On subjects of modal verbs in Latvian. A corpus based study of the debitive vs vajadzēt

Anna Daugavet
Outline

• What are the debitive and the verb vajadzēt?
  ○ What is the difference?
• classification of modal meanings
• classification of subjects used with the debitive and and the verb vajadzēt
debitive vs *vajadzēt*

Two main means of expressing verbal necessity in Latvian

- verb *vajadzēt*
- grammatical category of debitive = incorporated modal verb (Holvoet 2007)

Both have a subject in the dative.

The debitive is 6 times as frequent as *vajadzēt* (Balanced Corpus of Modern Latvian, *miljons*-2.0).
modal vs non-modal *vajadzēt*

• ‘need’ without infinitive (non-modal, 30%)

Man *steidzami* *vajag* *naud-u* <…>

I.DAT.SG urgently VAJADZĒT.3.PRS money-ACC.SG

‘I urgently need money.’

• with infinitive (modal, 70%)

Man *vajag* *mazāk dzer-t* *zāl-es* <…>

I.DAT.SG VAJADZĒT.3.PRS less drink-INF medicine-ACC.PL

‘I should take less medicine.’
**modal vs non-modal vajadzēt**

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Vecāk-iem vajadzē-tu pieskatī-t bērn-us parent-DAT.PL VAJADZĒT.3PRS look.after-INF child-ACC.PL un māj-ās runā-t par drošīb-u and home-LOC.PL talk-INF about safety-ACC.SG uz led-us <...>

on ice-GEN.SG

‘Parents should look after their children and talk at home about safety on the ice <...>’
debitive

• debitive prefix *jā-* plus present tense stem of any Latvian verb (plus auxiliary)

[Viņa nesaprot,]
kādēļ man tik daudz kafij-as jā-dzer.
why I.DAT.SG so much coffee-GEN.SG DEB-drink
‘[She doesn’t understand] why I need to drink so much coffee.’
debitive auxiliary

- auxiliary *būt* ‘be’ in tense and mood forms

*Bērn-iem bū-tu jā-sāk mācī-tie-s*
child-DAT.PL be-SBJ DEB-start learn-INF-RFL

*svešvalod-as,*

foreign.language-NOM.PL

[cik agri vien iespējams.]

‘Children should start learning foreign languages [as early as possible].’
### Grammatical Profiles

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debitive auxiliary

• Present tense forms without auxiliary are the most frequent forms of the debitive (59%).

• Avoiding the auxiliary → avoiding the negation (affirmative uses in 95%, cf 70% with vajadžēt)

Tēv par to nav jā-domā.

2sg.dat about dem.acc.sg neg.be.3.prs deb-think

‘You needn’t think about it.’
debitive vs vajadzēt

• *vajadzēt* is a separate verb
debitive is a grammatical form (incorporated verb)
• *vajadzēt* has a non-modal variant
• *vajadzēt* is commonly used in the subjunctive
debitive is mostly found in the present tense
• debitive has an auxiliary but is normally used without the auxiliary
• *vajadzēt* has a higher frequency of negated forms
  with the debitive negation is rare
modality (necessity)

• epistemic modality
  speaker is certain that a situation takes place

• non-epistemic / event modality
‘[<...> the Riga Airport has received results of a research carried out by the International Air Transport Association] in accordance with which there must be no less than 4.9 millions of air passengers in Riga in 2012.’
epistemic (rare): vajadzēt

[For example, the trade manager of the *Piebalgas alus* points out that] in a further perspective, the consumption in restaurants is certain to increase.
modality (necessity)

• epistemic modality
  speaker is certain that a situation takes place

• non-epistemic / event modality
  o deontic: participants have obligations or are given instructions
  o dynamic: participants have needs or are compelled by circumstances
    — differentiated on the basis of the communicative purpose
deontic (very common): debitive

Vis-iem būvniecīb-as dalībniek-iem
all-DAT.PL.M construction-GEN.SG participant-DAT.PL

jā-ievēro Latvij-as nacionāl-o
DEB-comply Latvia-GEN.SG national-ACC.SG.DEF

standart-u
standard-ACC.SG <...>

‘All persons participating in construction shall comply with the requirements of the Latvian national standards <...>’
deontic (very common): vajadzēt

