Participial modification in Hill Mari

Ksenia Shagal¹, Anna Volkova²

1. Introduction

This paper presents an overview of non-finite noun-modifying clauses in Hill Mari, a Uralic language spoken in the Mari El Republic, Russia. The clauses in question typically precede the modified noun and have participles as their predicates, cf. (1)–(2)³:

(1) [Paš-aš sör-šə̈] ĕrvežāš tol-te.
help-inf promise-pte.p act boy come-neg.prf
‘The boy who promised to help has not come.’

(2) [Ät’ä-t-ə̈n ke-m] vär-šə̈ sirmäš kužā veremā ke-ä.
father-poss.2sg-gen go-pte.p nact place-ill letter long time go-npst.3sg
‘The letters travel slowly to the place where your father went.’

The Hill Mari data discussed in this paper was collected on a field trip to the village of Mikryakovo (Gornomariysky District of the Mari El Republic) in August 2017. The field trip was organized by the School of Linguistics of the National Research University Higher School of Economics, Moscow. The data was collected by the authors, and it primarily consists of elicited sentences (Russian to Mari translation) and grammaticality judgements. All of the 11 consultants who participated in the survey are bilingual in Hill Mari (Mikryakovo variety) and Russian, and their age ranges from 21 to 76.

The structure of the paper is as follows: Section 2 opens up with a general overview of various properties of Hill Mari participles, such as their verbal and nominal features, temporal characteristics, morphological and syntactic restrictions, and most common syntactic functions. It further describes the participial paradigm in the language and the main oppositions it is based on. In Section 3, we focus on the relativizing capacity of participles, that is, on the rules regulating the relations between a participial clause and the noun it modifies. Section 4 examines the only case of competition between different participial forms and aims at explaining the choice between the participle in -šašlə̑k on the one hand and

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³ The borders of dependent clauses are indicated by square brackets throughout the paper. In the transcription, glossing of language examples and interpretation of individual grammatical categories, we generally follow the conventions developed by the research team of the field trip. One notable exception, however, is the glossing of the non-finite form in -mə̑, which we regard as a participle in this paper, similarly to other forms that can function as adnominal modifiers, see Section 2. Since it also commonly introduces complement clauses, it can be considered a nominalization in other sources, see Brykina & Aralova (2012) on Meadow Mari.
the participles in -šə and -mə on the other hand in future contexts. The encoding of subjects and direct objects in participial clauses is addressed in Section 5. Finally, in Section 6, we summarize all the data and draw some conclusions.

2. Participial paradigm in Hill Mari

In this study, participles are defined as non-finite verb forms that can be used for adnominal modification, cf. Shagal (2017: 1). The finiteness/non-finiteness opposition is understood here as a binary distinction similar to that between balancing and deranking as introduced by Stassen (1985: 76‒83) and further elaborated by van Lier (2009: 87). In other words, in order to be considered non-finite, a verb form has to exhibit certain morphosyntactic deviation from the prototypical predicate of an independent clause in a given language. This deviation can be manifested in restrictions imposed on verbal morphological categories or total loss thereof, acquisition of nominal morphological categories, or change in the encoding of various dependents. For instance, independent clause predicates in Hill Mari exhibit a threefold tense distinction between Non-Past, Aorist, and Perfect, and each of the three forms has a separate corresponding negative form, see Table 1:

<table>
<thead>
<tr>
<th>tense</th>
<th>affirmative</th>
<th>negative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Past</td>
<td>pər-e-m</td>
<td>a-m pər</td>
</tr>
<tr>
<td></td>
<td>enter-npst-1sg</td>
<td>neg.npst-1sg enter</td>
</tr>
<tr>
<td>Aorist</td>
<td>pər-šə-m</td>
<td>šə-m pər</td>
</tr>
<tr>
<td></td>
<td>enter-aor-1sg</td>
<td>neg.aor-1sg enter</td>
</tr>
<tr>
<td>Perfect</td>
<td>pər-en-ə-m</td>
<td>pər-de-lam</td>
</tr>
<tr>
<td></td>
<td>enter-prf-1sg</td>
<td>enter-neg.prf-1sg</td>
</tr>
</tbody>
</table>

In the participial paradigm, on the other hand, the only tense distinction is between Non-Future and Future, see Table 2. In all non-future contexts, the -šə participle is used for subject relativization, and the -mə form is employed in cases of non-subject relativization. Moreover, as we will show in Section 4, these two forms can sometimes refer to future events as well, thus competing with the form in -šašlək, which generally covers all future and debitive contexts. Under negation, all the contrasts are neutralized, since Hill Mari makes use of a single negative participle in -dəmə. Both its temporal characteristics and the participant it relativizes are inferred from the context.
Table 2. Participial paradigm of the verb pəraš ‘enter’

<table>
<thead>
<tr>
<th>Affirmative</th>
<th>Negative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Future</td>
<td>Pəraš-śə enter-ptcp.act</td>
</tr>
<tr>
<td>Future and Debitive</td>
<td>Pəraš-śašlək enter-ptcp.fut</td>
</tr>
</tbody>
</table>

Apart from the reduction in the tense system, Hill Mari participles also lack person/number markers characteristic of finite verb forms, compare (3) and (4) respectively:

(3) Tə mešək-əm [tə nər-əštə rovotəjə-əʃ] ədər-ələ-ən pu. this sack-acc that field-in work-ptcp.act girl-pl-dat give.imp ‘Give this sack to the girls who are working in that field.’

(4) Ədər-ələ tə nər-əštə rovotəjə-t. girl-pl that field-in work-npst-3pl ‘The girls are working in that field.’

As non-finite forms in general also tend to lack all kinds of modal distinctions, cf. e.g. Lehmann (1988: 200), participial suffixes in Hill Mari do not co-occur with the desiderative marker -ne, which can be used in independent clause predicates, compare (5) and (6) below. Instead, the corresponding meaning in participial clauses is primarily expressed by a construction with the verb šoaš ‘want’, see example (7):

(5) Mən’ plat’jə-m nəl-ne-m. I dress-acc take-des-1sg ‘I want to buy a dress.’

