressed by the free 1SG Loc-marked pronoun in and 1SG predicate inflection. There are other properties that make this clause stand out in the otherwise canonical active-direct narrative discourse flow, namely the intransitive/anticausative verbal affixation that contributes to the distinctness of the proposition affecting the sense of transitivity/subjecthood in the event. After this temporary alteration by the non-canonical (224) clause, the narrative discourse resumes in the expected canonical way in the immediately following active-direct (225), where the topicality of the 1SG Agent referent is "canonically" expressed by the elision and the 1SG agreement on the predicate.
terkā- s-im iwes-nā
fry-PST2-1SG/SG stick-LOC
'I fried it on sticks'

The next Loc-Agent clause is (227a), which demonstrates familiar formal characteristics, such as a Loc-marked overt Agent, and manifests the beginning of a repair describing a temporally displaced coherent episode, licensed by the adverbial 'before that' in (227a) and completed by the logical return to the main narrative sequence 7 clauses later in the narrative.

wāsk- āti kəm nōyū-lōk jiya-tati
duck- INF/Sup or moose-track look-INF/Sup
'Either to look for ducks or moose tracks'

227. a) tʃu ’il peley-nə min-nə aməs-ta...
DET ahead side-LOC 1DU-LOC sit-INF
'Before that, we sit…'
qolləm qasi amas-l-əw
three man sit-PRS-1Pl
‘…the three of us men are sitting (and see)…’

b) jaqkən a saqqən nuruγte-l-kən
bear Conj. cub run-PRS-3Du
‘…a bear with a cub running’

(227a) is also peculiar as it contains a self-initiated repair from 'we-two sit..' to '(we) three men are sitting', where, interestingly, in the repair part an active-direct arrangement substitutes for the Loc-Agent clause. That is, the initial Loc-Agent is changed into Nom-Agent in the repaired part. Essentially, the number of the Agent referent is repaired from Du 'we' to Pl 'us, three men'. One of the motivations of the change from Loc-Agent clause grammar (Loc) to active-direct (Nom=Ø) may stem from the alteration of pragmatic content in this repair, that is, the change of referentiality of the participant (from pronomial-1Du to full NP-Pl), and a decrease in its pragmatic activation.

tʃilaγt-ət-əm "rut sati : medwed !"
cry- IP- 1SG Russian way "bear"
'I cried in Russian "bear!"'
In the next example, the canonical clause type (228) the topical discourse referent (the Agent expressed by elision and predicate agreement co-reference), is interrupted by the Loc-Agent clause type in (229) with a new referent temporarily foregrounded, expressed by the Loc-pronominal Agent. It also represents a type of an aside containing the inner speech of the narrator. The discourse topical referent (1SG Agent) is consequently reactivated in the following canonical active-direct clause (230a) "appropriately" expressed by elision and predicate agreement inflection.

The Loc-Agent clause (232a) is yet another instance of the described non-canonical pattern. It temporarily establishes a new pragmatically prominent referent, by the Loc-marked pronominal Agent, against the background of the preceding active-direct (231) and the following active-direct (232b) with the discourse topical referent expressed canonically by elision and predicate agreement.

229. моцет jiği-nə kol-wayta-l-il
"maybe" 3PL-LOC hear-ATTEN-PRS-1Pl/SG
'Maybe they would hear it'

230. a) nu jemaki, jiɣata-l-im, b) aɣa, wajay.
- good look-PRS-1SG/SG OK, animal
'Ok, I look, there is the animal'

231. pestatil tom toɣ-em-al pelk-a nöröɣ-wəl ... i tʃel-wəl
fast DET go-PP-3SG side-ILL swim-PRS.3SG "and" cry-PRS.3SG
'He swims to the other side ... and yells'

232. a) män-nə oʃo ... joɣo-ta əntə uspet wer-s-əm,
1SG-LOC again... shoot-INF NEG "be on time" do-PST2-1SG

b) tʃerə nöröɣ- wəl
DET swim-PRS.3SG
'I didn't shoot in time, it swam so fast'
Thus, as a generalization of the use of Loc-Agent clauses in the narrative, it can be concluded that in addition to the listed structural features above, the following holds true:
- pragmatically, the Loc-Agent clause marks a temporary alteration of the discourse topic, parenthetically establishing a new quasi-topical referent coded typically by the Locative-marked Agent argument. This can be viewed as an act of temporary foregrounding of a referent other than the current discourse topic of the narrative.
- in every case, the discourse topical referent of the preceding active-direct discourse, which was altered by the Loc-Agent clause foregrounding act, reappears coded by elision and verbal agreement inflection, thus maintaining the topicality status, and continues as a topical Agent argument in the consequent canonical active-direct discourse.

10.3.3.3 Comparative Analysis of Active-Direct vs. Loc-Agent (Ergative)

Seeking a functional-pragmatic motivation of the choice between the canonical active-direct clause and the Loc-Agent clause, we can contrast below the instances of each construction in their narrative discourse environment.

The first pair readily yields itself to a contrastive analysis, in the above mentioned sequence (223-224), the active-direct clause (223) is immediately followed by the Loc-Agent clause (224). Having the same pronominal 1SG Agent argument, both clauses display such features as: Agent argument controlling verbal agreement inflection, high agentivity of this argument, verb-final word order, and perfective aspect of the transitive verb. However, there are a few differentiating features as well:
i) Ø case-marked Agent in the active-direct (223) vs. Loc case-marked Agent in the Loc-Agent (224),

ii) subjective verb conjugation in (223) vs. objective verb conjugation in (224),
iii) SOV order of (223) vs. OSV\textsuperscript{39} order of (224),
v) transitive event with affected 3SG Target (223) vs. detransitivized verb (224).

These features correlate with the general pragmatics of Topic-Comment (223) with a pronominal 1SG Agent argument in the Nom case vs. marked (224) with a de-emphasized pronominal 1SG Loc-marked Agent argument. (Here, the reference to the cultural frame may be of importance. When caught, a fish has to be immediately processed (scaled, gutted, cut and pickled in salt-brine) to avoid spoiling and attracting predators. Thus, in a sense, catching the fish is part of a conventionalized routine.)

In the Loc-Agent clause (234), a new, inanimate referent expressed by the Loc-marked argument, the full NP ‘gun’ signifies a temporary interruption of the discourse line, where this new referent appears as a temporary topic of attention in (234-235).

233. nu(piece)-la paja(y-inta-s-im ämp-äm ajrit-na-ki
up-ILL go-TR-PST2-1SG/SG dog-1SG canoe-COM-PRD
‘I went upstream, the dog is in the boat’

234. sidar tʃɔŋwā pɔtʃkān- nɔ toʃɔ ajrit- nɔ ola(y-wəl
Sidor late gun-LOC also canoe-LOC lie-PRS.3SG
‘Late Sidor's gun also lies in the boat’

235. a) twenati kaliber-am ... ola(y-wəl pon-am trop-na ...
twelve calibre-1SG lay-PRS.3SG load-PP buckshot-COM

b) mon-nɔ-pa trop-na ...
1SG-COM-All1 buckshot-COM
‘My twelve calibre lies here, loaded with buckshot... by me (loaded) with buckshot’

236. jem-aki nu(y-la- pa jàyi-nta-l-im,
good-PRD up-All1 paddle-TR-PRS-1SG/SG
‘Ok, I paddled upstream ...’

\textsuperscript{39} OSV is discussed above, as associated with the status of the Target - definite, co-occurring with Trg-V agreement.
However, in (236), the temporary backgrounded discourse topical referent, the 1SG narrator, regains its status as the primary discourse topic without any special promotion, that is, by canonical elision and predicate agreement inflection.

Contextually, Loc-Agent clauses appear to have parenthetical, consequential semantics. They represent an action-effect, causal dependence on the preceding event. The latter is expressed by an active-direct clause immediately prior to the adjoined Loc-Agent clause that represents an implicature, not merely an entailment. In the complex clauses of (237) and (238), the states-of-affairs of the coordinated Loc-Agent clauses are in a consequential relation with those of the preceding canonical active-direct clauses.

237. os liyɔ́lt-a-l-im, jɔ̀-ŋnɔ os oy-ɔ́l il wer-wɔ́l-ɔ́ta  
again take.aim-PRS-1SG 3SG-LOC again head-3SG down do-PRS-3SG/SG  
‘I tried to take aim again, he had his head down again’

238. tʃa oy-ɔ́l nuŋ alɔ́m-s-ɔttɔ́, mæn-nɔ tʃa liyɔ́lt-a-s-ɔm  
then head-3SG up move-PST2-3SG/SG 1SG-LOC then take.aim-PST2-1SG  
‘Then he got his head out, I raised my gun then’

Equally in the sequence (239-240), the event Loc-Agent (240) is a consequence of the canonical active-direct (239).

239. tʃinam jɔ̀yo-s-im  
there shoot-PST2-1SG/SG  
‘I threw it (a stick) there’

240. ämp-.ali-nɔ tʃinam pûŋk-ɔ́l warta-kata-s-ta  
dog-DIM-LOC there nose-3SG stick-INCH-PST2-3SG/SG  
‘The dog started to stick its nose there (in the hole from the stick)’

It is thus justified to posit that the events described by the Loc-Agent clauses are in a consequential relation, reactive in their nature, dependent upon the events in the preceding discourse. By extension, it is reasonable to hypothesize that the Loc-marked Agent arguments of these clauses, although mainly semantically agentive (definite human/animate), are construed as deprived, at least in part, of the control, volition properties in the above reactive sense. This correlates
appropriately with the oblique (Loc) case marking, which is non-canonical for the
Agent role. Also ultimately, it correlates with the above-mentioned discourse
pragmatic failure of these Loc-Agent arguments to assume and maintain discourse-
topicality status.

As just argued above, the Eastern Khanty constructions with Loc-marked
Agents demonstrate a mixture of features. Though demonstrating regular predicate
agreement patterns and same agency-subjecthood features, the oblique (Loc) case-
marking of the Agent role aligns this argument with peripheral, Locative
arguments of motion/posture/state propositions which are essentially intransitive in
their nature.

This strongly correlates with the cross-linguistic observations for non-
canonically marked Agent arguments, namely, the fact that among the predicates
requiring the non-canonical Agent marking, those expressing uncontrollable
activities are numerous to the extent that the non-control vs. control may be a
generally applicable semantic feature with regard to predicates requiring non-
canonically marked Agents (Onishi 2001). It is also observed cross-linguistically
that, in general, non-canonical oblique case marking of core arguments reflects
decreased transitivity status of the whole clause (Onishi 2001) owing to a set of
multilevel factors, such as the valency of predicate, the referential status of the
NPs, and clause TAM, polarity, specificity, etc. in their integration (Shibatani
1985).

These tendencies could be represented in the following adaptation of the Onishi
continuum (Aikhenvald et al. 2001):

\[
\begin{array}{c|c}
\text{Nominative} & \text{Locative} \\
\hline
(+) Agent's subjecthood & Agent's subjecthood (-) \\
(+) (control/volition) & (control/volition) (-) \\
(+) Clause/event transitivity & Clause/event transitivity (-) \\
\end{array}
\]

\[
\begin{array}{c|c}
\text{canonical} & \text{non-canonical} \\
\hline
\end{array}
\]
This non-canonical Agent coding taken to manifest the reduced control/volition of the Agent in the described state-of-affairs finds interesting resonance with the earlier descriptions of this phenomenon in the Finno-Ugric languages. Observations were made about such constructions representing a “logically impersonal sentence” with a “covert subject”, when events were conceptualized by speakers as “caused by other (mystical forces) – true agents” (Balandin 1967). A human, as an apparent agent of change, is not granted agentive status, “merely representing a locus of an event”, whereas “the causative effect of outside forces is revealed, and the agent appears in essence a mere semi-responsible performer” (Balandin 1967).

Extra-linguistically, this phenomenon appears to find strong cultural correspondences in Eastern Khanty. It is notable that the bear is an extremely frequent participant in the events described by these non-canonical constructions. Bear is a highly ritualized and tabooed cultural agent, and there are strongly observed rituals associated with bear hunting and feasting such as the use of masks and nicknames by hunters to conceal the identities of those responsible for the bear's death, taboo on the lexicon pertaining to the bear’s body parts, and the word bear itself (a generic term wajay ‘animal’ or qaqi-wajay ‘brother-animal’ is used instead of proper jiɣ ‘bear’), etc. Thus, the tendency to demote or "de-agentivize" the particular referents in the propositions coded in these constructions appears culturally motivated.

The internal motivation of case-marking in general, is usually seen in the identification of key participants of the proposition and their exact interrelations. A general claim holds that, for nominative languages the differentiation is made by prototypically making Target more morphologically complex than Agent, and for
ergative languages by making the Agent more complex than Target (Comrie 1978; Dixon 1979). This may seem in a way counter to the observations concerning the Eastern Khanty Loc-Agent clauses, where the coded state-of-affairs is construed largely as reduced in transitivity. It should be born in mind that these Eastern Khanty Loc-Agent constructions are not the most prototypical ergative per se. However, morphological complexity of the Agent argument of the Eastern Khanty Loc-Agent clause quite consistently correlates to prototypical ergative continuity between Agent and Target at the deeper level. That is, the Agent of the Loc-Agent clause approximates the Target of the active in its pragmatic and semantic features: decreased topicality and activity, approaching thus the semantics of the Experiencer in the Event, where affectedness of the Target role is unspecified.

10.3.4 The Eastern Khanty Voice Constructions

Lexical semantics indicating the degree of animacy corresponding to potential agentivity and subjecthood of the referent may provide enough information to prevent any potential ambiguity of the proposition and thus, to cancel the need for additional explicit labelling of the roles. And indeed, this is the case in the Eastern Khanty canonical transitive active-direct constructions, where NPs in the Agent and Target role are typically unmarked for case. However, specific pragmatic pressures cause the language system to resort to specific marking of the arguments, particularly of the Agent referent in cases of unpredictable distributions of semantic roles and pragmatic statuses, or where there is an unpredictable discrepancy between the pragmatic status of referents, their high animacy and their decreased or de-emphasised agentivity. Such discrepancies necessitate special grammatical coding of semantic roles, that is, the passive and Loc-Agent clauses.

In light of the cross-linguistically typical low morphological complexity of the Nominative compared to other cases and of the Absolutive compared to Ergative,
the formal similarity of Eastern Khanty non-canonical constructions of NPs in the passive and of “ergative-like” Loc-Agent clauses could be interpreted as a "diachronic relationship" between the Eastern Khanty passive and “ergative” organisations. The abovementioned dynamics of the assignment of subjecthood properties to arguments may be taken as support for the hypothesis of the "gradual" evolution of the nominative language to ergative via the switch of subject properties from the morphologically simple Target of the passive to the morphologically complex Agent (Comrie 1978). It is thus reasonable to posit that Eastern Khanty may be at a stage in its evolution, where the predominant nominative features are restricted to a particular functional domain, in the way that is characteristic of the ergative organisation. The directionality of this dynamic combination of organisational features may be determined in the course of further historical investigation.

In the course of this section, I have described the types of discourse-pragmatic functions and the kinds of propositional-semantic content that are associated with the voice constructions in Eastern Khanty, those with Loc-marking of Agents. Based on the analysis of Eastern Khanty narratives, I sought to support the hypothesis that the choice of these non-canonical constructions is motivated by pragmatic pressures/intentions in the discourse. The need to identify, maintain, and change the pragmatic properties and functions, and interrelations of referents in the discourse entails a variety of structural means available in the grammar of Eastern Khanty. The monostratal analysis of pragmatic-functional, semantic, and structural properties of all the participants in their interaction in the proposition as a whole is a particularly revealing approach to the issue of non-canonical constructions.

The comparison of the main relevant pragmatic, semantic and structural features of the core constituents, the verbal predicate, as well as the whole event coded by the non-canonical constructions is represented below (Table 2).
It follows from the analysis of these interrelated features of the non-canonical constructions that specific grammatical coding signal certain pragmatic-functional properties. More specifically:

(i) In the Loc-Agent clauses, the overt Loc-marked human/animate Agent, the low transitivity of the morphologically active verbal predicate, predicate agreement control, and its parenthetical character (one clause length followed by canonical active-direct clauses with the continuing discourse topic expressed by elision) signal temporary pragmatic prominence (secondary topicality) of the low control/volition Agent in the consequential dependence of the event, where the agentive (causer) nature of the Agent is de-emphasised, consistent with specific cultural conventions and practices (taboos, etc.);
(ii) In the passive clauses, such features as: a) the overt Loc-marked human/animate Agent demoted (or not explicit), b) the high semantic transitivity of the morphologically passive verb, c) the less animate (inanimate) Ø-marked promoted Target, d) Target controlled of predicate agreement, and parenthetical character (1-2 clause length followed by a canonical active-direct clause with the continuing topic expressed by elision) communicate temporary pragmatic prominence (secondary topicality) of the Target in the spontaneous/consequential/dependent event, where the pragmatic prominence (topicality) and causer nature of the Agent is de-emphasized or irrelevant/unknown rendering the event less spontaneous and somewhat automatic.

The Eastern Khanty non-canonical constructions – passive and Loc-Agent, are similar insofar as they manifest a parenthetical establishment of an alternative, secondary topic, i.e. a discourse-prominent referent, whose activation (topicality) status is briefly competing with that of the primary discourse-prominent referent (primary topic), which is expressed by the temporary promotion (foregrounding) of such a referent (to clause-initial position). This secondary discourse topic is typically coded by a full NP or a free pronoun, which, as shown at the onset of this section, is not a preferred primary topic expression in Eastern Khanty.\(^{40}\) The second feature of the Eastern Khanty non-canonical constructions is that the Agent referent is marked with Loc case. Such Loc-Agent non-canonical constructions differ in the semantic properties of the promoted referents. In the agented passive clauses, this referent is always lower on the animacy, agentivity scale, and it has semantic properties of the Target role, whereas in the case of the Loc-Agent clauses, the agentivity status of the referent is normally high.

\(^{40}\)Preferred topic expression is by elision and predicate agreement inflection (cf. Information Structure).
What also appears to be differing in these non-canonical constructions, motivating their co-existence in Eastern Khanty, is the variation in the pragmatic status of the two core roles in the proposition within the discourse context. That is, the Loc-Agent construction temporarily demotes (backgrounds) current topical Agent, rendering it less controlling/volitional, and possibly parenthetically promoting (foregrounding) another Agent referent for the length of the utterance. The passive construction, while also demoting (backgrounding) the Agent, is not primarily concerned with its agentivity features (as in the case of Loc-Agent construction), but rather aims to promote (foreground) the non-Agent, Target role to the discourse fore.

More broadly, within the Eastern Khanty system, non-canonical Agent marking constructions vs. canonical Nom/Abs-marking, indicate a general consistency in the Loc marking of the Agent with the particular pragmatic and semantic environments. This identification of the non-canonical constructions based on pragmatic functional parameters is supported by the indications of what appears to be a complementary distribution of the Loc-Agent and passive constructions in the narrative discourse. That is, these constructions have compatible type frequency in the narratives (10% and 12% respectively); however, they appear to show counter-proportional or mutually exclusive frequency in the same narratives, as evident in the discussed corpus and from prior studies (Kulonen 1989).

10.4 Negation

The Eastern Khanty negative clauses code propositions, whose truth value is asserted as false, as opposed to the regular indicative active-direct clauses (cf. 10.Simple Clause). The most common effect of the use of negation in the available Eastern Khanty data is only for a portion of the negative proposition to fall under
the scope of negation, being asserted as false, while the rest remains true, being the part of the proposition containing presupposed information:

242. män-nə əʃə ...  jɔyo- ta əntə uspet  wer-s-äm,
   1SG- LOC again... shoot-INF Neg "be on time" do-PST2-1SG
   'I didn't have time to shoot again'

In (242), the matrix ‘I was in time’ is asserted as false, while the verb complement ‘to shoot’ is not affected by negation being presupposed, which is typologically a fairly common pattern (Givon 2001: 379).

Formally, negation is coded by the negative particle ‘əntə’, typically placed immediately preposed to the part of the proposition that is negated. Eastern Khanty uses the negation of the verb phrase strategy, thus leaving outside of the negation scope other clause constituents.

243. mä awet-a əntə imt-əm
   1SG sled-ILL Neg sit-PST0.1SG
   'I did not sit in the sled'

244. miŋ jiy-i əntə qol-wayta-wəl
   1Pl 3Pl-ELA Neg hear-ATTEN-PRS.3SG
   ‘We won’t be hearing from them’

Similarly to (242-243), in (244-245), the negative particle occurs preceding the verbal predicate, expressing the false assertion. The Agent argument and the Locatives appear to be outside of the scope of negation referring to the presuppositional part of the proposition. In (245), the negative particle shows between the verbal predicate and the spatial adverb ‘outside’ closely associated with the predicate, thus leaving this spatial/manner preverb outside the immediate scope:

245. jal-l-əw küm əntə layil-wəl
   stand-PRS-1Pl outside Neg look-PRS.3SG
   ‘We wait, it does not look out’
This negative assertion pattern is further confirmed in (246-248), where the negative particle occurs immediately preceding the part of the proposition that is asserted as false, thus delineating the scope of negation:

+ The negation of desire coded by the negative particle preceding the complement-taking predicate, the desiderative modal verb ‘want’:

246. mä onłtəγəl-tə qat-pa mən-tätı əntə koj-l-əm
  1SG learn-IMPP house-All1 go-INF Neg want-PRS-1SG
  ‘I do not want to go to school’

+ The negation of ability coded by the negative particle preceding the complement-taking verbal predicate of ability ‘can’:

247. tintə-ta əntə ali-l-em
  pay-INF Neg can-PRS-1SG/SG
  ‘I won’t be able to pay for this’

248. muγulına wer-tä əntə on-l-əm
  something do-INF Neg can-PRS-1SG
  ‘I cannot do anything’

It should be noted, that here Eastern Khanty may express negative ability by lexical negation, i.e. the use of lexical unit with inherent negative semantics of ‘lack of ability’:

249. nuy-pa porislə-wəl, küm lüyä-tä kürγt-äγı
  up-All1 scramble-PRS.3SG outside get.out-INF cannot-PST0.3SG
  ‘(S)he scrambles up, (but) cannot get out’

+ The negation of cognitive ability coded by the negative particle preceding the complement-taking verbal predicate of cognition ‘know/remember’:

250. iməl-s-əm tiyla, əntə onol-l-im muγuli wer-tä
  sit-PST2-1SG there Neg know-PRS-1SG what do-INF
  ‘(I) sat there, not knowing what to do’

251. mä nuŋ-a əntə öγəl-l-əm
  1SG 2SG-ILL Neg believe-PRS-1SG
  ‘I don’t believe you’
+ The negation of obligation/necessity coded by the negative particle preceding the complement-taking verbal predicate of obligation/necessity ‘must/need’:

252. ta-l-a ilil-ta əntə mas-l-i
    there-ILL walk-INF Neg need-PRS-PS.3SG
    ‘One mustn’t go there’

253. nọŋ tìnəŋ ot-lan män-ä əntə mas-wəl
    2SG expensive thing-2SG/PL 1SG-ILL Neg need-PRS.3SG
    ‘I don’t need your expensive things (things are to me not necessary)’ (Gulya 1966)

+ The negation of the allowed event coded by the negative particle preceding the complement-taking verbal predicate of weak (distant) manipulation ‘let’:

254. qaləw əntə, wajəq qən-tʃä əntə sil-wəl-t
    fish-net Neg animal search-INF Neg let-PRS-3Pl
    ‘No fishing nets, they don’t let us track game’

+ The negation of the projected event serving as purpose, coded by the negative particle preceding the verbal predicate ‘go’ in the adverbial clause with purpose relation:

255. n‘än’ toyor-s-im, kör oypi toyor-s-im, ʃar küm əntə män-t-äl-ä
    bread close-PST2-1SG oven door close-PST2-1SG heat outside Neg go-IMPP-3SG-ILL
    ‘(I) closed the bread, closed the oven door, so that the heat would not escape’

+ The negation of the hypothesized/desired event serving as a condition for another event, coded by the negative particle preceding the verbal predicate in the adverbial clause with the relation of condition:

256. jöŋ wal-ŋ-al tŋ, timint wer əntə wal-yas
    3SG live-Cond-3SG Cond DET business Neg be-PST1.3SG
    ‘If (s)he were alive, such a thing would not have happened’ (Gulya 1966)

257. peräŋ qași tŋ titi əntə köt-kəs
    other man Cond DET Neg behave-PST1.3SG
    ‘Somebody else would not have behaved like this’ (Gulya 1966)

Apart from the verb phrase negation strategy, Eastern Khanty also uses individual constituent negation strategy placing the negative particle immediately before the negated element:
+ in preposition to an adverbial of time, thus negating what is asserted only by the
temporal adverbial rather than the whole of the verb phrase, as in (258):

\[
\text{258. } \text{tʃ’u l’änə ajemkitəm qu-j-t əntə qoɣ noməɣək-min,}
\text{ DET time young man-EP-Pl Neg long think-CNV}
\text{noɣ wer-ət, mən-ət təɣla, qo wəl-ət tʃ’u jaɣ}
\text{arrow do-PST0.3Pl go-PST0.3Pl DET-ILL where live-PST0.3Pl DET people}
\text{‘Then not thinking much, young men made arrows and went where those people lived’}
\]

+ in preposition to an adverbial of direction, thus negating what is asserted only by
the spatial adverbial rather than the whole of the verb phrase, as in (259), where it
is the target of movement that is negated, not the act of marriage itself (marriage is
construed as movement):

\[
\text{259. mä kitʃ-əm əntə rut’ iki-ja mən-ta}
\text{1SG want-1SG Neg Russian man-ILL go-INF}
\text{‘I don't want to go to (marry) the Russian man’}
\]

+ in preposition to an adverbial of condition/manner, thus negating what is asserted
only by the manner/condition adverbial, rather than the whole of the verb phrase,
as in (260), where it is the movement event of the conditional if-clause that is
negated, not the whole event of the complex clause itself:

\[
\text{260. əntə mən-ŋ-ən, wəɣ-nə tul-ŋ-ən}
\text{Neg go-Cond-2SG force-COM take-PS.2SG}
\text{‘If you are not going (to marry), you'll be taken by force’ (Tereskin 1961)}
\]

+ in preposition to a part of the adverbial of purpose, thus negating what is asserted
only the particular part of the purpose adverbial, rather than the whole of the
adverbial clause or the whole of the complex clause, as in (261), where it is one of
the asserted options, projected events of the purpose clause, that is negated:

\[
\text{261. n’an’ jiyata-s-im, qotʃ-æɣi ili əntə qotʃæɣi.}
\text{bread check-PST2-1SG/SG burn-PST0.3SG “or” Neg burn-PST0.3SG}
\text{‘I checked the bread, if it burned or not’}
\]

+ in preposition to each, the verbal predicate of the finite relative clause, and the
predicate of the matrix clause, thus negating separately the asserted event of the
relative clause, and negative presupposition of the matrix clause, as in (262):
in preposition to the verbal predicate of the finite reason adverbial clause, thus negating only the asserted predicate of the reason adverbial clause, rather than the whole of the proposition of the adverbial clause or the whole of the complex clause, as in (263):

263. män-nə tu-yas-i tön, jöy-ən män-ä əntə mə-yäs-i
   1SG-LOC bring-PST1-PS.3SG Cond 3SG-LOC 1SG-ILL Neg give-PST1-PS.3SG
   ‘I should have brought it, but he did not give it to me’  (Gulya 1966)

The negation of state is typically coded by the perfective participle derived from the negative particle əntə. This participial nominal predicate is often affixed with the predicator/adverbializer affix /-äki-. In this case, the negative nominalization is acting as a regular nominal predicate, requiring the predicator affix /-äki-/; compare (264-265) vs. the stative nominalization predicate ‘be loaded’ in (266):

264. män-ə tšiml-äli tši-näm jöyo-s-im, tʃut-na-pa ənt-im-äki
   1SG-LOC a.little-DIM there-All2 shoot-PST2-1SG DET-COM-TOP Neg-PP-PRD
   ‘I shoot there a little, and nothing happens’

265. qrugom welkältä-l-im, mətä nöyös lök ənt-im-äki
   around walk-PRS-1SG which sable track Neg-PP-PRD
   ‘I walk around, there is no sable track’

266. nu pötʃkän-äm əntə pon-am-äki
   well gun-1SG Neg load-PP-PRD
   ‘Well, my gun is not loaded’

In cases where the referent whose existence is asserted as false is plural in number, the negative participle əntim is used with the plural form of the predicator affix /-ätə/:
’The dogs are noisy, (they) stepped all over that place and themselves are not there’

However, also similar to some nominal predicates, this non-existence participle form of the negative particle enta (264-265), is occasionally used without the predicator affix. Thus (268) and (269) contain two reiterated propositions, where the first case of negative has the predicator affix, and the second does not:


269. worw-al-a läɣ-im-al, pun-əl ənt-im-äki, pun-əl ənt-im pants-3SG-ILL look-PP-3SG hair-3SG Neg-PP-PRD hair-3SG Neg-PP ‘(He) looked in the pants, the hair is all gone, the hair is not there’

The repeated negative assertion is coded by the negative perfective participle without the predicator affix. This pattern appears to apply across the considerable anaphoric distance, i.e. when the reiteration is separated from its antecedent utterance by a sizable discourse. Thus, (270) appears as a reiteration of a clause (265) uttered 10 clauses earlier:

270. opjat’ nöyös lök-pə ənt-im “again” sable track-TOP Neg-PP ‘Still, there is no sable track’

The cases of negative participle without predicator affix /-äki/ outnumber those with the affix (approx. 60% to 40%), which may prompt this form as a default coding of negative assertion of state when it is expressed for the first time. The exact implication of having the predicator affix with the negative participle is not entirely clear, as in the case of adjectives in the predicate function (above and cf. Adjectives: 4.1.1.2.Syntactic features).

