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Prosodic and syntactic markers of narrow focus in Italian L1 and L2 (French L1): an experimental study

Information structure marking can be a challenge for L2 learners: first, because it implies an articulated interplay of prosody, syntax and word order; second, because the interaction of these linguistic means is subject to language-specific constraints. In this paper, we analyse the narrow focus (non-corrective and corrective) marking strategies of native speakers of Italian and French, and French learners of Italian L2, through a corpus of task-elicited speech (41 speakers). We examine to what extent L2 learners use similar linguistic structures to those observed in the target language in narrow focus marking, and how L1 may influence their productions. Our results show that crosslinguistic effects arise both at the syntactic and the prosodic level, and depending on the contexts, can have a positive or negative effect on learners' productions. While crosslinguistic similarities help in the early mastery of cleft sentences for NF marking, systemic differences at the prosodic level initially prevent prosody from being exploited to the same goal.

Keywords: focus, prosody, syntax, second language acquisition, Italian L2.

1. Introduction

1.1 Focus and contrast

Focus is a key-concept in linguistics, and also a hard-to-define one. In a functionalist perspective, focus can be described as the most informative part of the utterance in the speaker's intentions, i. e. the one which conveys the most dynamic element within the communicative act (Halliday, 1967; Vallduví, Engdahl, 1996). In a syntagmatic relation, it is opposed to background, which, conversely, conveys less significant (given, expected, assumed) information (Krifka, 2008). In a situation like the one in example (1b), for instance, the subject "Maria" would be the focused constituent, and "l'ha comprato" ("bought it") would be the background, since the fact that a newspaper was bought is proposed as uncontroversial in both the question and in the answer, and the main contribution for conversation is made by the introduction of the agent, Maria.

- (1) (a) Chi ha comprato il giornale?
 'Who bought the newspaper?'
 (b) L'ha comprato [Maria]_F.
 'Maria bought it.'

Focus can be associated with the notion of contrast: some authors argue that the presence of focus itself sets out a selection of contrastive alternatives (Rooth, 1992;

Krifka, 2008); others distinguish neutral-focus types from contrastive-focus types, depending on the overtness or covertness of the contrast carried by focus in relation to these alternatives (Kiss 1998). Mediating between the two views, we can say that the degree of contrast entertained by the focused constituent with its potential alternatives constitutes a continuum, in which identification would be the least contrastive function of focus, and correction the most overt case of contrast (Repp, 2016; Cruschina, 2021). In this way, example (1b) would be a less contrastive (but not completely neutral) type of focus, since the answer “Maria” is not opposed explicitly to its hypothetical alternatives to the candidate focus; example (2b), oppositely, would be a more contrastive one, involving an overt opposition between two explicit alternative agents, Maria and Giulia:

- (2) (a) Giulia ha comprato il giornale.
 ‘*Giulia bought the newspaper*’
 (b) No, [Maria]_F l’ha comprato, non Giulia.
 ‘*No, Maria bought it, not Giulia.*’

1.2 Focus and its expression

The articulation between focus and background, as well as the function (identification or correction) of the focused constituent, can be conveyed through different means, involving multiple linguistic levels: morphology, syntax, word order, lexical particles, prosody. With regard to syntax, several means can be exploited, to an extent that depends on the discursive situation and language-specific constraints: postverbal subject, focus fronting, dislocations, etc. (Lambrecht, 1994; Neeleman, van de Koot, 2014). Cross-linguistically, a structure that is frequently associated with focus is the *it*-cleft sentence (Dufter, 2009; De Cesare, 2017), in which focus is expressed by the clefted constituent and the relative clause contains the background, as in (3):

- (3) È [Maria]_F che ha comprato il giornale.
 ‘*It’s Maria who bought the newspaper.*’

The use of clefts to express focus-background articulation is largely attested in both Germanic and Romance languages; its interpretation in terms of exhaustiveness, identification or correction, though, is not equivalent cross-linguistically (De Cesare, Garassino, 2015). Some languages specialize this construction for more contrastive situations (e.g. English or Italian), others use them in a larger array of contexts (e.g. French); it has been argued that this divergence is due to differences in the language phonological structure and word-order flexibility (Lambrecht, 2001; Destruel, DeVeaugh-Geiss, 2018; Greif, Skopeteas, 2021; Larrivée, 2022).

Besides (and along with) syntax, prosody plays a key role in the expression of information structure. Its function lies in highlighting the focus constituent, making it stand out from the rest of the utterance (Selkirk, 1984; Baumann, 2005; Baumann, Riester, 2012); the way in which prominence is implemented, though, is subject to great variability. It is often said that head-prominence languages, such as German or English, mark focus through pitch-accents (Cruttenden, 2006; Büring,

2016), whereas edge-prominence languages, like for example Japanese or French, mark it by phrasing (Jun, 2005; Féry, 2013). Recent work, however, has highlighted a more complex scenario: a better definition would be that of a continuum, spanning from head-prominent to edge-prominent type, along which languages are placed according to their employment of different strategies (Sbranna, Ventura, Albert & Grice, 2023). Furthermore, it has been observed that languages can share the same syntactic and prosodic means to encode focus, but use them in different pragmatic circumstances (Vander Klok, Goad & Wagner, 2018).

