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Combining Prosodic-Pragmatic Training and Free Commentary to Develop Intonation Skills in Italian FL: The Case of Information-Seeking Polar Questions

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Abstract

Prosodic skills are a fundamental component of language learning but are notoriously difficult to develop due the highly variable nature of prosody itself. In the burgeoning research field of didactic audiovisual translation, free commentary (FC) appears to be a less-studied modality of revoicing in the foreign language (FL) classroom. The main aim is to investigate the suitability of FC as a reinforcement activity for improving FL intonation skills. This paper presents an experimental study conducted at the University of Galway with undergraduate students studying Italian as a FL. The research design has a multi-stage structure. It consists of explicit prosodic-pragmatic training sessions, during which the experimental group learnt how to pronounce a polar question to ask for information, while the control group attended traditional conversation classes. A discourse completion task (DCT) was administered before and after the training. Secondly, both groups were required to complete FC to reinforce their intonation skills. Data analysis of DCT and FC was carried out within the autosegmental-metrical theoretical framework and the tone and break indices system. The results corroborate previous studies on the effectiveness of training and highlight the didactic value of FC in reinforcing FL intonation skills. The novelty of this study lies in the combination of the disciplines of prosody in FL acquisition, didactic audiovisual translation, and intonational phonology.

Key words: didactic audiovisual translation, free commentary, prosodic-pragmatic competence, explicit perception-production training, intonation, polar questions, language learning, Italian as a foreign language, higher education.

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Introduction

Prosodic features of speech (e.g., intonation, stress, and rhythm) are a cornerstone of language learning because they signal grammatical structure, convey the illocutionary force of the message, and facilitate the interactional structure of discourse. A considerable body of research has demonstrated the importance of teaching prosody in a discourse context (Chun, 2002). Several researchers have emphasised the benefits of prosodic training (Chun & Levis, 2021), the reliability of explicit instruction (Yenkimaleki, 2018) and the utilisation of waveforms and spectrograms (Levis & Pickering, 2004) in improving learners' perception and production skills. Despite these advantages, there is a lack of clarity about how to teach prosody effectively. Numerous contributions in the field of didactic audiovisual translation (DAT) have shown the potential of revoicing activities (such as dubbing, voice-over, and audio description) in developing speaking abilities (Danan, 2010; Navarrete, 2020; Talaván & Rodríguez-Arancón, 2018). Among revoicing modalities, free commentary (FC) has not received as much attention from academic research and has only recently begun to be explored (Lertola, 2021; Nicora & Lertola, 2024).

The main objective of this study was to investigate the suitability of FC as a reinforcement activity that can improve university students' intonation skills in Italian as a foreign language (FL). The multi-stage research design consisted of a combination of explicit prosodic-pragmatic training sessions and a DAT-focused language course (including creative subtitling and FC) for teaching Italian intonation. Building on previous findings (Nicora et al., 2018, 2019; Nicora, 2020), a replication study on the effect of explicit prosodic-pragmatic instruction through visual display was carried out. This was followed by a new experimental study with the additional integration of FC to help undergraduate students develop prosodic-pragmatic competence.

This paper briefly defines the key terminology in DAT and presents the literature review. It then outlines the methodology, including the research questions, the participants, and the course structure. The data collection is described in detail, and the results of the intonational analysis of the pre-/post-tests and FL speech productions derived from DCT and FC are presented within the autosegmental-metrical (AM) theoretical framework (Pierrehumbert, 1980) and the tone and break indices (ToBI) transcription system (Beckman & Ayers, 1994–1997).

1. Literature Review

1.1. DAT and Speaking Skills

The main underlying assumptions in DAT research are that language input is contextualised and that its authenticity can be fostered by using multimodal texts that engage students and create a friendly learning environment. The year 2023 marked the completion of the TRADILEX project in Spain, which aimed to measure improvements in the second language learning process after incorporating

audiovisual translation as a didactic tool. The outcomes are promising in terms of plans for future teacher training, the consequent implementation of DAT in the FL curriculum in schools (Fernández-Costales et al., 2023), and the publication of a book entitled Didactic Audiovisual Translation and Foreign Language Education (Talaván et al., 2023). The literature on DAT supports the validity of captioning and revoicing modes, either individually or combined, in enhancing proficiency in all four language skill areas in universities, secondary schools (Sánchez Requena, 2018) and, more recently, with primary school students (Beltramello & Nicora, 2021; Nicora, 2022, 2025).

Free commentary is a revoicing mode that adapts the original oral dialogue (if present) or renders images into a second language (L2), by incorporating additional information or even omitting information (Talaván et al., 2023). The new oral text should be synchronised with the visual information rather than with the soundtrack – if soundtrack is present in the sample (Chaume, 2013). In the case of silent videos, learners can use visual information to create a narrative, but they can also add further imaginative elements. When learners interpret the story and record themselves, they can use different voices and sound effects. A recent exploratory study investigated the potential of FC in a vocational training centre in Madrid (Lertola, 2021). As part of the professional module "Teaching English in Infant Education", 18 future infant teachers developed an FC task in which they had to collaborate on a written script for a short animation and record themselves individually. The feedback questionnaire revealed that the teachers believed that the digital storytelling of a silent animation had enhanced their writing and speaking skills. They also perceived revoicing as an innovative and highly motivating task and confirmed that they would incorporate the FC activity in their classes. The results support previous research on the benefits of revoicing modes in language learning. In line with these findings, a recent experimental study on the acquisition of FL vocabulary demonstrated that combining keyword subtitling with free commentary had a positive impact on children's language learning (Nicora & Lertola, 2024).

As far as speaking skills are concerned, most studies have focused on reverse interlingual and intralingual dubbing (Ávila-Cabrera, 2022; Bolaños García-Escribano & Navarrete, 2022; Danan, 2010; Sánchez Requena, 2016, 2018). Many scholars have used audio description in FL learning, leading to a significant body of research developing over a short period (Talaván & Lertola, 2016; Cenni & Izzo, 2016; Navarrete, 2020). For a more comprehensive review of the literature on DAT tasks to improve speaking skills in a variety of learning contexts and with different modalities, see Lertola (2019). Within revoicing, the modes that have been investigated most are dubbing and audio description; therefore, future research could consider other modes of revoicing, such as FC. Furthermore, in the majority of experimental studies in the literature, English is the target language, followed by Spanish. Hence, other language combinations need to be considered when research is carried out. Finally, to the best of the author's knowledge, no classroom research has ever centred on using intonation patterns with a special focus on polar questions, in specific communicative contexts, which are widely known to be difficult to learn (Nicora et al., 2018, 2019; Nicora, 2020). With this in mind, the current study introduces the application of a less-studied revoicing mode – FC – to help university students reinforce intonation skills in Italian as a FL.

1.2. Information-Seeking Polar Questions and Intonation Skills

Research on second language intonation has shown that cross-linguistic phonological studies are essential for several educational purposes, such as predicting difficulties that learners may encounter in language learning and selecting intonation patterns to offer as models (Mennen, 2007, 2015). As Mennen (2015) points out, the distinction between different types of transfer from the native language (L1) to the FL is extremely useful for the study of interlanguage intonation. Interlanguage intonation is a prosodic system created by language learners to support their transition from L1 to FL. This may involve several stages of language acquisition, during which the learner tends to move away from L1 in order to achieve the model of the native speaker. A comprehensive contrastive analysis of intonational meaning in Spanish, Italian, German, and Czech was recently published by Pešková (2023). In her book, the author states that polar questions are well known for their high variability and represent an interesting but widely debated topic. According to the World Atlas of Language Structures (Dryer, 2013), which suggests the main strategies for distinguishing polar questions from statements, colloquial Italian belongs to the languages with *interrogative intonation only*. This means that in Italian, intonation is used to distinguish a declarative sentence from an interrogative one. Therefore, in second language acquisition, the perception and production of all types of questions is crucial for avoiding misunderstandings when communicating in the FL.