271. mən-ə krugom jəlkämtä-s-im: məta wajay lök ənt-im 1SG-LOC “around” circle-PST2-1SG some animal track Neg-PP ‘I circle around: there is not a single animal track’
It should be noted, that there are a number of examples where the negative perfective participle unaffixed with /-äki/ is not a reiteration, but is an independent proposition as in (271) above. There are no attested examples of the opposite reiteration, that is, where the affixed negative participle follows the unaffixed one. However, there are rare examples of the reduplicated predicator affix following the negative participle (272):

272. toyi-jøy-i juŋa-s-əm, mɔtali ənt-im-äki-iki, ənt-im wɔl-käl

there-ELA get-PST2-1SG some Neg-PP-PRD-PRD Neg-PP be-PST1.3SG

‘I got there, there is nothing there, it wasn’t there’

In light of the above data, a prediction concerning the distribution of the predicator affix /-äki-/ with the negative participle to code non-existence implies a strong connection to the pragmatic features of the referent(s) whose non-existence is thus predicated. That is, it is most probable that negative assertion of existence will be coded by the negative nominalization uninflected with predicative affix /-äki-/ if the referent, whose non-existence is predicated, is high in pragmatic identifiability/activation, that is, more available in the discourse universe. Example (272) is viewed here as the supporting evidence, where the reiterated final predication, the negative participle əntim, is followed by the existential wɔlkäl

‘(s)he was’, resulting in the literal ‘non-existing it was’, referring to absent ‘milk’ whose non-existence was definitively confirmed by the SAP.

In complex nominal predicates with the nominal (attributive) part and the existential ‘to be’, similar to (272) above, the negative particle, according to the general pattern, appears in preposition to the nominal part, thus negating quality asserted by the nominal, rather than the existence of the entity itself. Thus, in (273), it is the quality ‘thin’ that is asserted as false, rather than the existence of the animal itself, with the negative particle thus preceding the attribute ‘thin’ rather than the copula ‘to be’:
273. wajay әнтә kәntʃim wәl-kәl
animal Neg thin be-PST.3SG
‘(That) animal was not a thin one’

This pattern of the negative particle immediately preceding the nominal predicate applies also to the cases of the nominal predicates with absent copula or predicator affix /-aki/:

274. әнтә әләә, әй әл
Neg big one year
‘Not a big one, one year old’

The whole proposition may also fall under the scope of negation, when the whole of the proposition is asserted as false. This is typically the case in refutation-answers or rejection replies to imperative or proposing utterances, as in (275b, 276b):

275. a) тʃи qaqi wajay ʃiʃ-wәł
DET brother animal cry-PRS.3SG
‘This is a bear crying’

b) әнтә, тʃи әнтә qaqi wajay, тәәә qәsi тʃиʃ-wәł
Neg DET Neg brother animal DET man cry-PRS.3SG
‘No, this is not a bear, this is a person crying’

276. a) inl-a!
sit-Imper.2SG
‘Sit in!’

b) әнтә, пәskәри mas-wәł
Neg fast need-PRS.3SG
‘No, I have to hurry’

Finally, the Eastern Khanty imperatives have the special negative particle äl used to code the negative imperatives/prohibition utterances or negative requests:

277. mәn-oγ qoqqә-pә äl mәn-ә
1SG-PRL far-All1 Neg go-Imper.2SG
‘Don't go far away from me!’
The negative particle \textit{\textipa{äl}} here always appears in preposition to the verbal predicate in the imperative mood form. Eastern Khanty imperatives, being the non-declarative strong manipulative speech acts, are associated with the scope of irrealis, as they refer to the states-of-affairs whose event-time will follow the speech-time, i.e. which are projected to occur in the future (cf. 8.3.1.2.2.Mood). The scope of negation in these cases extends over the whole of the proposition, thus eliciting the non occurrence of an action. The existence of the special negation pattern for imperatives is though rare but well attested typological pattern (cf., for example, Modern Hebrew (Givon 2001: 317)).
11. **Complex Clause**

The main goal of the study of clause linkage in Eastern Khanty, as elsewhere in the functional grammar frameworks, is to uncover the association between the morphosyntactic structural inventories used to code relations between the clauses, and the conceptual situations, a set of cross-linguistically sensitive functional principles, that these structural machinery, clause-linking strategies serve to express (Van Valin, La Polla 1997; Givon 2001; Christofaro 2003).

Complex clauses in the Khanty dialects have been the subject of studies of various depth and theoretical affiliation. Starting with early studies by Steinitz (1937), Zhivotikov (1942), Tereskin (1961), Gulya (1966), Sauer (1980), among others, the traditionally defined subordinate nonfinite constructions have been described primarily from a structural standpoint. More recent and more detailed studies of the features of embedded clauses have appeared in the works by Honti (1984), Csepregi (1998), and Nikolaeva (1999). Finally, the so-called *polypredicative constructions* were the object of continuous and rigorous academic effort from the local Ugrian, as well as from areal Siberian perspective by the Siberian scholars under the guidance of professor M.I.Cheremisina and include works by N.B.Koshkareva (1991), E.A.Kovgan (1991), and E.K.Skribnik (1991). Most of the above descriptions were made on the basis of the better described and more vital north-western dialects, and from a primarily formal-structural perspective. The focus of this chapter will be the description of the Eastern Khanty complex clause, a range of syntactic constructions containing more than one predicate unit. The analysis will reflect cognitive-functional theoretical perspective. It is proposed that the relations holding between the components of Eastern Khanty complex syntactic constructions may be best viewed along the continuum between conceptually subordinate and conceptually coordinate prototypes.
As it was established in the preceding sections (cf. 4.2.2. Nominalization. and 9. Verb.), Eastern Khanty makes a robust use of the various nonfinite constructions that may perform a variety of functions. I posit here that this prominent feature of the Eastern Khanty syntax, that is the embedding of the dependent clause within the matrix clause, is an extremely well suited illustration of the relation of iconicity holding between the syntactic complexity and the “cognitive-semantic nesting of one event inside another” (Givon 2001: 40). Though nonfinite embedded subordinate clauses will be shown to be indeed the most productive means of making complex clauses in Eastern Khanty, it will also become clear that this language system makes use of the range of other means of event linkage.

11.1 Subordination

In this section, the Eastern Khanty independent clause, as a finite clause demonstrating prototypical finite features of coding independent events, will be taken as a proxy measure for the description of the various types of constructions used to code dependent events. That is, the features (pragmatic, semantic, structural) of dependent clauses will be described against those of the simple independent finite clause and, if present, the differences and/or their possible affects on independent clause will be identified. Thus, the following description is built around the study of the contrast between the dependent event coding and the coding of the typical independent declarative event occurring in isolation.

As follows from the description of the Eastern Khanty simple declarative active-direct clause (cf. 10.}
Simple Verbal Clauses & Argument Structure), grammatical functions in the generally verb-final Khanty simple clause are coded by a combination of such features as word order, case marking, and predicate agreement inflection (cf. (1) vs. (2)). Agreement is obligatory between the Agent role and the predicate (1, 2), and agreement between the role of Target and the transitive predicate is contingent upon the pragmatic properties of the Target argument (2b, c), expressing pragmatic identifiability, accessibility and high degree of activation of this referent in the interlocutors' discourse universe.

1. **mä tem puγol-na jōŋ al w̥l-s-̥m**
   1SG DET village-LOC 10 year live-PST2-1SG
   ‘I lived in this village for 10 years’

2. **a) nā sdrt w̥l-s-̥m, ̥llō**
   1Pl pike kill-PST2-1SG big
   ‘We caught a pike-fish’

   **b) ̥llō sdrt mān-ŋō loyōli-s-im**
   big pike 1SG-LOC get-ready-PST2-SG/1SG
   ‘I got the big pike ready’

   **c) terkä-s-im iw̥s-ŋō**
   fry-PST2-SG/1SG stick-COM
   ‘(I) fried (it) on sticks’

It was also established in chapter 10 that with regard to the pragmatic organization of the Eastern Khanty, the way to introduce a brand-new referent into the discourse, or to reactivate it as a discourse participant with the topical pragmatic status, is by coding it with a full NP or a free pronoun in Nom case and by the respective predicate agreement inflection. Once the referent is identifiable as topical at the current stretch of the discourse, it is expressed by an elision and
predicate agreement inflection. The exceptions to the above grammatical coding of the semantic roles are the clauses with no clear topical referent (Background setting, Thetic, Event reporting), clauses with no clear agentive argument, or with an inanimate Agent, and passive clauses with the topical referent expressed by an argument with the semantic role of Target in the unmarked Nom case and controlling predicate agreement inflection.

Coding of two temporally ordered states-of-affairs requires a use of either structurally equivalent verb forms capable of occurring in independent clauses, also referred to as balanced, or use of structurally unequivalent verb forms, one being deranked and incapable of occurring independently (Stassen 1985). It will be my assertion later in this section that complex syntactic units code conceptually unequivalent events, and as such are both semantically-pragmatically and structurally asymmetrical. The conceptually subordinate events are coded in Eastern Khanty by forms deranked to some degree. They could be viewed along a continuum between fully independent finite predicate units and fully decategorized embedded dependent predicates. I will henceforth term these combinations of the conceptually independent and conceptually subordinate states-of-affairs as complex clauses. Since many of the Eastern Khanty subordinate constructions may be used to perform a variety of semantic functions, in the description below, the kinds of dependent syntactic forms will be reviewed with regard to their structural features and their functions in the matrix clause.

The most numerous and diverse Eastern Khanty subordinate constructions are, by far, the nonfinite adverbial clauses. The evolved functional definition of subordination applied to the adverbial constructions implies that one of the linked state-of-affairs corresponds to the circumstances under which the other state-of-affairs takes place. That is, it functions as a typical adverb towards the matrix independent predicate (Koptevskaja-Tamm 1993; Haspelmath 1995).
There are a variety of semantic relations that adverbial states-of-affairs may code. In Eastern Khanty, they are the relations of purpose or reason of bringing about the matrix state-of-affairs, temporal structure of the matrix state-of-affairs, and the condition under which the matrix state-of-affairs occurs.

In the available Eastern Khanty narrative data, on average, 56% of the adverbial meanings are typically expressed by single-stem lexical adverbs either uninflected or inflected for case or followed by postpositions. 13% of the adverbial meanings are expressed by the dependent perfective participle adverbial clauses, possibly inflected for case or occasionally followed by postpositions, while 9% are coded by the noun phrases typically inflected for case or followed by postpositions, or inflected with adverbializer/predicator affix. 7% of the adverbial meanings are coded by numerals, 5% – by the dependent imperfective participial adverbial clauses, occasionally inflected for case, 5% – by the dependent converbial clauses, typically uninflected, 3% – by the finite adverbial clauses, 2% – by constructions involving determiners and indefinite pronouns; and 1% by the negative markers, occasionally inflected with adverbializer/predicator affix.

I will concentrate in this section on adverbial and other nonfinite modifiers of clause-length. Among the main adverbial relations that can be identified in Eastern Khanty complex clauses are: (i) purpose; (ii) temporal precedence (posteriority); (iii) temporal simultaneity (overlap)\(^1\); (iv) reason/manner; (v) reality condition.

11.1.1 Infinitival Constructions

As outlined above (cf. 8.4.1. /-ta/ – Infinitive), Eastern Khanty infinitives with the infinitive marker /-ta/ (with the V-H allophone /-tä/) attached to the base stem

\(^1\) Temporal subsequence (antiority) relation appears not coded by the dependent clauses, though such adverbial relations as purpose (reviewed below) do imply anteriority of the dependent state-of-affairs.
are frequently used as a nonfinite predicate of the subordinate clause acting as a matrix verb complement.

3. mä ilkä-s-im katʃəm-ta löq porəm-ta
   1SG go-PST2-1SG hunt-INF track path.make-INF
   ‘I went to break a ski (hunting) track’

The semantic features of the complement relations of the dependent states-of-affairs are generally determined by the semantics of the complement-taking matrix predicate (Ransom 1986; Givon 1991; Cristofaro 2003). Eastern Khanty examples will be differentiated here with regards to the semantics of their complement-taking predicates into four major types:

i) purpose nonfinite construction;

ii) modal nonfinite constructions (deontic and phasal);

iii) utterance, perception and cognition nonfinite constructions;

iv) manipulation nonfinite constructions.

11.1.1.1 Infinitival Clauses with the Purpose Relation

In the example (3), the infinitive löq porənta ‘to break a track’ expresses the purpose of the Action of the matrix finite predicate ‘(I) went (to break a hunting track)’.

Example (4) below demonstrates an immediate extension from the single-stem lexical adverb relation to an adverbial infinitival clause coding a dependent state-of-affairs with the purpose relation:

4. Iwän juɣ lalkitəl-wəl töyt-a, töyöt wer-tä
   Ivan wood chop-3SG fire-ILL fire make-INF
   ‘Ivan is chopping wood for the fire, to make the fire’

The first nominal purpose function is coded by the NP inflected for the Illative case, while the second dependent state-of-affairs with the purpose relation is the coded by an infinitival clause with elided co-referential Agent argument (Ag=Agd). It can be noted that in its Illative case marking the nominal purpose function is
similar to the recipient function (Benefactive) of di-transitive clauses (cf. 10.1.1.2.7.Clauses with di-transitive predicates), which is another extension of the original spatial function of the Illative case.

Example (5) illustrates the Eastern Khanty coding of the dependent state-of-affairs with the purpose relation by another infinitival form, the so-called infinitive-supine:

5. ṛray ruγy-l-om, n‘ān‘ wer-tati
   flour mix-PRS-1SG bread do-INF/SUP
   ‘(I) mix flour, (need/have) to make bread’

The dependent state-of-affairs is an infinitive-supine predicate construction with the modal sense of obligation (INF/SUP), and with elided coreferential Agent argument in the linked clause (Ag=Ag$\_d$). The use of the Eastern Khanty infinitival affix /-tat$\_i$/ is fairly rare (under 5%). It occurs exclusively in the context of expression of the purpose of the matrix event, and consequently, these infinitives have the semantics of the adverbial of purpose. The use of /-(a)ti/ brings in the sense of purposeful, targeted acting in the situation, the sense of need/obligation, which differentiates this marker from the generic infinitive marker /-ta/.

Similar to the single stem adverb in (6a), Eastern Khanty infinitival adverbial clauses with the semantics of purpose (6b) code the envisioned resultant state-of-affairs of another independent state-of-affairs coded by the finite matrix clause. Cross-linguistically, the typical context for these will involve motion predicates.

6. a) al‘wal‘i tʃ‘onqir wɔjá-ɣən, jœŋ-ä mɔná-ɣən
   Alvali bucket take-PST0.3SG water-ILL go-PST0.3SG
   ‘Alvali took a bucket and went off for water’ (Tereskin 1961)

b) al‘wal‘i tʃ‘onqir wɔjá-ɣən, qul-kān-tʃā mɔná-ɣən
   Alvali bucket take-PST0.3SG fish-INF go-PST0.3SG
   ‘Alvali took a bucket and went off to fish’

Typically for purpose relations, in the Eastern Khanty examples, the infinitival subordinate clauses have no entailment about the participants of the dependent
state-of-affairs, nor about the control over realization of the dependent state-of-affairs by the performer of the independent (matrix) state-of-affairs. That is, the realization (result) of ‘going for water’ in (6a) is not evident, as well as there is no overt restriction in the system as to the identity of the ‘water fetcher’. There is cross-linguistic evidence though, for the tendency that the Agent of the dependent state-of-affairs is co-referential with that of the independent matrix state-of-affairs, and that the dependent state-of-affairs is realized. This clause, however, cannot be fully equated to a common motion Action clause with the locative adverbial of the direct Illative sense of the spatial landmark of motion: ‘went towards water’. It appears that what is important is the semantics of the lexical unit that occurs inflected for the Illative case (6c).

6. c) al’wal’i tʃ’onq wɔjä-wɔn, joyan-a / puyol-a / qul-a / ul-a mɔnä-wɔn
   Alvali bucket take-PST0.3SG river-ILL village-ILL fish-ILL berry-ILL go-PST0.3SG
   ‘Alvali took a bucket and went off towards (*for) river / towards (*for) village/*
   (*towards) fish / for (*towards) berry’

Here, there is a probable example of an ongoing functional extension of the ILL case marker /-a/, where it substitutes the now increasingly less frequent Instr/Purp case marker /-ati/, which is inapplicable to the pure spatial contexts of motion towards a landmark and has to imply a sense of purpose/obligation.

Another, and perhaps, the most frequent function of the infinitival subordinate clauses, is the range of complement relations to the matrix finite predicate in the Eastern Khanty complex clauses of the type exemplified by (7) below:

7. nuŋ quin-ta koj-an ?
   2SG marry-INF want-2SG
   ‘Are you going (want) to marry?’

This example represents the infinitival verbal complement to the desiderative modal complement-taking finite matrix verb ‘want/going to’. The word order here is the product of pragmatic factors, namely the tendency to place the focus element
prior to the finite matrix predicate, an evidence of the infinitive’s complement function.

This type of clauses falls under the general definition of clauses with verbal complements, coding the conceptually dependent states-of-affairs. The complement relation is taken below to imply that two states-of-affairs are linked in such a way that the matrix clause entails reference to the dependent (Cristofaro 2003: 95). In more traditional terms, the dependent states-of-affairs are coded by the dependent verbal clauses functioning as core arguments (Agent, but most frequently Target) of another, independent, matrix verbal clause (Givon 2001: 38).

11.1.1.2 Infinitival Complement Clauses with Modal Matrix Predicates

Eastern Khanty infinitival complement clauses will be differentiated here with regard to the semantics of the finite complement-taking predicates into deontic modal and phasal.

11.1.1.2.1 Deontic modality complements

Desire

This group of infinitival verbal complements code states-of-affairs, whose occurrence is desired in the matrix state-of-affairs coded by the finite independent predicate (8)-(11):

8. mä nuj niri-ta koj-l-am
   1SG 2SG ask-INF want-PRS-1SG
   ‘I want to ask you’

9. kos-ta koj-l-am
   urinate-INF want-PRS-1SG
   ‘(I) want to urinate’

10. koj-wal tfupim-ta, no juyn-nam pol’mä-gən
    want-PRS.3SG kiss-INF but 3SG-RFL be.afraid-PST0.3SG
    ‘(He) wants to kiss (her), but (he) is afraid’

11. məran nis-əl jiyitəja-ta koj-wal jok-ən
    only woman-3SG look-INF want-PRS.3SG home-LOC
‘(He) only wants to look at his wife’

These desiderative predicates code the wish on the part of the experiencer that the dependent state-of-affairs is realized by the experiencer (8-11). The modal complement-taking verb used in Eastern Khanty as the matrix predicate of desiderative complex clauses with verbal complements is the verb koj- ‘want’. The functional extension of a modal verb proper into a modal predicate taking complement clauses can be illustrated by comparing examples (8-11) to (12), where the modal verb takes a proper nominal Target NP argument:

12. mä ēntɔ koj-l-ɔm jɔy-a
   1SG Neg want-PRS-1SG 3SG-InstrO
   ‘I hate him (don’t want him)’

Obligation

For expression of obligation or necessity, the verb mas- with semantics ‘must, need’ is used (13-19) as the finite verbal predicate taking the infinitival complements:

13. mas-qal tun-ta pirnɔ wel-ɔm wet läŋki
    need-PST1.3SG sell-INF after killed-PP five squirrel
    ‘We needed to sell the 5 squirrels that we killed’

The condition of obligation in these constructions with verbal-complements appears construable in two ways (Cristofaro 2003: 100). First, the necessity/obligation is seen with regard to the participant who is responsible for the event, normally the speaker, and second, the occurrence of the dependent state-of-affairs itself is felt to be needed, or obligatory.

14. jäwet jayon jäl-il-tä mas-wɔl
    seven night play-DUR-INF need-PRS.3SG
    ‘(One) has to play for seven nights’

In case of speaker-obligation, the internal nature of the necessity/obligation is expected to be iconically reflected in the coding of the matrix predication by the finite modal complement-taking verb with the predicate agreement inflection,
similar to other modal verbs (cf. above: ‘want’). However, the modal verb mas- ‘need’ is not attested in the conjugation other than 3SG. The only predicate agreement inflection this verb displays is the 3SG (13, 14, 15).

15. mä-mpi joqan qasi wɔ-s-ɔm,  joɣ mäɣ-ä mæn-ta mas-wɔl
   1SG-RFL married man be-PST0-1SG home earth-ILL go-INF need-PRS.3SG
   ‘I am a married man myself, have to go home’ (Kalinina 1970)

The default 3SG form of the modal matrix verb is the feature prevalent beyond the complex clause with verbal complements, and occurs in examples containing nominal complements (16, 17):

16. män-ä  pøskäri  mas-wɔl
    1SG-ILL “fast” need-PRS.3SG
    ‘I need (it) faster’ (Lit.: to me faster is necessary)

Nominal (adjective) complement of the necessity modal finite matrix predicate is inflected for 3SG, while the Agent is 1SG.

17. nɔŋ  tinŋ  ot-lan  män-ä  ɔntɔ  mas-wɔl
    2SG expensive thing-2SG/Pl 1SG-ILL Neg need-PRS.3SG
    ‘I don’t need your expensive things (things are to me not necessary)” (Gulya 1966).

NP complement with the Target role of the necessity modal finite matrix predicate is inflected for 3SG, while the Agent is 1SG.

It is notable here that once the speaker-internal necessity/obligation is salient, the modal verb koj- ‘want’ is used. Thus, the internal nature, of the first conceptualization of obligation/necessity is seen with regard to the participant who is responsible for the event. The speaker, an SAP or other participant, is coded by the matrix clause with the modal verb ‘want’.

In cases, when this internal nature of obligation/necessity is present, but is not salient in the proposition (not profiled), the default 3SG conjugation is used. That is, the conceptualization of obligation/necessity is still seen with regard to a participant responsible for the event, by the speaker (13 and 15), the addressee (18), or by a non SAP participant (13, 14, and 19), but this responsible, controlling
participant is not specified in the dependent state-of-affairs. This necessity is coded in Eastern Khanty by the unspecified, impersonal construction with 3SG modal verbal agreement inflection.

In the second, external conceptualization of obligation/necessity, the impersonal 3SG passive form of the modal complement-taking verb ‘need’ is used, either preceding the complement clause (18) or following it (19), while the referent endowed with obligation/necessity is either marked by Illative case (18), or unmarked explicitly (19):

18. nuŋ-a mas-l-i mən-tä ālinti-ntä
   2PL-ILL need-PRS.3SG go-INF sleep-INF
   ‘You all need to go to sleep’

19. ta-l-a ĕl-l-ta ĕntö mas-l-i
   there-ILL walk-INF Neg need-PRS.3SG
   ‘One mustn’t go there’

The use of the default impersonal 3SG passive form of the modal necessity/obligation verb mas-, could be further illustrated by (20b), where it is used in response to a question concerning offering gifts at sacred places or before hunting/fishing sessions, which is a part of the ritual tradition of shamanism among the Eastern Khanty. Hence, the impersonal response ‘it is necessary’ is most appropriately coding a general necessity for some event.

20. a) muylä ğir maj-lo-s-ən?
    why gift offer-PRS-2SG
    ‘Why did you offer a gift there?’

   b) mas-l-i
      need-PRS-PS.3SG
      ‘It is necessary’

In recent data, there are occasional examples of complement clause constructions with the Russian loan modal verb nodo indicating necessity/obligation. Incidentally, the complement clause is introduced here by the
Russian loan complementizer, the pronoun ʃtobi ‘so that’, referring to an abstract entity specified by the dependent infinitival clause:

21. nado ʃtobi qasi tuti wəl-tā-l-āti
   “need” “that” man here be-TR-DUR-INF/SUP
   ‘There needs to be a man here’

   These instances are contact-induced substitutions of the native modal verb mas- and they exemplify code-switching in the situation of constant bi-lingualism, language assimilation and attrition. Russian contact influence is also evident in the occasional innovative use of the native Eastern Khanty necessity/obligation constructions. Example (22) shows the use of the native lexical modal verb mas- in the Russian-type syntax. The default 3SG inflection of the modal matrix predicate (similar to Russian nado), the clause-initial instead of clause-final matrix verb, and position preceding the complement infinitive (functioning as a second core argument) instead of following it, are the features of Russian syntax: VO (non-typical for Eastern Khanty) instead of OV.

