

Italo-Romance Phonological Rules and Indo-Aryan Lexicon: the case of Abruzzian Romani

1.0 Abruzzian Romani and the sources for its study

Abruzzian Romani is the Indo-Aryan language spoken by the Roma communities who settled in Abruzzo, Molise and the surrounding areas in the 16th century circa. In their long permanence in the Italo-Romance linguistic space Abruzzian Romani speakers have been bilingual for centuries, owning a linguistic repertoire consisting of Romani and Abruzzese. At the present time a significant number of them can be considered trilingual, having the last generations acquired a more or less ample knowledge of the regional variety of Italian. Abruzzian Romani preserves its role of endo-communitarian and identity language very well, while the function of eso-communitarian code is obviously fulfilled by the Italo-Romance branch(es) of the repertoire, especially by Abruzzese. The vitality of Abruzzian Romani has been repeatedly highlighted, especially in comparison with the clear condition of decadence of the other Romani varieties spoken in Southern Italy (cfr. e.g. Soravia 1978: 4; 2009: 75).

The sources for the study of Abruzzian Romani are not scant, but many structural and lexical aspects remain almost unexplored up to the present day. Even the most ancient texts in Italian Romani are probably based on a dialect which is very similar to Abruzzian Romani. Some sentences in a variety of this dialect have been identified by Leonardo Piasere in a comedy by Florido de Silvestris, titled *Signorina Zingaretta*, published in Viterbo in 1646 (Piasere 1994); however the rough transcription makes any interpretation of these passages very difficult (some attempts in Spinelli 2003: 134-135). The first documentation of Abruzzian Romani in an academic piece of work can be found in Graziadio Isaia Ascoli's pioneering book *Ziguenerisches* (1865). One of the most original sections of the book (pp. 127-154; Italian translation in Portandolfo-Piasere 2002) is entirely devoted to a variety called

Süd-Italiens Ziguenerisches and a significant part of Ascoli's informants came from Molise and Abruzzo. Seventy years later the Abruzzian Romani spoken in Annunziata di Giulianova (close to Teramo, Abruzzo) was the subject of an extensive survey for point 603 of ALI (Atlante Linguistico Italiano). Ugo Pellis, the major data collector of the ALI, managed to gather from a unique informant (a woman of about thirty), an abundant collection of lexical items and some sentences. For their novelty and uniqueness these materials were immediately published by Pellis (1936). In the Sixties and Seventies interest in Abruzzian Romani was reawakened by Giulio Soravia's (1971, 1972) and Sergio Partisani's studies (1972). In the following decades the documentation increased thanks to lexical collections and to the publication of oral texts (Morelli-Soravia 1998; Manna 1993 and 2002) as well as poems written by learned Abruzzian Roma such as Santino Spinelli. In Molise more recent fieldwork headed by Giuliana Fiorentino has led to the whole questionnaire of the Romani Morpho-Syntax Database (RMS) being recorded by means of two different informants in Campobasso. These important recordings are now available on the RMS web site (<http://romani.humanities.manchester.ac.uk/rms/>) and point to two different varieties of Abruzzian Romani: the first variety is heavily influenced by Abruzzese (IT-007 Molise; female informant), while the second variety (IT-010 Molise, male informant) shows some interference rather with the Regional Italian spoken in Abruzzo and Molise. Grammatical outlines of Abruzzian Romani have been written down by Ascoli (1865: 129-154), Soravia (1977: 83-90) and Morelli-Soravia (1998: 179-211).

2.0 New phonological rules and traditional lexicon

A careful examination of all these materials reveals that Abruzzian Romani shows a high degree of retention of the Indo-Aryan model from which it originates: phonological units and the lexicon have undergone very slight modifications, which are also few in number, with respect to early Romani; also the majority of

morphological units and processes, except for nominal declension, which has been lost, are clearly in continuity with the Indo-Aryan model. For these reasons in the landscape of European Romani, Abruzzian Romani can be considered a rather conservative dialect. In this regard Yaron Matras' words are very clear: in a study devoted to the classification of Romani dialects, he considers Southern Italian Romani, Dolenjska Romani, as well as British, Iberian and Epirotic Romani to be a "series of peripheral dialects" forming "relic areas" (Matras 2005: 29). Of course Abruzzian Romani also shows significant innovations, which separate it from other Romani dialects. This is true especially in the domain of the phonological rules, which appear to have been largely borrowed from Abruzzese dialects (spoken in Abruzzo and Molise; cfr. Giammarco 1960; Giammarco 1979; Marinucci 1988; Bigalke 1996). The outcome is rather unusual: an Indo-Aryan language, well preserved in the majority of its features, except for the phonological processes, which have been replaced by Italo-Romance (Abruzzese) rules. It is clear that a collocation of Abruzzian Romani in the borrowing scale purposed by Thomason-Kaufman (1988, 74-76) is not devoid of problems: the socio-cultural influence of the Italo-Romance speaking community being very strong and the structural borrowing limited to phonology and to some functional word, one could place Abruzzian Romani among the cases of strong cultural pressure with moderate structural borrowing (Thomason-Kaufman 1988: 83-91). An exploration of the above-mentioned sources, especially the recorded speech in RMS, enables a rather accurate description of these phonological rules borrowed from Abruzzese, which have so far only sporadically pointed out, but never accurately described nor investigated. Such a description will be the primary aim of this contribution: moreover, some remarks of explicative nature will be added to the descriptive representation of the borrowed rules. The investigation of these phonological outcomes of bilingualism can provide new evidence about the dynamics of interaction between the languages in the phonological competence of bilingual speakers, on the whole an underexplored topic (some reflections in Campbell 1976; Campbell 1998: 74; Thomason 2001: 87;

Thomason 2006; Matras 2009: 229-230). In this contribution to refer to the different sources for Abruzzian Romani the following abbreviations will be used:

Pe = Pellis 1936 (tr. = translations)

RMS 7 = <http://romani.humanities.manchester.ac.uk/rms/> female informant (IT-007 Molise)

RMS 10 = <http://romani.humanities.manchester.ac.uk/rms/> male informant
(IT-010 Molise)

ARms = Morelli-Soravia 1998

As for other Romani dialects quoted for comparison: PS = Piedmontese Sinti, LS = Lombard Sinti, CR = Calabrian Romani as spoken in Reggio Calabria, KL = Kalderashitska, WR = Welsh Romani.

