

P-approach vs Mood-approach

to non-finite adjunct clauses

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The central question

How can clauses be used as modifiers of events/situations?

I will only focus on adverbial clauses, and will not discuss relative clauses.

Problem 1: Semantic type

Finite (and some non-finite) clauses are fully saturated propositions, but modifiers are predicates.

- (1) a. It is not very healthy [that Tucker **eats** ten cookies a day].
- b. [For Tucker **to eat** ten cookies a day] is not very healthy.
- c. [Tucker's **eating** ten cookies a day] is not very healthy.

Problem 2: Types of modifiers

Generally speaking, clauses refer to „neutral” situations. Where does the specific flavor of modification (temporal, causal, rationale, etc.) come from?

- (2) a. Tucker will woof [TEMPORAL Alice will come home].
- b. Tucker will be happy [CAUSE Alice will come home].

The central question

How can clauses be used as modifiers of events/situations?

The proposal: Two strategies

- P-approach:
adjunct clauses are introduced by an adposition
= „the power from outside”
- Mood-approach:
adjunct clauses contain a special Mood/Mod head at the periphery
= „the power from within”

In this talk I will discuss these two strategies, their strengths and limitations, focusing primarily on data from Mari (Uralic).

Two case studies to be discussed:

- 1 Mari temporal gerunds and Ps
- 2 Mari rationale infinitives and Mood

The proposal: Two strategies

- P-approach:
Adjunct clauses with more complex semantics (temporal, causal, justification, etc.) require an adposition.
→ Nominalizations, mixed categories
- Mood-approach:
Adjunct clauses with rationale/purpose/goal semantics are derived by manipulating clause-internal Mood and modality.
→ Infinitives, subjunctives/imperatives

Power from outside: Clauses and adpositions

Strategy 1

P-approach: adjunct clauses are introduced by an adposition (= „the power from outside”).

(3) Basque (Caha 2022):

a. [Eguzkia atera d-en-e-tik] lanean ibili gara.
sun rise AUX-REL-DEF-ABL work.LOC walk AUX
‘We have been working [since the sun rose.]’

b. [[[when the sun rose] D] P] – PP with a light headed RelCl

See also Heycock (2022), following Hall & Caponigro (2010), on English temporal clauses being free relatives.

Russian:

- (4) Oleg rasstroils'a [posle [togo] (momenta), [**kak** amerikancy proigrali
Oleg got.upset after that moment.GEN how Americans lost
v gol'f]]].
in golf
'Oleg got upset after (the moment when) Americans lost at the golf
tournament.'

Cf. recent work by Marcel den Dikken on finite clauses generally resisting being merged as complements of Vs and Ps.

Strategy 1: P-approach

Adjunct clauses are introduced by an adposition.
= „the power from outside”

- (5) (Landau 2021, building upon Landau 2013, 2017 and Green 2018)
- a. Potatoes are tastier [after boiling them]. – temporal
 - b. The meeting was canceled [without knowing the reasons]. – temporal
 - c. They expelled him [for cheating at the exam]. – justification

In this talk I will focus mostly on non-obligatory control (NOC) non-finite clauses (i.e. propositional clauses of type $\langle s,t \rangle$).

Non-finite clauses and adpositions

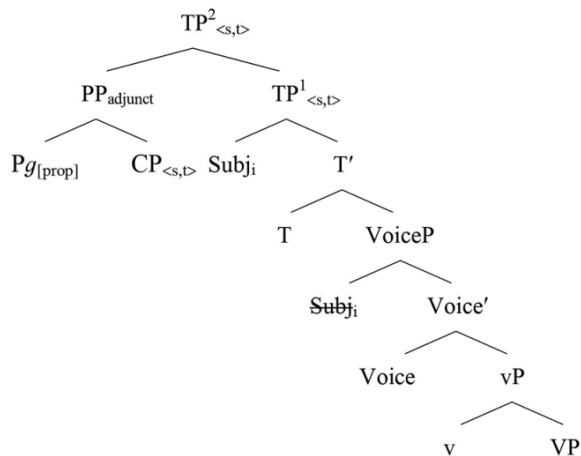
Landau's (2021) approach to NOC adjunct non-finite clauses: the special P head ($P_{Just}/P_{Temporal}$, etc.) takes the non-finite CP as its complement.

structural size	CP
adjunction site	at TP level/at VoiceP level
how adjoins	the CP is in Comp,P
source of the semantics	P

Non-finite clauses and adpositions

Landau's (2021) approach to NOC adjunct non-finite clauses: the special P head ($P_{Just}/P_{Temporal}$, etc.) takes the non-finite CP as its complement.

