Prosodic Phrasing in Catalan Dislocation Structures

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Subject and Goal

Subject:
 Prosodic Phrasing in Catalan CLLD- and CLRD-Structures

CLLD = clitic left-dislocation
CLRD = clitic right-dislocation

- · Goal:
 - Prosody of CLLD and CLRD
 - OT analysis
 - New OT-Constraint: ALIGNTOPIC
 - Modification of MINIMIZE-NUMBER-PHRASE (Prieto 2005)

Catalan CLLD & CLRD

Overview

- 1. Subject and Goal
- 2. The constructions: CLLD and CLRD in Catalan (CLLD / CLRD = clitic left-/right-dislocation)
- 3. Previous accounts
- 4. The intonation of CLLD and CLRD
- 5. Analysis The new Constraints
- 6. Analysis The OT tables
- 7. Final remarks & summary

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The Constructions

Normal Word Order

Vaig portar les taules al pis.

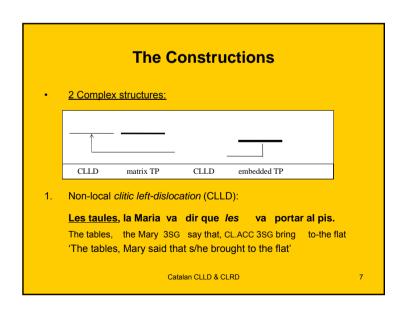
PAST.1SG bring the tables to-the flat 'I brought the tables to the flat'

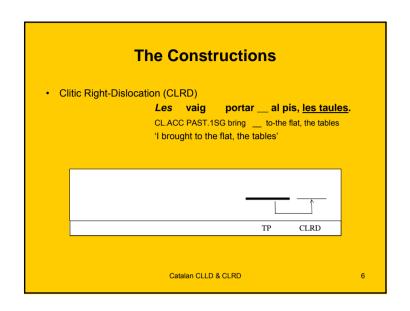
TP

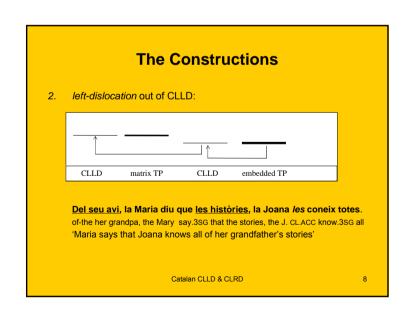
V - DO - IO / PP

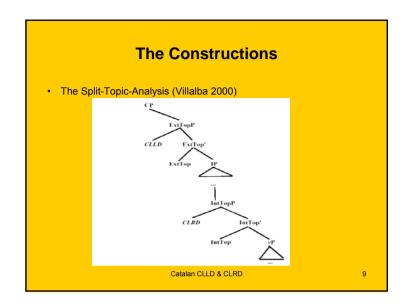
Catalan CLLD & CLRD

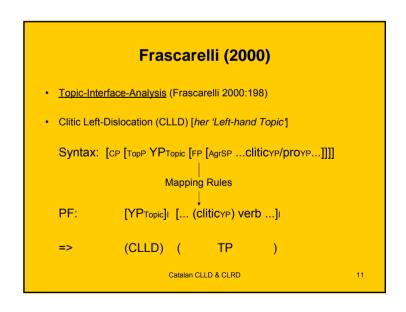
The Constructions • Clitic Left-Dislocation (CLLD) Les taules, les vaig portar __ al pis. The tables CLACC PAST.1SG bring __ to-the flat 'The tables, I brought to the flat' CLLD TP Catalan CLLD & CLRD

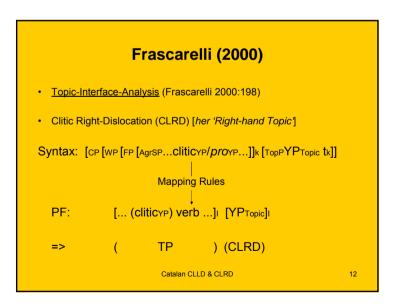












Frascarelli (2000)

- Topic and Prosody
- Topic Prosodic Domain (Frascarelli 2000:63)
 A Topic is minimally and exhaustively contained in an I(ntonational Phrase)
 - => a.) (Topic)
 - b.) X° ... (Topic)... YP
 - c.) (X° Topic)... YP
 - d.) X° ...(Topic YP)

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Prieto (2005)