1.3 Information structure marking and SLA

In recent years, there has been an increasing interest in the study of the syntax-prosody interplay and its implications for Second Language Acquisition. Prosody alone represents a problematic area for L2 learners: it's an important factor in the perception of "foreign accent" (Boula de Mareuil, Vieru-Dimulescu, 2006), and an area in which L1 transfer seems to be particularly persistent (Mennen, 2004). In the expression of information structure, the difficulties of prosody sum up to those of its mapping with syntax¹: this combination often represents a "final hurdle" learners never overcome, not even in advanced stages of acquisition (Mennen, 2015). Traditional models of L2 acquisition have predominantly focused on phonology and phonetics at the segmental level, as evident in the works of Flege (1995) and Best (1995), while substantially neglecting suprasegmental traits such as rhythm, intonation, and phrasing. Noteworthy attempts have been made in recent times to address this gap (So, Best, 2008; Gili Fivela, 2012; Wiener, Goss, 2018); nevertheless, these endeavors have yet to culminate in a comprehensive model. Prosodic aspects still represent areas under exploration, yielding mixed results and unresolved issues (Mennen, de Leeuw, 2014; Gili Fivela, Avesani, 2021). If several studies suggest that learners inevitably remain sensitive to the constraints of their L1 in expressing information structure (Hertel, 2003 and Lozano, 2006 for L2 Spanish; Zubizarreta, Nava, 2011 for L2 English), there is no consensus as to whether L1 transfer is active at the level of grammar or phonological categories, or at the level of phonetic detail, realisational dimension, and "nativelike" preferences.

Another point that has not yet been clarified is the role that typological proximity between source and target language plays in the acquisition of information-structural markers (Benazzo, Andorno, 2017). In fact, it has been argued that the effects of cross-linguistic influence (CLI) may be different depending on the typological proximity of the two languages in question, and that different combinations lead to different results; all the more so in the relationship between syntax and prosody (Andorno, Turco, 2015; Benazzo, Dimroth & Santiago, 2021).

¹ We acknowledge the existence of formal models that conceptualize the matter under consideration as an "interface" concern, as advanced by Sorace (2006). Nevertheless, for the purpose of this paper, we choose to adopt a functionalist perspective, deliberately eschewing a formalist lens.

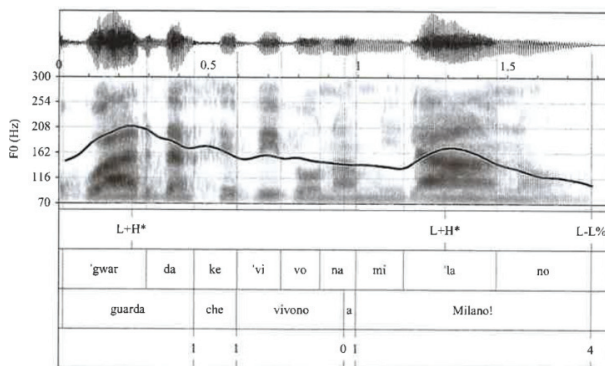
2. Background and research goals

2.1 Expressing focus in Italian and French

In this work we are interested in the description of two cognate languages, French and Italian, and the influence of L1 French on Italian L2 learners' production. The first difficulty we run into during our investigation is the description of the two languages in relation to their prosodic type (§ 1.1): are French and Italian head-prominent or edge-prominent languages? Moreover, if it is quite straightforward to say that Italian has a lexical accent, what can we say about accent - and consequently pitch-accents location - in French (Cole, Hualde, Smith, Eager, Mahrt & de Souza, 2019)?

Italian is a stress language, with penultimate stress being the most common pattern, and it has traditionally been classified as a syllable-timed language (Bertinetto, 1981). In Italian, and especially in the variety of Turin, narrow focus is realised as an L+H* L-pitch accent (Avesani, 2003; Avesani, Vayra, 2004; Gili Fivela, Avesani, Barone, Bocci, Crocco, D'Imperio, Giordano, Marotta, Savino & Soriano, 2015). Prominent constituents are also signaled by the use of wider pitch range, longer duration and higher intensity of the accented syllable (Avesani, 2003). An example of the f0 contour for a narrow-contrastive focus statement is shown in Fig. 1.

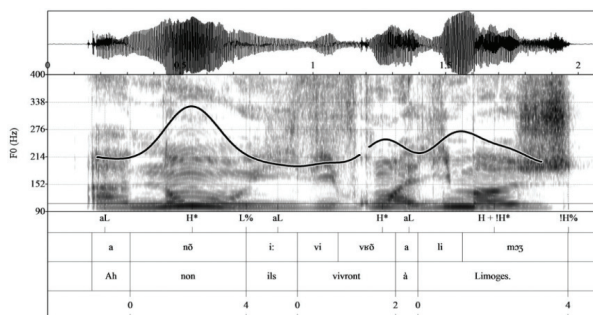
Figure 1 - *Contradiction statement "No, guarda che vivono a Milano"*
(*"No, they live in Milan"*) uttered by an Italian speaker from Florence
(from Gili Fivela et al., 2015)



French, on the other hand, has a final accent, whose function is not lexical, but edge-marking on the right boundary of the accentual phrase (AP); apart from this final accent, known as obligatory, it is also possible to place an accent initial (Hi) to highlight a focused constituent (Astésano, Bertrand, 2016; Di Cristo, 2016; Michelas, German, 2016). The focus-accent association is not limited to metrical patterns: in addition to the initial accent, a focused AP can be produced with a significant final descending melodic contour, tonal enhancement and slower speech rate. All these features convey a contrast between focused and unfocused APs, the latter produced without Hi (initial) accent and with a final rise (Hirst, Di Cristo, 1996; Jun, Fougeron, 1995, 2000; Delais-Roussarie, Post, Avanzi, Buthke, Di Cristo,

Feldhausen, Jun, Martin, Meisenburg, Rialland, Sichel-Bazin & Yoo, 2015), that could be described as a continuation contour (Delattre, 1966). Figure 2 shows an example of f0 contour for a narrow-contrastive focus statement in French, featuring an initial accent followed by a steep f0 fall on the focus word “Limoges”.

Figure 2 - Contradiction statement “Ah non, ils vivront à Limoges” (“No, they will live in Limoges”), uttered by a native French speaker from Marseille (from Delais-Roussarie et al. (2015))



As we have stated in the introduction (§ 1.3), mastering the interplay between prosody and syntax in the expression of information structure is a challenge for L2 learners. A few studies have addressed the question with regards to Italian L2, confirming the persistence of L1 influence in this area, although with different outcomes – mostly depending on the distance between source and target language. In Turco, Braun & Dimroth (2015), West-Germanic speakers are said to show effects of CLI in the use of pitch accents and verum focus to mark polarity focus in Italian. In Avesani, Bocci, Vayra & Zappoli (2015) German learners appear to have acquired the (negative) relation between discourse properties and their prosodic marking that holds in Italian, but show signs of transfer on the phonological level.

