

Dittongo mobile and *g* verbs

Reducing root allomorphy in Italian verbs

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In a nutshell

- ▶ Broad theoretical claims
 - i. No need PH-conditioned allomorphy, phonology is enough
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- ▶ Specific goals of the talk
 - i. Provide a single-UR account of
 - ▶ *Dittongo mobile*
 - ▶ *g*-verbs distribution
 - ▶ Their complementary distribution
 - ii. Show how this account betters previous analysis
 - ▶ Single-UR (Lampitelli 2017)
 - ▶ PH-conditioned lexical allomorphy (Pirelli & Battista 2000, Maiden 2001, Burzio 2014)

Dittongo mobile

- ▶ *sedere* 'to sit' IND.PRS

	SG	PL
1	's <small>je</small> :do	se'dja:mo
2	's <small>je</small> :di	se'de:te
3	's <small>je</small> :de	's <small>je</small> dono

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- ▶ *morire* 'to die' IND.PRS

	SG	PL
1	'm <small>wɔ</small> :jo	mo'rja:mo
2	'm <small>wɔ</small> :ri	mo'ri:te
3	'm <small>wɔ</small> :re	'm <small>wɔ</small> jono

Dittongo mobile

- ▶ 'ɛ/ɔ ~ ə/ʊ

Dittongo mobile

- ▶ 'jɛ/'ɔ ~ e/o
- ▶ Not all e/o become 'jɛ/'ɔ
 - ▶ be'vja:mo 'we drink' ~ 'be:vo 'I drink' vs *'bjɛ:vo
 - ▶ vo'tja:mo 'we vote' ~ 'vo:to 'I vote' vs *'vwɔ:to

Dittongo mobile

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 - ▶ vo'tja:mo 'we vote' ~ 'vɔ:to 'I vote' vs *'vwɔ:to
 - ▶ Not all 'jɛ/'wɔ become e/o
 - ▶ 'pjɛ:go 'I fold' ~ pje'gja:mo 'we fold' vs *pe'gja:mo
 - ▶ 'swɔ:nɔ 'I play' ~ swo'nja:mo 'we play' vs *so'nja:mo

Dittongo mobile

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 - ▶ 'swɔ:no 'I play' ~ swo'nja:mo 'we play' vs *so'nja:mo
- ▶ 6 verbs
 - ▶ II class ($\text{TH} = e$): *sedere* 'to sit', *tenere* 'to hold', *volere* 'to want', *dolere* 'to hurt'
 - ▶ III class ($\text{TH} = i$): *venire* 'to come', *morire* 'to die'

g-verbs

- ▶ *rimanere* 'to remain' IND.PRS

	SG	PL
1	ri'maŋgo	rima'nja:mo
2	ri'ma:ni	rima'ne:te
3	ri'ma:ne	ri'maŋgono

g-verbs

- ▶ *rimanere* 'to remain' IND.PRS

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1	ri'maŋgo	rima'nja:mo
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- ▶ *rimanere* 'to remain' SBJ.PRS

	SG	PL
1	ri'maŋga	rima'nja:mo
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g-verbs

- ▶ $\emptyset \sim g /_{_} o, a$
- ▶ Not all **C-o,a** become **Cg-o,a** (**C** = sonorant)
 - ▶ $\sqrt{\text{FIN}} \text{ 'end'} > fi'n-\mathbf{isc}\text{-o}_{1\text{SG.PRS.IND}}$ vs $*fi\mathbf{ng}\text{-o}_{1\text{SG.PRS.IND}}$

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- ▶ 9 verbs
 - ▶ II class (TH = *e*): *tenere* 'to hold', *svellere* 'to pluck out', *valere* 'to be worth, count', *porre* 'to put, set', *rimanere* 'to stay, remain', *sciogliere* 'to dissolve', *togliere* 'to remove', *dolere* 'to hurt'
 - ▶ III class (TH = *i*): *venire* 'to come', *salire* 'to go up'

Dittongo mobile & *g*-verbs

- ▶ *tenere* 'to hold' IND.PRS

	SG	PL
1	'tɛŋgo	te'nja:mo
2	'tjɛ:ni	te'nɛ:te
3	'tjɛ:ne	'tɛŋgono

Dittongo mobile & *g*-verbs

- ▶ Diphthong-*g* complementary distribution
 - ▶ 'tɛŋgo vs *'tjɛŋgo (cf. 'tjɛːni)

Dittongo mobile & *g*-verbs

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 - ▶ 'tɛ̃ŋgo vs *'tjɛ̃ŋgo (cf. 'tjɛ̃ːni)
- ▶ 3 verbs
 - ▶ II class ($\text{TH} = e$): *tenere* 'to hold', *dolere* 'to hurt'
 - ▶ III class ($\text{TH} = i$): *venire* 'to come'

Explananda

- ▶ Dittongo mobile
 - ▶ 'jɛ/'wɔ ~ e/o
- ▶ *g*-verbs
 - ▶ Ø ~ g (**with root-final C resyllabification**)
- ▶ Dittongo mobile & *g*-verbs
 - ▶ **Diphthong-g complementary distribution**

Preview of the analysis

i. *Dittongo mobile*

- ▶ The glide of *dittongo mobile* - G - belongs to a complex onset
- ▶ G surfaces only if licensed by 'V:

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- ▶ *g* is a floater belonging to the ROOT
- ▶ *g* surfaces only if licensed by $V_{[-\text{front}]}$ and associated to C

iii. *Dittongo mobile-g* complementary distribution

- ▶ *g* forces ROOT-final C resyllabification
- ▶ ROOT-final C prevents 'V lengthening
- ▶ No 'V lengthening, *dittongo mobile*'s G pronunciation

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Hypotheses

Theoretical toolkit

Analysis

Conclusions

Hypotheses - Dittongo mobile

- i. Rising diphthongs are 'complex O' (Marotta 1988, Kramer 2009)
 - ▶ Acoustic measurements (Salza 1988)
 - ▶ GV words select the pre-C Det (Loporcaro & Bertinetto 2005)
 - ▶ *TRGV
 - ▶ Exception: TR-*jamo*_{1PL.PRS.IND/SBJ}, TR-*jate*_{2PL.PRS.SBJ}

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- ii. Non-alternating diph as CGV vs *dittongo mobile* as CGV
 - ▶ G surfaces only if followed, i.e. licensed by 'V:

Hypotheses - *g*-verbs

- i. *g* is stored in the UR of the relevant roots
- ii. *g* is a floater
- iii. The presence of |I| (in a V) blocks the licensing of *g*'s |U|
 - ▶ *g* can only be licensed by *o*, *a* (Fanciullo 1998, Burzio 2004, Lampitelli 2019)

Hypotheses - Dittongo mobile - *g*-verbs interaction

- i. *g*-surfacing pushes ROOT-final *n*, *r*, *l* backwards
 - ▶ Scheer (2016, on Hungarian): “/-i/ moves to the onset of the CV unit that is endowed with [due to] harmonic pressure”
 - ▶ Faust & Lampitelli (tomorrow): “multiple correspondence, whereby the melody lexically associated to x_1 is realized by x_2 ”

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- ii. /'C(G)V:/ → /'C(G)VC/ → ['CVC]

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- ii. /'C(G)V:/ → /'C(G)VC/ → ['CVC]
- iii. 'V: is a stronger licensor than 'V

Hypotheses - Licensing

- ▶ Lic strength \propto complexity (Cyran 2008, 2010)
 - ▶ Full V > ə > EN
 - ▶ Complexity *qua* prosodic prominence
 - ▶ Mid vowels are not stronger than corner vowels

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- ▶ V Lic TR \Rightarrow 'V Lic TR, *'V Lic TR \Rightarrow V Lic TR (Harris 1997)
 - ▶ Br. Port. ['livru] > ['livu] 'book'
 - ▶ Palmoli ['kwɛllə] 'that_{F.PL} vs [,kəllə'fɛmmənə] 'that_{F.PL} woman_{F.PL}'

Hypotheses - Licensing

- i. Branchingness contributes to complexity calculation
 - ▶ $'CV_i CV_i > 'CV C\emptyset > CV$
 - ▶ Language-specific cut-off point

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- ▶ Strict CV (Lowenstamm 1999, Scheer 2004)
 - ▶ Complexity Scales and Licensing Strength (Cyran 2003, 2010)
- ▶ Stress as CV (modified version of Larsen 1998, QT)

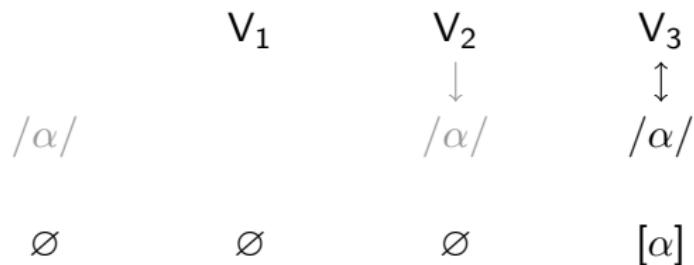
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 - ▶ Pronunciation: melody-to-skeleton (↑)
 - ▶ Defined at UR
 - ▶ Can be modified (deleted, added, moved)

Theoretical toolkit



TT representations (Cavirani & van Oostendorp 2017, 2019)

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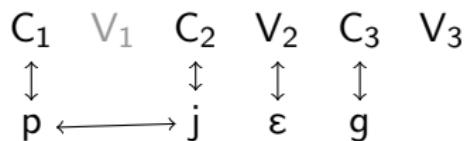
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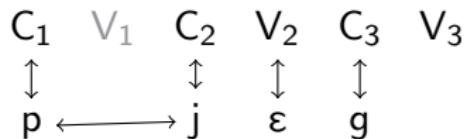
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- ▶ $\sqrt{\text{PIEG}}$ ‘fold’

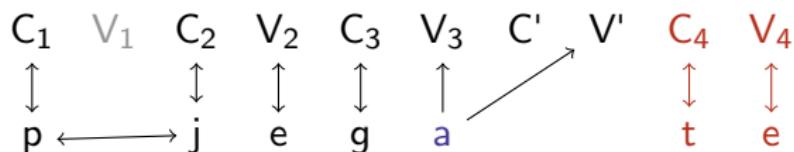


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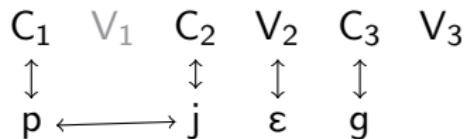


- ▶ 2PL.IND.PRS: $\sqrt{+}$ + floating a_{TH} + $C_t V_{e2\text{PL}} \Leftrightarrow [\text{pje'ga:te}]$