2.1 Propagation of /u/

The propagation of /u/ is a widespread phenomenon in many Southern-Italian dialects (cfr. Tuttle 1985, where the label “assimilazione permansiva” is used; Savoia 1987; Rizzi-Savoia 1993; Schirru 2008 and 2012-2013) and consists in the insertion of a non-etymological [w], sometimes to be interpreted as the second part of a complex articulation [...^w], after the onset of a syllable, if the preceding syllable, within the phonological word, contains /u/. The process can be exemplified by the Southern Italo-Romance type ['ka:pə] “head” vs [lu 'kwa:pə] “the head”; as for Abruzzian Romani the propagation is well attested to in all the available sources and the following examples suffice to define the underlying phonological rule (a detailed discussion in Scala 2015):

1. [ni 'kaftə] “stick” (Pe 3077) vs [u 'kwaftə] “the stick” (Pe 543)
2. ['ke:rə] “house” vs [u 'kwe:rə] “the house” (Pe 1497)
3. [ni kafu'kwo] “a coin” (RMS 7 709)
4. [so kwɨn'ɲen a'iddzə] “what did you buy yesterday?” (RMS 7 550), cfr. [kɨn'ɲenə] “you (pl.) bought”
5. [ni 'ga:tə] “a shirt” vs [u 'gwa:tə] “the shirt” (Pe 634)
6. [ʃuŋ'gweskərə] “parsley” (Pe 1969)

The rule is unknown to other Romani dialects, even to Calabrian Romani, a sub-branch of Southern-Italian Romani (Soravia 1978), and it is clearly borrowed from Abruzzese, but trigger vowels and target syllables are partially different. In Abruzzese /u/ is the only trigger and the /u/ propagation affects only syllables containing /a/ in the nucleus. Romani propagation adds /o/ (cfr. n. 4) to the triggers and also occurs in syllables with /i/ (cfr. n. 4), /e/ (cfr. nn. 2 and 8) and /o/ (cfr. n. 3) in the nucleus. Moreover the phonological inventory of Abruzzian Romani includes a fricative velar phoneme /x/, which is targeted by the propagation rule (cfr. nn. 7 and 8). This situation is very significant: the rule has been borrowed with reference to the features implied in the allophonic process and not with reference to the phonological units of Abruzzese; yet the outcome is that the rule also affects a velar phoneme unknown to the Abruzzese phonemic inventory, such as /x/, and occurs before vowels, such as /e/ and /i/, which exist in Abruzzese but are extremely rare after /k/ and /g/ on account of the Romance palatalization of velar stops before front vowels. The extension to syllables containing /o/ in the nucleus completes the set of targets, excluding only /u/. In this process loanwords play no role and the imitation of Abruzzese /u/ propagation is a mere application of an Abruzzese phonological rule to the Abruzzian Romani phonemic inventory via phonological features and not via phonological units.

2.2 [a-] prosthesis in words beginning with a consonant

The prosthesis of [a-] is not prescriptive, but it is very frequent in Abruzzian Romani. Sometimes it requires a lengthening of the etymological initial consonant; examples are innumerable, cfr. e.g. [ad'de:lə] “it rains”, [appə'ne:le] “he/she says”, [aj'jo:və] “he”, [addʒa'ne:sənə] “he/she knew”, [ake're:nə] “they make” etc.; for a comparison with other Romani dialects cfr. Piedmontese Sinti ['dela], [pe'nela], [jov], [dʒa'nelas], [ke'rena]. The same phenomenon occurs in Abruzzese (Giammarco 1960: 27) and in other Southern Italo-Romance dialects, and old Southern-Italian texts too provide

extensive documentation of it. In Loise De Rosa's *Ricordi*, a Neapolitan text dating from 14th century and edited by Formentin, there are forms such as *accuoro* "chorus", *acczim(m)ato* "sheared cloth", *acczim(m)atore* "shearer", *ademandare* "to ask", *adiricczo* "advice", *affatura/affattura* "enchantment", *affattu(c)chiara* "witch", *agratevele* "pleasant", *a(r)robbava* "he stole" *A(r)rugniere* "Ranieri (anthroponym)", *Arraganata* "Recanati (toponym)" (Formentin 1998: I 272). Old texts from Salento (Sgrilli 1984: 100) provide further evidence of the phenomenon. Rohlfs quotes examples from dialects from Calabria (§ 150) and Southern Lazio (§ 161). In addition to the simple listing of forms with *a*-prosthesis, some authors have attempted to give an explanation of the phenomenon. Radtke, who focuses on *a*-prosthesis in the present-day dialects of Campania (Radtke 1997: 62), rejects the hypothesis of an origin deriving from an erroneous segmentation of the feminine definite article such as *la gente* "the people" → *l'agente* → *agente* "people" and suggests including the *a*-prosthesis among the phonological phenomena of Campania dialects. Gerhard Ernst has identified the *a*-prosthesis in old Roman texts and compared it with the situation in modern Romanesco, and he too categorizes the *a*-prosthesis as a phenomenon pertaining to phonology (Ernst 1970: 115-117). Michele Loporcaro, who discusses the *a*-prosthesis in the dialect of Altamura, puts forward an origin from the Latin preposition AD, starting from the observation that the speakers of the dialect of Altamura systematically put *a* before the infinitive forms of the verbs, as well as in quotation forms and in sentences in which the infinitive fills the syntactic role of subject. Loporcaro hypothesizes a coalescence of preposition and infinitive and indicates this as the starting point for other forms in the paradigms (Loporcaro 1988: 92-93 and 150, n. 35). This explanation may account for the rise of the phenomenon in some areas, but it must be admitted that the *a*-prosthesis has been lexicalized and that, in some Central and Southern dialects, it has become a phonological process consisting of an optional phonological rule which affects not only verbs, but also nouns, adjectives and adverbs that have no paradigmatic relations with verbs.