22. mas-wəl niŋ-kuŋ-at-pə kojo-pa man-tā wəl-tā (X)
   need-PRS.3SG woman-man-PL-All1 IndPrn-All1 go-INF be-INF
   ‘I need to go live with my daughter and her family, or someone’

Ability

To express ability, the verb onə- with the semantics ‘can, know how’ is used (23, 24, 25) as the complement-taking finite matrix predicate:

23. mʊyulnə wer-tā əntə on-l-əm
   something do-INF Neg can-PRS-1SG
   ‘I cannot do anything’

24. qat wer-tā on-wəl
   house go-INF can-PRS.3SG
   ‘(S)he can build the house’
25. “tulpul, ōnta onal-γas-ən gul-oy tin wə-täl!”
    fool Neg can-PST1-2SG fish-PRL ransom take-INF
    “Fool, (you) could not take a ransom from the fish!” (Gulya 1966: 139)

This verbal lexeme is also used as a cognition verb with the semantics of ‘to
know’. The conceptual situation underlying the states-of-affairs coded by the
constructions with this modal verb expresses the fact that an entity has mental
(more often) or physical (dis)ability to enable or affect the dependent state-of-
affairs (Cristofaro 2003: 101).

Eastern Khanty has a typologically rare phenomenon such as a special mono-
morphemic lexical unit kürt- with a sense of negative ability (most frequently
physical) ‘cannot, unable’:

26. mä jũyo-ta kürt-əm
    1SG shoot-INF cannot-PST0.1SG
    ‘I could not shoot’

This negative ability modal verb functions in a way consistent with the positive
ability coding lexeme on- ‘can, be able’ which takes complement clauses with
infinitival dependent predicates (compare (24) vs. (26, 27, 28)):

27. nũy-ŋa porislə-wəl, küm lüyä-tä kuryt-äyi
    up-All1 scramble-PRS.3SG outside get.out-INF cannot-PST0.3SG
    ‘(S)he scrambles up, (but) cannot get out’

28. täl-tä kür-s-im
    pull-INF cannot-PST2-1SG
    ‘I could not drag (him)’ (Tereskin 1981: 131)

11.1.1.2.2 Phasal verbs

The Eastern Khanty phasal complement-taking predicates comprise a fairly
limited set of lexical verbs. Among them is the verb jəta ‘to become’ which is used
to code the inception of an event. The dependent state-of-affairs itself is coded
most consistently by the imperfective participle verb form, uninflected for any
nominal categories, but able to make typical verbal categorial distinctions such as
Aspect (by the *imperfective* participial marker itself) and Aktionsart (cf. 11.1.2. Imperfective Participle Constructions), specifying the internal structure of the event.

In Eastern Khanty, there is an aspectual affix with inchoative semantics coding the inception of a state-of-affairs. This synthetic way of coding the inception phase is illustrated by the examples with inchoative verbal affix in (29, 30) below:

29. mä wöy-äm qola-qat-əs-ı
   1SG strength-1SG exhaust-INCH-PST2.3SG
   ‘My strength began to exhaust’

30. jöy män-ä wäy kit-əkat-əs
   3SG 1SG-ILL money send-INCH-PST2.3SG
   ‘(S)he started sending me money’

It is clear that in the case of the aspectual operator, i.e. the affix /-qat-/, the event typically refers to the temporal plane of the past, preceding the speech event time. Also, the phase itself is not as salient in the proposition, and is viewed as rapid, not to be construed as an event in itself. The examples with phasal complement-taking predicates code predominantly the events of the temporal plane of the present, i.e. overlapping with the speech event-time (cf. 11.1.2. Imperfective Participle Constructions). If the fact of inception is salient in the proposition, it is viewed as a separate state-of-affairs coded by the matrix predicate, the verb ‘become’. As a typical finite predicate this verb may have its own internal structure coded by aspectual operators or Aktionsart affixes (62-66). This appears to be inline with the general cross-linguistic iconicity principle (Givon 2001), in that, close semantic binding between the events and lack of profiling of one of them, is reflected in one of the event’s coding by a bound aspectual morpheme. A looser semantic connection (though obviously existing) and a higher salience of the inception event are reflected by its conceptualization as an independent event coded by the matrix clause.
Example (33) below illustrates the extension of the use of the finite verb ‘become’. It varies from a proper nominal argument-taking transformation verb (31), to the verbal complement-taking phasal finite verb (cf. 11.1.2. Imperfective Participial Constructions). The headless nominal modifier is a target of transformation (32), and the nominal predicate (nominal modifier əllə ‘big’ with predicative inflection -aɣi) is a verbal complement with overall resulting inceptive phasal semantics (33):

31. āmp juɣ-qa ɟiy
dog stick-TRNSL become.PST0.3SG
‘Dog turned into a stick’

32. əllə jājməl pestra jaya-to
big axe sharp become-PST0.3SG/SG
‘The big axe got sharp’

33. print əllə-yi jay-ayi
hole big-PRD become-PST1.3SG
‘The hole got bigger (Lit.: got to be big)’

It is also clear from (29, 30) that in its use as a complement-taking phasal predicate, the verb ‘become’ acquires verbal affixes (cf. 8.3.1.1.2.1.Voice and Aspectual Affixation) affecting its valency, i.e. rendering it transitive, with the complement clause acting effectively as the second core argument.

The examples of infinitival constructions with the phasal sense of inception of the event ‘to start, to become’ have a much lower frequency, and they use the verb werta ‘to do, make’ in the auxiliary function, as in (34) below:

34. tʃu pirmə liləŋ jay qaɬam jay-na pi-tʃa wer-aqat-aɣal
this after alive people dead people-COM greet-INF do-INCH-PST1.3SG
‘After that those alive started to greet the dead ones’ (Kalinina 1970)

In (34), the verb pi’tʃa ‘to greet’ is used in the infinitive form followed by the verb ‘to do’ carrying the grammatical information (TAM, person-number agreement). The phasal meaning of the inception of the event here is also carried
out by the Inchoative verbal affix /-qət/- on the verb ‘to do’. The Eastern Khanty verb ‘to do/make’, due to its most abstract semantics, appears a logical candidate for becoming abstract and delexicalized into a grammatical morpheme, an auxiliary verb that is used robustly with nominalization-predicates (35) or with loan infinitive dependent predicates (36-41).

35. Wasja tom ot-əl, potpal-əl köll-öko wer-s-ät
   Vasja DET thing-3SG cellar-3SG open-PRD do-PST2-3SG
   ‘Vasja got that thing, got the cellar open’

36. mä kafnə qotl pritsä wer-l-im
   1SG “every” day “intr. shave(INF)” do-PRS-1SG
   ‘I shave (myself) every day’ (Russian loan for ‘shave (refl.)’)

37. mä-n niŋ-ali prit’ wer-wal
   1SG-ACC woman-DIM “tr. shave(INF)” do-PRS.3SG
   ‘My wife is shaving me’ (Russian loan for ‘shave (tr.)’)

38. miŋ tam pesok razgrebat’ wer-to
   1DU DET “sand” “shovel(INF)” do-PST0.3SG
   ‘We(two) were shoveling sand there’ (Russian loan for ‘to shovel’)

In the use of Russian loan verbs, Eastern Khanty preserves the native architecture of complex predicates (34), keeping the lexical loan verb in the infinitive form preceding the native auxiliary ‘to do’ in fully inflected form. In recent data (2000-2005), such pseudo-complex predicates containing the infinitive of the loan verb and the finite auxiliary ‘to do/make’ increase in frequency in spontaneous speech, owing to the omni-present bilingualism and dominance of Russian. Thus, in casual narrative speech, the Russian loan verbs clearly substitute for the existing Eastern Khanty verbs used by the same speakers in careful speech (39-41).

39. jəy tʃərə tom l’oq pereskat[fit’] wer-s-ät
   3PL fast DET road “jump over” do-PST2.3Pl
   ‘They jumped over that road real fast’ (Russian loan ‘jump over’)

40. a). men-no joŋo-ta əntə uspet wer-s-am,
b). tšerä pestatil nöröγ-wəl
   DET fast swim-PRS.3SG
   ‘I didn’t have time to shoot, he was swimming so fast’ (Russian loan ‘be on time’)

41. jal-m-al, jal-m-al. potpriknut’ wer-kali
   stand-PP-3SG stand-PP-3SG “jump up(INF)” do-PST0.3SG
   ‘He was standing, and then jumped up’ (Russian loan ‘jump up’)

This process of Russian lexical interference is not limited to the domain of verbs, and is also frequent in the use of nouns, numerals, etc.

The phasal meaning of the termination of an event is commonly coded by the infinitive and the finite complement-taking phasal matrix predicate lōy-tā ‘to stop’:

42. ul-əw, äť-im is-tā lōy-əs
   see-1PL brother-1SG cry-INF stop-PST2.3SG
   ‘We see, that my older brother stopped crying’ (Kalinina 1976)

43. mä tʃimil is-kāl-əm, no tʃu pırə is-tā lōk-kāl-əm
   1SG a little cry-PST1-1SG “but” DET after cry-INF stop-PST1-3SG
   ‘I cried a little, and then stopped crying’ (Kalinina 1970)

Similar to the inception event phase, the termination phase is expressed by the infinitive form of the verbal complement carrying the lexical information about the nature of the event, and the finite form of the phasal matrix verb.

11.1.1.3 Infinitival Complements with Utterance/Perception/Cognition and Manipulation Complement-taking Predicates

Eastern Khanty infinitive clauses do not appear to be used with ‘utterance’ and ‘cognition’ complement-taking predicates, that is, predicates expressing any kind of information transfer by means of speech or states of knowledge about the propositional content (Noonan 1985: 118). These complements are coded mostly by finite verbal clauses (cf. Conclusions on Eastern Khanty Subordination).
Eastern Khanty complement-taking verbs involving acts of manipulation are, on the contrary, more frequent with infinitival complements, and are very rare with the finite complement clauses. Manipulation constructions are typically those where one entity functions as a causer, normally the Agent argument of the matrix clause, and another entity functions as a causee participant of the matrix state-of-affairs. The second entity is a potential agent coreferential with the Agent argument of the dependent state-of-affairs resulting from manipulation (Noonan 1985: 125; Givon 2001: 41; Cristofaro 2003: 104).

44. qul kän-tʃä əntɔ ʃä-wəl-t
   fish search-INF Neg let-PRS-3PL
   ‘They don’t let (us) fish (search fish)’

45. wajaŋ kän-tʃä əntɔ ʃä-wəl-t
   animal search-INF Neg let-PRST-3PL
   ‘They don’t let (us) hunt (track game)’

46. t’u jay-a qat-ot tinoł-ta ma-wəl-t
   DET people-ILL house-PL sell-INF give-PRS-3PL
   ‘Some people are allowed to sell their houses’

In (44), (45), and (46) above, the matrix state-of-affairs involves one entity (3Pl) manipulating another entity (implicit and contextually accessible 1PL) in order to achieve a target state-of-affairs, or rather here, to prevent the target state-of-affairs (‘fishing’ and ‘tracking’) coded by the dependent infinitival clause. These clauses are not prototypical analytical causative constructions in their conventional cross-linguistic sense (Shibatani 1976), but have a weaker, permissive (or non-permissive) sense. In Eastern Khanty most of the causative meanings are coded synthetically with the help of verbal affixes with causative semantics (cf. Verb: 8.3.1.1.2. Verbal Derivation) (47, 48, 49, 50):

47. ortama-lt-anta vs. ortam-ta
   ‘to make (someone) rich’
   ‘to get rich’

48. waja-lt-anta vs. waja-ta
Examples of the analytical causatives in their typologically common sense, as prototypical 'make' and 'order' constructions, are rare in the available data, and when attested always are lower on the implication, or direct manipulation scale, similar to the 'order', 'tell' (51), the utterance type constructions above (cf. 11.2.4.1. Utterance Finite Complements):

51. imi löy-ä löyt-ömp-öl, loy-at-a ropil-ta kit-ta
woman 3SG-ILL scold-PP-3SG horse-PL-ILL work-INF send-PST0.3SG/SG
'The old woman starts to chide him, sends him to work in the stable' (Gulya 1966)

Clearly in (44, 45) and (51), Eastern Khanty analytical causative constructions share most of the semantic-cognitive features (Givon 2001: 44): lower direct contact, lower causer control, higher causee agentivity, and often lower co-temporality. Though higher on causer intentionality, in these manipulative constructions, the causee always retains a degree of control. Also, in all of these analytical constructions and their contexts, the causee does not display much resistance, albeit complains, and the causer does not resort to much coercive power to succeed in manipulation. Moreover, since all of these analytical manipulative constructions code the dependent state-of-affairs by the infinitival clause, they involve both the low finiteness and illocutionary force of the subordinate clause. Eastern Khanty analytical manipulative constructions tend to code the causative manipulation events of lower direct contact, co-temporality and coercive power on behalf of the causer, and on behalf of the causee they code higher agentivity, though lower resistance. As in the case of (44, 45) above, the success, or rather
completion of manipulation is not explicit. In their semantic-cognitive features, the synthetic manipulative/causative constructions (47-50), imply more direct contact, higher causer control and co-temporality, and lower causee agentivity. Higher causer intentionality generally combines with lower causee control in successful manipulation. The affixation strategy also means closest integration in one predicate of the event of causation and the caused state-of-affairs. In line with the cross-linguistic observations (Givon 2001: 44), the synthetic manipulative constructions in Eastern Khanty code the causative manipulation events of higher directness, contact, co-temporality and coercive power, lower or unspecified agentivity of the causee, in normally successful manipulation.

Some causative senses are coded in Eastern Khanty by lexical units with inherent causative sense (52, 53):

52. tim puɣol-oɣ min pɔɣi-la-wal-t: “mən-ɨɣ, mən-ɨɣ”
DET village-PRL 1PL chase-DUR-PRS-3PL go-Imper.2PL go-Imper.2PL
‘They chase (verbally) us away from this village: “Go, go!”’

53. imi os qul-aliɣ-apa iki-l kit-ɬ-ɬa
woman again fish-DIM-All1 oldman send-PRS-3SG/SG
‘The old woman sends her oldman again to the little fish’ (Gulya 1966)

Thus, Eastern Khanty appears generally consistent with the cross-linguistic observations on causation, in that, the dominant synthetic manipulative constructions with close morpho-syntactic integration iconically code the events of manipulation with closer event integration. Synthetic causatives imply direct contact, co-temporality, causer control and intentionality, and typically code completed manipulation. At the same time, peripheral analytical causative constructions merge into utterance complement clauses, iconically coding the events of manipulation with lower event integration, lower direct contact, co-temporality, causer control and intentionality; higher causee agentivity (lower
resistance), and generally successful, but possibly non-completed manipulation events.

**Fig.1. Eastern Khanty Manipulation Constructions.**

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11.1.2 Imperfective Participial Constructions

As it was mentioned (cf. 8.4.2.1. /-tə/ - Participle), the Eastern Khanty imperfective participles with the marker /-tə/ attached to the base stem most frequently have the function of the participial predicate of the embedded dependent clause:

54. wäsk-ä qatant-ø-øm, jöyö-t-äm-ä
    duck-ILL sneak-PRES-1SG shoot-IMPP-1SG-ILL
    ‘(I) sneak up on a duck, so that I could shoot (it)’

11.1.2.1 Imperfective Participial Clauses with Purpose Relation

One of the most frequent ways of coding the ‘purpose’ relation in Eastern Khanty is by the participial constructions. In (54) above, the dependent state-of-affairs is coded by a clause with the dependent IMPP predicate inflected for possession and case, and the elided Agent argument is coreferential with that of the matrix clause (Ag=Agₜ). The difference between the participial (54a) and infinitival (54b) purpose constructions appears to be in the degree of specificity of
the purpose, that is, generic ability ‘to shoot’ coded by infinitive vs. purposeful ‘shooting of a specific target’ coded by the imperfective participle with possessive coding of the specific Agent:

54. b) ?% wäsk-ä qatantō-l-əm, jöya-tä / ...pölfkän-äm pon-l-əm, jöya-tä
   duck-ILL sneak-PRS-1SG shoot-INF / gun-1SG load-PRS-1SG shoot-INF
   ‘?% (I) sneak up on a duck, to shoot / …loaded my gun, to shoot’

   The Agent argument of the dependent participial clause need not be co-
   referential with the Agent of the matrix clause, but it is discourse-identifiable,
   accessible:

55. n‘än’ toyor-s-im, kör oypi toyor-s-im, jār kiim anťa man-t-āl-ā
   bread close-PST2-1SG oven door close-PST2-1SG “heat” out Neg go-IMPP-3SG-ILL
   ‘(I) closed the bread, closed the oven door, so that the heat would not escape’

   In the example (55), the dependent state-of-affairs is coded by the clause with
   the IMPP predicate inflected for possession and Illative case, and the overt
   dependent non-coreferential Agent argument (Ag≠Agd).

   The Agent role of the dependent participial clause may be coreferential, not
   with the Agent, but rather with the Target argument of the matrix clause:

56. a) n’an’ pan-l-im ɔllōwtaki əlintay-ŋə toyor-l-əm, nām-əki jān-t-āl-ā
   bread put-PRS-1SG top                canvas-LOC close-PRS-1SG soft-PRD become-IMPP-3SG-ILL
   ‘I put the bread into the sack, so that (the bread’s crust) got softer’

   The dependent state-of-affairs is coded by the clause with the IMPP predicate
   inflected for possession and Illative case, and the elided non-coreferential Agent
   argument (Ag≠Agd), but co-referential with the Target argument of the matrix
   clause (Agd=Trg).

   Incidentally, (56b) uttered as reiteration immediately after (56a), demonstrates
   the possibility to code dependent state-of-affairs with purpose relation by a finite
   clause:

   b) n’an’ pan-l-im ɔllōwtaki əlintay-ŋə toyor-l-əm, nām-əki jas
      bread put-PRS-1SG top                canvas-LOC close-PRS-1SG soft-PRD become-PST2.3SG
‘I put the bread into the sack, so that (the bread’s crust) got softer’

The dependent state-of-affairs here is coded by the clause with a finite predicate, with the elided non-coreferential Agent argument (Ag≠Agd), but coreferential with the Target of the matrix clause (Agd=Trg).

11.1.2.2 Imperfective Participle Clauses with Temporal Relation

The Eastern Khanty imperfective participial clauses are also used to code the adverbial temporal relations, and with regard to their ordering relative to the event-time of the independent matrix state-of-affairs, they are differentiated into: (i) the relation of temporal precedence (posteriority) implying the dependent state-of-affairs occurring prior to the independent state-of-affairs; and (ii) the relation of temporal simultaneity (overlap) implying the dependent state-of-affairs occurring in the time-frame of the matrix.

57. a) t’u jay, il-pi-ja qirqa-qət-tə.
   DET people down-ILL fall-INCH-IMPP
   ‘Suddenly, the people, having started to fall,…’

   b) pani jënk-ä qirqa-m-ət,
   and water-ILL fall-MMNT-PST0.3PL
   c) qul-a jəy-ət
   fish-ILL become-PST0.3PL
   ‘and (they) fell into the water, (and) turned into fish’

In (57), the participial clause codes the dependent state-of-affairs with the temporal precedence relation and a coreferential Agent argument (Agd=Ag).

58. a) körö yl-ən jäl’yasə-m-əl-nə jay-nəm-ə rani’t werä-ən
   eagle front-LOC fight-PP-3SG-LOC 3SG-RFL-InstrO “injure”-INF do-PST0.3SG
   ‘That eagle got himself wounded when fighting,…’

   b) pir-pit-t-al-nə mörök-kə jəyä-ən,
   back-become-IMPP-3SG-LOC health-PRD become-PST0.3SG
   ‘Finally, the eagle got better,…’ (Kalinina 1970)

Similarly, in example (58b), the dependent state-of-affairs is coded by a construction with the IMPP predicate inflected for possession (coreferentially with the agentive 3SG Agent argument) and Loc-case, and the Agent argument
coreferential with the elided Agent of the subsequent finite matrix clause (Ag\(_d\) = Ag).

The imperfective participial clauses are also used in the function of the adverbial with the relation of temporal overlap:

59. qatn-to __ pit-na, pani pu\(\gamma\)ol-pa \(\ddot{a}\)rki pers\(\ddot{a}\)y je-s-i
   sick-IMPP become-IMPP and village-All1 many strange become-PST2-PS.3SG
   ‘I am getting sick, and there are more and more strangers in the village’

In the example (59), the dependent state-of-affairs is coded by the imperfective participial clause and the Agent argument non-coreferential with the overt Agent of the subsequent matrix clause (Ag\(_d\) \(\neq\) Ag). The absence of the possessive expression of the Agent of the participial clause is due to it being unambiguously topical 1SG SAP, thus the specification would be redundant.

It should be observed on the basis of the reviewed examples that there does not seem to be a grammar in Eastern Khanty that is specific purely for the ‘purpose’ or ‘temporal’ relation of the imperfective participial constructions. These are subordinate IMPP-clauses, either inflected for possession and case or not. What, however, appears to be a pattern, is that the preposed (or embedded) IMPP-clauses tend to denote a state-of-affairs temporally posterior (or overlapping) with the matrix event and are marked by the stative Locative case (if any). At the same time, the postposed IMPP-clauses tend to denote a projected (anterior) state-of-affairs largely correlating to purposive semantic relation, and are marked by a dynamic Illative case (obligatorily).

11.1.2.3 Imperfective Participial Clauses with Relative Clause function

The chapter on nominal modifiers has dealt briefly with the participial clauses coding a dependent state-of-affairs which functions as modifiers of a nominal argument of the matrix clause (cf. 4.2.2.Nominalizations).
These participial clauses are predominantly perfective participles, however, the imperfective participial clauses are also used in this function.

60. mä onłtauǐl-ta kat-pa mën-täti ąnto koj-l-am
   1SG learn-IMPP house-ALL1 go-INF NEG want-PRS-1SG
   ‘I do not want to go to school (Lit. the learning house)’

In the example (60), the Illative-marked Locative argument of the matrix clause ‘house’ is the head of the participial relative clause (Loc-NP_{rel}).

Typically for the SOV Eastern Khanty, and following the pattern of the simple single-stem nominal modifiers (cf. 4. Attributive Nominal Modifiers), the participial relative clauses precede the modified head noun, the constituent of the matrix clause. Typical Eastern Khanty relativization follows the gap strategy (Comrie & Thompson 1985), in which the grammatical role of the nominal argument in the relative clause, coreferential with the head, is not overtly marked (cf. 11.1.3. Perfective Partici pal Clauses). These Eastern Khanty constructions normally do not have relativizers and are immediately juxtaposed to the modified head.

11.1.2.4 Imperfective Participial Clauses as Verbal Complements

Eastern Khanty imperfective participles are particularly frequent as complements of the phasal complement-taking finite matrix verbs.

61. Iwän il imil-wól, mül-l-āti tä wövəš-lə-nə jiši-l-wəl
   Ivan down sit-PRS.3SG hat-3SG-COM DET shake-TR-IMPP become-TR-PRS.3SG
   ‘Ivan sits and starts to shake his hat like so’ (Kalinina 1970)

The imperfective participial clause is used as the complement with the aspectual sense of occasionality/habituality (affix /-/l-/) of inception phase complement-taking matrix verb.

Phasal constructions appear to comprise most of the functional domain of the imperfective participial complements. The Eastern Khanty phasal complement-
taking verbs are limited, including the verb *jəta* used in the sense ‘to begin’ (62-66).

62. tʃi köljøy-t-al-na, juy-on-na os qitʃalɔy-ta jiyi-mə-s this say-IMPP-3SG-LOC tree-inside-LOC again crack-IMPP become-MMNT-PST2.3SG ‘When he was saying this it started cracking again in the forest’

Here, the imperfective participial verbal complement codes the event whose inception phase is coded complement-taking finite matrix predicate.

63. juy - noγ os qitʃiłøy-tə jiyi-l-wəl, má tʃeləyə-s-əm tree-twig again crack-IMPP become-TR-PRS.3SG 1SG cry-PST2-1SG ‘Tree twigs started cracking again, I cried’ (Kalinina 1970)

64. Iwän mən-tə jiyi-l-wəl atʃə-qal-la Ivan go-IMPP become-TR-PRS.3SG brother-DU/3SG-COM ‘Ivan starts walking with his brothers’ (Kalinina 1970)

65. Iwän ut-a juy-əl-tə jiyi-l-wəl Ivan shore-ILL come-TR-IMPP become-TR-PRS.3SG ‘Ivan gets over to the shore’ (Kalinina 1976)

66. aj watʃ-qor səγə qoyəl-əm-tə jiyə-l-wəl one town-street manner walk-MMNT-IMPP become-TR-PRS.3SG ‘Along a town street he starts to walk’ (Kalinina 1976)

As follows from the examples above, this type of phasal construction is used to code an event inception. The dependent state-of-affairs itself is coded consistently by the imperfective participle uninflected for any nominal categories, but able to make typical verbal categorial distinctions such as Aspect (by the imperfective participial marker itself) and Aktionsart (65, 66), specifying the internal structure of the event.

The states-of-affairs involved in these inception relation constructions are usually states-of-affairs of an entity obtaining in a certain temporal or internal structural phase (the matrix event) of another state-of-affairs (dependent event). Thus, in (62), some entity is in the state-of-affairs of beginning ‘to do X (matrix event)’, where X is the state-of-affairs of ‘cracking’ (dependent event). The entity
participating in both events is the same, i.e. Agent referent of the matrix and the dependent states-of-affairs is co-referential. These phasal predicates may be related to aspectual operators, as they are taken to specify the internal constituency of a state-of-affairs. However, as Siewierska (1991) and Cristofaro (2003) have observed, phasal predicates are not like proper aspectual operators, which have purely internal reference to the affected state-of-affairs. Phasal predicates relate two states-of-affairs. The dependent one is taken as a whole, and the matrix one expresses the fact of an entity being in a certain phase of realization of the dependent state-of-affairs (Cristofaro 2003: 102).