To our knowledge, the question has never been addressed taking into account a combination of close-related languages, as would be the case with French learners of L2 Italian. We think this track could lead to interesting and, especially, complementary results from what we have already observed with Germanic source language learners.

2.2 Research questions

Our goal in this work is to observe the productions of non-native speakers, and try to interpret them in terms of cross-linguistic influence and L2 acquisition universals. The novelty of our study lies not only in its consideration of a little-studied combination of languages, but also in combining the syntactic and prosodic perspectives. In this context, we aim to assess the potential contributions of a methodology explicitly designed to harmonize these two dimensions; notably, our approach involves the analysis of both prosody and syntax in semi-spontaneous speech. While we are aware that analysing prosody through non-controlled material is not straightforward, we

think that fully-scripted speech would reduce the validity of conclusions, especially in investigating an information-structural category such as focus.

3. *Methodology*

3.1 Population of the study

As already stated, our study aims at observing and describing the production of Italian L2 speakers, and comparing them to the production of native speakers of both the source and the recipient languages, i.e. Italian and French. For this purpose, we chose to set up a multi-group, interindividual design, and recruited 3 groups of participants: the test group, made up of native French speakers learning Italian as L2, along with two control groups, made up of native French (with no or little competence in Italian) and native Italian speakers (with no or little competence in French). Speakers of the learner group acquire their L2 through non-guided learning (in the terms of Klein, Perdue, 1997; see also Klein, Dimroth, 2009): they are adult workers or students living in Italy, not attending any Italian language courses.

Participants were recruited and recorded between summer 2021 and fall 2022, in Turin, Italy (Italian L1 and Italian L2 groups) and Paris, France (French L1 group). Special care was taken in circumscribing the speakers' areas of origin, to minimize the impact of diatopic variation. For Italian, we adopted as a point of inquiry the area of Turin, whose variety is described, with particular interest for prosodic focus, in Romano, Interlandi (2008). The composition of the groups is shown in Tab. 1.

Table 1 - *Population sample of the study*

<i>Group</i>	<i>Proficiency</i>	<i>N. of speakers</i>	<i>Region of origin</i>
ITL1	-	14	Torino
FRL1	-	14	Paris
	B1 / B2	7	
ITL2	C1 / C2	6	Paris

Proficiency levels were assessed through three complementary tests: self-assessment, written cloze test (Vedder, 2008), evaluation of oral productions by L2 Italian teachers in accordance with CEFR guidelines (Council of Europe, 2001)².

² Since the corpus was constructed for a study on acquisitional phenomena, we took care to assess the speakers' proficiency level, which is why we report it in the sample description. Considerations about this factor remain, however, beyond the scope of the present article, in which we want to concentrate on observing the variety of marking strategies in the L1 and L2 groups, and not their relation to speaker' proficiency levels. In any case, level of competence seems not to be a dominant parameter for the analyses here reported. For an in-depth inquiry in that direction, we refer to Andorno, De Paolis (submitted).

3.2 Data collection protocol

Experimental studies on information-structure bring up an important methodological issue: on one hand, one has the need to analyse speech that conserves (at least partial) ecological, conversational value; on the other hand, the perspective of a phonetic analysis asks for the elicitation of controlled, fully comparable prosodic units. These two requirements are obviously contradictory and pose problems for designing the collection protocol. Moreover, one must take into account the need to compare results with those from other language combinations, an essential step in the identification of CLI. In an attempt to meet all these requirements, we decided to adopt the protocol designed by Gabriel (2010) and later taken up by Feldhausen and Vanrell Bosch (2016) in similar research, which is based on task-elicited speech. Stimuli for the protocol were translated into the languages useful for our purpose, Italian and French. The task is carried out as follows: first, the participant is shown PowerPoint slides containing two short stories, each one accompanied by a caption; then, the participant is shown other slides with the same pictures, accompanied by questions (see Fig. 3 in the next page). The participant is asked to answer each question aloud in complete sentences³, with no other indications on how to structure the utterance other than a request to avoid one-word answers.

Figure 3 - *Stimuli from the Italian version of the task*



³ In the prompt, the term “complete sentence” was intended to refer to sentences including a finite verb. This specification aimed to prevent elliptical answers such as “Maria.”, which would not be conducive to the study of syntactic marking and word-order changes. Regrettably, there was an unintended interpretation of this prompt, where participants understood it as an obligation to produce “canonical sentences”, leading to an avoidance of non-SVO orders. Consequently, in comparison to other corpus studies, our dataset exhibits lower occurrences of post-verbal subjects, dislocations, fronting, and other structures deviating from the canonical SVO order.

- (4) (a) Che cosa succede qui?
 'What's going on here?'
 (b) Chi compra il giornale in edicola?
 'Who's buying the newspaper at the newsstand?'
 (c) Giulia dà il giornale a suo fratello, giusto?
 'Giulia is giving the newspaper to her brother, right?'

Questions are formulated to elicit three types of focus-utterances: (a) broad focus, (b) narrow identification focus, (c) narrow correction focus. As shown in the examples in (4), identification focus is elicited through a partial question, and corrective focus through an assertive statement accompanied by a tag-question⁴, through which the reaction (in this case, corrective) of the speaker is sought. Partial questions and tag-questions target different syntactic components of the sentence: (i) subjects, (ii) verbs, (iii) direct objects, (iv) indirect objects, (v) adverbials. Participants are alone in the recording booth and can advance with the slides at their own pace. Recordings were carried out in a soundproof environment, with a Focusrite Scarlett interface and Shure SM58 microphones. Audio files were recorded in .wav format, with a sampling rate of 44100 Hz.

