Non-canonical possessive constructions in Negidal and other Tungusic languages: a new analysis of the so-called "alienable possession" suffix

Natalia Aralova, Brigitte Pakendorf

Natalia Aralova* and Brigitte Pakendorf

Non-canonical possessive constructions in Negidal and other Tungusic languages: a new analysis of the so-called "alienable possession" suffix

Abstract: A distinction between inalienable and alienable possession is considered to be crosslinguistically common. For the Tungusic languages, it is generally illustrated with examples that contrast inherently possessed body parts with body parts belonging to a non-inherent possessor, with the latter being formally marked with a suffix *-ŋ(V)*. However, as we argue here for Negidal (Northern Tungusic), rather than marking 'alienable' or 'indirect' possession, the suffix *-ŋ(i)* flags the occurrence of non-canonical possessive constructions; the supposedly straightforward interpretation of the oft-cited examples involving body parts is merely a secondary effect of the particular kind of non-canonical construction involved. This analysis unifies the diverse constructions in which *-ŋ(i)* occurs, namely with obligatorily possessed body parts, with non-possessible items such as nouns denoting humans or environment terms as well as demonstratives or adjectives, and with other modifiers when the possessee is elided. We complement our investigation with the analysis of the cognate suffix *-ŋi*, whose main function is to mark the possessor in possessive constructions with an elided head. The function of both suffixes can thus be subsumed under the marking of non-canonical possessive constructions. This analysis can be extended to several Tungusic languages, as the comparison with Negidal's sister languages shows.

Keywords: associative possession; inalienable-alienable distinction; possessive classes; Siberia; Tungusic

*Corresponding author: Natalia Aralova, Institut für Slavistik, Christian-Albrechts-Universität zu Kiel, Kiel, Germany, E-mail: n.aralova@gmail.com. https://orcid.org/0000-0001-9087-311X
Brigitte Pakendorf, Dynamique Du Langage, UMR5596, CNRS & Université de Lyon, Lyon, France, E-mail: brigitte.pakendorf@cnrs.fr

1 Introduction

So-called (in)alienable possession is described as a crosslinguistically common feature whereby two distinct kinds of possession – inherent and permanent versus loosely associated and non-permanent – are formally distinguished in adnominal constructions (e.g., Chappell and McGregor 1996; Haspelmath 2017; Nichols 1988; see also the overview of the literature in the introduction to this issue). This category has also been widely noted in the Tungusic languages (Boldyrev 1976; see Avrorin [1959: 155–163] specifically for Nanai, Boldyrev [2007: 122–139] for Evenki, Nikolaeva and Tolskaya [2001: 135–141] for Udihe, Novikova [1960: 145–152] for Even, and Pevnov and Khasanova [2006: 503–504] for Negidal), which are also included by Nichols (1988: 591–592) in her classification of (in)alienable possession types. The Tungusic distinction is most commonly illustrated with the contrast between inherently possessed body parts (1a) on the one hand and body parts of dead animals that have entered the possession of some human (1b) on the other, with the latter being formally marked by a suffix *-ŋ(V)*. Such examples appear to show that this formal opposition in possession marking is indeed one of inalienable versus alienable possession.

(1)   Nanai

    a.   *naj*   *dili-ni*
          person   head-PX.3SG
          '(the) person's head'

    b.   *naj*   *dili-ŋo-ni*
          person   head-ŋ(V)-PX.3SG
          '(detached) head (e.g., of an animal) owned by a person'
          (Nichols 1988: 565–566, taken from Avrorin 1959: 157–158; glosses and
          transcription modified)

However, in Negidal, a critically endangered language spoken in the Far East of Russia, the so-called alienable possession suffix [which takes the form *-ŋ(i)*] occurs in contexts that cannot be explained by any form of loose association or "socially or economically conferred ownership" (Nichols 1988: 568), such as with human referents or with the sun, casting doubts on an analysis in terms of alienability. Nikolaeva and Tolskaya (2001: 135–141) also point out that in Udihe the cognate suffix occurs in many more contexts than simply alienable possession; they describe the suffix as having five distinct functions (see Section 4.3 for details).

    We here address the question whether an analysis of the suffix *-ŋ(i)* in terms of marking alienable possession is warranted by the Negidal data. As will be seen from the label POSS (standing for 'non-canonical possessive construction') with which we

gloss this suffix, and as is laid out in detail in Section 4, we provide an analysis in which the function of -*ŋ(i)* is not to mark alienable possession, nor does this suffix have various different functions as postulated for the Udihe cognate by Nikolaeva and Tolskaya (2001: 135–141). Rather, the seemingly diverse uses of this suffix in Negidal can all be subsumed under a single function, namely to flag the occurrence of non-canonical possessive constructions. These data illustrate how apparently straightforward examples of the so-called alienability contrast might upon close examination turn out to have very different underlying motivations, thus raising the possibility that other cases of supposed (in)alienability might in actual fact also have different causes (see also Rose, this issue).

We extend our discussion to the closely related suffix -*ŋi*, which marks possessors in constructions with elided head nouns (hence the gloss PSR "possessor of elided head"). As will be detailed in Section 7, such constructions are non-canonical from a syntactic perspective and thus complement our understanding of non-canonical possessive constructions not only in Negidal, but also in other Tungusic languages.

The remainder of the article is structured as follows: after a brief introduction to the language and the data that form the basis of this investigation (Section 2), we introduce possessive constructions in Negidal in Section 3. In Section 4 we discuss the uses of the suffix -*ŋ(i)*, which was previously considered a marker of alienable possession. In order to situate the Negidal data in a broader context we provide a brief overview of the cognate suffixes in other Tungusic languages (Section 5). Section 6 is devoted to the description of the suffix -*ŋi*, which marks the possessor in possessive constructions with elided possessee in Negidal as well as in other Tungusic languages. The article concludes with a discussion of the different non-canonical possessive constructions that are marked by these two clearly cognate suffixes (Section 7).

2 Negidal: the language and the data

Negidal is a critically endangered Northern Tungusic language spoken in the Far East of the Russian Federation on the Lower Amur river and one of its major tributaries, the Amgun'. At least two dialects used to be distinguished: Upper Negidal and Lower Negidal (Cincius 1982: 3). However, Lower Negidal appears to be extinct by now, and only a handful of speakers of Upper Negidal remain (Pakendorf and Aralova 2018), among whom only two elderly women are still fluent in the language.

Like its relatives, Negidal is a fairly agglutinative language with rich, exclusively suffixing morphology. It has nominative-accusative alignment, with obligatory indexation of the S/A argument on the verb; objects, in contrast, are not cross-referenced on verbs. Nevertheless, both S/A and object (pro)nominal arguments are

commonly omitted if their referents are retrievable from the context. Due to vestiges of vowel harmony and consonant assimilation at morpheme boundaries, the surface forms of suffixes show some variation (Pakendorf and Aralova 2020).

This study is based exclusively on a fully annotated corpus of oral speech of Upper Negidal (Pakendorf and Aralova 2017). This comprises about 200 texts of diverse genres (folklore, autobiographical anecdotes, procedural texts, and conversations) numbering approximately 76,500 words in total. Nine elderly speakers – four of whom are by now deceased – are represented in the corpus, eight women and one man. Of these, the man and four women (a mother and three of her daughters) were/are fluent speakers, while the others, including another daughter, show differing levels of attrition (Pakendorf and Aralova 2018; corpus description[1]).

For our analysis of the contexts of use of the suffixes -ŋ(i) and -ŋi (cf. Section 6 for details on the distribution and morphophonological behavior of these suffixes) we extracted all the examples found in the corpus, namely 656 for -ŋ(i) and 31 for -ŋi, and coded them for host (class of lexeme, such as human, animal, plant, mass noun, demonstrative, adjective, or numeral) and specific lexeme (e.g., 'person', 'wood', 'good', 'this', etc.); whether the item carrying either of these suffixes carried further derivational, case, or possessive marking and if so, which kind (cf. Section 3.1); the context of use of the suffixes; and the syntactic position of the item carrying them (see coding sheet: Aralova and Pakendorf 2023). We furthermore investigated all the lexemes belonging to particular semantic classes (kinship terms, body parts, animals, plants, food, personal names) to assess to what extent they occur with or without possessive marking in the corpus, and we scanned concordances of the possessive suffixes to gain an understanding of their functions in Negidal.

3 Possession in Negidal

Since an understanding of possessive marking is necessary in order to understand the function of -ŋ(i) and -ŋi, in this section we continue with a brief description of possessive constructions in Negidal (3.1) and the possessive classes (3.2) observed in the corpus.

3.1 Types of possessive constructions

In Negidal, adnominal and predicative possession are expressed with two different constructions. Predicative possession is expressed with the proprietive suffix -ʨi. This suffix marks the possessee, and the possessor is not overtly indexed. While the

---

1 http://hdl.handle.net/2196/b644db81-725c-4031-935c-f33c763df152 (accessed on 25 July 2021).

Table 1: Possessive suffixes in Negidal (showing major allomorphs/variants).

	SG	PL
1 inclusive		*-lti, -t*
1 exclusive	*-β/-mi*	*-βun*
2	*-s*	*-sun*
3	*-n/-nin*	*-tin*
reflexive	*-j/-mi*	*-βaj*

proprietive mainly occurs in predicative possessive constructions (2), it can also mark possessees in attributive and adverbial position.