(6) NOC adjuncts: Propositional variant (at TP) (Landau 2021:66)



Nominalized non-finite clauses

Mixed categories that contain a verbal core dominated by some nominal projections.

(7) $[_{nP} \text{ n=NMZ } [_{TP/VoiceP} \dots]]$

(8) [[Oya ev-de kal-dığ-1] için] Ali iş-e gid-ebil-di.
Oya house-LOC stay-FNMZ-3SG because Ali work-DAT go-ABIL-PST
'Ali could go to work because Oya stayed at home.'
(Turkish; Kornfilt 2001)

Non-finite clauses and adpositions: Reanalyzing Mari gerunds

Non-finite clauses and adpositions: Reanalyzing Mari gerunds

- Language: Meadow Mari, one of the two main varieties of Mari (Uralic).
- Location: Mari El republic, Russian Federation. Number of speakers: approximately 260,000 (the Russian Census of 2020).
- Status: “definitely endangered” (Moseley 2010).

The original data presented in the talk are from the [Morkinsko-Sernur dialect](#) of Mari. They were collected in 2020–2023 from two native speakers in individual elicitations that I conducted online.

The Mari El Republic



Mari temporal gerunds (converbs)

- **mek**-gerunds: prior action,
- **mešk**-gerunds: future action,
- **šəla**-gerunds: simultaneous action.

(9) (Riese et al. 2022)

- a. Erla, paša-m əštə-**meke**, kofe-m jü-am.
tomorrow work-ACC do-MEKE coffee-ACC drink-NPST.1SG
'Tomorrow after I work I will drink coffee.'
- b. Erla, paša-m əštə-**meške**, kofe-m jü-am.
tomorrow work-ACC do-MEŠKE coffee-ACC drink-NPST.1SG
'Tomorrow before I work I will drink coffee.'
- c. Erla, paša-m əštə-**šəla**, kofe-m jü-am.
tomorrow work-ACC do-ŠƏLA coffee-ACC drink-NPST.1SG
'Tomorrow when I work I will drink coffee.'

Mari temporal gerunds as PPs

In the descriptive literature these temporal modifiers are described as a separate grammatical category (gerunds, converbs, dejepričastija). The category is not clearly defined and it is hard to bring it together with the major lexical categories – V, N, A, P.

Proposal

Temporal converbs in Mari are PPs with an embedded event nominal.

See also work by Maša Bešlin on participles being essentially adjectives and not forming a separate category.

Mari temporal gerunds as PPs

Bringing together diachronic and synchronic syntax

Diachronic analysis: Isanbaev (1961), Galkin (1964).

- me-ke-gerunds = NMZ + mēnge/mōngö ‘behind, after’: prior action,
- me-ške-gerunds = NMZ + ILL ‘into’: future action,
- šə-la-gerunds = NMZ + MOD (< LAT): simultaneous action.

MOD = modal case, used in comparative constructions, etc.; historically = LAT (Galkin 1964).

šə- = NMZ or PTCP + N_∅; cf. -məla forms used instead in some North-Western dialects.

Mari temporal gerunds as PPs

Bringing together diachronic and synchronic syntax

Synchronic reanalysis:

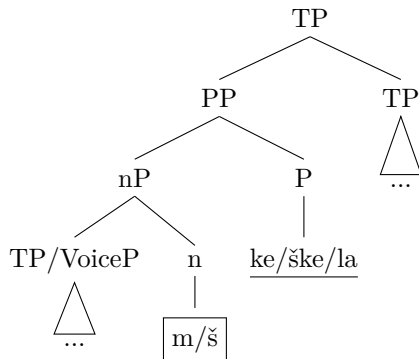
- (10) a. Erla, paša-m əštə-me-ke, kofe-m jü-am.
tomorrow work-ACC do-NMZ-AFTER coffee-ACC drink-NPST.1SG
- b. Erla, paša-m əštə-me-ške, kofe-m jü-am.
tomorrow work-ACC do-NMZ-ILL coffee-ACC drink-NPST.1SG
- c. Erla, paša-m əštə-šə-la, kofe-m jü-am.
tomorrow work-ACC do-NMZ-MOD coffee-ACC drink-NPST.1SG

Cf. Georgieva (2019, 2023) on converbs in Udmurt.