In addition, intonational studies on the final tones and the prosodic structure observed in polar and *wh*-questions in French as an L2 produced by Mexican Spanish learners highlighted their tendency to overuse a rising tone to mark interrogatives (Santiago & Delais-Roussaire, 2015a, 2015b). Through a cross-comparison of information-seeking interrogatives recorded in French and Mexican Spanish, Santiago & Delais-Roussaire (2015a) indicated an overuse of rising tones in the learners' speech productions in all question types. The authors claimed that the influence of the native language can undermine the development of a second phonological inventory. However, in a follow-up study, they stated that L1 transfer does not account for all learners' prosodic patterns and proposed alternate hypotheses for the rising contours, such as a prosodic simplification and the idea that some rises may be used to express a sort of "linguistic insecurity" (Santiago & Delais-Roussaire, 2015b). Similar overgeneralisation of interrogative patterns has also been observed in L1 Italian learners of Spanish (Gabriel & Kireva, 2014). Since overgeneralisation or exaggeration provides evidence of extraction of the regularities of a language and the application of rules, it can be viewed positively as an important part of development in language learning (Gass, 1988).

A recent study indicated the positive impact of perception-production training on the production of Italian-L2 polar questions by Irish-English speakers (Nicora et al., 2018, 2019). Ten participants were divided into an experimental group (which attended the training) and a control group (which attended regular conversation classes). The teacher provided explicit instructions about the phonology of intonation in the variety of Italian offered as a model – that is, La Spezia Italian – and used PRAAT speech visualisation software to interpret intonational cues. Learners were required to: interpret the context (given over a PC monitor), imitate audio samples and record their production; compare their prosodic cues with those of native speakers; and repeat the task to move their

performance closer to the native model. Only experimental participants moved their intonation pattern towards the native model. Despite various voices advocating the importance of developing prosodic-pragmatic competence, intonation remains a neglected topic in the FL classroom (De Marco et al., 2014; Mocciaro, 2014) and researchers have not yet reached a consensus on how to teach prosody effectively. Therefore, more attention needs to be paid to prosody in L2 acquisition and pedagogy.

2. Methodology

2.1. Research Questions

The research design included a replication study and a new experimental study. The replication study aimed to corroborate previous findings on the positive impact of explicit prosodic-pragmatic training on the development of students' prosodic skills in Italian as a FL (Nicora, 2020). The experimental study investigated the potential of FC in reusing the intonation patterns of information-seeking polar questions that students had learnt during previous explicit prosodic-pragmatic training. The novelty of this experimental study lies in investigating the revoicing modality of FC, which has not yet been explored specifically in the context of teaching prosodic features of speech; exploring creative subtitling applied to language teaching and learning; and building bridges between different research fields including DAT, prosody in L2 acquisition, and intonational phonology. The study addressed the following research questions:

RQ1: Are university learners of Italian better able to use intonation in uttering information-seeking polar questions after explicit prosodic-pragmatic training?

H1: Based on previous studies on the learning of intonation for information-seeking polar questions (Nicora et al., 2018; Nicora, 2020), the author hypothesises that the experimental participants will change their intonation patterns towards the target model after training.

RQ2: Is FC an effective reinforcement activity for learning intonation in Italian as a FL?

H2: Given the expected positive impact of the training on FL speech production in the post-test phase, the author hypothesises that the trained subjects will be able to apply the learnt intonation pattern to formulate new information-seeking polar questions in the free commentary activity.

RQ3: To what extent can the students reuse Italian intonation according to the pragmatic function of asking for information during the FC activity?

H3: Nicora (2020) demonstrated that most of the students who completed all activities suggested during a similar training were able to replicate the same (or a highly similar) pattern as that of a native

speaker. However, this is not expected to be the case for all the trained subjects who take part in the training and complete the FC.

2.2. Participants

The "Prosody, Creative Subtitling and Didactic Free Commentary" course was designed for second-year university students who were studying Italian at the University of Galway, Ireland. It was delivered in a blended learning environment over a period of 10 weeks from September to November during the 2023–24 academic year. It included one hour per week in the language laboratory and a weekly homework assignment.

According to the language background questionnaire, the class was composed of 25 university students aged 19 to 21. All the students who had completed their first year of Italian studies at the University of Galway had attained an A2 level of competence; this, however, did not apply to the Erasmus students. Nine of the students were excluded from the experiment for the following reasons: five did not participate in the language laboratory or complete the pre-test during the introductory lesson; two bilingual students (English-Italian) did not complete the pre-test; one student required a hearing aid and could potentially have more problems during the training, so his recordings were not analysed; and one student was dyslexic and had difficulties reading Italian. The remaining 16 students were split into two groups. The experimental (EXP) group was made up of 11 participants. They attended the language laboratory, participated actively in the lessons and completed the homework. The EXP group included Erasmus students, one of whom was from Lichtenstein and had a B1 level of Italian competence. The control (CTR) group consisted of five participants. They completed the pre-test and the post-test, took part in the collaborative creative subtitling project and submitted the free commentary assignment. Those in the CTR group attended traditional conversation classes and were not involved in the prosodic-pragmatic training. The CTR group included one Erasmus student who had completed their first year of Italian studies at a French university and had achieved a level of proficiency similar to that of their classmates. Except for two Erasmus students, all the experimental and control participants were Irish-English native speakers.

2.3. Course Structure

The course was divided into two macro areas: prosody of the Italian language, with reference to the variety spoken in La Spezia (Gili Fivela & Nicora, 2018), and audiovisual translation applied to language learning, in the form of creative subtitling and FC.

The first area was dedicated to prosodic-pragmatic training and included an introduction. The EXP students participated in a five-week prosodic-pragmatic training programme that included a series of perception-production tasks based on the intonation patterns of the Italian language. The context of a real-life situation was presented on a computer screen for the students to read, and the students

were then asked to translate this short paragraph from Italian into English. Then, a recording of a native speaker asking an information-seeking polar question related to the provided context was played, and the students were tasked with listening to the question and trying to reproduce it. They were asked to record their voices using Audacity software and to analyse their recordings with PRAAT speech visualisation software. This software allowed the students to visualise their intonation cues and compare them with those of native speakers. The didactic materials were created as new according to parameters established in previous experiments (Nicora, 2020). They were uploaded to the Canvas platform used at the University of Galway. The CTR participants were not involved in the first five weeks of the training, but they all completed the pre- and post-tests.

In the second part of the course, the EXP and CTR groups were both involved in a collaborative creative subtitling task using Aegisub software. The students were divided into groups and asked to create a script and subtitles for the silent cartoon Big Buck Bunny. This cartoon had been released as an open-source film in 2008. The teacher, who was also the researcher, synchronised 30 lines of subtitles with the most important frames. For the script, the students were asked to include at least 3 information-seeking polar questions and 3 information-seeking *wh*-questions, and to upload the subtitling assignment to Canvas as a group. Finally, the students were required to record their voices and upload their FC recordings to Canvas as individual assignments. To meet the evaluation criteria for this task, they were required to use the intonation patterns they had learnt. The course concluded with a presentation of the clips subtitled by each group of students in the language laboratory. This was followed by a peer review and a discussion of the challenges, difficulties, and benefits of DAT. This took place in the presence of a focus group of four Italian teachers, who evaluated each project according to the following parameters: clarity of grammar and syntax, adherence to subtitling strategies, creativity, and humour. The teacher then corrected and evaluated each project and the individual recordings.

2.4. Data Collection

Data collection was carried out throughout the 10-week course through a language background questionnaire, a pre-test, a post-test, and a free commentary task. The FC task was used as not only a learning tool, but also an instrument for gathering FL speech productions.

