Vafsi oblique pronouns at the syntax-prosody interface

Tina Bögel

in cooperation with
Saeed Yousefi and Mahinnaz Mirdehghan

Konstanz 2019
This talk ....

.... is about Vafsi and its oblique clitics
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My general interest:

→ Behaviour of clitics at the interfaces between modules
→ Conclusions for the general grammar architecture
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**My general interest:**

→ Behaviour of clitics at the interfaces between modules

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**Vafsi:**
This talk ....

.... is about Vafsi and its oblique clitics

**My general interest:**

- Behaviour of clitics at the interfaces between modules
- Conclusions for the general grammar architecture

**Vafsi:**

- Northwestern Iranian language, spoken by ca. 20,000 people (in two dialects)
- Unwritten, data comes from oral descriptions (Recording of Folk tales by L.P. Elwell-Sutton)
- Transcribed, translated, and supplemented with field study material by Donald L. Stilo, from whom most of the examples come from (Stilo 2004b,a, 2010)
- Saeed Yousefi is a native speaker, currently a PhD student of linguistics at the Shahid Beheshti University in Teheran
Information on Vafsi grammar is sparse

Non-rigid verb-final language (postverbal positions determined by information structure mostly, recipients)

Three realizations of pronouns:

1. independent pronouns
2. pronoun bases (with clitics attached to indicate person)
3. clitics
Independent pronouns and pronoun bases

- Two sets of independent pronouns
  - direct and oblique
Independent pronouns and pronoun bases

- Two sets of independent pronouns
  - direct and oblique
- Two oblique pronoun bases: hazun and verewn
  - no semantic content
  - can occur postverbally
  - person obligatorily indicated by oblique pronoun clitic

\[(2) \text{xu dæsd-mozd æ-d-om } \text{hazún=i} \]
  
good wage DUR-give-1SG OBLPR=2SG
  ‘I’ll give you a good wage.’
Pronominal clitics and their ‘affixal’ variation

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**Table:** Oblique and direct pronouns in Vafsi (Stilo 2010)

1 masc/fem
2 -e after consonants
Pronominal clitics and their ‘affixal’ variation

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<td>a -a</td>
<td>ian -ian-</td>
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<td>end(e) -end(e)</td>
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Table: Oblique and direct pronouns in Vafsi (Stilo 2010)

- Stilo claims that oblique clitics occur as affixes under specific circumstances

1 masc/fem
2 -e after consonants
Introduction

Pronominal clitics and their ‘affixal’ variation

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Table: Oblique and direct pronouns in Vafsi (Stilo 2010)

- Stilo claims that oblique clitics occur as affixes under specific circumstances
- This talk will show that
  a) oblique affixes do not exist and
  b) that the oblique ‘affixes’ are in fact clitics-under-stress

¹ masc/fem
² -e after consonants
Two sets of clitics

Most likely: Tense-based split ergative system:

**Set 1: direct case**
- present: subject
- past: subject of intransitive verbs

**Position:** Suffixed to the verb

**Set 2: oblique case** (ergative)
- past tense subject of transitives

**Position:**
- clitic appears before the verbal complex, attaches mostly to the direct object
  - It can NEVER appear after the verb
Examples of ‘regular’ Set2 clitic placement

(3) ya qærri=es [bæ-košdë]$_{vc}$
   or witch=3SG$_2$ PUNCT-killed
   ‘... or he killed the witch.’

(4) soan-e=ra bez-e šax=es [tíz=a kærdæ]$_{vc}$
   file-F.OBL=with goat-F.OBL horn=3SG$_2$ sharp=ATTR did
   ‘He sharpened the goat’s horns with a file’

(5) bælke hævi-án=es [komæk ær-kærdæ]$_{vc}$
   but all-PL.OBL=3SG$_2$ help DUR-did
   ‘... but he helped everybody’

(6) tani hæzíri=m [bæ-díæ]$_{vc}$
   he.OBL yesterday=1SG$_2$ PUNCT-saw
   ‘I saw him yesterday’
Another function of Set2 clitics