(2) *bajan* ***hutə-tɕi***   *bi-tɕa-n*
     many   **offspring-PROP** be-PST-3SG
     'He **had a lot of children**.'
     (APN_DIN_teadrinking: 48)

Adnominal possession is characterized by possessive suffixes on the head noun which index the person and number of the possessor (Table 1); the preposed possessor remains unmarked and is frequently dropped. The reflexive possessive suffixes index a possessor who is coreferential with the subject of the clause.

As is crosslinguistically common (Creissels 2006: 141–144; Koptjevskaja-Tamm 2001), the possessive suffixes in Negidal have several different nominal functions, namely to mark: (i) ownership (3a)–(3b); (ii) part-whole relationships (3c); (iii) the head in nominal modifier constructions (in which the 'possessor' characterizes the possessee, cf. Creissels 2006: 142 and Koptjevskaja-Tamm 2001: 964; [3d]) and iv) associative possession (3e). Notably, the marking of prototypical possession, i.e., ownership of items that can be bought, sold, or given away, is relatively infrequent, making up only a small proportion of the occurrences of these suffixes in the corpus. As can be seen from (3b), the (pro)nominal possessor, which precedes the possessee (3a), can be freely omitted from such possessive constructions, since it is cross-referenced on the possessee with the possessive suffixes. In discourse, overt possessors are relatively rare.

(3) a. ***bi*** ***suːn-mə-β*** *təti-βka-kəl*   *gun-ə-n*
         1SG   **coat-ACC-PX.1SG** to.dress-CAUS-IMP.SG say-NFUT-3SG
         'Dress it in **my coat**.'
         (TIN_swine: 90)[2]

---

2 All examples are taken from the Negidal corpus (Pakendorf and Aralova 2017). Note, however, that in some cases we have slightly modified the glosses and translations for clarity. The translation does not always reflect the Negidal text word for word; citation markers like *gunən* 'he/she says', in particular, are often omitted in the translation.

b. ***hola-sun=kə***   *e:kun*   *gun-ə-n*
    blanket-PX.2PL=FOC   what   say-NFUT-3SG
    '"What is **your blanket** made of?" – he says.'
    (DIN_chevkan_tale: 50)

c. ***mo꞉***   ***niŋtə-nin***   *ɟukə-dukkəj*   *ju-tɕe-ja-n*
    tree   **root-PX.3SG**   ice-ABL   exit-RES-NFUT-3SG
    '…the **root of a tree** sticking up out of the ice'
    (APK_spirits: 24)

d. *i-dukin=da*   *baka-ŋa:ti-s*   *taj*   ***lam***   ***ɟolo-βa-n***
    INTERR-ABL=ADD   find-DEONT-2SG   DIST   **sea**   **stone-ACC-PX.3SG**
    ' … where can one find a **stone from the sea** (lit. 'sea stone')?'
    (DIN_APN_fighting: 141)

e. ***samoxodka-β***   *iltən-ə-n*   *a:tɕin*
    ?steamer.R-PX.1SG   pass-NFUT-3SG   NEG
    {A woman is driving a boat upriver and is unsure about where to go. She
    has been following a steamer, but then} 'The steamer (lit. my steamer)
    passed [the riverbend] and disappeared.'
    (GIK_chertovy_zuby: 21)

The notion of associative possession is very important in the context of our study, since it is this type of possession marking that triggers most of the productive occurrences of the suffix *-ŋ(i)* (Section 4.1.2).[3] In this kind of construction, possessive marking highlights a relationship between two participants that is salient in discourse or in the speech situation (cf. Creissels 2006: 143 and in particular Nikolaeva 2003; Pakendorf 2007). These participants are the 'possessee' and the 'possessor' cross-referenced with the possessive suffixes.

Thus, in Example (3e) above, the woman driving the boat had been hoping to find her way through the tricky Amgun' channels by following the steamer (with which she otherwise has no relation at all); the importance that the steamer has for her at this moment of the narrative is expressed by the 1SG possessive marking ('my steamer'). Similarly, in (4) below, the little girl says it is her needle that broke, but in fact the needle belongs to an evil spirit. The salient relationship that is highlighted by the 1SG possessive marking ('my needle') is the fact that it was very important to return the needle to the spirit, but it broke while the girl was using it.

---

3 Even more frequent in number are lexicalized forms referring to 'husband' and 'wife' (see Section 4.1.3 for examples).

(4) *uli-l-laːn*   *gun-ə-n*   *kilgədgə-jə-n*   ***inma-β*…**
    sew-INCH-SS.ANT   say-NFUT-3SG   break[INTR.SMLF]-NFUT-3SG   **needle-PX.1SG**
    {The evil spirit is asking for its needle, and the little girl answers:} 'As soon as
    I started to sew, the needle (lit. **my needle**) broke.'
    (DIN_APN_needle: 48)

3.2 Possessive classes

Our perusal of the Negidal corpus leads us to identify three different possessive classes
of lexemes based on their morphosyntactic behavior: (i) obligatorily possessed nouns
that practically always occur in a possessive construction; (ii) non-possessible items
that generally do not occur in possessive constructions: these comprise semantically
non-possessible nouns on the one hand, and formally non-possessible numerals, de-
monstratives, adjectives and participles on the other; and (iii) all other nouns which
can occur both with or without possessive suffixes (including the proprietive),
depending on the context. With respect to the function of *-ŋ(i)* it is the first two
possessive classes that are relevant, since in the corpus data *-ŋ(i)* tends not to occur
with optionally possessed nouns; we, therefore, provide more information on oblig-
atorily possessed nouns and non-possessible items. In the following, we will use the
term 'direct possession' to refer to possessive constructions in which the possessive
suffixes attach directly to the head noun (following case suffixes where pertinent, cf.
[3a], [3e]), and 'indirect possession' to refer to constructions in which the suffix *-ŋ(i)*
intervenes between the root and the possessive suffixes.

     The obligatorily possessed nouns comprise kinship terms on the one hand (5a) and
body parts on the other (5b). (We exclude from consideration spatial/temporal relation
nouns – these are nominals that mostly function as the heads of possessive constructions
and are marked with one of the spatial cases and possessive suffixes which agree with
the 'possessor', e.g., *uskə daga-du-n* [door near-DAT.ESS-PX.3SG] 'next to the door'.).

(5) a. *tiːnu*   *min-dula*   *əmə-jə-n*   ***okin-mi***
         yesterday   1SG.OBL-LOC   come-NFUT-3SG   **older.sister-PX.1SG**
         '**My older sister** came to me yesterday…'
         (GIK_shuka: 1)
    b. *biː* ***si*** ***dəl-βə-s***   *hoŋna-sin-ɟiŋa-β*   ***bosaːktə-βə-s***
         1SG **2SG head-ACC-PX.2SG**   chop-TAM1-FUT1-1SG   **kidney-ACC-PX.2SG**
         talaka-ɟiŋa-β   *gun-ə-n*   ***haːkin-mə-s***   *juː-β-ɟiŋa-β*
         eat.raw.meat-FUT1-1SG   say-NFUT-3SG   **liver-ACC-PX.2SG**   exit-VAL-FUT1-1SG
         'I will chop off **your head**, I will chop **your kidneys** finely and eat them, I
         will take out **your liver**.'
         (DIN_Emeksikan: 97)

As will be seen in Section 4.1, these two subcategories of obligatorily possessed nouns differ in whether they occur with *-ŋ(i)* (body parts) or not (kin terms). There are only two contexts in which kin terms are found without possessive marking: in the vocative case (expressed by final vowel lengthening), and when carrying the comitative suffix *-tɕil.* This occurs only with kinship terms and expresses both a reflexive possessive relationship and a joint action (6).

(6)   *bu*   *akina-tɕil*   *ɟuː-ji*   *taj*   *amban-ɟi*   *kusi-ɟa-βun*
        1PL.EX   older.brother-COM   two-COLL   DIST   devil-INS   fight-FUT2-1PL.EX
        'We, my brother and I, will fight with that devil the two of us.'
        (DIN_Emeksikan: 249)

As to the lexical group of body parts, since prototypically these are in a very tight relation to their inherent possessor, most of these items in the corpus are indeed directly possessed, and the possessor is easily retrievable from the context. However, we observe some exceptions to this rule in the data: body parts in an extended sense, such as the integument, bodily effluvia, and bones, do not carry possessive marking when they refer to disembodied entities whose original 'possessor' is not identified. This includes examples of meat or fat used as food, hide used as fabric, pieces of fur caught on branches, or bones scattered on a battlefield.

     The class of non-possessible items is heterogeneous and consists of different parts of speech. It comprises certain nouns referring to humans[4] (proper nouns, but also common nouns such as 'person'), wild animals, plants, other environmental phenomena (such as 'sun') and nouns referring to large masses of uncountable entities (for instance, 'wood', 'water', food items) – this list is similar to, though not entirely overlapping with, Ainu non-possessible items (Bugaeva et al. 2022: 55). It also contains demonstratives, numerals, and modifiers such as adjectives and participles. Non-possessible items can occur with possessive markers in three cases: the nouns are (i) directly possessed when they function as the head in a construction with 'characterizing' nominal modifier (7) and (ii) indirectly possessed when their associative relationship to a discourse participant is highlighted for pragmatic reasons or when reference is made to a particular subset of an uncountable entity. (iii) As for the demonstratives, numerals, and modifiers, these are indirectly possessed for different reasons (described in detail in Section 4.2), for instance when they take the place of an elided head that would carry possessive marking. In all instances of indirect possession, the suffix *-ŋ(i)* is inserted before the possession marker, as will be shown in detail in Section 4.

---

4 There are two exceptions to this rule: directly possessed *asi* 'woman' occurs with a reading of '(someone's) wife' – though this is far less common than the use of indirectly possessed *atika:n* 'old woman' with this meaning (see Section 4.1.3) – and there are a few examples of directly possessed *bəjə* 'human' with a reading of 'people, tribe'.

