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# TEACHING LANGUAGE RHYTHM BY MUSIC TO OLDER ENGLISH LEARNERS OF ITALIAN

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## ABSTRACT

This paper qualitatively investigates the benefits of explicit instructions on rhythm in foreign language teaching. The study involves teaching Italian to 60+ years old native English speakers. The effects of explicit instructions using musical activities, syllable cards, and body synchronisation on learners' experience were examined. The study was designed around a series of novel educational interventions with regular semi-structured interviews and focus groups with participants, in addition to their regular Italian lessons. Participants reported benefits of the novel approaches in supporting their learning. The present study forms a basis of further empirical investigation on pedagogical development.

**Keywords:** speech production, syllables, rhythm, pedagogy, older learners

## 1. INTRODUCTION

In foreign language acquisition, adult learners face particular challenges in learning phonology and phonetics of the target language(s) [1]. In foreign language classroom, however, phonology and phonetics tend not to be taught explicitly for various reasons including that teachers are not sufficiently trained in this area [2, 3].

The present paper reports a qualitative study on teaching and learning rhythm in Italian, using explicit instructions and musical activities. Interpretative phenomenological analysis (IPA) was used (Section 2.2). IPA combines phenomenology (i.e. the study of experience), hermeneutics (i.e. the study of interpretation), and idiography (i.e. a description of the individual). IPA enables a two-stage interpretation process, with the participants trying to make sense of their world, and the researcher trying to make sense of the participants trying to make sense of their world [4].

The teacher involved her students in the research; the study participants were native English speakers who were 60+ years old with French as their dominant second language (L2), learning Italian as their third language (L3). Although incorporating music into language teaching is not a new method [5], the present study shows a case of

older learners acquiring so-called 'rhythmically similar' foreign languages which has not been extensively investigated. Despite the seeming rhythmic similarity between French and Italian [6], the learners still found learning Italian rhythm challenging. In addition, although older learners often face challenges in language learning caused by decline in memory capacity [7], they evaluated that embedding music in regular Italian lessons was helpful for improving their pronunciation together with memory retention and recall.

### 1.1 The syllable in Italian

Italian is often cited as a syllable-timed language showing syllabic isochrony [6, 8, 9]. However, not only the syllable-timing of Italian but also the rhythm typology has been questioned [10, 11, 12, 13].

The impression of syllable-timing seems to be partially caused by the relatively simple syllable structure. Although Italian permits a complex onset (e.g. CCC in *spregiare*, 'to despise'), [14] reported that 96.40% of the syllables in the LIP (Frequency Lexicon of Spoken Italian) were CV, CVC, V, VC, CVV, or CCV out of 19 possible types.

Despite the simple syllable structure, locating a syllabic boundary is not a trivial matter even for native Italian speakers. The syllable division rules proposed in 1969 by the Ente Nazionale Italiano di Unificazione (an Italian association which performs regulatory activities) state that diphthongs must not be split, and therefore we have, for example, *au.to*, not *a.u.to* ('car') and *vio.la*, not *vi.o.la* ('purple'). We can, however, split vocalic clusters forming a hiatus, as in *a.e.ro.pla.no* ('plane') and *po.e.ta* ('poet'). Sometimes native Italian speakers are uncertain about the intuitive division of syllables. For instance, *viola* can be considered either a disyllabic word *vio.la* with a diphthong or a trisyllabic word, *vi.o.la* with vowel hiatus [15].