Mari temporal gerunds as PPs

Lexical cases (including local cases) are affixal PPs.

(11)



See Riemsdijk & Huybregts (2002) and Asbury et al. (2007), i.a. On Mari: Den Dikken (2018), Pleshak (2019), Burukina (2023).

Advantages

- An explanation for the internal syntactic properties: Nominative/genitive subjects, as in nominalizations (Riese et al. 2022)

- (12) a. [Tunəktəš-**ən** savərnə-**me-k**(-əže)] tunemše-vlak špargalkəm
teacher-GEN turn-NMZ-after-POSS.3SG student-PL crib
luktənət.
took.out
'After the teacher turned his/her back, the students got out cribs.'
- b. [Ekzamen-vlak-**∅** tüngal-**me-k**] student-vlak šagal malat.
exam-PL start-NMZ-after student-PL little sleep
'After the exams start, students sleep little.'
- (13) a. [Una-vlak-**ən** tol-**me-šk**(-əšt)] žap šagal kodən.
guest-PL-GEN come-NMZ-ILL-POSS.3PL time little stays
'There is only little time left before the guests come.'
- b. [Una-**∅** tol-**me-ške**] tortəm ida koč!
guest come-NMZ-ILL cake IMP.NEG eat
'Don't eat the cake before the guests come!'

Nominative/genitive subjects in nominalizations (Riese et al. 2022):

- (14) a. Anuš-**ən** tol-**m**(-əžo) godəm
Anush-GEN come-NMZ-POSS.3SG during
'when Anush came ...'
- b. Keče-~~∅~~ lek-**me** godəm ...
sun come.up-NMZ during
'when the sun came up ...'

P-approach to clausal adjunction

The temporal gerunds in Mari are PPs with a nominalization complement both at a diachronic and synchronic level.

Advantages

- Transparent compositional semantics,
- An explanation for the syntactic distribution,
- An explanation for the internal syntactic properties.

Importantly, there is no more need to postulate a separate grammatical category.

Power from outside: Clause-internal Mood and modality

Non-finite clauses and adpositions: Infinitives

The examples that we have seen so far involved nominalized non-finite clauses, i.e. mixed categories. In general, P-headed infinitives appear to have a limited distribution.

- (15)
- a. This book was written [in order] [to be sold to Hollywood].
 - b. Ida war in den Garten gegangen, [um] [Blumen zu schneiden].
'Ida went to the garden (in order) to cut flowers.'
 - c. [Para] [estudiar]] vamos a la biblioteca.
'(In order) to study, we are going to the library.'

Limited temporal infinitives in Romance:

- (16) Tothom va aplaudir [en] [acabar el concert].
Literally: 'Everybody applauded in finish.INF the concert'
(Catalan; Rigau 1995)

Non-finite clauses and adpositions: Infinitives

Cross-linguistically, infinitives appear to resist being combined with a P.
← (Possibly) a categorial restriction.
Cf. the behavior of finite clauses – a broader syntactic generalization?

Note: Rationale/Purpose infinitives seem to be an exception.

OC infinitives are arguably of the type $\langle e, \langle s, t \rangle \rangle$ as they are predicated of the controller. How can they combine with a P?

See e.g. Landau (2021) postulating special P_{pred} that combines (relates) two predicates (the main one and the embedded one) together by first applying them separately to the controller DP and turning them into propositions.

The proposal: Two strategies

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Mari rationale infinitives and Mood

Rationale infinitives: The T-P-C sandwich

Infinitival RatCls in Mari: a dative postposition (Burukina 2023) and a complementizer.

(17) [PRO_i kudəvečə-š pur-aš-lan manən], təj_i pečə-m sümər-enat.
yard-ILL go-INF-DAT COMP you fence-ACC break-PST.2SG
'You broke the fence in order to get into the yard.'

