A SYNTACTIC APPROACH TO UDMURT CAUSATIVES

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Abstract: Causative constructions in Udmurt yield crucial syntactic properties like double-objects or alternation in case-marking pattern. A syntactic analyses based on Marantz (1997, 2001) distributive morphology account and Pylkkänen (2002, 2008) complement selecting causatives I claim here that these contradictory syntactic properties comes from the fact that the complex causative predicates are formed in the syntax. The Udmurt causatives are just like in Hungarian are monoclausal but bi-eventive constructions if we testify them with different scope tests, e.g. negation or low adverbials.

Keywords: causatives, syntactic analyses, clausality, eventity, case-pattern

1 Introduction

Causative verbs and constructions seem to be present universally across languages and causativization is referred to in the literature as a valence-changing process (Reinhart & Siloni 2005), a grammatical function changing process (Baker 1985) or an argument-structure-altering phenomenon (Pylkkänen 2002). Research on this topic has focused mainly on whether these constructions are built in the syntax or in the lexicon, or to put it better, if these processes take place in the lexicon or in the syntax.

According to the lexical analysis of causatives, this process changes the argument structure of the verb in the lexicon by giving one extra argument to the verb's structure, namely the causer. Thus, the lexicon is not just a set of words, but also contains the information of the verb's argument structure. Reinhart & Siloni (2005) argue that the lexicon is an active lexicon, which allows arity operations, and since a syntactic component cannot manipulate the Φ-grids (The lexicon interface guideline) causative operation can apply only in the lexicon. The causative head merged with the base-verb creates a new predicate, and the arity operation adds an Agent role to the Φ-grid of the base-verb. Syntactic analyses, as opposed to the lexical point of view, interpret the extra argument, the causer, as the specifier of a CauseP projection attached to the VP or the vP depending on the basic verb (Pylkkänen 2002) or more accurately depending on the root (Pylkkänen 2002, 2008) and propose that all derivation (such as causation) are executed in the syntax (Marantz 1997, 2001).

In this paper, following Pylkkönen's (2002, 2008) syntactic analysis, I propose the first analysis for Udmurt[1] causative constructions. These constructions have apparently contradictory syntactic properties which can be explained only by a syntactic analsysis. Pykönnen (2002, 2008) argues that the different properties of causatives cross-linguistically can be explained only with the bi-eventive account, and based on Marantz's (1997, 2001) morphosyntactic account, she assumes a CauseP projection independently from the VoiceP. Her account can give an adequate analysis of the lexical and of the productive causatives across languages.

The universal bi-eventive characteristic of the causatives is attested and proved but the clausality of these constructions is still in question. Periphrastic constructions like those in

[1] Udmurt is a minority language from the Finno-Ugric family, spoken in the Russian Federation.

English are crystal clearly bi-clausal, but the picture of the morphological constructions is messy. Based on tests of Horvath and Siloni (2010) and of Bartos (2011), such as negation, bindings and scopes of adverbials, I propose that the productive causatives marked by the causative morpheme are monoclausal in Udmurt like in Hungarian and unlike in Japanese.
It is also universal across languages that the causee is marked by the accusative morpheme if the base verb is intransitive, but the languages differ with respect to the marking if the base verb is transitive. Comrie's hierarchy (1981) suggests that the causee is encoded with some oblique case, mostly with dative or with instrument. Accusative as the marker of the causee is available for the causee in the so-called real double-object languages[2]. Udmurt is not a real double-object language, but crucially the complex causative predicate formed from a transitive verb can assign two accusatives in its argument structure.
Following Pylkönnen's (2008) idea, I assume here that the different syntactic properties of the Udmurt causatives, e.g. the double-object construction, are based on the length of the CauseP's complement in the v-domain. In Udmurt the complement – root, either VP or vP – is responsible for the case-marking pattern of the causee, and the alternating of the encodings have not only syntactic but also pragmatic reasons.
This paper is organized as follows: in section 2 I give some short background on Udmurt causative constructions concentrating on their special syntactic properties, and I focus on the encoding properties of the causee, with their different case marking pattern. In section 3 I present Bartos' (2011) approach to Hungarian causatives following his argument against Horvath & Siloni's (2010) lexicalist account and in this section, I also analyze the Udmurt causative constructions based on Bartos' testing on mono versus bi-clausality and eventivity. In section 4 based on Marantz's syntactic approach and Pylkkänen (2008) complement selection analyses I claim that in Udmurt the causative constructions have VP/vP and CauseP projections independently, and I present the syntactic derivation of these constructions. Section 5 closes my paper with the conclusions.