Oblique set2 clitics can also indicate a possessive construction

(7) æhl=e ewdan=ian
    inhabitant=EZ village=2PL2
    ‘the people of your village’

• Clitic directly follows the possessed item (wherever it appears)
Another function of Set2 clitics

Oblique set2 clitics can also indicate a possessive construction

(9) æhl=e ewdani=ian
    inhabitant=EZ village=2PL2
    ‘the people of your village’

- Clitic directly follows the possessed item (wherever it appears)
- This common use of the clitic as a possessive or a subject can lead to ambiguities

(10) a. kænizan=es báwattæ  ‘Her servant girls said (so)’  →  as possessive
    b. kænizan=es báwattæ  ‘She told the servant girls’  →  as subject
Another function of Set2 clitics

Oblique set2 clitics can also indicate a possessive construction

(11) æhl=e ewdan=ian
    inhabitant=ÉZ village=2PL₂
    ‘the people of your village’

- Clitic directly follows the possessed item (wherever it appears)
- This common use of the clitic as a possessive or a subject can lead to ambiguities

(12) a. kænizan=es báwattæ ‘Her servant girls said (so)’ \rightarrow as possessive
    b. kænizan=es báwattæ ‘She told the servant girls’ \rightarrow as subject

**Important**: An item marked by a possesive set2 clitic cannot host another set2 pronoun clitic!
Relevant elements in the verbal complex

1. The durative marker ær
2. The punctual marker bæ
3. The negation marker næ
4. The preverbs dæ(r)-, ó(r)-, há(r)-
Tense-aspect markers æt- and bæ-

- The durative marker ær-:
  → Unstressed, Form depends on phonological environment

(13) an=om ær-góæ
    that=1SG₂ DUR-want
    ‘I want that’
Tense-aspect markers æt- and bæ-

- The durative marker ær-:
  - Unstressed, Form depends on phonological environment

  (15) an=om ær-góæ
      that=1SG₂ DUR-want
      ‘I want that’

- The punctual marker bæ-:
  - Stressed, Form depends on phonological environment

  (16) an=om bæ-diæ
      that=1SG₂ PUNCT-saw
      ‘I saw that’

⇒ If the following item starts with a vowel, the æ-vowel is dropped and stress shifts to the following vowel:

  báwe “s/he came” ← bæ- + -av (‘come’) + -e (3SG)

⇒ Suppressed by negation (bæ-ssim ‘I went’, but náe-ssim ‘I didn’t go’), but also by preverbs and complex predicates
Negation and preverbs

- The negative marker $\text{na} \text{é} -$ (behaves like $\text{ba} \text{é} -$)
  - Stressed
  - In case of a vowel following, $\text{æ}$ is dropped and stress shifts to the following vowel
Negation and preverbs

- The negative marker náé- (behaves like báé-)
  - Stressed
  - In case of a vowel following, æ is dropped and stress shifts to the following vowel

- The preverbs däé(r)-, ó(r)-, há(r)-
  - Stressed
  - Originally directional particles
  - Create lexical extensions, finer nuances, or total meaning changes of the verb

<table>
<thead>
<tr>
<th>Vafsi</th>
<th>English</th>
</tr>
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<tbody>
<tr>
<td>girætt</td>
<td>grab, catch</td>
</tr>
<tr>
<td>ó(r)-girætt</td>
<td>pick up, lift</td>
</tr>
<tr>
<td>há(r)-girætt</td>
<td>take, get, bury</td>
</tr>
<tr>
<td>däé(r)-girætt</td>
<td>gather up</td>
</tr>
</tbody>
</table>

- Suppressed by negation
  → Meanings of the different preverbs fall together

- Some verbs do not have any preverbs, some occur only with a subset, and some only occur with preverbs
Some odd occurrences of the Set2 clitics
Some odd occurrences of the Set2 clitics

There are many cases where the clitic precedes the complex predicate

(19) bælke hævi-án=es [komæk ær-kærdæ]_{vc}
    but all-PL.OBL=3SG₂ help DUR-did
    ‘... but he helped everybody’
Some odd occurrences of the Set2 clitics