(6) *[mən’(-ən) nəl-ne-mə] plat’jə I-gen take-des-ptcp.nact dress ‘the dress that I want to buy’

(7) [Mən’ nəl-m-em šo-mə] plat’jə piš šergəš. I take-ptcp.nact-poss.1sg want-ptcp.nact dress very expensive ‘The dress that I want to buy is very expensive.’
In accordance with the hierarchy of verbal features proposed by Malchukov (2004: 20), participial suffixes, however, can easily combine with aspectual and valency-changing markers, such as attenuative, or verbal diminutive, cf. (8)–(9), and causative, cf. (10):

(8) attenuative
\[Izïš ~ mūgär-ālïššā] ~ ādōr ~ uspokoj-alt-š.
a little cry-att-ptcp.act ~ girl ~ calm.down-detr-aor[3sg]
‘The girl who cried a little has calmed down.’

(9) attenuative
read-att-ptcp.nact ~ book-poss.1sg ~ boring ~ be-npst.3sg
‘The book that I read a little is boring.’

(10) causative
\[Āvā-m-ōn ~ lōd-šktā-mā] ~ knīgā-žā ~ kogo-n
mother-poss.1sg-gen ~ read-caus-ptcp.nact ~ book-poss.3sg ~ big-adv
skušna ~ źl-eš.
boring ~ be-npst.3sg
‘The book that my mother made me read is very boring.’

Syntactic features of Hill Mari non-finite forms include, first of all, their ability to take a non-nominative subject in the contexts of non-subject relativization. Commonly, the subject of an attributive participial clause is expressed as a possessor, that is, by a noun in genitive, cf. (11), a possessive marker on the modified noun, cf. (12), or by a combination thereof, cf. (13). A more detailed discussion of subject encoding in participial clauses will follow in Section 5.1.

(11)
\[Mā ~ xōna-vlā-m] ~ [papi-n ~ źlā-mā] ~ toma-škā ~ pōrt-en
we ~ guest-pl-acc ~ grandmother-gen ~ live-ptcp.nact ~ house-ill ~ accomodate-cvb
kerd-š-nā.
can-npst-1pl
‘We can accommodate the guests in the house where grandmother lives.’

(12)
study-ptcp.nact ~ school-poss.1sg ~ other ~ village-in
‘The school in which I studied is in another village.’

(13)
\[tōn-ōn ~ oksa-m ~ pu-mā] ~ edem-et ~ kō-štā?
you.sg-gen ~ money-acc ~ give-ptcp.nact ~ person-poss.2sg ~ which-in
Where is the man to whom you gave the money?

In addition to losing some verbal properties, participles can also acquire certain nominal features. As a result, they are very similar in their behaviour to regular Mari adjectives. Usually the participial clause

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precedes the head noun and does not agree with it in case and number, cf. (14). However, if it follows
the modified noun, the participle agrees with it in case and number, cf. (15). Omitting the agreement
markers makes the sentence illicit.

(14)
I often be.sick-ptcp.act child-pl-dat berry-acc collect-cvb collect-aor-1sg
‘I collected berries for the children who are often sick.’

(15)
Mën’ t’et’ä-vlâ-lân [šâren cerlän̩-šâ]-*(vlâ-lân) kâck̩-m pog-en kand-âš-öm.
I child-pl-dat often be.sick-ptcp.act-pl-dat berry-acc collect-cvb collect-aor-1sg
‘I collected berries for the children who are often sick.’

The participial clause needs to be adjacent to the nominal complex containing the modified noun.
Consequently, postposing the participial clause that modifies a noun inside a postpositional phrase is
disallowed, cf. (16). Also, if a verb is positioned between the head noun and the participial clause, the
sentence is also illicit, cf. (17):

(16)
I often be.sick-ptcp.act child to visit-cvb go-aor-1sg
‘I went to visit the child who is often sick.’
I child to often be.sick-ptcp.act visit-cvb go-aor-1sg
Int.: ‘I went to visit the child who is often sick.’
c. ??Mön’ t’et’ä dok̩̊ [šâρën cerlän̩-šâ] dok̩̊ kašt-än tol’-âš-m.
I child to often be.sick-ptcp.act to visit-cvb go-aor-1sg
Int.: ‘I went to visit the child who is often sick.’

(17)
I book-acc take-ptcp.act girl-acc see-prf-1sg
‘I saw the girl who bought the book.’
b. Mön’ už-ân-am ʒd̩̊r-âm [kn’igâ-m nâl-šâ]-m.
I see-prf-1sg girl-acc book-acc take-ptcp.act-acc
‘I saw the girl who bought the book.’

4 In Meadow Mari, a participial clause following a noun also bears case and number markers agreeing with the head noun.
However, unlike in Hill Mari, in Meadow Mari the position of the postposed participial clause in a sentence is less constrained,
i.e. it can be separated from the head noun by a verb and it can modify a noun inside a postpositional phrase:

(i)
assignment-acc do-ptcp.neg student with I tutor-npst.1sg
b. Maj učenik dene zanimatl-em, [urokəm əštədome dene].
I student with study-npst.1sg assignment-acc do-ptcp.neg with
‘I give extra classes to a student who doesn’t do his assignments.’
c. "Mān’ ēdōr-êm už-ôn-am [kn’ígā-m nāl-šā]-m.
   I girl-acc see-prf-1sg book-acc take-ptcp.act-acc
   ‘I saw the girl who bought the book.’

The word order inside the nominal complex in Hill Mari is Dem > Num > A, conforming with Greenberg’s universal 20 (Greenberg 1963, Cinque 2005, see Pleshak 2017 for a detailed analysis of the structure of Hill Mari nominal complex). The participial clause can occupy the same slot as the adjectives – following the numeral and preceding the noun. If a noun is modified by both a participial clause and an adjective, their respective order is not fixed, cf. (18).