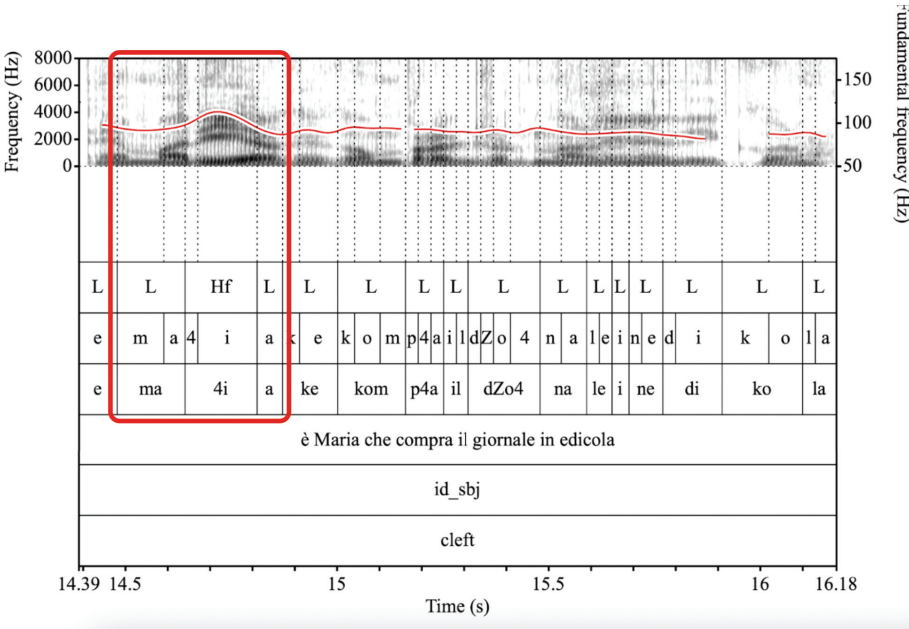
3.3 Tools for the analysis

Transcription and labeling of syntactic phenomena was done on the basis of a taxonomy taken, with minor adaptations, from Brunetti, Bott, Costa & Vallduví (2011). In our corpus, it-cleft sentences proved to be preponderant as a marked structure in both languages (for a precise account of their frequency, we refer to § 4). For simplicity, therefore, we decided to restrict our analysis to a sub-corpus including either it-cleft sentences or unmarked sentences. Instances of other non-canonical orders (e.g., postverbal subjects, clitic dislocations) were excluded. Segmentation at the word, syllable, and phone level was done via WebMaus (Kisler, Reichel & Schiel, 2012). A not insignificant problem arose with regard to prosodic labeling. If, in fact, if ToBI – in ToBIT and FrToBI versions, see Avesani (1995) and Delais-Roussarie (2015) – has been used in many works on L1 intonation, it poses a major problem for L2 studies. ToBI, in being a phonological type of annotation, presupposes the existence of a categorical and grammatical representation of the functions attributed to suprasegmental articulation in the speaker's system. This assumption, however, does not hold in the case of L2 speakers: a speaker's interlanguage, in fact, is a system of its own that cannot be assumed to be identical to that of either its source or target language (Selinker, 1972; Eckman, 1981; Mack, 1988). We chose, therefore, to code intonation through the Polytonia script (Mertens, 2014), which processes prosodic labels from raw phonetic values, without phonological interpretation, in relation to the individual characteristics of each speaker (pitch range, speech rate, etc.). The algorithm provides a series of symbols that represent tonal levels and the perceptible melodic movements of each syllable, based on the notion of the *seuil de glissando*

⁴ On the role of tag questions as biased questions see Romero (2020).

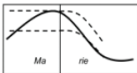
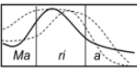
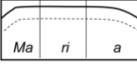
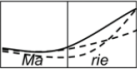
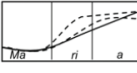
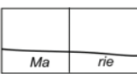
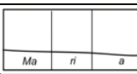
(Rossi, 1971). The system provides 5 symbols for the tonal level: L (low), M (mid), H (high), B (bottom) and T (top). It also provides 5 melodic movements: R (large rise), F (large fall), r (small rise), f (small fall), and _ (level). Finally, the system can provide for each syllable a combination of these symbols. Fig. 4 shows an example of Polytonia output, together with the other tiers of transcription and labeling.

Figure 4 - Example of Polytonia labeling for identification-focus statement
“È Maria che compra il giornale in edicola” (
“It’s Mary who’s buying the newspaper at the newsstand”) by a male Italian speaker



As can easily be imagined, a range of 5 levels plus 5 movements gives rise to a large number of combinations; the possible sequences on constituents of 2 to 4 syllables thus become numerous. For this reason, we decided to re-elaborate the taxonomy, narrowing down from the combinations provided by Polytonia to 4 macro-types, established on a functional basis (for details we refer to De Paolis, Santiago & Andorno, 2022). This allowed us to reduce the fragmentation of the results and identify sharper trends. The rationale and outcome of this reclassification is shown in Tab. 3. The intonation of target words, such as “Maria” or “giornale”, was profiled by combining the Polytonia labels assigned to individual syllables. For instance, determining whether “Maria” exhibited a falling, flathigh, flatlow, or rising pattern involved assembling the Polytonia labels associated with its three constituent syllables ([ma.'ri:a]) to ascertain the overall prosodic type of the word. An example of a target word featuring a falling contour is visible in the previous page, in Fig. 4.