In Eastern Khanty, there is also an aspectual affix with inchoative semantics which codes the inception phase. These two ways of coding the inception phase could be illustrated by comparing (62-66) above and the use of inchoative verbal affix in (67):

67. mä wöɣ-äm qola-qat-œs-i
   1SG strength-1SG exhaust-INCH-PST2.3SG
   ‘My strength began to exhaust’

68. jöɣ män-ä wäɣ kit-œkat-œs
   3SG 1SG-ILL money send-INCH-PST2.3SG
   ‘(S)he started sending me money’

In case of the aspectual operator /-qœt-/ , the event typically refers to the temporal plane of the past, preceding the speech time. Also, the phase itself is not as salient in the proposition. It is viewed as rapid, and not construed as an event in itself. On the contrary, the examples with phasal complement-taking predicates tend to code predominantly the events of the temporal plane of the present, i.e. overlapping with the speech time. The fact of inception is salient in the proposition, and is viewed as a separate state-of-affairs coded by the matrix predicate ‘become’. As a finite predicate, this verb may have its own internal structure coded by aspectual operators or Aktionsart affixes (62-66). Again, this
appears to be in line with the general cross-linguistic iconicity principle, in that, close semantic integration of events and lack of profiling of one of them are reflected in tighter morphological coding of one of the event’s by a bound aspectual morpheme. On the contrary, looser semantic integration and higher salience (profiling) of the inception event are reflected in the corresponding morphosyntax of an independent matrix clause.

Example (71) below illustrates the extension of the use of the finite verb ‘become’. It varies from a proper nominal argument-taking transformation verb (69) to the verbal complement-taking phasal finite verb (62-66). The headless nominal modifier is a target of transformation (70), and the nominal predicate (nominal modifier əllə ‘big’ with predicative inflection -ayi) is a verbal complement with overall inceptive phasal semantics (71):

69. àmp  juy-qa  jì-ɣ
   dog  stick-TRNSL become-PST0.3SG
   ‘Dog turned into a stick’

70. əllə  jājm-əl  pesta  joyo-tə
    big  axe-3SG sharp become-PST0.3SG
    ‘His big axe got sharp’

71. pült  əllə-yi  joy-ayi
    hole big-PRD become-PST0-3SG
    ‘The hole got bigger (Lit.: got to be big)’

It is also clear from comparing (62-66) and (67) that in its use as a complement-taking phasal predicate, the verb ‘become’ acquires verbal affixes (cf. 8.3.1.1.2.1.Voice and Aspectual Affixation) affecting its valency, i.e. rendering it as transitive, with the complement clause acting effectively as the second core argument.
11.1.3 Perfective Participial Constructions

As it has been described above (cf. 8.4.3./-ом/ - Participle), the Eastern Khanty perfective participles with the marker /-ом/ attached to the base stem, most frequently have the function of a participial predicate of the subordinate clause:

72. äл’иŋ weriyl-ǝм-ǝl, мөрөɣ qотl матæ-кøл-п ǝнто jөɣ-ä төлөɣ-wǝл in.morning wake.up-PP.3SG all day some-word-TOP NEG 3SG-ILL say-PRS.3SG ‘Having woken up in the morning, (she) does not say a word to him’

In (72), the perfective participial predicate inflected for possession codes temporarily posterior dependent state-of-affairs, with the Agent role coreferential with the elided Agent of the (temporarily and lineally) subsequent matrix clause (Ag=Agд).

11.1.3.1 Perfective Participial Clauses with Temporal Semantics

Similar to the Eastern Khanty imperfective participial clauses, the perfective participles are also used to code adverbial temporal relations, either of precedence (posteriority), or simultaneity (overlap), with the participial clause functioning as the temporal adverbial for the finite matrix predicate.

73. qunto qat tөйө-нø i-m-ǝl, räťʃ уwөytǝ-тø… when house fire-LOC eat-PP-3SG oldman see-PST0-3SG ‘When the house burnt down, the old man saw ….’

Likewise, in (73), the temporarily posterior dependent state-of-affairs is coded by the construction with the perfective participial predicate inflected for possession, and the Agent of the Event non-coreferential with the overt Agent argument of the subsequent matrix Action clause (Agд≠Ag).

74. sөwsiki-нø al’ǝwø kǝntǝ-кøт-ǝм-ǝł’-нø, кас-тø qat ǝyti-na Syvsiki-LOC Alve search-INCH-PP-3SG-LOC find-PST0.3SG/SG house roof-LOC ‘Then Syvsiki went looking for Alva (and) found him on the roof’ (Kalinina 1976)
In (74), the posterior dependent state-of-affairs is coded by the construction with the embedded perfective participial predicate inflected for possession and case, and the Agent argument coreferential with the overt Agent of the subsequent matrix clause (Agₐ=Ag).

The perfective participial constructions are also used, much less frequently, to code the semantic relation of temporal overlap of the dependent and the matrix state-of-affairs, when functioning as the temporal adverbial for the finite matrix predicate:

75. a) əŋk-āl suj-ā mən-m-āl-na, b) uwəxt-ətə c) əŋk-āl jəŋq-jəl qaŋən-na jal-wəl
mother-3SG voice-ILL go-PP-3SG-LOC see-PST.3SG mother-3SG water edge-LOC stand-PRS.3SG
‘Going for his mother’s voice, he saw that his mother was standing at the water’

In (75), the dependent state-of-affairs is coded by the clause with the perfective participial predicate inflected for possession and case (a), and the Agent argument in the linked clause coreferential with that of the independent matrix clause (b) (Agₐ=Ag), and non-coreferential with the overt Agent of the subsequent finite complement clause (c) (Agₐ#Ag).

11.1.3.2 Perfective Participial Clauses with Reality Condition Sense

Similar to the discussion of the IMPP-clauses with purposive and temporal clausal semantics, some Eastern Khanty perfective participial clauses may bear a general contextual sense of intention of the speaker with respect to the proposition in the context of the speech situation, or the commitment to the truth of assertion. This sense does not originate from a particular grammar of the participial clause itself, but is rather inferable from the holistic meaning of the complex clause.

The example (76) contains a participial adverbial clause ‘If/when I had a book’, and a counter-factual töŋ-conditional expressing the event that never did occur although expected/desired:

76. mä nipik taja-m-am-no, töŋ nöŋ-a mə-yäs-i
1SG book have-PP-1SG-LOC Cond 2SG-ILL give-PST1-PS.3SG
‘If I had a book, I should have given it to you’ (Gulya 1966: 122)

The Agent argument of the dependent if-clause is coreferential with the Agent of the subsequent counter-fact conditional. The counter-factual töŋ-conditionals act as a matrix clause controlling the participial clause preceding it42. It is nevertheless essentially also an adverbial clause with an implicit counterfactual sense ‘but I have not (given the book), because I did not have it’. The conditional semantics in the participial clause is the contextually driven extension of its more typical use as temporal adverbial.

11.1.3.3 Perfective Participles as Relative Clauses

Similar to imperfective participial clauses, the perfective participles are used in Eastern Khanty to code dependent states-of-affairs functioning as modifiers of the nominal arguments of the matrix clause (cf. 4.2.2.Nominalizations).

77. wal-m-il tayə-j-a jō-γəs-ə.
   be-PP-3PL place-EP-ILL come-PST3-3PL
   ‘They came to the place of (their) living’

In example (77), the head of the relative perfective participial clause is the Illative-marked Locative role in the finite matrix clause (Stative Locative-NP_rei). In the SOV Eastern Khanty, relative clauses typically precede the modified head noun.

These participial constructions illustrate a common Eastern Khanty, and typologically universal, process of a finite verbal phrase becoming a component of a noun phrase of another clause, a typically pre-nominal clause-initial attributive nominal modifier.

These attributive relative clauses are able to modify most of the nominal arguments. Eastern Khanty allows relativization of all the clause arguments, however, the perfective participial clauses are most frequently used in the

42 In case of (76), the matrix is the passive clause with the demoted Loc-marked Agent (3SG) and the Agent of the embedded participial clause is co-referential with the elided Agent of the passive matrix clause (1SG).
relativization of the Target semantic role (83, 84, 85, 86), less often of the Agent role (78, 82), and Locative role (77). Other relations may be relativized in Eastern Khanty by the use of other types of relative clauses (cf. 11.2.3.1.Finite Relative Clauses).

Typical Eastern Khanty relativization follows the gap strategy (Comrie & Thompson 1985), in which the grammatical role of the nominal argument in the relative clause, coreferential with the head, is not overtly marked. These Eastern Khanty constructions normally do not have relativizers and are immediately juxtaposed to the modified head.

78. torøm-na qurt-øm ot-øt pajlaŋ wajaŋ-qa jø-ŋ-øt
   god-LOC scare-PP kid-PL wings animal-TRNSL become-PST0.3PL
   ‘In the skies, scared children, turned into birds’

In (78), the Agent argument of the finite matrix clause is the head of the preposed participial relative clause (Ag=Head NP $_{rel}$).

Clause (79) is an example in which the Agent of the finite matrix clause is the head of the preposed dependent participial relative clause (Ag=Head-NP$_{rel}$).

79. min-nä jø-mø pøy mã-nä jø-s
   1DU-COM come-PP boy 1SG-ILL come-PST2.3SG
   ‘The young man who had come with us(two) came to me’ (Gulya 1966: 137)

The examples below also represent the result of nominalization, with clauses having less of a verbal character. Perfective participles often designate a resultant state, while imperfect participles tend to denote more complex, verb-like relations (cf. 11.1.2.3.Imperfective Participial Clauses with Relative Clause function).

80. mã wer-m-äl rít
   1SG do-PP-3SG canoe
   ‘The canoe that I’ve made’

81. jøy wal-m-äl qat
   3SG live-PP-3SG house
   ‘The house in which he lives’ (Gulya 1966: 128)
Examples (80, 81) provide additional illustration of the process of nominalization in Eastern Khanty (cf. 4. Adjectives) in the Givonian (2001) sense of a “grammatical process via which a finite verbal clause – either a complete clause or a subject-less verb phrase – is converted into a noun-phrase” (Givon 2001: 24).

As mentioned above, the prevailing majority of the Eastern Khanty instances of the relative clauses exemplify the gap strategy, in which the missing coreferential argument is elided from overt expression. It thus confirms the cross-linguistic tendency for languages to extend the discourse anaphora strategy to other syntactic environments such as relative clauses (Givon 2001: 185). Evidence for nominalization may come from the use of such nominal categorial distinctions as possession (80, 81), and case (82a, 85).

There are also occasional examples showing embedded post-head participial relative clauses preceding the matrix clause with no relativizer (82a, 83a):

82. a. jaɣ män-әм-әә qat-әә  jəm qat-әә,
   people go-PP-3PL house-PL good house-ATTR
   ‘People, who’d left houses, are with good houses’

   b. jələw qat-әә wəl-yəl-t
   new house-ATTR be-PST1-3PL
   ‘(They) are with new houses’

The Agent role of the finite matrix clause is the head of the postposed participial relative clause (Ag=Head NP_{rel}).

83. a. mä u-l-әм köt kätəm soy
   1SG see-PRS-1SG hand hold-PP stick
   ‘I see the hand holding the walking stick’

   b. mä kätəm soy köt u-l-әм
   1SG hold-PP stick hand see-PRS-1SG
   ‘I see the hand holding the walking stick’

The Target argument of the finite matrix clause is the head of the postposed participial relative clause (Trg=Head NP_{rel}).
These instances, however, are highly infrequent, and as follows from (83a), they are eventually self-repaired into (83b). They may be, at least in part, due to the processes of language attrition, or assimilation of the native patterns into a system-novel patterns under the contact influence of the dominant SVO Russian. A similar explanation can be posited for the also rare post-matrix, but pre-nominal relative clauses (84, 85):

84. mën-än tel-kal-iw äťf-im kayart-am sart
    1DU-LOC fry-PST1-1PL/SG brother-1SG catch-PP pike
    ‘We have fried the pike fish that my brother caught’

85. ämp-nə rönöytə-s-tə mä kätəl-m-äm soy
    dog-LOC bite-PST2-3SG/SG 1SG hold-PP-1SG stick
    ‘The dog bit the stick which I am holding’

The Target argument of the finite matrix clause is the head of the pre-nominal but post-matrix participial relative clause (Trg=Head-NPrel).

Both of the cases (84, 85) show the finite matrix clause with the relativized Target argument as the head of the subsequent participial relative clause, with the Agrel (‘brother’ (84) and 1SG (85)) being non-coreferential with the Agents of the matrix clauses (1Du (84) and ‘dog’ (85)). System internally, this kind of syntax is possible in Eastern Khanty in light of the syntactic flexibility of the identifiable/accessible/activated Target referent (cf. 10.1.1.2.4. Clauses with simple transitive predicates). This is consistent with the function of relative clauses grounding the referent, thus rendering it identifiable, accessible and active in the interlocutors discourse universe (also evident in Target-predicate agreement, Objective Conjugation).

Finally, example (86) is similar to (84, 85) above, in that the participial relative clause occurs after the matrix clause, but also post-nominally. Also, in (86), the

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43 All of the Eastern Khanty speakers are bi-lingual Khanty-Russian.
relativized head is preceded by the definite pronominal determiner *tom*, providing added explicit identifiability expression for the referent *ämp* ‘dog’:

86. män-nə wäɣ-s-im * tom ämp*, *tom qu rönöyt-əm*
    1SG-LOC call-PST2-1SG/SG DET dog DET man bite-PP
    ‘I called the dog that bit that man’

The Target argument of the finite matrix clause is the head of the post-nominal and post-matrix participial relative clause (Trg=Head-NP$_{rel}$).

In light of the extreme rarity of this type, it is considered an idiosyncratic Russian-contact influence in individual speaker, where the definite determiner of the relativized element is clearly a redundant grounding of the already identifiable referent.

The Eastern Khanty “nominalized” attributive modifier examples reviewed above are functionally adjectives, which in combination with typical nominal inflections (possession, case) refer to entities involved in the process denoted by the verbal predicate, not the process itself (Croft 1991: 75). In CG terms, the typical Eastern Khanty subordinate participial predicate of relative clause has a nominal profile of a region in the domain of entities, rather than the verbal independent profile of a relation or a process (Langacker 1991). Thus the predicative verbal profile of the independent clause dominates the whole of the proposition containing the matrix and the subordinate clauses. In propositional terms, these participial relative clauses belong to the part of the proposition containing pragmatic presupposition. Their morphosyntactic features of the decategorized verbs (nominalizations) correlate with their reduced illocutionary force, to the extent that they cannot function as isolated independent syntactic units.
11.1.4 Converbial Constructions

Eastern Khanty converbial clauses (cf. 8.4.4. /-min/ - Converb) are typically used to code the dependent states-of-affairs and typically serve in the function of temporal adverbial to the finite matrix predicate. These converbial clauses are used to code the semantic relation of posteriority or that of the very proximal posteriority bordering temporal overlap.

87. tśiml-ali amis-min-nə, ni mənā-ɣən juya-tə
a.little-DIM sit-CNv-LOC woman go-PST0.3SG gather woods-PST0.3SG
‘After sitting awhile, the woman went off to gather firewood’

In (87), the converbial predicate, very rarely inflected for Loc-case, codes the dependent state-of-affairs with the Agent role coreferential with the elided matrix Agent (Ag_d=Ag).

88. qat-a jiña-min, dawaj təŋqə qor oγər-tə-ɣalin
house-ILL come-CNv “let” straight image look-TR-PST0.3DU
‘Having come into the house, they started looking at everything’

In (88), the dependent state-of-affairs is coded by the converbial clause with the Agent role coreferential with the elided Agent of the subsequent matrix clause (Ag_d=Ag).

The relation of temporal overlap implies two states-of-affairs that are generally temporally overlapping, i.e. one state-of-affairs occurs more or less in the time-frame of the other one, and the event-time of one state-of-affairs is the reference point for the event-time of the other.

89. tʃ’ulænə oʃəmkitəm quį-t entə qov nəməysək-min, noy wer-ət, mən-ət …
then young man-PL Neg long think-CNv up do-PST0.3PL go-PST0.3PL
‘Then, the young men not thinking much, made arrows and went…’ (Kalinina 1970)

In (89), the dependent state-of-affairs is coded by the embedded construction with the converbial predicate, and with the Agent of the converbial clause being coreferential with the overt Agent of the finite matrix clause (Ag=Ag_d).

90. loqapa-ja aməs-mən jis-mən illä-nə woqi ju-wəl
garbage-ILL sit-CNV cry-CNV once-LOC fox come-PRS.3SG
‘With him sitting in the trash pile and weeping, there passes a fox’

In (90), the dependent state-of-affairs is coded by the construction with the converbial predicate, and the Agent non-coreferential with the overt Agent of the finite matrix clause (Ag≠Agd).

Conclusions on Nonfinite Temporal Adverbials

Generally, the main features of the Eastern Khanty nonfinite temporal adverbial clauses may be summarized as follows:

• Perfective Participial dependent predicates – 60% of all adverbial clauses:
  ➢ Structural features:
  o 29% of usage of the PP predicate inflected for possession (coding of Agent argument of the subordinate clause as possessor affix on the participial predicate)
  o 58% of usage of the PP predicate inflected both for possession and case
  o 13% of usage of the PP predicate not inflected for possession or case
  o 0% of usage of the PP predicate inflected for case but not possession
  o 2 occurrences of aspectual (Aktionsart) distinctions on the PP predicate (Inchoative, Durative)
  ➢ Semantic features:
  o 20% of the subordinate PP clauses code temporal relation of simultaneity
  o 41% of the subordinate PP clauses code a temporal relation that expresses either simultaneity or an immediate precedence
  o 39% of the subordinate PP clauses code temporal relation of precedence
  ➢ Pragmatic features:
  o 50% of the subordinate PP clauses have the Agent argument co-referential with the Agent of the matrix clause
  o 50% of the subordinate PP clauses have the Agent argument not co-referential with the Agent of the matrix clause, coding switch reference
Semantic-Pragmatic-Structural Feature Interaction:
- 85% of the PP predicates coding a temporal relation of simultaneity are inflected for both possession and case; and 15% – are inflected for possession only
- 93% of the PP predicates coding a temporal relation of simultaneity and immediate precedence are inflected for possession and case, and 7% – are inflected for possession only
- 85% of the PP predicates coding a temporal relation of precedence are inflected for possession, and 15% – are not inflected for either possession or case
- In ‘switch reference’ clauses, 17% – have the PP predicate inflected for possession and case; 30% – inflected for possession only; 3% – uninflected for either possession or case; 2 occasions of use in the subordinate PP clause of the default 3SG predicate agreement expressed by possessive inflection on the PP predicate though factual Agent in both cases was 3PL
- In ‘coreference’ clauses, 33% – have the PP predicates inflected for possession and case; 14% – inflected for possession only; 3% – uninflected for either possession or case; 2 – occasions of use in the subordinate PP clause of the default 3SG predicate agreement expressed by possessive inflection on the PP predicate though factual Agent in both cases was 3PL

• Imperfective Participial dependent predicates – 21% of adverbial dependent clauses:

Structural features:
- 18% of usage, the IMPP predicate is inflected for possession only (coding of Agent argument of the dependent clause as possessor)
- 18% of usage, the IMPP predicate is inflected for possession and case
- 64% of usage, the IMPP predicate is not inflected for possession or case
- 0% of usage, the IMPP predicate is inflected for case but not possession
1 occurrence of aspectual (Aktionsart) distinctions on the IMPP predicate (Inchoative)

- **Semantic features:**
  - 27% of the subordinate IMPP clauses code temporal relation of simultaneity
  - 46% of the subordinate IMPP clauses code a temporal relation that expresses either simultaneity or an immediate precedence
  - 27% of the subordinate IMPP clauses code temporal relation of precedence

- **Pragmatic features:**
  - 45% of the subordinate IMPP clauses have the Agent argument co-referential with the S/A of the matrix clause
  - 55% of the subordinate IMPP clauses have the Agent argument not co-referential with the S/A of the matrix clause, coding switch reference

- **Semantic-Pragmatic-Structural features Interaction:**
  - 9% of the IMPP predicates coding a temporal relation of simultaneity are inflected for possession only, and 0% are inflected for both case and possession, and 0% are inflected for case only
  - 18% of the IMPP predicates coding a temporal relation of precedence are inflected for case and possession, and 0% – are inflected for either possession or case alone
  - 9% of the IMPP predicates coding both temporal relation of simultaneity and immediate precedence are inflected for possession along, and 0% – are inflected for both possession and case, or case alone
  - in ‘switch reference’ clauses, 34% – have the IMPP predicate inflected for possession; 66% – uninflected for either possession or case
  - in ‘co-reference’ clauses, 40% – have the PP predicates inflected for both possession and case; 60% – uninflected for either possession or case

- **Converbial dependent predicates – 19% of adverbial subordinate clauses:**
Structural features:
- 0% of usage, the Conv. predicate is inflected for possession
- 8% of usage, the Conv. predicate is inflected for case (Loc)
- 92% of usage, the Conv. predicates are not inflected for possession, case

Semantic features:
- 90% of the subordinate Conv. clauses code temporal relation of simultaneity
- 10% of the subordinate Conv. clauses code temporal relation of precedence

Pragmatic features:
- 90% of the subordinate Conv. clauses have the Agent argument co-referential with the Agent of the matrix clause
- 10% of the subordinate Conv. clauses have the Agent argument not co-referential with the Agent of the matrix clause, coding switch reference

Semantic-Pragmatic-Structural Feature Interaction:
- 100% of the Conv. predicates coding a temporal relation of simultaneity are uninflected for either possession or case
- 100% of the Conv. predicates coding a temporal relation of precedence are inflected for case only
- 100% of the subordinate Conv. clauses coding temporal precedence whose Conv. predicate is inflected for case have the Agent argument co-referential with the Agent of the matrix clause, thus Loc case marking is not serving the pragmatic but rather basic spatial-temporal semantic function.

Reduction in verbal categorial distinctions and occurrence of nominal ones in nonfinite temporal constructions is associated with an increase in assertiveness and a decrease in illocutionary force of the subordinate clauses. This lack in autonomous profile is manifested cognitively in the ability to conceptualize the dependent state-of-affairs as an entity allowing for these nonfinite subordinate
clauses to occur in the function of adverbs. In the nonfinite predicates with reduced verbal categorial distinctions, the use of spatial case markers (Loc. or Prolat. in (58, 74, 75)) to locate the dependent state-of-affairs with regard to the matrix state-of-affairs time is the evidence of close semantic integration of the dependent state-of-affairs into the matrix state-of-affairs. The use of nominal possessive inflections to code the Agent role of the dependent state-of-affairs (except for converbial predicates) also contributes to general reduction of finiteness, as also observed cross-linguistically (Givon 2001).

**Generalizations on Eastern Khanty Nonfinite Adverbial Clauses**

Deviation from the independent declarative clause is measured with regard to two main parameters: the verb form, and the participant coding, i.e. the combination in the subordinate predicate/clause of such prototypical verbal categorial distinctions as tense, aspect, mood, person; or presence of some morphology normally not allowed on verbs, which codes independent events such as distinctions of case and possession (expression of participants by possessive inflections). As for the lack or presence of TAM distinctions in some subordinate relations, it apparently cannot be accounted for in terms of semantic integration, predetermination, preference, or unrealized dependent state-of-affairs.

Since time reference, aspectuality and modality typically code the occurrence of a state-of-affairs through time, i.e. properties of the relation/process rather than entity, these distinctions are less likely to be made in the dependent states-of-affairs that are more entity-like (Cristofaro 2003: 177). Thus, in Eastern Khanty, such adverbial relations as temporal and purpose are more or less construable as entities and thus are less probable to have TAM distinctions. On the other hand, adverbial relations such as reason and reality condition are at the periphery (cf.
11.2. Finite Linked Clauses), and remain construable as processes and retain comparably more prototypical verbal distinctive features.

In over 70% of the instances, the participial adverbial predicates appear inflected for nominal categories of possessive expression for the Agent role and for case\(^{44}\). Thus, for instance, many of the Eastern Khanty ‘purpose’ adverbial dependent states-of-affairs are coded by the imperfective participial predicates exclusively inflected for Agent’s person/number possessive inflections and ILL case. Consequently, at least in some instances (5%), prototypical verbal properties such as aspectual (including Aktionsart) distinctions co-occur with the prototypical nominal properties, such as possession and case distinctions.

The connection between the morphosyntactic features of the subordination relations and the semantic factors is functionally motivated and these motivations are based on cross-linguistic principles including economy and iconicity (Givon 2001; Haiman 1985), as well as on cognitive distinctions between entities and relations (Langacker 1991). The economy principle generally implies reduced morphological size and complexity of the formal expression (Bybee 1985; Lambrecht 1994). Also, this principle implies that only the information minimally required for adequate processing of the utterance will be coded explicitly, while the redundant and accessible information will be elided from overt expression. Thus, once the TAM values, participant information, etc. are determined and accessible from the matrix state-of-affairs, they need not be redundantly re-specified in the dependent state-of-affairs.

The elision of explicit expression of participants of the dependent states-of-affairs is highly prevalent in all Eastern Khanty adverbial relations but with varying frequency. For instance, elision is much more frequent in purpose relations. This is primarily due to these relations’ inherently typical same-Agent

\(^{44}\)Eastern Khanty case inflections never occur on participles with no possessive markers.
semantics (cf. 11.1.2. Imperfective Participial Constructions), discourse motivated tendency towards co-reference of core participants with the matrix state-of-affairs. That is, in purpose relations, it is a strong implicit tendency for the Agent of the matrix state-of-affairs to have volition and a degree of control towards the realization of the dependent purpose state-of-affairs, which is reflected in typical semantic integration, though not strong enough for formal entailment (Cristofaro 2003).

In other adverbial relations, elision of explicit expression of arguments is also attested with different frequency. Possible complications of information processing are prevented by the application of various co- and switch-reference devices. In Eastern Khanty, it is the use of the possessive markers on the participial predicates especially of purpose and temporal adverbials. That is, explicit expression of the participants of the dependent (as well as of the matrix) state-of-affairs will occur either for signaling a change, or to prevent ambiguity. Otherwise, no explicit expression is likely to take place, if the identity and roles of the participants are assumed to be identifiable by the speaker-hearer in the given discourse episode. Typologically, this is viewed as an application of the economy principle but at a more general overarching level (Givon 2001; Cristofaro 2003). In the case of Eastern Khanty subordinate adverbial clauses, this is seen in the syntactic integration of the linked states-of-affairs, where most of the relevant features are expressed in only one of the linked states-of-affairs, the matrix.

A lack in the verbal features and the presence of nominal features, as for instance in the case of Eastern Khanty participial predicates of temporal or purpose adverbial clauses, are manifestations of the usage of verbal forms’ in the non-prototypical discourse function of nouns, i.e. reference to concrete, time-stable, discourse-manipulable participants. While the prototypical discourse function of verbs is to predicate and refer to concrete, kinetically affective, time-dynamic
processes (Hopper & Thompson 1985; Givon 2001; Croft 2001). The cases of the non-prototypical functioning of the instances of a class represent cross-linguistically common decategorization, manifested in the reduction of the prototypical morphosyntactic properties of the class, and possible acquisition of the prototypical properties of the other class (Cristofaro 2003: 257).