2 Causatives in Udmurt

Causativization across languages can appear at least in three different ways, in the form of lexical (1a), morphological (1b) or syntactic cauasatives (1c).

(1) a. Lisa broke the window.
b. Taroo-ga yasai-o kus-ase-ta.
Taro-NOM vegetable-ACC rot-CAUSE-PAST
'Taro caused the vegetable to rot.'
c. John made Mary sing a song.

If we have a look at the examples in (2a-c), we can see that all of these causatives are found in Udmurt:

[2] Real double-object languages (Baker 1985): non-derived ditransitive verbs have two object in their argument structure.

(2) a. Saša pitran-ez bergati-z (lexical)
Sasha-NOM record-ACC rotate.PAST-3SG
'Sasha rotated the record.'

b. Maša Saša-ez kńiga-jez l*i̯*dž*i̯*-ti-z. (morphological)
Masha-NOM Sasha-ACC book-ACC read-CAUS.PAST-3SG
'Masha made Sasha read the book.'

c. Maša Saša-ez kńiga-jez l*i̯*dž*i̯*-n*i̯* koši-z. (syntactic)
Masha-NOM Sasha-ACC book-ACC to-read order.PAST-3SG

Although, the lexical and the syntactic causations are not part of the discussion here, in the next section I sketch their most characteristic properties, focusing mainly on the argument structures of the constructions.

2.1 Lexical causatives: transitive-inchoative alternation

The lexicalized causative verbs can be divided into three different groups in Udmurt based on their verb form:

a) The alternating verbs do not have any historical or morphological relationship; they are different verbs just like English *kill-die*.

(3) a. kul*i̯*-n*i̯* b. vu*i̯*-n*i̯*
'to die' 'to kill'

b) The transitive-inchoative alternation verbs; the inchoative verb is anticausative, because it is derived and marked by an *-śki̯* morpheme.

(4) a. *śi̯i̯*-n*i̯* b. *śi̯i̯*-śk*i̯*-n*i̯*
'to eat *(something) (transitive)' to eat (*something) (intransitive)

These anticausative verbs are typically unergatives with only the agent argument. The morpheme of the causation cannot join to this derived unergative verbs (5).

(5) **śi̯i̯*-śk*i̯*-t*i̯*-n*i̯*

c) Verbs with a causative suffix; but in these verb forms the suffix is only historical and not transparent for the native-speakers.

(6) a. berga-ni b. berga-t*i̯*-ni
'to roll' 'to rotate'

In the following part it is to be shown that *-t-* is the productive morphological marker of the causative in Udmurt.

The remainder of the paper I use the term ‘lexical causative’ for transitive verbs with or without the historical *-t-* morpheme, which select a theme and an agent as their arguments (7).

(7) Sasa$_{agent}$ pitranez$_{theme}$ bergatiz.

Udmurt does not contain transitive-intransitive alternating verbs like *open* in English.

2.2 Syntactic causative: influence of Russian

Syntactic causatives in Udmurt can appear with two different verbs (8a-b)[3]. The difference between the two types is not entirely clear at this moment, further investigations are needed, but it is sure that the difference is based on their semantics.

(8) a. ko*ś*i̯n*i̯* ‘to order’:

Maša	Saša-ez	kńiga-jez	l*i̯*dž*i̯*n*i̯*	ko*ś*iz.
Masha.NOM	Sasha-ACC	book-ACC	to_read	order.PAST.3SG

b. le*ź*i̯n*i̯* ‘to let’:

Maša	Saša-ez	kńiga-jez	l*i̯*dž*i̯*n*i̯*	le*ź*iz.
Masha.NOM	Sasha-ACC	book-ACC	to_read	let.PAST.3SG

‘Masha made Sasha read the book.’

