Contrast in Catalan Sign Language (LSC): a unifying semantic-pragmatic analysis

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Background. Most of the studies on Information Structure (IS) in sign languages (SLs) have been made from a syntactic perspective assuming that there is not a category for contrast (Kimmelman, 2014, among others). However, this categorization does not account for the fact that in Catalan Sign Language (LSC) focus and topics display the same marking in order to express contrast. Barberà (2015) claims that in LSC both sides of the signing space are used in discourse to localize two entities, which are under a contrastive relation. Zorzi (2016) describes the same markers for coordination and gapping in LSC in both contrastive focus and contrastive topics. Thus, it is relevant to approach contrast from a different perspective, a more general one incorporating related facts which have been analysed separately until now.

Goals. At the empirical level, we describe the non-manual markers (NMMs) used in the expression of contrast in LSC. At the theoretical level, given that in LSC contrast markers may also be found in topics, following Vallduví & Vilkuna (1998) we analyse the notion of contrast as a different dimension, which can also overlap with topics, and we offer an analysis of the expression of contrast in LSC from a unifying semantic-pragmatic perspective. Moreover, following Umbach (2004), we identify three different subtypes of contrast expressed through different combinations of markers.

Data. Contrast in LSC is mainly expressed through a combination of prosodic NMMs: left and right body leans, and head tilts, and morphophonological marking: the use of the opposite sides of the signing space. These markers are always present when there are salient contextually contrasted alternatives and can spread across different types of constituents (1).

	left-bl+left ht	<u>right-bl+right ht</u>	
(1)	$[[WOMAN]_T WINE [DRINK]_F]_x,$	$[[MAN]_T DRINK [COKE]_F]_y$	
	'The woman is drinking win	he woman is drinking wine, and the man is drinking a coke.	

Moreover, there is a lexical marker for contrast, the sign LIST, that is used when more than two alternatives are explicitly contrasted. This sign is optional, and can either substitute the NMMs used for contrast (2) or combine with them (3).

- (2) 'What did you buy at the supermarket?'
 LIST-1 POTATOES, LIST-2 EGGPLANT, LIST-3 TOMATOES, LIST-4 FISH, LIST-5 MEAT, ETC.
 'Potatoes, eggplant, tomatoes, fish, meat, and other things.'
- (3) <u>left-bl</u> <u>right-bl</u> <u>left-bl</u> LIST-1 CANDY, LIST-2 MONEY, LIST-3 TEDDY BEAR. 'Candy, money, a teddy bear."

If the context requires selecting one alternative and excluding the other, a repeated head nod is commonly added, which is addressed towards the selected alternative (4).

(4) What is the woman doing riding a bike or riding a horse?

right bl+ht+hn [BIKE RIDE]_x 'Riding a bike.'

In order to express a correction, body leans and head tilts are again displayed, but, in addition, a strong head thrust is found in the correction (5).

(5) You ate an apple, right? NO, IX₁ NOTHING, [WOMAN]F IX₃ 'No, I didn't, the WOMAN did.'

Analysis. Based on the data presented, I suggest that in LSC different types of contrast can be distinguished:

- i) Parallel contrast (1, 2, 3) introduces symmetric alternatives, and can be found in coordinated sentences or enumerations. This type of contrast is expressed through left and right body leans and head tilts, and the use of the opposite sides of the signing space, and it can overlap with both focus and topics.
- ii) Selective contrast (4) provides an alternative previously selected from two or more overt alternatives. It is expressed through the same markers as i), left and right body leans and the use of the opposite sides of the signing space, plus a head nod addressed towards the side where the selected contrasted alternative is placed.
- iii) Corrective contrast (5) provides an alternative that is true and substitutes a previous overt alternative which is considered false. This type of contrast is expressed again with the same markers as i) and ii), left and right body leans and the use of the opposite sides of the signing space, plus a strong head thrust emphasizing the correction.

The additional marking found in ii) and iii) results in a stronger prosody, which at the same time indicates a more marked contrastive context. Following Umbach (2004) I argue that in i) there is contrast due to similarity (common integrator) plus dissimilarity (semantic independence); in ii) there is contrast due to similarity plus dissimilarity, plus contrast due to exclusion, so the degree of contrast in these constructions is higher than in i); in iii) I suggest that there is similarity plus dissimilarity, contrast due to exclusion, and, additionally, a conflict with the expectations of the interlocutor (Destruel & Velleman, 2014), so the degree of contrast expressed in iii) is stronger than the one expressed in i) and ii), and thus the prosody in these constructions is more marked as well.

The classification proposed here is also compatible with Umbach's analysis, who distinguishes between contrast and correction based on the different presuppositions they trigger. The difference in our proposal and Umbach's analysis is that she refuses the idea of having a unique notion of contrast. However, LSC seem to show the contrary: i), ii), and iii) are expressed through the same NMMs, and the additional marking in ii) and iii) only increases the intensity in the articulation of the contrast, and the different subtypes identified before can be categorized as different degrees of intensity of the same category that correlate with different interpretations in terms of exhaustivity

(related with the selection of an overt alternative (ii)) and expectations (related to the correction of an overt alternative (iii)).

Conclusion. The results obtained from this research fill a gap in the LSC literature by describing contrast encoding in LSC, and, more broadly, they contribute to a better understanding of IS notions in languages in general, regardless of their modality. From a typological perspective, the fact that in LSC the marking of contrast is the same for both focus and topics can be seen as empirical evidence to support the semantic-pragmatic analysis of contrast. Moreover, the fact that all types of contrast are expressed with the same combination of NMMs differing only in the addition of some NMMs in more marked contexts, supports the idea that contrast is a gradient notion.

Selected references.

Barberà, Gemma. 2015. *The meaning of space in Catalan Sign Language (LSC): Reference, specificity and structure in signed discourse*. De Gruyter Mouton.

Destruel, Emilie. & Leah Velleman. 2014. Refining contrast: Empirical evidence from the English it-cleft. *Empirical Issues in Syntax and Semantics* 10, 197-214.

Kimmelman, Vadim. 2014. *Information Structure in Russian Sign Language and Sign Language of the Netherlands*. PhD Dissertation. University of Amsterdam.

Umbach, Carla. 2004. On the notion of contrast in information structure and discourse Structure. *Journal of Semantics*, 21(2). 155-175.

Vallduví, Enric & Maria Vilkuna. 1998. On rheme and kontrast. *The Limits of Syntax*. New York: Academic Press. 79-108.

Zorzi, Giorgia. 2016. *Prosody of gapping in Catalan Sign Language (LSC)*. SIGGRAM Workshop. University of Alcalà.