In Abruzzian Romani the *a*-prosthesis is an optional rule, but it is pervasive at the level of the lexicon, affecting all lexical categories. The fact that the prosthesis seems to be more frequent in verbs, adjectives and adverbs has no relation to their being lexical categories, but rather depends on a phonological restriction acting in the domain of phonological words. Proclitic forms belonging to the phonological word, such as articles, seem to block the prosthesis. It is probable that other phono-syntactic and sentence-prosodic contexts are unfavorable to *a*-prosthesis and an analysis of the occurrences in recorded texts seems to suggest that the presence of *a*-prosthesis occurs very often at the beginning of a sentence or after a pause: cfr. e.g. [appij'ne:mə ku mur ʃa'vo...] “we told to our son...” (RMS 7 807), [appij'ja am'mangə...] “he told to me...” (RMS 7 447), with the verb *pen-* “to tell, to say”, [adik'kjo:mə...] “I saw” (RMS 7 461, 513, 567, 570, 573 etc.) with the verb *dik-* “to see”, [addži'jo:mə...] “I went...” (RMS 7 442, 462), with the verb *ǵ-* “to go”, and many other cases. As for the occurrence of the prosthesis after a pause, cfr. the sentence (RMS 7 576):

[ara'ti dik'kjo:mə lu 'ʃtessə dʒu've:lə . adik'kjo:mə-lə 'andr u kur'ko]

“at night (I) saw the same woman (pause) (I) saw her in the pub”

Here the same verb in the same form /dikjom/ “I saw” occurs twice, but surfaces with *a*-prosthesis only after pause. Another context in which *a*-prosthesis frequently applies is between phonologically autonomous subject-NP and the verb of VP, cfr. for instance [ʃo:və adik'kja ni bu'ti...] “he saw a thing...” (RMS 7 1037), where [ʃo:və] “he” (3rd person singular masculine pronoun) shows a high degree of phonological autonomy and presents often an emphatic function, being Abruzzian Romani a pro-drop language. However in many cases a pause is clearly audible between these two syntactic constituents, so that the role of the syntax in *a*-prosthesis might be considered as not particularly relevant. While it is possible to affirm that some sentence contexts are favourable or unfavourable to *a*-prosthesis, the structure of the onset in the first syllable of the word does not seem to produce any restriction.

In this case too, the extension of the phonological rule from Abruzzese to Abruzzian Romani is the only reasonable way to explain such an innovation.

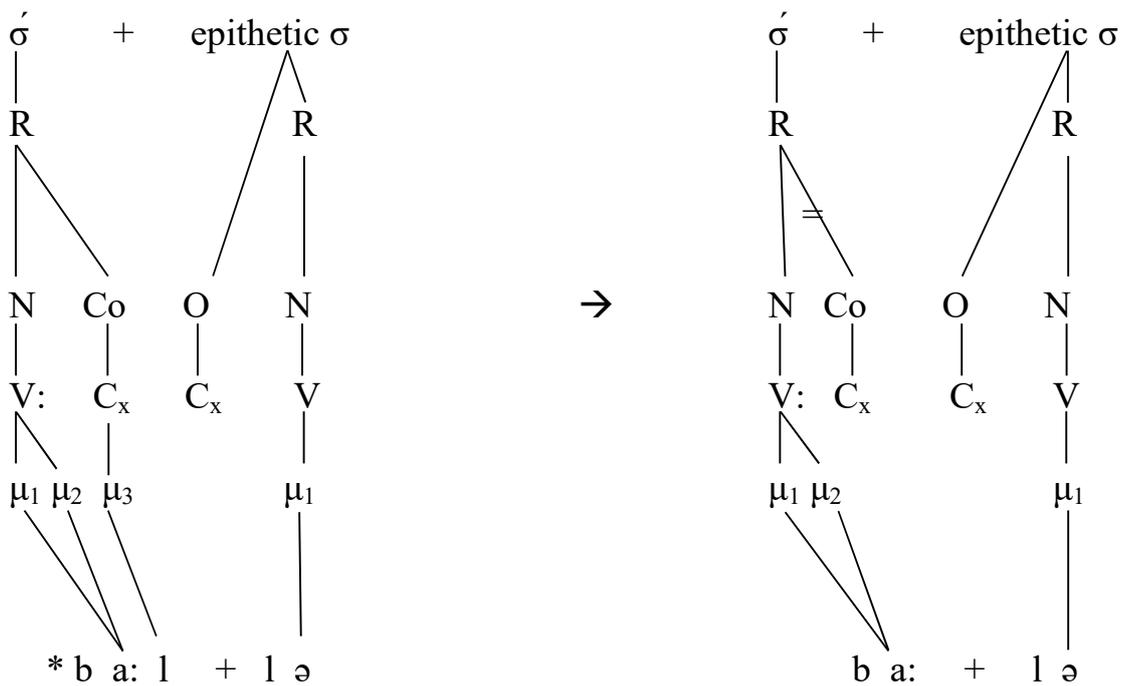
2.3 Epithesis in all the lexemes etymologically ending in a consonant

In Abruzzian Romani the words originally ending in a consonant generally undergo a modification of the prosodic structure, with the result that such words in Abruzzian Romani now have a final vowel [-ə], which produces an open syllable at the end of the form. The epithesis is accompanied by the weighting of the preceding syllable according to two processes: original final consonants are lengthened before [-ə] or lengthening affects the last vowel before the epithetic one, cfr. ['jekkə] “one”, ['rattə] “night”, ['jaggə] “fire”, ['dabbə] “hit”, ['laddʒə] “shame”; but ['ke:rə] “house”, ['ba:lə] “hair”, ['pe:nə] “sister” (cfr. PS [jek], [ra'ti], [dab], [ladʒ], [ker], [bal], [pen]). A very similar prosodic structure occurs in the co-territorial Romance dialects, such as in all Central and Southern Italo-Romance dialects (Bafile 2003 and 2010), in which the prosodic skeleton of the last syllable admits only the structure (C)CV. In the historical lexicon of Standard Italian and of Central and Southern Italo-Romance dialects only functional words admit final consonants; this syllabic structure, which differs from that of lexical words, has been explained with reference to the prosodic status of such functional words. Since they do not appear before a pause and are always followed by another word, the final consonant of functional words may be considered as belonging to a coda or to an onset, when there is phono-syntactic reduplication, licensed not in the lexicon, but after the insertion into the sentence (Bafile 2003: 157). In Neapolitan the behaviour of functional words and prenominal forms such as *nun* “not”, *don* “mister”, which show a prevocalic allomorph [nunn], [dønn], cfr. [nunn ak'kattə], [dønn an'tənjə] (Bafile 2003: 156) as well as the integration of loanwords ending in a consonant in the donor language, which are regularly adapted by adding a syllable CV whose onset is identical to the preceding coda cfr. ['stəppə] “stop”, ['gassə] “gas” (Bafile 2003: 161), are symptomatic. A

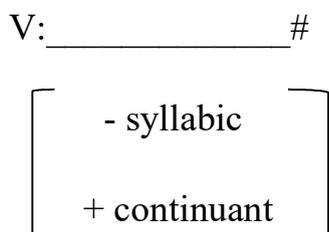
process of epithesis preserves the syllabic structure of such lexical words, defending the coda position of the original final consonant.