(7) *siŋəjə*   *gun-mi*   *oʝaːβi*   *gun-ŋati-s*   **ʝoː**   **bəjŋaː-nin**
     mouse   say-ss.cond   taboo   say-deont-2sg   **house**   **animal-px.3sg**
     'Saying "mouse" is a taboo, you have to say "domesticated animal" (lit. '**house animal**')'. (DIN_taboo: 1)

4 The suffix *-ŋ(i)* in Negidal

As mentioned in the preceding section, the suffix *-ŋ(i)*, which we gloss as poss, 'non-canonical possessive construction', occurs with two categorically opposed classes of items: the obligatorily possessed body part terms and the heterogeneous class of non-possessible items. It always precedes a possessive marker,[5] either the possessive suffixes summarized in Table 1 or the proprietive suffix *-tɕi*. Below we provide a detailed discussion of the contexts of use of the suffix, making a distinction between the possession of nouns (Section 4.1) and the possession of formally non-possessible parts of speech (Section 4.2). The use of *-ŋ(i)* with such disparate classes of items can be explained by viewing it as a flag of non-canonical possessive constructions, as we argue in Section 4.3. Our analysis contrasts with that of Pevnov and Khasanova (2006: 503–504), who discuss the suffix *-ŋ(i)* in semantic terms, as a marker of alienable possession, as is common in descriptions of Tungusic languages (cf. Cincius 1982: 20); they contrast it with "not-indirect possession" (*nekosvennaja prinadležnost'*) that occurs with body parts, kin terms, domestic animals and cultural artefacts.

A word of caution is in order: as pointed out in Section 2, we are basing our study purely on our analysis of the Negidal corpus. Given the nature of the corpus (spontaneous oral speech produced by individuals for whom Negidal has ceased to be the primary language of everyday use and who show differing degrees of attrition), counterexamples to our generalizations do occur, and not all of the examples are clear (~4 % were coded as 'unclear' for various reasons, see coding sheet). Nevertheless, since our database of examples is quite extensive, we feel confident in our overall analysis.

4.1 The suffix *-ŋ(i)* marking nouns

The vast majority of the tokens of *-ŋ(i)* marking nouns occur in adnominal possessive constructions which carry personal possessive suffixes, as will be illustrated

---

5 In actual fact, we find six examples of privative constructions where the *-ŋ(i)*-marked nominal is the argument of the negative existential noun *aːtɕin* and carries the indefinite accusative case marker instead of possessive marking. Of these, three comprise the phrase *atikaː-ŋ-ɲa aːtɕin* 'unmarried', literally 'without a wife', which we consider to be a lexicalization.

throughout this section. However, in 19 cases the possessive phrase is in predicative position, and thus the 'possession' is indexed by the proprietive suffix *-tɕi* ([8]; see Section 4.3.1 on use of the noun 'year' with possessive marking). The possessor tends to be animate, generally a human being or an anthropomorphized character in a fairy tale.

(8)　*aːŋ　taj　əmən　nəkun-tin　　　　　tonŋa　**anŋani-ŋi-tɕi***
　　　yes　DIST　one　younger.sibling-PX.3PL　five　**year-POSS-PROP**
　　　'And the youngest is **five years old** [lit. has five years].'
　　　(APN_tri_soseda: 56)

We first describe the use of *-ŋ(i)* with body parts (Section 4.1.1) before turning to the discussion of one of the most salient contexts of use of this suffix, namely the associative possession of non-possessible nouns (Section 4.1.2). Furthermore, certain non-possessible nouns acquire a reading of particularization in the context of possession, as we describe in Section 4.1.3.

4.1.1 Body parts

As mentioned in the introduction, one of the most frequently cited uses of the suffix *-ŋ(i)* is with body parts that have entered the possession of an individual who is not the inherent possessor. This is the use that has led to its previous identification as a marker of alienable possession (e.g., Pevnov and Khasanova 2006: 504). However, in the corpus we find hardly any examples of this type. In total, we have only four examples of nouns referring to body parts marked with *-ŋ(i)* (less than 1 % of all examples). Furthermore, rather than *-ŋ(i)* occurring with detached body parts that are in the possession of someone other than the inherent possessor (cf. [1] above), three of the four examples concern 'extended' body parts ('hide', 'blood', and 'excrement'), with somewhat unclear contexts, complicating their interpretation. In the remaining example of an indirectly possessed body part this refers not to the part of an animate being, but to the part of a boat. In (9a) the 'nose' of the boat (i.e., its prow) is marked by *-ŋ(i)* plus plural reflexive possessive suffixes referencing the non-inherent possessors, namely the sisters who made it.[6] In contrast, in (9b) the 'nose' is associated with the boat, its inherent possessor, and is directly possessed.

---

6 Note that in this example the possessive marking is of an associative nature, highlighting the relationship that is established between the sisters who are making the boat and its parts, rather than marking any form of ownership.

(9) a. *kaltaka* **oŋokto-ŋ-ŋəj**   *tulə-tɕa[-l]*   *kaltaka-ŋ-ŋaj*
         half   **nose-POSS-PRFL.PL** attach-PST[-PL]   half-POSS-PRFL.PL
         tulə-ji-du-tin   *ərroj*   *ədi-l-tɕa*   *umnat*
         attach-PRS.PTCP-DAT.ESS-3PL INTERJ.EVK   blow(of.wind)-INCH-PST   INTS
         'They had attached one half of **the nose**, as they were attaching the other
         half, suddenly the wind started to blow.'
         (APN_two_sisters: 10)

     b. *hul-mi*   *hul-mi*   *ɟaɟa-βa*   *βa:-tɕa*   *taji-ŋ-ŋi*   *βa:-ja:n*
         go-SS.COND   go-SS.COND   uncle.R-ACC   kill-PST   DIST-POSS-PRFL.SG   kill-SS.ANT
         na:-tɕa   **lodka-j**   **oŋokto-du-n**
         put-PST   **boat-PRFL.SG**   **nose-DAT.ESS-PX.3SG**
         'Going and going he killed a bear; having killed it he put it on the **nose of
         the boat**.' (GIK_bear: 19)

In contrast to body parts, which do occur with -*ŋ(i)*, no examples of the obligatorily
possessed kinship terms carrying this suffix are found in the corpus.

4.1.2 Associative possession of non-possessible nouns

By far the largest proportion of productively used tokens of -*ŋ(i)* are found with non-
possessible nouns when these occur in associative possession constructions. For
example, in (10a) the person referred to by the 1PL possessive-marked noun *bəjə*
'person' is a human who has entered the hut of foxes who are holding a shamanizing
session. The possessive marking indicates the relationship established by his having
sat down among the foxes (who are here the speakers) and might, in addition, express
a certain respect or awe on their part, since they assume he must be a shaman. In (10b)
the associative relationship between the 2SG 'possessor' and the fox lies in the fact that
the fox has tricked the addressee, a flying squirrel, into giving him her children one by
one, which he then ate. Finally, in (10c) the setting of the sun has a direct impact on the
two female protagonists cross-referenced by the 1PL possessive marking since they are
lost in the forest and clearly will not be able to find their way home in the dark.

(10) a. *gə*   *əj*   **bəjə-ŋi-t**   *[…]*   *sama:n=mal*   *bi-ɟiŋa-n*
          DP   PROX   **person-POSS-PX.1PL.IN.ARCH**   shaman=INDEF   be-FUT1-3SG
          gun-ə
          say-NFUT[3PL]
          '"Oh, **this person** (lit. this person of ours) is probably a shaman", they say.'
          (APK_fox: 127)

     b. **solaki-ŋi-s**   *ola:k*   *gun-ə-n*
          fox-POSS-PX.2SG deceiver   say-NFUT-3SG
          '**Your fox** is a liar.'
          (APN_omki: 39)

c. | *gə* | *ŋənə-jə-βun* | *ŋənə-jə-βun* | ***siβu-ŋi-βun*** | *tik-tɕa* |
    |---|---|---|---|---|
    | DP | go-NFUT-1PL.EX | go-NFUT-1PL.EX | **sun-POSS-1PL.EX** | fall-PST[3SG] |

'We go and go, **the sun** (lit. our sun) set.'
(APN_zabludilisj: 27)

An associative relationship flagged with possessive marking can also be of a more stable nature, such as that uniting a mother and her son in (11a), whom she refers to as 'my Vova' (a hypocoristic form of Vladimir), or that between a river and the person living on it (11b).

(11) a. | *i* | ***vova-ŋi-β*** | *ɟo-tki-j* | *əmə-jaːn* | *taja-βa* |
          |---|---|---|---|---|
          | and.R | **PERS.NAME-POSS-PX.1SG** | house-ALL-PRFL.SG | come-SS.ANT | DIST-ACC |

ves	*ulgutɕaːn-a-n*
all.R	tell-NFUT-3SG

'And **my Vova** came home and told all about it.' (talking about her son)
(AET_bear: 35)

b. | *ɟepu-βkan-na-ji-du-j* | *itɕe-je-n* | ***beja-ŋi-n*** |
    |---|---|---|
    | eat-CAUS-AM-PRS.PTCP-DAT.ESS-PRFL.SG | see-NFUT-3SG | **river-POSS-PX.3SG** |

bad-gida-li-n	*solaki*	*noŋan-duki-n*	*seːŋa-ja-n*
opposite-SIDE-PROL-PX.3SG	fox	3SG-ABL-3SG	???-NFUT-3SG

'While she was going to feed [her puppy] she sees, on the opposite side of **the river** [where she lives] a fox is ??hiding from her.'
(APK_1chindakan: 20)

In all of these cases, it is the possessive suffixes on the noun that express the pragmatically or situationally salient associative relationship, as shown for the directly possessed 'steamer' and 'needle' in (3e) and (4) above. Yet since the entities in Examples (10) and (11) belong to the class of non-possessible items, *-ŋ(i)* is necessary to license the possessive marking. Whereas in many cases the membership in the non-possessible class is semantically motivated (i.e., nouns denoting the landscape, wild animals or natural objects), the use of *-ŋ(i)* with proper nouns is a formal and not a semantic requirement. This is demonstrated by (11a): the same individual *Vova* could have been referred to by the speaker with directly possessed kin terms, such as *omolgi-β* 'my son' (boy-PX.1SG) or *hutə-β* 'my child' (offspring-PX.1SG).