(18)

(a) Kok kogo [āt’ā gāc kod-št] pōrt-êm Pet’a vāž-al-en
two big father from stay-ptcp.act house-acc Peter sell-cvb
leś-go-prf[3sg]
kolt-en.

(b) Kok [āt’ā gāc kod-št] kogo pōrt-êm Pet’a vāž-al-en

two father from stay-ptcp.act big house-acc Peter sell-cvb
leś-go-prf[3sg]
kolt-en.

‘Peter sold two big houses left from his father.’

The prototypical function of participle as a comparative concept in the sense of Haspelmath (2010) is adnominal modification. In this respect, participles differ from other non-finite forms, namely nominalizations and infinitives, which are primarily verbal arguments, and converbs, which typically serve as adverbal modifiers, see Haspelmath (1995: 4), van Lier (2009: 68). Since participle is verbal in nature and preserves a great deal of verbal morphosyntactic properties, it is fair to characterize participles as prototypical predicates of subordinate clauses specializing on modifying nouns, that is, primarily, relative clauses.

Cross-linguistically, however, it is very common for non-finite forms that can function as adnominal modifiers to be able to have other syntactic functions as well, especially that of a verbal argument, see, for instance, Koptjevskaja-Tamm (1993: 42‒44), Serdobolskaya & Paperno (2006), Shibatani (2009). In other words, many languages do not distinguish between participles and nominalizations, especially event nominalizations. This type of syncretism can be regarded as an areal feature in northern Eurasia, since it is attested in many language families of the region, such as Mongolic, Turkic and Tungusic, cf. Pakendorf (2012), Yeniseian, cf. Nefedov (2012), and Uralic, cf. Shagal (2018). In Hill Mari, the forms in -š-, -šalš- and -šmā- are specialized adnominal modifiers, and only occasionally can they be substantivized to behave as participant nominalizations, cf. (19)–(20). In this case, they take the case and number markers like regular head nouns of relative constructions:

(19)
Ti kagōl’ [irgodōm tol-št-vlä-län/ tol-šalšk-vlä-län].
this pie tomorrow come-ptcp.act-pl-dat/ come-ptcp.deb-pl-dat
‘This pie is for those who will come tomorrow.’
Those (kids) who do not drink milk grow poorly.

The -mə-form, on the other hand, is commonly used as an event nominalization and, therefore, acts as a predicate of a complement rather than a relative clause. Sentences (21) and (22) below illustrate the use of the -mə-nominalization/participle in a complement and a relative clause respectively:

(21) complement clause
[Maša-n plat’jō-m òrgō-m źō-m] už-ðn-at?
Masha-gen dress-acc sew-ptcp.nact-poss.3sg-acc see-prf-2sg
Did you see that Masha was sewing a dress?

(22) relative clause
[Maša-n òrgō-m] plat’jō-źō-m už-ðn-at?
Masha-gen sew-ptcp.nact dress-poss.3sg-acc see-prf-2sg
Did you see the dress that Masha is sewing?

As the examples show, the most notable difference between the two constructions is that in complement clauses the possessive marker indicating the dependent clause subject attaches to the -mə form itself, while in relative clauses it appears on the modified noun. The nominalization also takes a case marker, such as accusative -m in example (21). The difference in subject encoding between the two subordinate constructions will be briefly addressed in Section 5.2.

In addition to the dependent uses outlined above, the -mə-form can also function as a predicate of an independent sentence in resultative contexts where the agent cannot be specified, cf. (23). The patientive participant of the situation can either take an accusative suffix or remain unmarked (in which case it looks like the nominative form):

(23)
Pört(-ðm) strojō-mə.
house(-acc) build-ptcp.nact
‘The house is built.’

The participles in -šə and -ðmə almost never occur in independent sentences, and when they do, they are accompanied by an auxiliary, cf. (24). Furthermore, these forms used in such contexts are commonly adjectivized. For instance, the active participial form of the word jangōlaš ‘get tired’ features as a separate lexical entry in Savatkova’s dictionary with the meaning ‘tired’, see Savatkova (2008: 402).

(24)
Vas’a jangōlaš-šə ñl-eš.
Vasya get.tired-ptcp.act be-npst.3sg
‘Vasya is tired.’ (Kuklik 2016)

The form in -šašlōk- is fairly often used in independent sentences to convey a debitive meaning, but it normally combines with an auxiliary as well, cf. (25):
The car must come now.'

3. Relativizing capacity of participles

Participles in Hill Mari differ in their participial orientation, that is, in the range of participants that each form is able to relativize, see Haspelmath (1994: 153) and Shagal (2017: 39–40) for more information on the term. The two main cross-linguistic types of participles with respect to orientation are inherently oriented participles and contextually oriented participles. An inherently oriented participle is only able to relativize one particular participant of a certain verb. For instance, an active participle is used to relativize subjects, and a passive participle is used to relativize direct objects. A single contextually oriented participle, on the other hand, can relativize different participants depending on the sentence in which it appears.

Except for the active participle in -šə̑k, all the other participial forms in Hill Mari are contextually oriented, and they can occur in a wide range of relativization contexts. The cross-linguistically relevant types of relativizable participants are commonly presented in the form of the Accessibility Hierarchy, an implicational scale introduced by Keenan and Comrie (1977). The general idea of this hierarchy is that noun phrases can be more or less accessible to relativization depending on their role in the relative clause. The most basic formulation of the Accessibility Hierarchy is the following (the sign > stands for ‘more accessible for relativization than’):

(26) Subject > Direct Object > Indirect Object > Oblique > Possessor

The main prediction is that if a language allows to relativize a certain position, then it must also allow to relativize all the positions to the left of it, up to the subject. Different relativization strategies can be used for different positions, but each strategy has to apply to a contiguous segment of the hierarchy.