The prosodic rule operating in Abruzzian Romani is very similar and its application has enormously increased the presence of the trochaic foot in a language whose traditional lexicon hitherto lacked such a prosodic unity. At this stage in Abruzzian Romani lexical words do not seem to allow for final consonants or, in other words, an empty nucleus in word end-position is not permitted. In many cases the final vowel [-ə], added to all lexical words etymologically ending in a consonant, is preceded by the replication/lengthening of the previous consonant, which constituted the original coda of the last syllable. However the process is fairly regular with occlusive and affricate sounds, but, unlike Neapolitan (Bafile 2003: 167), does not apply to sonorants, as illustrated previously by examples such as ['ke:rə] “house”, ['ba:lə] “hair”, ['pe:nə] “sister”, ['dro:mə] “road” and by many others such as [te'la:rə] “under” (RMS 7 675), [tʃo:rə] “thieves” (RMS 7 792), [va've:rə] “other” (RMS 7 717), [bra'va:lə] “car”, [(a)n'gja:lə] “in front” (RMS 7 217), [pra:lə] “brother” (RMS 7 364, 365, 469, 471 etc.), ['ka:nə] “ear”, [tu'me:nə] “you (pl.)” (RMS 7 641 and 719), ['ku:nə] “who” (RMS 7 520, 521, 522 etc.), ['dro:mə] “road” (RMS 7 729, 1022, 1024, but ['drommə] in RMS 10 655), ['ro:mə] “man” (RMS 7 424, 461, 559, 562 etc.), [xa'je:mə] “we ate” (RMS 7 933). In addition, voiceless and voiced fricatives seem to display the same behaviour as sonorants, but less regularly: cfr. [de've:sə] “day” (RMS 7 397, 407, 412 etc.), ['ma:sə] “meat” (RMS 7 933, 945), [tra:jə] “fear” (RMS 7 , [tso:xə] “skirt” (RMS 7 936), [ta:və] “thread” (RMS 7 671). The absence of consonantal lengthening with an occlusive is very rare, cfr. ['bu:tə] “very, a lot”, where the long [u:] may occur for expressive reasons, which blocks the lengthening of /t/. The Abruzzese shows the same behaviour as Neapolitan in CV epithesis, so this split in Abruzzian Romani seems to imply that some property connected with sonorants and fricative prevents the CV epithesis. A possible explanation may be found by supposing that vowels before sonorants and before fricatives were long in an early stage of Abruzzian Romani; the preservation of an old

and etymological vowel length in Romani has been rejected by Yaron Matras who prefers to think that long vowels in Romani are of secondary origin (Matras 2002, 59-60), and this could be also the case with Abruzzian Romani. Evidence from Slavic languages suggests that vowels before sonorants can have the longest duration (Bethin 1998, 102; Kavitskaya 2002, 121-125). So it is possible to think that in some languages a context such as __ [+sonor.]# would be favourable to vowel lengthening. Moreover there is some evidence that vowel length increases not only before sonorants, but also before fricatives. However generalizations about the influence of consonants upon the duration of a preceding vowel are difficult to establish and many processes of lengthening seem to be language dependent (Lehiste 1970, 24). In Abruzzian Romani the lengthening of the original final consonant could be less likely to occur in sounds with a higher intrinsic sonority and there might have been a clear-cut difference between words ending in consonants having the feature [+continuant] and those ending in [-continuant] ones. While it may be assumed that in an early stage of Abruzzian Romani a stressed nucleus in the last syllable was long when followed by a sonorant or a fricative, i.e. from a [+continuant] consonant, the CV epithesis would have created a syllable of three moras, thus violating the Abruzzese constraint that prevents syllables of more than two moras; in accordance with this constraint, therefore, a long vowel can occur only in an open syllable. Abruzzian Roma, who have been bilingual for centuries, might have applied this constraint to both branches of their bilingualism, Abruzzian Romani and Abruzzese. Let us consider the example of the Pan-Romani word *bal* ‘hair’: if one assumes that it became *[ba:l], according to a rule $\acute{V} \rightarrow \acute{V}: / _ [+continuant]\#$, it may be argued that CV epithesis cancelled the consonant in the coda in order to avoid an overheavy syllable:



Such a hypothesis may account for the difference between the treatment of final sonorants and fricatives (i.e. [+ continuant] consonants) and that of final affricates and occlusives (i. e. [- continuant] consonants) in Abruzzian Romani. Both the epithesis rule and the constraint about the weight of the stressed syllable are borrowed by Abruzzese. The interaction between these two rules, impossible in Abruzzese, might have taken place in Abruzzian Romani because of the existence of a context such as



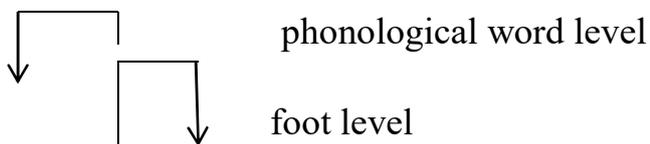
which was unknown to the Italo-Romance model. Furthermore in this case the borrowing of the rule of epithesis and of the constraint regarding the weight of the

stressed syllable can be explained only by assuming a transfer from Abruzzese phonological competence to that of the Abruzzian Romani.

