When embedded C^0 projects an argument

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1 Overview

Spec, CP is not always an A-bar position \leftarrow embedded C⁰ can be involved in agreement and case-assignment (see Wurmbrand 2019).

However, Chomsky (2000:102): "a = [XP [H YP]] ... If H is C, XP is not introduced by pure Merge."

Our claim: A particular type of C⁰ can thematically license an argument merged externally in Spec,CP.

Novel data: Object control in Meadow Mari (Uralic; nominative, head final, SOV).

In particular, double dative constructions.

Mari speech act verbs can serve as mandative predicates when they embed an infinitival or subjunctive clause.

- 1. Speech act verb + a finite indicative clause = an utterance
- 2. Speech act verb + a finite subjunctive / infinitival clause = an order

Speech act verb: No mandative interpretation

(1) [Rveze-vlak kniga-m už-ən-ət manən], Maša mə-lan-na kalas-en. boy-PL book-ACC see-PST-3PL COMP Maša we-DAT-POSS.1PL tell-PST 'Mary told us that the boys had seen the book.'

 DP_{DAT} – Addressee (the Goal of communication).

Speech act verb: Mandative interpretation

(2) Maša mə-lan-na $_i$ [PRO $_i$ tol-aš (manən)] kalas-en. Maša we-DAT-POSS.1PL come-INF COMP tell-PST 'Maša told us to come.'

 DP_{DAT} – simultaneously Addressee (the Goal of communication) and mandee.

 $^{^{1}}$ Unless explicitly specified otherwise, the data presented here come from the Morkinsko-Sernur dialect of Meadow Mari (otherwise known as Eastern Mari) spoken in Mari El republic. Several examples marked "Hill Mari" come from the Kuznetsovo variety of Hill Mari (Western Mari) spoken in Mari El. The data have been collected during my field work in 2019-2020. The double dative constructions under consideration are attested in both languages and, so far, I have found no difference in their properties and distribution.

In object control constructions with a mandative interpretation two non-coordinated dative nominal phrases can appear.²

Double dative sentences

(3) Maša mə-la-m tə-lan-et tol-aš (manən) kalas-en.
Maša I-DAT-POSS.1SG you-DAT-POSS.2SG come-INF COMP tell-PST

'Maša told me for you to come.' (OR: 'While talking to me Maša told you to come', 'Maša told you via me to come')

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Schema: [DP_{DAT1} + DP_{DAT2} + infinitive + verb].
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 DP_{DAT1} – immediate Addressee – an Intermediary that receives the message.

 DP_{DAT2} – the obligation holder/Addressee.

It is usually implied that the Intermediary must pass the message to the Obligation holder; but it does not matter whether the message has actually been passed on.

Outline of the analysis: DP_{DAT2} is base-generated in Spec,CP and is licensed by the embedded C^0 manifested as the complementizer $man \ni n$. This exceptional property of manen follows from its semi-grammaticalized status: it is derived from the verb of communication $mana\check{s}$ 'say, tell' and retains some of its lexical properties.

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(4) [VP DP_{DAT1} [VI[CP DP_{DAT2i} [CI[FinP PRO_i][FinI][TP t_i infinitive]]] C^0 man n ]] V^0]]
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2 Examining the two dative DPs

2.1 Properties of the dative DP1

 DP_{DAT1} is the Addressee argument selected by the matrix predicate.

- (5) a. Maša Petja-lan mə-lan-na $_i$ [PRO $_i$ tol-aš (manən)] kalas-en. Maša Petja-DAT we-DAT-POSS.1PL come-INF COMP tell-PST 'Maša told Petja for us to come.'
 - b. Maša $\operatorname{Petja-lan}_i$ [PRO $_i$ tol-aš (manən)] kalas-en. Maša Petja-DAT come-INF COMP tell-PST 'Maša told Petja to come.'

- (1) a. Məj Maša-lan vurgem-əm nal-ən-am.
 - I Maša-DAT clothes-ACC buy-PST-1SG
 - 'I bought Maša clothes.'
 - 'I bought clothes for Maša, on her behalf.'
 - b. *Məj Maša-lan tə-lan-et vurgem-əm nal-ən-am.
 - I Maša-DAT you-DAT-POSS.2SG clothes-ACC buy-PST-1SG

Intended: 'I bought you clothes for Maša.'

