

Prosodic structure of the Romanian verbal complex

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PLC

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I. Verbal complex

- 1 *Maximal pre-verbal sequence* (declarative main clause)

Ana **nu** **ți** **l-** **ar** **mai** **fi** recomandat pe Traian.

Ana **not** **you.DAT** **him.ACC** **COND.3S** **again** **PERF** recommended PE Traian

‘Ana would not have recommended Traian to you again.’

Neg > **Pron.DAT** > **Pron.ACC** > **Tense-mood auxiliary (COND / IND)** > **Intensifier** > **Perfective** > **Verb**

I. Verbal complex

1 *Maximal pre-verbal sequence* (declarative main clause)

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‘Ana would not have recommended Traian to you again.’

Neg > **Pron.DAT** > **Pron.ACC** > **Tense-mood auxiliary (COND / IND)** > **Intensifier** > **Perfective** > **Verb**

2 *Maximal pre-verbal sequence* (declarative embedded clause)

Vreau [**să** **nu** **ți-** **l** **tot** **fi** recomandat pe Traian].

want.1S [**SBJ** **not** **you.DAT** **him.ACC** **continually** **PERF** recommended PE Traian]

‘I wish I hadn’t kept recommending Traian to you.’

Mood (SBJ / INF) > **Neg** > **Pron.DAT** > **Pron.ACC** > **Intensifier** > **Perfective** > **Verb**

I. Verbal complex

- Phonology
 - no primary stress
 - no focus intonation (except **Neg**)
 - **Pron** allomorphy: *obligatory reduction*
 - context: **Pron + Pron** & **Pron (+ Pron) + auxiliary**
 - phonologically conditioned
 - phonologically regular

((Neg)_{PWd} (**Pron.DAT Pron.ACC Tense-mood aux**)_{PWd} Intensifier Perfective (Verb)_{PWd})_{PPH} †

- 2 strategies of prosodization for pre-verbal morphemes
 - **free words**
 - **free clitic** (Selkirk 1996)

† Selkirk 1984, Nespor & Vogel 1986

2. Pronominal alternation environments

Pron + Verb

3a. [itsʲ]

Ana **îți** recomandă pe cineva.

Ana **you.DAT** recommends PE someone

‘Ana recommends someone to you.’

Pron + Verb

4a. [ne]

Ana **ne** recomandă pe cineva.

Ana **us.DAT** recommends PE someone

‘Ana recommends someone to us.’

2. Pronominal alternation environments

Pron + Verb

- 3a. [itsʲ]
Ana **îți** recomandă pe cineva.
Ana **you.DAT** recommends PE someone
'Ana recommends someone to you.'

Pron + Pron + Verb

- 3b. [tsi l]
Ana **ți -l** recomandă pe Traian.
Ana **you.DAT him.ACC** recommends PE Traian
'Ana recommends Traian to you.'

Pron + Verb

- 4a. [ne]
Ana **ne** recomandă pe cineva.
Ana **us.DAT** recommends PE someone
'Ana recommends someone to us.'

Pron + Aux + Verb

- 4b. [neaɾ]
Ana **ne ar** recomanda pe cineva.
Ana **us.DAT COND.3S** recommend PE someone
'Ana would recommend someone to us.'

2. Pronominal alternation environments

Pron + Verb

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'Ana recommends someone to you.'

Pron + Verb

- 4a. [ne]
Ana **ne** recomandă pe cineva.
Ana **us.DAT** recommends PE someone
'Ana recommends someone to us.'

Pron + Pron + Verb

- 3b. [tsi l]
Ana **ți -l** recomandă pe Traian.
Ana **you.DAT him.ACC** recommends PE Traian
'Ana recommends Traian to you.'

Pron + Aux + Verb

- 4b. [near]
Ana **ne ar** recomanda pe cineva.
Ana **us.DAT COND.3S** recommend PE someone
'Ana would recommend someone to us.'

2. Pronominal alternation patterns

A. hiatus resolution	Λ deletes
	e diphthongizes
	o changes direction of cliticization
<hr/>	
B. high V alternation	
C. † insertion	

2. Pronominal alternation patterns

		Pron + Verb	Pron + Aux + Verb
A. hiatus resolution	Λ deletes	5a. [mΛ] aduc me.ACC bring 'I bring myself.'	5b. [m] am adus me.ACC IND.PERF.1S brought 'I brought myself.'
	e diphthongizes	5c. [ne] aduc us.ACC bring 'I bring us.'	5d. [ne] am adus us.ACC IND.PERF.1S brought 'I brought us.'
	o changes direction of cliticization	5e. [o] aduc her.ACC bring 'I bring her.'	5f. am adus - [o] IND.PERF.1S brought her.ACC 'I brought her.'