11.2 Finite Linked Clauses, Cosubordination

The traditional approaches to the definition of subordination derive in one way or another from morphosyntactic criteria such as clausal embedding, where the embedded clause is a clause functioning as a constituent of another clause. However, because of cross-linguistic variation in formal structural means and their interactions, morphosyntactic criteria alone cannot universally define subordination (Comrie 1981; Van Valin, La Polla 1997; Givon 2001; Cristofaro 2003).

In this section, I will describe examples of Eastern Khanty complex clauses, which I propose to be categorized as possibly falling at the far periphery of the domain of subordination. In Eastern Khanty, the subordinate states-of-affairs in this group of examples are coded by the clauses with finite verbal predicates. Subordination, here, will thus naturally be less of a structural notion, but rather a cognitive-semantic one.

The functional definition of subordination implies a universally valid way of construing of a relation between two (or more) events. Such a definition would refer to the Cognitive Grammar notions of profiling and backgrounding (Langacker 1991). Subordination here is defined as asymmetrical in that one of the events lacks an autonomous profile and is construed in the perspective of the other event (the matrix). Instead of appealing to particular structural means, such as clause types, functional definition of subordination appeals primarily to cognitive
relations between states-of-affairs (Dik 1997), based on cross-linguistic universality of functional situations, and universals of human cognition (Cristofaro 2003).

As it will be shown in the description below, Eastern Khanty finite complex sentences represent strings of clauses, loosely linked, often without any overt syntactic indication of subordination, or overt clause-linkage markers. That is, they hardly demonstrate any grammar specific for subordination. Differing in this respect from the nonfinite subordinate clauses, I suggest, these “strings” still may be seen to perform the subordination function of combining several states-of-affairs into a single linguistic unit. I will argue that a degree of semantic integration between these states-of-affairs is evident in recurrent elision of the core semantic roles, marked word order and reduced illocutionary force of these linked finite clauses. These features align conceptually with at least some degree of subordination.

On the other hand, it will also be pointed out that the semantic relation between these linked states-of-affairs could often be to some degree inferential, and is often mainly revealed by the features of paratactic character of the Eastern Khanty complex clauses.

11.2.1 Finite Linked Clauses with Purpose/Reason and Temporal Relations

Example (91) mentioned above (cf. 11.1.2.1.Imperfective Participial Clauses with Purpose Relation) and partially repeated here, demonstrates the possibility for a finite clause to code linked states-of-affairs with purpose semantics:

91. n’an’ pan-l-im ələwtaki olintay-nə toyor-l-əm, nâm-əki ʃə-s
   bread put-PRS-1SG top canvas-LOC close-PRS-1SG soft-PRD become-PST2.3SG
   ‘(I) cover the bread with the canvas sack, (so) it (the bread) got softer’

The second clause with the finite complex nominal predicate codes a state-of-affairs that represents the projected resultant Event, the state-of-affairs in purpose
relation towards the Action of the matrix clause. This second purpose proposition has the elided Agent of Event, which is non-coreferential with the Agent of the matrix Action clause \( (\text{Ag} \neq \text{Ag}_d) \), but is coreferential with the matrix Target argument \( (\text{Trg} = \text{Ag}_d) \). That is, the topical referent of the first finite clause, the 1SG Agent of the matrix Action, is not coreferential with the topical referent of the second finite clause, the Agent of the Event ‘bread’. However, the Agent of the second Event clause is elided and controls the predicate agreement inflection, which is the Eastern Khanty preferred topic expression (cf. 10.2. Information Structure). This elision of the non-coreferential Agent of the linked clause is in many respects similar to the features of the nonfinite purpose subordinate clauses reviewed above (cf. 11.1.1.1. Infinitival Clauses with the Purpose Relation).

Hypothetically, the second clause of (91) ‘it got soft’ referring to some established discourse active participant, is able to occur in isolation as an independent finite clause. However, in the given context of real-time commentary of the currently occurring actions marked appropriately by the Prst-Fut tense of the predicates, the use of PST2 tense makes this clause stand out in any sense other than a description of the projected state-of-affairs of the preceding clause.

Likewise in (92), the purpose dependent state-of-affairs is coded by the finite clause:

92. a) n’an’ jiyata-s-im,  b) küt[-äyi ili onto küt[-äyi.

\begin{align*}
\text{bread} & \text{ look-PST2-1SG/SG} & \text{ burn-PST0.3SG} \text{ “or” Neg burn-PST0.3SG} \\
& & \text{ ‘I checked the bread, (if) it burned or did not burn’}
\end{align*}

The first state-of-affairs coded by the finite Action clause is followed by the second state-of-affairs coded by the finite Event clause. Similarly to (91), in (92), the topical referent of the first linked clause (92a), the 1SG SAP, elided and controlling predicate agreement (PTE) is temporarily replaced in the second linked clause (92b) by another referent ‘bread’ \( (\text{Ag} \neq \text{Ag}_d) \). This topical referent in (92b), elided and controlling the 3SG predicate agreement, is coreferential with the
Target ‘bread’ of the first clause (92a) (Trg=Agₐ). There is a certain intonation break between the two finite clauses, a registerable pause between the preceding finite matrix and the following finite ‘purpose’ clauses commonly marked by the comma. There is also an interesting distribution of the TAM features in the postposed finite (purpose) clauses. Although, these finite purpose clauses occur in the PST tense form, the assertive power of their propositions is weak. That is, the propositions of these clauses are within the modal scope of irrealis. They are projections of States/Events, rather than asserted facts, which is quite typical of the purpose relation. Also, in the case of finite purpose clauses (91) and (92), there is obvious strong semantic integration of the dependent state-of-affairs into the independent matrix. Although, the dominance of a coreferential Agent referent in the dependent state-of-affairs is not formal, the matrix Agent’s control over realization of the dependent state-of-affairs is important.

On the one hand, it could be safely assumed that the sense of ‘purpose’ is not explicitly grammaticalized in these postposed finite clauses (91) and (92), and is rather an interpretation, or understanding of the utterances in their respective contexts. That is, the semantic relation between the linked states-of-affairs is rather inferred, resulting from the Eastern Khanty complex clause parataxis.

On the other hand, instead of a problematic differentiation of these Eastern Khanty purpose constructions as discretely subordinate based on explicit structural features, a scale may be posited, implying a gradation of structural and semantic features such as finiteness and participant coding. The Events coded by the second finite clauses in (91) and (92) may be seen as coding dependent states-of-affairs and as such functionally equivalent to lexical adverbs (cf. 5.Adverbial Modifier). Admittedly, unlike single-stem adverbs and nonfinite adverbial clauses (cf.11.1.1.1.Infinitival Clauses with the Purpose Relation, 11.1.2.1.Imperfective Participial Clauses with Purpose Relation), these finite purpose clauses do not
conform to the Eastern Khanty SOV word order, appearing typically after the matrix predicate. However, it should be noted that on the one hand, all Eastern Khanty adverbial modifiers (lexical, nonfinite clauses) are generally the least rigid in terms of word order. On the other hand, because of the very fact of finiteness of the conceptually dependent predicates they may only reasonably occur outside the finite matrix clause. The purpose semantic relation is easily inferred when the matrix clause precedes the clause specifying the purpose.

Eastern Khanty finite clauses may also be seen to code the reason relation, in which the linked state-of-affairs is a reason for the realization of the matrix state-of-affairs. Conceptually, finite clauses with the semantic relation of reason are similar to the reason-part of the proposition often expressed by lexical adverbs (cf. (93) vs. (94) vs. (97)):

93. nän’  jayart-aki,  näray
   bread  heavy-PRD  raw
   ‘The bread is heavy, (because) (it) is raw’

   In example (93), the post-matrix nominal ‘raw’ modifies the Agent argument ‘bread’ of the clause, and bears a reason relation towards the state-of-affairs ‘bread is heavy’. There is a fairly strong tendency for the reason adverbials to appear in postposition to the modified predicate, however, preposed reason adverbials are also occasionally attested.

94. allö  tföyöt, qullo  ter-ə-s  qul
   big  fire  all  bake-PST2.3SG  fish
   ‘The fire (is) big, (so) all the fish baked’

   In (94), the pre-matrix linked NP ‘big fire’ has the head non-coreferential with the Agent of the finite Event clause ‘fish baked’. Should the ordering of the linked clauses be altered (94*), the sequence would still remain acceptable with retained reason sense:

94. * qullo  qul  ter-ə-s,  allö  tföyöt
all fish bake-PST.3SG big fire
‘All the fish baked, (because) the fire is big’

In the sequence (95)-(96), the commentary for the video recording, (95) introduces the event ‘fish jumping out of the pot’ as the focus of attention, which is then reiterated in (96b) as the reason event for the matrix Action (96a).

95. wannə Iwän qul məla-wəl, qul put-oy il rüy-kətə-wəl, töyt-ä körkilla-kətə-wəl
soon Ivan fish put-PRS.3SG fish pot-PRL down jump-Inch-PRS fire-ILL fall-Inch-PRS.3SG
‘Soon, Ivan will put fish on, and fish will start jumping out of the pot, falling into the fire’

96. a) jɔya-ta, Iwän nayinto-wəl rut’ sayi, b) qul il rüy-wəlt, put-oy
look-Imper Ivan swear-PRS.3SG Russian way fish down jump-PRS.3PL pot-PRL
‘a) Look, Ivan swears in Russian, b) (because) fish is jumping out of the pot’

The state-of-affairs (96b) is coded by the finite clause with the overt Agent role non-coreferential with the Agent of the finite matrix (96a) (Ag ≠ Agd). Though the event of (106b), ‘the fish is jumping’ is clearly a part of the proposition containing pragmatic presupposition, a shared knowledge (topical), it is the center of attention in the discourse episode. Partial evidence of this is in the altered word order in (96b), where the Locative role ‘out of the pot’ appears postverbially. The topical (96b) occurs after (96a), which codes the not yet shared knowledge, a part of the proposition containing pragmatic assertion. In other words, the sequence focus-topic appears in violation of the Eastern Khanty strong topic-initial pattern (cf. 10.2.Information Structure). Motivation for this order arises from the mentioned tendency to have the reason relation (96b) to follow the matrix event (96a) in the absence of the explicit, grammaticalized ‘reason’ clause linkers. Thus, a degree of conceptual subordination can be posited between the following event (96b) setting reason specification for the matrix event (96a), functionally similar to a reason adverbial.

Alternatively, in a way similar to the finite ‘purpose’ co-subordinated clauses, the reason relation could be assumed to be rather inferential from the parataxis of Eastern Khanty complex clauses, as both, (96a) and (96b) appear to be able to
occur in isolation, although the altered Locative order in (106b) indicates it as somewhat marked pragmatically.

97. a) mä qolsla-l-im, b) pati-l-əm
   1SG cough-PRS-1SG get.cold-PRS-1SG
   ‘I am coughing, (because) (I) have a cold’

In (97), the linked finite clause (b) with the finite Future-Present predicate has the elided Agent co-referential with the Agent of the finite matrix clause (a) (Ag=Agd), and can be argued to bear a semantic relation of reason towards the preceding matrix clause. An argument in favor of the co-subordination treatment of this clause chain is the fact that if the clauses are reversed, the Agent ‘1SG’ must still be overtly present in the first clause, and could only be elided in the second (104*):

97.* a) ma pati-l-əm, b) qolsla-l-im
   1SG get.cold-PRS-1SG cough-PRS-1SG
   ‘(When/if) I have a cold, (I) cough’

Then, the meaning of the reversed clause would rather be that of temporal or conditional modification ‘when/if I caught a cold, I cough’, rather than reason. Also, instead of a strong assertion, a realis modal scope statement of (97), there is a weak assertion, an irrealis scope conditional statement resulting in (97*:).

The distinguishing of adverbial reason clauses in Eastern Khanty as a distinct type of coding the conceptually dependent states-of-affairs appears problematic both for nonfinite and finite clauses. All attested examples that can be interpreted as dependent states-of-affairs bearing reason relation to adjacent states-of-affairs are coded by finite clauses with arguable pragmatically marked word order and with minimally reduced illocutionary force.

Apart from the nonfinite constructions (cf. 11.1.2.2.Imperfective Participial Clauses with Temporal Relation; 11.1.3.1.Perfective Participial Clauses with Temporal Semantics), Eastern Khanty finite clauses may also be seen to code temporal relation, particularly of posteriority.
In (98), the first clause (a) has the finite passive predicate and the 1SG Agent role marked by Loc case, while the 3SG predicate agreement is controlled by the overt 3SG Target. While this Target role is coreferential with the Target pronoun ‘all’ of the next passive clause (98b), the Agent roles of these clauses are evidently non-coreferential. The Agent of (98a) is rather coreferential with the elided Agent of the active clause (98c) \((Tr_{ga}=Tr_{gb}=Tr_{gc})\), \((Ag_{ga} \neq Ag_{gb} = Ag_{gc})\). The TAM form of the predicates in all the clauses (98a-c) is Present-Future casting these propositions within the irrealis scope of the hypothesized future. The states-of-affairs of the passive clauses (98a) and (98b) may be seen as conceptually dependent, while that of the next finite active clause (98c) may be seen as the independent matrix. The passive clauses are conjoined by the link ‘and’ and represent a single intonation unit without a pause, whereas the active direct matrix (98c) is separated by the pause (0,225hms), shown in notation by a comma. This active clause (98c) has the topical Agent role coded appropriately by elision and the corresponding 3Pl predicate agreement (preferred topic expression).

Similarly to the finite purpose and, perhaps, more so for the reason clauses above, it could be argued that the temporal relation is increasingly not explicit in these postposed finite clauses and is rather inferred from the order and context, that is, from the paratactic character of the complex clause.

Alternatively, a degree of conceptual subordination can be posited between the preceding (98a-b) setting temporal or conditional specification for the matrix Action clause (98c). That is, the first two passive clauses in their parenthetic
character of the non-canonical constructions may be viewed as functionally similar to temporal or conditional adverbials. (It is a cross-linguistic fact (Givon 2001; Cristofaro 2003), that the distinction between the reality condition relations and the temporal relations of precedence and simultaneity may be either absent or coded by the same morphological means). Similar to the nonfinite constructions, Eastern Khanty finite clauses with temporal relation are typically preposed to the matrix clause, and are not used for coding the relation of temporal anteriority, rather implying the dependent state-of-affairs occurring before or in the time frame of the independent matrix state-of-affairs.

Eastern Khanty temporal adverbial clauses are admittedly typically subordinate along the grammatical, structural features (nonfinite). However, instead of the discrete subordination-coordination division, a scale may be posited implying a continuum of structural features (finiteness, participant coding, verbal and nominal distinctions) and of the pragmatic features (assertiveness, illocutionary force) in the conceptually dependent temporal state-of-affairs. Such scale may accommodate the diversity of Eastern Khanty morphosyntactic coding of conceptually dependent states-of-affairs with temporal relation to the matrix.

Representation of the morphosyntactic variation of the Eastern Khanty purpose, reason and temporal adverbial clauses may thus be seen as a graded scale, as in (Fig.2), illustrating variation in the degree of delexicalization of dependent predicates:

**Fig. 2. The Eastern Khanty Clauses as Purpose/Reason & Temporal Adverbials.**

(+) **finite (independent)**
- full finite clauses of reason relation with prototypical TAM distinctions and full illocutionary force \((Ag\neq Ag_d)\)
- full finite clauses of temporal relation with prototypical TAM distinctions and full illocution. force \((Ag\neq Ag_d)\)
- full finite clauses of purpose relation with reduced TAM distinctions and reduced illocution. force \((Ag=Ag_d)\)

(-) **finite (dependent)**
- nonfinite predicates with some TAM distinctions and no nominal features, low illocution. force \((Ag=Ag_d)\)
- nonfinite predicates with some TAM distinctions and nominal features, low illocution. force \((Ag=Ag_d)\)
- nonfinite predicates with no TAM distinctions and numerous nominal features, low illocution. force \((Ag=Ag_d)\)
11.2.2 Finite Linked Clauses with Reality Condition Relation

As mentioned above (cf. 8.3.1.2.2. Conditionals), the formal inflectional category in Eastern Khanty that signals the intention of the speaker with respect to the proposition in the context of the speech situation is the one that codes the commitment to the truth of assertion. That is the conditional mood adverbials.

99. in-ta qoj-im-ŋ-an, täm köllaŋ-o joy-ä, män-ä tfeläyt-ä
    eat-INF want-Mmnt-Cond-2SG here shore-ILL come-IMP.2SG 1SG-ILL cry-Impr.2SG
    ‘If you want to eat, come to that bank, call to me’ (Kalinina 1970)

The dependent state-of-affairs is coded by the clause with the finite conditional predicate and the Agent in the linked clause coreferential with the elided Agents of the subsequent imperative matrix clauses (Ag_d=Ag). The first, clause may not occur in isolation with the conditional marker /-ŋ-/ taking the slot of the tense inflectional marker, making the clause clearly a dependent one.

This reality condition relation codes two states-of-affairs where the realization of one, the state-of-affairs, is a condition for the realization of the other, the matrix state-of-affairs. The dependent state-of-affairs may be expressly unrealized as counterfactual in conditionals, or they may have low probability of being realized. Since realization of the main state-of-affairs is contingent on the realization of the dependent state-of-affairs, the main state-of-affairs also appears to be non-factual or irrealis.

11.2.2.1 /-ŋ-/ Conditionals

As mentioned in the description of Eastern Khanty verbal categories (cf. 8.3.1.2.2.2. Conditional), one of the frequent forms of expression of conditional mood in Eastern Khanty is the bound verbal morpheme /-ŋ-/ occupying the position normally taken by the Tense inflection.

It is clear in the available examples that, parallel to the established typological tendencies (Givon 2001: 300), in Eastern Khanty the modality of the proposition
does not affect the *propositional frame* of the clause. The pragmatic functions, semantic roles and grammar of the referents, predication types, and the verbs’ transitivity do not appear to impose any lexical restrictions. Conditional clauses show regular means of expression of transitivity, voice, aspect, negation, Agent-controlled predicate agreement, that is, pragmatic status-semantic roles-morphosyntax correlations.

100.  ámbë män-ŋ-än, wöñ-nä tul-uŋ-än
    Neg  go-Cond-2SG  force-COM  take-PS-2SG
    ‘If you don’t go, you’ll be taken by force’    (Gulya 1966: 121)

In (100), the dependent conditional *if*-clause has the irrealis negative modal scope marked by the negative particle preceding the negated component. The predicates of both, *if*-clause and *then*-clause are in the Future-Present tense form. The first passive clause has the elided active identifiable Target referent coded by the 2SG predicate agreement inflection (cf. 10.Simple Verbal Clauses & Argument Structure). Thus, the Agent role of the subordinate conditional clause is coreferential with the Target role of the passive matrix clause (Agd=Trg). The conditional *if*-clause, preceding the matrix clause, has reduced TAM distinctions and may not occur in isolation.

In communicative pragmatic terms, Eastern Khanty conditional casts the proposition either as a weak assertion of possible, uncertain, desired truth; or as a negative assertion (false assertion) contradicting explicit or assumed belief (Givon 2001: 301).

The *weak assertion* characterizes the conditional proposition (100). These Eastern Khanty Present-Future or Imperfective /-ŋ/-conditionals seem to provide fairly elegant evidence of the validity of the cross-linguistically sensitive *reference test* for modality involving referential behavior of NPs (Givon 2001: 303). The test posits that for the non-fact modality (irrealis assertion and negative assertion), NPs can be interpreted as either referring or non-referring, whereas for the fact modality
(presupposition and realis assertion), NPs can only be interpreted as referring. The Eastern Khanty conditionals, being the non-fact irrealis-assertions, make the verbal predicate formally insensitive to the pragmatic status of the Target referent (cf. 8.3.1.2.2.2. Conditional). That is, once the predicate has the conditional marker /-ŋ/ it may no longer distinguish the pragmatic status of the Target referent by the use of the Target-predicate (so-called Objective) agreement inflection (cf. 8.Verb; and 10.Simple Clause).

11.2.2.2 /töŋ/-Conditionals

There is another way of coding conditionals in Eastern Khanty, which uses a non-bound morpheme töŋ:

101. jöɣ_wal-ŋ-al, töŋ timint wer ŋnte wal-ɣas
    3SG live-Cond-3SG Cond DET business Neg be-PST1.3SG
    ‘If (s)he were alive, such a thing would not have happened’ (Gulya 1966)

Example (101) has the subordinate if-clause coded with the finite predicate and the overt Agent argument non-coreferential with the overt Agent of the subsequent finite clause (Ag_d≠Ag). The conditional marker separates the clauses. Interestingly, neither of the linked clauses in (101) appears to be able to occur in isolation as they both represent marked conditional constructions. Without the marker töŋ the second clause in (101) is an acceptable negative statement ‘this thing did not happen’, whereas with töŋ, but without the negative marker ŋnte, it is still the counterfactual conditional ‘this thing would have happened’ implying ‘but it did not’.

102. tʃu ta:y-ŋa, töŋ jɑm wal-ŋ-al
    DET place-LOC Cond good be-Cond-3SG
    ‘There, it would (have) been good’ (Gulya 1966)

In (102), the conditional clause is coded by the locative NP with the elided Agent argument non-coreferential with the elided Agent of the subsequent another conditional clause (Ag_d≠Ag), separated by the conditional marker töŋ.
Both (101) and (102) contain two conditional markers, the imperfective conditional suffix */-ŋ/* and the perfective non-bound marker *töŋ*. They are thus to be viewed as combinations of two conditional clauses: the imperfective */-ŋ/*-conditional clause and the perfective *töŋ*-conditional, with an implicit negative matrix. The expressed sense implies, that counter to the expectation, the projected/desired state-of-affairs was never achieved.

The whole of the propositions ((101)-(106)) have a certain completion or perfectivity aspectual sense (also evident in the exclusive use of past tense forms of the predicates). It is also evident in (101) and (102), as well as other */tön/-conditionals (103)-(106), that the perfectivity sense contributes to their general modality of a negative/false assertion, i.e. contradicting an explicit, factual belief. In other words, these propositions may be said to manifest the weakest possible degree of certainty on behalf of the speaker, to the extent of explicitly contradicting the real-world fact. Thus these Eastern Khanty perfective counter-fact conditionals fall under the modal scope of negation (Givon 2001: 311). It is also apparent that these epistemic modal constructions also have a certain sense of deontic modality, i.e. express a desire, obligation, expectation (102) and (103).

103. mä joy-pa mën-s-əm töŋ
    1SG home-All1 go-PST2-1SG Cond
    ‘I should have gone home (but did not)’ (Gulya 1966)

In (103), the modal clause has a finite predicate with the overt Agent argument and clause-final conditional marker. The matrix clause has an implication ‘but I did not’ with coreferential Agent argument (*Agd*=*Ag*). Example (103) and the rest below, being perfective counter-fact conditionals, demonstrate that for this type of conditionals (101-102) the marker */-ŋ/* is not the essential one, and the modal sense is expressed by the marker *töŋ*. Similar to (101-102), absence of the marker
töŋ would make (103) an acceptable independent simple verbal clause with the sense ‘I went home’.

104. qunta-ŋə tön, mă mən-yəl-am, tut-ŋə jöy-ən mä-nt käs-käl
   when-LOC Cond 1SG go-PST3-1SGDET-LOC 3SG-LOC 1SG-ACC find-PST3.3SG
   ‘If I had gone, then he would have found me’ (Gulya 1966)

In (104), the conditional if-clause ‘had I gone’ is coded by the past tense finite clause with the overt if/when pronoun inflected for Loc-case and followed by the counterfactual non-bound conditional marker töŋ, rendering the clause as conceptually dependent and reduced in illocutionary force (unable to occur in isolation). The subsequent non-canonical clause (Loc-Agent) is an independent, finite then-clause with full illocutionary force and an Agent non-coreferential with that of the counterfactual conditional (Ag_d≠Ag). The conditional ‘had I gone’ has the implied counterfactual matrix ‘but X did not’, where X is the Agent of the matrix (not necessarily coreferential with the Agent of the conditional as in (104)). Again, whereas the second clause is perfectly acceptable as an independent clause, absence of the marker töŋ would render (104) also an acceptable independent clause, and making (104) a coordinate clause with the sense ‘I went and he found me’.

The existence of the implicit negative matrix in this type of adverbial counterfactual conditional clauses becomes slightly more explicit in the example (105), where the reason for the counter-factness (…but X did not…) is stated in the next but-clause:

105. mă tøy jö-s-əm tön, uy-əm köť-əki
   1SG here come-PST2-1SG Cond head-1SG hurt-PRD
   ‘I should have come here, but I have a headache’ (Gulya 1966)

The conditional state-of-affairs is coded by the past tense finite clause with the overt clause-final töŋ-conditional marker, rendering it conceptually dependent and
formally subordinate, with reduced illocutionary force and implied assertion of the event. It is followed by the explicit reason extension ‘I have a headache’, clearly implying the quasi-explicit counter-fact negative matrix ‘I didn’t come’. The subsequent non-canonical (Loc-Agent) independent finite then-clause has full illocutionary force and the Agent argument non-coreferential with that of the counter-fact conditional (Agd≠Ag). Once again, it is the presence of the marker töŋ that marks subordination. Without it (105) would be a typical coordinate ‘I came, and/but I have a headache’.

Finally, (106) further confirms the existence of the negative matrix of the adverbial counterfactual conditional. The dependent counterfactual state-of-affairs ‘I should have brought it’ is coded by the finite passive clause followed by the conditional marker töŋ. It has the reduced in illocutionary force, and implies assertion of the event. It is followed by the reason clause ‘(because) he did not give it to me’ with the non-coreferential Agent argument (Agd≠Ag), and implying counterfactual ‘I did not bring it’.

106. män-nə tu-yas-i töŋ⁴⁵, jöŋ-ən män-ə ənte mə-yäs-i
    1SG-LOC bring-PST1-PS.3SG Cond 3SG-LOC 1SG-ILL Neg give-PST1-PS.3SG
    ‘I should have brought it, but he did not give it to me’ (Gulya 1966)

Thus, classification of Eastern Khanty finite conditional constructions as semantically and structurally subordinate is more straightforward than the cases of purpose/reason or temporal linked finite clauses. The prevailing majority of Eastern Khanty conditional meanings are coded by finite clauses with a slight tendency towards coreferential Agent (60%). Imperfective /-ŋ/-conditionals are all same-Agent, while perfective töŋ-conditionals are more often different-Agent (70%). Thus, scalarity of structural features such as finiteness, participant coding

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⁴⁵ For the discussion of the conditional marker töŋ cf.: 8.3.1.2.2.2. Conditional. Syntax-wise the marker töŋ is much more frequently clause-final than clause-initial.
and combination of verbal and nominal categories in the conceptually dependent state-of-affairs for the conditional adverbial clauses will have a marked cline towards finite coding. Reduction in verbal categorial distinctions is manifested in the absence of tense distinctions in imperfective /-ŋ/-conditionals and absence of ability to mark the pragmatic status of the Target role via marked predicate agreement (objective conjugation). Both types of conditionals lack in illocutionary force, are unable to occur in isolation without at least some contracted form of the counterfactual matrix.