- Constraints
- ALIGN-XP,R: ALIGN (XP, R; φ, R) (Selkirk 1995)
 Align right edge of XP to right edge of φ
- WRAP-XP (Truckenbrodt 1995, 1999:228)
 Each XP is contained in a phonological phrase

from: Truckenbrodt 1999:229

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Prieto (2005)

Prieto (2005): Syntactic & eurhythmic constraints on phrasing decisions in Catalan

- a. $(S)_{\Phi}$ $(VO)_{\Phi}$ short subject, short verbal projection
- b. $(SV)_{\Phi}(O)_{\Phi}$ short subject, but long object (2ω)
- c. $(S)_{\Phi}$ $(VO)_{\Phi}$ long subject (>2 ω), short object

"In Catalan, verbal heads can be regularly phrased together with preceding subjects when objects are long" (Prieto 2005:18)

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Prieto (2005)

- Constraints
- MAX-BIN-END (MBE)

P-phrases containing the main stress of the utterance consist of maximally two prosodic words. (Prieto 2005:10)

a. La Marina vol demaNAR-l'hi

'Marina wants to ask him/her' (broad focus)

b. La MaRIna vol demanar-l'hi

'MARINA wants to ask him/her' (narrow contrastive focus)

(Prieto et al 2005:9:Fig.6)

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Prieto (2005)

- Constraints
- MIN-N-PHRASES

Minimize the number of phrases (normal & rapid speech)

- Constraint penalizes Output-forms with more than 2 P-Phrases (Prieto 2005:20)
- · Hierarchy of the Constraints:

MIN-N-PHRASES >> MAX-BIN-END >> ALIGN-XP,R >> WRAP-XP

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Previous Accounts

- Problems and Questions:
- Frascarelli (2000):
 - only examines local CLLD and CLRD structures and does not look at embedded CLLD.
 - however, her Topic Prosodic Domain
- Prieto (2005):
 - does not say anything about dislocations
 - she offers an OT analysis for Catalan SVO-phrasing.
 - her constraints are insufficient for dislocations

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Prieto (2005)

Application

		[[L	a nena] _{NP} [dem	ana [els re	MIN-N- PHRASES	Max- BIN-END	ALIGN- XP,R	WRAP- XP		
Į	а.	()φ		*!	*	
I	b.	()¢ ()φ		*!		
-	D.	()¢ ()φ			*	VP NP
-	d. 🌝	. ()φ ()φ			*	VP
	е.	()¢ ()¢ ()φ	*!			VP NP
Ī		()φ ()φ ()φ	*!			VP NP

• <u>La nena demana els regals de Reis</u> (...christmas presents)

eis regais de Re

(...omiomido procen

(normal & rapid) short subject, long object

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Overview

- 1. Subject and Goal
- 2. The constructions: CLLD and CLRD in Catalan
- 3. Previous accounts

4. The intonation of CLLD and CLRD

- A Production Experiment
- Boundary Cues in Catalan
- Some Examples and their Pitch Tracks
- Summary of Phrasing
- 5. Analysis The new Constraints
- 6. Analysis The OT tables
- 7. Final remarks & summary

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CLRD

Intonation

The experiment I

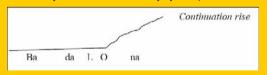
- · Production experiment based on scripted speach
- Locus:
 - Universitat Autònoma de Barcelona (Spain)
- Subjects:
 - 11 subjects (7 female and 3 male, ranging in age from 22-39 years)
 - All speakers were native speakers of Central Catalan (spoken in the greater region of Barcelona)
 - 4 speakers were linguists and hence not totally naïve to the purpose of the experiment

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Intonation

- Boundary cues for Catalan I
- Continuation rise (= High boundary tone H)
 (the preboundary stretch is realized as a rise from the last stressed syllable into the boundary syllable)



taken from Frota et al. 2006:5

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Intonation

The experiment II

- Material:
 - a total of 68 target sentences
 displaying the 9 beforementioned structural aspects
 - suitable context question to guarantee that the dislocated part is given (e.g.: "What did you do with the tables?")
- Procedure:
 - the subjects were told to read out each single sentence only after they were asked the suitable context question
 - the subjects were told to read out the sentences in conversational style without been given any specific instructions regarding the phrasing
 - the sentences were digitized (way files, sample rate 22.050Hz)
 - F0 tracks were analyzed using PRAAT

