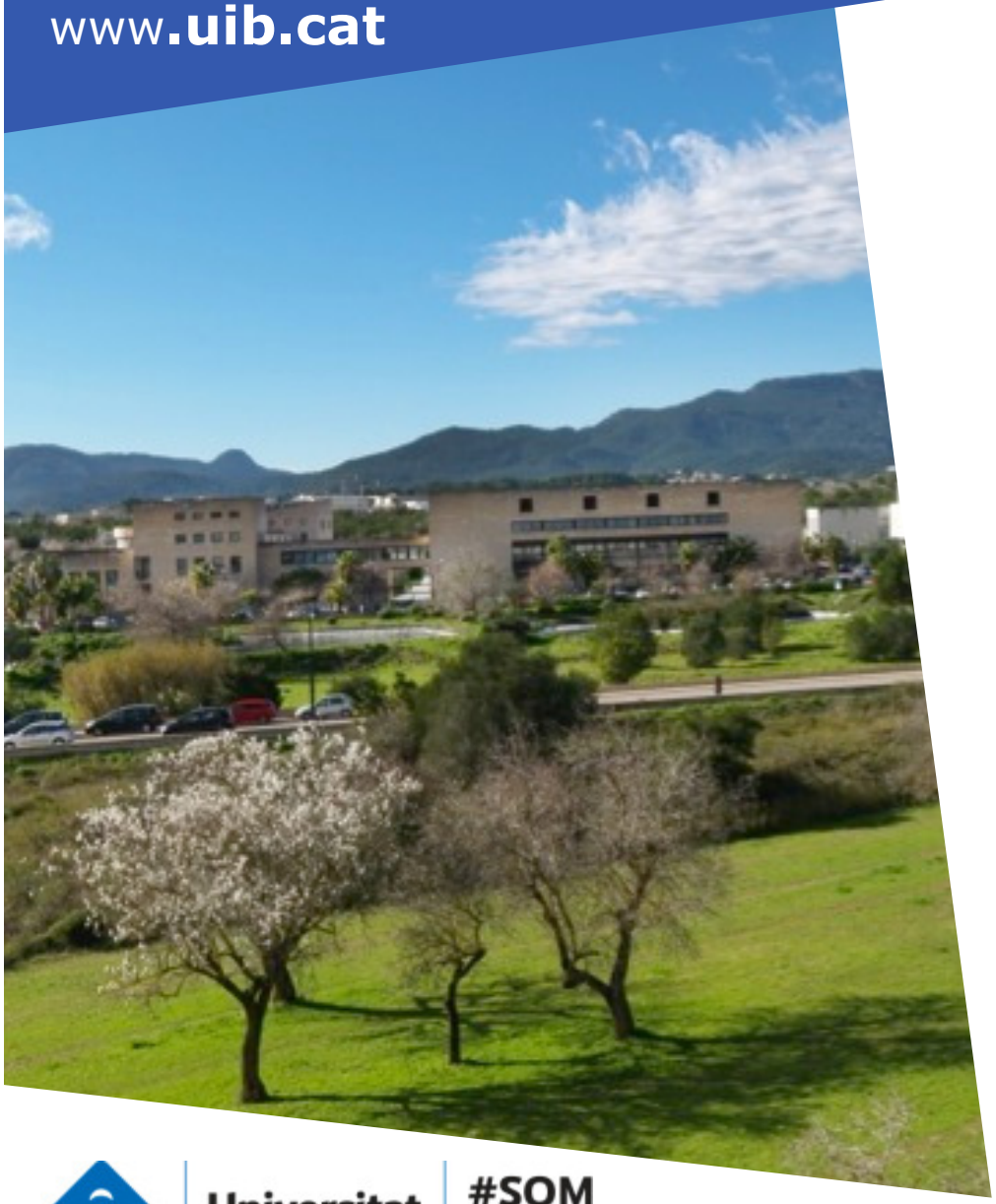
www.uib.cat



Formal approaches to Sardinian intonational phonology

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Il Sardo in Movimento

27-30 settembre 2017

a. Previous work on Sardinian intonation.
b. Sard_ToBI.
c. Truncation in Sardinian.
d. Intonation and its interfaces in Sardinian polar questions.
e. General conclusions.

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Previous work on Sardinian intonation

- **Main topics:** dialectal variation, intonational differences related to different sentence types or pragmatic nuances, and the intonation of regional varieties of Italian within Sardinia.

(Contini 1992, Lai & Zucca 2004, Zucca 2005; Contini 1976, 1984, Bolinger 1989, Lai 2002, Jones 1993, Zucca 2005, Vanrell & Cabré 2011, Kim & Repetti 2013, Cabré & Vanrell 2013; Canepari 1980, 1992, Schirru 1981–2, 1992).

- **Different frameworks:** a descriptive/impressionistic approach, an experimental-phonetic approach, the tune approach and the Autosegmental Metrical framework.

(Canepari 1980, 1992, Jones 1993; Schirru 1976, 1981–2, 1992, Contini 1984, 1992, Lai 2002, Lai & Zucca 2004, Zucca 2005; Bolinger 1989; Vanrell & Cabré 2011, Kim & Repetti 2013, Cabré &Vanrell 2013).

Yes-no questions and declaratives in Sardinian

- Both statements and yes-no questions are characterized by **falling intonation**.
- The pitch height of the **final pre-accentual syllable** seems to be key in yes no questions with question particle *a* or no specific lexical/syntactic marker (i.e., *A s'abba?* 'To the water?').
- Yes-no questions with constituent fronting present **rising-falling intonation**.

(Schirru 1981–2, 1992, Contini 1984, Lai & Zucca 2004).

Dialectal variation in intonation

- Still an **unresolved issue** in Sardinian.
- Terminal F0 patterns found for statements and yes/no questions in Nuoro (Logudorese) are very similar to those of Cagliari (Campidanese).

(Lai & Zucca 2004).

- There might be peculiarities in the prenuclear F0 or in duration.

(Lai & Zucca 2004).

Prosodic phrasing or pitch accent distribution in Sardinian

- Changes in word order are manifested at the prosodic level through pauses or the presence of an “unstressed with flow, fairly flat intonation contour” following right dislocations or fronted constituents.

(Jones 1993: 318, 332).

  - Existence of an **intermediate prosodic constituent** between the Prosodic Word (PW) and the Intonational Phrase (IP).

- Intuition of two native speakers (co-authors of some of the papers presented here): Sardinian has a **dense pitch accent distribution**.

a. Previous work on Sardinian intonation.
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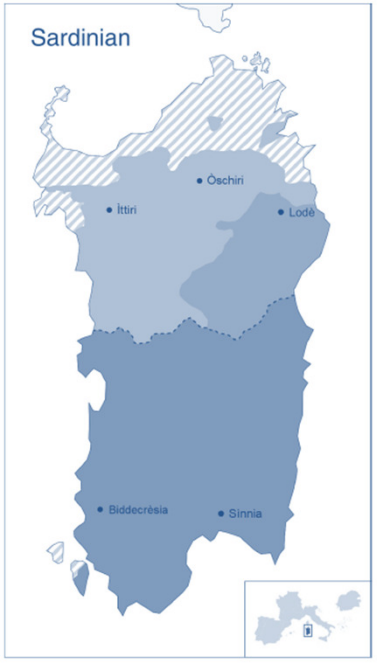
From ToBI...

Goal

- To describe the intonation and phrasing patterns found in a variety of **sentence types** as well as the lexicosyntactic markers used to convey specific pragmatic meanings for both the **Logudorese and Campidanese varieties**.
  - To develop a **ToBI** (a system for transcribing intonation couched within the AM model) for Sardinian.



Autosegmental Metrical framework

- **Starting point** of the AM model: Pierrehumbert (1980), Beckman & Pierrehumbert (1986), and Pierrehumbert & Beckman (1988).

Metrical and Autosegmental

- **Autosegmental:** tones constitute a separate level (tones are autosegments), associated to the segmental level through rules.

(1) p a t a k a

H L H

(2) p a t a k a i m o → p a t a k i m o

H L H L H H L HL H

- **Metrical:** tones are associated with prominent syllables.