The morphosyntactic variation of the Eastern Khanty subordinate conditional adverbial clauses could be represented as a scale, as follows (Fig 3):

**Fig. 3. The Eastern Khanty conditional dependent adverbial clauses.**

(+) **finite (independent)**
- finite predicates with full TAM distinctions and near full illocut. force (105, 104-106) (Ag≠Agd)
- finite predicates with full TAM distinctions and reduced illocut. force (106) (Ag=Agd)
- finite predicates with reduced TAM distinctions and low illocutionary force (99-100) (Ag=Agd)
- nonfinite PP predicates with reduced TAM distinctions and some nominal features (76), (Ag=Agd)

(-) **finite (dependent)**

**Conclusions on Eastern Khanty Finite Adverbial Clauses**

The linked finite clauses reviewed thus far (cf. 11.2.1.Finite Linked Clauses with Purpose/Reason and Temporal Relation; 11.2.2.Finite Linked Clauses with Reality Condition Relation) appear to have in common their semantic relation towards the linked clause. This relation appears to be that of modification of either the matrix predicate or the whole of the matrix proposition. That is, these linked finite clauses may be seen as functionally akin to single-stem adverbials and nonfinite subordinate adverbial clauses. There are, however, notable differences between the Eastern Khanty nonfinite subordinate clauses in this function and the finite ones reviewed in the sections above. The degree of syntactic dependence/integration of the finite clauses is much lower, so much that in many
cases their very ‘modification’ semantic relation can be said to be rather inferable
from their general deictic character, rather than truly grammaticalized.
In terms of the degree of semantic integration of the dependent state-of-affairs, all
Eastern Khanty adverbial clauses, could be viewed as follows (Fig.4):

**Fig. 4. The Eastern Khanty Adverbial Clauses.**

((+)independence)  
low semantic integration  

Finite *purpose* (92), *reason* (94, 95), *temporal* (98) clauses
Finite *conditional* (99-102, 104-106) clauses
Nonfinite *purpose* and *temporal* (55, 56a, 73, 89, 90, 59, 75)  
adverbial clauses with non-coreferential Agent [Ag≠Agd]
Nonfinite *temporal/conditional, purpose* (58, 74, 87, 88)  
adverbial clauses with coreferential Agent [Ag=Agd]

On the other hand, high semantic integration ((-)independence)

Finite *reason/purpose* clauses (56b, 92, 94-96) [+TAM]
Finite *temporal* clauses (98) [+TAM]
Finite /ŋ/-*conditional* clauses (102-106) [-TAM]
Finite /-ŋ/-*conditional* clauses (99, 100) [-TAM]
Nonfinite *purpose* and *temporal* clauses (88, 89, 90) [-TAM], [-poss], [-case]
Nonfinite *temporal* clauses (87, 73) [-TAM], [+poss], [-case]
Nonfinite *conditional, purpose* (55, 56a), *temporal* clauses  
(58, 74, 75) – [-TAM], [+poss], [+case]

Many of the adverbial senses in Eastern Khanty are coded by the nonfinite
verbal predicates, particularly participles (50%). Though with some complexities
concerning the inherent boundedness/completedness of the verbal stem (Filtchenko
2000), the Eastern Khanty participles are traditionally differentiated into perfective
and imperfective ones (or past and present participles) (Tereskin 1961; Gulya
1966). The distribution of verbal and nominal categorial distinctions in the Eastern
Khanty adverbials may be represented along the scale as follows (Fig.5):

**Fig. 5. Grammatical categories in the Eastern Khanty adverbial clauses.**

(V)verbal categories (TAM)  
Finite *reason/purpose* clauses (56b, 92, 94-96) [+TAM]
Finite *temporal* clauses (98) [+TAM]
Finite /ŋ/-*conditional* clauses (102-106) [-TAM]
Finite /-ŋ/-*conditional* clauses (99, 100) [-TAM]
Nonfinite *purpose* and *temporal* clauses (88, 89, 90) [-TAM], [-poss], [-case]
Nonfinite *temporal* clauses (87, 73) [-TAM], [+poss], [-case]
Nonfinite *conditional, purpose* (55, 56a), *temporal* clauses  
(58, 74, 75) – [-TAM], [+poss], [+case]

Eastern Khanty finite adverbial clauses appear to share with their nonfinite
counterparts a certain reduction of verbal distinctions, particularly aspect
(Aktionsart) and mood, but to a much lesser extent (Table 1):
Table 1

Grammatical distinctions in the Eastern Khanty adverbial clauses.

<table>
<thead>
<tr>
<th>Adverbial relations</th>
<th>Tense</th>
<th>Aspect</th>
<th>Mood</th>
<th>person/number</th>
<th>Case</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-finite</td>
<td>+finite</td>
<td>-finite</td>
<td>+finite</td>
<td>-finite</td>
</tr>
<tr>
<td>Temp. precedence</td>
<td>-</td>
<td>+</td>
<td>+/-</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>Temp. simultaneity</td>
<td>-</td>
<td>+</td>
<td>+/-</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>Purpose/Reason</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>Reality Condition</td>
<td>-</td>
<td>-</td>
<td>+/-</td>
<td>+</td>
<td>+(Prag)</td>
</tr>
</tbody>
</table>

* – the category that cannot be differentiated in the given Eastern Khanty form, for instance, the Tense in the nonfinite verb form, or Case on the finite verb form.

(Blank cell) – no examples for the given form, for instance, the nonfinite ‘reason’ adverbial clauses.

(Prag) – occurrence of the possessive inflections of pronominal etymology is a pragmatics motivated way of coding core (Agent) role.

The lack of verbal features (TAM distinctions) and reduced argument expression appear to be motivated by decreased processual properties in Eastern Khanty nonfinite adverbial clauses. The use of nominal features such as case-marking and expression of arguments as possessors in the nonfinite adverbial clauses is related to the semantic integration of the dependent state-of-affairs and the matrix one. Generally, the dominance of the matrix state-of-affairs’ profile over that of the adverbial state-of-affairs correlates with the fact that the dependent state-of-affairs is interconnected with the matrix one to the extent that it cannot be conceptualized as completely distinct (Cristofaro 2003). In Eastern Khanty, the evidence comes from a certain pragmatic sentential deficiency of all adverbial clauses. Typically, in one way or the other, these adverbial clauses appear unable to be used independently, or at least require very specific contexts. This correlates with the characteristic decrease in assertiveness, illocutionary force of these adverbial clauses, ranging from near full in finite purpose/reason and temporal clauses – to reduced, in finite conditional clauses – to low, insufficient for independent discourse use in infinitival, participial and converbial adverbial clauses (Fig.6):
The decreased verbal distinctions and illocutionary force indicate increased semantic integration between the matrix and the linked states-of-affairs, and mean their decreased independent profile and processual features, allowing their conceptualization as unitary entities, parts of the matrix state-of-affairs (Langacker 1991, Cristofaro 2003). In functional features, this is manifested in these linked states-of-affairs acting as adverb-like constituents of the matrix clause (in case of nonfinite clauses with the associated use of the appropriate nominal features such as case and possessive marking of arguments).

A multi-parametrical scale of the Eastern Khanty adverbial clauses could be offered illustrating the degree of diversion from the lexical prototype, or gradual switch in typical categorial distinctions of the dependent predicates, reflecting the variation in the degree of semantic/conceptual independence of the linked states-of-affairs (Fig.7):

**Fig. 7. Clause-linking relations in the Eastern Khanty complex clauses.**

**(+)** Independent linked clauses, coordinate-like interclausal relation

finite clauses with prototypical TAM distinctions and full illocutionary force
finite clauses with reduced TAM distinctions and reduced illocutionary force
nonfinite clauses with no TAM distinctions, no nominal features, low illocutionary force
nonfinite clauses with no TAM distinctions and some nominal features, low illocutionary force
nonfinite clauses with no TAM distinctions and multiple nominal features, low illocutionary force

**(-)** Dependent linked clauses, subordinate-like interclausal relation
11.2.3 Finite Linked Clauses with the Function of Relative Clause

The chapter on nominal modifiers has already dealt with the states-of-affairs coded by the clauses functioning as modifiers of nominal arguments of the matrix clause (cf. 4.2.2. Nominalizations).

11.2.3.1 Finite Relative Clauses

In the recent data, there are a growing number of examples of the relative clauses not only following the head, but also coded by the finite clauses (107, 108, 109). In these examples of the finite relative clauses, their syntactic and semantic features show that these clause-size nominal modifiers bear the appearance of full-fledged independent clauses.

107. mä kolente-l-əm merəm, muyuj jateswe-wəl anŋ-im
   1SG listen-PRST-1SG tale which tell-PRST.3SG mother-1SG  
   'I listen to the tale which my mother tells'

   In (107), the zero-marked for Acc. case Target role of the active matrix clause is coreferential with the Target role of the postposed finite active relative clause, also zero-marked for Acc. case. The head of the relative clause is coded by the relativizer ‘which’ occurring clause-initially in the OVS linked clause. The 3SG predicate agreement in the linked clause is controlled by the Agent role ‘mother’ in compliance with the general pattern (cf. 10.1.1.2. Core Semantic Roles and Their Grammar). However, due to its specific word order and presence of relativizer the second finite clause is unlikely to occur in isolation as an independent clause.

The next example (108) is analyzed in much the same way:

108. luɣ-a qətin-tə-wəl, mä təluy-l-əm muyuli piriɣ-wəl
   3SG-ILL listen-Tr-PRS.3SG 1SG say-PRS-1SG which ask-PRS.3SG  
   '(S)he listens, I answer, what (s)he asks'

   The Target of the matrix clause (utterance complement) is coreferential with the Target of the finite relative clause (also utterance complement) (Trg-NP[Trg]rel). The head of the relative clause is coded by the pronominal relativizer ‘what’. The
finite relative clause, though showing canonical finite clause features (TAM, predicate agreement) is nevertheless unlikely to occur as an independent clause in light of the relativizer and marked word order.

109. tʃ’u-l’à-na ajemkitəm quj-t əntə qoɣ noməɣək-min,  
    DET-time-LOC young man-PL Neg long think-CNVS  
    ‘Then the young men, not thinking much,…’

    noɣ wer-ət, mən-ət təy-l-a, qo wał-ət tʃ’u jəɣ  
    down make-PST0.3PL go-PST0.3Pl DET-3SG-ILL DET people  
    ‘…made arrows and went there, where those people lived’  
    (Kalinina 1970)

Similar to the (107) in (109), an argument of the matrix clause, the ILL-marked Locative ‘there’ is coreferential with the head of the finite Event relative clause. Unlike the nonfinite gap relative strategy, in finite relative clause (108), the head is coded by a pronominal relativizer with the Locative role (Loc-NP[Loc]rel). In compliance with the general Eastern Khanty finite clause pattern, the 3Pl predicate agreement in the linked clause is controlled by the Agent role ‘those people’. Also similar to (107), the finite VS (109) is highly unlikely as an independent clause.

In the somewhat similar manner, the finite linked clause in (110) has canonical TAM and Agent-controlled predicate agreement, though altered word-order (SVO) licensed by the pragmatic status of the Target referent ‘animal tracks’:

110. mə əl-wə-s-əm, qo kötʃkəl qasi kəs-əɣi əɣa jəɣ  
    1SG be-PST2-1SG where hunter man find-PST0.3SG animal track  
    ‘I have been to that place, where the hunter found the animal track’

In departure from the pattern in (109), however, the complex clause (110) demonstrates headless relative or correlative clause with the matrix clause not having the head argument supposedly modified by the relative clause. In (110), it is the Locative ‘place, there’, which should be coreferential with the head referent, the postposed finite relative clause, also the Locative coded by the pronominal relativizer ‘where’ (ØLoc-NP[Loc]rel).
The finite clause may also be linked by the temporal WH-pronoun ‘when’ serving as relativizer, as (111), also illustrating the Eastern Khanty headless relative clause pattern:

111. mä onə-l-əm, qunta ʃonən aj-ni tiɣ-äɣi
   1SG know-PRS-1SG when summer small-woman be.born-PST0.3SG
   ‘I remember (the summer), when the girl was born’

The Target argument of the SVO matrix clause (cognition complement) is elided, being coreferential with the Locative (Temp) of the postposed finite relative Event clause (Trg-NP[Temp]rel), which shows otherwise canonical Agent-predicate agreement and SV order.

In all the above cases (approx. 15% of all relative clauses) the relative clause follows the head (107, 109) or the matrix clause in cases of corelative (headless) clauses (110, 111), and has the relativizer in the form of interrogative pronouns, such as muɣyj ‘what, which’, qo ‘where’, qunta ‘when’.

Demonstrative pronouns, however, may also occur in the function of relativizers:

112. mä wel-käs-im ño,tʃəɣi, ti ni ʃoɣ-.writeInt n’an’
   1SG make-PST3-1SG knife DET woman cut-PRS3SG bread
   ‘I have made the knife, which a woman cuts the bread with’

The peripheral role of the Instrument of the matrix clause is coreferential with the head of the postposed finite relative clause. The finite active relative clause shows canonical Agent controlled predicate agreement, the SVO word order, and is linked to the matrix by clause-initial pronominal relativizer, coding the role of Instrument (Instr-NP[Instr]rel).

Somewhat similarly in the example (113), the postposed finite relative clause demonstrates canonical finite Agent controlled agreement pattern and SV word order.
The elided Target role of the finite Loc-Agent matrix clause (cognition predicate) is coreferential with the overt Agent role ‘the man’ of the finite intransitive relative clause (Trg-NP[Ag]_rel). The SVO word order of the matrix clause is typical for the cognition, perception, and utterance predicates (cf. 11.2.4.Finite Clauses as Verbal Complements). The absence of the explicit Target role of the matrix clause and presence of the overt Agent role of the linked relative clause in (113) illustrates the Eastern Khanty finite internally headed relative clauses.

A similar example of the finite internally headed relative clause is (114), with the postposed finite intransitive relative clause having the overt Agent role.

The elided Target role of the SVO matrix clause (perception predicate) is coreferential with the Agent role of the postposed relative clause (Trg-NP[Ag]_rel). The interpretation of the whole of the linked finite clause in (114) as the Target complement of the finite matrix predicate of cognition is unlikely in light of the aspectual adverb ‘for a long time’.

In these examples, independent finite matrix clauses are followed by the finite relative clauses, with interrogative or demonstrative pronouns serving as relativizers. Clause linking elements precede the relativized matrix clause element. Relativized elements have various semantic roles and grammar in the matrix clause, however, the Target role prevails (107, 108, 111, 113, 114) over other roles: Locative (109, 110) and Instrument (112)). The relativized element may be altogether absent from the explicit expression rendering relative clauses headless,
corelative (110, 111), and can occur within the internally-headed relative clause itself (113, 114). Propositionally, these instances exemplify conceptually dependent state-of-affairs coded by the finite clauses with reduced illocutionary force. Thus, the examples under (115a-d), representing the relative clauses in (107-114) can hypothetically occur in isolation, but in some specific discourse environment:

115. a. (muyuj) jateswe-wəl äŋk-im
   (Det) tell-PRS.3SG mother-1SG
   * ‘(which tale) my mother tells’

b. (qo köťköl qasi) käs-äyi wajaɣ lök
   (where hunter man find-PST.3SG animal track
   * ‘(Where the hunter) found the animal track’

c. (qunta jọŋən) aj-ni tiɣ-äyi
   (when summer) small-woman be.born-PST.3SG
   * ‘(Which summer) the girl was born’

d. (ti) ni öɣö-wəl n’an’
   (DET woman) cut-PRS.3SG bread
   * ‘(Which) the woman is cutting the bread’

e. (tom) qu ju-wəl
   (DET man) walk-PRS.3SG
   * % ‘(That) the man is walking’

f. (ti quj-āli) ajri-nə jayəntə-wəl
   (DET man-DIM) canoe-LOC go-PRS.3SG
   * % ‘(This) the boy is going in canoe’

The instances of this type of finite relative clause are the closest to the finite prototype. However, none of the above finite dependent predicates makes full verbal categorial distinctions such as Aspect and Mood. Tense-wise, with the exception of (110, 111), all are in Present-Future form and show general overlap of the event-time of the dependent state-of-affairs with the matrix state-of-affairs and with the speech-time. Also, in case of the matrix event of ‘remembering the exact
time X’ (111), may be viewed as a strong reference to X, or even conceptually being in X. Consequently, it may be posited that typically the event-time of the whole complex clause is defined by the matrix predicate, whereas the finite predicate could be devoid of independent time reference, having only relative or deictic time reference.

The available diachronic depth for this type of relative constructions can be inferred from existing descriptions. Thus, in the 1950’s-1960’s there were similar constructions noted, but analyzed in detail in the Vakh dialect of Eastern Khanty, with the occasional headless finite relative clauses (116, 117) prefaced by interrogative pronouns as relativizers (Gulya 1966):

116. kojį ‡onto ropiltö-wål, ‡onto li-wål
          who Neg work-PRS.3SG Neg eat-PRS.3SG
       ‘Who does not work, does not eat’ (Gulya 1966: 85)

The elided Agent role of the matrix clause is coreferential with the head, the Agent role of the preposed finite relative clause (Ag-NP[Ag]rel), linked by the clause-initial WH-pronoun relativizer ‘who’.

117. mövolö mä-nä mas-wål, t‘u maji-yil-yas
          what 1SG-LOC need-PRS.3SG DET give-TR-PST3.3SG
       ‘What I need, that he gave me’ (Gulya 1966: 86)

The Target role of the matrix clause coded by the Dem. Pronoun ‘that’ is coreferential with the head, the Target role of the preposed finite relative clause (Trg-NP[Trg]rel), linked by the clause-initial WH-pronoun relativizer ‘what’.

118. mövolö kojamp-in, nöŋ-ä me-l-im
          what want-2SG 2SG-ILL give-PRS-1SG/SG
       ‘What you want, (I) give to you’

The elided Target role of the matrix clause is coreferential with the head, the Target of the preposed finite di-transitive relative clause (Trg-NP[Trg]rel), linked by the clause-initial WH-pronoun relativizer ‘what’.
These finite relative clauses are headless, and do not mark the grammar of the missing head in the matrix clause (outside the general differentiation of animate/inanimate by the choice of WH-pronouns), leaving it, however, fairly unambiguous due to quite rigid word-order.

Examples (116-118) above demonstrate hypotactic clause linkages with at least some degree of interdependence between the matrix clause and the linked clause. Whereas in (116, 118), relative clauses are introduced by relative pronouns which refer to an antecedent, in (117), there is a resumptive pronoun ụ which appears to mark the return to the matrix clause. Unlike (116, 118) with no trace of the missing head NP, the “position” of the missing head NP in (117) is taken by the high-reference demonstrative pronoun, in contrast with the non-referring and indefinite interrogative pronouns in (116, 118). It can be assumed that in (116, 118) the missing head has no specific semantic content that renders these sentences as more generic statements (correlating to the typical use here of the Present-Future Tense form). Alternatively, (117) has a more specific sense, corresponding to the use of one of the Definite Past Tense forms, and requiring an argument referentially identical to the interrogative pronoun which introduces the relative clause (Potanina 2005).

Usage of the demonstrative and deictic particles as clause arguments referring to the whole of another clause is an important explicit device for indicating an existing semantic relationship between the linked clauses. Similarly, the usage of TAM distinctions (Mithun 1984; Cristofaro 2003), codes a relation of temporal sequence (cf. 11.1.2.2.Imperfective Participial Clauses with Temporal Relation; 11.1.3.1.Perfective Participial Clauses with Temporal Semantics; 11.1.4.Converbial Constructions). Clauses (119, 120) demonstrate the obligatory
presence of the highly-referring argument in the matrix clause \textit{t}oy\textipa{pa}, coreferential
with an entire clause:

\begin{verbatim}
119. qol\textipa{t}'\textipa{y} jö-s-\textipa{an},  toy\textipa{pa} män-ä
    whence come-PST2-2SG there-All1 go-Impr.2Sg
    ‘From where you came, there you go’  (Gulya 1966: 96)
\end{verbatim}

The Locative role of the matrix clause is coreferential with the Locative role of
the preposed finite relative clause (Loc-NP[Loc]\textipa{rel}), linked by the clause-initial
WH-pronominal relativizer and the locative referring element \textit{t}oy\textipa{pa}.

\begin{verbatim}
120. qöl\textipa{a} kit-l-im,  toy\textipa{pa} män-äti
    where-All1 send-PRS-1SG/SG there-All1 go-Impr.3Sg
    ‘Where I send him, there he should go’  (Gulya 1966: 142)
\end{verbatim}

These examples also express some general idea implicit in the use of the
Imperative in the matrix clause (119), that it does not matter where one came from,
one should go back, or (120), that it is more important that one obeys the order and
no matter where one is sent to, one should go (Potanina 2005).

Moreover, \textit{t}oy\textipa{pa} refers not to a visible, but a more abstract location (Gulya
1966: 201), which is more independent of the context. Examples (119, 120) are
quite rare, atypical instances in unwritten Eastern Khanty, being rather more
characteristic of “written” languages where prevalent reference is often made to
entities and events that are not visible to the writer or reader (Perkins 1992: 67).
Rather, in spoken Eastern Khanty, a more concrete lexical unit \textit{tayi} with the
general sense ‘place’ is a major device of locative relative clauses, denoting
direction or location:
121. t’uti noməysil-l-am, təɣ-əpa ap-im jəŋk-ä kel-as
   thus think-PRS-1SG place-All1 father-1SG water-ILL die-PST2.3SG
   ‘So (I) am thinking: probably (my) father drowned there,…’

ləŋəntəpə təyi-na jəynə t’eləɣ-əki
surely place-LOC river not.frozen-PRD
‘…where the river is not frozen’ (Tereshkin 1961: 105)

The Locative role of the matrix clause is coreferential with the Locative role,
the head of the postposed finite relative clause (Loc-NP[Loc]rel).

122. qul wel-tä-l təyi-ja, wän təyi qit-əs
   fish kill-IMPP-3SG place-ILL near place exist-PST2.3SG
   ‘That place where he was fishing was not far’ (Tereshkin 1961: 106)

The Agent role of the State matrix clause is coreferential with the Locative role,
the head of the preposed finite transitive relative clause (Ag-NP[Loc]rel).

123. kəlyos kartowja amt-əm təyi-ja joyəm-əmən,
   ‘kolhoz’ ‘potatoes’ put-PP place-ILL come-PP-1DU
   ‘When we approached the place where the kolkhoz grows potatoes…’

mä jəy-ä, atʃ-im-a, t’u kol at-l-əm
1SG 3SG-ILL brother-1SG-ILL DET word say-PRS-1SG
‘…I say to him, my elder brother’ (Tereshkin 1961: 106)

The Locative role of the intransitive matrix clause (which, in turn, is the
temporal adverbial clause of another matrix) is the Locative role, the head of the
postposed finite relative clause (Loc-NP[Loc]rel).

Examples (121, 122, 123) illustrate a more explicit and frequent type of Eastern
Khanty relative clauses with an overt NP in both linked clauses. The finite relative
clauses (121, 122) bear a certain degree of emphasis by foregrounding a part of the
proposition in a way similar to clefting. Example (121) demonstrates a
conceptually dependent state-of-affairs that serves to ground one of referents in
another state-of-affairs, where this dependent state-of-affairs is coded by the finite
clause acting as a complement of the independent clause predicate. Examples (122,
have the dependent state-of-affairs coded by the participial relative clauses – a more frequent strategy.

**Generalizations on the Eastern Khanty Relative Clauses**

The co-existence of two Eastern Khanty strategies of relative clause formation: (i) a more frequent participial predicate without relative pronoun; (ii) a more recent and less frequent finite predicate and WH-pronoun, may be explained by contact influence from the areally dominant written SVO Russian. In this light an example from another Finno-Ugric language could be illustrative. Estonian, historically a typical OV language with the prenominal participial relative clauses, according to P.Hopper and E.Traugott, shifted to typical VO features – the finite verb and relative pronoun, under the influence of its Germanic and Slavic neighbors (2003: 126).

The tendency of unwritten languages to have shorter clauses and parataxis, as opposed to the widespread *unbracketing of the sentence frame* in written languages has been identified cross-linguistically in a number of studies (Schuetze-Coburn 1984: 653). Eastern Khanty relative clauses reveal this tendency in the avoidance of fully complex sentences. Most frequent types represent the embedded participial relative clauses, with the use of finite relative clauses being peripheral and more recent. Like other types of Eastern Khanty complex sentences, the complex clauses with finite relative clauses are generally loosely linked strings of clauses. These “strings” have the subordination function of combining several events into a single linguistic unit. The semantic relations between the linked states-of-affairs could still be viewed as inferential, revealed by the features of the paratactic character of the Eastern Khanty complex clauses. However, as the examples of finite relative clauses above show, that there are certain features of these clauses (such as
reduction in verbal distinctions and illocutionary force) that render them to a degree deficient as independent clauses.

As follows from the examples, Eastern Khanty relative clauses are restrictive, providing an explicit reference to another state-of-affairs, where some referent of a matrix clause acts as the Agent, or Target, or other arguments, thus providing grounding for the referent in the discourse universe (Givon 2001: 176). In this process, the grounding state-of-affairs of the relative clause is presupposed by the speaker to be in some way active and accessible to the hearer, because it belongs to the part of the proposition containing pragmatic presupposition (Lambrecht 1994). Eastern Khanty relative clauses ground the modified referents to a wider discourse context and appear presupposed rather than asserted, thus pertain to the propositional modality.

The deviation from the typical independent declarative clause in isolation is measured with regard to such parameters as finiteness and participant coding. The lack of TAM distinctions in typical Eastern Khanty relative clauses (passive or Loc-Agent finite relative clauses are not attested) is a result of the interaction of such factors as a high degree of semantic integration and predetermination of the dependent state-of-affairs.

Such features of Eastern Khanty relative clauses as the dominating gap strategy, reduced illocutionary force and reduced finiteness distinctions, coding explicitly only the information required for adequate processing of the utterance, with a tendency to elide the redundant and accessible information are the manifestations of the cross-linguistic principles of economy and iconicity. The TAM values and participant information determined by the matrix state-of-affairs is normally not respecified in the dependent clause. In cases where sharing of participants with the matrix state-of-affairs is absent, arguments are formally elided. Complications of
the information processing are avoided by the application of the switch-reference devices, including the use of the possessive markers on the participial predicates.