Table 3 - *Prosodic types retained from Polytonia, with the example Marie/Maria (from De Paolis et al., 2022, our translation)*

Prosodic type	Language	Polytonia labels	Stylization	Interpretation
falling	FRL1/L2	MR-HF, M-Mf, r-f, r-HF		A rise / high tone is perceived at the beginning of the first syllable (Hi), followed by an important melodic fall on the last syllable, showing a major break.
	ITL1	Lr-HF-L, O-LR-HF, M-H-L, O-H-L		A melodic rise/high tone is perceived in the syllable carrying the lexical accent, followed by an important fall on the last syllable, showing a major break.
flathigh	FRL1/L2	M-M, H-H,		The entire constituent is perceived in the high or medium range in the speaker's pitch range, indicating a tonal enhancement.
	ITL1	H-H-H, O-H-H, O-M-M, M-M-M,		
rising	FRL1/L2	L-LR, M-H, L-M, L-Mr, L-MR,		A rise is perceived on the last syllable of the constituent, indicating the boundary of the accent phrase in the non-final position of the utterance (continuation rise).
	ITL1	L-O-H, O-L-M, L-Lr-M		A rise is perceived in the tonic syllable of the word, followed by a rising contour (or high plateau) in the postonic (continuation rise).
flatlow	FRL1	O-O, L-L, O-L		The entire constituent is perceived in the speaker's low pitch range, no melodic movement is perceived.
	ITL1	O-O-O, L-L-L, O-O-L, O-L-O		

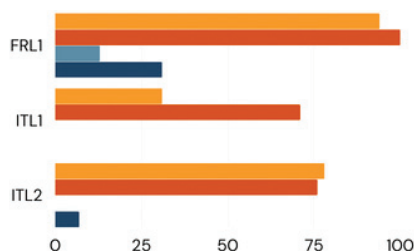
4. Results

Our dataset consists of 615 utterances in total: 15 per speaker, for 41 speakers (14 ITL1, 14 FRL1 and 13 ITL2). In this study, we observe the realisation of subjects and direct objects. We will illustrate the results of this analysis in two stages: first, with a focus on syntactic marking; second, with one on intonation; some considerations about the combination of the two will be made in § 5.

4.1 Syntactic marking

The first step of our analysis was to observe the use (number and context of occurrences) of it-clefts by speakers of the three groups. The proportion of such structures realised by speakers of each group in the two narrow-focus contexts (identification and correction) and for each syntactic role (subject and object) is shown in Fig. 5.

Figure 5 - *Proportion of cleft sentences realised by speakers of each group for identification-subjects (yellow), correction-subjects (orange), identification-objects (light blue), correction-objects (blue)*



In all three groups, both contrast and syntactic role significantly influence the use of it-clefts: the subject role and the corrective function enhance the likelihood of clefting. This pattern can be attributed to the specific communicative demands of subjects: as they naturally occupy the initial position in an utterance – a position typically reserved for topics, according to communicative principles (Givón, 1989) – they require additional marking to align with this function. That said, interesting differences can be observed among the three groups. French speakers make large use of it-clefts in both narrow-focus conditions, making it difficult to observe an effect of contrast: in the subject-focus context, the percentage of utterances marked by this structure is very high for both identification (94 %) and correction (100 %). A considerably lower number of occurrences is observed for the object-focus marking: 14 % for identification and 31 % for correction. It is interesting to notice, anyway, that the difference between identification and correction is in both cases (subject vs object) not significant ($p > 0.05$ for both subjects and objects). As for the native Italian group, there is no occurrence of it-cleft structures for object marking, the use of this structure being limited to subjects. Regarding the role of contrast, it-clefts can be used for identification focus, but do not represent the default strategy (31 % of cases). Their frequency increases for correction focus (71 %); still, without reaching the proportion of the French group. Anyway, the difference between the two conditions, identification vs correction, is for the Italian group highly significant ($p < 0.0005$).

For Italian L2 speakers, the results indicate a “middle ground” between the two native groups. The data reveal that French learners produce fewer it-cleft sentences overall compared to the FRL1 group, indicating partial approximation to the target language. However, they do not appear to distinguish between the two conditions – identification and correction – as evidenced by the similar percentages of clefted utterances: 78 % for subject identification and 76 % for subject correction ($p > 0.05$). For object marking, slightly more cleft sentences were produced in the corrective context, but the difference remains statistically insignificant ($p > 0.05$). The interaction between syntactic role and focus type thus differs in French and Italian: in French, focused subjects consistently trigger it-cleft constructions, regardless of sentence function; in Italian, syntactic role

and focus type both have an impact on cleft frequency. To test this interpretation of our data, we applied a linear regression model with two-factor interaction using the `lm` package in R (R Core Team, 2021):

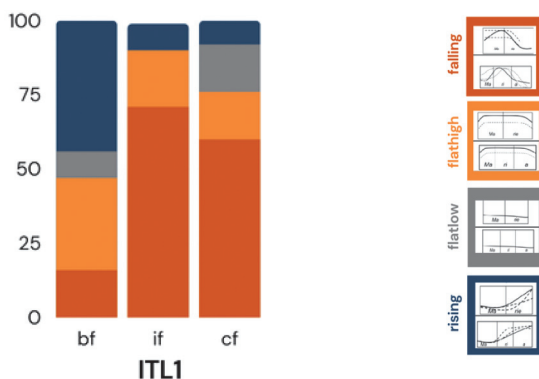
$$\text{model} <- \text{lm}(\text{cleft} \sim \text{infContext} * \text{tgtConst})$$

For Italian, the model exhibits a robust fit (Multiple R-squared: 0.7082, Adjusted R-squared: 0.6936, F-statistic: 48.53 on 3 and 60 DF, p-value < 0.0005). In contrast, the model lacks effectiveness for French, where the sole reliable predictor is the syntactic role. Regarding ITL2, the model suggests a modest fit (Multiple R-squared: 0.2631, Adjusted R-squared: 0.2236, F-statistic: 6.664 on 3 and 56 DF, p-value < 0.0005).

4.2 Prosodic marking

The prosodic analysis was performed on the same dataset, including all utterances that were either unmarked (i.e., exhibiting SVO order without dislocations, clitic anticipation, or clitic resumption) or marked using it-clefts⁵. In this section we will show for each of the three groups the results of a quantitative analysis conducted on the basis of Polytonia output. Fig. 6 summarizes the proportion of prosodic types observed in the native Italian group, according to the focus subtype, broad vs identification vs correction.