(3) *ele**fan**te*

(4) *ele**fan**te afri**ca**nu*

Hualde (2003)

Tonal units

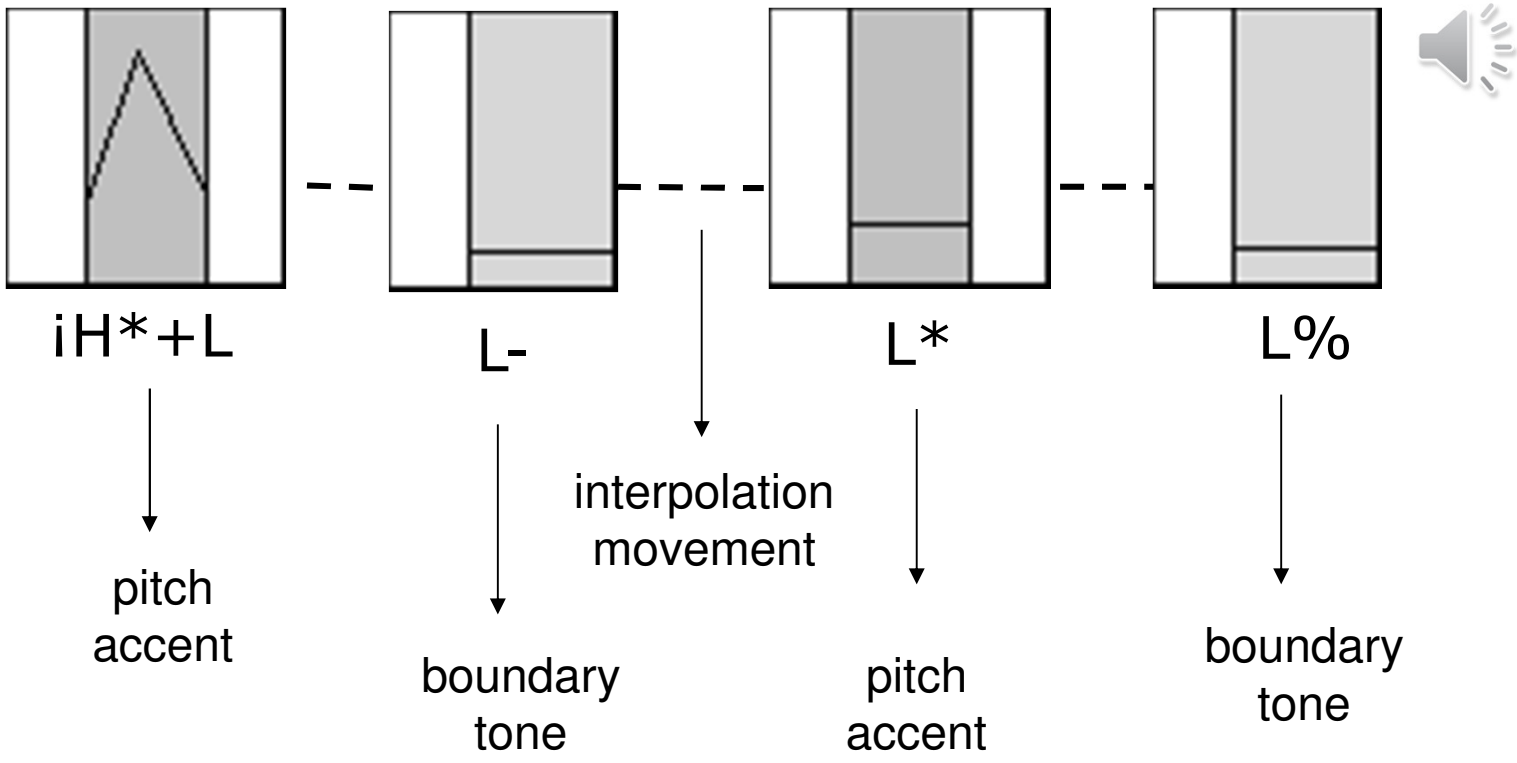
- **Two different units** are proposed: pitch accents and boundary tones.
  - **Pitch accents** are aligned to the **stressed syllables**.
  - **Boundary tones** are aligned to the **prosodic edges**.

- The **phonological representation** of a specific sequence is the result of a chain of pitch accents and boundary tones.

- The **phonetic implementation rules** are responsible for the generation of the melodic continuum.

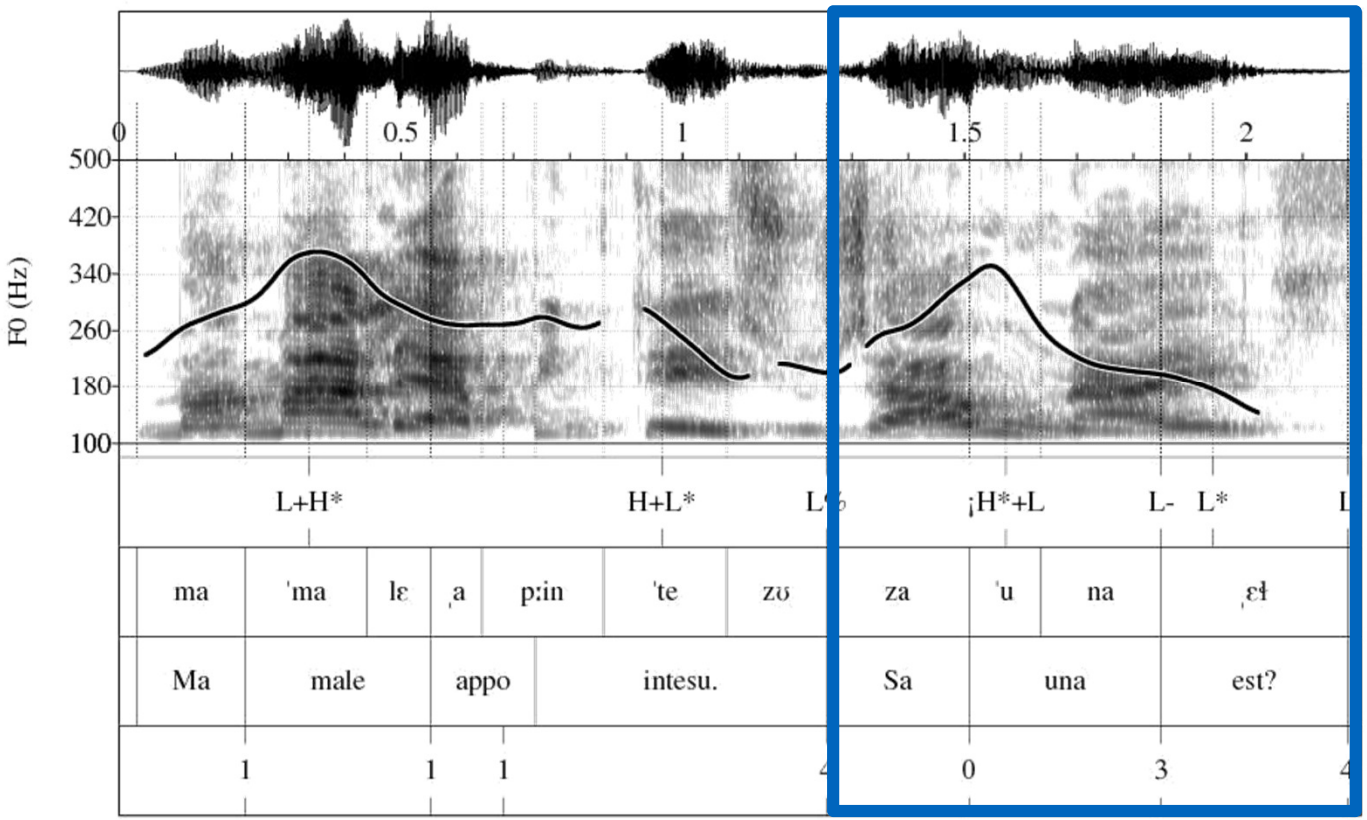
Hualde (2003)

(5) *Sa **u**na **est**e?* 'Is it one o'clock?'