4.1.3 Particularization via possession of non-possessible nouns

Non-possessible nouns referring to uncountable masses of an entity, such as wood, water, money, or food items, can carry possessive suffixes to pick out a particular subset of the entity that is in the possession of an individual and that is intended for their personal use. In this case, the suffix *-ŋ(i)* is required to license the possessive

marking. Thus, 'your water' in (12a) refers to a particular subset of water that you need in the house for drinking, cooking, or washing. Possessive marking on the noun *mo:* 'tree, wood' can result in two different readings: it can refer either to wood that is going to be used in the fire of the 'possessor' (12b), or to a piece of wood that is in someone's possession for use as a staff or a stick. Similarly, the bread that is being sought in (12c) is only a very small and particular subset of all bread, namely the individual ration that was allocated during the war.

(12) a. *ineŋ-ti*   **mu:-ŋ-ŋi**   *əmə-β-ŋati-s*
          day-ADVR   **water-POSS-PRFL.SG**   come-VAL-DEONT-2SG
          'You must bring **the water** (lit. your water) during the day.'
          (DIN_rite: 12)

      b. *ŋonu-jə-n*   **mo:-ŋ-ŋi**   *hena-dgi-je-n*
          to.leave-NFUT-3SG **wood-POSS-PRFL.SG**   carry.load.on.back-REP-NFUT-3SG
          'He goes and carries the firewood on his back.'
          (DIN_starik_staruha: 24)

      c. *əmna*   **xlepu-ŋ-ŋaj**   *ulguma-mi*   *ŋənə-tɕa-βun*
          once   **bread.R-POSS-PRFL.PL** ask-SS.COND go-PST-1PL.EX
          'Once we went to ask for **our** (ration of) **bread**, …'
          (APN_DIN_conversation: 152)

This 'particularization' function of possessive marking of non-possessible nouns can also be found in some special cases, namely to refer to an individual's age [(8) above and (14) below], to single out a particular individual from a larger set, and to derive the terms for 'husband' and 'wife' from nouns meaning 'old man' and 'old woman' (13a), (13b), respectively.[7] The terms for 'husband' and 'wife' can be interpreted as referring to one particular individual among all the possible 'old women/men' (who in the case of spouses, of course, do not necessarily have to be old) who has a particular relationship with the 'possessor'. These terms are already lexicalized,[8] as can be seen from the fact that they serve as the base for the derivation of the verbs 'to marry' (13c), (13d). A similar case of particularization via possessive marking can be found in Udihe, where indirect possessive marking of the nouns meaning 'girl' and 'boy' results in a meaning of 'daughter' and 'son', respectively (Nikolaeva and Tolskaya 2001: 139–140).[9] The language-specific nature of this kind of possessive

---

7 As mentioned in Footnote 4, directly possessed 'woman' can also be used with reference to someone's wife, but the use of indirectly possessed 'old woman' in this function is more than three times as frequent.

8 Nevertheless, in some fairy tales in which the protagonists are old spouses, the words *otika:ŋinin* and *atika:ŋinin* are variably translated as 'old man' and 'old woman' rather than 'husband' and 'wife'.

9 Note that Nikolaeva and Tolskaya (2001) analyse this case of particularization as a function of the so-called alienable suffix -*ŋi*, not of the possessive marking.

marking can be seen in the fact that in Negidal the word for 'son' derives from directly possessed 'boy' [without addition of *-ŋ(i)*], while in Udihe the direct addition of possessive suffixes, without *-ŋi*, to the term for 'old man' results in a meaning of 'husband' (Nikolaeva and Tolskaya 2001: 127).

(13) a. *otika:-ŋi-nin*
        old.man-POSS-PX.3SG
        'her husband'

    b. *atika:-ŋi-nin*
        old.woman-POSS-PX.3SG
        'his wife'

    c. *otika:ŋ-la:-*
        husband-VR
        'to marry (from a woman's perspective)'

    d. *atika:ŋ-la:-*
        wife-VR
        'to marry (from a man's perspective)'

With respect to a person's age, it is the particularization via 'possession' of the noun meaning 'year' that has this function ([14], see also [8] above). As will be discussed in the following section, a reading of particularization is also attained when numerals carry possessive suffixes.

(14) …*min-du*   *bi-tɕa-n*   *ɲuŋun*   **anŋani-ŋi-β**
     1SG.OBL-DAT.ESS be-PST-3SG six   **year-POSS-PX.1SG**
     '… I was six years old.'
     (GIK_olan: 3)

4.2 The suffix *-ŋ(i)* marking non-possessible parts of speech

As mentioned in Section 3.2, apart from non-possessible nouns the suffix *-ŋ(i)* occurs widely with other word classes. Here its use does not have any semantic motivation but is required for formal reasons. The possession of numerals (Section 4.2.1) can be analyzed as an example of particularization, similar to that described for nouns in Section 4.1.3. Another class of formally non-possessible items is demonstratives. We discuss the diverse contexts in which they occur with possession marking in Section 4.2.2. We also find *-ŋ(i)* with modifiers such as adjectives or participles in adnominal possessive constructions with elided possessee (Section 4.2.3); in these cases, the possessive suffix transfers from the head to the modifier, thus triggering the insertion of *-ŋ(i)*.

4.2.1 Particularization via possessive marking of numerals

Possessive marking on numerals has a similar particularization effect as that seen for certain nouns (e.g., wood, water, years, or spouses), namely, it serves to single out a particular individual from a group (15a). With numerals higher than one the resulting reading is that of an ordinal numeral (15b).

(15) a. ***omoŋ-ŋi-βun***   *dəlbəni-ɲa-βa*   *aja-t*   *ə-tɕə*   *aː-ja*
          one-POSS-1PL.EX night-AUG-ACC   good-ADVR   NEG-PST   sleep-NEG.CVB
          uɲum-mi
          freeze-SS.COND
          '**One of us** didn't sleep well all night, freezing.'
          (GIK_2tatarskoe: 62)

      b. *taji=gda*   *ton-ŋi-tin*   *dolin-du*   *təgə-t-tɕa*
          DIST=CONTR   **five-POSS-PX.3PL** middle-DAT.ESS   sit.down-TAM2-PST.PTCP
          bəjə-l-βa   *itɕe-je-n*
          person-PL-ACC   see-NFUT-3SG
          'That one, **the fifth** that sat in the middle, saw the men.'
          (DIN_kidnap: 41)

4.2.2 Possessed demonstratives

Another highly frequent use of the suffix *-ŋ(i)* is with the distal and proximal demonstrative pronouns *taj* 'that' and *oj* 'this'. These demonstratives are very frequent in Negidal speech: in the corpus we find 4975 instances of *taj* and 1386 instances of *oj*.[10] Mostly they are used without any possessive marking, and when they do take possessive suffixes, these are always preceded by the marker of non-canonical possessive constructions *-ŋ(i)*.

There are 147 examples with indirectly possessed demonstratives in the corpus, both distal and proximal, i.e., these constitute about one-fifth of all the examples carrying the suffix *-ŋ(i)*. As found for some proper nouns, the use of *-ŋ(i)* with possessed demonstrative pronouns can be shown to be formally rather than semantically motivated, as illustrated by example (16): here the demonstrative refers to an inherently possessed body part, namely the foot of the person who is doing the bandaging, which takes direct possessive marking as seen in the phrase added as an afterthought. The fact that *taj* carries *-ŋ(i)* can thus only be explained by the fact that demonstratives are formally non-possessible and cannot be directly possessed.

(16) ***taji-ŋ-ŋi***   *[…]*   *kaβsa-ja-n*   *bogdi-j*
      DIST-POSS-PRFL.SG   wrap.up-NFUT-3SG   leg-PRFL.SG
      'He bandaged **all this**, his foot.'
      (DIN_starik_staruha: 62)

---

10 This count does not differentiate between nearly lexicalized adverbial uses like *ta-du* 'there' (DIST-DAT.ESS), *o-du* 'here' (PROX-DAT.ESS), or *ta-duk* 'then' (DIST-ABL), attributive uses, and proper pronominal uses when a demonstrative pronoun functions syntactically as a verbal argument. However, the case-marked forms of the distal demonstrative, which are likely to have an adverbial reading, make up only ~16 % of all the instances in the corpus.

Possession of the distal demonstrative pronouns is very often associative, as seen in (17) with the following context: two women saw someone in a boat who they thought was a relative, so they called him, but when he got closer, they saw he was a stranger. The possessive marking here underlines the salient relation between the women and the man they were talking about and whose attention they were trying to draw.