- c. Məj Maša-lan peč-əm pudərt-en-am.
 - I Maša-DAT fence-ACC break-PST-1SG
 - 'I broke Maša's fence.'
 - 'I broke the fence for Maša.'
- d. *Məj Maša-lan tə-lan-et peč-əm pudərt-en-am. I Maša-DAT you-DAT-POSS.2SG fence-ACC break-PST-1SG

Intended: 'I broke your fence for Maša.'

²Not attested, for instance, in Russian (a contact language) or Hungarian (a Uralic language). In Mari, in double datives are regularly prohibited in monoclausal constructions.

✓DP_{DAT1} is restricted to [+Animate] (regularly [+Human]) intermediaries.

(6) Maša serəš-əšte / *serəš-lan mə-lam tol-aš (manən) kalas-en. Maša letter-IN letter-DAT I-DAT.1SG come-INF COMP tell-PST 'In a letter, Maša told me to come.'

✓DP_{DAT1} does not have to be dative.

- (7) a. Maša jumə-m / *jumə-lan tol-aš (manən) sörval-en.
 Maša God-ACC God-DAT come-INF COMP beg-PST
 'Maša begged God to come.'
 - b. Maša jumo-m mo-lan-na tol-aš (manon) sörval-en. Maša God-ACC we-DAT-POSS.1PL come-INF COMP beg-PST 'Maša begged God to make us come.'

2.2 Properties of the dative DP2

 DP_{DAT2} is interpreted as a combination Addressee/mandee.

Scenario: The children are asleep. They should sleep until the evening. The doctor talked to me and asked me to check on them.

- (8) a. Vrač mə-lan-em [joča-vlak kas marte mal-əšt manən] kalas-en. doctor I-DAT-1SG child-PL evening until sleep-JUS.PL COMP tell-PST 'The doctor told me that the children should sleep until the evening.'
 - b. #Vrač mə-lan-em joča-vlak-lan kas marte mal-aš *(manən) kalas-en. doctor I-DAT-POSS.1SG child-PL-DAT evening until sleep-INF COMP tell-PST Intended: 'The doctor told me that the children should sleep until the evening.'
 - c. #Vrač joča-vlak-lan kas marte mal-aš (manən) kalas-en. doctor child-PL-DAT evening until sleep-INF COMP tell-PST 'The doctor told me that the children should sleep until the evening.'

 DP_{DAT2} forms a constituent with the embedded non-finite clause.

 \checkmark DP_{DAT2} and the infinitival clause cannot be separated by a matrix adverb.

(9) *Təj mə-lan-na [Petja-lan tače kapka-m erla ačal-aš (manən)] kalas-əš-əč. you we-DAT-POSS.1PL Petja-DAT today fence-ACC tomorrow fix-INF COMP tell-PST-2SG Intended: 'Today you told us that tomorrow Petja should fix the fence.'

✓DP_{DAT2} and the non-finite clause can only be dislocated together.

- (10) a. Təj mə-lan-na kalas-əš-əč [Petja-lan kapka-m ačal-aš (manən)]. you we-DAT-POSS.1PL tell-PST-2SG Petja-DAT fence-ACC fix-INF COMP 'You told us that Petja should fix the fence.'
 - b. *Təj mə-lan-na Petja-lan kalas-əš-əč [kapka-m ačal-aš (manən)]. you we-DAT-POSS.1PL Petja-DAT tell-PST-2SG fence-ACC fix-INF COMP 'You told us that Petja should fix the fence.'

 DP_{DAT2} is **not** an overt **embedded subject** (cf. Russian or Hungarian, where overt embedded subjects of non-finite clauses are attested):

 \checkmark DP_{DAT2} obeys the [+Human] restriction regardless of the embedded predicate. → same restriction as for the addressee!

- (11) a. #Maša më-län-em [[ðškal-lan ške-ok tol-aš] keles-en. [Hill Mari] Maša I-DAT-POSS.1SG cow-DAT REFL-PTCL come-INF tell-PST Only: 'Maša told me to go for the cow myself.'

