

## The syntactic distribution of information focus and the mapping between syntax and information structure

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**1. Introduction: The problem.** In crosslinguistic research, answers to wh-questions are still “the most widespread and most widely used test for focus” (van der Wal 2016: 265) and, in particular, for information focus. When studying the syntax of focus, however, this test is problematic because the most natural answer to a wh-question is often a fragment that only includes the focus, while the given background material is elided. This problem has led to considerable controversy in the literature about the position in which information focus is realized, particularly for Spanish, but also for Catalan and Italian. On the basis of their intuitions and introspection, most scholars claim that information focus, including subjects, must appear at the end of the sentence (Zubizarreta 1998, Belletti 2004). Other researches, however, have questioned this claim on the basis of experimental data, arguing that information focus can occur preverbally, especially in the case of focal subjects (see Gabriel 2010, Hoot 2016, Vanrell & Fernández Soriano 2013, 2018, Feldhausen & Vanrell 2014, Jimenez Fernández 2015a,b on Spanish and Catalan; for Italian most quantitative studies are on language acquisition, see Belletti 2008 and references therein). These experimental studies, however, are not free from criticism, in that, the adopted elicitation technique often included explicit instructions to the participants, who were explicitly asked to repeat in their answer all the constituents appearing in the question (e.g., Gabriel 2010, Vanrell & Fernández Soriano 2018), even though the most natural answer would have been a focal fragment.

**2. The production experiment.** In order to enhance the naturalness and reliability of the question-answer test, we designed an experiment with a new elicitation technique, i.e. *questions with delayed answers* (QDA), in which some material is inserted between the question and the point in which the participant is asked to answer the question, so that participants would spontaneously utter a full sentence instead of a fragment, without being explicitly instructed to do so (cf. (1) with a subject question and (2) with an object question).

- (1) ‘You go to your parents’ place. You show your mum a watercolour portrait of yourself. She asks “**Who drew it?**”. At that point you get a phone call. Somebody got the wrong number. You hang up and, to answer your mum, you say:’
- (2) ‘You are watching a film with your roommate. Since she wakes up really early every day, she falls asleep and misses the ending. When you switch off the TV, she wakes up and asks you: “**What did they find?** I don’t think I’ll watch this movie again. I’m sure I would fall asleep again.” To reply you say:’

This experiment was carried out in three null-subject Romance languages, using the same material (16 items [8 with subject questions + 8 with object questions] + 16 fillers) in the target language:

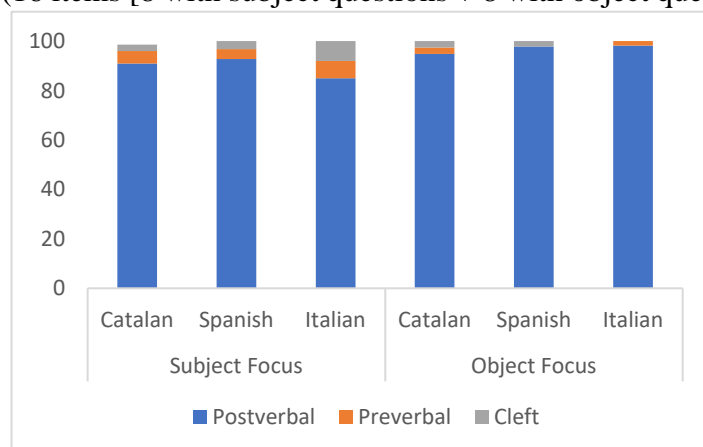


Figure 1: Results of the production experiments: % of elicited foci

20 native speakers of Catalan, 20 of Spanish and 32 of Italian (20 from continental Italy + 6 Sardinians and 6 Sicilians) took part in the online elicitation sessions with the experimenter. The results are in Fig. 1. Only a small percentage of the answers were fragments, meaning that the experimental items were largely successful in eliciting full sentences. The results are very similar in all languages: overall, participants overwhelmingly produced postverbal

foci with both subjects and objects, along with a marginal number of preverbal and clefted foci.