(17) ***taji-ŋi-βun***   *ali-l-laːn*   *gun-ə-n*   *ja=ka*
      DIST-POSS-PX.**1PL.EX** be.angry-INCH-SS.ANT say-NFUT-3SG   1SG.R=FOC
      otkuda   *gun-ə-n*   *nemec-duk*   *priexal*   *li*
      from.where.R   say-NFUT-3SG   German.R-ABL   come.PST.R   Q.R
      '**He** [lit. 'that one of ours'] got angry and said: "So where do I come from", he said, "from the Germans, or what?"'
      (APN_anecdotes: 27)

In addition, the distal demonstrative frequently occurs with possessive suffixes when it substitutes for a noun that would take possessive marking. For example, in (18) the distal demonstrative replaces the word *nuptinman* 'lining', which takes 3SG possessive marking since it stands in a part-whole relationship to the implied 'possessor', a fur rug. In its function as an anaphoric pronoun, *taj* takes the same 3SG possessive marking. As in (16), the possessive marking on the demonstrative has to be licensed with the suffix *-ŋ(i)*, even though the noun referred to is directly possessed.

(18) *nuptin-ma-n*   *o-si-n*   *man* *uli-jə*   *o-si-n*   *itɕe-je*
      lining-ACC-PX.3SG NEG-NFUT-3SG self sew-NEG.CVB   NEG-NFUT-3SG see-NEG.CVB
      bi ***taji-ŋ-ŋa-n***   *uli-m*
      1SG DIST-POSS-ACC-PX.**3SG**   sew[NFUT]-1SG
      'She doesn't sew the lining herself, she doesn't see, I sew **that**.'
      (DIN_komalan_prixozhka: 12)

The proximal demonstrative *oj* is used in deictic rather than anaphoric functions. It is frequently accompanied by a co-speech gesture, independently of its use with or without possessive markers. The possessive marking of the proximal demonstrative pronouns appears to have subtle pragmatic nuances that we as outsiders cannot access, since possessive-marked forms do not differ intonationally or gesturally from non-possessed forms. For instance, in (19), which is taken from a procedural explanation, the speaker does not emphasize the possessive-marked demonstrative intonationally, nor does she point while producing it, but she emphatically points and pronounces the final unpossessed demonstrative *əj-gatɕin*. It is thus not clear why she chose to add a possessive suffix to the first demonstrative. However, independently of the reasons why in some cases demonstratives receive possessive marking, formally they belong to the class of non-possessibles; thus, addition of possessive suffixes needs to be licensed through addition of the specialized marker *-ŋ(i)*.

(19)   *uː-li-dgi-s*   ***oji-ŋi-nen***   *oː-ŋati-nin*   *počti*
       scrape.hide(uu)-INCH-REP-2SG   **PROX-POSS-PX.3SG**   become-DEONT-3SG   nearly.R
       əj-gatɕin
       PROX-SML
       'You again start to scrape, so that this side becomes nearly like this.'
       (DIN_preparing_hide: 97)

Furthermore, both the distal and the proximal demonstrative occasionally function as a placeholder, substituting for a noun that cannot be immediately retrieved. When the delayed noun carries possessive marking, whether for semantic or pragmatic reasons, the demonstrative functioning as a placeholder carries the same possessive suffix, and *-ŋ(i)* is required to license this marking (see [16] above with the distal demonstrative as a placeholder and [20] with the proximal demonstrative in this function).

(20)   *oŋi-m*   ***oji-ŋ-duli-n***   *ɟaβa-ja-n*   *del-duli-n*
       mother-PX.1SG   **PROX-POSS-PROL-PX.3SG**   grab-NFUT-3SG   head-PROL-PX.3SG
       'My mother grabbed it by this, by its head.'
       (DIN_rybalka: 25)

4.2.3 Modifiers of an elided possessee

The suffix *-ŋ(i)* also occurs on modifiers in constructions with an elided head noun. In the corpus, we find eight examples of *-ŋ(i)* occurring on a modifier: it marks participles, adjectives, and the term *geː*, which is polysemous between an adjectival reading 'other' and an ordinal numeral 'second'. Furthermore, some of the examples of indirectly possessed demonstratives, especially the distal demonstrative, could potentially also be analyzed as modifiers with elided head nouns. It is important to note that the modifier in these constructions is not a possessor, since Negidal uses a dedicated, albeit clearly related, suffix to mark the possessor when the head of an adnominal possessive construction is elided (see Section 6). The examples below illustrate the use of *-ŋ(i)* with an adjective and a participle (21a) and the term *ge:* (21b). In these cases the modifier carries the possessive and case marking that would have been found on the head noun, and *-ŋ(i)* is required to license the possessive marking on parts of speech that are not possessible. This requirement is again of a formal, and not semantic, nature: for example, 'bucket' is a noun that can take possessive suffixes directly (21c), so that the occurrence of *-ŋ(i)* on the modifier 'second' in (21b) cannot be explained by it having been copied from the omitted head.

(21) a. *gə tar   əjəki bitɕa uŋun **ke:ruken-ŋ-ŋi**   mani-n ɟep-pa-n*
       DP DIST.Evk frog BI.PTL HESIT **unripe-POSS-PRFL.SG** self-3SG eat-NFUT-3SG
       *uŋun-mi   **i:-tɕa-ŋ-ŋi**   okin-du-j*
       HESIT-PRFL.SG **ripen-PST.PTCP-POSS-PRFL.SG** older.sister-DAT.ESS-PRFL.SG
       na:-jə-n
       put-NFUT-3SG
       'Well, as for the frog, it eats **the unripe** (berry) himself, and **the ripe one** he
       keeps (lit: puts) for his older sister.'
       (APK_frog_tale: 37)

   b. ***ge:-ŋ-ŋəj***   *kaltaka-(βa)-n   təsi-ja-(βun)*
      second-POSS-PRFL.PL   half-ACC-PX.3SG   gather-NFUT-1PL.EX
      'We had gathered half of **our second** (bucket) [i.e., it was half-full].'
      (APN_cheremsha_brodjaga: 68)

   c. ***vedro-βaj***   *ɟaβa-gaj   təβli-nakan   ŋənə-gaj* …
      bucket.R-PRFL.PL   take-HORT.PL   pick.berries-SS.SIM   go-HORT.PL
      'Let's take **our bucket**, let's go picking berries …'
      (APN_cheremsha_brodjaga: 88)

In summary, the suffix *-ŋ(i)*, which was previously analyzed as a marker of 'indirect'
or 'alienable' possession (e.g., Cincius 1982: 20; Pevnov and Khasanova 2006:
503–504), occurs with nouns denoting entities that are impossible to reconcile with
alienable possession, and it also occurs with items belonging to very distinct pos-
sessive classes, both obligatorily possessed body parts and a variety of non-
possessible items. This might appear to indicate that this suffix has a diverse range of
functions, as was proposed for Negidal's sister language Udihe by Nikolaeva and
Tolskaya (2001: 135–140; 634–635). However, as we will outline in the following, it is
indeed possible to subsume all the diverse uses under one single function, namely the
marking of non-canonical possessive constructions.

4.3 Analysis in terms of non-canonical possessive constructions

To recapitulate, in Negidal the suffix *-ŋ(i)* is found in the following possessive con-
structions: (i) when the possessee is a body part that is in the possession of an indi-
vidual who is not the inherent 'possessor' (i.e., what has up to now been analyzed as the
marking of alienable possession); (ii) when the possessee is a noun that denotes a non-
possessible entity, such as a human being or an entity pertaining to nature or a noun
that denotes an uncountable and unpossessible mass, where the possessive marking
serves to highlight a pragmatically salient relation or to pick out a particular item or
individual; and (iii) with different formally non-possessible parts of speech, such as
numerals, demonstratives, adjectives, or participles. In this third category we find
possessive-marked numerals that pick out an individual from a group, demonstratives

that carry possessive suffixes to highlight a salient relationship between the 'possessor' and the possessee or because they substitute for a possessive-marked noun, and adjectives or participles that take on the possessive marking pertaining to the head noun in constructions where the possessee is elided. What unites all of these constructions is the fact that they are non-canonical: body parts are prototypically attached to the body they were born on, so that 'possession' by a non-inherent possessor is unexpected and out of the ordinary. Similarly, non-possessible items such as humans, wild animals, plants, the sun, trees, water, numerals, demonstratives, adjectives, or participles are by definition not expected to be possessed; possessive marking for pragmatic or discourse-based reasons is thus clearly unexpected and non-canonical. The seemingly diverse contexts of use of *-ŋ(i)* can thus be explained by this suffix carrying a single function, namely to flag non-canonical possessive constructions. That these non-canonical possessive constructions occasionally comprise examples involving body parts that appear to show a distinction between inalienable and alienable possession is merely a secondary effect of the actual function of *-ŋ(i)*.

The use of *-ŋ(i)* in Negidal is not necessarily a semantically driven feature but is often governed by formal requirements, as is shown in various instances. Thus, associative possession of proper nouns such as *Vovaŋiβ* in (11a) triggers indirect possessive marking, even though the same individual could be referred to by a directly possessed kinship term. Similarly, in some examples, a modifier (21b) or a possessive-marked demonstrative (16, 18) stands in for a possessee that would either obligatorily or optionally take direct possessive marking. Furthermore, possessive-marked proximal demonstratives occur in parallel with unpossessed forms without any easily discernible difference in use. Nevertheless, all the examples of possessive-marked demonstratives carry *-ŋ(i)*.