(18) [Məlanna kudəvečə-š pur-aš-lan manən], təj pečə-m
we.DAT yard-ILL go-INF-DAT COMP you fence-ACC
sümər-enat.
break-PST.2SG
'You broke the fence in order for us to get into the yard.'

Rationale infinitives: The T-P-C sandwich

Infinitival RatCls in Mari: a dative postposition and a complementizer.
→ The structural sequence $[_{CP}[_{PP}[_{TP} \dots T^0] P^0] C^0]$

An analysis whereby the infinitival clause is selected by a dative P is problematic for the theory of categorial selection.

Grimshaw (1991): in an extended projection the lexical head and all the functional heads must share the category (see also Riemsdijk (1990) for a similar idea).

The proposal

- LAN in rationale infinitives spells out a modal operator, Mod_{Rat}
- Mod_{Rat} is in the head of MoodP at the periphery of the embedded clause
- LAN is identical to the dative marker because of the diachronic connection between the two.

I argue that -lan in RatCls is an exponent of $\text{Mod}_{\text{Rat}}/\text{Mood}^0$; however, for the sake of uniformity I gloss it as DAT.

The structure of rationale clauses: Semantics

The starting point: the semantic analysis of RatCls by Dąbkowski & AnderBois (2023), following Grosz (2014) and Nissenbaum (2005).

Semantics of RatCls

All rationale clauses contain a teleological modal element.

It makes reference to the goals of the matrix Agent that give rise to the situation described by the matrix clause.

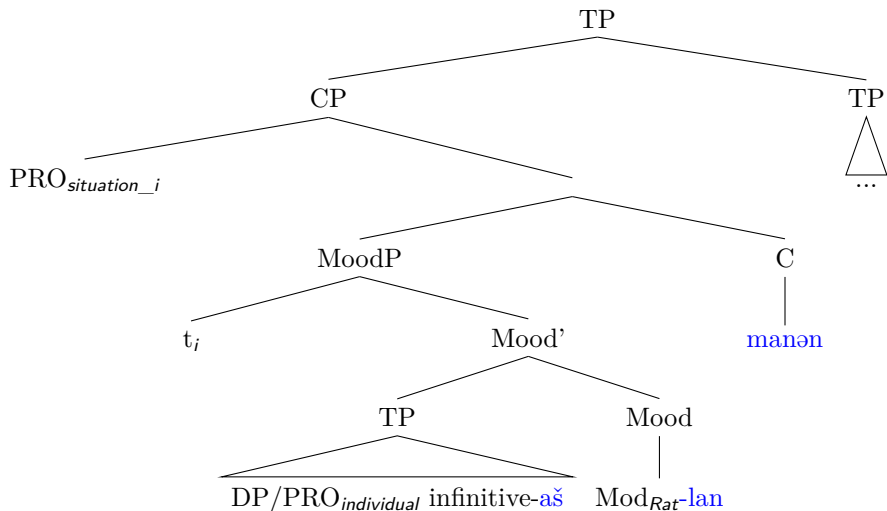
$$(19) \quad \llbracket \text{Mod}_{\text{Rat}} \rrbracket^{a,w} = \lambda p_{\langle st \rangle} . \lambda q_{\langle st \rangle} . \forall w' [w' \text{ is compatible with the goals relevant to } q: p(w')]$$

Mod_{Rat} is a two-place predicate.

It takes as its arguments the embedded TP (p) and the main TP (q). It quantifies over the set of possible worlds compatible with the matrix explicit or implicit Agent's goals in this specific situation.

The structure of rationale clauses: Syntax

(20)



The structure of rationale clauses: Syntax

- The MoodP is predicative and requests one argument after combining with the embedded TP.
- A silent minimal pronoun $PRO_{situation}$ is merged in Spec,MoodP, saturating the MoodP.
Cf. Stegovéc (2019) introducing a perspectival individual-type anaphor PRO_{pers} in Spec,MoodP to combine with a directive/deontic modal Mood.
- $Man\acute{o}n$ (C^0) is a general non-interrogative complementizer.
- $PRO_{situation}$ moves to Spec,CP, where it turns into an operator.
- The whole CP becomes a derived one-place predicate and can combine with the main TP.