Figure 6 - *Distribution of contours in broad, identification, correction focus utterances (group ITL1)*



⁵ We chose to incorporate cleft sentences alongside those with a canonical order in the same dataset for two primary reasons. Firstly, literature descriptions suggest that the prosodic profile of clefted constituents does not structurally differ from that of in-situ focus constituents (Mertens, 2012; Pinelli, Poletto, Avesani, 2020). Secondly, our aim was to analyse syntax and prosody as additive strategies rather than complementary ones (a point we will revisit in the discussion, see par. 6). Therefore, it would not have been meaningful to solely describe clefted constituents from a syntactic perspective and in-situ constituents solely from a prosodic one. It's also worth noting that separating clefted from non-clefted constituents would have created an imbalance between the French and Italian datasets, due to the notable frequency disparity in cleft structures observed in the two groups.

As the chart shows, in the broad focus (bf) condition the vast majority of constituents “Maria” and “giornale” are realised with a rising continuation contour (44 %) or with a general tonal enhancement (flathigh, 31 %). A few realisations present a falling or flatlow contour; this small number represents some realisations of the word “giornale”, produced sporadically with this intonational profile because of its quasi-final position (“Maria compra il giornale in edicola”, “Maria is buying the newspaper at the newsstand”). When we observe the identification-focus condition (if), we observe a drastic increase in realisations of falling contours (71 %), at the expense of types rising (9 %) and flatlow (0). In contrast, the transition to the corrective-focus condition (cf) is smoother: rising contours still account for a very small portion of the total (8 %), and falling and flathigh contours represent the majority (60 % and 16 % respectively). That 16 % of flatlow contours is made up of realisations as “No, Maria non compra delle parole crociate; Maria compra il giornale in edicola” (“No, Maria isn’t buying crosswords at the newsstand; Maria’s buying the newspaper at the newsstand”), in which “il giornale”, due to its utterance-final position and the explicit negation of the preceding utterance, is realised prosodically as a post-focal, non-prominent, constituent.

Figure 7 - Prosodic marking of broad, identification, correction focus for group FRL1

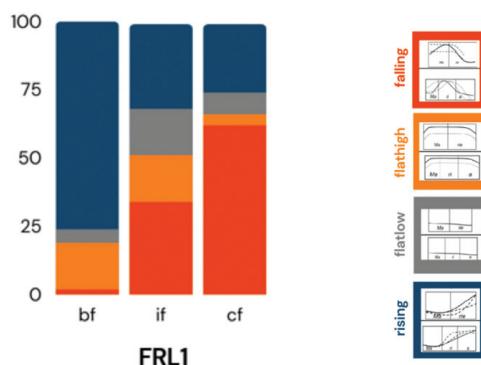
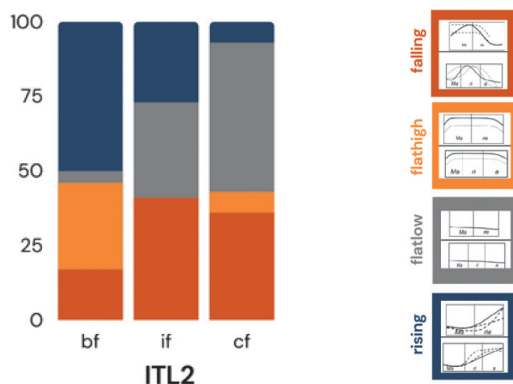


Fig. 7 summarises the proportion of prosodic types observed in the native French group. Similarly to the native Italian group, French speakers realise the constituents “Marie” and “journal” with a large majority of rising (76 %) and flathigh (17 %) contours in the bf condition; falling and flatlow account for a small proportion of the total, 2 % and 5 % respectively. The same considerations made about these two contours in the Italian group hold in this case. Otherwise, a strong difference emerges in the transition from the bf condition to the if condition: French speakers continue to produce a substantial amount of rising contours (31 %), along with the falling and flathigh (34 % and 17 %). Even more strikingly, we find 17 % of flatlow realisations for focused constituents. A similar situation is found for corrective focus: even though the amount of falling

contours rises to 62 %, rising and flatlow realisations still account for 8 % and 25 % of the total. This can be partially explained by resorting to observations made about syntax (see § 3.1): constituents that are not prosodically marked, in fact, often coincide with those that are marked through a cleft-sentence, which, as we saw in the previous section, is massively exploited by French speakers in both contexts of narrow focus.

Figure 8 - *Prosodic marking of broad, identification, correction focus for group ITL2*



When moving to the Italian L2 group, we notice some similarities with the two groups ITL1 and FRL1, and, most interestingly, some crucial differences. The results for the non-native group are shown in Fig. 8. In the bf condition, L2 speakers' behaviour mirrors that of the target group: the large majority of constituents is produced with flathigh or rising contours (29 % and 50 %), while falling (17 %) and flatlow (4 %) account for a small part of the total. A somewhat unexpected situation emerges, instead, when we move to the narrow-focus conditions. In fact, as we can see from the chart, if a rise in the proportion of falling contours is visible (32 %, against 17 % for bf) in the identification-focus (if) condition, a relatively large part of the constituents is realised with a flatlow contour. Moreover, rising contours still account for 27 % of the total. Moving to the most contrastive situation, i.e. correction focus, the proportion of flatlow contours strikingly rises to 50 %, while falling contours drop to 36 %. If, for the FRL1 group, the presence of flatlow contours in contrastive situations could be explained by speakers resorting to syntax, it is not the case for the ITL2 group: in fact, the use of cleft sentences, while more frequent than that made by the ITL1 group, does not fully compensate for this absence of prosodic marking.