To date, the suffix *-ŋ(V)* found in Tungusic languages has been treated as a marker of 'alienable', 'indirect' or 'relative' possession (e.g., Boldyrev 2007 for Evenki, Novikova 1960 for Even, and Nikolaeva and Tolskaya 2001 for Udihe; cf. Nichols 1988; Nichols and Bickel 2013), with analyses of its occurrence couched in semantic terms. Whereas Novikova (1960: 141–152) and Boldyrev (2007: 122–139) attempt to explain – not always successfully – all occurrences of the suffix *-ŋ(V)* by referring to a single function, namely that of marking 'indirect', 'relative', or 'symbolic' possession (*kosvennaja*, *otnositel'naja*, or *uslovnaja prinadležnost'*), Nikolaeva and Tolskaya (2001: 135–141) attribute five different types of functions to this suffix: "(i) temporary ownership […]; (ii) alienable possession […]; (iii) an abstract associative relationship through a certain activity […]; (iv) a substitutional meaning 'instead of something' […]; (iv – *sic*) the predicative function" (p. 135). These descriptions thus differ considerably from our analysis of *-ŋ(i)* in Negidal, for which we identify a single function based in part on formal grounds. We, therefore, turn to descriptions of several Tungusic languages to investigate to what extent our analysis of the function of *-ŋ(i)* in Negidal might be valid for the cognate suffixes in its sisters.

5 The marking of non-canonical possessive constructions in other Tungusic languages

We here summarize information on possessive constructions in four relatives of Negidal: Evenki, Even, Udihe and Nanai. Even and Evenki, which are spoken by small speech communities dispersed over the length and breadth of Siberia, are very closely related to Negidal, while Udihe and Nanai, which are spoken in geographical proximity to Negidal, are genealogically distant (Atknine 1997; Janhunen 2012). Our discussion is based on our interpretation of published descriptions and does not necessarily reflect the analysis of or the terms used by the original authors.

Judging from the available sources, the suffix *-ŋi* in Evenki functions in a very similar manner to *-ŋ(i)* in Negidal. As in Negidal, kinship terms and body parts appear to be obligatorily possessed, since they practically always occur with possessive suffixes, whereas terms denoting humans, environmental features, plants, wild animals or birds, and nouns denoting uncountable entities ('water', 'bread', 'wood') cannot carry possessive suffixes directly. Associative possession of such entities has to be licensed by the suffix *-ŋi* (Boldyrev 2007: 126–133; Nedjalkov 1997: 145). Furthermore, when adjectives, participles or demonstratives carry possessive suffixes because the head noun is elided, this possessive marking also has to be licensed with *-ŋi* (Boldyrev 2007: 133–136).

In Even, too, the suffix *-ŋ* occurs in the same contexts as *-ŋ(i)* in Negidal: with proper nouns, terms referring to people, the environment, wild animals and food, as well as adjectives, numerals, participles and demonstratives when the head noun is elided (Novikova 1960: 147–150). Interestingly, Novikova (1960: 141, 147) provides examples of this suffix attached to kin terms, with a reading of social rather than biological kinship (22).

(22)   Even

timin   *kuŋakan*   **hutə-ŋ-ə-n**   *əliki-ŋ-ge-j*
next.day   child   **offspring-POSS-EP-PX.3SG**   squirrel-POSS-DEST-PRFL.SG
gel-ne-n   *nəkitɕi-l-rəkə-n*   *iret-le*   *tɕukatɕan*
search-AM[NFUT]-3SG   shoot.arrow-INCH-COND-3SG   young.larch-LOC   bird
do:-n   *gə:n-ni*   *kuŋa-ŋ-təki-j:*
to.land[NFUT]-3SG   say[NFUT]-3SG   child-POSS-ALL-PRFL.SG
amə-ŋ-ə-s   *ekən-ɟ-i*   *atikaŋ-rə-n*
father-POSS-EP-PX.2SG   older.sister-INS-PRFL.SG   marry-NFUT-3SG
'The next day the boy, **the one who is considered his child**, went to hunt squirrels (lit. went to look for squirrels for himself). When he started to shoot, a bird landed on a young larch and said to that boy: **"The one who is considered your father** is married to his older sister."'
(Novikova 1960: 148, our glossing and English translation)

In Udihe, too, possessive constructions are similar to those found in Negidal: while kinship terms and body parts tend to be obligatorily possessed, ownership of a body part by someone other than the inherent 'possessor' is marked by -*ŋi*, as is 'possession' of 'land' and other landscape terms, terms denoting humans, the words for 'tree' and 'money' (and, somewhat unexpectedly, 'cow'), as well as substantivized adjectives (Nikolaeva and Tolskaya 2001: 135–141).

As in Negidal, in Nanai body part and kinship terms (except in vocative use) are obligatorily possessed, while proper nouns and meteorological terms as a rule do not occur with possessive suffixes (Avrorin 1959: 119–127). The 'indirect possession' suffix -*ŋgo*/-*ŋgu* occurs frequently with non-possessible nouns that are associatively possessed, and can also be added to adjectives and interrogative pronouns (Avrorin 1959: 160–161).

In summary, the types of nouns and other lexemes that require addition of the suffix -*ŋ(V)* to license possessive marking overlap to a large extent across Negidal, Evenki, Even, Udihe, and Nanai: kinship and body part terms are obligatorily possessed, while terms denoting humans, environmental features, uncountable masses and materials cannot take possessive suffixes unless these are preceded by -*ŋ(V)*. Adjectives, participles, and demonstratives that take possessive marking because they substitute for an elided head noun need -*ŋ(V)* to license the possessive marking. From this perspective, the analysis we propose for Negidal could be extended to -*ŋ(V)* in other Tungusic languages, namely that this suffix has as its single function the marking of non-canonical possessive constructions. Like the possession of a body part by an individual who is not the inherent possessor, a kinship relationship that is not a true biological relationship is unexpected and not canonical, explaining why such a relationship is flagged with -*ŋ* in Even (22), resulting in an apparent marking of alienable possession.

6 Possessor marking in constructions with elided possessee in Negidal and other Tungusic languages

The description of non-canonical possessive constructions in Negidal would not be complete without describing another suffix, namely -*ŋi*, which was briefly mentioned in the introduction. As opposed to -*ŋ(i)*, which is found on the possessee and its modifiers, -*ŋi* occurs exclusively on possessors in adnominal possessive constructions with an elided head noun; hence we gloss it PSR, 'possessor of elided head'. This suffix differs slightly in form from that found with possessees: while in the latter case,

the base form is *-ŋ* with *-i* added as an epenthetic vowel in certain morphonological environments,[11] the suffix that occurs with possessors has the base form *-ŋi*. This difference can clearly be seen when comparing two accusative-marked forms, one a possessee (23a) and one a possessor with an elided head noun (23b). In (23a) the bilabial fricative of the accusative case marker assimilates to the velar nasal of *-ŋ(i)*, whereas in (23b) the accusative suffix retains its original shape following the vowel of *-ŋi*. Nevertheless, the two suffixes are clearly diachronically related (cf. Sunik 1982: 65) as well as functionally similar, as will be discussed in Section 7.

(23) a. *tɕoːka-**ŋ**-**ŋa**-s*   b. *daβa-**ŋi**-**βa***
          grass-**POSS**-**ACC**-PX.2SG   chum.salmon(autumn)-**PSR**-**ACC**
          'your grass'   'chum salmon's (skin)'

Our analysis of *-ŋi* is based on 24 clear examples in the corpus (see coding sheet, which also contains several examples with calques from Russian and several unclear cases). This suffix is attested in those cases when the possessee is omitted from an adnominal possessive construction: compare (24a) with the overt head noun *sobgo* 'fish skin' with (24b), where *-ŋi* substitutes for the head of the possessive phrase 'skin of a catfish'. Although in examples such as (24c) the possessee is present in the sentence, the possessor having been added as an afterthought, it is not present in its canonical position in the possessive construction, namely following the possessor.[12]

(24) a. ***som   sobgo-nin***   *kak   uŋun sapjan=da*
          catfish.R fish.skin.NAN-PX.3SG like.R HESIT morocco.leather.R=ADD
          'The skin of a catfish is like morocco leather.'
          (APN_DIN_rybjakozha: 25)
      b. ***som-ŋi***   *kak   sapjan-gatɕin*
          catfish.R-PSR   like.R   morocco.leather.R-SML
          '**A catfish's** [skin] is like morocco leather.'
          (APN_DIN_rybjakozha: 27)
      c. *…ɲan   əmən   dəl-βa-n   tɕeka-ja   taj **amban-ŋi-βa***
          again   one   head-ACC-PX.3SG cut.off-NFUT[3PL] DIST **devil-PSR-ACC**
          '… they cut off another head **of that devil** (lit. they cut off another head of his, of that devil).'
          (DIN_Emeksikan: 110)

---

11 *-ŋ* occurs before syllabic morphemes: overt case markers, the verbalizer *-laː* and reflexive possessive markers when the nominal is in direct object position; *-ŋ-i* occurs before the nonsyllabic plural suffix and with nominals in nominative case and before the proprietive suffix.

12 The canonical form of the possessive construction in (24c) would be *amban dəlβan*.

Since possessive noun phrases are not restricted to any specific position in the clause we find *-ŋi*-marked possessors in subject (24b), direct object (24c), and predicate position (25), although the latter are rare in the corpus (see coding sheet).