### 1.2 Lexical stress in Italian

Italian words are classified into five categories depending on where the stress is. (In this paper, stressed syllables without orthographic stress marking are capitalised.) The five categories are:

- *tronche*: word-final, *sofà* ('sofa'), *caffè*
- *piane*: penultimate, *UOmo* ('man'), *Libro* ('book')
- *sdrucchiole*: antepenultimate, *TAvolo* ('table'), *veRifica* ('he/she verifies')
- *bisdrucchiole*: fourth-last, *veRificano* ('they verify'), *VENdimelo* ('sell it to me')
- *trisdrucchiole*: fifth-last syllable, *REcitamelo* ('recite it to me')

Stress assignment in Italian is, in general, not predictable in polysyllabic words, and it is predictable from orthography only in a small number of cases. The limited predictability of stress assignment is an issue with which every speaker has to deal [16]. For assigning stress in polysyllabic words, language users tend to rely on the frequency information (i.e. biased towards frequent *piane* pattern) and phonological analogy (e.g. deriving the stress pattern from other words with the same final phonemic sequence) [17].

### 1.3 Teaching and learning Italian syllables and stress

In Italy, recognising syllables is considered a very important step for learning reading and writing [18]. In primary school, children are explicitly taught the syllabification rules. They are taught that, for instance, geminates are always divided, e.g. *can.ne* ('reeds'), *far.ro* ('spelt'), and that, for consonant clusters formed by three or more consonants, the boundary is placed before the second consonant: e.g. *con.trol.lo* ('control'), *al.tro* ('other').

It is probably not surprising that English learners of Italian find it challenging to learn the syllable division and stress assignment (See Sections 1.1 and 1.2). For instance, in [19], English learners of Italian carried out a reading aloud task for non-words with penultimate, antepenultimate, and ambivalent stress neighbourhood sequences in Italian. Learners heavily relied on the dominant stress pattern in Italian, *piane*, assigning stress to the penultimate syllable, although this tendency decreased as their Italian vocabulary size increased (also see [20]). Because most Italian words are *piane* [21], students often make an error producing stress in the penultimate syllable for *sdrucchiole*, *bisdrucchiole*, and *trisdrucchiole*. For instance, *Stefano* is a *sdrucchiola* (*STE.fa.no*), but learners tend to mispronounce it as *Ste.FA.no*.

Learners often ask questions such as "why in Italian are accents in writing compulsory only to indicate stress on a word-final vowel, and not on the antepenultimate?" [16]. For writing, words with stress on the last syllable must carry a graphic accent (i.e. *città*, 'city'). However, the graphic marking of

the non-final stress is optional. Therefore, *principi* in writing can be two words differentiated by stress assignment, *PRINcipi* ('princes') vs *prinCIpi* ('principles'), in speech.

Finally, we observed that native English speakers seemed to struggle to perceive and produce geminates, e.g. *capello* ('hair') vs *cappello* ('hat'). Producing a geminate (e.g. *pappa*, 'mush, baby food') as a singleton counterpart (e.g. *papa*, 'pope') is a rhythmic error changing a word's meaning.

## 2. METHODOLOGY

### 2.1. Participants

Participants were eight 60+ years old native speakers of British English (P1–P8) with varying degrees of proficiency in other languages: all of them studied one or two other European languages (French, German, Spanish, Russian) and Latin, and three of them were language teachers in secondary schools in the North West of England. They were keen language learners. For the majority of participants, French was a dominant L2 (four studied it to degree level, three throughout secondary schooling, one studied it through primary schooling and has been studying it informally in recent years). All participants were learning Italian as L3 by attending the author LZ's recreational classes (2 hours per week) as a group for a minimum of four years.

### 2.2. Data collection and analysis

The author LZ, who is a native Italian speaker and the teacher for the participants, carried out semi-structured interviews and led focus groups. Interviews were carried out individually and, on one occasion, with two learners in tandem. Each interview lasted for approximately 40 minutes. The interviews were audio-recorded and manually transcribed.

First, interviews with each participant and one focus group meeting took place; participants discussed their love for the language, their experiences with Italian and with other foreign languages they had acquired and the obstacles they faced. After these meetings, regular conversations and class activities were carried out. The interviews were scheduled in between classes (eight intervention classes) to monitor participants' progress and reflection about the novel teaching and learning methods. In addition, participants regularly emailed about their experiments with short rhymes (and suggestions for more activities and songs to try out) to the author LZ, showing motivation and desire to explore further. This paper describes the activities which took place over six months.