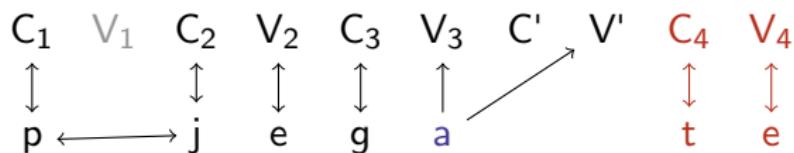


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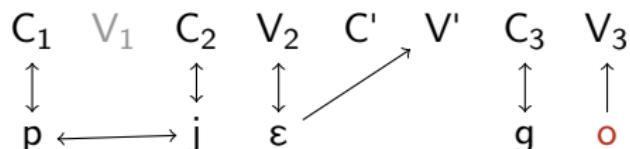
- ▶ $\sqrt{\text{PIEG}}$ 'fold'



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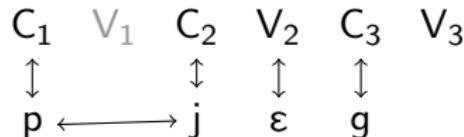


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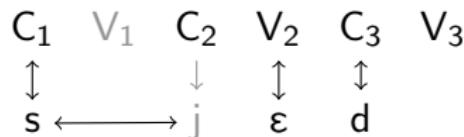


Dittongo mobile

- ▶ $\sqrt{\text{PIEG}}$ 'fold'



- ▶ $\sqrt{\text{SIED}}$ 'sit' - *Dittongo mobile*

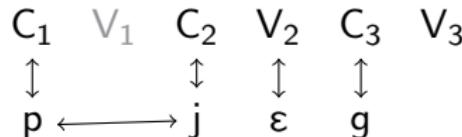


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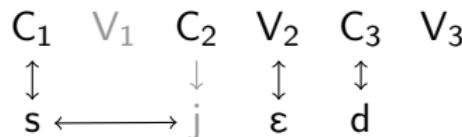
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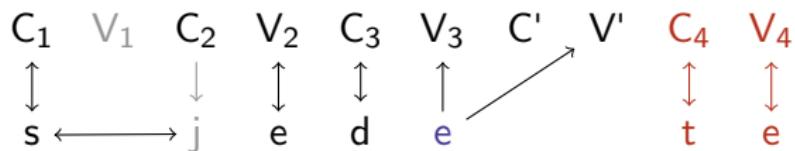
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- ▶ Non-alternating diphthong
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- ▶ *Dittongo mobile*
 - ▶ C_2 has only $\downarrow \Rightarrow$ pronounced if Lic
 - ▶ V_2 Lic $> x$, $x \propto$ complexity

Dittongo mobile

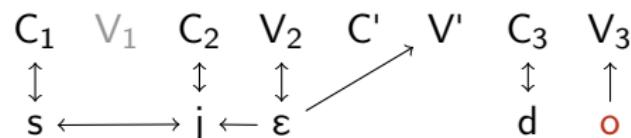
- ▶ 2PL.IND.PRS: $\checkmark + \text{floating } e_{\text{TH}} + C_t V_{e2\text{PL}} \Leftrightarrow [\text{se}'d\text{e:te}]$



- ▶ V_2 is unstressed \Rightarrow weak licensor
- ▶ V_2 cannot Lic C_2 \Rightarrow no j -to- C_2 \uparrow \Rightarrow silent j

Dittongo mobile

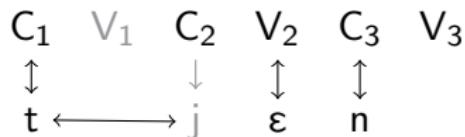
- ▶ 1SG.IND.PRS: ✓ + floating *o*_{1SG} ⇔ ['sjɛ:do]



- ▶ V₂ is stressed *and* long ⇒ strong(est) licensor
 - ▶ Branchingness adds to complexity
- ▶ V₂ Lic C₂ ⇒ *j*-to-C₂ ↑ insertion ⇒ *j* pronunciation

Dittongo mobile & *g*

- ▶ $\sqrt{\text{TIEN}^G}$ 'hold'

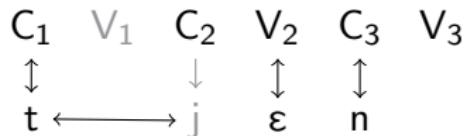


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- ▶ Floating *g* \Rightarrow neither \downarrow nor \uparrow

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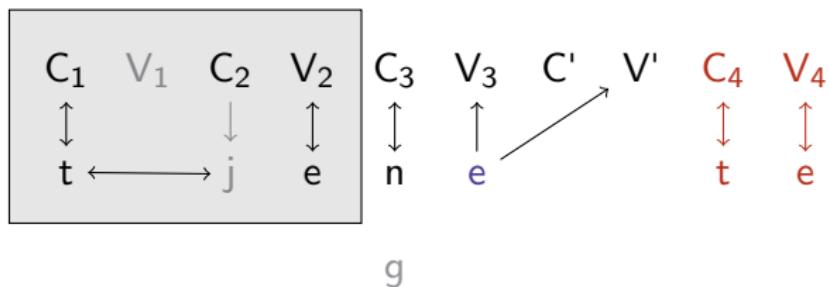


g

- ▶ Floating *g* \Rightarrow neither \downarrow nor \uparrow
- ▶ Pronounced if
 - ▶ Licensed
 - ▶ Associated to C