Periphrastic causatives in Udmurt behave just like in English: they are predicates selecting a clause as their complement.
Among the different causatives (e.g. lexical or syntactic) the morphological causatives present the most interesting properties. The rest of this paper will concentrate on these properties.

2.3 Morpological causatives: Special syntactic properties

In Udmurt, complex causative predicates are marked by a causative morpheme *-t-*. This morpheme can be attached both to intransitive (9a) and transitive verbs (9b) (GSzUJa1962, Kozmács 1994).

(9) a.

Maša	Saša-jez	uža-t-iz.
Masha-NOM	Sasha-ACC	work-CAUS-PAST.3SG

‘Masha made Sasha work.’

b.

Maša	Saša-jez	kńiga- jez	l*i̯*d*ź́i̯*-t-iz.
Masha-NOM	Sasha-ACC	book-ACC	read-CAUS-PAST.3SG

’Masha made Sasha read the book.’

[3] These periphrastic constructions probably appeared in the language because of the influence of Russian. Russian has only periphrastic constructions to express causativity, except of course the lexical causative-anticausative pairs like pity-poity.

As can be seen in both cases the complex predicate involves an additional argument, the causer of the base event, and this is a noncore argument. In the case of the (9a) the base intransitive verb became a transitive one, and the original argument – the agent – is marked as a direct object with the ACC, following the syntactic encoding rule of the direct object in Udmurt. This is a universal property of the causative form of an intransitive verb.
The transitive base morphological causatives have some special properties, which do not characterize the lexical and the syntactic causatives, not even the intransitive base productive causatives and in these properties the case marking of the causee plays the main role.

2.2.1. Double-object constructions: only for causatives

Cross-linguistically, in the argument structure of a transitive base causative the causee is encoded with an oblique (henceforth: OBL) case (Comrie 1981) – mainly with DAT or INST – like, for instance, in Hungarian:

(10) Péter fel-olvas-tat-ta a könyv-et Mari-val.
Peter.NOM up-read-CAUS-PAST.3SG.DEF the book-ACC Mary-INST
'Peter made Mary read the book.'

This is consistent with Comrie's (1981) hierarchy (Subject (S) > Direct Object (OB) > Indirect Object (IO) > Oblique Object (OBL)). According to his hierarchy we assume that the new argument in the structure takes the most prominent, empty syntactic position, which is in the case of a transitive verb the IO and as an IO is encoded with DAT.
As opposed to Comrie's hierarchy, in Udmurt transitive based causatives yield a double-object argument structure (11).

(11) Maša Saša-jez kńiga-jez l*i̯*dž*i̯*-t-iz.
Masha-NOM Sasha-ACC book-ACC read-CAUS-PAST.3SG
'Masha made Sasha read the book.'

According to Baker (1985), in true double accusative languages the ditransitive verbs can assign structural case to more than one NP which they govern, and both of the NPs have object-like behavior. Since in these languages non-derived verbs can assign two ACC, it is not surprising that in a transitive based causative can do the same. But Udmurt is not a true double accusative language, since this double-object structure is not well-formed in the case of a non-derived predicate, even if it is a ditransitive verb (e.g. give) (12).

(12) Saša Maša-l*i̯*/ *Maša-jez kńiga-jez šot-iz.
Sasha-NOM Masha-DAT/ Masha-ACC book-ACC give-PAST.3SG
'Sasha gave Masha the book.'

Although, there are two sentence types where the descriptive literature assumes two objects in one clause. Kondratjeva (2002, 2010) and Salminen (2006) mention in their works that double-object constructions can appear in Udmurt with verbs like e.g. take (13).

(13) Saša Maša-jez kʲšno bašt-iz.
Sasha-NOM Masha-ACC wife-NOM take-PAST.3SG
'Sasha married Masha.'