- There are many cases where the clitic **precedes the complex predicate**

  \[(21) \text{bælke hævi-án} = \text{es} \quad [\text{komæk ær-kærdæ}]_{vc} \]
  \[\text{but all-PL.OBL=3SG}_{2} \quad \text{help DUR-did} \]
  ‘... but he helped everybody’

- But the clitic can also occur **within the complex predicate**, where it attaches to the first element

  \[(22) \text{æ-cu eˇsden bæ-vær-i} \quad \text{ya [komæk=i kær-òm]}_{vc} \]
  \[\text{DUR-an SELF PUNCT-take-2SG}_{1} \quad \text{or help=2SG}_{2} \quad \text{do-1SG}_{1} \]
  ‘Can you carry it yourself or should I help you?’
Some odd occurrences of the Set2 clitics II

The clitic can occur preceding the unstressed duration marker in its clitic form (a.) or verb-initially in its ‘affixal’ form (b.):

(23) a. an=om ær-góæ
    that=1SG₂ DUR-want
    ‘I want that’

    b. ím-ær-góæ
    1SG₂-DUR-want
    ‘I want’
Some odd occurrences of the Set2 clitics II

The clitic can occur preceding the unstressed duration marker in its clitic form (a.) or verb-initially in its ‘affixal’ form (b.):

(25) a. an=om ær-góæ
   that=1SG₂ DUR-want
   ‘I want that’

   b. ɨm-ær-góæ
       1SG₂-DUR-want
   ‘I want’

→ The affixal form is not restricted to sentence-initial positions:

(26) bá-waz ya ɨ-r-koš-ome
    PUNCT-tell or 2SG₂-DUR-kill-1SG₁
    ‘Tell (me) or I will kill you’

→ Because of examples like these, Stilo assumes affixal status
Some odd occurrences of the Set2 clitics III

The clitic can occur verb-medially following either the punctual marker or the negative marker (in its ‘affixal’ form), or a preverb (as a clitic):

(27) a. \textit{bğ-æ-diæ} \quad \text{that}=1\text{SG}_2 \quad \text{punct-saw}
   \quad \text{‘I saw that’}

   b. \textit{b-ím-diæ} \quad \text{PUNCT-1SG}_2\text{-saw}
   \quad \text{‘I saw’}
Some odd occurrences of the Set2 clitics III

- The clitic can occur verb-medially following either the punctual marker or the negative marker (in its ‘affixal’ form), or a preverb (as a clitic):

  (29) an=om bæ-diæ
      that=1SG₂ PUNCT-saw
      ‘I saw that’

  b. b-ím-diæ
      PUNCT-1SG₂-saw
      ‘I saw’

→ This is (again) not restricted to sentence-initial positions:

  (30) tinan væxdi=ke nahar=esan hár=es=da ...
      they.OBL when=SUB lunch=3PL₂(poss) PVB=3SG₂=gave
      ‘When she (=es) gave them (tinan) their (=esan) lunch’
Distribution oblique pronouns

<table>
<thead>
<tr>
<th>Position</th>
<th>Form</th>
</tr>
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<tbody>
<tr>
<td>1. preceding the verbal complex (non-initial position)</td>
<td>clitic</td>
</tr>
<tr>
<td>2. between the members of a complex predicate and after the preverbs</td>
<td>clitic</td>
</tr>
<tr>
<td>3. preceding the duration marker</td>
<td>‘affix’</td>
</tr>
<tr>
<td>4. following the punctual or the negation marker</td>
<td>‘affix’</td>
</tr>
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Only if there is no host to the left

áwæ=s bę-paša jaru=s kærđ=o dær=es=rua qæšeng=o water=3SG2 PUNCT-sprinkled broom=3SG2 did=and PVB=3SG2=swept beautiful=and
‘He sprinkled water, swept and swept nicely...’

qeylán=es b=íś=keša=vo jens-a suræt=es ú-girættæ=o water.pipe=3SG2(poss) PUNCT=3SG2=smoked=and good-PL inventory=3SG2 PVB-took=and
‘... and he smoked his waterpipe and took inventory of the goods ....’
Stilo assumes that the clitic/affix originates within the verbal complex/the verb and is ‘fronted’ if an adequate host is available.
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But: no unified reason why clitic would be fronted in some constructions but not in others.
Stilo assumes that the clitic/affix originates within the verbal complex/the verb and is ‘fronted’ if an adequate host is available.