2.4.1. Language Background Questionnaire

The language background questionnaire was administered before the course began. The aim was to get an overview of each participant's native language, level of language proficiency, and duration of exposure to the target language.

2.4.2. Pre-Tests and Post-Tests

In line with the Interactive Atlas of Romance Intonation (IARI) (Prieto et al., 2010–2014), the pre-test/post-test had already been designed in the form of a discourse completion task (DCT) (Blum-Kulka et al., 1989) and had been used in previous experiments (Nicora, 2020; Nicora et al., 2018, 2019). The DCT is a production questionnaire used in linguistics and pragmatics to elicit specific target sentences. The DCT (e.g., see Appendix I) was administered to the EXP and CTR participants before and after the five weeks of prosodic-pragmatic training. It included nine target sentences (three for each of the two categories of questions – information-seeking polar and *wh*-questions – and three declarative sentences), which were composed of the same number of syllables or inter-accent intervals. The target words were selected for the emphasis placed on the prominent syllable, which depended on the type of word (proparoxytones: "mànico" handle; "mèdico" doctor; Mòdena, an Italian city; paroxytones: "domàni", tomorrow; "limòni" lemons; "rimèdio", remedy; oxytones: "Memè", Meme is a proper name). They were elicited through real-life communicative contexts that were presented to the students in a random order on a computer screen. Each context was designed to elicit a specific type of sentence. The students were asked to read and translate the context, interpret the corresponding target sentence accordingly, and record themselves while producing the target sentences. The whole task was repeated three times. However, for the purposes of this study, only the information-seeking polar questions and the target words (proparoxytones and paroxytones) were examined.

2.4.3. Free Commentary

The final stage of data collection concerned the FC task. During the collaborative creative subtitling project, the students, with guidance from the teacher, worked on the script for the clip and formulated written information-seeking polar and *wh*-questions. Each student recorded the script (including these types of questions) individually using Audacity. After the target sentences produced by the students were collected, they were extracted to be analysed to verify the potential of the FC as a learning tool and its potential as a reinforcement activity for developing prosodic and pragmatic competence in Italian as a FL.

2.5. Data Analysis: The Autosegmental-Metrical Theory and the ToBI System

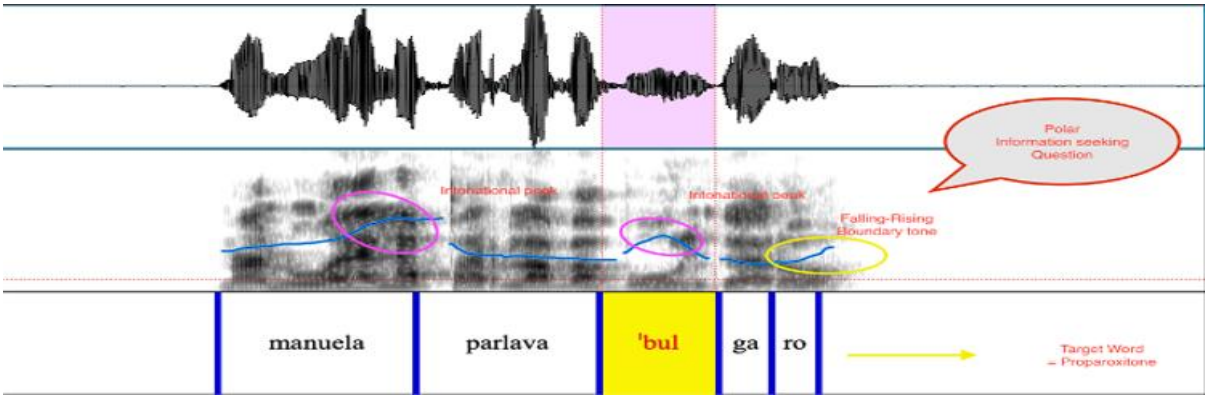
The participants' FL speech productions were analysed on the basis of the ToBI transcription system within the autosegmental-metrical theoretical framework (Pierrehumbert, 1980). This model assumes that the surface realisation of pitch contours is derived from sequences of high (H) and low (L) tones. The pitch accents are associated (or "aligned", according to Pierrehumbert,1980) with a metrically strong syllable. A pitch accent is monotonal if it corresponds to a single H or L tone, in which case the tone is associated with the syllable and marked with an asterisk * (i.e., H* or L*). The pitch accent is bitonal if it corresponds to a combination of two tones, in which case the two tones

are separated by "+". The tone associated with the syllable is called the *starred tone*; the other tone is called the *leading tone* if it precedes the starred tone (e.g., L+H*) or the *trailing tone* if it follows (i.e., L*+H). Boundary tones correspond to terminal tones and are indicated by "%". The most perceptually salient pitch accent, typically the last one in an intonational phrase, is called the *nuclear pitch accent* (Ladd, 1996). The combination of a nuclear pitch accent and its subsequent boundary tone is known as a *nuclear combination* or *configuration* (i.e., L*+H L% or H*+L LH%).

According to the guidelines for ToBI labelling (Beckman & Ayers, 1994–1997), a recording of speech, with an associated spectrogram and pitch track, allows users to visualise the fundamental frequency (f0) contour and place symbolic labels arranged in four parallel tiers for speech/tonal events. This system has been adapted to provide an inventory of pitch accents and boundary tones for many languages and varieties. Over the years, investigations using the autosegmental-metrical theoretical framework have described a large number of Italian varieties (Gili Fivela et al., 2015; Gili Fivela & Nicora, 2018) and shown that the patterns differ depending on the variety of Italian considered. The variety of Italian offered as a model in this research, which was analysed using the ToBI labelling, is La Spezia Italian – the teacher's native variety of the language. Regarding this variety, Nicora et al. (2018) found two nuclear configurations for information-seeking polar questions, labelled as L*+H L% and H*+L LH% in proparoxytone and paroxytone target words. The pitch accent corresponds to an f0 peak around the middle of the syllable, followed by a low f0 stretch and a final rise (see Figure 1). The second pattern was more frequent in the teacher's speech productions, so the didactic material and instructions focused on that nuclear configuration (Nicora, 2020).

Figure 1

Intonation Model for an Information-Seeking Polar Question in La Spezia Italian



Source: Nicora (2020).

3. Results

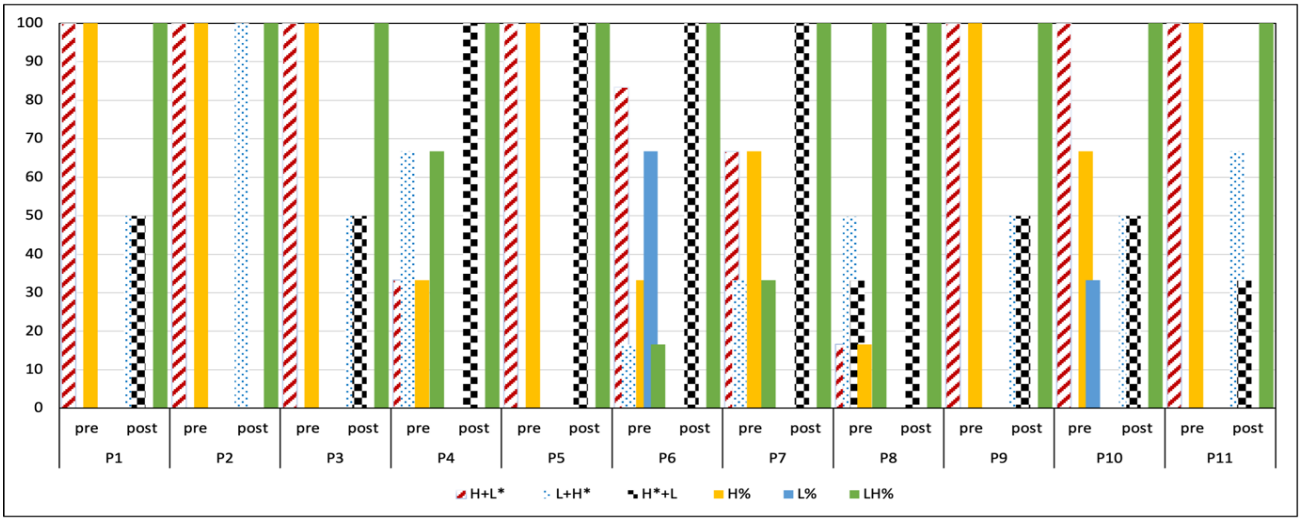
A total of 624 target sentences (576 speech tokens collected during pre-test and post-test, and 48 creative sentences from the free commentary task) were analysed using PRAAT speech visualisation software and labelled according to the ToBI system. The next two sections present and discuss the FL speech productions obtained before and at the end of the explicit prosodic-pragmatic training (4.1) and after the FC (4.2).