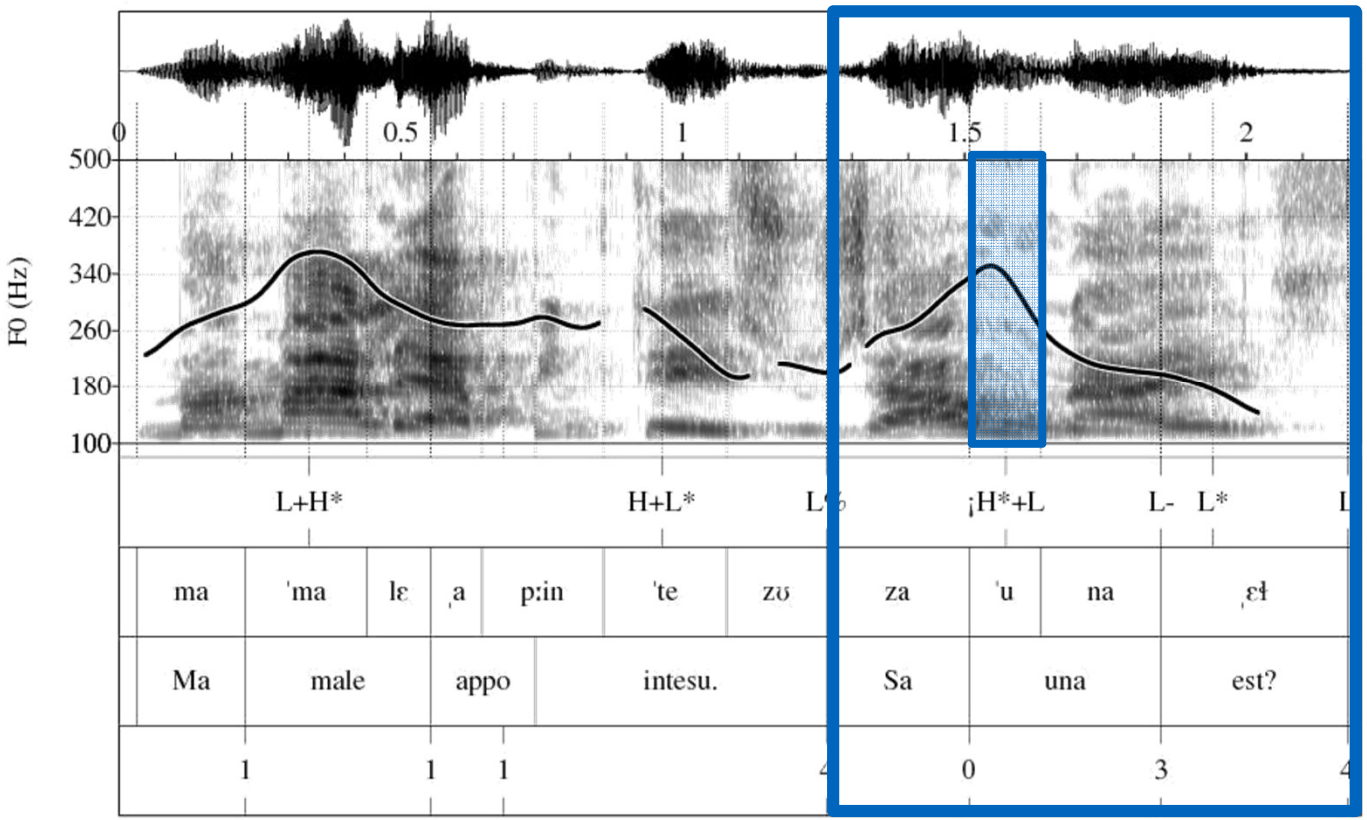


Vanrell et al. 2015

(5) *Sa **u**na **est**e?* 'Is it one o'clock?'

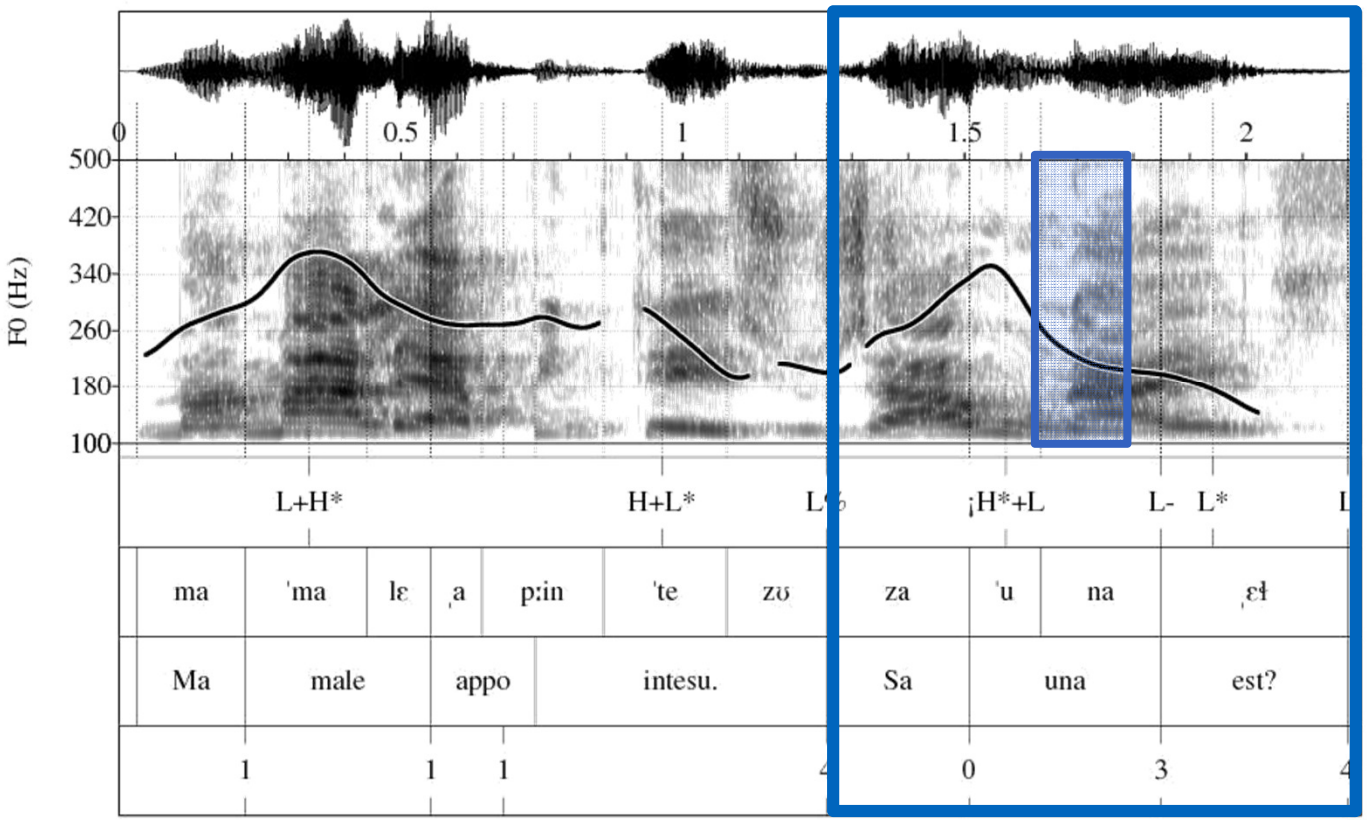


(5) *Sa **u**na **est**e?* 'Is it one o'clock?'



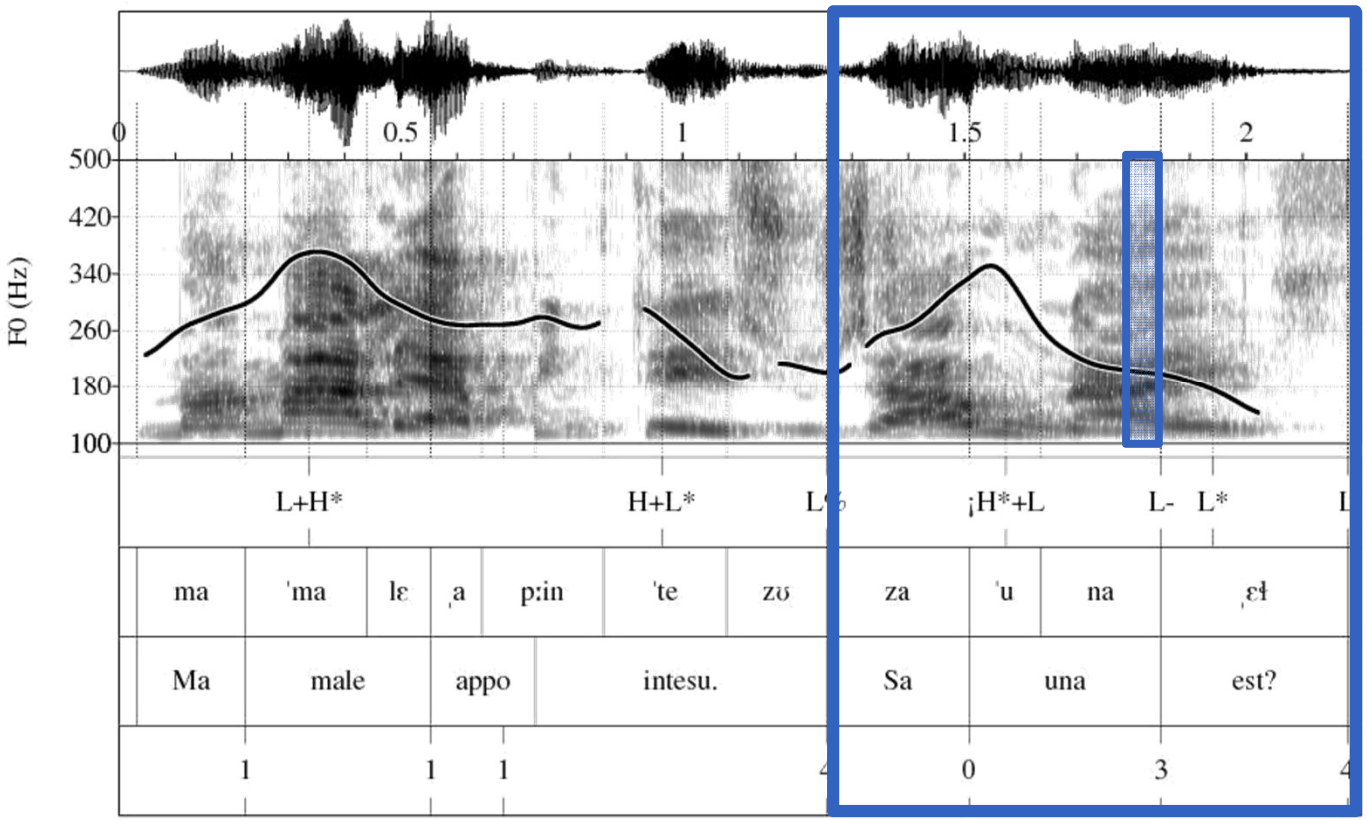
pitch accent

(5) *Sa **u**na **est**e?* 'Is it one o'clock?'