2. Pronominal alternation patterns

	Pron(s) + Vb	Pron + Aux + Verb
B. high V alternation	6a. [mi] te aduc me.DAT you.ACC bring ‘I bring you to me.’	6b. [mj] am adus me.DAT IND.PERF.1S brought ‘I brought to me.’
C. ð insertion	6c. [imj] aduc me.DAT bring ‘I bring to me.’	6d. [imj] voi aduce me.DAT IND.FUT.1S bring ‘I will bring to me.’

2. Pronominal alternation patterns

A. hiatus resolution	Λ deletes	5a. [mʌ] me.ACC 'I bring myself.'	aduc bring	5b. [m] me.ACC 'I brought myself.'	am IND.PERF.1S	adus brought
	e diphthongizes	5c. [ne] us.ACC 'I bring us.'	aduc bring	5d. [ne] us.ACC 'I brought us.'	am IND.PERF.1S	adus brought
	o changes direction of cliticization	5e. [o] her.ACC 'I bring her.'	aduc bring	5f. - [o] her.ACC 'I brought her.'	am IND.PERF.1S	adus brought
B. high V alternation		6a. [mi] me.DAT 'I bring you to me.'	te you.ACC bring	6b. [mj] me.DAT 'I brought to me.'	am IND.PERF.1S	adus brought
C. ð insertion		6c. [ðmj] me.DAT 'I bring to me.'	aduc bring	6d. [ðmj] me.DAT 'I will bring to me.'	voi IND.FUT.1S	aduce bring

3. Theoretical issues

- Phonology of function words
 - phonological processes

- Morphology-phonology interface
 - allomorphy conditioned morphologically & phonologically

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- Phonology of function words
 - phonological processes

- Morphology-phonology interface
 - allomorphy conditioned morphologically & phonologically

Monachesi 2005, Gerlach 2002 (morphological)

clitic-specific morphophonological idiosyncrasies

Popescu 2000 (phonological)

clitic-specific OT constraints

4. Economy & clitic-specific phonology

	Λ deletion
A. hiatus resolution	e diphthongization
	o changes direction of cliticization
B. high V alternation	
C. † insertion	

- Popescu's assumptions
 - [pron.Dat + pron.Acc + aux] = Clitic Sequence (CS)
 - CS = morphosyntactic unit, built at interface w/ syntax
- Popescu's main ideas
 - constraints penalizing structure: ALIGNL (ω , STEM)
 - word & morpheme minimality constraints: MIN_{lσ}, CONSTITUENT
 - markedness constraints: ONSET, NOCODA, NOHIATUS
 - † is underlyingly a mora; [i]-[j]-[j] are allophones (/μi/ for [†j])

4. Economy & clitic-specific phonology

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+

Good descriptive adequacy for CS
NOHIATUS captures **A.**

-

Constraints introduced as clitic-specific
C-initial Aux not considered
Allophone choice not explained

5. Prosodic domains & general phonology

- My assumptions

- [pron.Dat + pron.Acc + V-initial aux] = Prosodic Word
- general PWord-level phonological processes apply
- general PWord-level phonotactic constraints apply

- My main ideas

- word-internal NOHIATUS
- word-final high vowel alternations => [i]-[j]-[j]
- prosodic minimality condition => /i/ for [ɨ]

A. hiatus resolution	Λ deletion
	e diphthongization
	o changes direction of cliticization
B. high V alternation	
C. ɨ insertion	

5. Prosodic domains & general phonology

- My assumptions

- pronominals form a Prosodic Word: (PRO)_{PWD}

(pron.DAT)_{PWD}

(pron.ACC)_{PWD}

(pron.DAT pron.ACC)_{PWD}

MWORD_{LEX} = PWORD \gg (PRO)_{PWD} \gg MIN2 σ \gg MWORD = PWORD

5. Prosodic domains & general phonology

- My assumptions

- [pron.Dat + pron.Acc] = Prosodic Word: (PRO)_{PWD}

MWORD_{LEX} = PWORD \supseteq (PRO)_{PWD} \supseteq MIN2 σ \supseteq MWORD = PWORD

Pron Pron Vb	MWORD _{LEX} = PWORD	(PRO) _{PWD}	MIN2 σ	MWORD = PWORD
a. Pron Pron (Vb)		*!*		* *
b. (Pron Pron Vb)	*!	*		* *
➤ c. (Pron Pron) (Vb)			*	* *

5. Prosodic domains & general phonology

- My assumptions

- [pron + V-initial aux] = Prosodic Word

V-aux (Vb) _{PWD}	(Pro V-aux) _{PWD} (Vb) _{PWD}	(Pro Pro V-aux) _{PWD} (Vb) _{PWD}
C-aux (Vb) _{PWD}	(Pro) _{PWD} C-aux (Vb) _{PWD}	(Pro Pro) _{PWD} C-aux (Vb) _{PWD}