Following Baker's (1985) analysis, I would call this unmarked object which always occurs directly on the left side of the verb noun incorporation in these sentences rather than a true double accusative.
Transitive sentences are the other sentence type where we can find double-object constructions with predicates like e.g. call, say, etc. (14)

(14) Al'i ta shur-ez tuganaj shuo. (Salminen 2006:10)
now this river-ACC tuganaj-NOM say.PRES.3PL
'Now this river is called Tuganaj.'

Following Matushansky (2012) I would rather say that these kinds of constructions are small clauses, not true double accusatives, and in these small clauses the predicate assigns nominative case to the NP.

2.2.2 The order of the arguments

Besides the case-marking of the arguments in causative constructions, there is another interesting property, namely the order of the two accusatives. If the thematic roles of the arguments are clear the order is variable (Kozmács 1994), just like in the following example where the patient is +animate and the theme is –animate (15).

(15) Saša kńiga-jez$_{[theme]}$ Maša-jez$_{[patient]}$ lʲdžʲ-t-iz.
Sasha-NOM book-ACC Masha-ACC read-CAUS-PAST.3SG
'Sasha made Masha read the book.'

The thematic roles are still clear even if we change the order (16).

(16) Saša Maša-jez$_{[patient]}$ kńiga-jez$_{[theme]}$ lʲdžʲ-t-iz.

This comes from the semantics and pragmatics, because the +/- animate value of the arguments make the situation clear, the + animate will be the patient and the – animate the theme. But unlike in the case of arguments valued differently, the order of them is non-variable if we have two +animate role in the sentence (17a-b).

(17) a. Saša Maša-jez$_{[patient]}$ Ivan-ez$_{[theme]}$ žugʲ-t-iz.

Sasha-NOM Masha-ACC Ivan-ACC hit-CAUS-PAST.3SG
'Sasha made Masha hit Ivan.'

b. *Saša Ivan-ez$_{[theme]}$ Maša-jez$_{[patient]}$ žug*i*-t-iz.

Since the semantics of the arguments does not help us to specify the thematic roles of the arguments, probably the order of arguments is the only option to determine the proper roles: the further one from the verb is always the patient and the theme is next to the verb.

2.2.3 Neutralization of the case-marked/non-case-marked object alternation

The third syntactic property which occurs only with causatives of transitive verbs is the neutralization of the case-marking alternation on the object which has the causee function in the construction (Kormács 1994).
In Udmurt, non-specific objects are morphologically unmarked (18a) and specific ones are marked by the accusative morpheme -ez/jez (Kondratjeva 2002, 2010):

(18) a. Saša kńiga l÷dž-iz.
Sasha-NOM book-NOM read-PAST.3SG
'Sasha read a book.'

b. Saša kńiga-jez l*i̯*dž-iz
Sasha-NOM book-ACC read-PAST.3SG
'Sasha read the book.'

But as I mentioned above, in double-object causative constructions this characteristic of Udmurt disappears. The original subject of the base predicate is always case-marked, even if it is non-specific, regardless of the embedded verb being intransitive (19a) or transitive (19b).

(19) a. Saša *pinal/pinal-ez uža-t-iz.
Sasha-NOM child-NOM/child-ACC work-CAUS-PAST.3SG
'Sasha made a/the kid work.'

b. Saša *pi/pi-jez kńiga-jez l*i̯*dž*i̯*-t-iz.
Sasha-NOM boy-NOM/boy-ACC book-ACC read-CAUS-PAST.3SG
'Sasha made a/the boy read the book.'

However, the unmarked vs. marked alternation still holds for the internal argument of the base predicate, of course in the case of transitive verbs (20a-b) and as with non-derived predicates, the alternation is based on the specificity of the embedded object.

(20) a. Saša pi-jez kńiga l*i̯*dž*i̯*-t-iz.
Sasha-NOM boy-ACC book-NOM read-CAUS-PAST.3SG
'Sasha made the/a boy read a book.'

b. Saša pi-jez kńiga-jez l*i̯*dž*i̯*-t-iz.
Sasha-NOM boy-ACC book-ACC read-CAUS-PAST.3SG

‘Sasha made the/a boy read the book.’