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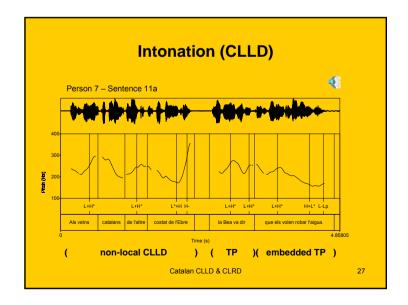
Intonation

- Boundary cues for Catalan II
- 2.) preboundary lengthening
- 3.) pitch reset
 (after the boundary, at the beginning of the following phrase)
- 4.) a pause

(defined as a stretch of silence; present at the phrasing boundary)

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Intonation Three examples: Context Question / Answer & Pitch Tracks 1. Non-local CLLD 2. LD out of CLLD 3. CLRD TP Catalan CLLD & CLRD



Intonation

Non-local CLLD:

Què va passar amb els veïns catalans de l'altre costat de l'Ebre? (What happened to the Catalan neighbours from the other side of the Ebre?)

Als veïns catalans de l'altre costat de l'Ebre [la Bea va dir [que els volen robar l'aigua]].

To-the neighbours catalan of the other side of the E. [the B. Past.3SG say [that CL-DAT want-they steal the-water]]

'Bea said that they want to steal the water from the Catalan neighbours from the other side of (the river) Ebre.'

(based on Prieto 2005:20)

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Intonation

LD out of CLLD:

Qui va comprar l'ampolla de vi rosat de Bordeus? (Who did buy the bottle of rose wine from Bordeaux?)

[a De Bordeus] la Maria diu

que [β <u>l'ampolla de vi rosat</u> t(α)] la va comprar el Joel

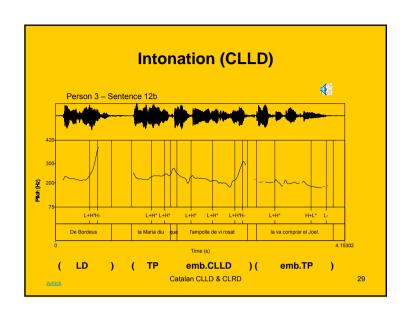
[From Bordeaux] the Maria say.3SG

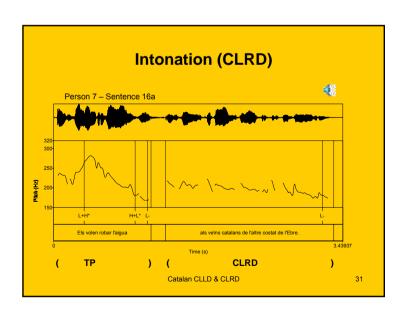
that [the bottle of rose wine] CL.ACC Past.3SG buy the Joel

'Mary says that Joel bought the bottle of rose wine from Bordeaux.'

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Intonation

· CLRD:

Què va passar amb els veïns catalans de l'altre costat de l'Ebre? (What happened to the Catalan neighbours from the other side of the river

Els volen robar l'aigua, <u>als veïns catalans de l'altre costat de</u> l'Ebre

CL-DAT want-they steal the-water, to-the neighbours cat. of the-other side of the E.

'They want to steal the water from the Catalan neighbours from the other side of Ebre.'

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Intonation

- Prosodic Properties an overview
 - a) Downstep within each prosodic phrase
 - b) Typical pitch accent: L+H* (but also L*+H)
 - c) High boundary tone (H) (= continuation rise) after each CLLD
 - d) No boundary tone on the left of CLLD
 - e) Downstep between the continuation rises
 - f) Reset on the first pitch accent of the clause following CLLD
 - g) Low boundary tone at the end of that clause
 - h) CLRD is unaccented and has a flat contour
 - i) CLRD contour is a bit higher than Low boundary tone of preceding clause

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Overview

- 1. Subject and Goal
- 2. The constructions: CLLD and CLRD in Catalan
- 3. Previous accounts
- 4. The intonation of CLLD and CLRD
- 5. Analysis The new Constraints
 - ALIGNTOPIC
 - *P(ROSODIC)-P(HRASE)
 - · Hierarchy of Constraints
- 6. Analysis The OT tables
- 7. Final remarks & summary

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Analysis

Need for ALIGNTOPIC:

Structure: SVO, with long object

=> `normal' vs. CLLDed subject (cf. below)

<u>figure</u>

		ena] [dei o	mana els	regals o	[de F	eis]]] ω .	AL TOP	Min- N	MBE	AL	WRAP
a.	()	*!		*		
=> b.)()			*		
c.)()	*!				VP,NP
d.)()	*!				VP
ë.	()()()		*!			VP,NP
f.	()()()		*!			VP

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Analysis

- Topics (CLLD & CLRD) do not build a prosodic phrase of their own
- Contra Frascarelli's (2000) Topic Prosodic Domain:

 A Topic is minimally and exhaustively contain.