Of the three contextually oriented participles, the future/debitive form in -šašlə̑k and the negative form in -də̑mə̑ exhibit full contextual orientation, which means they can relativize several positions starting from the left end of the hierarchy, i.e., the subject. The form in -mə̑ occurs in complementary distribution with the participle in -šə̑: it can relativize several different participants, but not the subject. In other words, its contextual orientation is limited.

3.1. Subject relativization

As mentioned above, the only inherently oriented participle in Hill Mari is the active participle in -šə̑, which can relativize both intransitive and transitive subjects, cf. (27) and (28) respectively:

(27) [Tengečə̑ zvon ’ə̑-šə̑] vrač tagacə̑ to-k-em tol-eš.
  yesterday call-ptcp.act doctor today home-ILL-poss.1sg come-npst.3sg
  ‘A doctor who called yesterday will come to me today.’
Subject relativization by means of the forms in -šašlək and -dəmə is illustrated in the examples (29) and (30) below:

(29) Ti kagəl'-əm mən’ [irgodəm tol-šašlək] təng-em-lən
this pie-acc I tomorrow come-ptcp.deb friend-poss.1sg-dat
kod-en-əm.
leave-prf-1sg
‘I will leave this pie for a friend of mine who will come tomorrow.’

(30) [Lem-əm kač-dəmə] t’et’à-vlə morožənəm a-k polučaj-ep
soup-acc eat-ptcp.neg child-pl ice.cream-acc neg.npst-3 get-3pl
‘The children who do not eat the soup will not get any ice-cream.’

3.2. Direct object relativization

All the three contextually oriented forms commonly relativize direct objects, cf. (31)–(33):

(31) Mən’ [ät’a-m-ən strojə-mə] pört-əštə ələ-ne-m.
I father-poss.1sg-gen build-ptcp.nact house-in live-des-1sg
‘I would like to live in the house that my father built.’

(32) [Reša-šašlək] zadača-em piš trudna.
solve-ptcp.deb problem-poss.1sg very difficult
‘The problem that I have to solve is very difficult.’

(33) [Pi kač-dəmə] lu-vlə-m tən’ cilə ʃu-en kolt-en kerd-ə-t.
dog eat-ptcp.neg bone-pl-acc you all send-cvb throw-cvb can-npst-2sg
‘You can throw away all the bones that the dog does not eat.’

3.3. Indirect object relativization

Although indirect objects are expected to be relativized fairly easily, the examples of indirect object relativization can be quite problematic to many Hill Mari speakers. For instance, the sentence in (34) was produced by only one out of five speakers whom we asked to translate the corresponding Russian
sentence (Gde čelovek, kotoromu ty otdal den’gi?). The rest preferred to use the finite relativization strategy, which will be discussed briefly in Section 3.7. When asked to evaluate the grammaticality of the sentence, one of the speakers found it acceptable, one was unsure, and two judged it to be ungrammatical.

(34)  
\[Kõ-štõ \quad [tõn’-ön \quad oksa-m \quad pu-mõ] \quad edem-et?\]  
which-in you-gen money-acc give-ptcp.nact person-poss.2sg  
‘Where is the person to whom you gave the money?’

This finding agrees with the observations by Brykina & Aralova (2012: 481‒482) for Meadow Mari, a language closely related to the one under investigation. They report that most (but still not all) speakers allow to relativize indirect objects of the verbs polšaš ‘help’, küštaš ‘order’ and puaš ‘give’, while relativizing dative arguments of the verbs šorgőžaš ‘smile’ and vozaš ‘write’ appeared problematic. The tendency attested in Meadow Mari seems to be in line with the valency rule in participial relativization, which states that in some languages participles favour the relativization of those verbal dependents that belong to the valency of the verb, cf. Mal’čukov (2008: 218), Shagal (2017: 73). In Hill Mari, however, even the very basic ditransitive verbs, such as puaš ‘give’ can be controversial in these contexts.

3.4. Relativization of obliques

Unlike indirect objects, different kinds of obliques are very easily relativized by all of the contextually oriented participles. The types of obliques that commonly undergo relativization in Hill Mari include comitatives, cf. (35), instruments, cf. (36), and locatives, cf. (37):

(35)  
\[Maša \quad [pop-en \quad šalgõ-mõ] \quad ţdör-vlâ-ţõ-m \quad kõšec\]  
Masha [speak-cvb stand-ptcp.nact girl-pl-poss.3sg-acc which.el  
pãl-ã?]  
know-npst.3sg  
‘How does Masha know the girls that she is talking to?’

(36)  
\[Van’a-lan \quad [irgodõm \quad pört-ţõ-m \quad čiâltõ-šâšõţk] \quad čiā-m\]  
Vanya-dat tomorrow house-poss.3sg-acc paint-ptcp.deb paint-acc  
ajõr-aš kel-êš.  
choose-inf need-npst.3sg  
‘Vanya needs to choose the paint with which he will paint his house tomorrow.’

(37)  
\[Čõõ-õmõ] \quad pört \quad jõle \quad põdõrg-ã.\]  
live-ptcp.neg house quickly break-npst.3sg  
‘The house where nobody lives goes bad quickly.’

Apart from the obliques that belong to the semantic frame of the relative clause predicate, Hill Mari also allows to relativize true circumstantial adverbials, such as temporal adverbials, cf. (38)–(39). This is an expected phenomenon, since the relative availability of time circumstantial for relativization, as well as their
patterning with the higher positions of the Accessibility Hierarchy, have been observed cross-

(38)  
\[ \text{Kolš-mɒ/kolš-šašlɒk} \] keč-et maxan’ li-šš-m pál-ăš  
\text{die-ptycp.nact/die-ptycp.deb} day-poss.2sg which be-ptycp.act-acc know-inf  
a-k li. neg.npst-3 be[sg]  
‘It is unknown what the day when you are going to die will be like.’