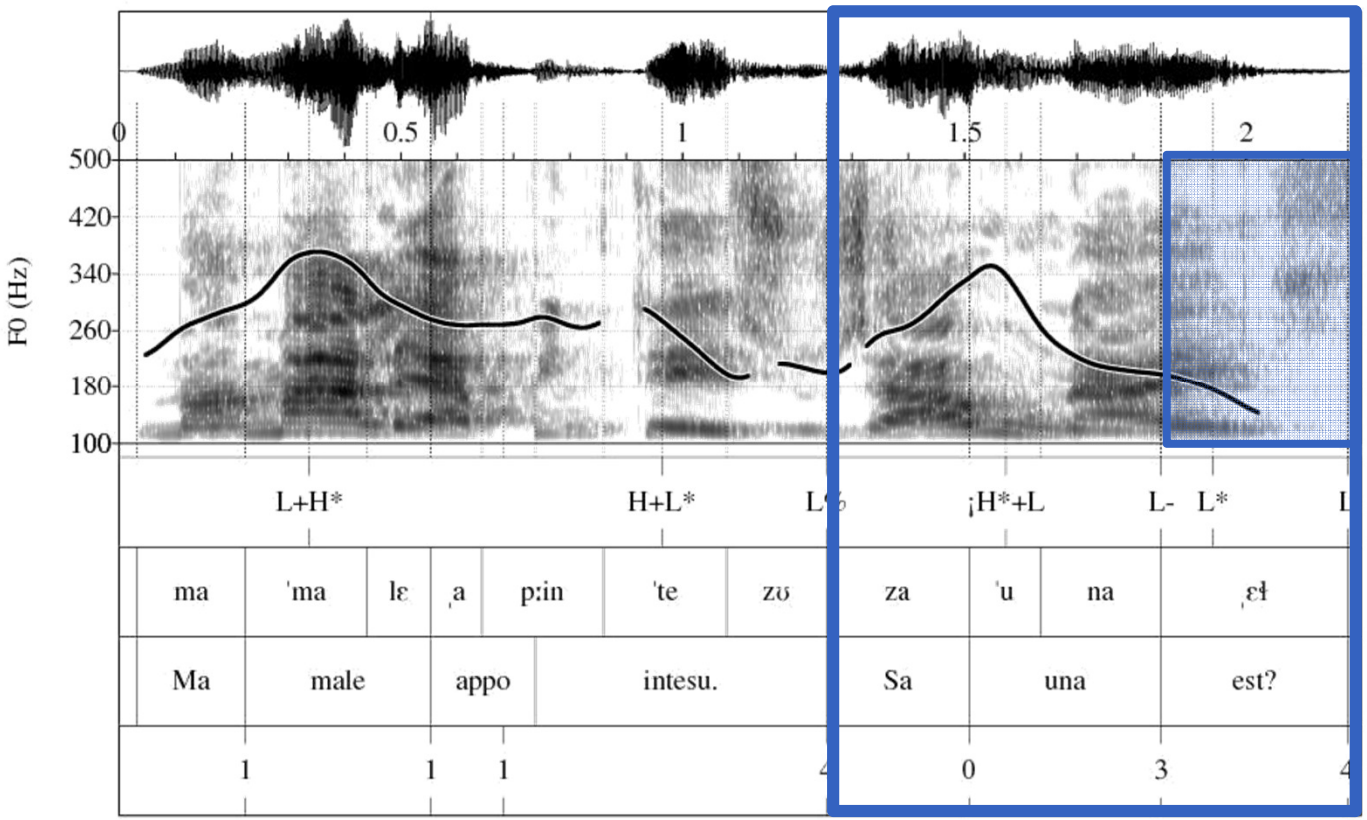
interpolation movement

(5) *Sa **u**na **est**e?* 'Is it one o'clock?'



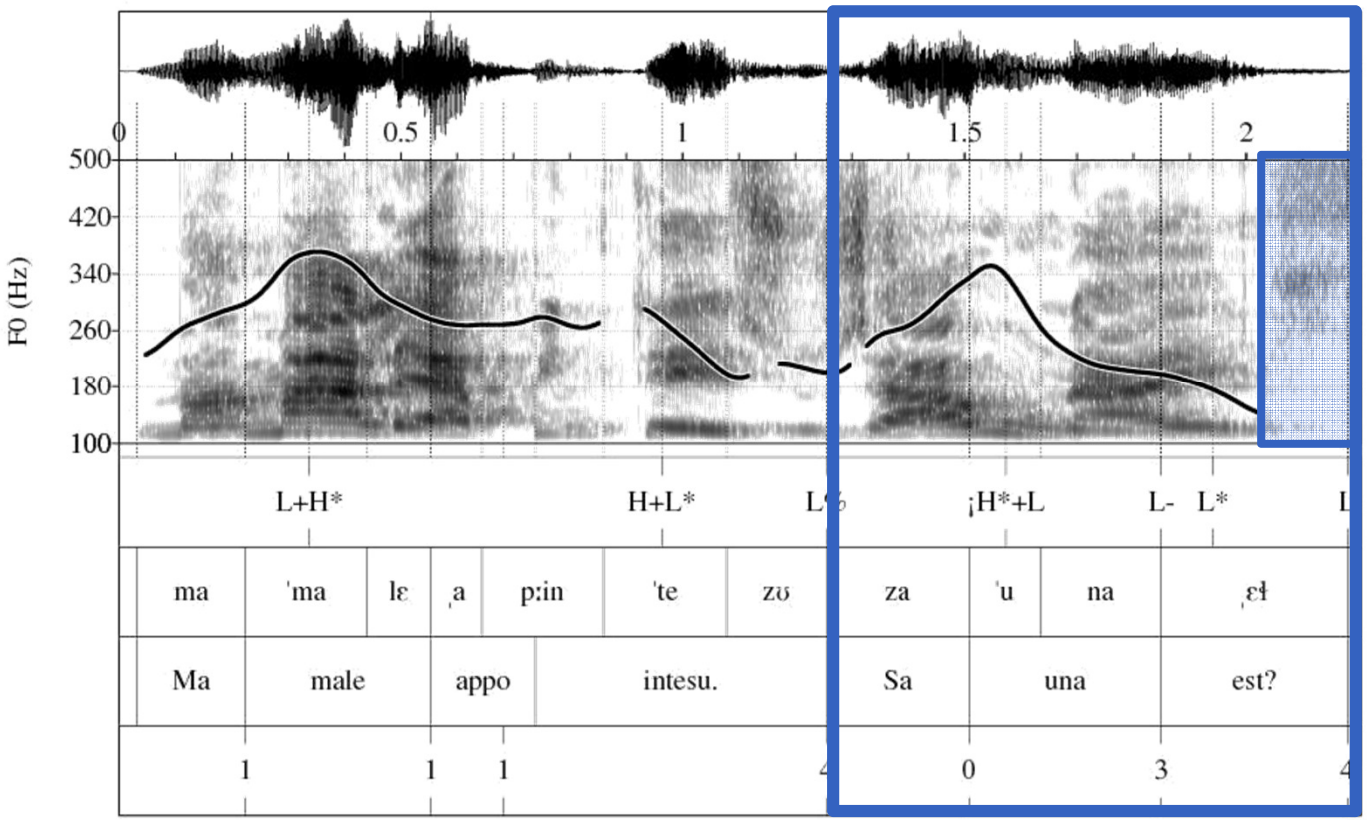
boundary tone

(5) *Sa **u**na **est**e?* 'Is it one o'clock?'



pitch accent

(5) *Sa **u**na **est**e?* 'Is it one o'clock?'



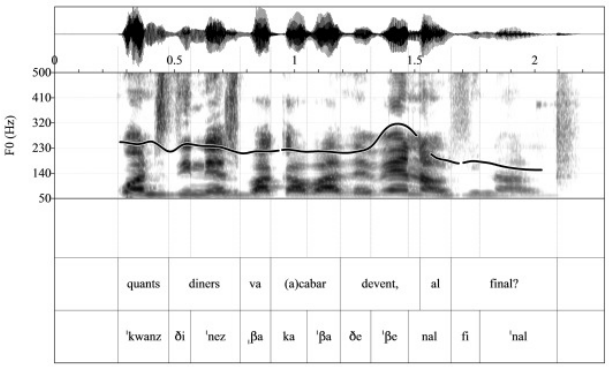
boundary tone

Pitch accents

- Pitch accents can be **monotonal** (L*, H*) or **bitonal** (L+H*, H+L*). Tritonal pitch accents are not excluded.