The structure of rationale clauses: Syntax. NOC

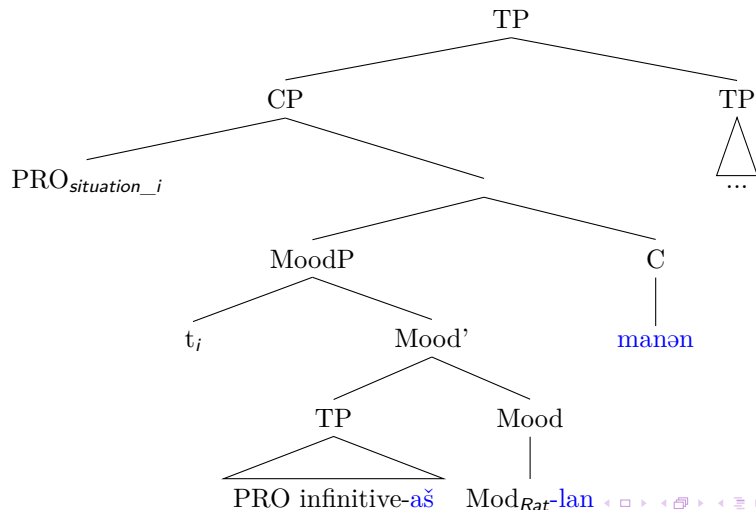
Rationale clauses with a PRO subject instantiate **non-obligatory control**.

	OC	NOC	RatCls
PRO _{arb} allowed	×	✓	✓
Non-local controllers allowed	×	✓	✓
Strict reading of PRO	×	✓	✓
Only [+human] PRO	×	✓	✓

See the Appendix for the examples.

The structure of rationale clauses: Syntax. NOC

RatCls with a PRO subject instantiate **non-obligatory control** and fit into the structure without modification. The NOC PRO here – a pronoun/logophor.



Implications: Mood/Mod vs P

- RatCls adjoin at TP level.
- RatCls contain a teleological modal Mod_{Rat} introduced in MoodP, which is responsible for their semantics.

	Mood-approach	P-approach (Landau 2021)
structural size		CP
adjunction site (RatCls)		at TP level
how adjoins	the CP directly	the CP is in Comp,P
source of the semantics	Mood/Mod	P

Implications: Mood/Mod vs P

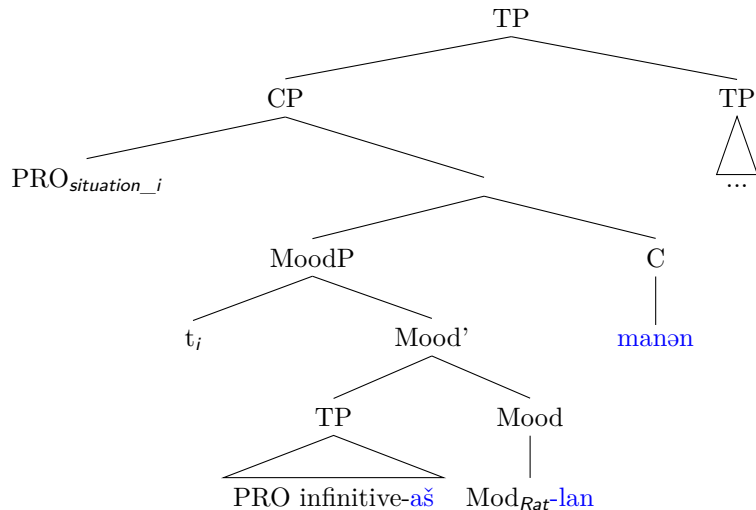
(For rationale clauses) the Mood/Mod analysis is the superior account of adjunct clauses, as it derives the required interpretation and the syntactic properties from the CP, without postulating a PP with a zero element.

The two accounts are not incompatible but rather complement each other.

See the Appendix for a discussion of a historical link between P-approach and Mood-approach.

Implications: Rationale imperatives

Recall the proposed structure: Mood/Mod⁰ takes a saturated TP as its complement. How about a finite one with a **nominative subject**?



Implications: Rationale imperatives

Aside from rationale infinitives, **rationale imperatives** are available.