5. Prosodic domains & general phonology

- My assumptions

- [pron + V-initial aux] = Prosodic Word: (PRO)_{PWD}

V-aux (Vb)_{PWD}

(Pro V-aux)_{PWD} (Vb)_{PWD}

(Pro Pro V-aux)_{PWD} (Vb)_{PWD}

MWORD_{LEX} = PWORD \gg (PRO)_{PWD}, ONSET, EXHAUST \gg MWORD = PWORD

Pron V-Aux Vb	MWORD _{LEX} = PWORD	(PRO) _{PWD}	ONSET	EXHAUST	MWORD = PWORD
a. Pron V-Aux (Vb)		*!* !	*	**	* *
b. (Pron V-Aux Vb)	*!	*			* *
➤ c. (Pron V-Aux) (Vb)		*			* *
d. (Pron) V-Aux (Vb)			*	*	*

5. Prosodic domains & general phonology

- Assumptions

- [pron.Dat + pron.Acc + V-initial aux] = Prosodic Word
- general PWord-level phonological processes apply
- general PWord-level phonotactic constraints apply

- Main ideas

- word-internal NOHIATUS
- word-final high vowel alternations
- prosodic minimality condition

A. hiatus resolution

B. high V alternations

C. ð insertion

5. Prosodic domains & general phonology

A. hiatus resolution	Λ deletion
	e diphthongization
	o change in direction of cliticization

- Assumptions

- [pron.Dat + pron.Acc + V-initial aux] = Prosodic Word: (PRO)_{PWd}
- general PWord-level phonological processes apply: NOHIATUS

Λ deletion	Verbal complex (Pron + V-Aux + Vb)	5a. [mΛ]) _{PWd} (aduc me.ACC bring 'I bring myself.'	5b. [m] am) _{PWd} (adus me.ACC IND.PERF.1S brought 'I brought myself.'
	Noun (stem + desinence + clitic article)	5i. [fatΛ] girl-FEM 'girl'	5ii. [fata] girl-∅-DEF 'the girl'

5. Prosodic domains & general phonology

A. hiatus resolution	Λ deletion
	e diphthongization
	o change in direction of cliticization

● Assumptions

- [pron.Dat + pron.Acc + V-initial aux] = Prosodic Word: (PRO)_{PWd}
- general PWord-level phonological processes apply: NOHIATUS

e diphthongization	Verbal complex (Pron + V-Aux + Vb)	5c. [ne]) _{PWd} (aduc us.ACC bring 'I bring us.'	5d. [ne] am) _{PWd} (adus us.ACC IND.PERF.1S brought 'I brought us.'
	Noun (stem + desinence + clitic article)	5iii. [karte] book-FEM 'book'	5iv. [kartea] book-FEM-DEF 'the book'

5. Prosodic domains & general phonology

A. hiatus resolution	Λ deletion
	e diphthongization
	o change in direction of cliticization

- Assumptions

- [pron.Dat + pron.Acc + V-initial aux] = Prosodic Word: (PRO)_{PWd}
- general PWord-level phonological processes apply: NOHIATUS

o changes direction of cliticization

5e. ([o])_{PWd} (aduc)_{PWd}

her.ACC bring

‘I bring her.’

5f. (am)_{PWd} (adus - [o])_{PWd}

IND.PERF.1S brought her.ACC

‘I brought her.’

5f'. * ([o])_{PWd} (am)_{PWd} adus

her.ACC IND.PERF.1S brought

‘I brought her.’

5. Prosodic domains & general phonology

A. hiatus resolution	Λ deletion
	e diphthongization
	o change in direction of cliticization

● Assumptions

- [pron.Dat + pron.Acc + V-initial aux] = PWord
- general PWord-level phonological processes

	front	central	back
high	i	ɨ	u
mid	e	Λ	o
low	ɛa	a	ɔa

o changes direction of cliticization

5e. ([o])_{PWd} (aduc)_{PWd}

her.ACC bring

‘I bring her.’

5f. (am)_{PWd} (adus - [o])_{PWd}

IND.PERF.1S brought her.ACC

‘I brought her.’

5f'. * ([o])_{PWd} am)_{PWd} adus

her.ACC IND.PERF.1S brought

‘I brought her.’

5. Prosodic domains & general phonology

A. hiatus resolution	Λ deletion
	e diphthongization
	o change in direction of cliticization

● Assumptions

- [pron.Dat + pron.Acc + V-initial aux] = PWord
- general PWord-level phonological processes
- general PWord-level phonotactics: *_{q̣a}(CODA)_{PWd}

	front	central	back
high	i	ɨ	u
mid	e	Λ	o
low	ɛ̣a	a	ɔ̣a

o changes direction of cliticization

5e. ([o])_{PWd} (aduc)_{PWd}

her.ACC bring

‘I bring her.’