(39)  
\[ \text{Sir-dɒmɒ} \] keč-š takeš ert-ăš.  
\text{write-ptycp.neg} day-poss.1sg for.nothing pass-aor.3sg  
‘The day when I did not write anything passed for nothing.’

3.5. Possessor relativization

As the examples above suggest, in Hill Mari, all the positions of the Accessibility Hierarchy from subject
to obliques (including time circumstantials) are relativized by means of a gap strategy, that is, the
common argument is not represented in any way in the dependent clause, cf. Comrie and Kuteva (2013).
However, in case of possessor relativization, the relativized participant has to be represented in the clause
by means of a resumptive pronominal element, a 3rd person singular possessive suffix on the possessee,
see examples (40)–(42) below. Interestingly, the choice of participle in this construction depends on the
role of the possessee in the relative clause. For example, the active participle in -šə can only relativize a
possessor of a subject, cf. (40), while the non-active participle in -mə only relativizes possessors of non-
subject participants, such as direct objects, cf. (41), or obliques, cf. (42). Naturally, the forms in -şašlək
and -dɒmə are able to relativize all kinds of possessors.

(40)  
\text{possessor of S > -šə}  
\[ \text{ősškal-žə} \] edem ves őškal-ın näl-ın.  
cow-poss.3sg /cow die-ptycp.act person other cow-acc take-prf[3sg]  
‘The person whose cow died bought a new cow.’

(41)  
\text{possessor of P > -mə}  
\[ \text{oksə-žə-m} \] edem-et kogo-n nezer  
money-poss.3sg-acc /money-acc steal-ptycp.nact person-poss.2sg big-adv poor  
δl-eš.  
be-npst.3sg  
‘The person whose money you stole is very poor.’

(42)  
\text{possessor of OBL > -mə}  
\[ \text{pört-őštə-žə} \] edem-em kogo-n purə  
house-in-poss.3sg /house-in live-ptycp.nact person-poss.1sg big-adv good  
δl-eš.  
be-npst.3sg  
‘The person in whose house I lived is very kind.’
3.6. General noun modifying clause constructions

In accordance with the claim made in Matsumura (1981, 1983) for Meadow Mari, Hill Mari seems to make use of general noun-modifying clause constructions (GNMCCs) rather than relative clauses in a strict sense, see Matsumoto et al. (2017) for more information on the term. This means that one and the same construction can be used not only to relativize various arguments and adjuncts, but also in situations when the relationship between the modified noun and the clause is different. For instance, all of the speakers who we worked with produced and approved sentences with a perceptional noun juk ‘sound, voice’, cf. (43)–(44), and most of them found acceptable the sentence in (45), where the modifying clause expresses the content of the noun novost’ ‘news’. Some speakers, however, were doubtful about the latter construction and suggested supplementing it with the postposition gišän ‘about’.

(43) Mān’ [āvā-m-ōn cōlan-ōštō turi źarō-mō] juk-šā-m
I mother-poss.1sg-gen kitchen-in potatoes fry-ptcp.nact sound-poss.3sg-acc
kol-a-m.
hear-npst-1sg
‘I hear the sound of my mother frying potatoes in the kitchen.’

(44) [Posuda māš-mō] juk-da-m mān’ kol-a-m.
dishes wash-ptcp.nact sound-poss.2pl-acc I hear-npst-1sg
‘I hear the sound of you washing dishes.’

(45) [Vas’ā(-n) źkzamen zdajō-mō] (gišän) novost’-ām kol-ōn-at?
Vasya-gen exam pass-ptcp.nact about news-acc hear-prf-2sg
‘Did you hear the news that Vasya passed the exam?’

In sum, Hill Mari allows for the use of participial clauses in a wide range of argument and adjunct noun-modifying constructions (traditionally referred to as relative clauses), as well as in other contexts of adnominal modification. At this point, we do not have enough data to make a well-founded claim regarding the nature of clausal nominal modification in Hill Mari, but the observations suggest that the speakers rely heavily on pragmatics, and an important criterion for forming a noun-modifying construction is whether it is expected to be easily interpreted by the listener.

3.7. Finite relativization strategy

Although participial clauses generally allow to relativize a wide range of arguments and circumstantials, they are not the only relativization strategy employed by Hill Mari speakers. Similarly to other Uralic languages, Hill Mari also makes use of finite relative clauses, which it developed due to its intense language contact with Russian, see Comrie (1998: 77‒78) on the cross-linguistic tendency.

The two most common types of finite relative clauses attested in Uralic languages are postnominal externally headed relative clauses and internally headed relative clauses, see Shagal (to appear) for an overview. Most speakers of Hill Mari make use of the externally headed type, where the relative clause is introduced by an inflected relative pronoun immediately following the modified noun, cf. (46). Some,
however, occasionally produce internally headed relative clauses, which contain the shared argument and typically occur in the very beginning of the sentence, preceding the main clause, cf. (47). In this case, the relativizer is invariable, that is, it does not agree with the shared argument in case or number:

\[(46)\]
\[
\text{Čörvezáš [kōdā-} \text{lan} \quad \text{irok} \quad \text{pi-m} \quad \text{podar-en-}āt\]
\[
\text{boy which-dat morning dog-acc give.as.a.present-prf-3pl}
\]
\[
kāzōt=āt \quad \text{susu} \quad \text{āl-eś.}
\]
\[
\text{now=add happy be-npst.3sg}
\]

‘The boy whom they gave a dog in the morning is still happy.’

\[(47)\]
\[
\text{Kōdō t'ēt'ā-vlā šōsēr-}ōm \quad a-k \quad jū-ep] \quad \text{xuda-n} \quad \text{kušk-ō-t.}
\]
\[
\text{which child-pl milk-acc neg.npst-3 drink-3pl bad-adv grow-npst-3pl}
\]

‘Those (kids) who do not drink milk grow poorly.’