(21) [Čəla-m kalas-en puo- \emptyset **manən**], rveze-vlak-əm per-enna.
all-ACC tell-CVB give-IMP.2SG COMP boy-PL-ACC hit-PST.1PL
'We hit the boys in order for you to tell (us) everything.'

(22) Čəla-m kalas-en puo- \emptyset !
all-ACC tell-CVB give-IMP.2SG
'Tell us everything.'

Cross-linguistically, embedded imperatives are usually restricted to being embedded under speech act predicates, where they are still used in the primary directive function (Kaufmann 2014 for an overview).

Implications: Rationale imperatives

Aside from rationale infinitives, **rationale imperatives** are available.

- (23) [Rveze-vlak čəla-m kalas-en pu-əšt **manən**], təj-əm
boy-PL all-ACC tell-CVB give-IMP.3PL COMP you-ACC
per-enna.
hit-PST.1PL
'We hit you in order for the boys to tell (us) everything.'
- (24) (Tek) rveze-vlak čəla-m kalas-en pu-əšt.
PTCL boy-PL all-ACC tell-CVB give-IMP.3PL
'The boys should tell us everything.'

To the best of my knowledge, imperatives used specifically as rationale clauses have only been reported in Chukchi by Naumov (2018).

Implications: Rationale imperatives

Imperatives and modality

Imperatives are formed with a modal operator (Mod_{Imp}) that is comparable in its interpretation to the modal **should**. It is essentially equivalent to a deontic modal and is syntactically introduced in the Mood domain.

See Schwager (2006)/Kaufmann (2012), also Stegovec (2019).

The proposal

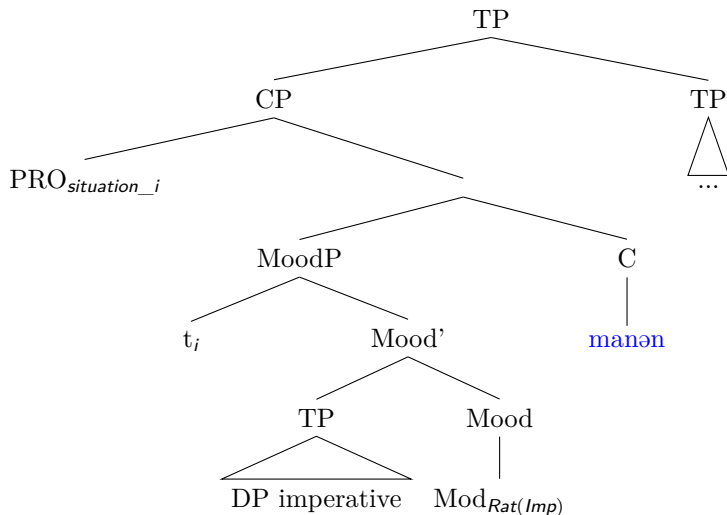
In rationale imperatives Mod_{Imp} shifts its flavor to teleological and, due to its complex semantics, requires an argument of the type $\langle st \rangle$.

Compare to overt modals: **must** and **may** – epistemic or deontic; **can** – deontic, circumstantial, bouletic, or teleological.

Note also that Mari has no subjunctive clauses.

Implications: Rationale imperatives

Rationale imperatives fit into the proposed structure without modification.



Mood-approach to clausal adjunction

- Rationale clauses contain a MoodP with a teleological modal inserted as its head.
- In imperative RatCls the silent imperative modal is used, with a shifted modal flavor.

Advantages

- All the different types of RatCls are derived based on the same syntactic structure and with the same set of functional elements.
- The Mood-approach can be extended to infinitival rationale/purpose clauses in other languages.
- The Mood-approach can be extended to subjunctive rationale/purpose clauses in other languages.

- The Mood-approach can be extended to infinitival rationale/purpose clauses in other languages.

Cf. Grosz (2014) on the preposition **um** in German rationale clauses is an exponent of ModRat, and Jędrzejowski (2022), who proposes that **um** in such constructions is not a preposition but instead lexicalizes the embedded C head.

The central question

How can clauses be used as modifiers of events/situations?

- The semantic type problem
- The type of modifier problem

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Thank you! Vielen dank!

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Appendix

The proposal

Mod_{Rat} is spelled out as **lan**, morphologically identical to the dative postposition, because Mod_{Rat} and P_{Dat} are diachronically linked.