Dittongo mobile & g

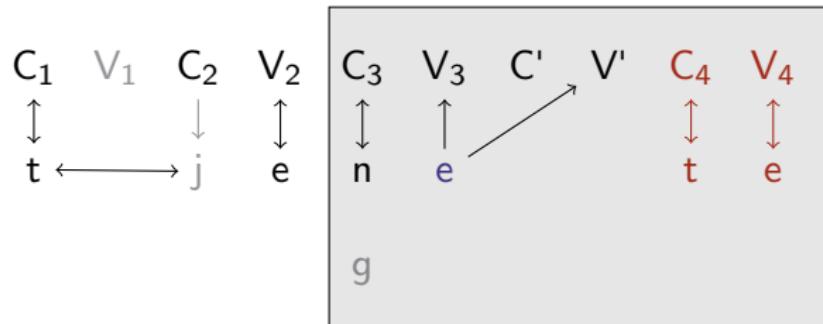
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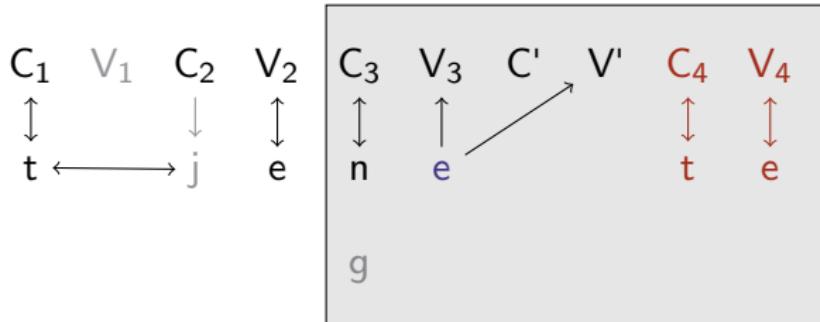
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Dittongo mobile & g

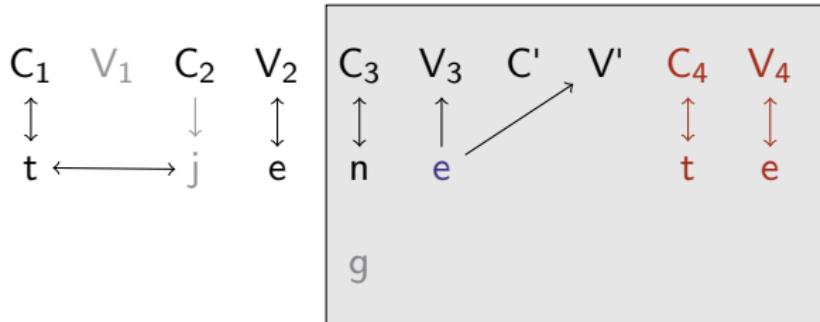
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 - ▶ No *g* licensor (EN too weak to Lic *g*)

Dittongo mobile & *g*

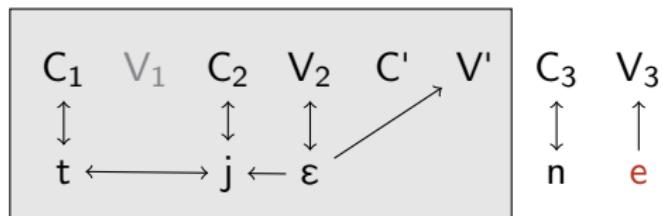
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 - ▶ *te'negte
 - ▶ *gt
 - ▶ No *g* licensor (EN too weak to Lic *g*)
- ▶ *g* stays afloat

Dittongo mobile & g

- ▶ 3SG.IND.PRS: $\sqrt{ } + \text{floating } e_{3\text{SG}} \Leftrightarrow ['tjɛ:ne]$

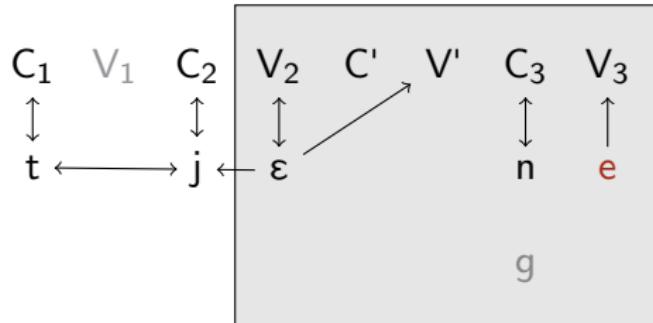


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 - ▶ C₂-C₁ IOL \Rightarrow V₁ trapping