In Eastern Khanty relative clauses, the degree of semantic integration of the dependent state-of-affairs, can be placed along the following scale (Fig. 8):

**Fig. 8. Semantic integration in the Eastern Khanty relative clauses.**

- **(+independence)**
  - Lower semantic integration
  - Finite post-nominal non-coreferential relative clauses with overt relativizers (pronouns) preceding the relativized head element (109, 114) [Ag≠Agrel]
  - Finite post-nominal coreferential relative clauses with overt relativizers (pronouns) preceding the relativized head element (107, 119) [Ag=Agrel]
  - Nonfinite non-coreferential relative clauses with relativizer and/or possession marking (77, 85, 86, 122) [Ag≠Agrel]

- **(-independence)**
  - Higher semantic integration
  - Nonfinite non-coreferential relative clauses with no relativizer, no possession marking (83, 84, 123) [Ag≠Agrel]
  - Nonfinite coreferential relative clauses (82), no possession marking [Ag=Agrel]

The reduced semantic independence of the linked dependent states-of-affairs is iconically reflected in the reduced syntactic independence of the linked relative clauses. Typical Eastern Khanty relative clauses are coded by participial predicates (80%), and the minority (20%) are expressed by the finite predicates. The distribution of verbal and nominal categorial distinctions in the relative clauses is somewhat different from that of adverbal clauses, and may be represented along the scale in (Fig.9):

**Fig. 9. Verbal and nominal feature distribution in relative clauses.**

- **(V)verbal categories (TAM)**
  - Finite post-nominal relative clauses (94, 107-120) – [-AM]
  - Nonfinite pre-nominal relative clauses (87, 78, 79) [-TAM]

- **(N)nominal categories (case, poss)**
  - Nonfinite relative clauses [+poss]: (77,83,84, 85, 86, 122, 123)
Unlike adverbial dependent clauses, Eastern Khanty participial clauses are typically uninflected for nominal categories (75%), and only occasionally (25%) have possessive inflection coding of the Agent argument of the subordinate clause. The motivation for the use of possessive inflection on participial predicates is quite straightforwardly related to coreference of the Agent role of the matrix and subordinate clauses. Possessive affixation appears in non-coreferential relative clauses (77, 85, 122). Consequently, at least in some instances, prototypical verbal properties such as aspectual distinctions (imperfective & perfective participles) co-occur with the prototypical nominal properties, such as possession distinctions (Table 2).

### Table 2

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<th>Grammatical categories in the Eastern Khanty relative clauses</th>
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The dominance of the matrix state-of-affairs’ profile over that of the dependent one is manifested in the fact that the dependent state-of-affairs is interconnected with the matrix to the extent that it cannot be conceptualized as completely distinct. This correlates with the decrease in assertiveness and illocutionary force in the Eastern Khanty relative clauses, ranging from near full in case of finite relative clauses, to low in participial relative clauses (Fig. 10):

**Fig. 10. Illocutionary force in the Eastern Khanty relative clauses.**

(+) near full illocutionary force

Finite non-coreferent. relative clauses (109, 114) [Ag≠Agrel]

Finite coreferent. relative clauses (107, 119) [Ag=Agrel]

(-) low illocutionary force

Nonfinite non-coreferent. relative clauses (77, 83-86, 122) [Ag≠Agrel]

Nonfinite coreferent. relative clauses (82) [Ag=Agrel]
Thus, a multi-parametrical scale of Eastern Khanty relative clauses may be drawn (Fig.11) representing the functional/cognitive variation in the degree of their independence:

Fig. 11. Clause-linking in Eastern Khanty relative clauses.

(+) Independent linked clauses, co-ordinate-like interclausal relation
- finite predicates with TAM distinctions; overt clause-linking element; near full illocutionary force
- nonfinite predicates with some TAM distinctions; non-coreferential Agent participant; no nominal features; low illocutionary force
- nonfinite predicates with no TAM distinctions; and nominal features; low illocutionary force

(-) Dependent linked clauses, subordinate-like interclausal relation

11.2.4 Finite Clauses as Verbal Complements

Another group of examples of the Eastern Khanty complex clauses reviewed here are the finite clauses construable as complements of another finite clause.

124. t’u luŋ-mũŋ os’ tel-ila-wəl, “jäjɔ̏m-näti tuŋi ʃoŋ-ʃ-əm!”
DET demon again cry-TRPRS-3PL axe-COM away chop-PRS-1SG
‘Then, the demon cries again: “I will cut you with an axe!”’

125. ti nomaysala-wəl, “tũ sem-kal əntɔ quł-l-a”
DET think-PRS.3SG DET eye-DU Neg obey-PRS.3DU
‘So he thinks: “Those eyes don’t obey”’

126. ul-ɔw, ətf-im is-tä löŋ-əs
see-1PL brother-1SG cry-INF stop-PST2.3SG
‘We see, (that) my older brother stopped crying’ (Kalinina 1976)

In the examples (124), (125) and (126), the second finite clause can be analyzed as representing the message, thought (inner speech message), or the object of perception of the matrix finite complement-taking predicates of ‘utterance’, ‘cognition’ and ‘perception’ respectively.

Similar to the nonfinite complement clauses (cf. 11.1.1.2.Infinitival Complement Clauses with Modal Matrix Predicates; 11.1.2.4.Imperfective Participial Clauses as Verbal Complements), the dependent states-of-affairs in
(124), (125) and (126) are coded by finite clauses which may be argued to function as arguments of other finite clauses (Givon 2001: 38). Based on the semantic features of the finite matrix complement-taking predicates (Ransom 1986; Givon 1991; Cristofaro 2003), the Eastern Khanty finite complement clauses may be differentiated with regard to their semantics into: ‘utterance’, ‘perception’, and ‘cognition’.

11.2.4.1 Utterance Finite Complements


127. t’u  luŋ-mũŋ  os’  tel-ilə-wəl,  “jäjəm-näti  tuyi  jovə-l-əml!”
DET  demon  again  cry-TR-PRS-3PL  axe-COM  away  chop-PRS-1SG
‘This demon cries again: “I will cut you with an axe!”’

128.  imi  ji-ɣən,  “tũ  rəți  qatiylə-wəl”
woman  say-PRS.3SG  DET  oldman  slide.down.hill-PRS.3SG
‘The woman says: “That oldman is sliding down the hill”’

129.  pɨrə  mä-n  pɨrıkə-wəl,  “jəm  n’äŋ’?”
then  1SG-ACC  ask-PRS.3SG  good  bread
‘Then, he asks me: “(Is this) bread good?”’

In examples (127-129), the first clause with the transitive finite ‘utterance’ complement-taking predicate is followed by the second, direct report finite ‘message’ clause. The Agent role of the first ‘utterance’ clause is non-coreferential with the Agent of the ‘message’ clause. One of the indications of the complement nature of the second ‘message’ clause may be seen in that the transitive matrix predicate requires a second argument, which is otherwise absent, and the second clause effectively substitutes for this function.

Occasionally, in our data as well as in earlier documented data and sketches (Tereskin 1961; Gulya 1966; Kalinina 1970), there are examples of direct reported...
speech introduced by the use of a pronouns (*tʃi*‘this’ and *tʃut*‘that’) with the resulting sense of emphasizing the directness of the report, similar to the English ‘...and says the following...’. In (130), the second, direct report interrogative finite clause is a complement of the ‘utterance’ complement-taking transitive matrix predicate ‘say’.

130. **təlɤ-ty**  

say-INF need-PRS.3SG “that” why man-ILL touch-TR-INF

‘One must say that, “Why (should you) touch a human being?”’

131. “**oɣ, kam jəm-äki!”**,  

Oh IndPrn good-PRD Ivan DET speak-PST.3SG river-ILL look-CNV

“‘Oh, how fine!’ – so said Ivan looking at the river.’ (Gulya 1966)

132. **əjpa qəsi-j-a köröy tʃ’ut-i təlɤ-y-wəl, “mä wəl-t-am tfars-a poroyl-uł-man”**  

once man-EP.ILL eagle DET say-PRS.3SG 1SG live-IMPP.1SG sea-ILL fly-PRS-1Du

‘Once, the eagle says that to the man: “We will fly to that place where I live”’

Unlike the examples (127-129), the second finite ‘message’ clause in (130-132) is linked to the first finite matrix clause with the pronominal complementizer (native Eastern Khanty ‘that’, or the equivalent Russian loan) coding the second argument of the transitive matrix ‘utterance’ complement-taking predicate. The Agent role of the matrix clause is non-coreferential with the Agent of the second finite clause, the complement, which is logically the addressee of the first ‘utterance’ clause.

It appears in (127-132) that Eastern Khanty does not use indirect report constructions to convey the propositional content of someone’s utterance without resorting to quoting the exact words of it. Direct reports preserve the original finite structure and most of the illocutionary force of the ‘message’ clauses (136-138). Although, the matrix utterance predicate is normally inflected along the regular pattern of predicate agreement (133), there are occasional examples of the use of
the uncoordinated, generic 3SG Agent (130, 134a) and the rare default 3SG matrix predicate agreement (134b).

133. mä jöy-a tɔlɔ-y-l-ɔm, “tawaj imal-l-im”
    1SG 3SG-ILL say-PRS-1SG “let’s” sit-PRS-1DU
    ‘I say to her: “Let’s sit”’

134. a) Tajka män-nä tɔlɔ-y-wɔl, “koj-kam quł-a män-äyi”
    Tajka 1SG-ILL say-PRS.3SG who-IndPn where-ILL go-PST0.3SG
    ‘Tajka says to me: “Someone got into something”’

    b) mä jöy-a tɔlɔ-y-wɔl, “dawaj pɔrtay norɔyta-l-ɔw”
    1SG 3SG-ILL say-PRS.3SG “let’s” back run-PRS-1Pl
    ‘I say to her: “Let’s run back!”’

In these constructions, the message, the directly reported utterance, can be analyzed as having the function of a second required argument of transitive ‘utterance’ predicates, coded by finite complement clauses. Unlike nonfinite clauses (cf. 11.1.1.Infinitival Constructions, 11.1.2. Imperfective Participial Constructions, 11.1.3. Perfective Participial Constructions, 11.1.4.Converbial Constructions), the finite ‘utterance’ complement clauses (129, 130, 133-138) typically follow the matrix clause, with extremely rare exceptions strongly attributed to Russian contact influence and recent writing practice ((131) vs. (130) (135)).

135. illä-nɔ joŋ ju-m-al-ɔ i-metäli tel-il-ɔwɔl, “qat-a joŋ ail liŋ-a”
    once-Loc home come-PP-3SG-Loc IndPn say-TR-PRS.3SG house-ILL home Neg go-Impr2
    ‘Once, he came back home and heard someone say: “Don’t go in the house!”’

The reported ‘message’ is fully finite and by its construed essence of the exact preserved utterance has full illocutionary force (136-138):

136. os’ taŋi luŋut-a nɔŋ-pa qantqɔq-t’am tel-li-wɔl, “sem-iyli-am ər jing!”
    again DET hill-ILL up-All1 climb-PP cry-Tr-PRS.3SG eye-DU-1SG come-Imper-Du
    ‘Going up the hill, he cries: “My eyes, come to me!”’

137. imi pɔtʃäy wer-wɔl, “qawɔ wɔt i ju-s-ən män-nɔ majal-ta”
    woman greet do-PRS.3SG such so and come-PST-2SG 1SG-LOC guest-INF
    ‘Woman greets: “Finally, you came to me to visit!”’
Example (138) illustrates merger of the ‘utterance’ complement-taking predicates with the domain of ‘manipulation’ complement-taking predicates (cf. 11.1.1.3.Infinitival Complements with Utterance/Perception/Cognition and Manipulation Complement-taking Predicates), where the coded situation is that of indirect causation.

### 11.2.4.2 Cognition Finite Complements

Some of the Eastern Khanty complex clauses may be argued to have the finite matrix clause with the ‘cognition’ predicate wherein an entity is in a state of knowledge, or obtains knowledge about the propositional content (Noonan 1985: 118) of another finite clause. In these linked clauses, the second finite clause appears to be more or less conceptually dependent on the first clause, functioning as one of its arguments (139-142):

139. ti nomɔysɔl-wɔl, “tü sem-kal ᐃn.ta quq-l-a”
DET think-PRS.3SG DET eye-DU Neg obey-PRS-3DU
‘So he thinks: “Those eyes don’t hear/obey”’

In example (139), the first finite, matrix clause with the transitive ‘cognition’ complement-taking predicate displays the canonical topical Agent coding by elision and agent-controlled predicate agreement. The second finite clause shows overt 3Du Agent role non-coreferential with the matrix Agent, and Agent-coordinated 3Du predicate agreement. In apparent parallel to the ‘utterance’ complex clauses (cf. 11.2.4.1.Utterance Finite Complements), this second finite clause represents the direct report type, or internal speech of the Agent of the first finite clause.
In examples (140-141), direct report finite clauses follow the finite matrix clauses with the transitive ‘cognition’ complement-taking predicate ‘think’. The Agent roles of the matrix and linked clauses are non-coreferential.

Cognition verbs appears to be similar in many respects to the utterance complement-taking verbs, in that the dependent state-of-affairs is coded by a finite clause preserving the exact finite form and illocutionary force of an independent utterance, i.e. direct report of the original (inner speech) utterance. Thus, in (139-141), as well as in (142) and (143), linked clauses coding the propositional content are the finite clauses, with full range of TAM distinctions and expression of the core roles ((142) and (143)). However, typically the linked event-time coincides with the matrix event-time and normally with the speech-time. Similar to the ‘utterance’ complement-taking predicates, the ‘cognition’ predicates are all transitive but lack the explicit second core argument.

The finite complement clauses of Utterance and Cognition, representing the matrix Agent’s (inner) speech, are pragmatically the focus of the proposition. That is, the propositional content of the linked clause makes up the part of the proposition of the whole of the complex clause that contains pragmatic assertion. It is in the focus pragmatic relation towards the whole complex clause proposition. In other words, these linked clauses correlate quite evidently to a referent of a typical Eastern Khanty simple transitive clause that bears the pragmatic status of focus and normally occurs clause-finally (before the transitive predicate in the simple clause). That is, in pragmatic terms as well as in terms of typical argument structure and
word order, the linked complement clauses effectively perform the function of the second core arguments of the transitive matrix predicates.

The linked clause may be impersonal representing the internal speech question or a rhetoric statement by the Agent of the matrix clause (142):

142. imə̆l-s-əm tı̆la, əntə̆ onə̆l-ı̆m ı̆muli wər-ış
sit-PST2-1SG there Neg know-PRS-1SG what do-INF
‘(I) sat there, don’t know what to do’

In example (142), the direct report type complement clause of the ‘cognition’ complement-taking transitive finite predicate is impersonal, while the elided matrix 1SG Agent role with coordinated 1SG predicate agreement speaks to its topicality. The predicate onə̆l- ‘know, be able’ itself has modal semantics, frequently used to code mental or physical ability (cf. 11.1.1.2.Infinitival Complement Clauses with Modal Matrix Predicates). Recalling the discussion of the nonfinite verbal complements of this modal predicate it can be said that this deontic modality predicate requires a complement that will be in focus pragmatic relation to the whole of the proposition, that is, will represent the not yet shared information, pragmatic assertion. In case of the proposition of (142), this element is the postposed linked finite clause ‘what to do’. Thus, the linked complement clause in (142) may serve as an illustration of the functional kinship of the nonfinite and finite linked clauses as complements of the modal matrix predicate.

Some of the linked finite clauses are introduced by pronominal complementizer (143):

143. nu ladno, iki-nə̆ tı̆yım-tə-s-i, ı̆tə̆ nö̆yi gọyərtə-wəl ı̆wọ jətwəl sənkərtə-wəl
OK oldman-LOC figure-PST2-PS.3SG DET meat boil-PRS.3SG fat smell smell-PRS.3SG
‘Ok then, the oldman figured, that it is meat boiling, fat smells’

In example (143), the direct report finite complement clause of the ‘cognition’ complement-taking transitive finite predicate is linked to the following ‘message’ clause by the pronominal complementizer ‘that’ (Russian loan). The linked clause
has the explicit 3SG Agent and coordinated 3SG predicate agreement, non-coreferential with the explicit 3SG Agent argument and coordinated 3SG agreement inflection on finite matrix predicate. Also, the subproposition of the postposed linked clause contains pragmatic assertion and is in pragmatic relation of focus to the whole of the proposition in (143).

As is evident from the above examples (139-143), such features as transitivity of the matrix predicate, absence of second core role of this transitive matrix predicate, matrix Agent’s authorship of the linked clause’s proposition speak to these linked clauses’ strong conceptual integration with the preposed matrix clauses, and to their complement function of the of the ‘cognition’ predicates.

11.2.4.3 Perception Finite Complements

Finally, some of the Eastern Khanty complex clauses have linked finite clauses functioning as complements of the complement-taking ‘perception’ matrix predicates that refer to the mode of perception by the experiencer (Noonan 1985: 129):

144. mä portäɣ läyləl-s-əm, jəyata-l-im, qaqi-wajay, qoləm mən-wəl-t
    1SG back look-PST2-1SG look-PRS-1SG/SG brother-animal three go-PRS-3PL
    ‘I looked back, (and) see three bears walk’

145. mä-nə jəyata-l-im, tät olay-wəl
    1SG-LOC see-PRS-1SG/SG there lie-PRS.3SG
    ‘I see it lies there’

In these examples, the finite linked clauses having the overt Agent role and coordinated predicate agreement are post-posed to finite clauses with the non-coreferential topical Agent controlling the agreement inflection on the transitive finite ‘perception’ complement-taking matrix predicate. The second core roles of the transitive matrix predicates are not explicit and may be argued to be functionally substituted by the linked clauses, which code what is perceived by the matrix Agents.
Again, similar to ‘utterance’ and ‘cognition’ complement-taking predicates, ‘perception’ predicates have linked finite complement clauses typically with the form and illocutionary force of direct report utterances. That is, in (144) and (145) as well as in (146-147) below, the linked finite clauses code the propositional content, with TAM distinctions, independent time frame coinciding or not with the matrix event-time.

146. u-l-әw, әтаf-im is-tә löy-әş
   see-PRS-1PL brother-1SG cry-INF stop-PST2.3SG
   ‘We see my older brother stop crying’ (Kalinina 1976)

147. wu-l-әә, тfaras әj kum-na läyтi-wә
   see-PRS-3SG sea small foam-COM splash-PRS.3SG
   ‘(He) sees: the sea splashing with a small undulation’ (Gulya 1966: 139)

In examples (146-147), the direct report finite complement clauses of the ‘perception’ complement-taking transitive finite matrix predicates have the explicit Agent roles and coordinated predicate agreement inflections, non-coreferential with the Agent roles and inflections of the finite ‘perception’ predicates.

Similar to ‘utterance’ and ‘cognition’ complement linked clauses, ‘perception’ linked finite clauses, represent pragmatic assertion, the not yet shared information. That is, the subpropositions of these linked clauses can be considered to be in pragmatic relation of focus towards the proposition of the whole of the complex clauses (146-147).

It is evident that for the perception verbs, that it is more natural to have the Agent role participant of the linked clause non-coreferential with the matrix Agent role. This is logical because these propositions typically express perception of one entity by another entity, the Agent, rather than the perception by the Agent of oneself.

148. mә qol-qal-im, jәтәрки ujәy-na qol-әyi
   1SG hear-PST1-1PL grouse below-LOC spend.night-PST0.3SG
   ‘I hear, a grouse has stayed for the night under there’
In example (148), the direct report type finite complement clause of the ‘perception’ complement-taking transitive finite predicate has an explicit 3SG Agent role and coordinated 3SG predicate agreement inflection, non-coreferential with the explicit 1SG Agent role and 1SG inflection of the finite matrix predicate. The subproposition of the postposed linked clause contains pragmatic assertion and is in the pragmatic relation of focus towards the whole of the complex clause proposition in (148).

The semantic connection between the matrix and the post-posed linked finite clause may become increasingly looser, coding not directly the ‘object’ of matrix Agent’s perception, but rather the speaker’s interpretation of another Agent’s ‘perception’ (149).

The direct report type finite linked clause is postposed to the ‘perception’ complement-taking finite transitive predicate and has an explicit 3SG Agent role and coordinated 3SG predicate agreement inflection, non-coreferential with the explicit 3SG Agent role and coordinated 3SG inflection of the matrix predicate. Still pragmatically, the subproposition of the linked clause may be said to contain pragmatic assertion and supplement the subproposition of the preceding clause in the pragmatic relation of focus to the whole of the proposition in (149).

Even more loose is the inter-clause semantic connection in (150), with the direct report type linked copulaless existence clause being postposed to the ‘perception’ complement-taking transitive finite predicate, but is essentially the speaker’s assumption, rather than the factual Agent’s ‘dog’ perception.
Generally, with regard to information structure of the reviewed complex clauses it is seen that the states-of-affairs of the postposed linked clauses represent the assertion part of the holistic complex clause proposition. The chain-initial finite clauses containing the transitive complement-taking predicates represent the part of the proposition containing pragmatic presupposition, to which the state-of-affairs of the linked complement clause can be said to be in relation of aboutness. In terms of the simple Eastern Khanty clause information structure (cf. 10.2. Information Structure), this complex clause information structuring clearly corresponds to topic-initiality (the matrix clauses) and focus-finality (the postposed linked complement clause). In other words, complement clauses have a least a degree of cognitive-functional kinship with the typical Eastern Khanty simple clause Target argument.

The examples of the Eastern Khanty ‘perception’ finite complement clauses appear closest to the ‘coordinate’ prototype in a continuum between ‘subordinate’ and ‘coordinate’ complex clauses. Nevertheless, it is still to be noted that the degree of semantic integration between these linked clauses is quite strong, at any rate because the perception of the state-of-affairs implies the perception of the entities involved in this state-of-affairs. In this, perception is construed as referring to an individual entity bringing about this perceived state-of-affairs (Cristofaro 2003: 105).

In a way similar to the finite ‘purpose’ linked clauses, the complement function of the ‘object of perception’ could rather be viewed as inferable from the Eastern Khanty complex clause parataxis, as these linked clauses (144-147) all appear to have a grammar of independent finite clauses and as such are able to occur in isolation. The indication of their complement function thus seems to be merely the otherwise absent second core arguments of the always transitive ‘perception’ matrix predicates.
Generalizations on Eastern Khanty Complement Clauses

In Eastern Khanty, the semantic prototype of complement-taking verbs could be generalized in the following way:

- The matrix verb codes either the aspectual (inception or termination), or modal information (desire, obligation, ability), or target possibility (manipulation), or propositional content (perception/cognition/utterance) of the state-of-affairs of the complement clause;
- The Agent of the matrix clause is typically coreferential to the Agent of the complement clause (phasal/modal clauses); non-coreferential (perception and manipulation clauses); or can be either coreferential or not (utterance/cognition);
- The matrix clause containing the complement-taking predicate refers to pragmatic presupposition (topical status), whereas the complement clause as a whole refers to pragmatic assertion (focus status).

Syntactic prototype of complement-taking verbs:

- The Agent of the complement clause is elided (zero coded) \([\text{Ag}_{\text{comp}}=\emptyset]\) when coreferential (phasal/modal, manipulation); and typically overt (but elision is still possible) when non-coreferential \([\text{Ag}_{\text{comp}}=(\text{NP}, \text{Prn})]\) – (utterance/cognition/perception)
- The complement clause predicate is typically nonfinite (infinitive, participle) in case of the manipulation, modal and phasal matrix predicates; or typically finite in case of the utterance/cognition/perception matrix predicates.
- The complement clause is functionally the second core argument of the transitive matrix clause predicate \([\text{CompCl}=\text{Trg}]\)

These syntactic features could be viewed as correlating with the semantic-cognitive ones, in that one dimension (semantic-cognitive) informs and is iconically reflected in the another dimension (syntactic). The complement relations
listed in this section display a continuum of the extent to which the semantic features of the linked clauses are predetermined by the nature of the relation, which is iconically represented in these syntactic features of these complement constructions (Cristofaro 2003: 111). That is, the semantic predetermination of the TAM features and coreference in such complement relations as phase, modality and manipulation are reflected in the reduced finiteness of the linked clause. Consequently, there are no typical verbal (TAM) distinctions, restricted coreferentiality (phase, modal – \[Ag=Ag_{comp}\], manipulation – \[Trg=Ag_{comp}\]), and these subordinate clauses are low in illocutionary force. On the other hand, in such complement relations as ‘perception’, low existing semantic predetermination of such features, as TAM, and non-coreferentiality of the perceiver and the perceived entity, renders the linked clause, coding the perceived state-of-affairs, as finite, but nevertheless co-temporal with the matrix clause coding the perception event (144-150). Complement relations as ‘utterance’ (130-132) and ‘cognition’ (139-142) (possibly equated in Eastern Khanty to inner speech utterance), have low semantic predetermination with regard to TAM coreferentiality and render the linked clauses coding these conceptually dependent states-of-affairs as finite with near-full illocutionary force. They are able to function in isolation, containing both the presupposition and assertion parts of the proposition.

The above Eastern Khanty strategies of complement clause formation appear to be quite polar. Equally productive and frequent are nonfinite subordinate clauses without complementizers, and fully finite complement clauses with occasional use of complementizer linkers. In finite complement clauses (utterance and cognition), there is an apparent tendency towards exclusive use of direct report. The full finiteness and illocutionary force status of these direct report clauses does not prevent them from being able to be conceptualized as an entity, and as such to be able to function as arguments of the transitive complement-taking predicates.
Thus, Eastern Khanty complex clauses with complement-taking predicates can be viewed with regard to their semantic and formal features as distributed along the continuum between a more coordinate-like and a more subordinate-like prototypes:

### Table 3

<table>
<thead>
<tr>
<th>Eastern Khanty complement clauses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complement Relation (Form of CompCl)</td>
</tr>
<tr>
<td>Perception (finite CompCl)</td>
</tr>
<tr>
<td>Utterance (finite CompCl) [Ag≠Agcomp]</td>
</tr>
<tr>
<td>Cognition (finite CompCl) [Ag=/#Agcomp]</td>
</tr>
<tr>
<td>Phasal (INF, IMPP CompCl) [Ag=Agcomp]</td>
</tr>
<tr>
<td>Manipulative (INF CompCl) [Ag=Agcomp]</td>
</tr>
<tr>
<td>Modal (INF CompCl) [Ag=Agcomp]</td>
</tr>
</tbody>
</table>

Unlike Eastern Khanty adverbial and relative clauses, complement clauses, or more precisely, their predicates, do not display any of the nominal features such as possessive expression of arguments or case, even though some of the complement relations are coded by nominalizations (Adv. and Rel. clauses are not considered in Table 3).

**Conclusions on Eastern Khanty Subordination-Coordination Continuum**

With regard to implications that the reviewed features of Eastern Khanty complex clauses have for the general notion of subordination, the following remarks can be made. First, the Eastern Khanty complex clauses appear to confirm that the traditional bias towards formal morphosyntactic criteria such as clausal embedding in discrete definition of subordination vs. coordination does not adequately describe the known cross-linguistic variation in the means of clause linkage (Comrie 2006; Van Valin 2006; Austin 2006).
The cognitive situation of subordination is taken above to underlie all of the sentence types that are regarded as instances of subordination under traditional criteria, namely, adverbial, complement and relative clauses. This framework enables us to include within the analysis cases having various morphosyntactic manifestations, but unified by the same underlying cognitive-semantic structure. What appears important is the relation between semantic features in various types of linked clauses, in particular the degree of semantic integration between the linked events.