Justifying the **P-to-Mood** reanalysis:

Step I. Historically postpositions in Mari were able to take infinitival dependents.

Mari infinitives stem from deverbal nominals, which were subject to case marking and could combine with postpositions (Rätsep 1954, Galkin 1964).

Dative as an exponent of Mood/Mod

Step II. The dative postposition headed rationale adjuncts.

- Dative is a **directional** case:
Figure approaches Ground (Goal/Recipient) during the event time;
it can but does not have to reach it.
- **Datives \approx Rationale Clauses**
(Agent performs a certain action to approach the desired result situation.)

(25) Petja škol-əš Maša-**lan** kaj-en.
Petja school-LAT Maša-DAT go-PST.3SG
'Petja went to school for Maša.'

(26) Vüd-**lan** kaj-enat da läg-en-at.
water-DAT go-PST.2SG and get.stuck-PST.2SG
'You went for water and got stuck.'

Cf. Kracht 2002; Zwarts 2005; Gehrke 2008; Pantcheva 2011 on Ps.

Step III. The dative postposition was eventually reanalyzed as a functional head at the clausal periphery.

- Cross-linguistically, there is a tendency of grammaticalizing adpositions into C/T
cf. English *for* and Romance *de/di* or *a* as C^0 (Kayne 1984), and English *to* as T^0
- CPs/TPs are parallel to PPs
see Van Riemsdijk (1978), Emonds (1985), Grimshaw (1991) on parallels between C and P, and Szabolcsi (1992) and Pesetsky and Torrego (2004) comparing C–D and P–T.

Dative as an exponent of Mood/Mod

- RatCls contain a teleological modal Mod_{Rat} introduced in MoodP, which is responsible for their semantics.
- Infinitival RatCls involve P-to-Mood reanalysis: Mood/ Mod_{Rat} is a grammaticalized dative postposition possibly, as a result of the expansion of the verbal domain.

Against alternative accounts: A post-syntactic reordering approach

The surface order is **V-T-P C**,
but the order of the projections is $[_{PP}[_{CP}[_{TP} \dots T^0] C^0] P^0]$

Cf. the flexible positioning of POSS in possessive constructions and PPs with a possessed nominal dependent:

pört-**em**-vlak-**őšt**/**lan** ‘house-POSS.1SG-PL-INE/DAT’

pört-vlak-**őšt**/**lan**-**em** ‘house-PL-INE/DAT-POSS.1SG’

← Analyses in terms of post-syntactic reordering:

- Lowering (McFadden 2004, building upon Embick & Noyer 2001);
- Metathesis (Guseva and Weisser 2018, building upon Harris & Halle 2005).

Against alternative accounts: A post-syntactic reordering approach

Problematic: Deriving the order INF-DAT NEG COMP.

- (27) Kapkam [təlat pur-aš **ogəl** manən] a nuno kaj-əšt
gate you.DAT go-INF NEG COMP but they leave-IMP.3PL
manən poč-ən-na.
COMP open-PST-1PL
'We opened the gates not in order for you to enter but in order for them to leave.'

- (28) [Kapka pur-aš-et-lan **ogəl**], a nuno kaj-Ø-əšt manən
gate go-INF-2SG-DAT NEG but they leave-IMP-3PL COMP
poč-ən-na.
open-PST-1PL
'We opened the gates not in order for you to enter but in order for them to leave.'

Another problem: In modern Mari infinitives do not appear with semantic cases (inessive, illative and lative) (Lavrentjev 1972, Riese et al. 2022).

Against alternative accounts: A post-syntactic reordering approach

Deriving the order INF-DAT NEG COMP: *ogəl* is a constituent negation, an adjunct to the constituent (Georgieva et al. 2021)

- If NEG is adjoined to **TP/PP**, neither Lowering nor Metathesis works:

(29) [PP [CP [TP [TP infinitive-aš] NEG *ogəl*] C manən] P lan]

(30) [PP [PP [CP [TP infinitive-aš] C manən] P lan] NEG *ogəl*]

- If NEG is adjoined to **CP**, Metathesis may work:

(31) [PP [CP [CP [_{FinP} infinitive-aš] C *manən*] NEG *ogəl*] P *lan*]

← **Problem**: no independent evidence for NEG in Mari ever being adjoined at the CP level.