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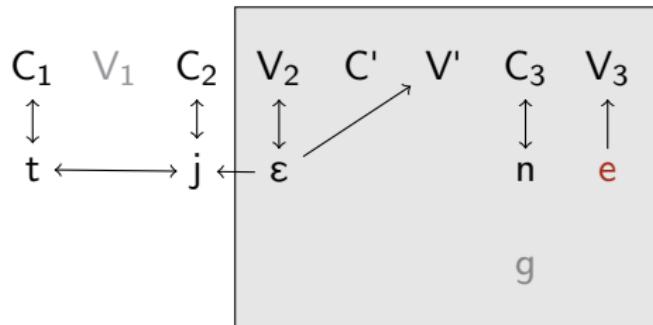
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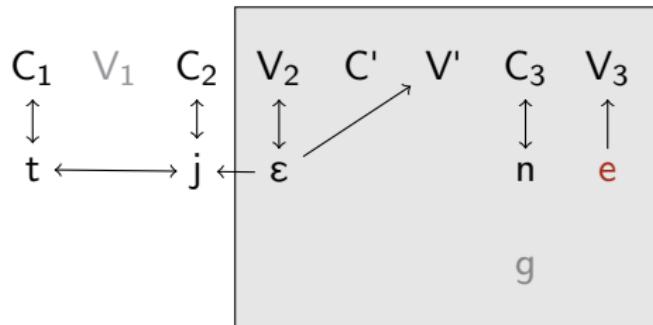
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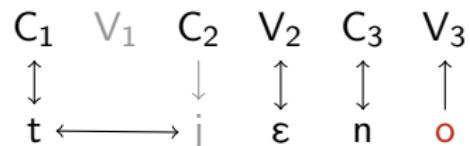
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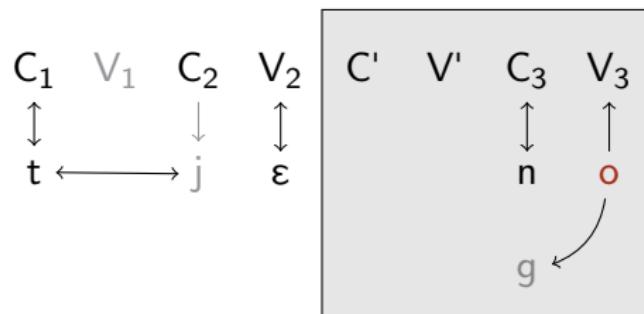
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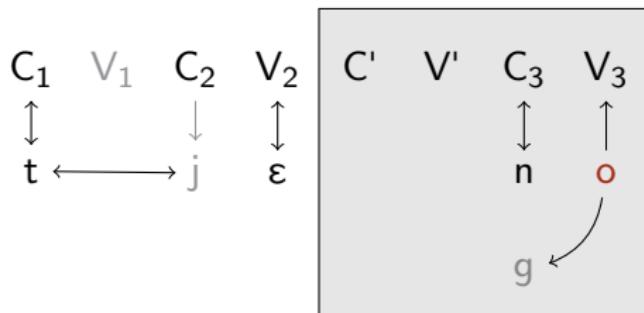
- ▶ 1SG.IND.PRS: $\sqrt{ } + \text{floating } o_{1\text{SG}} \Leftrightarrow *['t\varepsilon no]$



- ▶ Stress assignment \Rightarrow 'CV insertion
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 - ▶ No \uparrow without C

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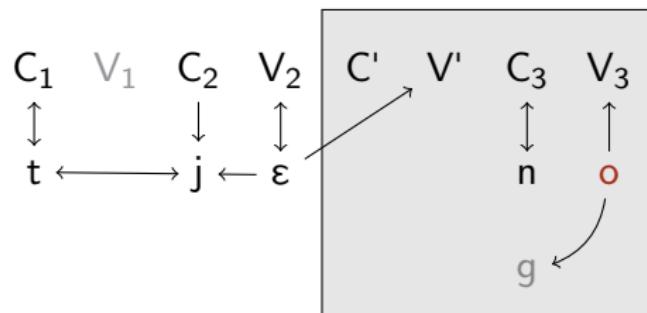
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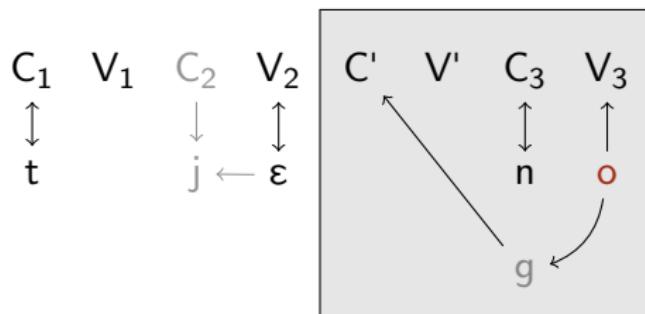
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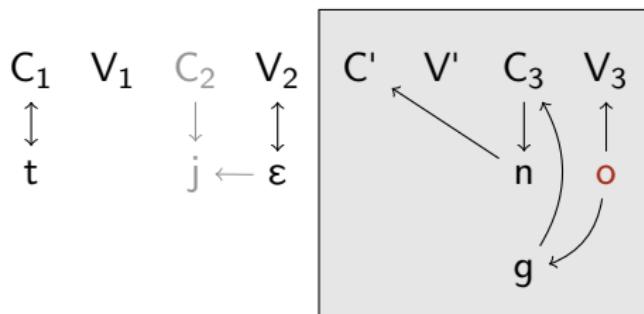
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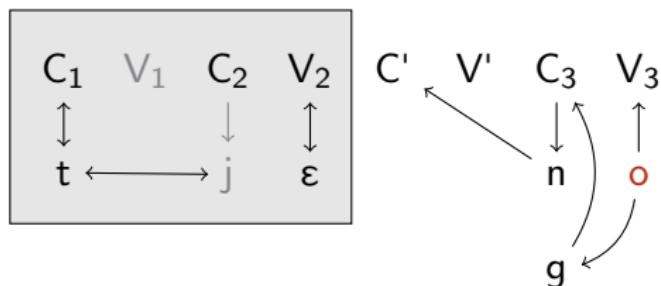
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 - ▶ $g \uparrow$ in C' \Rightarrow * gn & * g and o non-adjacent
 - ▶ $g \uparrow$ in C_3 & $n \uparrow$ in C' \Rightarrow $ŋg$
 - ▶ \uparrow from n -to- C_3 to n -to- C'