Ar draug-a māt-i var un with friend-GEN.SG mother-ACC.SG can.3PRS and vajag sarunā-tie-s <...> VAJADZĒT.3PRS converse-INF-RFL

‘It is both possible and necessary to have conversations with your boyfriend’s mother.’
modality (necessity)

• epistemic modality
  speaker is certain that a situation takes place
• non-epistemic / event modality
  o deontic: participants have obligations or are given instructions
  o dynamic: participants have needs or are compelled by circumstances
— differentiated on the basis of the communicative purpose
Man jā-iet uz veikal-u.

1SG.DAT DEB-go to shop-ACC.SG

‘I need to do the shopping.’

Labdien, man vajag piezvanī-t!

hello 1SG.DAT VAJADZĒT.3.PRS call-INF

‘Hello, I need to make a call.’
dynamic (past tense): debitive

[Cilts pārstācju kļuva arvien vairāk,]
bet āden-s daudzum-s, ar ko
but water-GEN.SG quantity-NOM.SG with REL.acc
viņ-iem bija jā-iztiek,
3-DAT.PL be.3PST DEB-subsist
[aizvien saruka.]

‘[The number of people in the tribe was increasing,]
but the quantity of water that they had to subsist on
[was shrinking].’
dynamic (less common): vajadzēt

[Pageājušajā sezonā bija tik daudz darba, ka skrēju kā vāvere ritenī.]

Vajadzēja apgū-t un spēlē-t četr-as vajadzēt.3PST learn-INF and play-INF 4-ACC.PL.F jaun-as lom-as teātr-ī plus new-ACC.PL.F part-ACC.PL theatre-LOC.SG plus vēl paspē-t uz televīzij-u <...>
more be.in.time-INF on television-ACC.SG

‘[There was so much work in the last season that I was running like a squirrel on a wheel.] I had to learn and play four new parts in the theatre plus be in time <for my work> on television.’
debitive vs vajadzēt

• dynamic vs deontic (Endzelīns 1951)?
• corpus studies
  o correlation with different mood and tense forms (Daugavet 2017)
    deontic uses are more frequent
    dynamic uses are less usual
  o correlation with different subjects
    ✓ no (phonetically realized) subject
no subjects (60%)

'Bērn-a vēlmēs vajag
child-GEN.SG wish-LOC.PL VAJADZĒT.3.PRS
ie-klausī-tie-s <...>
PVB-listen-INF-RFL

‘It is necessary to listen to a child’s wishes.’

Pēc iespēj-as mazāk jā-ie-klausā-s
after possibility-GEN.SG less DEB-PVB-listen-INF-RFL
cit-u padom-os.
other-GEN.PL advice-LOC.PL

‘It is necessary to listen to other people’s advice as little as possible.’
types of subjects

• nominal vs pronominal (personal)
• nominal
  animate, inanimate, collective
• prepositional vs postpositional
  o nominal vs pronominal
  o animate vs inanimate
The non-modal *vajadzēt* prefers pronominal subjects.
nominal vs pronominal

Man steidzam-i vajag naud-u <...
1SG.DAT urgent-ADV VAJADZĒT.3.PRS money-ACC.SG
‘I need money urgently.’

<...> cilvēk-am vajag izraudā-tie-s.
human-DAT.SG VAJADZĒT.3.PRS weep.out-INF-RFL

Tenisist-iem jā-brauc uz Itālij-u.
tenisist-DAT.PL DEB-go to Italy-ACC.SG
‘The tenisists have to go to Italy.’
### modal vs non-modal vajadzēt

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The difference in the frequencies of subjects is accompanied by the difference in the grammatical profiles.
## Types of subjects: pronominal

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|   |       |               |                   |
|---|-------+----------------+-------------------|
|   |       | debitive       | modal vajadžēt    |
|   |       | 60,72%         | 64,70%            |
|   |       | 22,66%         | 17,05%            |
|   |       | 11,86%         | 13,77%            |
|   |       | 6,39%          | 6,28%             |
|   |       | 2,60%          | 3,28%             |
|   |       | 2,87%          | 4,21%             |
|   |       | 4,77%          | 4,48%             |