3.1. Explicit Prosodic-Pragmatic Training and Information-Seeking Polar Questions

Figure 2 shows the results of the experimental (EXP) participants (P1, P2, P3, P4, P5, P6, P7, P8, P9, P10, P11). In the pre-test, more than half of the EXP participants (P1, P2, P3, P5, P9, P11) seemed to produce an H+L* H% intonation pattern. In proparoxytone and paroxytone words, H+L* corresponds to either a very shallow drop from the prenuclear syllable to the nuclear syllable or a very gradual fall from the previous f0 peak, followed by a postnuclear rise. As far as the boundary tone is concerned, the participants produced a rising f0 (H%) at the end of the sentence. For Irish-English students, this could result from the influence of their native language. Furthermore, previous research on polar questions and language acquisition has shown that L2 learners tend to overshoot final rises at the right edge of non-final clauses (Santiago & Delais-Roussarie, 2015a, 2015b). Similar overgeneralisation of interrogative patterns has also been observed in L1 Italian learners of Spanish (Gabriel & Kireva, 2014).

Figure 2

EXP Group: Percentages of Pitch Accents and Boundary Tones in Proparoxytone and Paroxytone Target Words



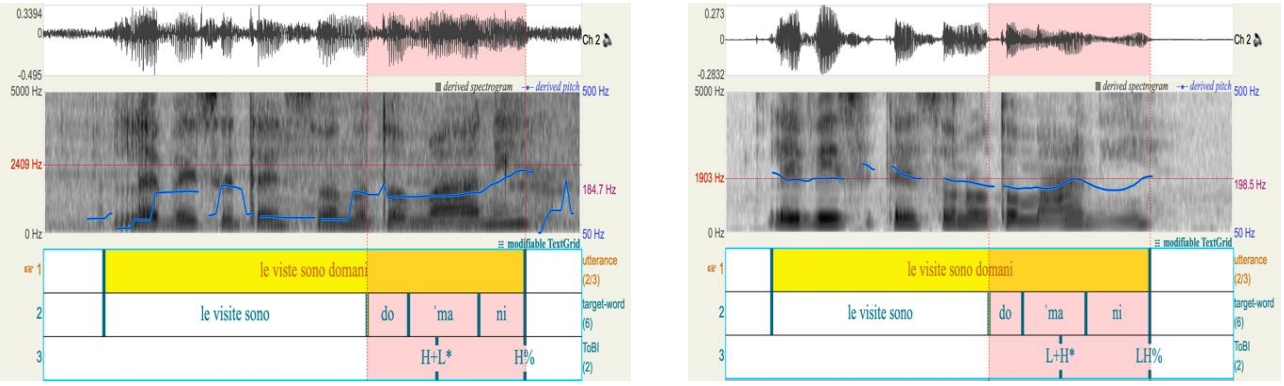
Source: Author's own elaboration.

In addition, in a small percentage of cases, four EXP participants (P4, P6, P7, P8) produced an L+H* pattern characterised by a slight rise in the stressed syllable of the target word. This model is closer to the native Italian pattern, but it is not the same. Only subject P8 produced H*+L (an intonation pattern closes to that of a native speaker). According to the language background questionnaire, P8 is an Erasmus student from Lichtenstein with a B1 level of competence in Italian. In two isolated cases (P6 and P10), the intonation pattern labelled as H+L* is followed by a low boundary tone (L%). P6 and P10 are Irish-English students who were born in Galway and live in the Republic of Ireland. This could be the result of interference from their native Irish English, as demonstrated in a previous study by Nicora et al. (2018).

In the post-test, the EXP participants switched from a falling-rising to a clear rising-falling-rising pattern. As shown in Figure 3, P1 changed the intonation pattern labelled H+L* H% in the pre-test to perform the L+H* LH% intonation pattern after the training. In the post-test, the intonational cue rises on the stressed syllable and begins to fall at the end of the nuclear syllable. In addition to P1, other participants (P2, P3, P9, P11) produced, at different percentages, the nuclear combination labelled L+H* LH%. Although they did not achieve the model of the native speaker (H*+L LH%), they altered their intonation pattern. This step could form part of the stages of interlanguage intonation.

Figure 3

Pre-Test (left) and Post-Test (right) Results for EXP P1: Paroxytone Target Word



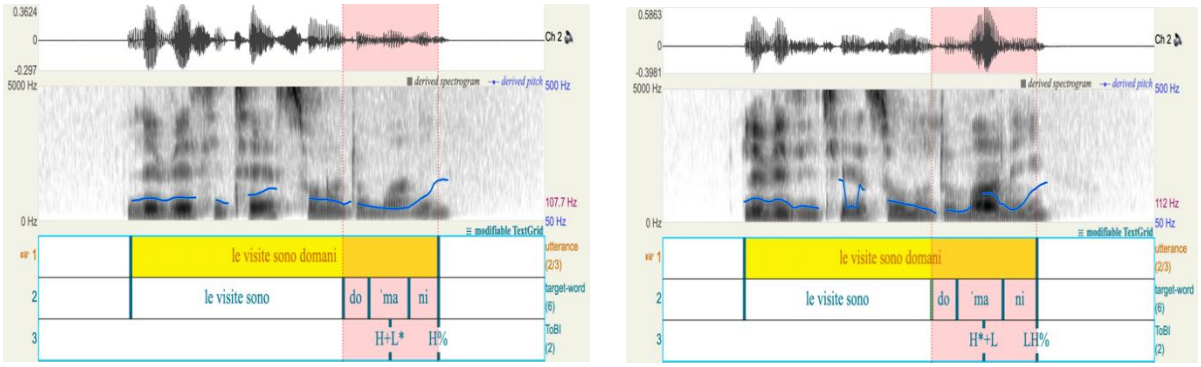
Source: Author's own elaboration.

All the EXP participants (except P2) achieved the native speaker model taught during the training and analysed as H*+L LH% (Figure 4). Within the target word "domàni" (tomorrow), it is possible to notice a peak in the middle of the stressed syllable ma and then a falling-rising boundary tone. Five of the participants (P4, P5, P6, P7, P8) produced this intonation pattern in all the samples. However, participants P1, P3, P9, P10 and P11 still produced, at different percentages, the nuclear combination labelled L+H* LH%. The researcher was therefore interested to find out if any of these participants would be able to produce the native model in all samples after completing the creative subtitling project and the FC.

Concerning boundary tones, all the participants adopted a pattern that was very similar to the proposed Italian model, switching from a low (L%) to a low-high (LH%) boundary tone. After the training, the participants seemed to fall into a different phonological category for pitch accent and boundary tone.