- An utterance can have more than one pitch accent. The final one is the **nuclear pitch accent**, whereas the remaining pitch accents are referred to as the **prenuclear pitch accents**.

- Not all stressed syllables are accented (pragmatic option).



***Quants** di**ners va** aca**bar** de**vent**, al final?*
'How much money did he end up owing altogether?'

Hualde (2003)

Boundary tones

- Two different types of prosodic phrases are distinguished:
  - Intonational phrase or **IP** (L%, H%).
  - Intermediate phrase or **ip** (L-, H-).

- Not all languages need to have these two levels.

(Spanish: Sosa 1999 vs. Nibert 2000 and Hualde 2002)

(6) a. [La vieja]NP [lanza la amenaza]VP 'The old lady threatens him/her'

b. [La vieja lanza]NP [la amenaza]VP 'The old spear threatens him/her'

(Prieto 1997)

... to Sard_ToBI...

- Vanrell, M.M.; Ballone, F.; Schirru, C.; Prieto, P. (2015). Sardinian intonational phonology: Logudorese and Campidanese varieties. In: S. Frota and P. Prieto (Eds.), *Intonational Variation in Romance,* 317-349. Oxford University Press.

Methodology

- **Task:** Discourse Completion Task.

Focalizatzione contrastiva – Contrastive focus

Intras ind una butega a inue no ses intrada mai e pregunta si b'at mandarinu, però sa pisedda no hat cumpresu 'ene ite cheres, si cheres limone. Li torras a narrere mandarinu

A. Chelzo unu chilu 'e mandarinu

B. Limone?

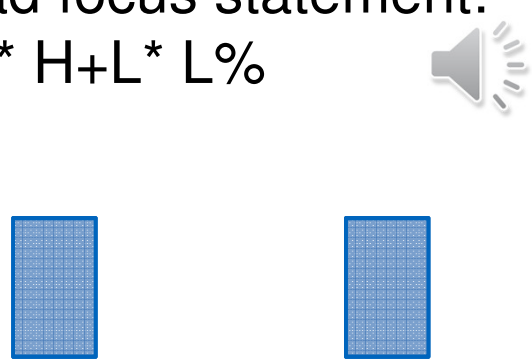
A. Apo nadu mandarinu!

(Vanrell et al. in press)

- **Speakers:**
  - 5 from the Logudorese area (3 female speakers from Ìttiri, 1 male speaker from Òschiri, and 1 male speaker from Lodè).
  - 4 from the Campidanese area (1 male speaker from Biddecrèsia and three female speakers from Sìnnia).
- **Orthographic conventions:**
  - Respect for the principle of invariance.
  - Conservation of some etymological consonants.
  - Accentuation.
  - Geminated consonants.

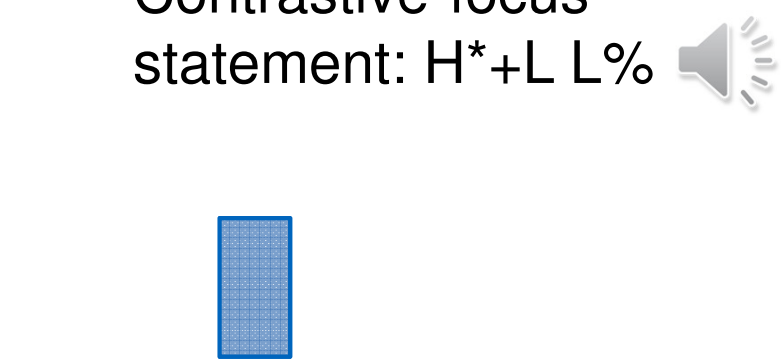
DECLARATIVES

- Broad focus statement: L+H* H+L* L%



Una pitzinna mandicande arantzu
'A girl eating an orange'
Lodè, Logudorese

- Contrastive-focus statement: H*+L L%



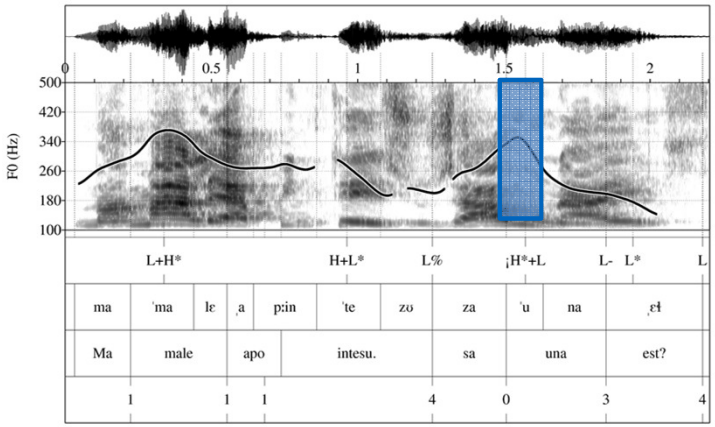
MANDARINU cherzo, non limone
'No, no, I want tangerines, not lemons!'
Ìttiri, Logudorese

YES-NO QUESTIONS

- Information-seeking y/n questions: ¡H+L* L%

Mandarinu, a che nd'at?
'Do you have tangerines?'
Ìttiri, Logudorese

- Echo y/n questions: ¡H*+L L%



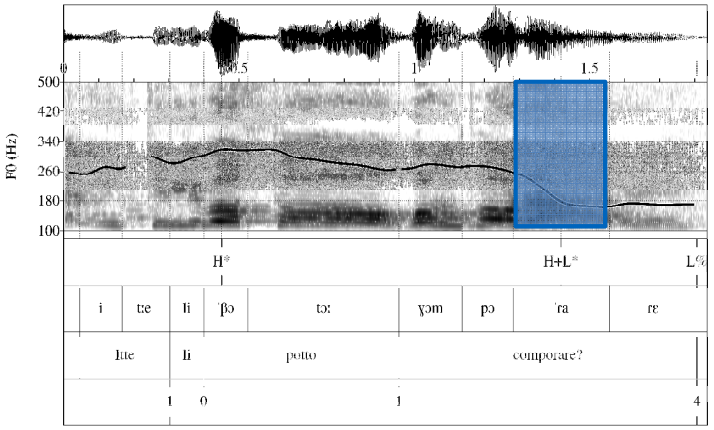
Sa una est?
'It's one o'clock?'
Ìttiri, Logudorese

WH-QUESTIONS

- Information-seeking wh-questions: ¡H*+L L* L%

E a in ue andas?
'And where do you go?'
Ìttiri, Logudorese

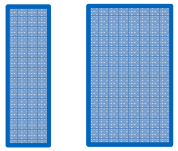
- Long information-seeking wh-questions: H+L* L%



Itte li potto comporare?
'What could I buy for him/her?'
Ìttiri, Logudorese

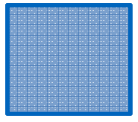
IMPERATIVES AND VOCATIVES

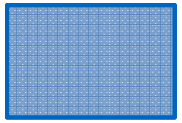
- Imperatives: L+H* H+L* L%



Beni inoghe, in cue est periculosu!
'Come here, it is dangerous there!'
Òschiri, Logudorese

- Vocative (Ìttiri, Logudorese: first contact vocative (L+H* H+L* L%)

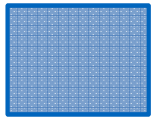




Eleonora!!

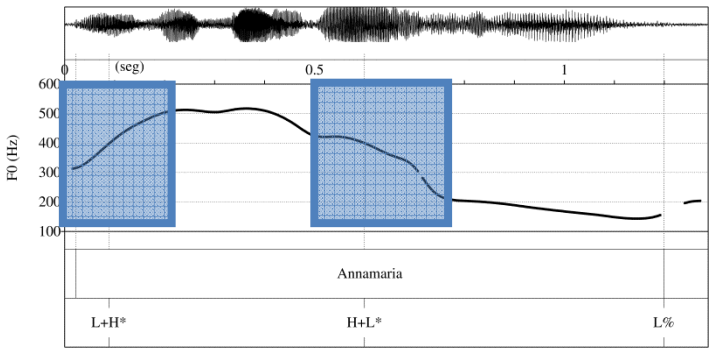
Eleono'!