 Not available: 'Maša told me that the cow should come herself.'
 - b. Maša mö-län-em [âškal ške-ok tol-žâ manân] keles-en. Maša I-DAT-POSS.1SG cow self-PTCL come-JUS COMP tell-PST 'Maša told me that the cow should come herself.'
- ✓ Double dative sentences do not pass the idiom chunk test.
- (12) *Maša (Petja-lan) [koti-lan mä loškâ-na vanž-aš] keles-en. [Hill Mari] Maša Petja-DAT cat-DAT we between-POSS.1PL run-INF tell-PST Intended: 'Maša told (Peter) that we should quarrel.'
- ✓ Double dative constructions are restricted to speech act verbs.
 - (13) Ač'a-ž-lan [(*mə-lan-na) təšeč kaj-aš] nele. father-DAT we-DAT-POSS.1PL here.EL go-INF hard 'For his/her father it is hard to leave.'

3 Double dative constructions: the role of manon

3.1 The second dative DP is projected by the C head

- DP_{DAT1} is a matrix Addressee.
- DP_{DAT2} is related to the non-finite clause but cannot be analyzed as an argument of the embedded predicate. No raising analysis.

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(14) \left[ \dots DP_{DAT1} \dots \left[ XP DP_{DAT2i} \left[ X_{I} \right] PRO_{i} \text{ infinitive } \right] \mathbf{X}^{0} \right] \dots SAY \right]
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I argue that X here is a C head of a particular type: it is manifested as the complementizer $man \ni n$ or its null allomorph.

(15) Maša mə-lan-na $[CP \text{ Petja-lan}_i [IP \text{ PRO}_i \text{ tol-aš}] \text{ (manən)}]$ kalas-en. Maša we-DAT-POSS.1PL Petja-DAT come-INF COMP tell-PST 'Maša told us that Petja should come.'

The complementizer $man \ni n$:

- selects a non-finite FinP as its complement,
- projects an argument in Spec, CP the DP_{DAT2} and assigns it the Addressee role together with licensing dative Case.

Cf. the correlation: only those predicates that can embed a non-finite complement clause with the complementizer $man \ni n$ allow double dative.

(16) Ač'a-ž-lan [(*mə-lan-na) təšeč kaj-aš (*manən)] nele. father-DAT we-DAT-POSS.1PL here.EL go-INF COMP hard 'For his/her father it is hard to leave.'

3.2 The complementizer manan

The **exceptional status** of manon as a complementizer

 \leftarrow it is a **semi-grammaticalized** element diachronically derived from the speech act verb $mana\check{s}$ 'say, tell'. Morphologically $man \ni n$ is identical to the non-agreeing converb/past.3sg form $man \ni n$.

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(17) "Ala virus?" – man-ən xirurg.

CONJ virus tell-PST surgeon

"And a virus?' – said the surgeon.'
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Similarly to lexical predicates and unlike, for instance, 'proper' complementizers, such as $\check{s}to$ 'that' and $\check{s}tob\hat{a}$ 'so that' borrowed from Russian to Hill Mari, manon always appears at the right edge.

- (18) a. Ävä ergö-žö-län keles-en [(**štobô**) tödö sôkôr-ôm näl-žö]. [Hill Mari] mother son-POSS.3SG-DAT tell-PST so that he bread-ACC take-JUS 'The mother told her son to take/buy bread.'
 - b. Ävä ergö-žö-län keles-en [tödö sôkôr-ôm näl-žö (manôn)]. mother son-POSS.3SG-DAT tell-PST he bread-ACC take-JUS COMP 'The mother told her son to take/buy bread.'

In the double-dative sentences $man \ni n$ is a \mathbb{C}^0 , not a lexical verb (the converb form):

 \checkmark Converb clauses are usually adjuncts, the embedded clauses with $man \ni n$ under consideration are complements:

- 1. They cannot co-occur with an internal DP argument, such as 'fact' or 'joke' (19).
- 2. They allow sub-extraction (20, 21).
- (19) a. Me Petja-lan tidə məskara-m kalas-en-na. we Petja-DAT this joke-ACC tell-PST-1PL 'We told Petja this joke.'
 - b. *Me Petja-lan tidə məskara-m [tud-lan tol-aš man-ən] kalas-en-na. we Petja-DAT this joke-ACC he-DAT come-INF say-CVB tell-PST-1PL Intended: 'We told Petja this joke, saying to him to come.'
- (20) a. Nunə mə-lan-na [kö-m šel-aš (manən)] kalas-en-ət? they we-DAT-POSS.1PL who-ACC hit-INF COMP tell-PST-3PL 'Who did they tell us to hit?'
 - b. Kö- m_i nunə mə-lan-na [t_i šel-aš (manən)] kalas-en-ət? who-ACC they we-DAT-POSS.1PL hit-INF COMP tell-PST-3PL 'Who did they tell us to hit?'

(21)a. Kö-m šel-ən me kaj-əš-na? who-ACC hit-CVB we go-PST-1PL 'Who did we leave having hit?' b. $??K\ddot{o}-m_i$ $me [t_i \text{ šel-an}]$ kaj-əš-na?

who-ACC we hit-CVB go-PST-1PL

'Who did we leave having hit?'

 \checkmark The morphological form of man as a complementizer is fixed. For instance, a negative converb form derived with the suffix -de cannot be used.

- / man-de (22)a. Maša salam-əm kalas-əde pur-əš. tell-CVB.NEG enter-PST Maša hello-ACC tell-CVB.NEG 'Maša entered without saying hello.'
 - b. *Maša t-lat [təšeč kaj-aš / kaj-Ø man-dekalas-en. go-IMP tell-CVB.NEG tell-PST Masa you-DAT.2SG here.EL go-INF Intended: 'Maša told you not to leave.' 'Maša did not tell you to leave.'
- \checkmark manon as a complementizer cannot be substituted by a converb form of a synonymous speech act verb.
- / kutər-ən kalas-əš-əč. *Təj mə-lan-na təšeč kaj-aš **pop-ən** you we-DAT-POSS.1PL here.EL go-INF speak-CVB say-CVB tell-PST-2SG Intended: 'You told us to leave.'
- \checkmark manon as a complementizer is desemanticized.
- šoješt manen]. (24)Iza üšan-a [šüžar-že ok brother believe-NPST.3SG sister-POSS.3SG NEG.3SG lie 'The brother believes that his sister will not lie to him.' [T&S:120 (25)]]

Following Toldova and Serdobolskaya (2014): In modern Mari manon is being grammaticalized as a functional element, a complementizer.

Its grammaticalization has not been complete yet:

it may retain some properties of the lexical speech act verb manaš, such as the ability to combine with a non-finite clausal complement and to license the Addressee argument.

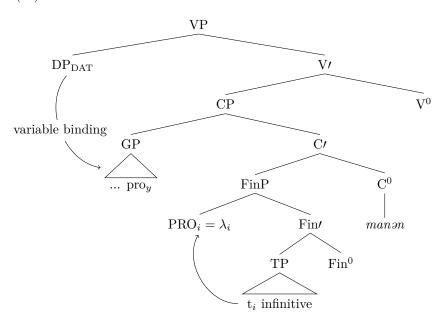
 $[V_P \ DP_{DAT1} \ [V_I]_{CP} \ DP_{DAT2i} \ [C_I]_{FinP} \ PRO_i \ [F_{inI}]_{TP} \ t_i \ infinitive \] \ Fin^0 \] \ C^0 \ manon \]] \ V^0 \]$

Deriving double dative constructions: Logophoric control

Mari mono-dative object control constructions

← Landau's (2015) logophoric control analysis for attitude predicates.

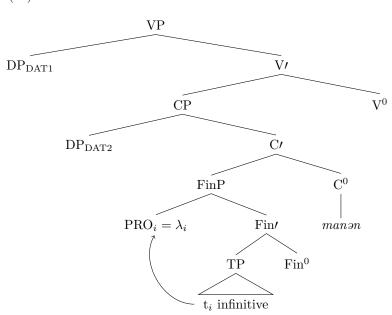
(26)



 ${f GP}$ – the concept generator phrase; it introduces the AUTHOR, ADDRESSEE, TIME, and WORLD coordinates for the embedded proposition.

Mari double-dative object control constructions

(27)



 DP_{DAT2} and PRO are connected via predication.