Figure 4

Pre-Test (left) and Post-Test (right) of EXP P5: Paroxytone Target Word

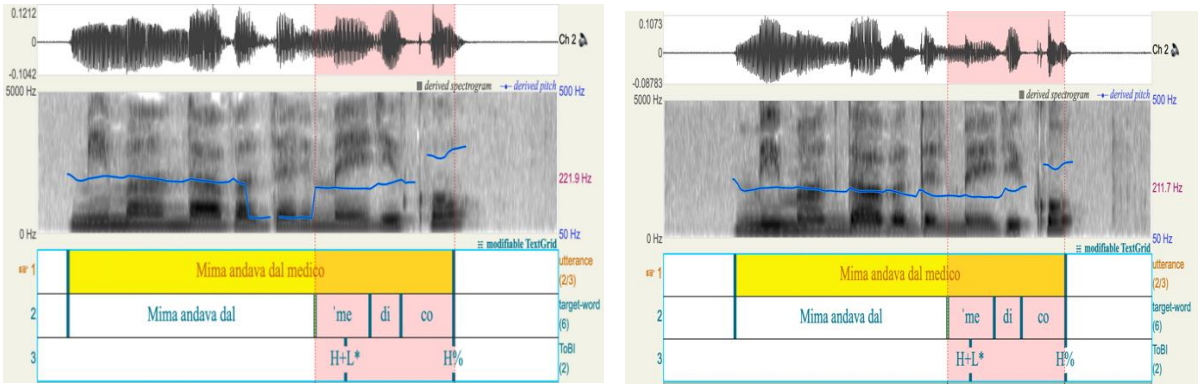


Source: Author's own elaboration.

The control (CTR) participants were coded P12, P13, P14, P15 and P16. All the participants in this group produced the intonational pattern labelled H+L* H% in both the pre-test and the post-test. Figure 5 shows the pre-test and post-test for P16. The CTR subjects did not develop a prosodic-pragmatic competence in Italian FL.

Figure 5

Pre-Test (left) and Post-Test (right) for CTR P16: Proparoxytone Target Word



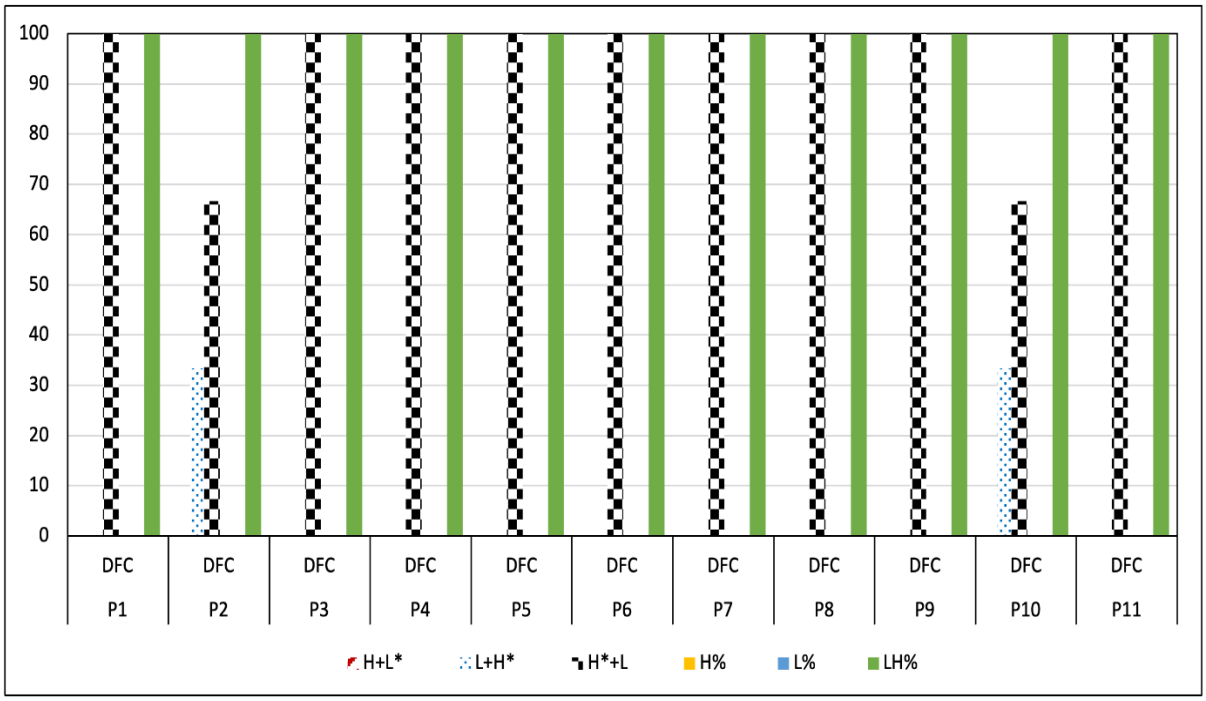
Source: Author's own elaboration.

3.2. FC and Information-Seeking Polar Questions

Figure 6 presents the results for each EXP participant who submitted the FC task concerning information-seeking polar questions. The acronym DFC stands for Didactic Free Commentary. All the EXP subjects were able to reuse the intonation pattern learnt during the prosodic-pragmatic training. In particular, after the FC task, P1, P3, P9 and P11 realised the nuclear combination H*+L LH% in 100% of cases, in contrast to the results of the training. This corroborates the hypothesis on the validity of FC as a learning tool. In addition, P2 was able to improve intonation skills and perform the native model in half of the cases. Overall, the majority of the participants achieved the intonation reference model labelled H*+L LH%, thus validating the hypothesis on the effectiveness of FC in reinforcing intonation in Italian taught as a FL.

Figure 6

EXP Group: FC and Polar Questions – Percentages of Pitch Accents and Boundary Tones in Proparoxytone and Paroxytone Target Words

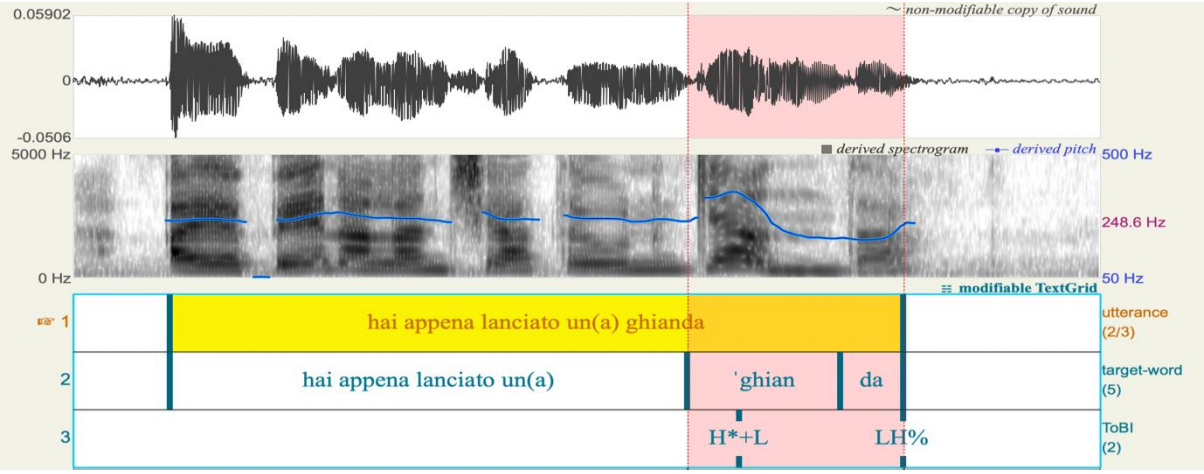


Source: Author's own elaboration.

The information-seeking polar question (in Italian: *Hai appena lanciato una ghianda?*; in English: "Have you just thrown an acorn?") formulated by P11 during the FC task (Figure 7) shows a peak over the nuclear syllable of the target word "ghianda" (acorn), ending with a fall, followed by the final rise in the boundary tone. P11 has improved FL intonation, thereby realising the same pattern of the native speaker model in terms of nuclear configuration.