- Vocative (Ìttiri, Logudorese,): insistent vocative (L+H* !H%)



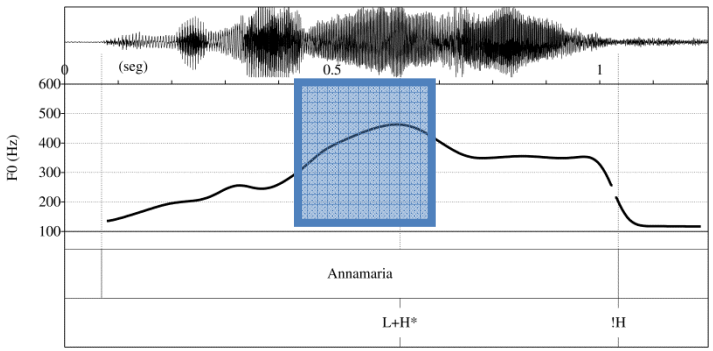
VOCATIVES

- Vocative (Campidanese, Sìnnia): first contact vocative (L+H* H+L*).



Annamaria!

- Vocative (Campidanese, Sìnnia): insistent vocative (L+H* !H%)

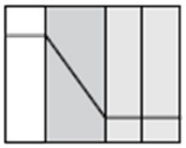
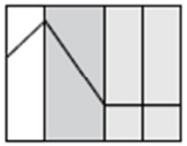
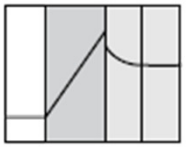
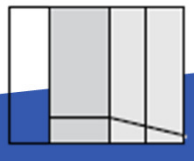


Annamaria!!

- Inventory of nuclear configurations in Sardinian:

CATALAN

L* L%	Broad-focus statements, narrow-focus statements, information-seeking wh-questions
L* H%	Information-seeking yes/no questions
L+H* H%	Information-seeking yes/no questions
H+L* L%	Information-seeking yes/no questions, confirmation-seeking yes/no questions, information-seeking wh-questions (Valencian)
¡H+L* L%	Information-seeking questions (Balearic)
H* L%	Information-seeking wh-questions
H*+L L%	Contrastive focus (Algherese, Northern Catalan)
L+H* L%	Contrastive focus, narrow focus, vocatives (Northern Catalan)
L+H* !H%	Vocatives, uncertainty statements, yes/no questions (Northwestern, Tortosí area)
L+¡H* L%	Echo yes/no questions, echo wh-questions
L+H* HL%	Requests, vocatives
L* HL%	Requests, vocatives, contradictory statements
L+H* L!H%	Statements of the obvious
L+H* LH%	Echo questions, incredulity questions
L+H* LHL%	Insistent requests, insistent vocatives

H+L* L%		Broad-focus sentences, long information-seeking wh-questions, and commands
H*+L L%		Contrastive-focus sentences, uncertainty statements, and requests.
L+H* L%		Exclamative sentences
¡H+L* L%		Yes/no questions and echo wh-questions
¡H*+L L%		Echo yes/no questions, confirmation yes/no questions, and short information-seeking wh-questions
L+H* !H%		Vocatives with non-truncated bases
L* L%		Vocatives with truncated or non-truncated bases

ITALIAN

L+H* L%	Not final item in lists, early narrow focus (Pisa, Lecce); wh-questions (Cosenza).
L+H* L%[b]	Contrastive-corrective narrow-focus statements (Milan, Turin, Florence, Siena, Lucca, Naples, Salerno); exclamatives (Turin, Florence, Siena); yes/no questions (Salerno, Cosenza, Bari); counterexpectational yes/no questions; commands (Turin); imperative requests (Milan, Turin, Florence, Siena, Salerno); vocative initial call (Pisa, Lucca, Salerno, and Cosenza); vocative insistent call (Milan, Turin, Florence, Pisa, Siena, Cosenza).
L+H* LH%	Yes/no questions (Turin, Salerno, Cosenza, Bari).
L+H* L!H%	Counterexpectational yes/no questions (Lecce).
L+H* H%	Wh-questions (Rome, Cosenza); possible on intermediate item in lists.
L+H* H!H%	Vocative initial call (Milan, Turin, Florence, Siena, Pisa, Lucca, Rome, Pescara, Naples, Salerno, Cosenza, Lecce) and insistent call (e.g. Pisa, Pescara, Salerno, Cosenza).
L+¡H* H%	Counterexpectational wh-questions (Milan, Turin, Florence, Siena, Pisa, Lucca, Rome, Salerno, Pescara, Cosenza).
L+¡H* LH%	Echo yes/no questions (Lucca).
L+¡H* L%	Counterexpectational yes/no questions (Bari);[c] counterexpectational wh-questions (Lecce, Salerno, Pescara).
L*+H L%	Wh-questions in Pescara.
L*+H H%	Wh-questions in Pescara and Salerno.
L*+H HL% L*+H HL-L%	Yes/no questions (Turin and Naples, although in the latter the low target in the pitch accent is aligned earlier and a bitonal phrase accent is found; see discussion in text).
L*+>H L%	Exclamatives (Turin, Milan, Lucca, Rome, Lecce).

...and back

- Sardinian does not use a H tone (H-) to mark continuation, but a **downstepped tone** (!H-).
- **No rising boundary tones** in questions.
- Existence of an **upstepped H tone** (¡H+L* and ¡H*+L).
- Frequent presence of **secondary accents** or initial prominences.
- Exceptions to the **assignment of the nuclear accent to the rightmost element** in the sentence (right dislocation, constituent fronting, short wh-questions).

(Jones 2013)

- **No** clear evidence for **dialectal differences in intonation**.

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- Vanrell, M.M.; Cabré, T. (2011). Troncamento e intonazione dei vocativi in Italia centromeridionale. In: B. Gili-Fivela, A. Stella, L. Garrapa and M. Grimaldi (Eds.), *Contesto comunicativo e variabilità nella produzione e percezione della lingua, Atti el 7 convegno AISV* (26-28 January 2011, Lecce), Roma: Bulzoni.
- Cabré, T.; Vanrell, M.M. (2013). Entonació i truncament en els vocatius romànics. In: E. Casanova Herrero and C. Calvo Rigual (Eds.), *Actes del 26è Congrés de Lingüística i Filologia Romàniques* (València, 6-1 September 2010). Berlin: W. de Gruyter, 543-553.
- Cabré, T.; Torres-Tamarit, F.; Vanrell, M.M. (in preparation). Truncation in Sardinian.

Two truncation processes in Sardinian

- Sardinian shows two optional truncation processes: **hypocoristic truncation** and **vocative truncation**.
- Sardinian **hypocoristic truncation** deletes initial unstressed syllable(s), and as a result yields nouns conforming to the canonical foot of the language (a syllabic trochee).
- Another process of truncation in Sardinian occurs in **vocatives**, which preserve the left side of the word until the stressed vowel.

Hypocoristic truncation

- **Bisyllabic truncated forms** (perfect copy of the main foot found in penultimately stressed bases).

Paroxytonic base	Bisyllabic truncated form
Filu(**me**na)	**Me**na
Benia(**mi**nu)	**Mi**nu
Serva(**to**re)	**To**re

- **Trisyllabic truncated forms** (reduplicated truncated forms and truncated forms with syllable adjunction).

Reduplicated truncated forms		Truncated forms with syllable adjunction	
Base	**Reduplicated truncated form**	**Base**	**Truncated base with syllable adjunction**
Filu(**me**na)	Me(**me**na)	Serva(**to**re)	Va(**to**re)
Serva(**to**re)	To(**to**re)	Bertu(**me**u/a)	Tu(**me**u/a)
Constan(**ti**nu)	Ti(**ti**nu/a)	Gaspa(**ri**na)	Pa(**rri**na)

- **Diminutives**.

Diminutivized base	Truncated form
Anto(**niet**ta)	(**T-et**t-a)
Giovan(**n-i**c-u/a)	(**N-i**c-u/a)
Speran(**tz-i**n-a)	(**Tz-i**n-a)

Hypocoristic truncation: bisyllabicity

- Hypocoristic truncation is a **morphological process** subject to the prosodic requirements of the Sardinian Minimal Word: a bisyllabic trochee.
- Derived truncated words are required to be minimally and maximally **bisyllabic**.
- The bisyllabic trochee is the **basic foot for stress assignment** in this language.
- **No intonational contour** defines them.

Vocative truncation

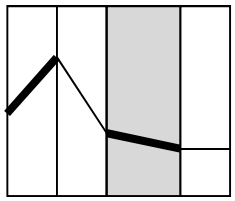
Bèrtulu > Be’	Innàtziu > Inna’
babbu > o ba’ ‘father’	Fortunadu > Fortuna’
Simone > Simo’	Remundu > Remu’
Gironimu > Giro’	Mariàngela > Maria’
Gòsamu > Go’	tziu > o tzi’ ‘uncle’
Iperància > Ipera’	Domínigu > Domi’
Rosària > Rosa’	Rita > Ri’, Arri’
Filumena > Filume’	Andria > Andri’
Austinu > Austi’	Zùlia > Zu’

Vocative truncation: a morphological process?