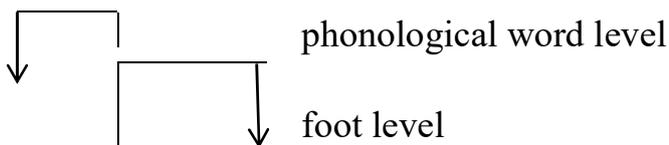
2.4 Reduction to [ə] of post-tonic unstressed vowels

Etymological post-tonic unstressed vowels in Abruzzian Romani are generally reduced to [ə], cfr. [ˈtu:tə] “to you (sg.)” (Pe tr. 38), [tiˈxa:nə] “pan” (Pe 764), [ˈkokələ]/[ˈkok^wələ] “bone” (Pe 203 and 237), [paˈnjeskərə] “watermelons” (Pe 2016); in other more conservative Romani dialects the original vowels are still preserved, cfr. KL [ˈtute], [tiˈgani], [ˈkokalo] and WR [paˈnjeskere]. Only the rare unstressed final /a/ sometimes remains unchanged or surfaces as [ɐ], cfr. forms of the imperfect such as [keˈrendza] “you (pl.)/they did” (ARms 182) and [vakeˈrendza] “they talked” (RMS 7 678). The reduction is regular in word end-position, but it also occurs very often in non-final post-tonic vowels too. This centralization of unstressed post-tonic vowels is also well documented in Abruzzese and other Southern Italo-Romance dialects (Giammarco 1960: 20 and 41-45; Bafle 1997a: 453-454) and again in these dialects, only final [a] can resist centralization (however in several Abruzzian dialects final [a] too has undergone centralization, cfr. Giammarco 1979: 45). In Abruzzian Romani the reduction to [ə] of all [- low] vowels can be considered an innovation acquired through the imitation of an Abruzzese phono-prosodic rule. However, the definition of this rule is rather problematic. The majority of the dialects of Southern Italy has undergone diachronic process of neutralization of features in final (and, more in general, post-tonic) vowels, where only [± low] is still active and produces the surface contrast between [-a] or [-ɐ] and [-ə], and in some areas, for instance in Molise, this contrast too has been neutralized (Avolio 2002: 615). Such a process has probably been induced by stress, but in many words it has been lexicalized. In any case the transfer in Abruzzian Romani of the reduction to [ə] of post-tonic vowels, with some exceptions for /a/, cannot have been connected with a diachronic process. The reduction of final and post-tonic vowels might already have been established in

Abruzzese when Romani-speaking people first arrived in the region Abruzzo, but the chronology is disputed (cfr. Avolio 2002: 609; Avolio 2009: 153-171; Vignuzzi 1992: 609; Barbato 2015). In order to explain this convergence of Romani with the Abruzzese phono-prosodic structure a synchronic rule is required. A framework may be assumed in which the stressed nucleus constitutes the head of the phonological word and therefore licenses the previous nucleus or nuclei, and, at the same time, the same stressed nucleus is the head of a foot and licenses the subsequent nucleus (Harris 1992 and Harris 1994: 154-156; Bafile 1997). It may also be assumed that a ternary foot is conceivable for Abruzzese, as for Italian, where it is productive and particularly widespread. This prosodic organization may be represented as follows:



N 'N N
 ti 'xa: nə "pan"



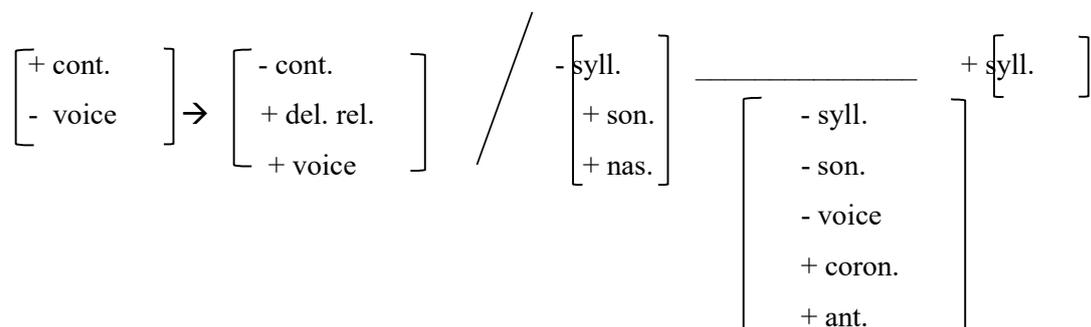
N 'N N N
 pa 'jes kə rə "watermelons"

In Abruzzese, as in standard Italian, the foot does not automatically match the word, as the word stress is mainly on the penultimate or on the antepenultimate syllable. It is a very common phenomenon that the unstressed nuclei undergo restrictions with reference to the vowels they can display; in Abruzzese all the weak positions licensed

in the foot by the word-stressed nucleus admit only the realization [ə] for the underlying (or etymological) [-low] vowel. This phono-prosodic rule may have been copied and transferred from the Abruzzese to the Romani competence in bilingual speakers. In some varieties of Abruzzese the reduction occurs in all weak positions, including pre-tonic ones; Abbruzian Romani however, as far as is known, seems to display vowel reduction mainly in a post-tonic context. Nor does the role played by Abruzzese loanwords in Abbruzian Romani seem to be relevant in the case of vowel reduction. A prosodic rule which changes post-tonic /i/, /e/, /o/, /u/ to [ə] can come about only as a process, otherwise the central vowel [ə] in the loanwords would have been integrated with /e/ or with /a/, as has happened in many Sinti dialects for German words with [ə] (cfr. PS ['bru:ka] “brook”, ['flinta] “rifle”, ['feifa] “pipe” < *Brücke, Flinte, Pfeife*), without inducing any type of rule.