Although in principle finite relative clauses in Hill Mari allow to relativize all the positions on the Accessibility Hierarchy, they are typically employed when the speaker has problems using the participial strategy. Therefore, the examples of finite strategy mostly represent the relativization of the lower positions on the Accessibility Hierarchy, such as, for example, obliques introduced by locative postpositions with a fairly specific meaning, cf. (48):

\[(48)\]
\[
\text{Kövōr-ōm [kōdā-} \text{n} \quad \text{lōwāl-nō} \quad \text{mā} \quad \text{šukō veremā}
\]
\[
\text{carpet-acc which-gen down-in we much time}
\]
\[
\text{āśt-ōl-de-lnā]} \quad \text{lūkt-āl-mō-m=āt} \quad a-k \quad \text{šo.}
\]
\[
\text{sweep-freq-prf.neg-1pl lift-att.ptcp.nact-poss.1sg=add neg.npst-3 reach[sg]}
\]

‘I don’t even want to lift the carpet under which we have not swept for a long time.’

Despite the fact that finite relative clauses are a relatively recent innovation in Hill Mari, they already seem to have become the default relativization strategy for some speakers belonging to the younger generation. Our younger consultants always produced finite relative clauses in response to Russian finite stimuli and experienced difficulties in rephrasing them using participles. Older speakers, on the other hand, still seem to prefer the non-finite strategy, although corresponding finite constructions are acceptable to them at all times as well.


As can be seen from Table 2 in Section 2, three oppositions most relevant for the Hill Mari participial paradigm, namely affirmative vs. negative, subject relativization vs. non-subject relativization, and non-future vs. future, establish an almost complete relation of complementary distribution among the four participial forms present in the language. The form in -dōmō takes up all the negative contexts, while the forms in -šō and -mō cover the subject and non-subject relativization respectively in non-future contexts. Nevertheless, when the situation expressed in the relative clause pertains to the future, more than one predicate option is available. Both the participles in -šō and -šašlōk can be used to relativize subjects, and
both the forms in -mɔ and -šašlɔk can relativize non-subjects. In this section, we will discuss the distribution of these forms in the contexts where competition arises.

In most cases, for the expression of future situations in relative clauses, speakers use the participle in -šašlɔk, while the use of -šɔ and -mɔ is generally not allowed for future reference, see examples (49)–(50):

(49)  
\[
\text{Un’iv’ers’it’et-ɔš} \quad \text{postupaj-šašlɔk/*postupaj-šɔ} \quad t’et’ā-vlā \quad \text{vele}
\]
\[
\text{tī} \quad \text{ekzamen-ɔm} \quad \text{zdaj-a-t.}
\]
\[
\text{this exam-acc} \quad \text{hand.in-npst.3-pl}
\]
‘Only the children that will be trying to enter the university take this exam.’

(50)  
\[
\text{Irgodām/cecāš} \quad \text{rešā-šašlɔk/*rešā-mɔ} \quad \text{zadača-na} \quad \text{piš}
\]
\[
\text{tomorrow/now} \quad \text{solve-ptcp.deb/solve-ptcp.nact} \quad \text{problem-poss.1pl} \quad \text{very}
\]
\[
\text{nelo.} \quad \text{difficult}
\]
‘The problem that we are going to solve tomorrow/now is very difficult.’

However, sometimes the speakers can allow for the use of non-future participles when the relative clause contains an overt reference to the future, such as the temporal adverbial irgodām ‘tomorrow’, cf. (51). Presumably, the use of the forms in -šɔ and -mɔ is more acceptable if the future event they express is perfective rather than imperfective, compare example (51) with the example (50) above:

(51)  
\[
\text{Ti kagəl’ [irgodām} \quad \text{tol-šašlɔk/*tol-šɔ} \quad \text{tāŋ-em-lān.}
\]
\[
\text{this pie tomorrow} \quad \text{come-ptcp.deb/come-ptcp.nact} \quad \text{friend-poss.1sg-dat}
\]
‘This pie is for my friend who will come tomorrow.’

One special type of contexts is when the event expressed in the relative clause is not only perfective, but also precedes the event expressed in the main clause. In such cases, non-future participles are strongly preferred by all of the speakers we worked with. In fact, most of them consider the form in -šašlɔk ungrammatical in such sentences, cf. (52)–(54):

(52)  
\[
\text{Vōd don} \quad \text{tem-šɔ/*tem-šašlɔk]} \quad \text{vedōrā-m} \quad \text{kel-eš}
\]
\[
\text{water with} \quad \text{fill.up-ptcp.act/fill.up-ptcp.deb} \quad \text{bucket-acc} \quad \text{be.necessary-npst.3sg}
\]
\[
\text{li-eš} \quad \text{karangd-aš.}
\]
\[
\text{be-npst.3sg} \quad \text{move.away-inf}
\]
‘We will need to move away the bucket that will fill up with water.’

(53)  
\[
\text{Kandā-mə/*kandā-šašlɔk]} \quad \text{kol-et} \quad \text{don} \quad \text{mōn’} \quad \text{kagōl’-əm} \quad \text{āšt-e-m.}
\]
\[
\text{bring-ptcp.nact/bring-ptcp.deb} \quad \text{fish-poss.2sg} \quad \text{with} \quad \text{I pie-acc} \quad \text{make-npst-1sg}
\]
‘I will make a pie with the fish that you will bring.’
I promise-npst-1sg bear-inf
'I promise to wear the ring that you will give me.'

It should be noted, of course, that in the examples above, the use of non-future participles in relative clauses results in their temporal meaning being ambiguous between past and future. For instance, the sentence in (53) can also mean ‘I will make a pie with the fish that you brought’. The important point, however, is that the -šō and -mō forms are still the most natural way to express future events if these events are anterior to the situation in the main clause. In addition, in some of the cases illustrated above, the event expressed in the main clause is conditional on the event expressed in the relative clause (for instance, in example (52) we will only have to move away the bucket if/when it fills up with water). This is the context where the use of non-future participles is particularly common. In fact, sometimes such relative clauses are explicitly used to introduce a condition, cf. (55):

(55)

soup-acc eat-ptcp.act/eat-ptcp.deb child-pl only ice.cream-acc

‘Only the children that will eat up the soup will get ice-cream.’