5 Additional support for the analysis

5.1 No double datives with finite clauses

- (28) *Maša mə-lan-na Petja-lan [rveze-vlak kniga-m už-əšt manən] kalas-en. Maša we-DAT-POSS.1PL Petja-DAT boy-PL book-ACC see-JUS COMP tell-PST Intended: 'Maša told us to tell Petja that the boys should see the book.' or 'Maša told Petja to tell us that the boys should see the book.'
- (29) a. Maša mə-lan-na Petja-lan tol-aš (manən) kalas-en. Maša we-DAT-POSS.1PL Petja-DAT come-INF COMP tell-PST 'Maša told us that Petja should come.'
 - b. Maša mə-lan-na [*Petja-lan / Petja tol-žo manən] kalas-en. Maša we-DAT-POSS.1PL Petja-DAT Petja come-JUS COMP tell-PST 'Maša told us that Petja should come.'
- \leftarrow DP_{DAT2} is the subject of predication, while FinP is the predicate (hence, cannot be fully saturated).

5.2 Partial vs. exhaustive control

In sentences with **a single dative DP** and an embedded non-finite clause, the DPDAT and the understood embedded subject must be co-indexed. However, the coreference can be **partial**.

 \leftarrow pro_y is bound by the controller, DP_{DAT} ; binding is more flexible.

- (30) a. Maša t-lat təšəč **pərl'a** kaj-aš kalas-en. Maša you-DAT.2SG here.EL together go-INF tell-PST 'Maša told you to leave together.' (= you and Maša should leave together)
 - b. Me təšeč pərl'a ka-en-na. we here.EL together go-PST-1PL 'We left together.'
 - c. Məj təšeč (***pərl'a**) ka-en-am. I here.EL together go-PST-1SG 'I left.'

In sentences with **two dative DPs**, DP_{DAT2} obligatorily controls the embedded subject. Partial coreference examples with two dative DPs are evaluated as degraded.

 \leftarrow DP_{DAT2} is the subject of predication

(31) *Maša mo-la-m t-lat təšəč pərl'a kaj-aš kalas-en.
Maša I-DAT-POSS.1SG you-DAT.2SG here.EL together go-INF tell-PST
Intended: 'Maša told me to tell you to leave together.'

6 Implications

• Spec,CP is not restricted to having A-bar properties. For the future research: to look at other languages where speech act verbs are being grammaticalized into complementizers. Cf. Sinitic languages (Chappell 2008); see also Heine & Kuteva (2002) on grammaticalization of 'say', Matić & Pakendorf (2013) on non-canonical uses of 'say'.

 (Tentative) proposal: DP_{DAT2} argument is an overt ADDRESSEE coordinate, in the spirit of Baker 2008.

Baker 2008:125: "All matrix clauses and certain embedded clauses have two special null arguments generated within the CP projection, one designated S (for speaker) and the other A (for addressee)". I suggest that, based on the Mari data, this proposal can be elaborated to include exceptional cases when a 'discourse-oriented' argument (an Addressee in the cases under consideration) is overtly realized as an independent DP, being projected by the complementizer.

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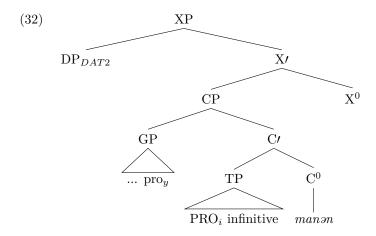
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A Alternative analysis: a silent modal



where X^0 is a silent modal.

${\bf Challenges:}$

Ideally, we would like this silent modal to fit in with overt deontic modals found in Mari, such as $k\ddot{u}la\dot{s}$ 'be necessary'. $k\ddot{u}la\dot{s}$ is a transitive control predicate that selects a dative obligation holder and a non-finite clause.

- $k\ddot{u}la\dot{s}$ 'be necessary' has [+ Animate] restriction on the DP_{DAT};
- külaš can embed a finite subjunctive clause (33);

- külaš cannot embed non-finite clauses with manən;
- Partial control is not allowed with double datives.
- (33) Mə-lan-na $_i$ [PRO $_i$ kogəl'o vaškerak küj-žo manən] kül-eš. we-DAT-POSS.1PL pie quickly cook-JUS COMP be.necessary-NPST.3SG 'It is necessary for us for the pie to cook quickly.'