Dittongo mobile & *g*

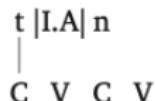
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- ▶ V₂ is stressed *but* non-branching \Rightarrow weak licensor
 - ▶ 'CV_iCV_i > 'CV_iC∅ > CV
- ▶ V₂ cannot Lic C₂ \Rightarrow no *j*-to-C₂ ↑ \Rightarrow silent *j*

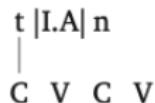
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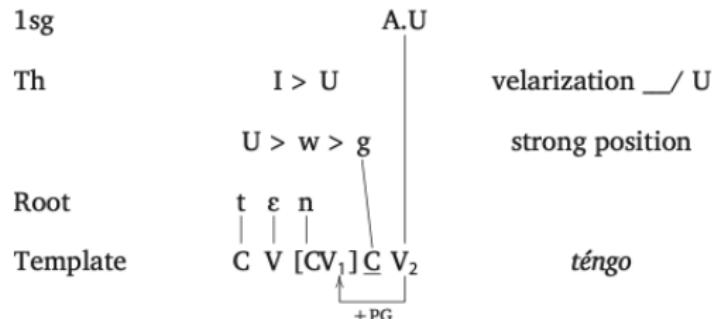
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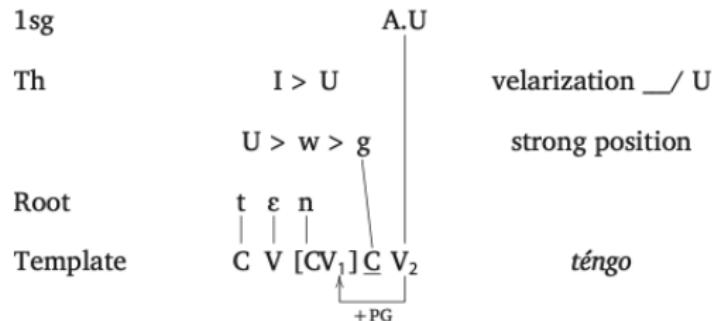
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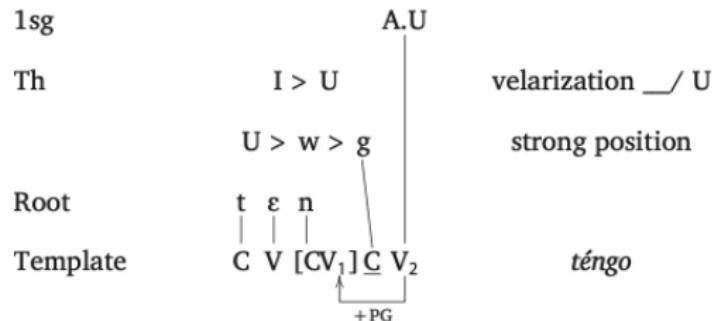


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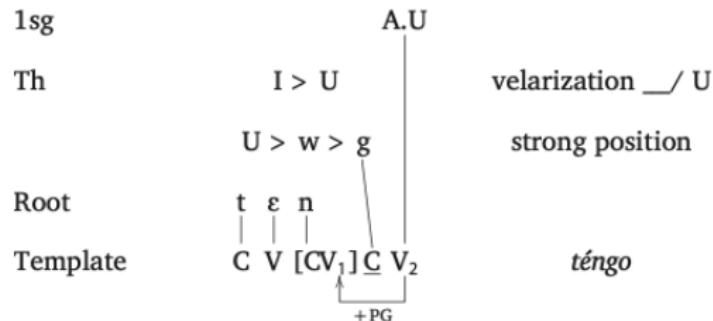


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 - ▶ ...
- ▶ No account of the *g*-dittongo complementary distribution
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Credits

- ▶ Maria Cortiula, Michal Starke & nanolab
- ▶ Tobias Scheer

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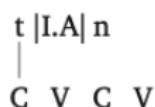
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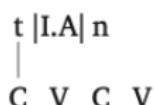
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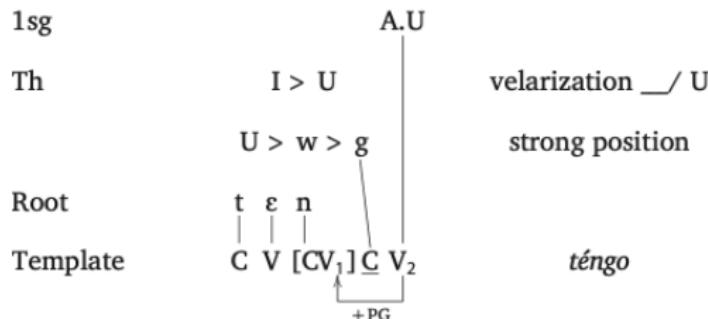