(25) *babuška   nikolaeva   tože   **kazarov-ja-ŋi***
      granny.R   PERS.NAME   also.R   **PERS.NAME-ASS.PL-PSR**
      'Granny Nikolaeva was also **one of the Kazarovs**.'
      (DIN_APN_za_chaem: 140)

Interestingly, the split in marking a modifier depending on whether it is a possessor (marked with *-ŋi*) or another type of modifier [marked with *-ŋ(V)*] is found not only in Negidal, but is also present in some, albeit not all, other Tungusic languages. For Evenki, Bulatova and Grenoble (1999: 14) postulate a formal distinction of the suffix that marks possessors from the so-called marker of indirect possession: they analyze the morpheme that attaches to possessors as having a long vowel (*-ŋi:*) as opposed to the short vowel they determine for the suffix that marks possessees. However, this distinction is not mirrored in Nedjalkov's (1997: 123–125) analysis, which appears to identify the two suffixes as one and the same form, an analysis that also seems to be taken by Boldyrev (2007: 122–139).

In contrast, in Even there is a clear formal distinction between the suffix that attaches to the possessee, which consists solely of the velar nasal *-ŋ* (26a), and the suffix that attaches to possessors in constructions with elided head, which takes the form *-ŋi* (26b); Cincius 1947: 144, 148; Novikova 1960: 147–152). The latter can occur in subject, predicate, direct object, and attribute position and is called a "special possessive form of nouns" by Novikova (1960: 150–152).

(26) a. Even
          *hun   buju-**ŋ**-ə-sən*
          2PL.OBL   wild.reindeer-**POSS**-EP-PX.2PL
          'your wild reindeer'
          (Novikova 1960: 147, our glossing and English translation)
      b. Even
          …*taduk **hin-ŋi-β**   man-riɟur   ɲan **min-ŋi-β**   ɟeb-ɟi-p*
          …then **2SG.OBL-PSR-ACC** use.up-SS.ANT.PL also **1SG.OBL-PSR-ACC** eat-FUT-1PL.EX
          '(Let's first eat your stored fish), then, when we have eaten **yours**, we will eat **mine**.'
          (Novikova 1960: 151, our glossing and English translation)

For Udihe, Nikolaeva and Tolskaya (2001: 141, 634) analyze the suffix *-ŋi* that occurs with possessors as clearly being identical to the "alienable possession suffix" and analyze it as expressing predicative possession: "The suffix *-ŋi-* here signifies that the possessive relationship is the main predication in the sentence. For obvious semantic

reasons, only the alienable possessive relationship can be predicated by the construction in question."

In contrast to Udihe, and like Even and Negidal, Nanai, too, makes a formal distinction between the suffix that marks possessees (-*ŋgo/-ŋgu,* [27a], [27b]) and that which marks possessors (-*ŋgi,* [27c], [27d]; Avrorin 1959: 155–163, 186–192), which Avrorin calls the "predicative-possessive form". The same split is furthermore found in Uilta, a close sister of Nanai (Ozolinja 2013: 128–133, 253). In Nanai, possessors are marked with the suffix -*ŋgi* when they occur in predicative position, when they are postposed to their head (as an afterthought), or when the head is elided because it is retrievable from the preceding discourse (Avrorin 1959: 187–189).

(27) a. Nanai   b. Nanai
         mi: *naj-**ŋgo**-i*   *mi:*   *eŋgur-**ŋgu**-i*
         1SG   human-POSS-PX.1SG   1SG   wolf-POSS-PX.1SG
         'my human'   'my wolf'
         (Avrorin 1959: 160, our glossing and English translation)
      c. Nanai   d. Nanai
         *naj-**ŋgi***   *soli-**ŋgi***
         human-PSR   fox-PSR
         'belonging to a human'   'belonging to a fox'
         (Avrorin 1959: 186, our glossing and English translation)

Unlike the Tungusic languages spoken in Russia, Written Manchu (attested in northern China) has a genitive case form that marks the possessor in adnominal possessive constructions, but it lacks suffixes that attach to the head noun in such constructions, having neither the direct possession markers nor the suffix -*ŋ(V)*. However, it does have a suffix -*(n)iŋga*[13] that marks the possessor in predicative position or when the possessee is elided (Avrorin 1956: 99, 2000: 74, 86) and that thus corresponds to the suffix -*ŋi* found in Negidal.

In the Tungusological tradition, the suffix -*ŋi* is often considered a marker predominantly of predicative possession (Avrorin 1956: 94, 1959: 186–188; Nedjalkov 1997: 123–124; Nikolaeva and Tolskaya 2001: 634–635). In contrast, we analyze the function of this suffix as marking possessors of elided head nouns, with the predicative position of the NP being a secondary aspect that emerges from discourse. Our analysis is fully compatible with the data presented by Avrorin (1956: 99) on Manchu, Avrorin (1959: 186–189) on Nanai, and Novikova (1960: 150–152) on Even; a parenthetical insertion by Avrorin (1956: 97) indicates that the same might hold for Evenki.

---

13 Avrorin (1956: 99) analyzes this suffix as a combination of genitive suffix –(*n)i* and the predicative-possessive suffix -*ŋə*.

We are thus faced with formally similar (and most probably related), yet distinct suffixes in at least three Tungusic languages that appear to have distinct functions, namely the marking of possessees on the one hand and the marking of possessors on the other. Nevertheless, as we discuss in the concluding section, these discrepancies can be reconciled under a unified analysis as markers of non-canonical possessive constructions.

7 Discussion and conclusions

To summarize, the Tungusic languages have one (Evenki in one analysis, Udihe) or two (Evenki in an alternative analysis, Negidal, Even, and Nanai) formally very similar suffixes that occur in possessive constructions. One of these has the form *-ŋi* in all the languages except for Nanai, where it is *-ŋgi*, the other is *-ŋ* in Even and Negidal (with insertion of an epenthetic schwa or [i], respectively) and *-ŋgo/-ŋgu* in Nanai. These suffixes are most probably cognate (cf. Sunik 1982: 65), with the protoform arguably being *-ŋi* – and, as shown by the Manchu data – the original function possibly being the marking of possessors in adnominal constructions in which the head noun is omitted. In the languages that have two formally distinct suffixes, the formal distinction corresponds to a syntactic distinction, since the suffix *-ŋi* occurs exclusively with possessors in constructions with elided head nouns, while the suffix *-ŋ(V)* occurs with possessees. However, while the formal split corresponds to the syntactic split between possessor- and possessee-marking, there is also non-correspondence between form and syntactic function, since like *-ŋi* the suffix *-ŋ(V)* occurs with modifiers of elided possessees. Thus, in some languages, two distinct suffixes are found in adnominal possessive constructions with an elided head noun. A diachronic analysis of these suffixes in the Tungusic languages might help elucidate how these distinct functions evolved but has to be left for a later stage.

In addition to the shared origin of these suffixes, they can also be analyzed as sharing an overarching function, namely the FLAGGING OF NON-CANONICAL POSSESSIVE CONSTRUCTIONS. In Section 4.3, we argued that the suffix *-ŋ(i)* that occurs in possessive constructions in Negidal has erroneously been analyzed as a marker of alienable possession, following a Tungusological tradition. As our analysis shows, this suffix signals either the possession of a body part by a non-inherent possessor, or the possessive marking of non-possessible items, both semantically non-possessible nouns and formally non-possessible parts of speech, such as proper nouns, numerals, demonstratives, and adjectives. The suffix *-ŋi* that marks the possessor seems to have a similar flagging function, though with a different type of non-canonical construction. As pointed out in Section 3.1, it is quite common to omit the POSSESSOR from possessive constructions, since in adnominal constructions this is indexed by the

personal possessive suffixes, and its identity can thus be retrieved fairly straight-forwardly. The canonical Negidal adnominal possessive construction can thus be taken to consist of a head noun carrying possessive suffixes and an optionally expressed possessor; the inverse, namely an overt possessor and an elided head noun is unexpected and non-canonical. Therefore the function of *-ŋi* marking possessors of elided head nouns can be subsumed synchronically under the overall function that we propose for *-ŋ(i)*, namely the marking of non-canonical possessive constructions. Judging from the available descriptions, this analysis could be extended to the cognate suffix(es) in Negidal's sister languages.

Non-canonical possessive constructions are clearly a complex, multilayered and interlaced phenomenon, with semantic, formal, and syntactic factors playing a role (Figure 1). Regarding nouns, possession can be seen as non-canonical mainly for semantic reasons: the suffix is used either with body parts that are possessed by a non-inherent, i.e., non-canonical, possessor, or with nouns that refer to entities that cannot be possessed, such as humans or different natural entities. In the case of other parts of speech, the use of the non-canonical possession marker has purely formal reasons: all non-nouns are marked with *-ŋ(i)* in possessive constructions, irrespective of whether they are associatively possessed, refer to particularized individuals, or stand in for a directly possessed noun. Syntactic considerations are important with respect to constructions that are structurally non-canonical. Although possession of formally non-possessible modifiers such as adjectives and participles needs to be licensed with *-ŋ(i)*, while possessors carry *-ŋi*, these seemingly disparate construc-tions share the omission of the head noun of an adnominal possessive construction. We summarize the different types of non-canonical possessive construction in Figure 1.
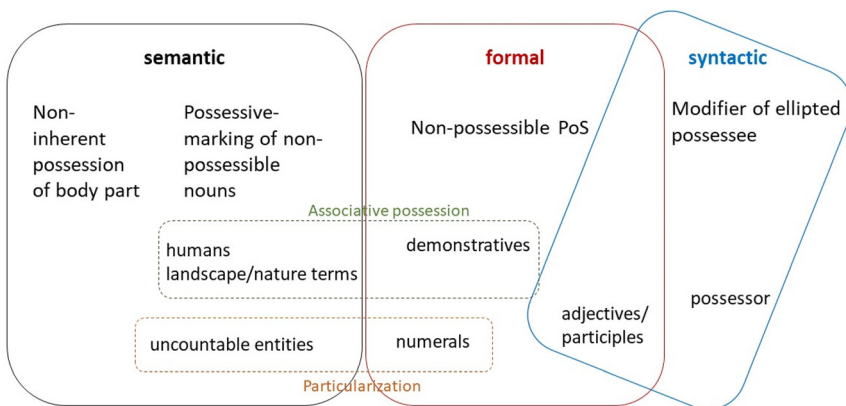

Figure 1: Types of non-canonical possessive constructions in Negidal.