Figure 7

EXP P11: Example of a Polar Question Realised Using FC

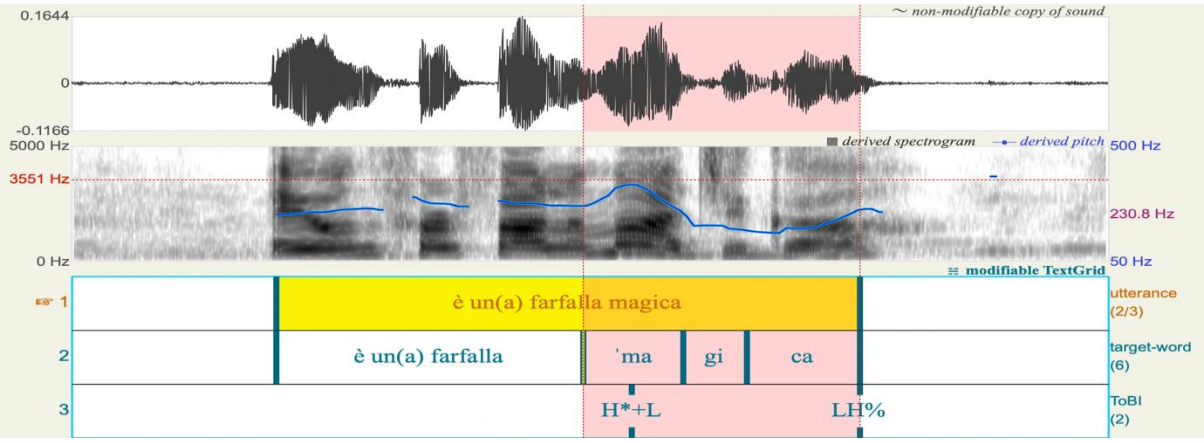


Source: Author's own elaboration.

Although less clear than in the previous example, P4 reproduced the learnt intonation pattern during the free commentary activity by applying it to the utterance "è una farfalla magica?" ("Is it a magic butterfly?"). According to the language background questionnaire, P4 was born in, and lives in, the Republic of Ireland. At the perception level, the influence of Irish English seemed to be strong enough in the pre-test to cause misunderstandings in foreign speech communication. However, after completing the FC activity, P4 realised the pitch accent H*+L and the boundary tone LH%. Indeed, in the target proparoxytone word "magica" ("magic"), over the nuclear syllable (ma) there is a peak followed by a low-high boundary tone (Figure 8).

Figure 8

EXP P4: Example of a Polar Question Realised Using FC

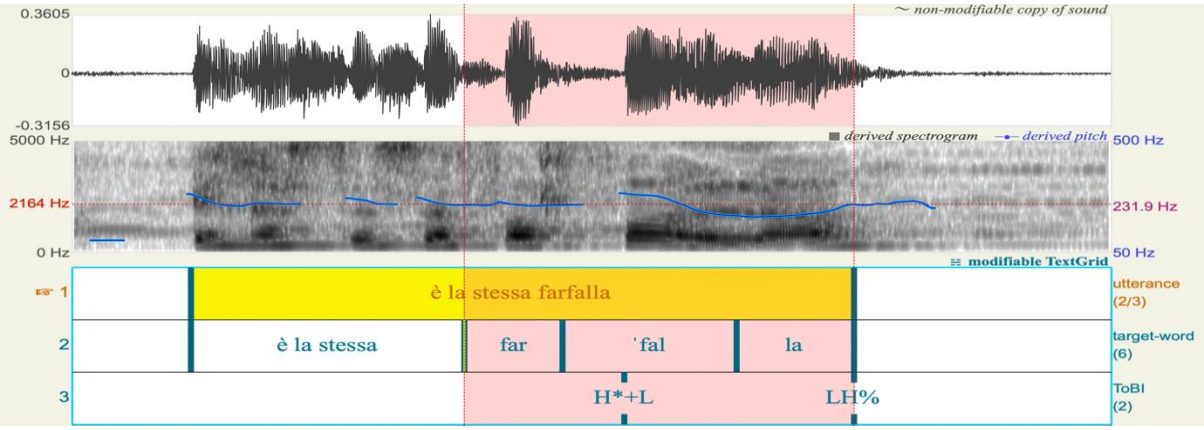


Source: Author's own elaboration.

The EXP participant P8 applied the intonation pattern learnt during the training to the utterance "è la stessa farfalla?" ("is it the same butterfly?"), achieving a result very similar to the native Italian (Figure 9). The intonational cue shows a peak in the nuclear syllable (fal) followed by a fall, and the boundary tone is a distinct low-high tone.

Figure 9

EXP P8: Example of a Polar Question Realised Using FC

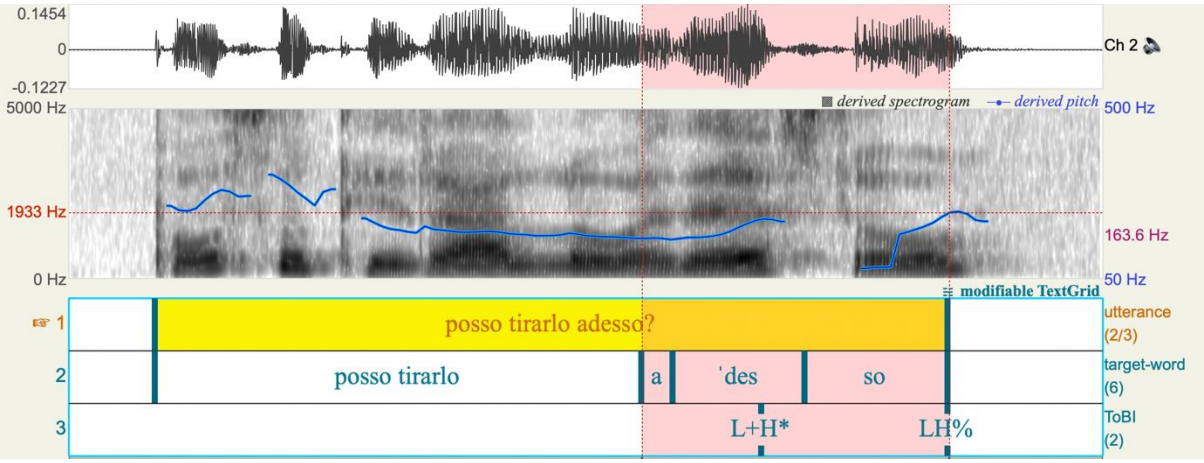


Source: Author's own elaboration.

On the other hand, two EXP participants (P2 and P10) continued to have difficulties in reusing the intonation pattern of polar questions. It should be mentioned that after the explicit prosodic-pragmatic training, P2's performance improved and the participant was able to produce a new phonological category (L+H*), albeit never achieving the model used by a native speaker. Figure 10 presents an example of L+H* LH% applied to the utterance "Posso tirarlo adesso?" ("Can I throw it now?") as realised by P2. It was therefore anticipated that in the FC activity a small percentage would also fall into this phonological category; but remarkably, P2 managed to change the pattern towards the intonation reference model taught by the native speaker (H*+L). These data suggest that the improvement cannot be ascribed to the training alone. One possible explanation is that the participant autonomously looked at the activities suggested during the training to better prepare for the individual recording (the FC), which might have led to some kind of self-correction.