B Double dative and the left periphery of the embedded clause

Wh-movement out of the embedded CP is allowed in Mari \rightarrow A/A-bar properties of the same C⁰. However, the mechanism of this movement is understudied; more data should be collected.

- (34) a. Nuno mə-lan-na [tə-lat [Petja-m šel-aš (manən)]] kalas-en-ət. they we-DAT-POSS.1SG you-DAT.2SG Petja-ACC hit-INF COMP tell-PST-3PL 'They told us for you to hit Petja.'
 - b. Kö- m_i nuno mə-lan-na [tə-lat [t_i šel-aš (manən)]] kalas-en-ət? who-ACC they we-DAT-POSS.1SG you-DAT.2SG hit-INF COMP tell-PST-3PI 'Who did they tell us for you to hit?'
 - c. Nuno mə-lan-na [kö-m $_i$ tə-lat [t $_i$ šel-aš (manən)]] kalas-en-ət? they we-DAT-POSS.1SG who-ACC you-DAT.2SG hit-INF COMP tell-PST-3PL 'Who did they tell us for you to hit?'
 - d. Nuno mə-lan-na [tə-lat [kö-m šel-aš (manən)]] kalas-en-ət? they we-DAT-POSS.1SG you-DAT.2SG who-ACC hit-INF COMP tell-PST-3PL 'Who did they tell us for you to hit?'

C Dative case assignment

In infinitival purpose clauses with the complementizer manon:

- overt dative subjects can appear;³
- the infinitive is accompanied by a possessive marker corresponding to the embedded subject: optionally if the subject is overt, obligatorily if the subject is covert and distinct from the matrix subject;
- manən is optional but preferable.
- (35) a. Rveze-vlak(-*lan) pur-əšt manən me kapka-m poč-en-na. boy-PL-DAT enter-JUS.PL COMP we gate-ACC open-PST-1PL 'We opened the gate so that the boys could enter.'
 - b. ?Rveze-vlak-lan pur-aš manən me kapka-m poč-en-na. obsolete boy-PL-DAT enter-INF COMP we gate-ACC open-PST-1PL
 - 'We opened the gate so that the boys could enter.'
 - c. Rveze-vlak-lan pur-aš-əšt manən me kapka-m poč-en-na. boy-PL-DAT enter-INF-POSS.3PL COMP we gate-ACC open-PST-1PL 'We opened the gate so that the boys could enter.'

 $^{^3}$ See also Landau (2008), i.a., on dative case being assigned by the embedded C^0 in Russian.

- (36) a. Pur-aš(-na) (manən) me kapka-m poč-en-na. enter-INF-POSS.1PL COMP we gate-ACC open-PST-1PL
 - 'We opened the gate to enter.'
 - b. Mə-lan-na pur-aš(-na) manən me kapka-m poč-en-na. we-DAT-POSS.1PL enter-INF-POSS.1PL COMP we gate-ACC open-PST-1PL 'We opened the gate to enter.'
 - c. Pur-aš#(-na) manən Petja kapka-m poč-en. enter-INF-POSS.1PL COMP Petja gate-ACC open-PST 'Petja opened the gate for us to enter.' Without "-na": 'Petja opened the gate to enter.'
- (37) a. Kogəl'-lan küj-aš(-əžə) manən me duxovka-m čükt-əš-na. pie-DAT cook-INF-POSS.3SG COMP we oven-ACC turn.on-PST-1PL 'We turned on the oven for the pie to cook.'

In the double dative constructions under consideration in this paper, possessive marking on embedded infinitives is prohibited:

- (38) a. *Maša mə-lan-na tol-aš-na kalas-en. Maša we-DAT-POSS.1PL come-INF-POSS.1PL tell-PST
 - Intended: 'Maša told us to come.'
 - b. *Maša rveze-vlak-lan (mə-lan-na) təšeč kaj-aš-na manən kalas-en. Maša boy-PL-DAT we-DAT-POSS.1PL here.EL go-INF-POSS.1PL COMP tell-PST Intended: 'Maša told the boys for us to come.'