-clitic  \[\text{VC}\]

But: no unified reason why clitic would be fronted in some constructions but not in others.

**Question:** Is there a different explanation?
These examples can be explained with respect to prosody!

Claim:
These examples can be explained with respect to prosody!

Claim:
- The oblique clitics are syntactically placed just before the verbal complex: \( \text{XP}^* \text{ CL}_2 \text{ VC} \)
These examples can be explained with respect to prosody!

Claim:
- The oblique clitics are syntactically placed just before the verbal complex: \( XP^* \ CL_2 \ VC \)
- Set2 clitics are *enclitics*: they need a preceding host
These examples can be explained with respect to prosody!

Claim:

- The oblique clitics are syntactically placed just before the verbal complex: \( \text{XP}^* \text{ CL}_2 \text{ VC} \)
- Set2 clitics are *en*clitics: they need a preceding host
- If stranded in the initial position of a prosodic phrase or if left without an adequate host, the clitic is ‘moved’ into an adequate position

→ via *prosodic inversion* (Halpern 1995)
What we know about Vafsi prosody?

(Based on Stilo (2004a,b)) larger prosodic boundaries (ι, ϕ) can be found:

- at the beginning of a clause
- in subordinate clauses, stress usually falls on the subordinate conjunction, but not on *ke* (which thus cannot act as a host for a clitic)
- *sustained intonation* (pitch level remains high, with a long syllable duration, followed by a short pause → ϕ boundary)
  - after coordinating conjunctions -o (‘and’) and ya (‘or’),
  - often after the subject of a sentence in Vafsi (also Persian ....)

⇒ This explains all instances where the clitic appears following
  - the preverbs
  - the first element of a complex predicate
This explains .... constructions with preverbs

- clitics following the stressed preverbs

(31) $[\text{hár=om-da}]_{\text{VC}} \quad \text{yey kelj-i} \quad < \quad (l = \text{om} [\text{há ...} $

\text{PVB=1S.OBL=gave one girl-OF}$

'I gave (it) to some girl.'

→ clitic would be stranded in initial position of a prosodic phrase
This explains .... constructions with preverbs

- clitics following the stressed preverbs

\[(33) \ [h\acute{a}r=om-da]_{VC} \ yey \ kelj-i \ < \ (l =om [h\acute{a} ... \ PVB=1s.OBL=gave \ one \ girl-OF \ 'I \ gave \ (it) \ to \ some \ girl.' \]

→ clitic would be stranded in initial position of a prosodic phrase

→ vs. constructions where the clitic finds an adequate host

\[(34) \ t\acute{a}men \ ketab=es \ [h\acute{a}-bax\ddot{a}a]_{VC} \ 1s.OBL \ book=3s.OBL \ PVB=gave.away \ 'He \ gave \ a \ book \ away \ to \ me.' \]
This explains .... constructions with complex predicates

- clitics following the first member of a complex predicate

\[(35) \ æ-cu \ ešden \ bàe-vær-i \ ya \ [komæk=i \ \kær-òm]_{vc} < \ldots ya)_{\varphi} (=i\ldots\]

DUR-an SELF PUNCT-take-2SG\_1 or help=2SG\_2 do-1SG\_1

‘Can you carry it yourself or should I help you?’

→ ya is followed by sustained intonation = a prosodic phrase boundary
This explains constructions with complex predicates

- clitics following the first member of a complex predicate

(37) æ-cu eˇsden bˇæ-vær-i ya [komæk≈i kær-¯om]_{vc} < ...ya)_{φ (=}i...
  DUR-an SELF PUNCT-take-2SG₁ or help=2SG₂ do-1SG₁
  ‘Can you carry it yourself or should I help you?’