Figure 10

EXP P2: Example of a Polar Question Realised Using FC

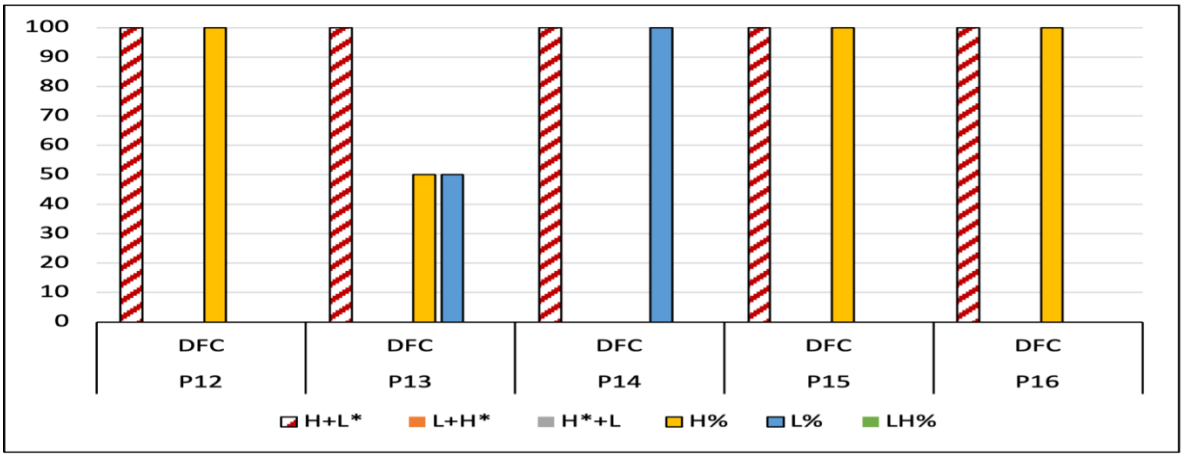


Source: Author's own elaboration.

Illustrating the contrary pattern, Figure 11 shows that none of the CTR participants (from P12 to P16) realised the required intonation model following the FC activity. They continued to use the same pattern produced in the DCT in terms of both pitch accent (H+L*) and boundary tone (H%).

Figure 11

CTR Group: FC and Polar Questions – Percentages of Pitch Accents and Boundary Tones in Proparoxytone and Paroxytone Target Words



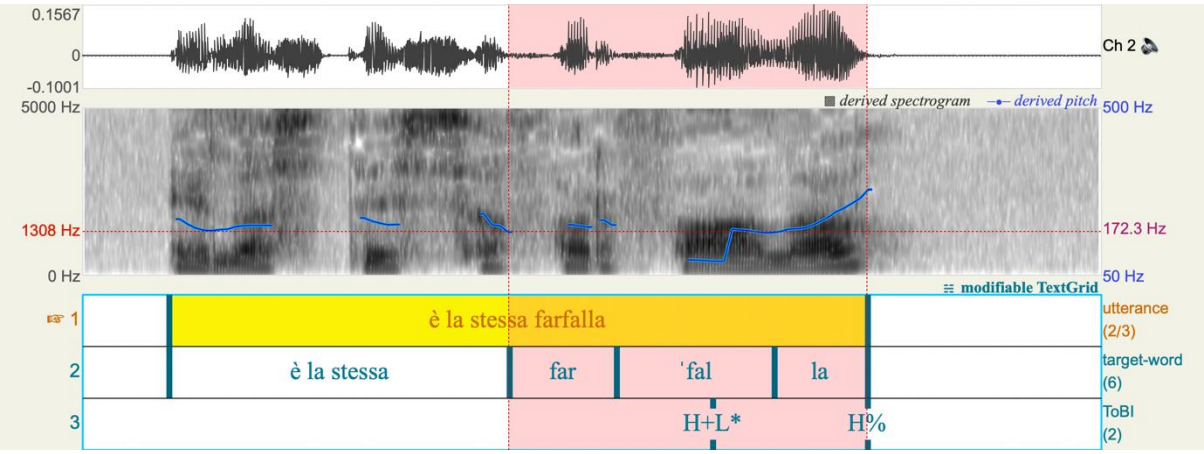
Source: Author's own elaboration.

Figure 12 presents a clear example of a polar question realised by the CTR participant P16 through FC and labelled H+L* H%. The intonational cue falls over the nuclear syllable and rises at the end. As in the previous images taken from the pre-test and post-test, the span of the final rising tone is still

very high. In addition, in a number of cases the participants applied the same patterns that were realised in the pre-test and post-test phase and analysed as H+L* L%.

Figure 12

CRT P16: Example of a Polar Question Realised Using FC



Source: Author's own elaboration.

4. Discussion

The results provide an affirmative answer to the RQ1 of whether university learners of Italian improve their intonation abilities after explicit prosodic-pragmatic training. All the EXP participants in the post-test moved the nuclear combination closer to the model of the native speaker in terms of both pitch accents and boundary tones, thereby validating the effectiveness of the training (Nicora et al., 2018, 2019). The majority of the EXP participants produced the nuclear combination labelled H*+L LH% according to the ToBI system. However, some of these participants produced an intonation pattern labelled L+H* LH%, characterised by a rise that begins to fall towards the end of the nuclear syllable. This pattern could indicate the presence of a stage of interlanguage intonation that is approaching the native model. The results corroborate previous findings in the teaching and learning of FL prosody: the teachability of prosodic features of speech in Italian as a foreign language (De Marco et al., 2014; Mocciaro, 2014; Nicora, 2018, 2019), the reliability of explicit instruction (Yenkimaleki, 2018), and the use of waveforms and spectrograms (Levis & Pickering, 2004). Conversely, participants in the CTR group, produced the same intonation pattern for information-seeking polar questions in the pre-test and post-test phases. Finally, the replication study shows that both the EXP and the CRT group tended to overuse rising patterns in polar questions in the pre-test phase (Pešková, 2023; Santiago & Delais-Roussarie, 2015a, 2015b), even though L1 transfer normally implies falling patterns. This behaviour may imply that participants were using an acquisition strategy (simplification of forms) or overgeneralising an unmarked, universal tendency such as the rise being a typical feature of questions (Bolinger, 1972).

It was expected that after the explicit prosodic-pragmatic training, the EXP participants would be able to reuse the learnt intonation pattern when recording themselves for the FC activity. The results revealed that after FC, all EXP participants improved their intonation skills. In particular, data from the EXP group revealed that the majority of the students realised the intonation reference model labelled H*+L LH%, thus validating the initial hypothesis and affirmatively answering the RQ2 regarding the effectiveness of FC for reinforcing intonation skills. This is evidenced by a higher percentage of nuclear combinations H*+L LH% than the percentage obtained with training alone. This also confirms the validity of using revoicing modes as learning tools (Lertola, 2019), and especially FC (Lertola, 2021; Nicora & Lertola, 2024). Furthermore, the perception-production tasks executed during the training were useful in preparing the students for the collaborative creative subtitling activity, during which they formulated written information-seeking questions before recording themselves reading a script aloud. Creative subtitling served as a metalinguistic reflection on how to formulate questions in Italian and how to choose the context in which it was better to insert the question. To answer RQ2, the findings assert that FC is an effective activity to reinforce learning how to pronounce an information-seeking polar question in Italian, even in a different context.

Finally, the FC activity was also innovatively exploited as a data collection tool to gather semi-spontaneous speech productions. The data provide an encouraging answer to the RQ3 to the extent in which students were able to reuse the appropriate intonation pattern to fulfil the pragmatic function of the act of asking an information-seeking polar question in Italian during the FC activity. Nine out of 11 EXP students properly reused the intonation previously learnt in 100% of their samples. When comparing the data with the results from the replication study, further improvements could be seen, such as an increase in the percentage of intonational nuclear H*+L LH% combinations in the EXP group. This may suggest that by autonomously reviewing the training materials available on the Canvas platform, the students prepared themselves for the individual FC assignment, continuing to practise their intonation in Italian to perform better in the FC. It was also understood that the presence of a complementary revoicing activity in the perception-production training might lead to a more thorough acquisition of target intonation models: both activities are highly motivational and both can be less intimidating for shy students.