2.2.4 Case-marking patterns – new observation

Crucially, the ACC is not the only case with which the causee can be encoded in the argument structure of transitive base causatives. The causee of the complex predicate displays an ACCUSATIVE – OBLIQUE case-alternation, where the OBL is the *–en,* instrumental morpheme (21a-b).

(21) a. Saša Maša-jez/*Maša-en pinal-ez babʲtʲ-t-iz.
Sasha-NOM Masha-ACC/*Masha-INST baby-ACC rock_to_sleep-CAUS-PAST.3SG
‘Sasha had Masha rock the baby sleep.’
b. Saša *kirʑ́an-ez/kirʑ́an-en pinal-ez babʲtʲ-t-iz.
Sasha-NOM *song-ACC/song-INST baby-ACC rock_to_sleep-CAUS-PAST.3SG
‘Sasha made the baby rock to sleep with a song.’

This case-pattern is available for the non-derived causative verbs (e.g. dry) as well (22a-b):

(22) a. Saša$_x$ Maša-jez/*Maša-en jʲirsi-jez$_x$ kvast-iz[4].
Sasha-NOM Masha-ACC/* Masha-INST hair-ACC dry-PAST.3SG
‘Sasha made Masha dry his hair.’
b. Saša$_x$ *šundʲ-jez/šundʲ-en jʲirsi-jez$_x$ kvast-iz.
Sasha-NOM *sun-ACC/sun-INST hair-ACC dry-PAST.3SG
‘Sasha let the sun dry his hair.’

The alternation depends on the argument of the embedded predicate of the causatives. It means that the different encoding of the causee comes from the manipulation effect of the causer (Alsina 1992; Ackerman & Moore 1999) (23).

(23) Affectedness hypothesis: when a causee argument exhibits a semantic alternation, then an alternant with a more affected interpretation will be realized as a grammatical relation that is higher on the Relational Hierarchy (DO>IO>OBL) than the relational encoding of the non-affected alternant; the more affected argument of the base predicate is encoded by ACC and the less one by INST.

In (21a) the causee is manipulated and affected by the causer, the argument is encoded with ACC case, unlike in (21b) where the causer cannot manipulate the causee, rather, the causer let the causee do something, as we can see from the English translation. According to the Affectedness hypothesis it must be encoded with OBL case. The causee encoded with the ACC is more in the domain of the complex predicate than the causee encoded with the INST (Alsina

[4] The index ‘x’ has the only function of making the situation clear, i.e. the hair is Sasha’s and not Masha’s.

1992, Ackermann & Moore 1999). These grammatical alternations are cross-linguistically well-known from the literature and most of the times they are based on transitivity (Ackermann & Moore 1999) (24).

(24) Transitivity Hypothesis:
   a. intransitive base predicate → direct object causee
   b. transitive base predicate → indirect object or oblique object

As we have already seen, Udmurt does not seem to entirely conform to the Transitivity Hypotesis, because the alternation is based on the transitive predicate, just like in (24b), but the alternation is not between the indirect object – oblique object, but the direct object – oblique object.

3. Morphological causatives: domains and events

Periphrastic and lexical causations clearly differ from productive causations if we have a look at the domains and events they contain. Lexical causatives are typically bi-eventive and monoclausal, and syntactic causatives are not problematic – they are bi-eventive and bi-clausal. The bi-clausality is clear in the latter case, since the construction contains two different lexemes, one is for the cause event and one is for the base event. But the answers for these clausality and eventity questions are not so easy if we are talking about productive causatives. The typological classification of morphologically marked causatives is based on whether they are mono- or biclausal, and whether they involve two events or just a single one. There are different types of tests to analyse the clausality and the eventivity. In the followings, I would present these tests following Horvath & Siloni (2010) and Bartos (2011).

3.1 Tests for mono-versus biclausality

Horvath and Siloni (2010) use several diagnoses to show the clausal difference between morphologically marked causatives like in Japanese, which expresses biclausal properties, and in Hungarian, which seems to have monoclausal productive causatives.
In the followings, I show two of their tests – negation and condition B – applying their analyses to Udmurt, which seems to be closer to Hungarian than to Japanese.