- ▶ Diphthong and *g* iff stress on the ROOT V \Rightarrow extra CV slot
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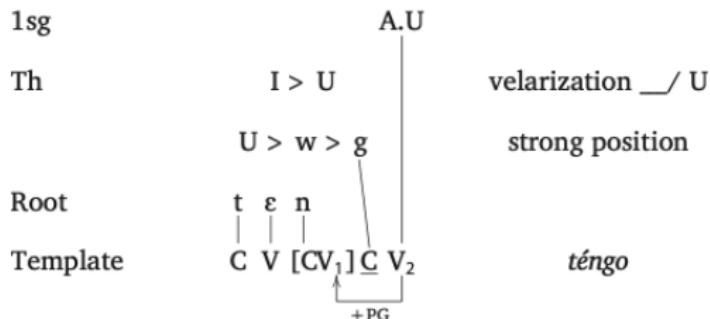
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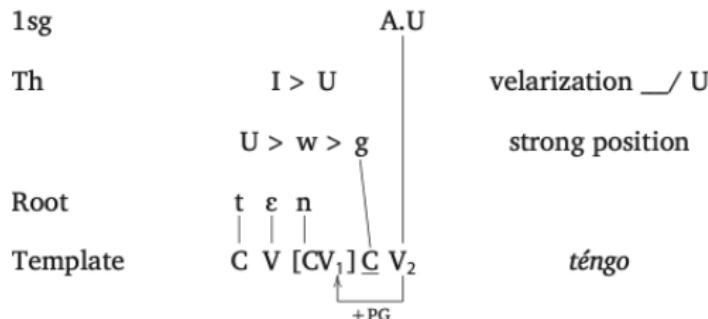
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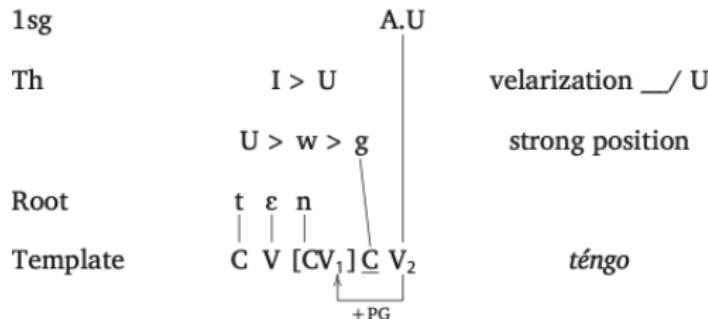
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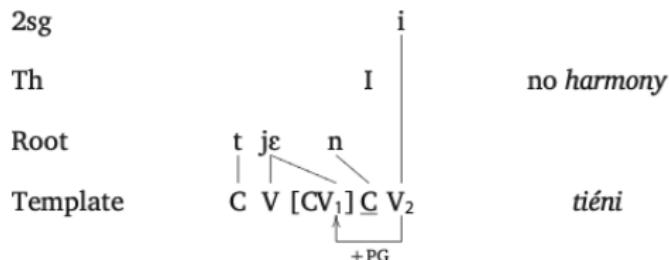
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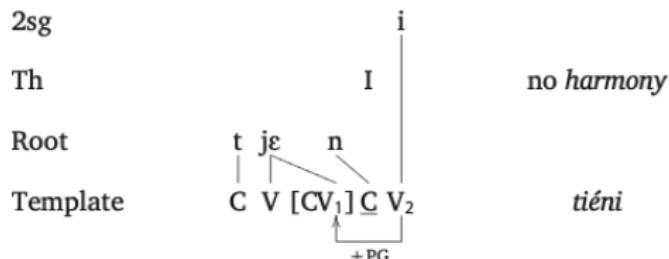
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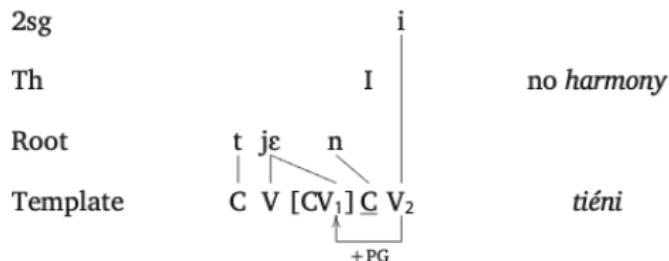
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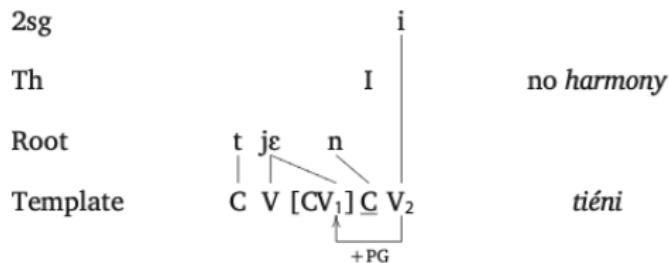
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 - ▶ 3SG.IND.PRS phonological exponent
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 - ▶ Class I: **floating a**

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1SG & 2SG vs 3SG - a nanosyntax proposal

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 - ▶ Class III = |I| + |A| ⇒ ['vje:ne]
 - ▶ Class II = |A.I| + |A| ⇒ ['tjɛ:ne]
 - ▶ Class I = |A| + |A| ⇒ ['a:ma]

1SG & 2SG vs 3SG - a nanosyntax proposal

- ▶ 3SG.IND.PRS: ['tjɛ:ne], ['a:ma] ⇒ ...CVC_✓-**e/a**
 - ▶ TH vowels
 - ▶ Class III = |I| (*tenere*)
 - ▶ Class II = |A.I| (*venire*)
 - ▶ Class I = |A| (*amare*)
 - ▶ 3SG.IND.PRS phonological exponent: |A|
 - ▶ TH & |A|_{3SG.IND.PRS} merge in ✓-final V_Ø
 - ▶ Class III = |I| + |A| ⇒ ['vje:ne]
 - ▶ Class II = |A.I| + |A| ⇒ ['tjɛ:ne]
 - ▶ Class I = |A| + |A| ⇒ ['a:ma']
 - ▶ Why does TH surface only in 3SG.IND.PRS?