2.5 Fortition + voicing of /s/ after a nasal consonant

In Abbruzian Romani the etymological fricative /s/ after /n/ surfaces as a voiced affricate [dz], in accordance with a process of *fortition + voicing*, which may be represented as follows:



The process can be observed mainly in proximity to some morphological boundaries; for instance the innovative morpheme of the imperfect [-sənə] (Elšík-Matras 2006:

192), cfr. [bafʌ've:sənə] “he/she was playing (music)” (RMS 7 835), when added to a sequence ending in /n/ takes the form [-dzənə], cfr. [bafʌ'vendzənə] “they were playing (music)” (RMS 7 686). Another morphological context that documents the *fortition* and the *voicing* of /s/ as [dz] is the inflection of personal pronouns: here the morpheme [-sə] (cfr. -sa in phonetically more conservative dialects), which marks the so-called instrumental case (often conveying a comitative meaning), surfaces as [-dzə] when the pronoun stem ends in /n/, cfr. [ˈla:sə] “with her” (stem /la-/) vs [ˈlɛndzə] “with them” (stem [lɛn-]). An almost identical rule of fortition, well outlined by Schirru (2010: 147), is widespread in Central and Southern Italo-Romance dialects, in which it also occurs after /l/ and /r/ (Rohlf 1966: § 267), i.e. after [+sonor.] consonants, while in Abruzzian Romani the rule is visible only after /n/, because Abruzzian Romani does not seem to provide contexts such as /ls/, /rs/. The absence of such contexts makes possible the hypothesis that the rule in Abruzzian Romani might be identical to the rule of Abruzzese and that in Abruzzian Romani rule the specification [+nasal] on the consonant preceding /s/ might be redundant. More radically it could be maintained that both Abruzzese and Abruzzian Romani show fortition of /s/ only after a consonant, i.e. after a [-syll.] phonemic unity: phonotactic constraints restrict to the sonorants in Abruzzese and to /n/ in Abruzzian Romani the consonants which can precede /s/; in this perspective the feature [+sonor.] too, can be considered as redundant. The more common output of the rule in Southern Italo-Romance dialects is [ts], while the contextual *voicing* of the affricate is typical of Abruzzese, cfr. e.g. [pən'dza] “to think”, [ˈmɛndzə] “table”, [kʌndzu'ma] “to consume” (Giammarco 1960: 52).

However, returning to Romani, an allomorph [-tsa] for the instrumental case occurs in the plural in many Romani dialects and may in fact go back to a very early stage of Romani (Matras 2002: 88-89); so it may be assumed that the dialect, now called Abruzzian Romani had already undergone this process before coming into contact with Abruzzese dialects. The fortition of the alveolar fricative in the innovative morpheme of the imperfect [-sənə], which becomes [-dzənə] after /n/, might be

considered as the result of the same Early-Romani process, which partially coincided with the Abruzzese rule and indeed may have been confirmed and reinforced by this coincidence. Although it remains uncertain whether the process of fortition can be traced back to an early stage of Abruzzian Romani or depends on interference from co-territorial Romance dialects, the voiced outcome [dz] for /s/ after a consonant with the feature [+ sonorant] is typical of Abruzzese and seems to be a more recent phenomenon in Abruzzian Romani, preferably to be explained through a process of rule borrowing.

2.6 Palatalization of the alveolar fricative /s/ before alveolar stop

In many Southern Italo-Romance dialects, before stops the alveolar fricative /s/ undergoes palatalization, becoming a post-alveolar fricative [ʃ] (for a detailed discussion of this allophonic process cfr. Luca Lorenzetti's contribution in this volume). The phenomenon applies in its amplest way to few dialects, for instance in those of Macerata (Marche; cfr. Neumann-Spallart 1904: 300-301) and Subiaco (Lazio; cfr. Lindström 1907: 251), where all stops can trigger the palatalization of a preceding alveolar fricative. In other dialects the triggers are represented only by /k/ and /p/, i.e. by the stops having the feature [+ grave], as can be observed for instance in Campania, and especially in Naples (Ledgeway 2009: 99). Finally, in some areas the palatalization /sC/ → [ʃC] occurs only if C = /t/; this is the case with most Abruzzese dialects (cfr. Giammarco 1979: 66). The rule also operates in Abruzzian Romani, as suggested by forms such as ['vaʃtə] “hand” (Pe 186 and 187; ARms 196; RMS 7 377, 758, 852, 1043), [saʃta'rjappə] “he/she healed up” (RMS 7 384), ['saʃtrə] “iron” (Pe tr. 37; ARms 195; RMS 7 n. 673, 810, 905), ['graʃtə] “horse” (Pe 1617; ARms 189; RMS 7 447, 555, 584, 770, 776, 799, 1000, 1008).

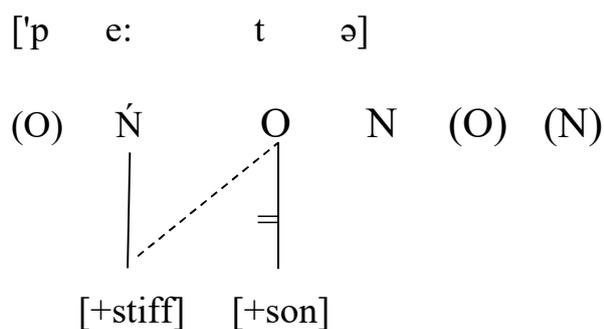
These words, belonging to the pre-European lexical layers of Romani, represent the continuation respectively of Old Indo-Aryan *hasta* “hand”, *svastha* “healthy, sound”,

śastra “instrument, tool (especially to cut), iron” and Armenian *grast* “beast of burden” (Boretzky-Igla 1994: 325, 328 and 332) and have a solid etymology with /st/, which is confirmed by many conservative Romani dialects, cfr. KL [vast], [sas'to], [sastri], [grast]. Current knowledge suggests that the palatalization of /st/ into [ʃt] occurs only in Abruzzian Romani, where it is mandatory. As for the sequences /sk/ the palatalization of the fricative is very rare in Abruzzian Romaní: the data from Pellis (1936) shows that /sk/ does not undergo palatalization cfr. e. g. [u ddu'meskərə] “corset” (Pe 641), [i paŋ'njeskərə] “basin” (Pe 837), [u mur'reskərə] “soap” and the female informant from Campobasso, labelled IT-007 in the Romani Morpho-Syntax Database, confirms the absence of palatalization of /s/ before /k/. The data given by ARms are less consistent where we find [l'ejkəro] “his”, [p'ejkəro] “his/her/its own” (Morelli-Soravia 1998: 191 and 193), all etymologically from *-es-kerō* (Matras 2002: 84 and 89), but [pa'njeskə]/[pa'njeskərə] “cucumber, melon, watermelon”, [ma'seskərə] “slaughterhouse” and [pi'soskə] “because” (Morelli-Soravia 1998, 177 and 193). It is possible that the data given by Morelli-Soravia 1998 reflect, at least partially, a sub-variety of Abruzzian Romani spoken in the province of L'Aquila, whose Romance dialects are not considered part of the Abruzzese *continuum* because of the presence of many features unknown to the rest of the Abruzzese dialects; one of these features is the trend to palatalize /s/ before voiceless stops and before /m/ (Giammarco 1979: 80). The sequence /sp/ is very rare in Romaní and the only case, apart from Italo-Romance loanwords, is represented by [li nis'pje] “the grandsons” (RMS 7 781), where [nis'pjo] “grandson”, a loanword from Greek ἀνιψιός (Ascoli 1865: 134; Scala 2006-2007: 51-52), is clearly exempt from palatalization (cfr. also the diminutive form [nispri'jo] in Morelli-Soravia 1998: 192).