A Topic is minimally and exhaustively contained in an I(ntonational Phrase)

- ALIGNTOPIC:
 - ALIGN (CLLD,R; Prosodic Phrase,R)
 - ALIGN (CLRD,L; Prosodic Phrase,L)

Align the right edge of a CLLDed XP to the right edge of a Prosodic Phrase,

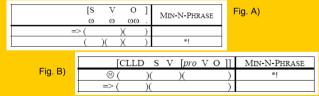
but align the left edge of a CLRDed XP to the left edge of a Prosodic Phrase.

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Analysis

Modification MIN-N-PHRASE:



*P-PHRASE (*P-P):

Penalize output forms with more than n+1 prosodic phrases. (Where n is the amount of extended projections (CPs))

1 CP ⇒ 2 P-Phrases, 2CPs ⇒ 3 P-Phrases,...

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Analysis

· Hierarchy of the constraints:

ALIGNTOPIC / *P-PHRASES >>

MAX-BIN-END >> ALIGN-XP,R >> WRAP-XP

brief version: ALTOP >> *P-P >> MBE >> AL >> WRAP

- Analysis for four types of structure (out of the nine types):
 - non-local CLLD LD out of CLLD
 - CLLD & CLRD

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Analysis

non-local CLLD

	[[E	l llibre] [la ω	nena] [va ω	dir [que [ω	el va compi		cn]]]]] ω .	AL TOP	*P-P	MBE	AL	WRAP
a.	()	*!		*	*	
Ъ.	()()			*!	*	
c.	()()	*!		*	*	
d.	()()	*!			*	
e.	()()()			*!		
=> f.	()()()				NPs	VP_M
g.	()()()				NPs	VP _M , VP _E !
h.	()()()()		4!		*	
i.	()()()()		4!			

(CLLD) (MatrixTP) (embedded TP)
(El llibre) (la nena va dir) (que el va comprar a Barcelona)

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- 5. Analysis The new Constraints
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 - non-local CLLD LD out of CLLD
 - CLLD & CLRD
- 7. Conclusion

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Analysis

left-dislocation out of CLLD

j		[[D	el s.a.], [1 ωω	a M.] ω	[diu [d	q. [les h ω		J.] [le ω	s coneix ω	totes]]]] ω .	AL Top	*P-P	MBE	AL	WRAP
ľ	a.	()	**!		*	*	
j	b.	()()	*!		*	*	
j	=>	()()()			*	NP _{S1} ,	VP_M
j	d.	()()	()()		4!	*	NP _{S2}	*
	e.	()()	()()()		5!			*

((CL)LD) (MatrixTP emb.CLLD) (embedded TP) (<u>Del seu avi</u>) (la Maria va dir que <u>les històries</u>) (la Joana les coneix totes)

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Analysis CLLD & CLRD at the same time MBE AL [[A la seva.c.] [[la J.] [els hi va deixar [una setm.]], els llibres]] b. (=> (d. (4! 3 f. (3 * CLLD) (TP)(CLRD) (A la seva cosina) (la Joana els hi va deixar una setmana) (els llibres) 'Joana lent the books to her cousin for one week' Catalan CLLD & CLRD 41

Final remarks & summary

• Frascarelli's (2000) Topic Restructuring:

Topic Restructuring (Frascarelli 2000:63)

If non-branching, a Topic may restructure into the adjacent constituent, on either side.

$$\begin{array}{lll} [[\ldots]\phi \]_{IntP} & [[\ldots]\phi \]_{IntP} & => & [[\ldots]\phi \ [\ldots]\phi \ [\ldots]\phi \]_{IntP} \\ Topic & Sentence & Topic & Sentence \end{array}$$

BUT:

- Even long constituents are phrased with preceding matrix TP
- · Always right boundary with CLLD

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Final remarks & summary

• The prosodic Hierarchy (Selkirk 1984, Nespor & Vogel 1986):

IntP Intonational Phrase

PhP Phonological Phrase (intermediate Phrase, iP)

"Only Catalan and Spanish show a consistent trend with HBT [High Boundary Tone, IF] being scaled higher if a pause follows. We believe that this fact lends support to the distinction between two levels of intonational phrasing, suggested in section 4 for these two languages:

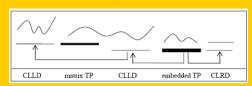
the *intonation phrase*, marked by the *presence of a pause*, and the *intermediate phrase*, characterized by *absence of a pause*."