**3. The acceptability-judgement experiment.** We additionally conducted a rating experiment on the acceptability of preverbal and postverbal information foci in Catalan, Spanish and Italian. For this acceptability rating study, we used the same contexts as in the production experiment, but an answer to the question was provided, which was the target of the rating task. Each answer was shown in two versions: with a postverbal focus and with a preverbal focus (cf. (3a/b) and (4a/b), which are answers in Catalan and Spanish to the questions in (1) and (2), respectively).

- |     |    |                           |     |    |                           |
|-----|----|---------------------------|-----|----|---------------------------|
| (3) | a. | Ho ha dibuixat una amiga. | (4) | a. | Han encontrado un tesoro. |
|     | b. | Una amiga ho ha dibuixat. |     | b. | Un tesoro han encontrado. |
|     |    | ‘A friend drew it.’       |     |    | ‘They found a treasure.’  |

A total of 390 native speakers of Catalan, 197 native speakers of Peninsular Spanish, and 200 native speakers of Italian took part in the experiment; the participants were asked to rate the degree of acceptability of each answer in the relevant context on a Likert-scale from 1 to 7. The results

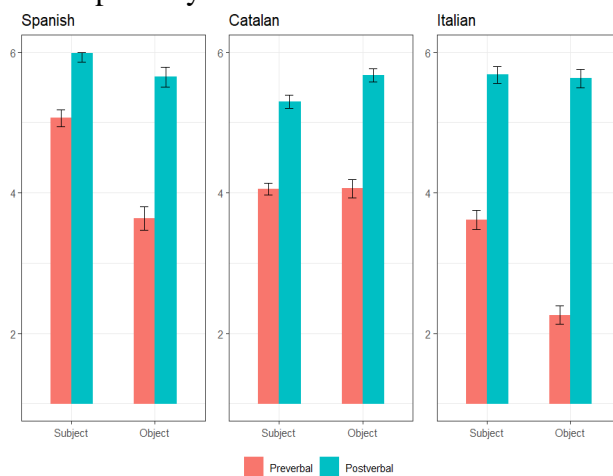


Figure 2: Results of the rating experiments

of this study confirm the findings of the production experiment: in all languages postverbal focus is always preferred over the two types of preverbal focus, both in the case of subjects and objects (cf. Figure 2). However, the study also reveals differences across languages between the two languages. While in Catalan, the interaction between position and the grammatical function is not significant ( $\beta=-0.19$ ,  $p = .57$ ), in Spanish ( $\beta=0.51$ ,  $p < .001$ ) and in Italian ( $\beta=0.61$ ,  $p = .001$ ) it is, and the rating scores of the preverbal subjects are higher than those of the preverbal objects.

**4. Discussion and analysis.** From a methodological viewpoint, we believe that our QDA-technique offers significant advantages in the strive for natural data in the elicitation of informational focus, both in production and in rating tasks. Our findings, moreover, provide experimental evidence in support of the theoretical view, mostly based on native speakers' intuitions and introspection, that in Catalan, Spanish and Italian, informational foci are preferably realized in a postverbal position. A focal interpretation of the preverbal constituent in answers to questions, however, cannot totally be excluded. This interpretation is especially available with preverbal subjects in Spanish (mean score=4.98, cf. Fig. 2), showing an important difference with the other two languages. We interpret this difference in the light of the hypothesis formulated in Leonetti (2017), according to which Catalan and especially Italian are more restrictive than Spanish with respect to the mapping between syntax and information structure. While all languages resort to the dedicated word order with a more transparent information-structure partition for a focal subject (i.e. VS), Spanish is more permissive in also allowing a narrow focus interpretation of the subject in an SV order.

In order to account for the optionality of focus realization and for the variation in the degree of acceptability of preverbal foci across the three languages, we finally propose a model based on the alternative spellout of chain links (Bianchi 2019) and on a set of soft constraints that operate at the interface between LF and PF and that regulate the gradient acceptability of preverbal foci.

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