5. *Discussion*

5.1 Syntax and prosody in the L1 groups

For what concerns syntax, it emerges quite clearly that it-cleft sentences represent a widely exploited solution in both French and Italian, albeit with important differences between the two languages. As for the overall frequency, our results align with the literature: French speakers produce it-clefts more frequently than Italian speakers, who often choose in-situ marking instead (Lambrecht, 2001; Dufter, 2009). In terms of syntactic role, the tendency is similar in the two groups: it-clefts are used more often to mark focused subjects rather than focused objects. However, while for French this implies only a difference in frequency (94 % and 100 % clefts for subjects in *if* and *cf* conditions, and 14 % and 31 % for objects), for Italian there seems to exist a stronger constraint, completely preventing the use of cleft structures for object marking. This kind of asymmetry in subject-object marking has already been attested and accounted for in numerous studies conducted on Italian and French (Belletti, 2015, Samo, Merlo, 2021). Regarding the other variable, however, it seems that the degree of contrastiveness carried by the focus constituent has an effect only in Italian. In fact, while French speakers employ clefts to a similar extent for identification and correction, Italian speakers seem to “specialise” cleft structures to mark correction. For what concerns prosodic marking, results from the native groups confirm the descriptions in literature (§ 2.1): speakers from both groups mark narrow focus through the use of specific *f0* contours, with some structural differences related to the phonological features of the two languages, such as the presence of *Hi* for French, and the anchoring to the accented syllable for Italian (see Fig. 9 and 10). The two charts in Fig. 11 show an important aspect of the two native languages: in Italian, prosody can be used without syntax (orange portion, in-situ focus); the opposite, instead, is not true. In French, the situation is reversed: syntax can be used in absence of prosodic marking (the blue space, representing syntax alone, occupies more than a quarter of the total); while the opposite case, i.e. in-situ focus, is rarely attested. On the other hand, we can observe a common tendency in the L1 groups: in almost half of the cases, the focused constituent is marked by both syntax and prosody. These results also confirm the descriptions of native systems present in the literature (Féry, 2001; Mertens, 2012).

Figure 9 - F0 contour for the word “Marie” in the identification-focus condition (native French speaker)

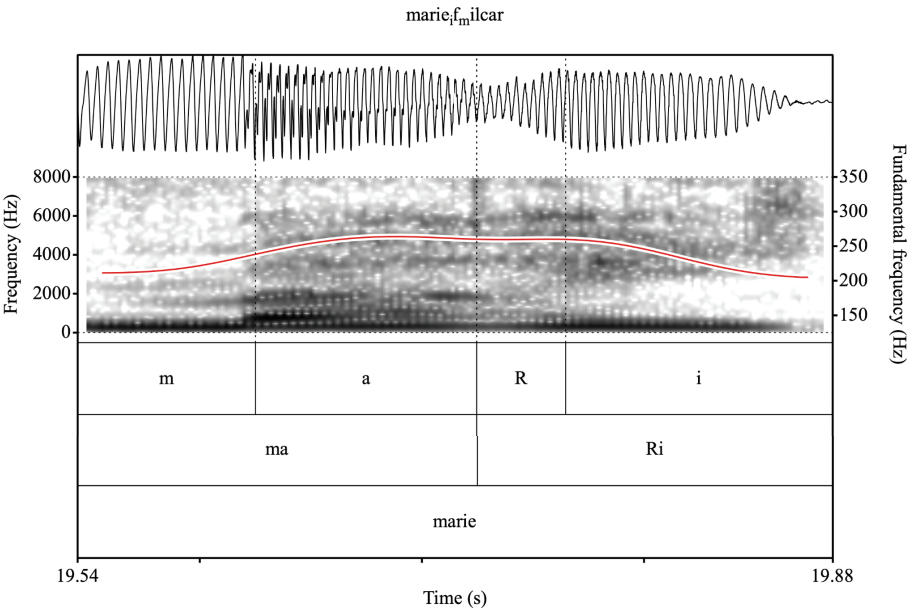


Figure 10 - F0 contour for the word “Maria” in the identification-focus condition (native Italian speaker)

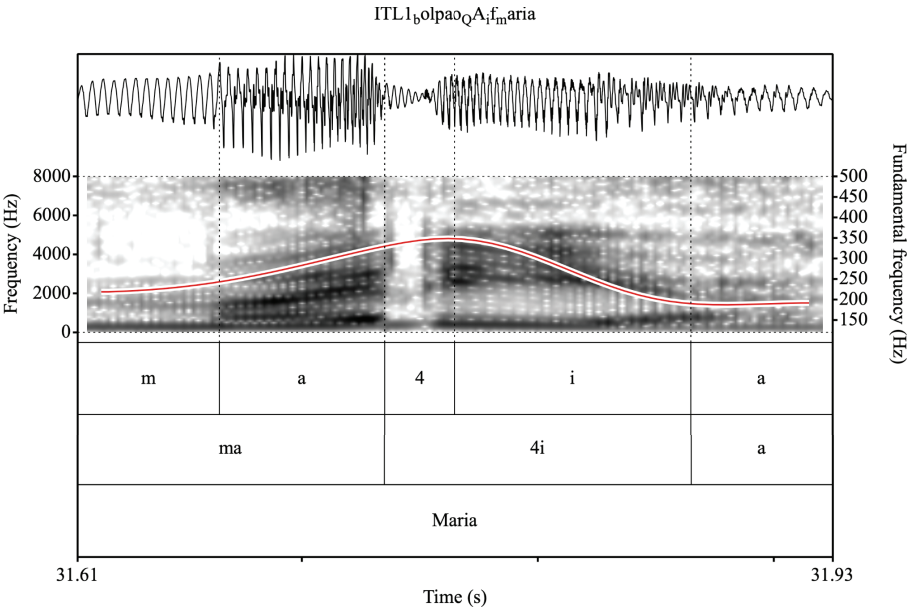
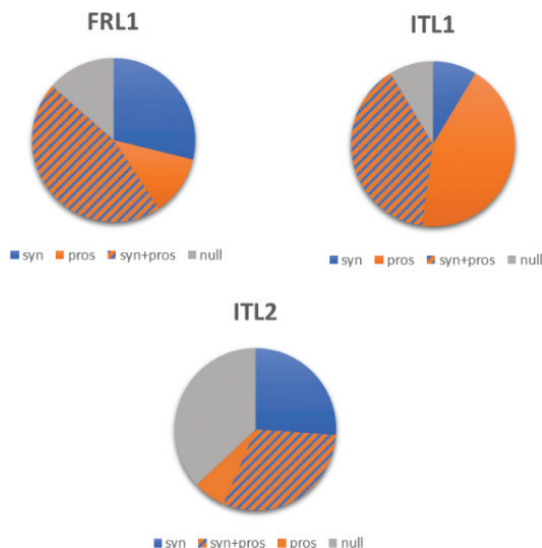