To summarize, we can say that the participle in -šašlōk, when used in non-modal contexts, does not only have to refer to the future, but also typically denotes a situation following the situation expressed in the main clause. The forms in -šō and -mō, while normally referring to past, present and habitual events, can be used to encode future situations as well, but only those preceding the situation expressed in the main clause. Thereby, all the affirmative participial forms in Hill Mari can be characterized as bearing both an absolute and a relative tense meaning.

5. Argument encoding

5.1. Subject encoding

The subject of the participial clause – for participles in -mō, -dōmō, and -šašlōk – bears nominative or genitive case markers and/or can be encoded by a possessive marker on the head noun. Unlike Meadow Mari (Brykina & Aralova 2012, Volkova 2018) in which the encoding of the subject correlates rather rigidly with its position on the animacy hierarchy (Silverstein 1976)5, in Hill Mari the choice of subject form seems much more to be an issue of preference.

(56) 1&2 person > other pronoun > proper name > human > non-human > inanimate

5 In Meadow Mari, the subject of the -me, -dome, and -šaš participial relative clauses can be marked with Genitive (available for all argument types) or with Nominative (only the lower part of the animacy hierarchy) (Brykina & Aralova 2012, Volkova, under review).
When the subject of the participial clause is a first or second person pronoun, it can be expressed with a possessive marker on the head noun, cf. (57).

(57)  
\[Kn’igä-m näl-mə] edem-et ke-n kolt-en.  
book-acc take-ptcp.nact person-poss.2sg go-cvb send-prf[3sg]  
‘The person from whom you took the book, went away.’

If the 1st/2nd person subject is overt, it usually bears a genitive marker and is often, but not obligatorily, accompanied by a possessive marker on the head noun – cf. the contrast between (58) and (59).

(58)  
I-gen give-ptcp.nact money-poss.1sg Ivan count-npst.3[sg]  
‘Ivan counts the money, given by me.’

(59)  
\[Mön’*(-ən) pu-mə] oksa-m Ivan šotl-a.  
I-gen give-ptcp.nact money-acc Ivan count-npst.3[sg]  
‘Ivan counts the money, given by me.’

The presence of a possessive marker facilitates the encoding of the pronominal subject with nominative: it is possible to omit the genitive case ending in (58), but not in (59), cf. also example (60) which was produced by the speaker without prompting. Most of the (older) speakers judge as illicit the nominative encoding of the overt subject in the absence of a possessive marker on the head noun. Also, as one speaker noted, the combination of a nominative subject with a possessive marker is better than nominative subject and no possessive marker, but worse than genitive encoding.

(60)  
\[Mön’ pu-mə] pilä-em koce pədört-en kerd-ən-ūt?  
I give-ptcp.nact saw-poss.1sg how break-cvb can-prf-2sg  
‘How could you break the saw I gave (to you)’

That same pattern is reproduced for the 3rd person subjects of participial clauses, except the judgements become weaker. Example (61) shows a 3rd person subject tədə ‘that’ in genitive with an optional 3rd person possessive marker on the head noun. Some speakers allow a nominative 3rd person subject without a possessive marker on the head noun, some say it is worse than genitive, cf. (62):

(61)  
\[Tədə-n vəšli-mə] þəðræš(-əžə) jažo-n mər-a.  
That-gen meet-ptcp.nact girl-poss.3sg good-adv sing-npst.3[sg]  
‘The girl he met sings well.’
When it comes to proper names, there is a tendency among older speakers to use genitive on the subject of the participial clause, but they along with younger speakers agree that nominative can also be used, cf. (63):

(63) 
[Maša(-n) pu-mə] oksa-m Ivan šotl-a.  
Masha-gen give-ptcp.nact money-acc Ivan count-npst.3[sg]  
‘Ivan counts the money given by Masha.’

With nouns denoting humans and non-human animates genitive and nominative case encoding freely alternates, cf. (64). As for inanimate nouns (65), nominative encoding is preferred (is usually the first reaction of the speakers).

(64)  
Mä [provodn’ik(-ən) jažo-n pälõ-mə] kornõ-m mo-n-na.  
we guide-gen good-adv know-ptcp.nact road-acc find-prf-1pl  
‘We found the road that the guide knows well.’

(65)  
[Tən’-ən noskî-vlâ-et ki-mə] jaš’s’ik-õm mõn’ kõčâl a-m mo.  
you-gen socks-pl-poss.2sg lie-ptcp.nact drawer-acc I find neg.npst-1sg can  
‘I can’t find the drawer where your socks are.’

According to our preliminary observations, in the aspect of encoding subjects, participles in Hill Mari somewhat contrast with event nominalizations expressed by the same morpheme -mə. Event nominalizations in most cases have the subject in genitive, cf. (66), irrespective of the presence of a possessive marker on the nominalized verb.

(66)  
Mõn’ [ät’ä -mʔ(ən) ūrvâž kõčâ-mõ(žõ)-m] už-õn-am.  
I father-poss.1sg-gen fox catch-nmz-poss.3sg-acc see-prf-1sg  
‘I saw my father catching a fox.’

5.2. Direct object encoding

Similarly to other Finno-Ugric languages, cf. Serdobolskaya & Toldova (2017), Hill Mari exhibits differential object marking. The two available options of direct object encoding are zero-marking and the accusative marker -m, as illustrated in example (67) below, which allows for variation:

(67)  
milk/milk-acc drink-ptcp.act child-pl good-adv grow-npst-3pl
'Children that drink of milk grow fast.'