3.1.1 Negation

Negation is one of the diagnoses which can show exactly how many clauses the causative construction involves. If the basic event and the causation can be negated separately, we can talk about bi-clausality (Horvath & Siloni 2010, Bartos 2011).
In Japanese, the negation test shows exactly the two clause domains in causatives, as we can see in the following examples (25a-b):

(25) a. Toru-wa Yoko-o ik-ase-nakat-ta
   Toru-TOP Yoko-ACC go-CAUS-NEG-PAST.3SG
   ‘Toru did not make Yoko go.’

b. Toru-wa Yoko-o ik-anaku-sase-ta
Toru-top Yoko-acc GO-NEG-CAUS-PAST.3SG
'Toru made Yoko not go.'

(Horvath & Siloni 2010)

The order of the morphemes determines which event of the complex predicate is in the domain of negation. In (25a) the order of the affixes (CAUS-NEG) gives the meaning of the construction, because the causation is not in the domain of negation. But if we change the order as we did in (25b), the causation comes into the negation domain, and as we can see from the English translation, it is not the base event but the cause event which is negated.
This is not the case in Hungarian. Unlike Japanese, where the negation is affixal, in Hungarian, negation is formed analytically with the *nem* partical (26a) in causative constructions as well.

(26) a. Nem énekel a gyerek.
not sing.PRES.3SG the child.NOM
'The child does not sing.'
b. Nem énekel-tet-t-em a gyerekek-et.
not sing-CAUS-PAST-1SG the child.PL-ACC
'I didn't make the children sing.' NOT: I made the children not sing.'

(Horvath & Siloni 2010)

As we can see from the translation, the only available interpretation of the sentence is where the cause event is in the domain of negation. It is not possible to negate the base event separately. As Bartos (2011) mentions in his work, this difference may result from the different nature of the negation in the languages and not from the nature of causation.

3.1.2 Condition B

Even if the negation (test) cannot show us exactly the clausal difference between Japanese and Hungarian, because of the difference in the type of negation, Condition B can. In monoclausal causation, a pronominal argument of the base verb cannot be bound by the causer (Bartos 2011) and this is exactly what in Hungarian causatives can be found (27a-b).

(27) a. Laci$_x$ ír-t néhány sor-t magáról$_x$/*ról-a$_x$
Laci write-PAST-3PL a_few lines-ACC himself-about/about-3SG
'Laci wrote a few lines about themselves.'
b. Laci$_x$ ír-at-ott a fiúk-kal néhány sor-t magáról$_x$/*róla$_x$
Laci write-CAUS-PAST the boy-INST a_few lines-ACC himself/about-3SG
'Laci had the boys write a few lines about him.'

(Bartos 2011)

As the (27) examples show, the subject of the sentence, *Laci* cannot bind the pronoun *róla* neither with a simple predicate (27a) nor with a complex predicate (27b), which means that the pronoun and the antecedent is in the same clause domain.
In Japanese, the binding domains are different with non-derived or derived predicates (28).

(28) a. Toru$_i$-wa Kitahara$_j$-ni kare*$_i$/*$_j$-o syookai si-ta.
Toru-TOP Kitahara-DAT he-ACC introdution do-PAST
'Toru introduced him to Kitahara.'
b. Toru$_i$-wa Kitahara$_j$-ni kare$_i$/*$_j$-o syookai s-ase-ta.
Toru-TOP Kitahara-DAT he-ACC introdution do-CAUS-PAST
'Toru made Kitahara introduce him'.

(Horvath & Siloni 2010)

In (28a) *kare* cannot be coreferentail with neither *Toru* (external argument) nor *Kitahara* (internal argument), because they are in the same clause, but in (28b) *kare* can be bound by the subject/topic *Toru*, which empirically show us that the pronoun and the topic DP must be in distinct clauses. The explanation for this is to assume that the base event and the causation event are distinct, too (Shibatani 1990, Bartos 2011).
Based on the diagnoses negation and Condition B, we can conclude that, in Hungarian the productive causation is monoclausal and in Japanese it is bi-clausal.
What about Udmurt?