5f. (am)_{PWd} (adus - [o])_{PWd}

IND.PERF.1S brought **her.ACC**

‘I brought her.’

5f'. * ([ọ])_{PWd} am)_{PWd} adus

her.ACC IND.PERF.1S brought

‘I brought her.’

5. Prosodic domains & general phonology

- Assumptions

- [pron.Dat + pron.Acc + V-initial aux] = Prosodic Word
- general PWord-level phonological processes apply
- general PWord-level phonotactic constraints apply

- Basic insights

- ✓ word-internal NOHIATUS
- word-final high vowel alternations
- prosodic minimality condition

A. hiatus resolution

B. high V alternations

C. ð insertion

5. Prosodic domains & general phonology

B. high V alternation

C. ð insertion

- Assumptions

- [pron.Dat + pron.Acc + V-initial aux] = Prosodic Word
- general PWord-level phonological processes apply: **V[+high]*_{PWd}

<p>B. high V alternation</p>	<p><i>Verbal complex (Pron + V-Aux + Vb)</i></p>	<p>6a. [mi] te aduc me.DATyou.ACC bring ‘I bring you to me.’</p>	<p>6b. [mj] am adus me.DAT IND.PERF.1S brought ‘I brought to me.’</p>	
		<p>6c. [imʲ] aduc me.DATbring ‘I bring to me.’</p>	<p>6d. [imʲ] voi aduce me.DAT IND.FUT.1S bring ‘I will bring to me.’</p>	
	<p><i>Noun (stem + plural affix)</i></p>	<p>6i. [boj] ox-PL ‘oxen’</p>	<p>6ii. [lupj] wolf -PL ‘wolves’</p>	<p>6iii. [af.tri] star -PL ‘stars’</p>

5. Prosodic domains & general phonology

B. high V
alternation

C. ð insertion

- Assumptions

- [pron.Dat + pron.Acc + V-initial aux] = Prosodic Word
- general PWord-level phonological processes apply: $*V[+high]_{PWord}$

B. high V
alternation

6a. ([mi] te) _{PWord}	aduc	6b. ([mj] am) _{PWord}	adus
me.DAT you.ACC bring		me.DAT IND.PERF.1S brought	
‘I bring you to me.’		‘I brought to me.’	
6c. ([imʲ]) _{PWord}	aduc	6d. ([imʲ]) _{PWord} voi	aduce
me.DAT bring		me.DAT IND.FUT.1S bring	
‘I bring to me.’		‘I will bring to me.’	

$(PRO)_{PWord}, *V[+high]_{PWord}, NOHIATUS \gg DEP, MAX$

5. Prosodic domains & general phonology

B. high V
alternation

C. *ɨ* insertion

- Assumptions

- [pron.Dat + pron.Acc + V-initial aux] = Prosodic Word
- general PWord-level phonological processes apply: $*V[+high]_{PWord}$

B. high V
alternation

C. *ɨ*
insertion

6a. ([mi] te)_{PWord} aduc 6b. ([mj] am)_{PWord} adus
 me.DAT you.ACC bring me.DAT IND.PERF.1S brought
 ‘I bring you to me.’ ‘I brought to me.’

6c. ([im^ɨ])_{PWord} aduc 6d. ([im^ɨ])_{PWord} voi aduce
 me.DAT bring me.DAT IND.FUT.1S bring
 ‘I bring to me.’ ‘I will bring to me.’

$(PRO)_{PWord}, *V[+high]_{PWord}, NOHIATUS, PWord \geq 1\sigma \gg DEP, MAX$

5. Prosodic domains & general phonology

- Assumptions

- [pron.Dat + pron.Acc + V-aux] = PWord $MWord_{Lex} = PWord \gg (Pro)_{PWd} \gg MWord = PWord$
- general PWord-level constraints: $*V[+high]_{PWd}, PWord \geq 1\sigma, NOHIATUS$
- general PWord-level phonotactics $*_{\alpha}a(CODA)_{PWd}$

- Main ideas

- ✓ word-internal NOHIATUS
- ✓ word-final high vowel alternations
- ✓ prosodic minimality condition

A. hiatus resolution

B. high V alternations

C. ð insertion

6. Theoretical issues

- Phonology of function words
 - phonological processes
- Morphology-phonology interface
 - allomorphy conditioned morphologically & phonologically

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- Phonology of function words

- phonological processes

✓ *with explicit prosodic domains*

- Morphology-phonology interface

- allomorphy conditioned morphologically & phonologically

allomorphy conditioned by interaction of constraints regulating prosodic structure with general phonology of Rom.

- Descriptive adequacy

✓

Thank you for your attention!

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