### Subjunctive vs. Imperfective

- **Subjunctive:** 1000 (55.56%)
- **Imperfective:** 800 (44.44%)

### Conjugation

- **Simple:** 1200 (66.67%)
- **Compound:** 600 (33.33%)

### Person

- **1st:** 600 (33.33%)
- **2nd:** 400 (22.22%)
- **3rd:** 200 (11.11%)

### Other

- **Adverb:** 100 (5.56%)
- **Preposition:** 100 (5.56%)
- **Interjection:** 100 (5.56%)

### Total

- **Total:** 2000
subject types and modal meanings

• For the debitive, deontic uses are more common with nominal subjects, and **dynamic uses with pronominal subjects**.

• For *vajadžēt*, deontic uses are frequent with both nominal and pronominal subjects. But dynamic uses are less frequent with nominal subjects because some of them are ambiguous between dynamic and epistemic meaning.
subject types and modal meanings

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### subject types and modal meanings

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The table above shows the distribution of subject types and modal meanings for the verb *vajadzēt*.
subject types and modal meanings

• deontic uses are more frequent
• for vajadžēt, deontic uses are more frequent with both nominal and pronominal subjects
  o increase in epistemic uses with nominal subjects
• for the debitive, deontic uses are still more frequent with nominal subjects but less frequent than dynamic uses with pronominal subjects
Animacy (nominal subjects)

- animate (humans, animals etc.)
- inanimate (physical objects, properties, actions etc.)
- collective (organizations etc.)
'Angels don’t have to support themselves.'

‘The fan was expected to function more effectively [but it was almost dead...]'
collective

<...> skol-ām tagad vajag
    school-DAT.PL now VAJADZĒT.3.PRS
pār-rakstī-t vis-us dokument-us.
re-write-INF all-ACC.PL.M document-ACC.PL

‘Now schools are required to rewrite all documents.’
Animacy (nominal subjects)

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The non-modal *vajadzēt* is less tolerant towards inanimate subjects.
animate (nominal subjects)

• animal and supernatural beings (rare)
• human beings (most common)
  o reversible (occupation, residence)
  o irreversible (age, gender, family relationship, nationality, religion)
  o personal names
• cilvēks and persona both meaning ‘human, person’
The non-modal *vajadzēt* favours irreversible subjects.
deontic vs dynamic (animate subjects)

• Animate subjects represented by personal names have 60% of dynamic uses vs 30% of deontic uses with both the debitive and the modal *vajadzēt*.

• In all other groups the proportion is reversed in favour of the deontic meaning.
Irmgard-ei jā-salabo piloš-ais
Irmgarde-DAT.SG DEB-repair dripping-NOM.SG.M.DEF vannasistab-as krāns.
bathroom-GEN.SG tap-NOM.SG
‘Irmgarde has to repair the dripping tap in the bathroom.’

Mārim vajadzēja izturē-t arī
Māris-DAT.SG VAJADZĒT.3.PRS endure-INF also vairākas asin-s pārliešanas.
several-ACC.PL.F blood-GEN.SG transfusion-ACC.PL
‘Māris had to endure several blood transfusions.’
inanimate (nominal subjects)

physical objects, places, substances, smells, sounds, complicated objects with or without physical dimension, objects and places without physical dimension, actions, events, circumstances, time, personal qualities, emotions, attitudes, prices, payments, numbers, information with a fixed form of presentation, information without a fixed form of presentation, symbols...
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<td>3</td>
<td>3%</td>
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</tr>
<tr>
<td>sum</td>
<td>674</td>
<td>100%</td>
<td>109</td>
<td>100%</td>
<td>8</td>
</tr>
</tbody>
</table>
actions and events

'Economic growth should take place simultaneously with social changes.'

'Navigation on the canal should be along the current.'
attitudes and emotions

Taču ir jā-būt vēlm-ei un spēj-ai
but be.3.PRS DEB-be wish-DAT.SG and ability-DAT.SG
organizē-t sav-u darb-u <...>
organize-INF RFL-ACC.SG work-ACC.SG
‘There should be wish and ability to organize one’s work <...>’

Pa pēd-ām vajadzē-tu nāk-t
prep track-DAT.PL VAJADZĒT-SBJ come-INF
uzticīb-ai un paļāvīb-ai.
trust-DAT.SG and reliance-DAT.SG
‘There should follow trust and reliance.’
It is objections that should be well-based.'