In light of posited general iconicity of the relation between language structure and language function (Haiman 1985; Givon 1990; Newmeyer 1992), the degree of independence of the linked concepts reflects the degree of independence of the expressions coding the concepts. A clean dichotomous differentiation of ‘independent’ and ‘dependent’ clauses, typical of traditional descriptions, is indeed “…unrealistic both functionally and syntactically, [and] …rather, the analysis must deal more specifically with degrees, and types, of semantic-pragmatic connectivity on the one hand, and syntactic dependency, finiteness and control on the other” (Givon 2001: 348).

In cognitive grammar framework, subordination is the situation where only one state-of-affairs is profiled, whereas in coordination neither of the linked states-of-affairs imposes its profile over the other (Langacker 1991; Cristofaro 2003). That is, lack of an autonomous profile correlates with the lack of assertion in the utterance, with dominance of presupposition (Lambrecht 1994).

A continuum or scale of combinable features is proposed, whose presence or absence and combination in each clause would locate it in relation to either of the subordinate or coordinate prototypes (Haiman and Thompson 1984; Mathiessen and Thompson 1988; Lehmann 1988; Van Valin and La Polla 1997; Givon 2001). These features manifest the degree of lexical-grammatical elaboration in a clause,
and may produce a set of parallel continua resulting in a hierarchical scale of downgrading the subordinate clause. The scale would range from the prototype embedded subordinate clause, with low degree of grammaticalization of the main predicate and overt clause linkage, to the prototype finite matrix-like clause, possibly reduced in illocutionary force.

Within the hypothesis that clause linkage strategies will be related to the pragmatic distinctions of foreground/background information (Hopper and Thompson 1980; Reinhart 1984; Tomlin 1985; Thompson 1987), it is seen in the Eastern Khanty examples above, that while the foreground information is the essence of the text and has to be temporarily ordered, the background is supportive information and is typically out of timeline. Eastern Khanty subordinate clauses may express the background information, the base element of predication corresponding to the scene and containing pragmatic presupposition (relative clauses, conditionals). They may alternatively express the foreground information associated with pragmatic assertion (complement clauses, modal/phasal and purpose/reason adverbials), which is the profile element of the predication corresponding to the designated component of the scene. What, however, is more essential is that the reviewed Eastern Khanty subordinate and cosubordinate clauses reveal the tendency to distribute these elements of predication, the types of information between the linked clauses in a way consistent with the cognitive-semantic situation of subordination rather than coordination. That is, what characterizes the reviewed Eastern Khanty complex clauses is that just one of the states-of-affairs referred to in the complex clause is asserted (or profiled (Cristofaro 2003: 31)), rather than all of them being equally asserted, which makes these complex clauses closer to the prototype of subordination rather than instances of coordination.
The functional definition of subordination implying universally valid ways of construal of asymmetrical relations between events (*profiling* and *backgrounding* (Langacker 1991); pragmatic assertion vs. presupposition (Lambrecht 1994)) allows for more multifaceted and flexible explanatory approach. Within this approach, appealing primarily to cognitive relations between events, rather than to structural clause types, the reviewed Eastern Khanty types of complex clauses (adverbial, relative and complement), are seen here as various instances of a cognitive situation of subordination, as it is iconically reflected in the morphosyntactic integration between clauses (Givon 1990; Newmeyer 1992; Cristofaro 2003).

### Table 4
Comparison of the features of Eastern Khanty linked clauses

<table>
<thead>
<tr>
<th>Type</th>
<th>relation</th>
<th>Finiteness</th>
<th>semantic integr</th>
<th>illocutn. force</th>
<th>aut.profile</th>
<th>coord/subord</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adv Clause</td>
<td>Purp/Reas</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>Cosub</td>
</tr>
<tr>
<td></td>
<td>Temporal</td>
<td>(-, +)</td>
<td>(-, +)</td>
<td>(-, +)</td>
<td>(-, +)</td>
<td>Cosub</td>
</tr>
<tr>
<td></td>
<td>Condition</td>
<td>+</td>
<td>-</td>
<td>(-, +)</td>
<td>(-, +)</td>
<td>Cosub/Sub</td>
</tr>
<tr>
<td>Rel Clause</td>
<td>Pre-posed</td>
<td>-</td>
<td>(+, -)</td>
<td>-</td>
<td>-</td>
<td>Sub</td>
</tr>
<tr>
<td></td>
<td>Post-posed</td>
<td>+</td>
<td>(-, +)</td>
<td>(+, -)</td>
<td>(+, -)</td>
<td>Cosub/Sub</td>
</tr>
<tr>
<td>Comp Clause</td>
<td>Phase</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>Sub</td>
</tr>
<tr>
<td></td>
<td>Modal</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>Sub</td>
</tr>
<tr>
<td></td>
<td>Manipul.</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>Sub</td>
</tr>
<tr>
<td></td>
<td>Percept.</td>
<td>+</td>
<td>(+/-)</td>
<td>(+, -)</td>
<td>(+, -)</td>
<td>Cosub/Sub</td>
</tr>
<tr>
<td></td>
<td>Cognition</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>Cosub</td>
</tr>
<tr>
<td></td>
<td>Utterance</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>Cosub</td>
</tr>
</tbody>
</table>

In Eastern Khanty complex clauses such features: as typical association of pragmatic assertion with one of the linked clauses and pragmatic presupposition with the other of the linked clauses; foreground information dominating the temporarily ordered clauses, and the background information being typically out of timeline and dominating the subordinate clauses appear to be matters of degree.
The lack in the predicates of the linked clauses of the typical verbal features: finiteness and presence of the nominal features of possession- and case-marking refers primarily to Eastern Khanty nonfinite dependent clauses (Adverbial; Relative; Complement) and to a lesser extent to some of the finite linked clauses (Conditional, Relative) (cf. Table 4). However, such dependent states-of-affairs coded by full finite clauses as Reason, Perception Complement, and particularly Utterance and Cognition Complement find themselves at the other side of the range. In temporally ordered propositions they code the essential foreground information containing pragmatic assertion. Thus, all of the reviewed Eastern Khanty complex clauses are considered to fall within the cognitive-functional definition of subordination as utterances, where only one of the linked states-of-affairs is asserted or profiled, while another is presupposed.

11.3 Coordination

While subordinate clauses are traditionally described as dependent, coordinate clauses are typically referred to as independent (Givon 2001). As follows from the previous sections on Eastern Khanty subordination and co-subordination, semantic and syntactic dependence is understood to be scalar rather than discrete, as noted by T. Givon, “no clause in a coherent discourse is functionally absolutely independent of the local context” (2001: 327). Thus, a distinction between subordinate and coordinate clauses is best viewed as a continuum.

This section will review the types of Eastern Khanty clauses that instantiate a relation between linked clauses which locates them at the region of the continuum closer to the coordination prototype.

151. mänuq-oll-m-ä kör law-ø-yas-øm, put wer-yäš-im, ।
   1SG up-DER-1SG-ILL oven make fire-PST3-1SG kettle do-PST3-1SG
   ‘Having got up, I started the oven and made some food, …’
Whereas, previously I have used the term “clause”, simple or complex, in reference to syntactic units with a single profile, in this discussion of Eastern Khanty coordination, the term “clause-chain” will be used, in the sense of a unit of coherent multi-propositional discourse combining clauses that have the tightest, most continuous cross-clausal coherence links (Givon 2001: 355).

Example (151) represents an instance of a chain of states-of-affairs unified by a common agent referent, coded as the 1SG Agent argument of all the clauses in the chain. However, not all the states-of-affairs are coded homogeneously. That is, the coding of the first state-of-affairs ‘get up’ is different in its participial form of the predicate from the subsequent chain of independent finite clauses coding a chain of independent states-of-affairs: ‘start the oven’, ‘make food’, ‘bring in firewood’. The first state-of-affairs appears to be semantically dependent, referring to the background information in the whole of the proposition, which is iconically reflected in its syntactic features of a dependent embedded participial clause with reduced finiteness, lack of differentiation of verbal (TAM) features, presence of nominal (possession, case) features, and low illocutionary force. On the other hand, all the subsequent states-of-affairs are conceptualized as independent, each with its own autonomous profile containing some foreground information, and belonging to the part of the proposition containing the pragmatic assertion, which is iconically manifested in their finiteness, differentiation of typical verbal features and full illocutionary force. They are nevertheless united in a single coherent chain of clauses sharing such semantic-cognitive dimensions as close co-temporality (reflected in consistent TAM form) and coreferentiality (reflected in consistent coding of the common agentive referent by predicate agreement inflection). Thus, in (151) above, one complex clause illustrates the dominant Eastern Khanty
features of this system’s grammar of thematic coherence. The first nonfinite pre-posed Adv. clause ‘get up’, typologically commonly (Givon 2001: 355-56) represents a chain-grounding clause performing a coherence-bridge function, and coding the local cataphoric links to the subsequent chain-initial clause. The next chain-initial finite clause ‘start the oven’ launches the chain, initiating its major thematic strands (the overt 1SG SAP topical referent, TAM value of the whole proposition, narrative perspective). This is a typical finite clause with low anaphoric connectivity to the chain-grounding clause, and high cataphoric coherence. The third clause ‘make food’ is chain-medial, carries some sequential new information, displays a high degree of cross-clausal coherence, is finite, and retains main threads of thematic coherence (topicality, TAM, perspective). Notably, this linked finite clause may not be interpreted as having a modifying function (adverbial) such as, for example purposive, as the finite predicate ‘make’ has the past tense form (PST3) rendering it in the realis modal scope, which is incomparable with purposive function, essentially irrealis. Finally, the chain-final finite clause ‘bring in firewood’ terminates the thematic unit. It has high anaphoric continuity with the preceding discourse and lower cataphoric continuity with the subsequent discourse, which prefaces a coming thematic break, and initiation of a new chain (152).

152. a) t’u pirnɔ nipik luy-ɔm, pirnɔ amɔs-l-ɔm,
DET then book read-PRS.1SG then sit-PRS-1SG
‘After that I read a book, then sit for a while, …’

b) t’u amɔs-l-ɔm, qa niŋ-qɔn mən-ɔn ju-s-ɣɔn
DET sit-PRS-1SG two woman-DU 1SG-LOC come-PST2-3DU
‘…while I am sitting, two women came to me’

As it has been already illustrated (cf. 10. Simple Verbal Clauses & Argument Structure., 11.1.Subordination), Eastern Khanty is a language with SOV-type chaining, with, as is most typical for the SOV languages, the chain-final clause
being the most finite. In (152b), the chain-final predicate ‘come’ has the past tense form making it a more definite, realis scope event. In a typologically common manner, the chain-final finite clause often marks the referential discontinuity, such as topic shift. This marks a universal tendency to maintain tight coherence within the chain and allows breaks only between the chains (Longacre 1985; Givon 2001). In the example (152) above, while the chain-initial and -medial clauses maintain continuity, as coded by finite clauses with elided topical Agent argument, the chain-final finite clause asserts new foregrounded information, and introduces new referents that may become consequently topicalized. The repetition of the chain-medial finite clause (152b), ‘while (I) am sitting like this’, is a chain-grounding device, a temporal marker for the subsequent topic-shift of the chain-final clause. It maintains large-scale discourse coherence, and thus functions like a finite dependent adverbial clause conceptually dependent on the subsequent matrix indicated by ‘two women came to me’.

The referential status of the Agent argument in the linked clauses is unambiguous in the case of varying person-number of referents, even though both could be elided from explicit expression (cf. (153) vs. (154)), where the predicate form is informative enough:

153. (mä) jöö-käs-əm (jiy), i potʃ-gas
    1SG shoot-PST3-1SG bear “and” flee-PST3.3SG
    ‘I shot a (bear/it) and (it) fled’

154. (mä) jöö-käs-əm (jiy), i potʃ-gas-əm
    1SG shoot-PST3-1SG bear “and” flee-PST3-1SG
    ‘I shot a (bear/it) and (I) fled’

In cases where the person-number of referents coincide ((155a) and (156a)), possible referential ambiguity may be resolved in a variety of ways. In (155a) and (156a) below, both pairs of the referents (the ‘hunter’ and the ‘bear’ in (155a); and ‘mother’ and ‘daughter’ in (156a)) may be the antecedent of the 3SG pronominal
argument, or the pronominal agreement on the predicate (in case the 3SG is elided) of the linked clause ‘(s)he ran away’. Although there is a slight bias for the Agent of the first clause to also be the Agent of the linked second clause, in these particular contexts the Target of the first clause appears a more likely candidate for the Agent of the second linked clause, but alternative scenarios are easily acceptable by the speakers.

155. a) kötkül qu jöyö-s jiɣ, (jöɣ) mən-käs / sayalta-ɣas
   hunt man shoot-PST2.3SG bear 3SG go-PST3.3SG / leave-PST3.3SG
   ‘The hunter shot a bear, (and) he (the hunter) went away / left’

   b) kötkül qu jöyö-s jiɣ, jöɣ mən-käs / potʃ-ɣas
   hunt man shoot-PST2.3SG bear 3SG go-PST3.3SG / flee-PST3.3SG
   ‘The hunter shot a bear, (and) the bear went away / fled’

   c) kötkül qu jöyö-s jiɣ, jöɣ-näm mən-käs / nuruɣ-t-ɣas
   hunt man shoot-PST2.3SG bear 3SG-RFL go-PST3.3SG / run-PST3.3SG
   ‘The hunter shot a bear, (and) himself went / ran away’

Ambiguity resolution is achieved by the overt expression of arguments ((155b) and (156b)) in the case where Agent referents switch between the clauses (Ag₂=Trg₁). In case of referent persistence (Ag₂=Ag₁), it is disambiguated by the use of a reflexive pronoun ((155c) and (156c)), in which case the antecedent of the reflexive is preferred to be the Agent of the first, chain-initial clause.

156. a) ṣeq-äl-νo ɣɣ-âl ɣjoyt-käl-tɔta, (jöɣ) isi-kät-ɣi, küm nuruɣ-t-ɣi
   mother-3SG-LOC daughter-3SG scold-PST1-3SG 3SG cry-Inch-PST0.3SG out run-PST0.3SG
   ‘Mother scolded her daughter, and she ran away’

   b) ṣeq-äl-νo ɣɣ-âl ɣjoyt-käl-tɔta, ɣɣ-âl isi-kät-ɣi, küm nuruɣ-t-ɣi
   mother-3SG-LOC daughter-3SG scold-PST1-3SG daughter cry-Inch-PST0.3SG out run-PST0.3SG
   ‘Mother scolded her daughter, and the daughter ran away’

   c) ṣeq-äl-νo ɣɣ-âl ɣjoyt-käl-tɔta, jöɣ-näm isi-kät-ɣi, küm nuruɣ-t-ɣi
   mother-3SG-LOC daughter-3SG scold-PST1-3SG 3SG-RFL cry-Inch-PST0.3SG out run-PST0.3SG
   ‘Mother scolded her daughter, and herself ran away’
Alternatively, but less frequently, the overt NP expression of the persistent Agent referent is employed (156d).

Thus, as can be seen in the examples above, in Eastern Khanty chained, coordinated clauses there is no rigid cataphoric equi-subject constraint. Some of the examples involve switch-subject between the chain-initial and subsequent clause; and the chain-grounding clause is always followed by a finite chain-final clause. However, it should nevertheless be noted that there is an obvious preference for topic maintenance in the system. Unless specified otherwise, or evidently ambiguous and constraining to the intended information processing, the linked clauses are perceived as same-topic, and thus as equi-subject, as is consistent with obvious Ag=Topic and Topic=clause-initiality preference (cf. 10.2. Information Structure).

**Clause Juncture**

As follows from the examples above (155, 156), Eastern Khanty may link clauses without the use of linking morphemes, by a simple juxtaposition with intonation break and possible pause at the clause juncture.

Alternatively, the juncture may be marked by the use of continuative link, or a native continuative conjunction panə ‘and’:

157. a) qat puöl ajnäm tajavl-ot tayrəyətə-l-i b) pəni mən-l-i
   house village all own-thing leave-Impr.2PL and go-Imper.2PL
   ‘a) Leave your house, your village, all you have, b) and go!’

158. a) mas-wəl torem qat-a jilil-tä suytow-a b) pəni ətiyə-ki, pat-l-uj-em
   need-PRS.3SG god house-ILL go-INF drugs-ILL and cold-PRD freeze-PRS-PS-1SG
   ‘a) Need to go to god-house village for drugs, b) but its cold, I am freezing’
This native Eastern Khanty connective marker of cataphoric transition to the next clause is equally frequent in linking both same-Agent and different-Agent, i.e. Agent role switch (cf. (157) vs. (158) and vs. (159):

159. a) qatʃ [% n-tə] pit-tə b) pāni puyol-pa ärki persγ je-s-i
  sick-IMPP become-IMPP and village-All1 many strange become-PST2-PS.3SG
  ‘a) I am getting sick, b) and there got to be many strangers in the village’

In (157), this conjunction codes high thematic continuity with coreferential participants, co-temporality and location unity, TAM unity and narrative perspective. Further on, in (158), it codes lower thematic continuity though retaining an overall topical agent referent perspective, overall same-Agent chain, co-temporality, and location unity, but with parenthetical Agent role switch in chain-medial nominal predicate clause, and alteration in TAM and voice. Finally, in (159), this conjunction appears to code contrastive rather than continuative event linking, not coordinated (in traditional terms) but instead asymmetrical, with the Agent role switch from the topical 1SG SAP in the preposed nonfinite temporal clause, present but more abstract co-temporality and location unity, not consistent TAM and narrative perspective.

Another native conjunction frequently used at the clause juncture is pɨrno ‘after’, which codes overtly the temporal sequence, and anaphoric continuity of the states-of-affairs in the preceding chain (cf. (152a) directly following (151) in the narrative discourse). Pɨrno too, like pɨn above, does not seem to have same-Agent restrictions for the conjoined clauses (cf. (160) vs. (161), (162), (163)):

160. mā tʃimil is-kāl, tʃu pɨrno is-tā lōk-kāl
  1SG a little cry-PST1-1SG DET after cry-INF stop-PST1.3SG
  ‘I cried a little, then stopped crying’

161. a) jem-aki nuruγta-s-im b) tʃū pɨrno mən-sə-kən iɣla-pa
  good-PRD run-PST2-1SG/SG DET after go-PST2-3DU down-ILL
  ‘OK, so I ran there,’  ‘after that, they two went down’
162. a) ṛ̣ya ṛuγu-l-aṁ n‘ān‘ wer-tä b) pirmā mā-n ṛiɾikətə-wəl “jōm n‘ān‘?”
flour mix-PRS-1SG bread make-INF then 1SG-ACC ask-PRS.3SG good bread
‘(I) am mixing flour to make bread, then (he) will ask me: “Good bread?”’

163. a) motosikl-nä mā-n loγosla-ɣās b) pirmā mā-n pāl’ntsā-kā pin-kal-at
motorbike-COM 1SG-ACC hit-PST3.3SG then 1SG-ACC hospital-ILL put-PST3-3Pl
‘(He) hit me with a bike, then (they) put me in the hospital’

In recent data, a loan conjunction with identical semantics is attested, serving a
similar function of (cf. (160) vs. (164, 165a)):

164. a) tim kät-kən muɣuli-kam kantʃ-il-kən b) potom jōɣ-pa mən-wəl-t
DET two-DU some-IndPn write-PRS-3DU “then” home-All1 go-PRS-3PL
‘These two are writing something there, then (they) go home’

165. a) pesok tʃi-näm il pil-kəs-i-min tajka-na, potom qisim-mən toɣ
“sand” there-All1 down put-PST3-1DU Tajka-COM then rest-PST0-1Pl there
‘(We) load the sand down there, then rest’

b) a jōɣ mən-s-ətən tom, pesok tun-tə
‘and’ 3PL go-PST2-3Pl DET sand bring-INF
‘while they went there to bring more sand’

Loans are gradually making their way into Eastern Khanty, and adverbs and
conjunctions appear to be particularly susceptible to this contact-induced
innovation. Russian loan conjunction i ‘and’, is currently sharing a functional
domain with the native panə above, and at some locations has gradually taken over
as a continuative linker, as in (153, 154) above. It should be observed, however,
that unlike the native panə, the loan conjunctions have ‘source’ functional
distribution, i.e. the loan i ‘and’ is typically used, as in Russian, for thematic
continuity, to join same-Agent finite clauses (cf.: (153, 154)). At the same time,
another loan from Russian, the conjunction a ‘but’ is typically used contrastively,
for thematic discontinuity again consistent with Russian grammar (cf.: (165), (166-
167)): 
The functional differentiation between loan continuative and contrastive conjunctions is evident in (168) below, where in (a) continuative *i* is used for referential continuity with same-Agent marked in the linked clause by the reflexive 3SG pronoun, but further on in (b), the contrastive *a* is used for the Agent role switch.

168. a) ämp-ät jərāy-wəl-t, ʧu tayɨ morta toɣi wer-il poro-min ì jəɣ-nəm ənt-im-ätə.  
    dog-Pl noise-PRST-3Pl DET place all away do-3Pl step-CNV “and” 3Pl-RFL Neg-PP-PL  
    ‘The dogs are noisy, (they) stepped all over that place and themselves are not there’

b) a pült əll-äy jiɣ-äyi.  
    ‘but’ hole big-ADV become-PST.03SG  
    ‘but, the hole (bear den) got bigger’

The use of contrastive junctions as in (168b) appears consistent with the general cross-linguistic strong association between contrastive conjunctions, referential discontinuity and thematic discontinuity (Givon 2001: 350), where the continuative (non-contrastive) conjunction *i* ‘and’ codes greater cataphoric continuity than the contrastive conjunction *a* ‘but’. In many cases, for example (166-167), overall thematic continuity is maintained regardless of temporary referential discontinuity. As in many other languages, conjunctions do not seem to signal the degree of referential continuity, but rather the degree of thematic coherence. Coherence as the continuity of some elements across a contiguous span of multi-propositional discourse (Givon 2001: 329) is grammaticalized in Eastern Khanty by a variety of
formal means including referents, location, temporality, aspectuality, modality, perspective (narrative voice), action/events. Referential continuity thus is one of the strands of thematic coherence, combining with other features to affect thematic coherence or contrast, as a holistic entity. All of the reviewed lexical and grammatical means individually and in interaction contribute to maintaining the overall thematic coherence in the discourse. Referential coherence is coded by lexical nouns, pronominalization, Agent-predicate and Target-predicate agreement inflections, case-marking, possessive inflections in nominals and nominalizations; tense-aspect-modal coherence is coded by verbal affixation. Event coherence is coded by lexical verbs; while spatial coherence and coherence of perspective are coded by a mix of lexical and grammatical means including case, adverbs, and postpositions.

Thematic contrast is “always embedded in a context of expectations about states, activities, subjects or objects that are expected to behave in a certain way but in fact do not (Givon 2001: 351). The expectations are typically set up by a preceding discourse, but may also originate from certain cultural stereotypes and norms.

Generally contrasting the instances of clause linkage with no overt conjoining morphemes vs. those with explicit conjunctions, whether loan or native, it appears that in cases of both, referential continuity and referential discontinuity, same-Agent and the conjoining morphological material iconically reflect greater distance between linked states-of-affairs. They signal relatively reduced thematic continuity compared to that of conjunctionless chains. That is, directly juxtaposed clauses tend to code closer conceptualised states-of-affairs of the (151)-kind, whereas presence of an explicit juncture tends to introduce a degree of conceptual distance (compare the conjunction of (169) above with the absence of conjunction in (169)): 
Conclusions and Prospects on Eastern Khanty Complex Clauses

It can be confirmed with regard to Eastern Khanty complex clauses in the perspective of overall textual coherence that the observed features fall within the general cross-linguistic patterns for the SOV languages (Givon 2001: 365-366). In Eastern Khanty complex clauses, there is apparent concentration of the most finite marking in the chain-final clause, which is especially evident in the system’s preferred subordination strategies (adverbial clauses, relative clauses, verbal complements). Even when clauses higher on a finiteness scale are employed for clause linkage, they still appear typically lower on such features as finiteness, semantic independence, and illocutionary force, than their consequent, chain-final matrix clauses (finite adverbial clauses: purpose, temporal, reality condition, reason relations, and also finite relative clauses, and finite verbal complements). Finiteness as a complex feature is indeed best construed as a multi-factorial scale, where the degree of finiteness of various clause-types iconically correlates with the degree of semantic and discourse-pragmatic independence, and thematic continuity in the coded states-of-affairs (Givon 2001: 367). That is, lower autonomy, semantic independence, and higher continuity typically correlate with lower finiteness (chain-medial same-Agent clauses). This corresponds largely with the overall typology of information structuring, in which general pragmatic-morphosyntactic continuum (Lambrecht, 1994) runs from reduced morphological complexity (formalism, overtness) to increased pragmatic status (topicality, activation, accessibility, identifiability).

The Eastern Khanty case system is employed robustly in regulating referential coherence. Thus, adverbial clauses, which are treated as single-stem adverbial
modifiers, have possessive and case inflections that serve also to indicate same-Agent vs. different-Agent referential coherence in chain-initial and chain-medial clauses (adverbial clauses). There is, however, a set of issues to be resolved in further study of the system, as for example, the possible use of Eastern Khanty case-agreement for switch-reference, as for example in Latin (Haiman 1983) where it is an extension of noun modification case-agreement. This is not the case for Eastern Khanty, which has no noun-modifier agreement of any sort, especially case-agreement.

Eastern Khanty displays a gradual increase in the distribution of the more finite linked clauses, particularly relative and adverbial clauses, where the domination of nonfinite (mostly participial) clauses has been the case. Apart from the increasing contact influence from Russian, this may be also regarded as a system internal, but typologically attested tendency for the initial grammaticalization of Adv-clauses via nominalization, with the subsequent gradual adding of more finite TAM morphology. This is a diachronic process of re-finitization registered cross-linguistically (Givon 1994; Gildea 1998; Watters 1998).
References:


structure”. Proc. of the II Encuentro de Linguistica en elNoroeste, Hermosillo,
Mexico. Universidad de Sonora.
41. Givon, T. 1991. Isomorphism in the grammatical code: Cognitive and
Hebrew”, Approaches to Grammaticalization. By Traugott, E. & Heine, B.
47. On Language: Selected Writings of Joseph H. Greenberg, ed. by Keith
The Hague-Bloomington.
W.Schlachter Symposion über Syntax der uralischen Sprachen. Göttingen,
1970.


95. Lightner, T. 1965. On the description of vowel and consonant harmony. Word 21, 244-250.


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