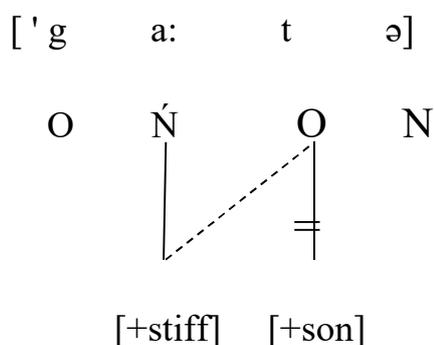
The allophonic rule that admits only [ʃ] before /t/ is well rooted in Abruzzian Romani and has cancelled the etymological sequences [st]; in this case too, the hypothesis that this rule has been borrowed from Abruzzese, which displays exactly the same process, has to be considered as highly probable.

2.7 Devoicing of /d/ after a stressed vowel

In Abruzzian Romani the devoicing of /d/ regularly occurs after a stressed vowel. Words such as [ˈtu:tə] “milk” (Pe tr. 38 and 43), [ˈda:tə] “father” (Pe 14, tr. 48 and 49), [ˈga:tə] “shirt” (Pe 634 and 635), [ˈdu:tə] “light” (Pe 806 and 1507), [ˈvo:tərə] “bed” (Pe 833 and 1064), [ˈkli:tə] “key” (Pe 1087) present a non-etymological [t]; phonetically more conservative Romani dialects confirm that the original dental stop in this words was /d/, cfr. PS [tud], [dad], [gad], [dud], [ˈvodoro] and LS [ˈklidi]. The phenomenon is well attested to in co-territorial Abruzzese dialects, cfr. e. g. [ˈkru:tə] “row”, [ˈpe:tə] “foot” (Giammarco 1960: 47; Rohlfs 1966: § 216; Bigalke 1996: 19-20) and in the opinion of Carlo Battisti (1912: 182-197) originates from the sonority decrease of unstressed vowels reduced to schwa. A more recent analysis, put forward by Leonardo Savoia about a very similar phenomenon in the dialect of Andria (Northern Puglia), explains the loss of sonority as an extension to the following alveolar stop /d/ of the feature [+ stiff] (i.e [+ stiff vocal folds]), associated with the high tone of the stressed vowel (Savoia 2014: 249-257). If vocal folds remain stiff during the realization of a subsequent occlusive, they do not activate the laryngeal mechanism and therefore in the subsequent consonant there is a loss of sonority. In the dialect of Andria stressed nuclei of proparoxytone words are considered as weak and devoid of the feature [+ stiff] and consequently unable to propagate it. Abruzzese has undergone the same process of devoicing of /d/ after stressed vowels, described in the dialect of Andria, but the loss of sonority also occurs in proparoxytone words whose stressed syllable presents a long vowel and then a strong nucleus cfr. e. g. *la vēteva* “the widow” in Montesilvano (AIS I 77 *la vedova*, point 619). Taking Abruzzese [ˈpe:tə] < PĚDE(M) “foot” as an example, the process can be represented as follows:



In Abruzzian Romani the rule is mandatory and can be exemplified by the word that in phonologically more conservative Romani dialects, such as PS and KL, is *gad* “shirt”. In Abruzzian Romani this word surfaces as [ˈga:tə]:



It is clear that this rule cannot have been acquired through Abruzzese loanwords. A sequence $\acute{V} + [t]$ in Abruzzese words would not have represented a model unknown to Romani and would have been reproduced in the replica-language without any difficulty and, above all, without introducing any new rule. There are many Abruzzian Romani words in which $\acute{V} + [t]$ is etymological, cfr. [bˈbu:tə] “much” (Skr. *bahutva*), [ˈka:tə] “scissors” (Pkr. *kattiya*), [ˈʃu:tə] “vinegar” (Skr. *śukta*), [ˈdze:tə] “oil” (Armenian *jēt* ‘). Only synchronic alternations between [d] and [t], caused by the shift of stress position in Abruzzese paradigms, can have served as a model for this process of devoicing, which is well rooted in the phonological structure of Abruzzese dialects; hence the rule has been transferred to Abruzzian Romani. In Abruzzian Romani alternations between [t] and [d]/[dd], such as [fiˈri:tə] “window”, pl.

[fərid'dja], a loanword from Greek θυρίδι (Scala 2006-2007: 49), testify that the rule /d/ → [t]/V̇___ is still active, potentially irrespective of the real presence of a high tone in the stressed syllable of the replica-language. A rule grounded on a phonetic feature, as is [+stiff], may be extended to another language by bilingual speakers, becoming a mere distributional rule which preserves only the relation between input and output, even without replicating the phonetic feature that motivated the output in the model language.

A glance at Calabrian Romani, a dialect closely related to Abruzzian Romani, enables the acquisition of further information about the rule. A form such as CR [fi'riddə] “windows” (Soravia 1978: 34) seems to undergo only the rule of CV epithesis described above (cfr. 2.3) and widespread in all Central and Southern Italo-Romance dialects. In Abruzzian Romani things are different: devoicing of /d/ after a stressed vowel and the CV epithesis can conflict and the evidence is clear: where /d/ devoicing occurs, CV epithesis takes place in the reduced form -V (with V = [ə]) as after [+continuant] consonant. In fact forms such as *[gattə] “shirt”, *['tuttə] “milk”, *['duttə] “light” do not exist. This behaviour of the CV epithesis rule might be related to the length of the vowel preceding the devoiced /d/.