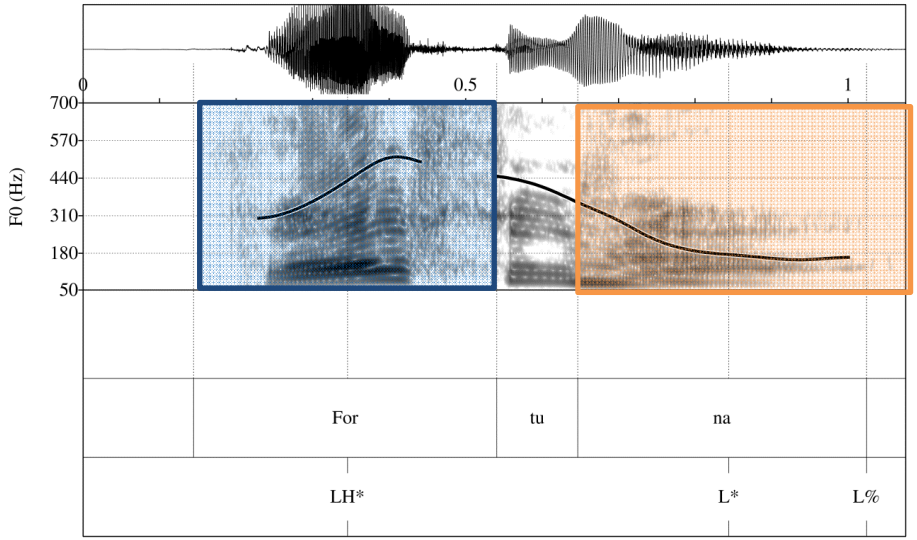
- Vocative truncation **is not a morphological process** *strictu sensu* (not guided by any prosodic requirement drawn from the prosodic hierarchy: Mora –> Syllable –> Foot –> Prosodic Word).
- It is driven by **two enhanced positions**: the word-initial syllable and the stressed vowel of the word.
- They can only be uttered with a particular **intonational contour** in a specific pragmatic context.

Vocative truncation: intonation – initial call

- **Less emphatic vocative** (initial call): a rising pitch (L+H*) accent aligned to the first syllable of the name and a low pitch accent (L*) on the nuclear syllable followed by a low boundary tone (truncated base – Logudorese Sardinian).

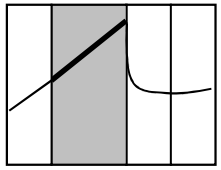


LH* L* L%

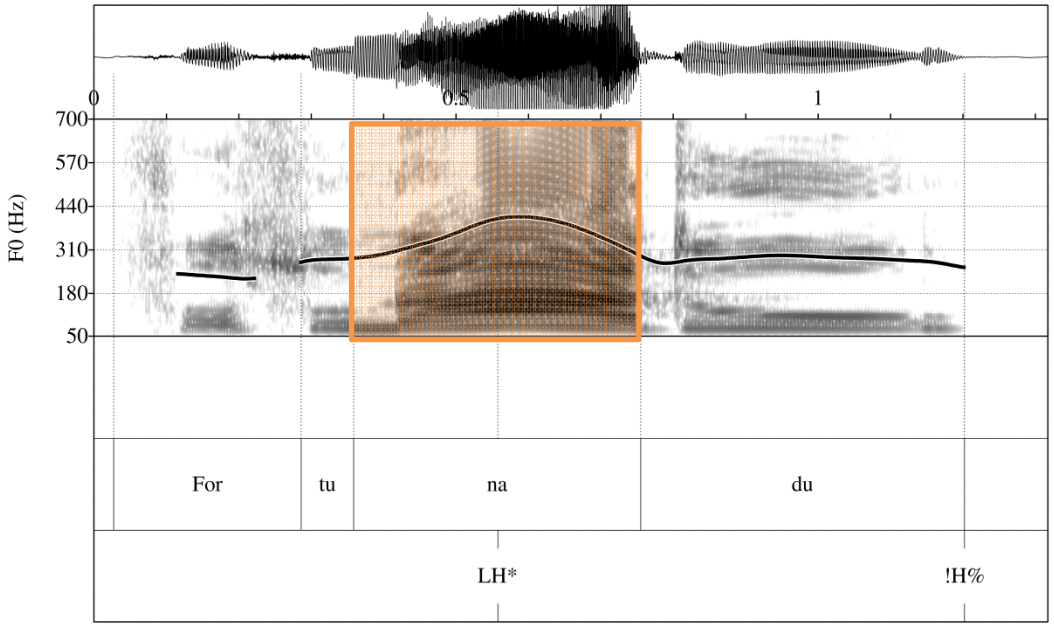


Vocative truncation: intonation – insistent call

- **More emphatic vocative** (insistent call): calling contour, L+H* !H%.
- Vocatives bearing the calling contour are never truncated.

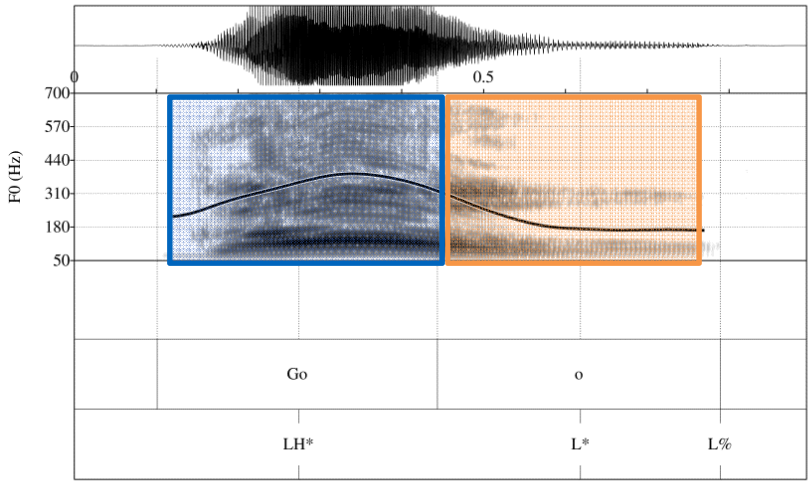


LH* !H%

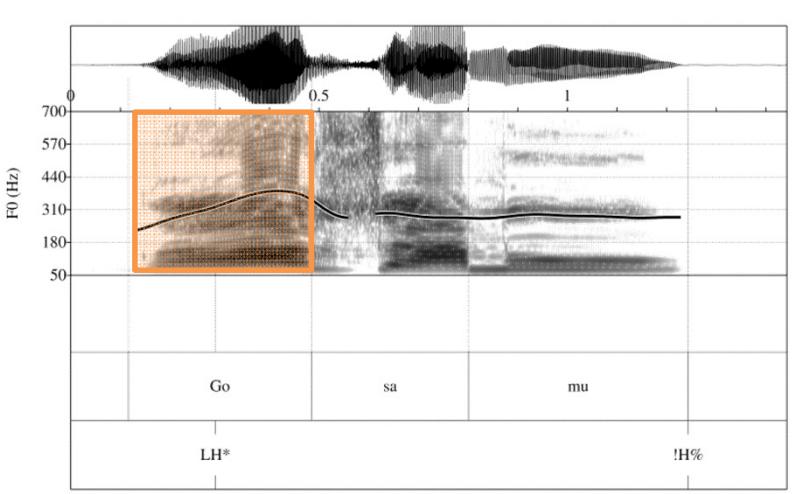


Vocative truncation: intonation – lengthening of monosyllabic vocatives

- Monosyllabic truncated vocatives in Logudorese Sardinian undergo lengthening of the syllable forced by the complex intonational contour.



701 ms



364 ms

Vocative truncation: analysis 1/4

- All truncated vocatives violate the constraint FootBinarity-σ because they contain monosyllabic, degenerate feet (i.e., *Filu('mena)* > *Filu('me)*, *Ma('ria)* > *Ma('ri)*, *('Gosa)mu* > *('Go)*).

  (7) Foot-Binarity-σ (Ft-Bin-σ). Assign one violation mark for every foot with less than two syllables.

  (McCarthy and Prince 1993)

Vocative truncation: analysis 2/4

- Two alignment constraints are proposed: Align-L(LH*,PWd) for the first emphatic pitch accent, and Align-R(L*,PWd), for the nuclear pitch accent.

  (8) **Align-Left(LH*,PWd) (*PWd[...σ...LH*...]).** Assign one violation mark for every triplet <PWd,σ,LH*> such that a syllable precedes the LH* pitch accent within the prosodic word.

  (9) **Align-Right(L*,PWd) (*[...L*...segment...]PWd).** Assign one violation mark for every triplet <L*,segment,PWd> such that the L* pitch accent precedes a segment within the prosodic word.

  (Hyde 2012)

Vocative truncation: analysis 3/4

- The last segment of the truncated vocative corresponds to the stressed vowel of the base. Ident-Stress-BT demands that the foot head is identical in both the base and the truncated hypochoristic.

  (10) **Ident-Stress-BT (Id-Str-BT).** Assign one violation mark for every x that is not in correspondence with y.