After the meetings with participants, a list of significant statements was identified for the interpretative phenomenological analysis (IPA) which aims to capture participants' detailed examinations of personal experience without theoretical presumptions [22]. IPA is a rigorous approach employing in-depth qualitative analysis and requiring continuous and active reflexivity of researchers and participants [23]. The participants' experiences of learning the Italian language and their perceptions of their progress, rather than effective approaches to language learning, were focused on in the data collection process. The transcribed notes were subsequently categorised into themes. The final narrative included both the learners' account of their experiences in their own words and interpretative commentary. The study was approved by the ethics committee of the University of Central Lancashire (reference BAHSS0299).

### 2.3 Teaching materials and activities

In the classes, three methods were broadly used; musical activities, syllable cards, and body synchronisation. For all activities, the teacher emphasised the stressed syllable, particularly for *parole sdrucciole* and words which a number of students identified as having 'too many syllables'. The positive effects of incorporating music into language learning is well-known [24, 25]. For instance, a large body of research shows the benefit of singing in the target language(s) [26] and synchronisation [27].

For musical activities, for instance, the teacher presented the national anthem of Italy upon request of participants who wanted to consolidate the lexicon of kitchen objects. The song starts with *Fra.TEL.li d'I.TA.lia*, with the stress on the 2nd and the 5th syllables. Then participants carried out activities aligning alternative words with the same rhythmic structure producing combinations such as *col.TEL.li* ('knives') and *for.CHET.te* ('forks'), singing and tapping for each syllable with pens.

Another specific example is a full teaching session based on *La donna è Mobile* ('The woman is fickle') from Giuseppe Verdi's *Rigoletto*. The learning activities were designed to emphasise syllable division and stressed syllables. The aria was initially played to students, who were provided with the text, and they immediately started to sing along. The first listening was followed by activities of word stress recognition (e.g. *MOBILE*). As shown in Fig. 1, there is a correspondence between musical notes and syllables. The third note (D) is aligned to *na* and *è* because of synaloepha [28] which is a contraction of two adjacent vowels into one syllable. *Mo.bi.le*

corresponds respectively to the musical notes F, E, and C. The teacher emphasised the importance of the F note: the stressed syllable in *MOBILE* is aligned to the highest note (F) and this allowed learners to link the stress and melodic prominence.



**Figure 1:** Example of musical score for *La donna è mobile*

For the following activity, learners replaced *MOBILE* with other trisyllabic adjectives. The students realised that *COMICA* would work because it is a *sdrucciola* like *mobile*, whereas *felice* would not because it is *piana*, as the *piana* creates a mismatch between stress and the musical prominence (P4: "*La donna è comica*... It fits..."; P5: "*La donna è felice*... It doesn't work... Because it's *piana*").

Other examples used for teaching include folk songs (for instance *Bella ciao*, suggested by participants), a poem put to music using the Marseillaise tune, the Italian anthem and arie d'Opera.

Activities with paper cards were used to increase students' awareness of how a polysyllabic word is decomposed into syllables. The teacher prepared paper cards, each card showing a syllable (*ca*, *vo*, *lo*, etc.). Participants, in pairs, formed as many words as they could, using the cards (e.g. *cavolo* 'cabbage', *casa* 'house'). At the end of the activity each group shared their words. For words that they found difficult to pronounce and to recall (for instance, students often made a mistake of producing *ca.me.riè.re*, 'waiter' as *ca.mie.re*), they practised pronouncing them with body movement such as clapping and tapping to each syllable (using pens or other objects).

### 3. RESULTS AND DISCUSSION

The themes identified at the initial interviews included: desire to keep the brain active; high level of competence in other foreign languages; learning Italian later in life and without having to take formal exams; positive perception of the "Italian learning journey"; feeling of having reached a plateau (P5 blames the pandemic and the lack of trips to Italy where they could use the language); their age being partly responsible for memory decline; comparison with being a young learner ("When I was young I

could sit down and learn lists of words without context, but now it doesn't work").