Unlike in many other Finno-Ugric languages, in both Mari varieties (Meadow Mari and Hill Mari) the use of differential object marking is limited to non-finite clauses, while the direct object of a finite independent clause always receives accusative marking. Moreover, the accusative encoding of the direct object seems to be strongly preferred in non-finite clauses as well. Thus, we were only able to identify very few contexts in which speakers preferred the unmarked option\(^6\). It should be noted, however, that so far we have only focused on isolated sentences, so the communicative status of the direct object in wider discourse, which has been shown to be an important factor regulating differential object marking in Mari, cf. Toldova & Serdobolskaya (2002), is outside the scope of the current study.

Among our examples, the zero-marking of the direct object was mostly allowed (and even preferred by most speakers) when the object itself was perceived as an uncountable entity, see examples (68) and (69). If, on the other hand, the direct object was countable, the speakers preferred to mark it with an accusative suffix, cf. (70):

(68)  
\[
\begin{array}{ll}
\text{soup/soup-acc} & \text{eat-ptcp.act} \\
\end{array}
\]

‘Only the kids who eat (the) soup will get ice-cream.’

(69)  
\[
\begin{array}{ll}
\text{mother-poss.1sg-gen} & \text{potatoes/potatoes-acc} \\
\end{array}
\]

‘The frying pan in which mother is frying potatoes is very old.’

(70)  
\[
\begin{array}{ll}
\text{song-acc/song} & \text{sing-ptcp.act} \\
\end{array}
\]

‘The girls that were singing a song stopped.’

As suggested by earlier studies on differential object marking in Finno-Ugric languages, one of the most important factors for the choice of direct object encoding is its specificity, see an overview in Toldova & Serdobolskaya (2002). Specific nouns receive accusative marking, while non-specific ones appear in an unmarked form, e.g. in habitual contexts, compare (71) and (72). Again, for nouns that do not refer to a single object, the distribution is not that strict. For instance, in (73) the specific noun kol ‘fish’ exhibits variability in its marking due to referring to an uncountable entity, cf. (74):

(71)  
\[
\begin{array}{ll}
\text{tree-acc} & \text{chop-ptcp.act} \\
\end{array}
\]

‘The person that cut down a tree is making a boat [out of it].’

---

\(^6\) It seems, however, that in complement clauses the range of contexts allowing for unmarked direct objects is broader (Pleshak, p.c.).
(72) [Pušāngō roał-šā] edem pāš-šm čang-a.
    tree chop-ptcp.act person boat-acc hack-npst.3[sg]
    ‘The lumberjack is making a boat.’

(73) [Kol-šm/kol kāčū-šā] ergāš pazar-āš (kol don) ke-n.
    fish-acc/fish catch-ptcp.act boy market-ill fish with go-prf[3sg]
    ‘The boy which caught a lot of fish went to the market [with it].’

(74) [Kol kāčū-šā] ergāš pazar-āš (kol don) ke-n.
    fish catch-ptcp.act boy market-ill fish with go-prf[3sg]
    ‘The boy who is a fisherman went to the market with some fish.’

Interestingly, in appropriate contexts (e.g. habitual), direct objects tend be zero-marked even if they refer
to living beings, cf. (74), although animate direct objects are typologically more likely to receive overt
marking, see Witzlack-Makarevich & Seržant (2018).

6. Summary and concluding remarks

Similarly to many other Uralic languages and languages of northern Eurasia, Hill Mari primarily employs
non-finite clauses for adnominal modification. These clauses can be introduced by any of the four
participial forms available in the language, which occur in almost complementary distribution. The forms
in -šə and -mə cover the relativization of subjects and non-subjects respectively in non-future contexts,
the form in -šašlək is used for any kind of adnominal modification in future and deative contexts, and
any of these three affirmative forms can be negated using the negative participle in -dəmə. In other words,
Hill Mari makes use of one inherently oriented participle (the active participle in -šə) and three
contextually oriented participles.

Quite in line with the northern Eurasian tendency (Pakendorf 2012), the contextually oriented participles
can relativize a fairly wide range of arguments and adjuncts, such as subjects, direct objects, various
types of obliques, and possessors. In both Mari varieties, the relativization of indirect objects appears
problematic, which is a fact that clearly calls for an explanation, but requires further investigation before
the explanation could be proposed. All the positions of the Keenan & Comrie’s (1977) Accessibility
Hierarchy up to obliques are relativized using a gap strategy, that is, without any overt reference to the
relativized participant in the participial clause. For possessor relativization, on the other hand, the use of
corresponding possessive markers on the possessee is required. In addition to relativizing arguments and
adjuncts, Hill Mari participial clauses can also form ‘smell of’ and ‘news that’ constructions, which is
usually taken as a sign that a language features generalized noun-modifying clause constructions, or
GNMCCs (Matsumoto et al. 2017). In general, it appears that the formation of noun-modifying clauses
in Hill Mari is to a large extent conditioned by pragmatics. In particular, when the relativized participant
is not easily recoverably for some reason, a speaker may resort to the relative pronoun strategy modelled
on Russian, which allows to reduce potential ambiguity.
As non-finite forms, Hill Mari participles demonstrate a notable degree of deviation in comparison to finite verb forms. For instance, they do not take regular person-number markers, and they demonstrate reduction in the temporal paradigm as well as limited combinability with certain elements of verbal morphology. Another salient property of participial clauses is the way the core arguments are encoded. As a result of nominalization, the subject of an attributive participial clause can be expressed by a possessive marker on the modified noun. If expressed by a pronoun only, first and second person subjects obligatorily receive a genitive suffix, while for other types of subjects genitive marking is optional. Participial clauses are also one of the few contexts where Hill Mari allows for differential marking of the direct object, which in this case can either be zero-marked or receive an accusative suffix. The general tendency here is that direct objects are less likely to receive overt marking if they stand for uncountable entities or appear in habitual contexts.

References


Volkova, Anna. 2018. Syntactic structure of participial clauses in Meadow Mari. Ms., National Research University Higher School of Economics.