Figure 11 - *Proportion among different focus marking strategies in groups FRL1 (left) and ITL1 (right)*

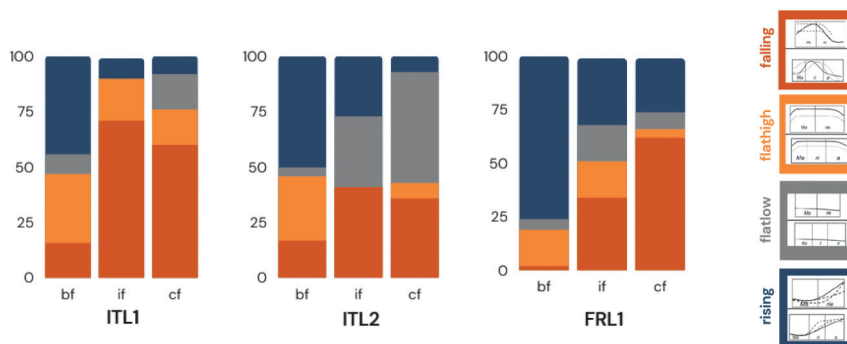


5.2 Syntax, prosody and CLI in the L2 group

The outcome of these differences and similarities between the two L1s can be easily traced in the performance of Italian L2 learners. In fact, despite the potential difficulty in acquiring a complex construction such as the cleft sentence, learners effectively use this structure in the appropriate contexts. Yet, they do it in a way that mirrors the behaviour of their source language, both in terms of absolute frequency and of information-structural context.

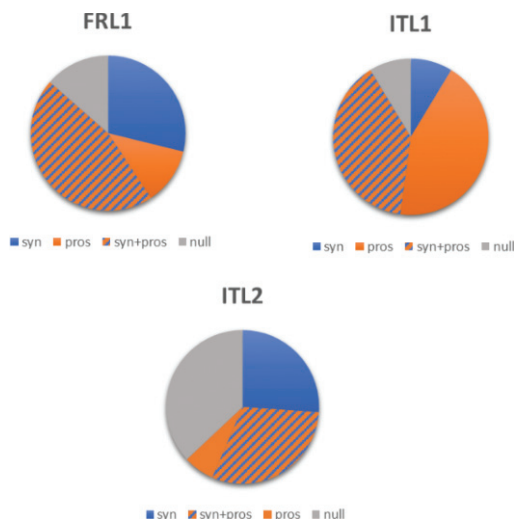
A more complex picture arises, instead, from the analysis of prosodic means used by learners, since they are not the same as those observed in neither of the two L1 groups. In many cases, non-native speakers realise focus phrases with a non-prominent intonation pattern, rising or flat. Constituents' profile seems to be dictated more by their position within the utterance than by their function: a continuation contour is observed if the constituent is at the beginning of the utterance, a flat, low contour if the constituent is at the end. This way, bf and if-cf utterances often share the same prosodic pattern. We propose a comparative visualization of the results of the three groups from the prosodic point of view in Fig. 12.

Figure 12 - *Proportion of different contours (falling, flathigh, flatlow, rising) produced by each group in 3 focus conditions: bf, if, cf.*



A possible explanation for this divergence from the target is that overall disfluency and conflict between different phonological constraints in L1 and L2 inhibit the use of prosodic marking, causing the frequency of prosodically marked structures to be much lower than in the L1 groups (see Avesani *et al.*, 2015). This lack of prosodic marking, not compensated for by a larger incidence of syntactic one, leads to less marking overall, as we can see in Fig. 13 (compared to Fig. 11).

Figure 13 - *Proportion among different focus marking strategies in the non-native group (ITL2)*



These results suggest that, in expressing the information structure of utterance, learners do not rely on prosody to the same extent as native speakers do: in the L2 group, focus/background articulation is realised mostly through syntax. Since this trait cannot be traced back to the influence of L1, one could think of it as a trait

typical of learners' interlanguage. It would not be the first case that such a finding emerges: studies on other language pairs suggest that syntactic marking is more salient for learners than prosodic marking (Yan, Warren, Calhoun, 2022).

6. Conclusions and perspectives

In this work we have tried to draw a general picture of the syntactic and prosodic marking means used by Italian, French and Italian L2 speakers to mark narrow-identification and narrow-correction focus. The results show different outcomes of the acquisition process of French learners of Italian L2, depending on the aspect taken into consideration (syntax vs prosody). A possible interpretation for these different outcomes lies in the divergent effects that CLI can have on these two levels, syntax and prosody, depending on the points of contact and of distance of the two native systems from these points of view. Regarding the prosodic analysis conducted on the L2 group, though, an important question arises: can we really say that there is no prosodic marking in absence of major f_0 movements⁶? And, also, could it be the case that rising contours are used by learners to mark narrow focus, differently from what observed in the native groups – where rising patterns are usually used for continuation in non-focus phrases? As we have stated throughout the paper, it cannot be assumed that learners' interlanguage will work on the same categories and constraints as the learners' native or target system. A partial attempt to address this question is represented by the work from De Paolis, Abbà, Romano (2023), in which complementary features are considered, in particular the presence of glottal stops as an index for different phrasing patterns.

A last – but still fundamental – question that is yet to-be addressed concerns the role of perception in the acquisition of means for information structure marking. If learners “fail” to make appropriate use of syntax and prosody to highlight focus constituents, can this be attributed to a non-recognition of their functions at the perceptual level? In light of the recognized significance of the perception-production link in an acquisitional context, the next phase in this investigation will involve the development of a perception test to integrate production data.

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⁶ A similar question has also been addressed by Bocci, Avesani (2011).

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