The participants reported their high motivation with a willingness to try anything to improve. All eight participants acknowledged a "change in learning" due to ageing and the fact that they are no longer forced to learn reams of vocabulary as they did for school exams.

Importantly, at early interviews participants identified learning vocabulary and its rhythm as the biggest challenge; they commented that Italian stress is the most difficult part, not knowing how to stress an unknown word (P6: "The pronunciation is just difficult!"; P3: "Words which come from the same root as English are fraught with danger. Thus, *Acido*, ..., *amBìguo* and *GONdola* are easy because the stress is the same [as in *acid*, *ambiguous*, and *gondola* in English]. However, words like *aCRObata*, *aNEDdoto*, ..., *inCOgnito*, *oRIgano* and *stereOtipo* are trickier: they don't exactly trip off the tongue!"). That is, older learners experience difficulties in L3 vocabulary retention and recall due to a memory loss and a scarcity of strategies to facilitate the learning process. Despite that fact that all participants had experience in learning French which is considered rhythmically similar to Italian [6, 29], the learners reported that their experience in French did not directly benefit their Italian (P1: "I studied French at University level. I never use it with Italian because I know it doesn't help! I usually put the stress on the penultimate syllable because I was told that it works more times than it doesn't, but I am finding out it's not the case!"). The majority of the participants expressed the desire to "experiment" with pronunciation through classical music.

As they were progressing with their learning, they reported the benefits of explicit instructions with music. In particular, Western classical music with clear metrical structure seemed to be useful as educational materials for improving learners' awareness about the syllable division and stress assignment (P3: "The stress on words is my weak point, but the rhyme strategies and music really help"). One participant reported significant improvements in word recall following the session on *La donna è mobile* (P2: "I wrote something using rhyme and rhythm. I did *La donna è mobile* with all the *-abile*, *-ibile* etc. words; I did something to try help me with the meaning of *pronto* and *presto*, and that worked. It was a rhyme and has worked").

Using the explicit instruction on the syllable division using the cards and movements was also proved to be useful for learning geminates: for instance, when learners break words like *cap.pel.lo* ('hat') into syllables, they were "forced" to produce and perceive the geminates.

The participants' broad evaluation of the musical activities was positive (P7: "without realising it, it's already in your head"). Participants indicated that classical music, due to catchy melodies, a dramatic build and some artists' enunciation, is particularly suited for Italian language learning. Everyone admired the clarity of Luciano Pavarotti's diction, "*as clear as a bell*" [30], as the tenor emphasises stressed syllables in his singing.

The Marseillaise tune, used by Italian songwriter Sergio Endrigo to accompany a Gianni Rodari's children poem called *Napoleone*, also received positive feedback from participants, because they were familiar with the music: P5 said they were having breakfast, clicked on the link which was sent by LZ and stopped eating. They wanted to give full attention to the song because they recognised the music. When P7 was asked "Would it have been the same with an unknown tune?" they responded: "No, not for me".

#### 4. CONCLUSIONS

The present study shows that older learners of Italian benefit from explicit training in syllable division and rhythm. After the explicit training using classical music, syllable cards and body synchronisation, all participants reported to have gained an awareness of syllable structure. Syllable-timing is not a satisfactory label for Italian [31] and Italian has a complex stress system. Explicit instructions on the language-specific syllable division and stress assignment rather than the broad rhythm typology classifying languages into stress-timed or syllable-timed would help learners.

The activities described here show how syllable and stress rhythm can be taught effectively for older learners. They reported that the instructions were particularly helpful for improving their understanding of Italian geminates and stress assignment. Understanding syllables and stress seems to be an important step for learners to develop their strategies to enhance memory retention and recall.

The present study took a qualitative approach. Further study investigating the measurable effects of the training is required. Finally, the present study shows that pedagogical development combining knowledge in phonetics and music can lead to fruitful outcomes.

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