3.1.3 Monoclausal Udmurt causatives

I this subsection I show how the Udmurt data can be analyzed based on the diagnoses presented above. First let us have a look at negation.
Negation in Udmurt is not affixal like in Japanese, it is analytic like in Hungarian, but in a different way, because instead of a negative particle Udmurt has an inflected negation verb.
I assume that causatives in Udmurt are monoclausal, as negation cannot scope over the embedded verb of the construction (29)

(29) Mon pinaljos-ti öj kirʒ́a-t-i.
I-NOM (the) kids-ACC not-PAST.1SG sing-CAUS.PRT.
'I didn't make the kid sing.' NOT: 'I made the kid not sing.'

Although, negation is expressed by the negation verb in almost all tenses, there is one tense in Udmurt, the Perfect, where the negation is affixal, like in Japanese (30).

(30) a. užaśkem b. užaśki-mte-e
work.PERF.1SG work-PERF-NEG-1SG

This verb form can properly show us, just like it was shown in Japanese, the domains of negation in an Udmurt causative form.

(31) a. Saša pinaljos-ti kirʑ́a-t*i̯*-mte.
Sasha-NOM kids-ACC sing-CAUS-NEG.3SG
'Sahsa had not made the kids sing.' NOT: Sasha had made the kids not sing.

As we expected, there is no difference regarding the affixal and the analytic constructions, because in both cases the whole predicate is in the domain of the negation, and it is not possible to separate them from each other, not even if we change the order of the suffixes, which is not an option is Udmurt (*kirʑ́a-mte-t*i̯*).

The second diagnose, the Condition B works exactly in the same way as we saw in Hungarian. The personal pronoun argument of the internal predicate cannot be bound by the causer.

(32) D*i̯*šetiš$_x$ pinaljos-ti gožtet gožt*i̯* -t-iz *co-les$_x$/as-les$_x$.
teacher-NOM (the)kids-ACC letter-NOM write-CAUS-PAST him-ABL/of-himself
'The teacher had the boys write a few lines about him.'

Based on these tests we can conclude that productive causatives in Udmurt behave exactly the same way as causatives in Hungarian, they are monoclausal.

3.2 Tests for mono- versus bi-eventivity:

The second issue which is always in the focus of the examination of causatives cross-linguistically is whether they are mono- or bi-eventive. Here are two of the diagnoses used by Bartos (2011) for testing Hungarian causatives' eventivity.

3.2.1 Subjects of participials

If the causation contains two subject roles, it means that the clause involves two different events (Bartos 2011), as we can see in Hungarian (33a) and in Japanese (33b):

(33) a. Laci a földön fek-ve énekel-tet-t-e Mari-t.
Laci the ground-on lie-PTC sing-CAUS-PAST-3SG.DEF Mari-ACC
'Laci made Mary sing lying on the ground.'
(ambiguous: Laci or Mary was lying on the ground)
(Bartos 2011)

b. Taroo-wa arui-te Hanako-o ik-ase-ta.
Taro-TOP walk-PTC Hanako-ACC go-CAUS-PAST
'Taro made Hanako go, walking.' or 'Taro, walking, made Hanako go.'
(Horvath & Siloni 2010)

Since both in Hungarian and in Japanese both the causer and the causee can be a controller, the sentence has two different readings, which means that there are two different events with two different potential subjects.

3.2.2 Low adverbial modifiers

Just like in the case of negation, in the clausality tests low adverbials can help as to analyses the eventivity of a productive causative, because if the basic event and the causation event can be modified separately we can talk about a bi-eventive causation (Bartos 2011).

(34) a. A tanár kétszer írat-t-a le Laci-val a vers-et.
the teacher two-times write-CAUS-PAST-3SG.DEF down Laci-INST the poem-ACC
'The teacher made Laci write down the poem twice.'
(ambiguous: 'twice made/caused' or 'twice wrote')

b. Jon-wa muriyari sono ko-ni sono kotusita-o
Jon-TOP forcibly that child-DAT that sock-ACC
ooyorokobide hak-ase-ta.
happily put_on-CAUS-PAST
'Jon forcibly made the child put on his socks(,) happily.'
(ambiguous: Jon or the child was happy)

Based on the ambiguous reading of the low adverbial modifiers (34a-b) and the subject of principals, we can draw the final conclusion. Namely, both in Hungarian and Japanese the causatives are bi-eventive.