Frota et al. (2006:17)

Catalan CLLD & CLRD

Final remarks & summary

Analysis accounts for phrasing of CLLD & CLRD structures:



- Topics do not build automatically a prosodic phrase of their own
- Analysis bases on constraints for simple SVO structures in Catalan and contains one new and one modified constraint: new: ALIGNTOPIC modified: *P-P

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References

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Catalan CLLD & CLRD



Title: Prosodic Phrasing in Catalan Dislocation Structures Name: Ingo Feldhausen (University of Potsdam / ZAS Berlin)

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Introduction: The talk is concerned with the prosodic phrasing of *clitic left-dislocation* (CLLD) and *clitic right-dislocation* (CLRD) constructions in Catalan. Interestingly, there are no analyses so far for embedded and long-distance CLLD and applying the existing analyses to such complex structures shows their insufficiency. My empirical data, for which I recorded 11 speakers of Central Catalan, shows that CLLD does not build a prosodic phrase of its own (contrary to received opinion on this matter, cf. Frascarelli 2000 for Italian). Instead, embedded CLLD is phrased with the matrix clause, leaving out the embedded clause in a separate prosodic phrase, thus signaling a strong right boundary. CLRD is always separated prosodically from the preceding clause.

Analysis: In order to account for the phrasing in complex structures, I will expand the OT account by Prieto (2005) by adding the high-ranked constraints ALIGNTOPIC and *P(ROSODIC)-P(HRASE). ALIGNTOPIC is a disjunct constraint requiring the right alignment of prosodic phrases and topic phrases, which are left-dislocated (CLLD), and left alignment of prosodic phrases and topic phrases, which are right-dislocated (CLRD). *P-P is a constraint which reduces the number of prosodic phrases in reliance on the syntactic length of the clause.

Background: Up to now there are three relevant Optimal Theoretic (OT) constraints to describe the prosodic phrasing of Catalan, with the following ranking: MAXBINEND >> ALIGNXP,R >> WRAPXP (Prieto 2005). MAXBINEND requires that each prosodic phrase which contains the nuclear stress consists of maximally two prosodic words. ALIGNXP,R (Selkirk 2000) requires that the right edge of an XP is aligned to the right edge of a phonological phrase and WRAPXP (Truckenbrodt 1999) demands that each XP is contained in a phonological phrase. This ranking accounts for the fact that size of constituents plays a role in Catalan phrasing within root clauses: (S)(VO) phrasing if object is short; (SV)(O) phrasing if object is long (cf. Prieto 2005, D'Imperio et al. 2005). However, consideration of clitic left-dislocation (CLLD), (1), shows that this paradigm is insufficient. CLLD leads to a violation of MAXBINEND, because CLLD always has a right boundary, i.e. (CLLD)(VO), regardless of the size of the object. The above ranking would predict that the CLLDed constituent would behave like a subject in a sentence with a long object, resulting in the phrasing as seen in (2a), hence (CLLD V)(O). However, the actual phrasing has to be as in (2b). Frascarelli (2000:63) posits that CLLD and CLRD are minimally and exhaustively contained in a prosodic phrase. When it comes to embedded CLLD (3) this claim does not hold. Frascarelli (2000) would expect the phrasing in (3b), whereas the actual phrasing is as in (3c).

- (1) Clitic Left-Dislocation (CLLD): [Les taules, les porto al pis de la Maria]_{CP1} 'The tables, I bring to Mary's flat'
- (2) a. (Les taules les porto)(al pis de la Maria) = (CLLD V)(O) b. (Les taules)(les porto al pis de la Maria) = (CLLD) (VO)
- (3) Embedded CLLD
 - a. [La Maria va dir [que les taules, les va portar al pis] $_{CP2}$] $_{CP1}$ 'Mary said that the tables, s/he brought to the flat'
 - b. *(La Maria va dir que)(les taules)(les va portar al pis)
 - c. (La Maria va dir que les taules)(les va portar al pis)

D'Imperio, M. et al. (2005). 'Intonational phrasing in Romance: the role of syntactic and prosodic structure'. In: S. Frota, M. Vigário and M. J. Freitas (eds.), *Prosodies*, 59–97. Berlin/New York: Mouton de Gruyter. Frascarelli, M. (2000). *The Syntax-Phonology Interface in Focus and Topic Constructions in Italian*. Kluwer.

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