→ ya is followed by sustained intonation = a prosodic phrase boundary
→ vs. constructions where the clitic finds an adequate host

(38) bˇælke hævi-án≈es [komæk ær-kærdæ]_{vc}
  but all-PL.OBL=3SG₂ help DUR-did
  ‘... but he helped everybody’
And with the other markers?

- prosodic inversion is impossible after the unstressed durative marker
  → marker is not an adequate host
  → clitic also can’t be positioned after the verb
And with the other markers?

- prosodic inversion is impossible after the unstressed durative marker
  → marker is not an adequate host
  → clitic also can’t be positioned after the verb
  ⇒ the clitic remains \textit{in situ}
  ⇒ Takes on a clitic-under-stress-form (the former ‘affixal form’) to account for the phrase-initial position

\begin{align*}
\text{with an adequate host:} & \\
\text{clitic-under-stress:} & \\
(40) \quad & \text{a. } \text{an}=\text{om} \ \text{ær-góæ} \\
& \text{that}=1\text{SG}_2 \text{ DUR-want} \\
& \text{‘I want that’} \\
& \text{b. } \text{im-ær-góæ} \ *\text{=}\text{om-ær } ...\\
& 1\text{SG}_2\text{-DUR-want} \\
& \text{‘I want’}
\end{align*}
Similarly with the negation and punctual marker næ-/bæ-

- Both, negation and punctual marker are stressed
- are adequate hosts, prosodic inversion can be applied (if needed)
Similarly with the negation and punctual marker næ-/bæ-

- Both, negation and punctual marker are stressed
  → are adequate hosts, prosodic inversion can be applied (if needed)

But: if these markers are followed by a vowel, they drop their vowel (æ-), and stress is shifted to the following vowel
→ The clitic is again ‘under stress’

\[
\text{with an adequate host:} \quad \text{clitic-under-stress:}
\]

(42) a. an=om bæ-diaë
   that=1SG PU-saw
   ‘I saw that.’

b. b=ím-diaë
   PU-1SG-saw
   ‘I saw.’

Derivation of ‘I saw’

<table>
<thead>
<tr>
<th>Step</th>
<th>Result</th>
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<tbody>
<tr>
<td>1. <em>input</em></td>
<td>=om bæ-diaë</td>
</tr>
<tr>
<td>2. <em>prosodic inversion</em></td>
<td>bæ=om-diaë</td>
</tr>
<tr>
<td>3. <em>vowel deletion, stress shift</em></td>
<td>b=óm-diaë</td>
</tr>
<tr>
<td>4. <em>clitic under stress</em></td>
<td>b=ím-diaë</td>
</tr>
</tbody>
</table>
A cumulation of examples

áwæ=s  bæ-paša  ||  jaru=s  kærd=o  ||  dær=es=rua  qæšeng=o  ||
water=3SG₂  PUNCT-sprinkled  ||  broom=3SG₂  did=and  ||  PVB=3SG₂=swept beautiful=and  ||
‘He sprinkled water, swept and swept nicely...’

qeylán=es  b=ís=keša=vo  ||  jens-a  suræt=es  ú-girættæ=o  ||
water.pipe=3SG₂(poss)  PUNCT=3SG₂  =smoked=and  ||  good-PL inventory=3SG₂  PVB-took=and  ||
‘... and he smoked his waterpipe and took inventory of the goods ....’
A cumulation of examples

He sprinkled water, swept and swept nicely...

... and he smoked his waterpipe and took inventory of the goods ....

• Question: How can we represent this in Lexical-Functional Grammar?
Demonstration examples

(43) a. b=m-dia
     PU-1SG-saw
     ‘I saw.’

b. an=om ba=dia
     that=1SG PU-saw
     ‘I saw that.’
Demonstration examples

(44) a. b=ím-diæ
    PU-1SG-saw
    ‘I saw.’

b. an=om  bæ-diæ
    that=1SG PU-saw
    ‘I saw that.’