Our study thus demonstrates that descriptions of the (in)alienability distinction supposedly found in Tungusic languages should be treated with caution. While this distinction appears to emerge straightforwardly from the oft-cited examples involving 'alienably possessed' body parts, close examination of all the contexts of use of the 'alienable possession' marker shows that this interpretation is merely a secondary result of the particular type of non-canonical construction involved. While it would of course be rash to conclude from this single case that all instances of inalienable versus alienable possession identified worldwide are erroneous, our study does indicate a need for caution when interpreting such data (cf. the introduction to this special issue, and in particular Rose, this issue).

Author contributions: The order of authors is alphabetic. Both authors collected, analysed, and discussed the data and wrote the paper.
Data availability statement: The data coding sheet for this article may be viewed in the Zenodo repository at: https://doi.org/10.5281/zenodo.7897522.

Abbreviations

ABL	ablative
ACC	accusative
ADD	additive
ADJR	adjectivizer
ADVR	adverbializer

ALL	allative
AM	associated motion
ANT	anterior
ARCH	archaic form of suffixes
ASS	associative
AUG	augmentative
BI.PTL	particle derived from the copula *bi-*
CAUS	causative
COLL	collective
COM	comitative
COND	conditional
CONTR	contrastive
CVB	converb
DAT.ESS	dative-essive
DEONT	deontic future
DEST	destinative
DIST	distal demonstrative
DP	discourse particle
EP	epenthetic vowel
Evk	Evenki borrowing
EX	exclusive
FOC	focus
FUT	future tense
HESIT	hesitative
HORT	hortative
IMP	imperative
IN	inclusive
INCH	inchoative
INDEF	indefinite
INS	instrumental
INTERJ	interjection
INTERR	interrogative root
INTR	intransitive
INTS	intensive
LOC	locative
Nan	Nanai borrowing
NEG	negative
NFUT	non-future
OBL	oblique
PERS	personal (name)
POSS	non-canonical possessive construction
PRFL	reflexive possessive
PROL	prolative
PROP	proprietive
PROX	proximal demonstrative
PRS	present
PSR	possessor of elided head

PST	past
PTCP	participle
PX	nominal possession
Q	question
R	Russian borrowing
REP	repeated action
RES	resultative
SIDE	derivation suffix meaning 'side'
SIM	simultaneous
SML	similative
SMLF	semelfactive
SS	same-subject converb
TAM	tense-aspect-mood
VAL	valency-changing suffix
VR	verbalizer

References

Aralova, Natalia & Brigitte Pakendorf. 2023. Dataset for "non-canonical possessive constructions in Negidal and other Tungusic languages: A new analysis of the so-called 'alienable possession' suffix". *Zenodo*. https://doi.org/10.5281/zenodo.7897522.

Atknine, Victor. 1997. The Evenki language from the Yenisei to Sakhalin. In Hiroshi Shoji & Juha Janhunen (eds.), *Northern minority languages: Problems of survival: Papers presented at the Eighteenth Taniguchi International Symposium: Division of Ethnology*, 109–121. Osaka: National Museum of Ethnology.

Avrorin, Valentin A. 1956. Predikativno-pritjažatel'nye formy v nanajskom i drugix tunguso-man'čžurskix jazykax [Predicative-possessive forms in Nanai and other Tungusic languages]. *Voprosy jazykoznanija* 3. 93–100.

Avrorin, Valentin A. 1959. *Grammatika nanajskogo jazyka. Tom pervyj [A grammar of Nanay. vol. 1]*. Moscow, Leningrad: Izdatel'stvo Akademii Nauk SSSR.

Avrorin, Valentin A. 2000. *Grammatika man'čžurskogo pis'mennogo jazyka [A grammar of written Manchu]*. Saint Petersburg: Nauka.

Boldyrev, Boris V. 1976. *Kategorija kosvennoj prinadležnosti v tunguso-man'čžurskix jazykax [The category of indirect possession in the Tungusic languages]*. Moscow: Izdatel'stvo "Nauka".

Boldyrev, Boris V. 2007. *Morfologija èvenkijskogo jazyka [Evenki morphology]*. Novosibirsk: Nauka.

Bugaeva, Anna, Johanna Nichols & Balthasar Bickel. 2022. Appositive possession in Ainu and around the Pacific. *Linguistic Typology* 26(1). 43–88.

Bulatova, Nadezhda & Lenore Grenoble. 1999. *Evenki* (LINCOM Languages of the World: Materials). Munich: Lincom Europa.

Chappell, Hilary & William McGregor. 1996. Prolegomena to a theory of inalienability. In Hilary Chappell & William McGregor (eds.), *The grammar of inalienability*, 3–30. Berlin New York: Mouton de Gruyter.

Cincius, Vera I. 1947. *Očerk grammatiki èvenskogo (lamutskogo) jazyka. Čast' 1-ja: Fonetika i morfologija [A grammar sketch of Even. Part 1: Phonetics and morphology]*. Leningrad: Gosudarstvennoe učebno-pedagogičeskoe izdatel'stvo Ministerstva prosveščenija RSFSR, Leningradskoe otdelenie.

Cincius, Vera I. 1982. *Negidal'skij jazyk. Issledovanija i materialy [Negidal. Analysis and materials]*. Leningrad: Nauka.

Creissels, Denis. 2006. *Syntaxe générale – une introduction typologique 1. Catégories et constructions*. Paris: Lavoisier.

Haspelmath, Martin. 2017. Explaining alienability contrasts in adpossessive constructions: Predictability vs. iconicity. *Zeitschrift für Sprachwissenschaft* 36(2). 193–231.

Janhunen, Juha. 2012. The expansion of Tungusic as an ethnic and linguistic process. In Andrei L. Malchukov & Lindsay J. Whaley (eds.), *Recent advances in Tungusic linguistics* (Turcologica 89), 5–16. Wiesbaden: Harrassowitz.

Koptjevskaja-Tamm, Maria. 2001. Adnominal possession. In Martin Haspelmath, Ekkehard König, Wulf Oesterreicher & Wolfgang Raible (eds.), *Language typology and language universals*, vol. 2.2, 960–970. Berlin & New York: Walter de Gruyter.

Nedjalkov, Igor. 1997. *Evenki*. London: Routledge.

Nichols, Johanna. 1988. On alienable and inalienable possession. In William Shipley (ed.), *In honor of Mary Haas*, 557–609. Berlin, New York & Amsterdam: Mouton de Gruyter.

Nichols, Johanna & Balthasar Bickel. 2013. Possessive classification. In Matthew S. Dryer & Martin Haspelmath (eds.), *The world atlas of language structures online*. Leipzig: Max Planck Institute for Evolutionary Anthropology. Available at: http://wals.info/chapter/59 (accessed 29 July 2021).

Nikolaeva, Irina. 2003. Possessive affixes in the pragmatic structuring of the utterance: Evidence from Uralic. In Comrie Bernard & Pirkko Suihkonen (eds.), *International symposium on deictic systems and quantification in languages spoken in Europe and North and Central Asia. Collection of Papers*, 130–145. Izhevsk & Leipzig: Udmurt State University, Max Planck Institute for Evolutionary Anthropology.

Nikolaeva, Irina & Maria Tolskaya. 2001. *A grammar of Udihe*. Berlin & New York: Mouton de Gruyter.

Novikova, Klavdija A. 1960. *Očerki dialektov èvenskogo jazyka [Sketches of Even dialects]*. Moscow & Leningrad: Izdatel'stvo Akademii Nauk SSSR.

Ozolinja, Larisa V. 2013. *Grammatika orokskogo jazyka [A grammar of Orok (Uilta)]*. Novosibirsk: GEO.

Pakendorf, Brigitte. 2007. The 'non-possessive' use of possessive suffixes in Sakha (Yakut). *Turkic Languages* 11. 226–234.

Pakendorf, Brigitte & Natalia Aralova. 2017. *Documentation of Negidal, a nearly extinct Northern Tungusic language of the Lower Amur*. London: SOAS, Endangered Languages Archive. Available at: http://hdl.Handle.Net/2196/00-0000-0000-000F-E387-1.

Pakendorf, Brigitte & Natalia Aralova. 2018. The endangered state of Negidal: A field report. *Language Documentation and Conservation*. Available at: http://scholarspace.manoa.hawaii.edu/handle/10125/24760.

Pakendorf, Brigitte & Natalia Aralova. 2020. Even and the Northern Tungusic languages. In Martine Robbeets & Alexander Savelyev (eds.), *The Oxford guide to the Transeurasian languages*, 288–304. Oxford: Oxford University Press.

Pevnov, Aleksandr M. & Marina M. Khasanova. 2006. Negidal'cy i negidal'skij jazyk (Obščie svedenija, zvukovoj stroj, imennye časti reči) [The Negidals and the Negidal language (General information, phonology, nominal parts of speech)]. *Acta Linguistica Petropolitana* 2(1). 447–542.

Sunik, Orest P. 1982. *Suščestvitel'noe v tunguso-man'čžurskix jazykax [The noun in the Tungusic languages]*. Leningrad: Nauka, Leningradskoe otdelenie.