

Italian as L2 in Romanian preschoolers: evidence from a perception and production task

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Understanding how the phonetic and phonological properties of a language influence the acquisition of a second language (L2) is of high importance: adults learning a new language face situations in which phonemes of their first language (L1) are absent in the new L2; similarly, situations in which positional variants in L1 are phonemes in L2 (or vice-versa) may also occur. Moreover, they also need to cope with cognitive challenges (categorization of phones and their possible combinations) as well as with motor control abilities (learning new articulatory habits). Notwithstanding this enormous task, when entering kindergarten at age 3-6, children are in the optimal condition to become simultaneous bilinguals by learning their mother tongue and the second language.

The current proposal stems from the material collected within the “CNR-IC.P10 Migrazioni” project and aims at shedding some light on the difficulties faced by children in the acquisition of an L2 in order to support the development of rehabilitative and educational intervention activities and tools to suit the needs of multilingual children. Following state-of-the-art studies on bilingual competences and on the linguistic development of bilingual children, the proposed study aims at deepening our understanding of the mechanisms that drive the phonetic and phonological acquisition of Italian as L2 and the influence exerted on it by the phonetic-phonological structure of L1 (Romanian). The current study focuses on a group of 17 bilingual children (Romanian-Italian, age 61-83 months) all born from parents immigrated in Italy having Romanian nationality. Technically speaking, the participants are in the majority of cases “early sequential bilinguals” (Marini, 2014). The research question we try to answer here is whether differences between the phonetic-phonological system of Romanian (ROU) and Italian (ITA) may influence the perception and the production of Italian as L2 in Romanian children. In Romanian the phonemes /dʒ/, /ɲ/ and /ʎ/ are indeed absent as well as the gemination of consonants with distinctive function (Galatà, Zmarich, 2011).

A discrimination test and a production test (by repetition) based on the same non-words targeting, among others, also phonemes absent in Romanian (that we consider as “critical” consonants), were administered to both groups of children. The discrimination test is based on the opposition, in non-word pairs, of Italian phonemes absent in Romanian with phonemes present in Italian: the difference among the opposed phonemes involves one phoneme in each pair whose opposed one differs for a maximum of 3-4 distinctive features (Jakobson, 1966). The test includes also non-word pairs for sonority and gemination.

In order to evaluate more ecological parameters usually found in spontaneous speech, an additional task has been administered to both groups of children in order to elicit their oral production that included two painted story strips that each child had to describe (cfr. Huber, Gleber, 1982; Marini et al., 2011; Paradis, 1987; Marini et al., 2015). The following indexes were measured: verbal productivity, narrative fluency, speech rate, mean length of utterance (MLU), percentage of disfluencies, percentage of incorrect words and percentage of phonological errors. The performances resulting from the narrative task were compared with age-matched normative data coming from monolingual Italian and English children (cfr. BVL 4-12, Marini et al. 2015; Yairi, Ambrose, 2005; Hall, Amir, Yairi, 1999; Zanobini et al., 2012).

The children’s parents were further asked to fill-in a questionnaire addressing both linguistic and socio-demographic factors known to be significant for reaching fluency in Italian L2 (Galatà, Zmarich, 2011).

For the discrimination test, the children’s answers (same/different) were coded in a unique matrix. The analysis was carried out both on the overall mean of the correct responses as well as on the mean of the correct responses grouped by age. For the production test, the repetitions of each child have been analysed: a) acoustically, by means of segmentation and labelling via PRAAT. The duration of target consonants in tokens with and without gemination has been measured for comparison; b) according to the classical analysis in terms of error patterns, by coding the repetitions via PHON by matching the proposed targets and the children’s actual productions allowing us to qualify and quantify all types of errors/phonological processes.

The analysis of the children’s responses to the discrimination test showed that: 1) ROU children better discriminate non-critical consonants as compared to those that we considered critical, confirming the hypothesis that these children would have had a general difficulty with consonants absent in their L1; 2) greater difficulties emerge in the discrimination of the gemination contrast involving critical consonants; 3) there is an improvement in the discrimination ability for all the consonants considered (both critical and non-

critical ones) as the age of the children increases: one could hypothesize that the children's maturation and higher exposure to L2 lead to a better discrimination.

The results from the segmental analysis considering the children's performances in the production test showed that ROU children have more difficulty in the production of those non-words containing sounds that are absent in the Romanian language. This result fully confirms our expectations: the percentage of correctness of non-words that do not contain critical sounds shows a higher mean value. Moving to the acoustic analysis of the produced phonological contrasts, results show that, on average, ROU children have acquired the gemination contrast in production and have also assimilated the Italian phonological rule requiring that the duration of the vowel preceding single or geminated consonants has to be inversely proportional to the duration of these last ones. Major difficulties in the acquisition of L2, as well as the influence of the underlying L1 system, emerged mainly at the phonetic and phonological level: the ROU children produced a high number of incorrect words, with performances comparable to those of ITA children aged between 36 and 42 months. On average, despite the adequate phonological discrimination abilities, 1 phoneme out of 10 has been omitted or substituted: as evidenced by the repetition test, phonemes present in the Italian phonological inventory but absent in Romanian show a high percentage of incorrectness. However, a significant improvement in the correctness of the responses was found as the children grew up in age and as the verbal productivity and fluency increased, as a consequence of the influence exerted by the maturation of higher cognitive functions.

Concerning the measures of lexical and verbal fluency, the ROU children produced a number of words that is average with respect to what expected for the age. In spite of the presence of a reduced narrative fluency, the articulation rate and the number of disfluencies do not deviate significantly from the norm: the children's speech is characterized by the presence of numerous silent pauses and hesitations between one uttered sentence and another. The syntactic complexity of the sentences uttered by the bilingual children is average, despite the MLU remains lower as compared to monolingual peers. However, the increase in MLU as the age increases, proved to be more rapid in the bilinguals, allowing the children in the older group to reach average performances comparable to those found in Italian monolinguals.

Correlating these results with the information captured in the questionnaires, some considerations may be drawn. Age of first systematic exposure to a new language is among the factors having a fundamental role in the acquisition of L2: it has been observed that an early access to the kindergarten determines better discrimination abilities. Influence is also attributed to the input received by the child in the family context: children exposed to L2 since the first months of life (with one or both parents speaking Italian at home), showed a quicker acquisition of phonetic and phonological aspects of L2.

Concluding, the proposed study offers an insight into the main difficulties that a Romanian preschooler faces in the acquisition of Italian as L2. The study also confirms the effectiveness of the adopted instrument (the non-word repetition test), that proved to be extremely suitable in capturing such difficulties; it furthermore contributes to highlight how factors depending on individual variables and on the degree of exposure to L2 may influence the linguistic competences shown by the children.

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