3.3.3 Udmurt causatives are also bi-eventive

Using Bartos's diagnostics for testing bi-eventity in causative constructions we find that Udmurt causatives also involve too events – the core event and the causing event. Both events can be modified by low adverbials, like kʲk pol 'twice' (35a) and with participle clauses they result in ambiguity: the causer and the causee both can be the subject of the participle, like muzjem vʲilʲn kʲillʲca 'lying on the ground' (35b).

(35) a. Dʲišetiš Saša-jez odig kirʒ́an-ez kʲk pol kirʒ́a-t-iz.
teacher-NOM Sasha-ACC one song-ACC twice sing-CAUS-PAST
'The teacher made Sasha sing a song twice.'
(ambiguous: 'twice made/caused' or 'twice sing')

b. Saša muzjem vʲilʲn kʲillʲca kʲirʒ́a-t-iz Masa-jez.
Sasha-NOM ground on lying sing-CAUS-PAST Masha-ACC
'Sasha made Masha sing lying on the ground.'

As these examples testify, productive causative constructions behave like causatives in Hungarian, they are monoclausal but bi-eventive.

4. The syntactic structure of the causative constructions

In the last part of my paper I try to sketch the structure of productive causatives in Udmurt. Following Marantz (1997, 2001) I assume here that relevant linguistic items are syntactic entities with their own projections in the structure, and in the structure CauseP is the projection of the causation event, which takes the embedded verb/event's position - vP or VP – depending on the transitivity of the verb, as its complement. Both the CausP (causer) and the vP/VP (causee) have their own external arguments[5]. This yields the ambiguity of the constructions with participles.
Based on the data I assume the following structure of the causatives in Udmurt (36):

(36) [CausP NPcauser [Caus [vp NPcausee [v' v [VP NPintarg […]]]]]

The negation as a functional projection is on the left periphery, higher than the CausP, which is an affixal projection, and ff the negation is also affixal, it is lower in the structure than the CauseP. In both cases negation cannot intervene between the CausP and the vp/VP that is the reason why it is not possible to negate the base event separately from the cause event. The low adverbial modifier can be attached both to the vP/VP and the CausP and it result in ambiguity.
Pylkkönen (2002, 2008) in her analyses argue that the CauseP can select three different complements, namely root-selecting Cause Verb-selecting Cause and Phase-selecting Cause. This classification can account to the different properties of the causative. In Udmurt I propose that the double-object constructions are typical Verb-selecting causation and in the case-alternation can play role only with phase-selecting CauseP.

5. Conclusion

The empirical data of Udmurt causative constructions, their special syntactic properties suggest a syntactic analysis of these construction rather than a lexicalist one. The double-object argument structure, the strict word order among these internal arguments with + animate feature and the ACC case marking neutralization of the causee are properties which cannot belong to the lexicon. Only the case-pattern of the causee, the ACC-INST alternation has semantic and pragmatic reasons, namely the affectedness of the causee by the causer.
This grammatical encoding alternation of the causee is against Comrie (1981) encoding hierarchy which says that in the INST>DAT>ACC hierarchy the less effected argument is encoded with the ACC case and the most one with inst. In Udmurt, as we have seen it is exactly the opposite, because the less effected argument in the construction is marked by the INST.
To talk about causatives in Udmurt still question why the causee is always marked with the acc morpheme? Is it a real acc or it has different function. Even I leave this question open in

[5] Maranzt (1997) and Krazter (1996) instead of vP suggest VoiceP for introducing an external argument to the structure. In this analysis I follow Chomsky (2005) and assume vP for transitive verbs.

this paper, I assume that in causative constructions better to say that the causee is marked with the acc, but it is not a real acc, but some kind of quirky case, just like for example the quirky nominative in Icelandic.

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