- A very initial c-structure (XP* CL VC) ...
Demonstration examples

(45) a. b=ím-diæ
   PU-1SG-saw
   ‘I saw.’

b. an=om  bæ-diæ
   that=1SG PU-saw
   ‘I saw that.’

- A very initial c-structure (XP* CL VC) ...

\[
S \\
(\text{NP}) \hspace{1cm} \text{CL} \hspace{1cm} \text{VC}
\]

→ C-structure works for b. (which is straightforward), but not for a!
Demonstration examples

(46) a. \( \text{b=im-diæ} \)
   \( \text{PU-1SG-saw} \)
   \( \text{‘I saw.’} \)

b. \( \text{an=om bæ-diæ} \)
   \( \text{that=1SG PU-saw} \)
   \( \text{‘I saw that.’} \)

A very initial c-structure (XP* CL VC) ...

\[ S \]
\[ \text{(NP)} \quad \text{CL} \quad \text{VC} \]

→ C-structure works for b. (which is straightforward), but not for a.!
→ Resolved via the syntax-prosody interface (as proposed in Bögel (2015))
The Prosody-Syntax interface (Bögel 2015)

Two perspectives:
(Roughly following models as proposed by, a.o., Levelt (1999) and Jackendoff (2002))

- **Production**: from meaning to form (syntax → prosody)
- **Comprehension**: from form to meaning (prosody → syntax)

Both: The **Transfer of structure** → Information on (larger) syntactic and prosodic phrasing, and on intonation is exchanged

ρ: The **Transfer of vocabulary** → Associates morphosyntactic and phonological information on lexical elements and projects them to their respective structures
P-structure – the p-diagram (during production!)

- Linear representation in the p-diagram

→ structured syllablewise

⇒ Each syllable is part of a vector associating the syllable with relevant values:

→ lexical stress, segments, prosodic phrasing, ...

- Input to the p-diagram comes from c-structure (Transfer of structure) and the lexicon (Transfer of vocabulary)

<table>
<thead>
<tr>
<th>PHRASING</th>
<th>( (i = \sigma (\omega \sigma \sigma) \omega)_i )</th>
</tr>
</thead>
<tbody>
<tr>
<td>...</td>
<td>...</td>
</tr>
<tr>
<td>LEX_STRESS</td>
<td>prim</td>
</tr>
<tr>
<td>SEGMENTS</td>
<td>/om/ /bæ/ /di/ /æ/</td>
</tr>
<tr>
<td>V. INDEX</td>
<td>( S_1 \quad S_2 \quad S_3 \quad S_4 )</td>
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</tbody>
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P-structure – the p-diagram (during production!)

- Linear representation in the p-diagram
  → structured syllablewise
  ⇒ Each syllable is part of a vector associating the syllable with relevant values:
    → lexical stress, segments, prosodic phrasing, ...

- Input to the p-diagram comes from c-structure (Transfer of structure) and
  the lexicon (Transfer of vocabulary)

- Includes language-specific phonological processes (‘postlexical phonology’)
- But first: transfer processes to p-structure to create this initial p-diagram
The Transfer of Vocabulary

- Associates morphosyntactic and phonological information on lexical elements
- Via the multidimesional lexicon, which projects them to their respective structures