  (Based on Benua 1995)

Vocative truncation: analysis 4/4

- All truncated forms violate the anti-deletion faithfulness constraint Max-σ-BT, which assigns penalties for each syllable in the base that finds no syllable correspondent in the truncated form.

  (11) **Max-σ-BT.** Assign one violation mark for every syllable in the base B that does not have a correspondent in the truncated form T.

  (Based on Benua 1995)

L+H* L* Filu(mena)	Al-L (L+H*,PWd)	Al-R (L*, PWd)	Id-Str -BT	Max-σ -BT	FtBin-σ
a. ☞ $Fi_{L+H^*}lu(me)_{L^*}$				*	*
b. $Lu_{L+H^*}(me)_{L^*}$				**W	*
c. $Fi_{L+H^*}(lu)_{L^*}$			*W	**W	*
d. $Fi_{L+H^*}lu(me_{L^*}na)$		*W*		L	L
e. $Filu_{L+H^*}(me)_{L^*}$	*W			*	*

Ranking arguments: Align-R(L*,PWd) ≫ Max-σ-BT
Align-R(L*,PWd) ≫ Ft-Bin-σ
Id-Str-BT ≫ Ft-Bin-σ
Id-Str-BT ≫ Max-σ-BT

(The other constraints are undominated and unranked with respect to each other.)

Conclusions

- Truncated hypocoristics in Sardinian are the outputs of a **templatic minimization process**. The template is a bisyllabic trochee.
- Truncated vocatives are the result of a **non-morphological process** guided by the two prominent positions of the word: the initial syllable and the lexical stress.
  - The contour LH* L* is the phonological exponent of the vocative syntactic head and seems to be the **true template** for the vocative truncation process.

a. Previous work on Sardinian intonation.
b. Sard_ToBI.
c. Truncation in Sardinian.
d. Intonation and its interfaces in Sardinian polar questions.
e. General conclusions.

- Vanrell, M.M.; Ballone, F.; Schirru, C.; Prieto, P. (2014). Lexicosyntactic and intonational marking of evidential and epistemic bias in Sardinian yes-no questions. In: Y. Congosto Martín, M.L. Montero Curiel and A. Salvador Plans (Eds.), *Fonética Experimental, Educación Superior e Investigación, III. Prosodia.* Madrid: Editorial Arco/Libros, 541-560.
- Vanrell, M.M.; Ballone, F.; Schirru, C.; Prieto, P. (2015). Intonation and its interfaces in Sardinian polar questions. *Loquens,*1(2), e014. doi:http://dx.doi.org/10.3989/loquens.2014.014

Markers in Sardinian polar questions

- Particle *a*.

(12) *A benis a jocare chin mecus?* 'Are you coming to play with me?'

- Constituent fronting.

(13) *Mortu in s'ispidale est?* 'Did he die in the hospital?'

- Different intonational patterns:

(14) ¡H+L* L%

(15) ¡H*+L L%

(Contini 1984, Schirru 1982, 1992, 1993, Jones 1993, Remberger 2010, Vanrell et al. 2015)

Meaning associated to these question markers

- Constituent fronting.
  - Common marker in polar questions. (Jones 1993)
  - A strategy for marking positive focus often with an emphatic value. (Remberger 2010)
- Particle *a*.
  - Used in requests, invitations and offers. (Jones 1993)
  - It assigns focal value, marker of positive polarity. (Floricic 2009, Remberger 2010)
- Different intonational patterns:
  - ¡H+L* L% - info-seeking y/n questions. (Vanrell et al. 2014)
  - ¡H*+L L% - biased y/n questions. (Vanrell et al. 2015)

Goals

- To refine the **analysis** presented in Vanrell et al. (2015) for the ¡H+L* L% and ¡H*+L L% tonal events associated with unbiased and biased polar questions respectively.
- To assess whether there exists a **one-to-one correspondence** between lexicosyntactic and intonational structure as is defended in Contini (1984) and Vanrell et al. (2014).
- To shed **some light** on the specific meanings related to the linguistic markers found in Sardinian polar questions.
  - There is some sort of relationship between the different linguistic markers found in Sardinian polar questions and speaker bias.

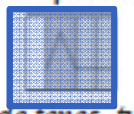
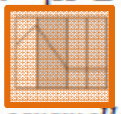
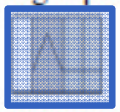
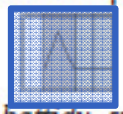
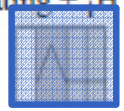
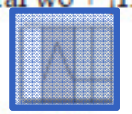
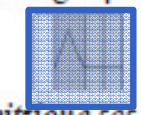
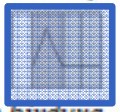
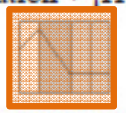
(Sudo 2013)

Methodology

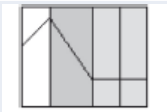
- **Task:** Discourse Completion Task.
  - Situations which contained **three different bias conditions** (neutral, epistemic and evidential) with positive and negative polarity (conveying the speaker bias towards either a positive or a negative answer).

Una de carrela t'at nadu chi fut andende a sa butica, e t'at preguntadu si cherias calchi cosa dae in ie. Tue nd'as aprofittadu, e l'as nadu de ti comporare sas caramellas pro sa ula, chi ti dolet meda. Cando la bides torrende, li preguntas si t'at battidu sas caramellas.	'A neighbor of yours told you that she was going to the pharmacy and asked whether you needed anything from there. Happy to take advantage of her offer, you asked her to buy you some cough drops because you have a sore throat. Now you see her coming back from the pharmacy. Ask her if she's got the cough drops for you.'

- **Speakers:**
  - 11 Sardinian women, aged between 47 and 73, from three locales of the Logudorese area – Ìttiri (3 speakers), Puttumajore (4 speakers) and Ottieri (4 speakers).
- **Analysis:** orthographic transcription, ToBI transcription, lexicosyntactic markers.

BIAS-POLARITY conditions	1st preferred strategy	2nd preferred strategy
Neutral condition	*a* + ¡H*+L L%  *A nde tenes, tumattas?* 'Do you have any, tomatoes?'	*a* + ¡H+L* L%  *Una caramella, a l'as?* 'A cough drop, do you have one?'
Positive epistemic condition	fronting + ¡H*+L L%  *Battidas mi las as, sas caramellas?* 'Have you brought them to me, the cough drops?'	neutral wo + ¡H*+L L%  *Mi l'as battidu, su liberu?* 'Have you brought it to me, the book?'
Negative epistemic condition	fronting + ¡H*+L L%  *Battidu mi l'as, su liberu?* 'Have you brought it to me, the book?'	neutral wo + ¡H*+L L%  *Mi l'as battidu, su liberu?* 'Have you brought it to me, the book?'
Positive evidential condition	fronting + ¡H*+L L%  *Ma in pitzione ses andada?* 'Have you retired?'	neutral wo + ¡H*+L L% *Ma fiza tua, pro casu est diventada professoressa?* 'By any chance has your daughter become a teacher?'
Negative evidential condition	negation + ¡H*+L L%  *Tando, frùtture e birdura, no nde bendides pius?* 'So, fruit and vegetables, you aren't going to sell them anymore?'	negation + ¡H+L* L%  *Non ti l'ant a rinnovare, su cuntrattu?* 'They will not renew it, the contract?'

Summary

Linguistic marker	Meaning
particle *a* (e.g., *Una caramella, **a** l'as?*)	**politeness marker** / **mitigator** – willingness to accept denial or acceptance, mitigating the request for information
constituent fronting (e.g., ***Battidas** mi las as, sas caramellas?*)	positive bias
negation (e.g., ***Non** ti l'ant a rinnovare, su cuntrattu?*)	negative bias
¡H+L* L% 	lack of bias
¡H*+L L%	bias

- **We have offered a more refined analysis for the intonational distinction.**
- **We have provided evidence againt the idea that the intonational form in Sardinian polar questions is determined by the lexico-syntactic structure.**
- **We have provided a tentative pragmatic interpretation of the multiple mechanisms existing in Sardinian to construct polar questions.**

a. Previous work on Sardinian intonation.
b. Sard_ToBI.
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e. General conclusions.

- Although we found a reduced inventory of nuclear configurations in Sardinian, this does not exclude that **intonation plays a relevant role** in this language.
  - **Phonological contrasts:** H+L* L% (statements) vs. ¡H+L* L% (y/n questions), H*+L L% (contrastive focus) vs. ¡H*+L L% (questions with fronted constituents).
  - **Template** for truncated vocatives (L+H* L* L%).
  - **Interaction with question particles:** question particle *a* + ¡H+L* L% (neutral polar questions) vs. question particle *a* + ¡H+L* L% (offers and invitations).

- We think that **joint analysis** of all grammatical components is needed in order to obtain an integrative view of how prosodic patterns work together with syntax and pragmatics.
  - We hope to have provided a tool for exploring these interface phenomena (Sard_ToBI is **learnable** and **transparent**).

GRÀTZIAS **ME**DA

L+H* **L*** **L%**

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