

**Syntax over Prosody:
The Effect of the Complementizer Phrase CP on Prosodic Phrasing in Catalan**

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This paper shows a clear effect of the syntactic projection CP on the shape of the prosodic phrasing in Catalan SVO structures and proposes an analysis in the framework of stochastic Optimality Theory (Boersma & Hayes 2001) for the different possible prosodic groupings. Catalan is known to be a language sensitive to eurhythmic constraints. Prieto (2005) and D’Imperio et al. (2005) show that the most common phrasing pattern in simple SVO structures is (S)(VO), as in (1a). However, (SV)(O) is possible when the DP object consists of two or more prosodic words (ω), i.e. if it is prosodically heavy, as in (1b). In addition, Feldhausen (2010) shows that the number of (SV)(O) phrasings increases when the object is not only prosodically heavy but also sentential, as in (2).

- (1) a. $(\underset{\omega}{S})(\underset{\omega}{V} \underset{\omega}{O})$ \leq Prosodic Structure
 \leq Prosodic Words
 L’Àguila robà el ratolí
 ‘The eagle stole the mouse.’
- b. $(\underset{\omega}{S} \underset{\omega}{V})(\underset{\omega}{O} \underset{\omega}{O} \underset{\omega}{O})$
 L’àguila robà el ratolí del meu germà
 ‘The eagle stole my brother’s mouse.’
- (2) $(\underset{\omega}{S} \underset{\omega}{V})(\underset{\omega}{q} \underset{\omega}{S})(\underset{\omega}{V} \underset{\omega}{O})$
 [La Bàrbara suposa [que l’ànguila robà el ratolí]_{CP2}]_{CP1}
 ‘Barbara assumes that the eagle stole the mouse.’

Up to now the exact motivation for the (SV) grouping in (2) remains unclear. Is it the prosodic weight of the sentential object (consisting of three ω) or is it the syntactic status as a sentence (i.e. CP)? The crucial structure for answering this question has to include a sentential object consisting of only one prosodic word, as in (3). If prosodic weight is the decisive factor, (3) should phrase as (1a): (S)(VO), since the object is light. If the syntactic status is decisive, (3) should phrase as (1b): (SV)(O), since the object represents a CP.

- $(\underset{\omega}{S})(\underset{\omega}{V} \underset{\omega}{O})$ \leq pattern (1a)
 $(\underset{\omega}{S} \underset{\omega}{V})(\underset{\omega}{O})$ \leq pattern (1b)
 \leq Prosodic Words
- (3) [La Maria_i suposa [que *pro*_j dorm]_{CP2}]_{CP1}
 ‘Mary assumes that (Peter) sleeps.’

Based on data of a production experiment, in which three native speakers of Central Catalan uttered 108 sentences of the structure given in (3), it is shown that (SV)(O) is the predominant phrasing pattern (48,1%), cf. Figure 1, followed by (S)(V)(O), 31,5%. As also shown in Table 1 (S)(VO) indeed occurs, but it represents the last option (20,4%). Thus, although there is no difference between the prosodic pattern of (1a) and (3), the prosodic grouping of (3) strongly corresponds to the grouping of simple sentences with a prosodically heavy object, as in (1b). This suggests that the effect of the syntactic CP strongly influences the prosodic structure – irrespective of its actual prosodic weight. To account for the findings the constraint hierarchy MAX-BIN-END >> ALIGN-CP,L >> MIN-N-PHRASES >> ALIGN-XP,R is proposed, in which the last three constraints overlap to guarantee a reverse ranking in order to account for the variation found in the data, cf. Figure 2. Only ALIGN-CP,L is new (for the other three constraints cf. Prieto 2005). This constraint aligns the left edge of a CP with the left edge of a prosodic phrase and thus accounts for the fact that the sentential object is in general prosodically separated from the subject and the verb (cf. Table 2) – as is a heavy DP object.

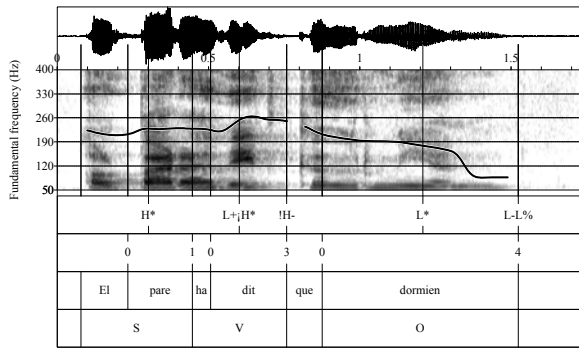


Figure 1: (SV)(O) phrasing – Waveform, spectrogram and F0 trace for the sentence *El pare ha dit que dormien* ‘Barbara assumes that they called’ of speaker MX (sentence 3a_1021_2a)

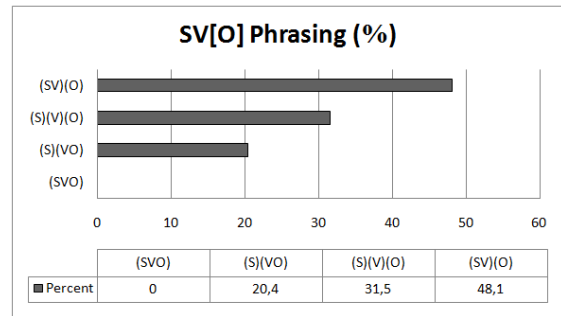


Table 1: Patterns of prosodic phrasing of SVO structures, with a sentential object consisting of only one prosodic word (given in percentages)

	(SVO)	(S)(VO)	(S)(V)(O)	(SV)(O)
■ Percent	0	20,4	31,5	48,1

Figure 2: Constraint Hierarchy for Catalan clauses with sentential objects (Stochastic Optimality Theory)

	ωω ω SV [O]	MAX-BIN-END	ALIGN-CP, L	MINIMIZE-N-PHRASES	ALIGN-XP,R
a.	48.1% (SV)(O)			2	*
b.	31.5% (S)(V)(O)			3!	
c.	20.4% (S)(VO)		*!	2	
d.	0% (SVO)	*!	*	1	*

Table 2: Actual ranking for the most common phrasing pattern (SV)(O) of the SV_[CP] [O] structure

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