<table>
<thead>
<tr>
<th>s(yntactic)-form</th>
<th>p(honological)-form</th>
</tr>
</thead>
<tbody>
<tr>
<td>bæ-diæ V</td>
<td>‘diæ⟨SUBJ⟩’</td>
</tr>
<tr>
<td>(↑ PRED)</td>
<td>= past</td>
</tr>
<tr>
<td>(↑ TENSE)</td>
<td>= punctual</td>
</tr>
<tr>
<td>(↑ ASPECT)</td>
<td></td>
</tr>
<tr>
<td>...</td>
<td>P-FORM</td>
</tr>
<tr>
<td></td>
<td>[bædiæ]</td>
</tr>
<tr>
<td></td>
<td>SEGMENTS</td>
</tr>
<tr>
<td></td>
<td>/b æ d i æ/</td>
</tr>
<tr>
<td></td>
<td>METR. FRAME</td>
</tr>
<tr>
<td></td>
<td>(’σσσ)ω</td>
</tr>
<tr>
<td>om PRON</td>
<td>‘pro’</td>
</tr>
<tr>
<td>(↑ PRED)</td>
<td>= 1</td>
</tr>
<tr>
<td>(↑ PERS)</td>
<td>= sg</td>
</tr>
<tr>
<td>(↑ NUM)</td>
<td>= set2</td>
</tr>
<tr>
<td>(↑ CL-TYPE)</td>
<td></td>
</tr>
<tr>
<td>...</td>
<td>P-FORM</td>
</tr>
<tr>
<td></td>
<td>[om]</td>
</tr>
<tr>
<td></td>
<td>SEGMENTS</td>
</tr>
<tr>
<td></td>
<td>/o m/</td>
</tr>
<tr>
<td></td>
<td>METR. FRAME</td>
</tr>
<tr>
<td></td>
<td>=σ</td>
</tr>
</tbody>
</table>
The Transfer of Vocabulary

- Associates morphosyntactic and phonological information on lexical elements
- Via the multidimensional lexicon, which projects them to their respective structures

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<tbody>
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<td>bæ-diaë V</td>
<td>P-FORM [bædiaë]</td>
</tr>
<tr>
<td>(↑ PRED)</td>
<td>SEGMENTS /b æ d i æ/</td>
</tr>
<tr>
<td>(↑ TENSE)</td>
<td>METR. FRAME ('σσσ)₀</td>
</tr>
<tr>
<td>(↑ ASPECT)</td>
<td></td>
</tr>
<tr>
<td>...</td>
<td></td>
</tr>
<tr>
<td>bæ-diaë V</td>
<td>P-FORM [om]</td>
</tr>
<tr>
<td>(↑ PRED)</td>
<td>SEGMENTS /o m/</td>
</tr>
<tr>
<td>(↑ PERS)</td>
<td>METR. FRAME =σ</td>
</tr>
<tr>
<td>(↑ NUM)</td>
<td></td>
</tr>
<tr>
<td>(↑ CL-TYPE)</td>
<td></td>
</tr>
<tr>
<td>...</td>
<td></td>
</tr>
</tbody>
</table>

Each lexical dimension can only be accessed by the related module

→ Modular: strict separation of module-related information
→ Translation function: Once a dimension is triggered, the related dimensions can be accessed as well.

⇒ Associated **p-form is selected and made available to p-structure.**
The Transfer of Vocabulary II

### p(honological)-form

| P-FORM   | [báediæ]       |
| SEGMENTS | /b æ d i æ/     |
| METR. FRAME | (σσσ)ω  |

| P-FORM   | [om]           |
| SEGMENTS | /o m/         |
| METR. FRAME | =σ      |

<table>
<thead>
<tr>
<th>PHRASING</th>
<th>=σ</th>
<th>(σ σ σ)ω</th>
</tr>
</thead>
<tbody>
<tr>
<td>LEX_STRESS</td>
<td>-</td>
<td>prim</td>
</tr>
<tr>
<td>SEGMENTS</td>
<td>/om/</td>
<td>/bæ/</td>
</tr>
<tr>
<td>V. INDEX</td>
<td>S₁</td>
<td>S₂</td>
</tr>
</tbody>
</table>

Bögel, Yousefi, Mirdehghan (Konstanz/Teheran)
Also needed: Information on larger prosodic constituents

→ Via the transfer of structure
The Transfer of Structure ... from syntax to prosody

\[
\begin{align*}
\mathcal{S} & \quad (\sharp (T(\ast)) \quad S_{\min} \text{ PHRASING}) = \iota \\
\mathcal{S} & \quad (\sharp (T(\ast)) \quad S_{\max} \text{ PHRASING}) = \iota
\end{align*}
\]