'[Firstly,] the issue of salary should be confidential'
Position

• prepositional vs postpositional
Man vispirms jā-tiek gal-ā ar sav-iem 1SG.DAT first.of.all DEB-arrive end-LOC.SG with RFL-DAT.PL.M 
ministr-a un valdīb-as minister-GEN.SG and government-GEN.SG 
locekļ-a pienākum-iem. member-GEN.SG duty-DAT.PL 
‘First of all, I have to fulfill my duties a minister and a member of the government.’ 

<...> ar mūsu problēmām jā-tiek with our problem-DAT.PL DEB-arrive 
gal-ā mums paš-iem. end-LOC.SG 1PL.DAT self-DAT.PL 
‘It is with our own efforts that we should solve our problems.’
Position

• prepositional vs postpositional
• prepositional vs postpositional combined with nominal vs pronominal
• prepositional vs postpositional combined with animate vs inanimate
‘It is also the residents who have to partly cover the costs.’

‘It is Briežkalns where every self-respecting skier should make a visit to’
Pre-position vs post-position

<table>
<thead>
<tr>
<th></th>
<th>debitive</th>
<th>modal vajadzēt</th>
<th>non-modal vajadzēt</th>
</tr>
</thead>
<tbody>
<tr>
<td>pre</td>
<td>3702</td>
<td>597</td>
<td>320</td>
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<tr>
<td></td>
<td>88,52%</td>
<td>91,56%</td>
<td>96,68%</td>
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<tr>
<td>post</td>
<td>480</td>
<td>55</td>
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</tr>
<tr>
<td></td>
<td>11,48%</td>
<td>8,44%</td>
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<tr>
<td>sum</td>
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<td>652</td>
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<td>100,00%</td>
<td>100,00%</td>
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</table>

Gradual increase in postpositional subjects from the non-modal *vajadzēt* to the debitive.
prepositional vs postpositional (nominal subjects)

<table>
<thead>
<tr>
<th></th>
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<th>modal vajadzēt</th>
<th>non-modal vajadzēt</th>
</tr>
</thead>
<tbody>
<tr>
<td>nom</td>
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<tr>
<td>pre</td>
<td>1977</td>
<td>82,10%</td>
<td>271</td>
<td>85,49%</td>
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<tr>
<td>post</td>
<td>431</td>
<td>17,90%</td>
<td>46</td>
<td>14,51%</td>
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</table>

Gradual increase in postpositional nominal subjects from the non-modal *vajadzēt* to the debitive.
prepositional vs postpositional (pronominal subjects)

<table>
<thead>
<tr>
<th></th>
<th>debitive</th>
<th>modal vajadzēt</th>
<th>non-modal vajadzēt</th>
</tr>
</thead>
<tbody>
<tr>
<td>pro</td>
<td>1263</td>
<td>100,00%</td>
<td>252</td>
</tr>
<tr>
<td>pre</td>
<td>1250</td>
<td>98,97%</td>
<td>246</td>
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<tr>
<td>post</td>
<td>13</td>
<td><strong>1,03%</strong></td>
<td>6</td>
</tr>
<tr>
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<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Postpositional pronominal subjects are very few with any of the verbs.
prepositional vs postpositional (animate subjects)

<table>
<thead>
<tr>
<th></th>
<th>debitive</th>
<th>modal <em>vajadžēt</em></th>
</tr>
</thead>
<tbody>
<tr>
<td>animate</td>
<td>1210 100,00%</td>
<td>141 100,00%</td>
</tr>
<tr>
<td>pre</td>
<td>1063 87,85%</td>
<td>136 96,45%</td>
</tr>
<tr>
<td>post</td>
<td>147 12,15%</td>
<td>5 3,55%</td>
</tr>
</tbody>
</table>

Postpositional animate subjects are more favoured by the debitive.
Postpositional inanimate subjects are equally possible with both the modal *vajadzēt* and the debitive.