3.0 Phonological rule borrowing: external and internal dimensions

The seven phonological Abruzzian Romani rules which have been discussed in section 2 can be recalled briefly:

Sub-section	Rule description and outcome
2.1	Description: Propagation of /u/ which affects syllables having a velar stop or velar fricative in the onset and all vowels but /u/ in the nucleus. Outcome: emergence of a non-etymological [w] or [... ^w], after the onset of a syllable, if the preceding syllable, within the phonological word, contains /u/ or /o/
2.2	Description: prosthesis of [a-] in words beginning with a consonant Outcome: emergence of a non-etymological [a-], especially in words occurring at the beginning of a sentence or after a pause
2.3	Description: CV epithesis in words ending in a consonant Outcome: last syllable's CV structure (with V=[ə]) in all lexemes originally ending in a consonant

2.4	Description: centralization to [ə] of post-tonic unstressed vowels Outcome: loss of colour distinction in post-tonic unstressed vowels
2.5	Description: fortition to affricate and voicing of /s/ after a nasal consonant Outcome: loss of the etymological cluster [ns], regularly changed in [ndz]
2.6	Description: palatalization of /s/ before alveolar stop Outcome: generalization of [ʃ] before /t/ and consequent loss of the etymological distinction between [st] and [ʃt]
2.7	Description: loss of sonority of /d/ after a stressed vowel Outcome: generalization of [t] after stressed vowel and consequent loss of the etymological distinction between ['Vt] and ['Vd]

All these phonological rules, which have been almost totally neglected so far in grammatical outlines of Abruzzian Romani, have been undoubtedly imported from co-territorial Romance dialects. Such rules can be found, despite different degrees of pervasiveness, in all varieties of Abruzzian Romani and they can be considered as the usual set of phonological processes operating in Romani-speaking communities in Abruzzo and Molise. Heavy phonological rule borrowing, such as that observed in Abruzzian Romani, seems more likely when the lexicon of the two languages present in the repertoire of a community is strongly different. Some other similar cases, such as Arbëresh dialects in Southern Italy (Savoia 2008: 43-46) and Armenian dialects, these latter for a long time in contact with Turkic languages (Vaux 1998: 151-173 and 242-246, Scala 2016 and Scala in press), seem to confirm this trend. If a bilingual community entrusts the role of identity-marker to a language, from a cognitive point of view the lexicon represents the most salient and accessible way of marking distance and of highlighting a different identity. If the lexicon of the endo-communitarian language is radically different to that of the inter-communitarian one, the phonology can more easily undergo unification, by extending the model of the inter-communitarian language to both languages. On the contrary, when in a bilingual community the we-code and the they-code (or everyone-code) are lexically very similar, each phonetic detail which differentiates the two languages is carefully preserved and respected in the pronunciation; this situation is clearly observable in a lot of small communities in Italy, where the local Italo-Romance dialect is perceived

and preserved as the endo-communitarian code, differing from neighbouring dialects or the koine-dialect only by virtue of its phonetic features.

Returning to a system perspective, it has to be highlighted that in most cases the rules described above for Abruzzian Romani can be considered only as processes acting on phonological features and not on phonological units. The case of the imitation of the Abruzzese prosodic structure and its prosody related rules (cfr. 2.3 and 2.4) is very clear in this regard: in the Romani words etymologically ending in a consonant, the presence of an epithetic syllable CV recalls the prosodic structure of words in co-territorial dialects based on a trochaic foot, with the stressed syllable having a heavy rhyme (long vowel or consonantal coda). This structure has no relationship with phonological units, but rather with the metrical-prosodic structure, which is constituted only by a set of properties. The case of propagation (2.1) is also highly significant: in Abruzzian Romani the phenomenon presents a set of possible target onsets which is ampler than in Abruzzese propagation, also including a phonological unit such as /x/, which is unknown to the Abruzzese phonemic inventory. The set of vowels acting as triggers is also more ample than in the Romance model and includes /o/, and not only /u/, as in Abruzzese. The phonological rule has been borrowed from Abruzzese and selects the same features as the model, but in Abruzzian Romani, because of the difference between the two phonemic inventories, it captures more units. This evidence actually seems to minimize, if not exclude, any role for the borrowed lexicon in the process of rule imitation. Other phonological rules of Abruzzian Romani, notably the palatalization of the alveolar fricative /s/ before alveolar stop (2.6) and the devoicing of /d/ after a stressed vowel (2.7), cannot have been induced through lexical loanwords. The outputs of these two rules in Abruzzese are indeed sequences of sounds well known to Abruzzian Romani, which in its traditional lexicon presented many cases of etymological /ft/ and /Vt/. Such sequences, generated in Abruzzese by a process of allophony, could have been integrated into the replica language without any difficulty, but also without inducing any new phonological rule. On the whole, the role of the Abruzzese lexical loanwords

as a vehicle for the borrowing of phonological rules into Abruzzian Romani does not **seems** to be particularly relevant. Moreover, loanwords seem to act as vehicles for new phonemes (Gusmani 1982; Stolz 2008: 21), rather than as inductors of new phonological rules, with the exception perhaps of stress patterns (Thomason 2006: 671). Some decades ago, in a detailed study about phonological contact, van Coetsem discussed the polarity between lexicon, as the least stable domain of the language, and phonology (together with morphology and syntax), as one of the more stable levels, and maintained that the stability of phonology can explain the agentivity of the recipient language on the lexical borrowings of a source language, emerging in borrowings phonological adaptation, and the agentivity of the source language (imposition, in the terminology of van Coetsem) on a recipient language in transferring its phonological features on the pronunciation of a L2 (van Coetsem 1988: 26-36). The cases of phonological rules borrowing analyzed in the previous pages suggest that some form of agentivity of the source language can affect the pronunciation of a recipient language outside the dimension of language learning. In native bilingual speakers, as Abruzzian Roma are, this phenomenon appears to be possible at least in the domain of syntagmatic phonology and its emergence seems to be favoured by some particular sociolinguistic conditions which can trigger (or at least permit) a progressive unification of the phonological rules of the languages involved in the repertoire.

In this contribution seven phonological rules borrowed by Abruzzian Romani from Abruzzese have been discussed and it is likely that there are still others yet to be described. In conclusion, in Abruzzian Romani it is hard to find a phonological rule which is not shared with Abruzzese. In this perspective it may be assumed that Abruzzian Romani speakers, who have all been bilingual with Abruzzese for centuries, currently manage a subset of phonological rules which serves two different languages and is applied to two different phonemic and lexical inventories.

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