<table>
<thead>
<tr>
<th>PHRASING</th>
<th>(\iota(=\sigma \ (\sigma \ \sigma \ \sigma)_{\omega}))</th>
</tr>
</thead>
<tbody>
<tr>
<td>LEX_STRESS</td>
<td>– prim – –</td>
</tr>
<tr>
<td>SEGMENTS</td>
<td>/om/ /bæ/ /di/ /æ/</td>
</tr>
<tr>
<td>VECTORINDEX</td>
<td>(S_{\min} \quad S_4 \quad S_5 \quad S_{\max})</td>
</tr>
</tbody>
</table>

- where \(S_{\min}\) refers to the first syllable within the scope of a node
- where \(S_{\max}\) refers to the last syllable within the scope of a node

\[\rightarrow\] Roughly following Selkirk (2011)'s Match theory
The Transfer of Structure ... from syntax to prosody

\[
\begin{align*}
S_{\text{min}} \quad \text{PHRASING} & \quad = \quad \iota \left( T(\ast) \right) \\
S_{\text{max}} \quad \text{PHRASING} & \quad = \quad \iota \left( \bar{\eta} \right)
\end{align*}
\]

<table>
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<tr>
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<th>(\iota(\ast=\sigma \quad \sigma \quad \sigma \quad \omega))</th>
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<td>LEX_STRESS</td>
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- where \(S_{\text{min}}\) refers to the *first* syllable within the scope of a node
- where \(S_{\text{max}}\) refers to the *last* syllable within the scope of a node

→ Roughly following Selkirk (2011)’s *Match theory*

*But problem still unresolved → postlexical phonology*
Postlexical phonological processes

**Input to p-structure:**
(via transfer processes)

**Postlexical phonology:**
(sandhi rules, mismatches etc ...)

**Output of p-structure:**
## Overall framework

![Diagram showing the overall phonological framework](image)

<table>
<thead>
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</tr>
<tr>
<td></td>
<td>SEGMENTS /b æ d i æ/</td>
</tr>
<tr>
<td></td>
<td>METR. FRAME (σσσ)_ω</td>
</tr>
<tr>
<td>om PRON</td>
<td>P-FORM [om]</td>
</tr>
<tr>
<td></td>
<td>SEGMENTS /ɔ m/</td>
</tr>
<tr>
<td></td>
<td>METR. FRAME =σ</td>
</tr>
</tbody>
</table>

**PHRASING**

- \((σσσω)_l\) for s-form
- \((l = σ) (σσσω)_l\) for p-form

**LEX_STRESS**

- om: prim
- bæ: -
- di: -
- æ: -

**SEGMENTS**

- /om/ /bæ/ /di/ /æ/

**V. INDEX**

- \(S_1\) \(S_2\) \(S_3\) \(S_4\)

**Postlexical phonological rules**

![Diagram showing postlexical rules](image)

**PHRASING**

- \((l (σσσω))_l\) for s-form
- \((l = σ) (σσσω)\) for p-form

**LEX_STRESS**

- prim
- -

**SEGMENTS**

- [bɪm] [di] [æ]

**V. INDEX**

- \(S_1\) \(S_2\) \(S_3\)
Vafsi oblique clitic pronouns do *not* have an affixal counterpart
Vafsi oblique clitic pronouns do not have an affixal counterpart.

Their placement can be explained if considering both, c-structure and p-structure.

- The clitics are syntactically placed immediately preceding the verbal complex.
- If necessary, they are prosodically ‘replaced’ to account for their need of an host.
- The difference in form can be accounted for by assuming an unstressed and a stressed version of the clitic.
Vafsi oblique clitic pronouns do not have an affixal counterpart. Their placement can be explained if considering both, c-structure and p-structure. The clitics are syntactically placed immediately preceding the verbal complex. If necessary, they are prosodically ‘replaced’ to account for their need of an host. The difference in form can be accounted for by assuming an unstressed and a stressed version of the clitic. The resulting analysis can be straightforwardly implemented at the syntax–prosody interface as proposed in Bögel (2015).
Thank you!

... questions, comments...?
References