(32) *Maša məlanna [eməm jü-aš ogəl manən] kalas-en.*
Maša we.DAT medicine drink-INF NEG COMP tell-PST
'Maša told us not to drink the medicine.'

Against alternative accounts: Manən as a lexical verb

Manən is not a complementizer but a lexical predicate.

Manən stems back to the verb **manaš** ‘say, tell’ (Isanbajev 1961; Galkin 1964). It is morphologically identical to the non-agreeing gerund form (converb).

- (33) Məlanna tengeče [pro koləm kuč-aš kaj-et] **man-ənət**.
we.DAT yesterday fish catch-INF go-NPST.2SG say-PST.2SG
‘You told us yesterday that you would go fishing.’

Against alternative accounts: Manən as a lexical verb

Problematic:

- **Manən**.COMP is **desemanticized**; it is used even when no speech act can possibly be implied.
- It does not alternate with gerunds derived from synonymous speech-act verbs.
- It does not have a negative gerund form.
- Verbs of saying are generally incompatible with infinitival complements marked with **-lan**.

- (34) #Məlanna [kudəvečəš pur-aš-lan] **man-ən-at**.
we.DAT yard.ILL go-INF-DAT say-PST.2SG
Not available: ‘You told us yesterday that you would go fishing.’
Only: ‘You told us something in order to get into the yard.’

Non-obligatory control in rationale clauses

PRO_{arb} is allowed

- (35) [PRO_{arb} unam vašlij-aš(-lan) (manən)] üstel tidə pöleməšte
guest receive-INF-DAT COMP table this room.INE

šog-a.

stand-NPST.3SG

‘The table stands in this room in order to receive guests.’

- (36) [PRO_{arb} kurəkəm sajən už-aš(-lan) (manən)] okna kugu.
mountain well see-INF-DAT COMP window big

‘The window is big in order to better see the mountains.’

Long-distance control by the logophoric centre is allowed

- (37) **Rveze-vlak**_{*i*} kalas-enət, [[PRO_{*i*/**k*} unam vašlij-aš-lan] üstel_{*k*} tide
boy-PL tell-PST.3PL guest receive-INF-DAT table this
pöleməšte šog-a].
room.INE stand-NPST.3SG
'The boys_{*i*} said that the table stands in this room in order for them;
to receive guests.'

Strict reading of PRO under ellipsis is possible

- (38) Petja_i [PRO_i vaške_rerak p_arem-aš(-lan) (manən)] eməm nal-ən,
Petja sooner get.well-INF-DAT COMP medicine take-PST
ača-ava-ž-at təgakak.
parents-POSS3SG-ADD too
'Petja bought medicine in order to get well sooner, and his parents
also bought medicine in order for him to get well sooner.'

Non-obligatory control in rationale clauses

PRO must be [+human] (unlike in OC, Chomsky 1981)

- (39) *[PRO_i šarl-aš-lan (manən)] **peledəš**; šərka-m kolt-a.
spread-INF-DAT COMP flower pollen give.out-NPST.3SG
Intended: ‘The flowers produce pollen in order to propagate.’

- (40) *[PRO_i kislrod-əm lukt-aš-lan (manən)] **kuškəl**; užarge.
oxygen-ACC emit-INF-DAT COMP plant green
Intended: ‘The plants are green in order to produce oxygen.’

The structure of rationale infinitives: Adjunction to TP

RatCls always scope **above** the **matrix negation**.

- (41) [Uroklan jamdəlalt-**aš**-lan], knigam nal-ən **onal**.
class prepare-INF-DAT book buy-GER NEG.PST.1PL
***NEG > RatCl**: ‘We did not buy the book to prepare for the class.’
RatCl > NEG: ‘To prepare for the class, we did not buy the book.’

- (42) Me, [uroklan jamdəlalt-**aš**-lan], knigam nal-ən **onal**.
we class prepare-INF-DAT book buy-GER NEG.PST.1PL
***NEG > RatCl**: ‘We did not buy the book to prepare for the class.’
RatCl > NEG: ‘To prepare for the class, we did not buy the book.’

Other pieces of support: the linear order, the behavior under ellipsis.