1SG & 2SG vs 3SG - a nanosyntax proposal

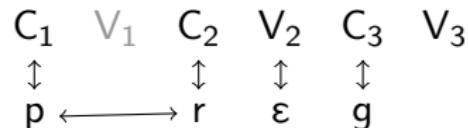
- ▶ 3SG.IND.PRS: ['tjɛ:ne], ['a:ma] ⇒ ...CVC_✓-**e/a**
 - ▶ TH vowels
 - ▶ Class III = |I| (*tenere*)
 - ▶ Class II = |A.I| (*venire*)
 - ▶ Class I = |A| (*amare*)
 - ▶ 3SG.IND.PRS phonological exponent: |A|
 - ▶ TH & |A|_{3SG.IND.PRS} merge in ✓-final V_Ø
 - ▶ Class III = |I| + |A| ⇒ ['vje:ne]
 - ▶ Class II = |A.I| + |A| ⇒ ['tjɛ:ne]
 - ▶ Class I = |A| + |A| ⇒ ['a:ma']
 - ▶ Why does TH surface only in 3SG.IND.PRS?
 - ▶ 3SG.IND.PRS is 'smaller' than 1,2SG.IND.PRS
 - ▶ floating *o* ⇔ ROOT-TH-1SG.IND.PRS
 - ▶ floating *i* ⇔ ROOT-TH-2SG.IND.PRS
 - ▶ floating *a* ⇔ ROOT-TH-3SG.IND.PRS

1SG & 2SG vs 3SG - a nanosyntax proposal

- ▶ 3SG.IND.PRS: ['tjɛ:ne], ['a:ma] ⇒ ...CVC_v-e/a
 - ▶ TH vowels
 - ▶ Class III = |I| (*tenere*)
 - ▶ Class II = |A.I| (*venire*)
 - ▶ Class I = |A| (*amare*)
 - ▶ 3SG.IND.PRS phonological exponent: |A|
 - ▶ TH & |A|_{3SG.IND.PRS} merge in √-final V_Ø
 - ▶ Class III = |I| + |A| ⇒ ['vje:ne]
 - ▶ Class II = |A.I| + |A| ⇒ ['tjɛ:ne]
 - ▶ Class I = |A| + |A| ⇒ ['a:ma']
 - ▶ Why does TH surface only in 3SG.IND.PRS?
 - ▶ 3SG.IND.PRS is 'smaller' than 1,2SG.IND.PRS
 - ▶ floating *o* ⇔ ROOT-TH-1SG.IND.PRS
 - ▶ floating *i* ⇔ ROOT-TH-2SG.IND.PRS
 - ▶ floating *a* ⇔ ROOT-TH-3SG.IND.PRS
 - ▶ In 3SG.IND.PRS, TH head can be lexicalized (in √-final V_Ø)

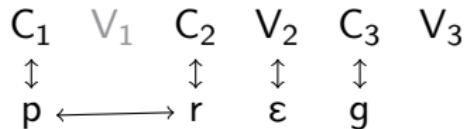
TR cluster

- ▶ $\sqrt{\text{PREG}}$ ‘prey’

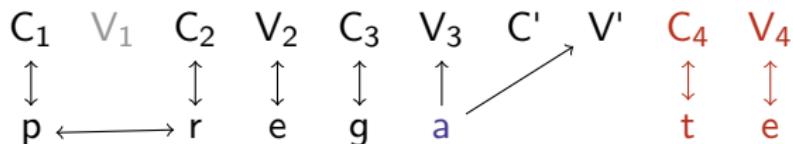


TR cluster

- ▶ $\sqrt{\text{PREG}}$ 'prey'

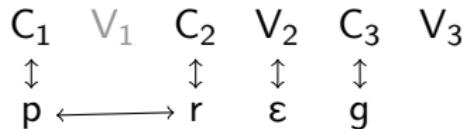


- ▶ 2PL.IND.PRS: $\checkmark + \text{floating } a_{\text{TH}} + C_t V_{e2\text{PL}} \Leftrightarrow [\text{pre'ga:te}]$

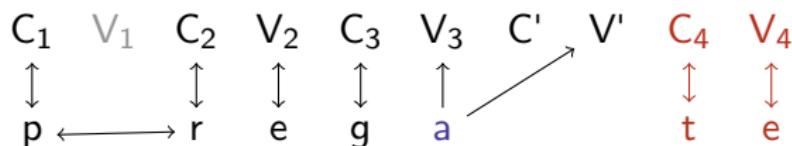


TR cluster

- ▶ $\sqrt{\text{PREG}}$ 'prey'



- ▶ 2PL.IND.PRS: $\sqrt{+}$ + floating a_{TH} + $C_t V_{e2\text{PL}} \Leftrightarrow [\text{pre'ga:te}]$



- ▶ 1SG.IND.PRS: $\sqrt{+}$ + floating $o_{1\text{SG}}$ $\Leftrightarrow [\text{'pre:go}]$