5. Conclusion

The teaching of the prosodic features of speech, including intonation, has been long neglected in the FL classroom in spite of the relevance of these features to spoken communication. The research design proposed in this paper suggests making the most of the combined implementation of prosodic-pragmatic training and DAT activities for the acquisition of intonation skills – especially for specific types of utterances (information-seeking polar questions) and their use in context. The results from pre-tests and post-tests run among the participants revealed the positive impact of prosodic-pragmatic training on the development of intonation skills in Italian as a FL. The majority of the experimental participants achieved the native model, whereas the control participants did not

improve. Furthermore, after the free commentary activity, all the experimental participants were able to reuse the appropriate intonation pattern to fulfil the pragmatic function of the act of asking an information-seeking polar question in Italian. Importantly, those who had produced the intonation pattern of the native model in only half of the cases at the end of the training section of the course were able to reuse it in 100% of cases after FC. This verified FC's potential as a reinforcement activity. In addition, producing a script through collaborative creative subtitling might have served as a tool for metalinguistic reflection by enabling the students to reflect on the written form of the questions. FC helped them to practise reusing the intonation patterns they had learnt previously in other contexts, different from those found in the training. Future research should investigate the reuse of intonation patterns learnt in interactional contexts, with the ambitious aim for students to begin to recognise and reuse the intonation reference models learnt within a classroom setting in real-life situations.

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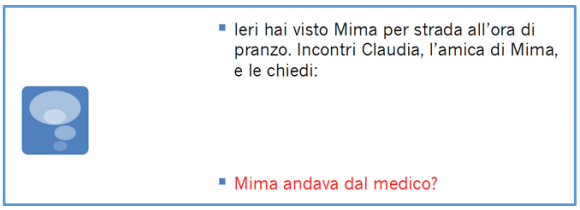
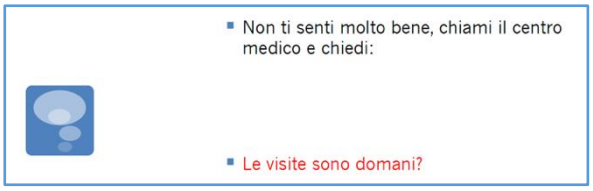
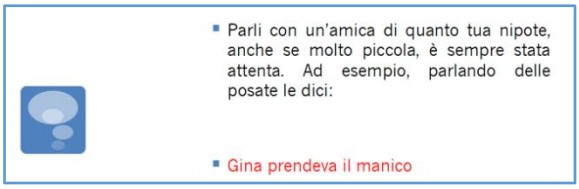
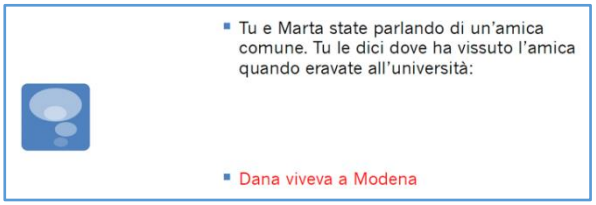
Appendix I

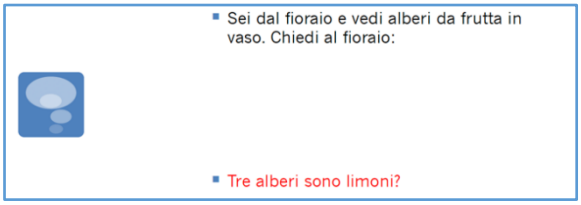
Pre- and Post– Test

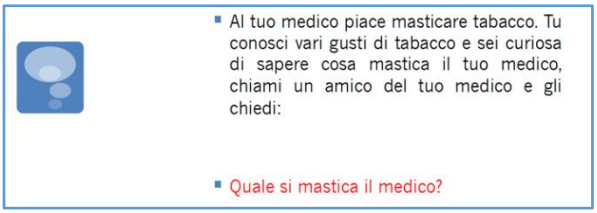


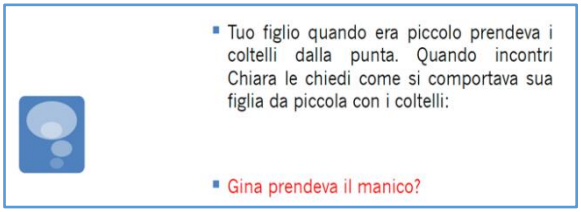


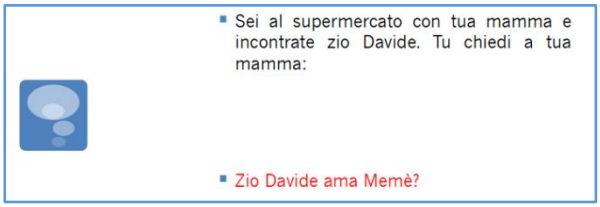


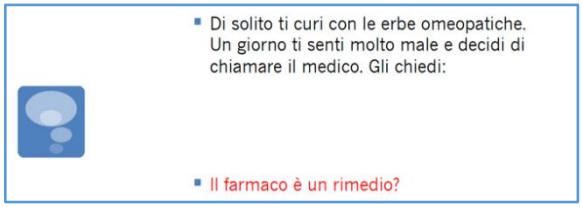


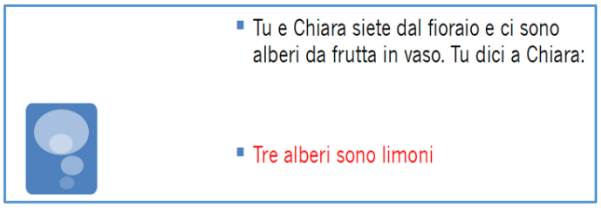


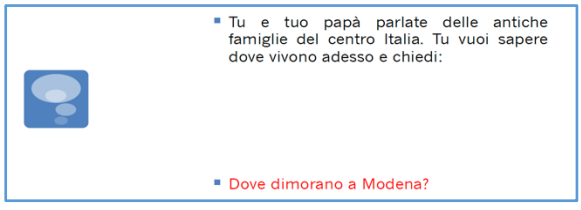












- Chiara non si sente bene e ti chiama per avere un consiglio. Tu le dici:

- Il farmaco è un rimedio

- La settimana scorsa hai rotto lo spremiagrumi. Oggi pomeriggio tua sorella ti dice che la nonna vi stava preparando una limonata. Tu le chiedi:

- Come ci spremeva i limoni?

- Stai preparando un dolce con tua sorella. Nella ricetta ti suggeriscono di usare il manico di un coltello per girare la crema, tu le chiedi se mescolare con il manico funziona bene:

- Come si mescola col manico?

- Tu e Marta state chiacchierando di una vostra amica in comune. Marta ti chiede dove andava Mima ieri mattina, e tu le dici:

- Mima andava dal medico

- Tu e un tuo vecchio compagno di scuola state parlando di amici comuni che sono tornati dopo un lungo periodo trascorso in un'altra città. Tu chiedi:

- Dana viveva a Modena?

- Marta si cura sia con le erbe omeopatiche sia con i farmaci. La chiami e le chiedi cosa pensa sui due tipi di cura:

- Quale si dimostra un rimedio?

- Sei al supermercato con tua mamma e incontrate Zio Davide con la sua fidanzata Memè e lui sembra proprio innamorato di lei. Guardi tua mamma e le dici

- Zio Davide ama Memè

- Marta ti racconta che zio Davide un volta si fermò in un autogrill con la Memè e mangiarono benissimo. Tu le chiedi:

- A quale si fermò con la Memé?

- Marta chiama il centro medico perché vuole sapere quando ci sono le visite mediche. La segretaria risponde:

- Le visite sono domani