

## **42 Vowel Harmony in contact situations: The case of the Balkans**

Victor A. Friedman and Brian D. Joseph

### **42.1 Introduction**

In several sources in the vast literature on the languages of the peninsula in southeastern Europe known as the Balkans the claim can be encountered that vowel harmony is a Balkanism, i.e., a convergent feature in languages of the region caused by contact among speakers of these languages. If such claims are correct, the Balkan situation would show the spread of vowel harmony due to language contact. Our goal here is to assess these claims and thus shed some light on what can happen with vowel harmony in intense contact situations. Since much here hinges on the precise characterization of vowel harmony, we need to consider the definition of vowel harmony that underlies the relevant claims. Ultimately, we largely dismiss these claims, but we turn to a way in which vowel harmony does spread in the area, and consider other contact-related developments involving vowel harmony in these languages.

### **42.2 The Balkan languages**

Several languages in the Balkans have been involved in intense contact, characterized by Friedman & Joseph (2023) as multi-lateral, multi-generational, mutual multi-lingualism, resulting in a high degree of structural and lexical convergence among the languages involved. The consequent convergence zone is generally called a “sprachbund”, and while there are many such sprachbunds around the world, e.g. S, the Balkans stand out as the most thoroughly studied and one about which the most is known, both synchronically and diachronically. The languages in the Balkan sprachbund are Albanian, Aromanian, Bulgarian, Greek, Judezmo, Macedonian, Meglenoromanian, Romani, Romanian, Torlak BCMS (Bosnian-Croatian-Montenegrin-Serbian), and Turkish (especially the West Rumelian variety). Among these languages, Bulgarian, Macedonian, and Torlak BCMS constitute Balkan Slavic, and Aromanian, Meglenoromanian, and Romanian make up Balkan Romance.

### **42.3 Defining vowel harmony**

In its most elemental sense, vowel harmony is an assimilatory matching of vowel features in a given phonological domain, e.g. a word. The nature of the matching can vary from language to language, with differences evident in extent, i.e., whether it ranges over the whole domain or just a part thereof, e.g. an adjacent syllable, in directionality, and in the particular features involved. These differences permit a distinction between an effect that spreads rightward from a fully specified, usually root, vowel onto a lexically underspecified suffix—what some consider “classic vowel harmony”, the type seen in Turkish (see Chapter 59, this volume)—and assimilatory processes that spread from the fully specified vowel in a morpheme on the right onto a preceding vowel, as in Germanic “umlaut” (see Chapter 68, this volume). While some analysts may restrict the designation “vowel harmony” to just the former case, the latter case can be considered vowel harmony in a broad sense as it involves some harmonizing between vowels within a given domain. This distinction affects how the claims about vowel harmony in the Balkans, and thus in contact situations more generally, are assessed.

### **42.4 Relevant claims about vowel harmony in the Balkans**

Vowel harmony has been discussed by several scholars in connection with the massive structural convergence seen in the Balkans. Although it is clear that some sort of harmonic featural agreement is evident in some of the languages, claims of specifically contact-related spread of vowel harmony are not substantiated. Nonetheless, these claims are interesting because they rest on an assumption that vowel harmony can in fact spread through contact; scholars have thus worked implicitly with a positive view of the possibility of vowel harmony diffusing across language boundaries.

One putative harmonic feature mentioned in the literature on the Balkans is the raising/fronting of a low or back vowel to become a higher and/or fronter vowel with or without accompanying palatalization and diphthongization, when followed by a high front vowel; this shift is said to occur in Bulgarian and Romanian, and maybe Albanian and Greek. This feature was first discussed by Miklosich (1862) and has since been given coverage in handbooks, e.g.

Sandfeld (1930: 171), Schaller (1975), and Asenova (2002); further, it has received some consideration in secondary literature.

These various treatments generally involve an apparent misunderstanding, and at the very least mislabeling is evident. The basic facts involve the Balkan Slavic reflex of Common Slavic \*ě—referred to as *jat*(') in Slavic linguistics based on its letter-name in the Cyrillic and Glagolitic alphabets—generally considered a low front vowel ([æ]). The reflex of \*ě is [e] west of an isogloss that roughly separates off a western portion of Balkan Slavic from north to south as it meanders from west of Nikopol, on the Bulgarian side of the Danube, southwards to the Aegean Sea at Thessaloniki, in Greece; east of that isogloss (but also in the Macedonian of Boboshtica-Drenova in Albania), the result is [ʲa] or [ʲæ], i.e., a low vowel, often preceded by palatalization (jotation) of the preceding consonant in some or all environments (see Stojkov 1968; Mazon 1936; Vidoeski 1962/63 for details). The facts of the Balkan (named for the mountain chain *Balkan* running east-west through central Bulgaria) and Moesian (northeastern) dialects of Bulgarian are illustrative. The reflex [a] occurs only under stress and only when not followed by the sequence consonant + front vowel. The reflex [e] occurs elsewhere in the Balkan dialects, whereas in the Moesian dialects, [e] occurs in unstressed position and [æ] occurs under stress when followed by a consonant plus, importantly for claims about vowel harmony, a front vowel, e.g. *cvját* ‘color’, *cvéten* (Moesian *cvæten*) ‘colored’, *cvetové* ‘colors’. In apparently parallel fashion, Romanian shows alternations between nonfront and front vowels (e.g. *î/i*, *a/e*) or between a backed diphthong and a front vowel (e.g. *ea/e*), conditioned by the presence or absence of a front vowel in the following syllable, e.g. *cuvînt* / *cuvinte* ‘word’ (SG/PL), *iarnă* / *ierni* ‘winter’ (SG/PL), *seară* / *seri* ‘evening’ (SG/PL); note also, however, *frumos* / *frumoasă* ‘beautiful’ (M/F). And, in Albanian there are a few similar-looking alternations, though not always obviously involving a front vowel in the next syllable, e.g. *jam* ‘I am’ / *jemi* ‘we are’, but also *i vogël* / *e vegjël* ‘little’ (M/F), *plak* / *pleq* ‘old’ (SG/PL).

Schaller (1975: 84), in writing about the Romanian alternations, claims that “Diese vokalischen Veränderungen werden als ‘Umlaut’, ‘Harmonisierung’ oder ‘Brechung’ bezeichnet”.<sup>1</sup> Inasmuch as the Romanian, and to some extent also the Bulgarian, facts per se involve some featural matching, or spreading, e.g. manifested as raising/fronting with a

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<sup>1</sup> “These vocalic alterations will thus be designated ‘Umlaut’, ‘harmony’ or ‘breaking’”.

following high vowel, there is some harmonizing across adjacent syllables. Whether that is vowel harmony in some sense, or instead a development to be labeled as assimilatory umlaut, constitutes a definitional matter, not an empirical one.

Nonetheless, Schaller's mention of "Harmonisierung" seems to be the source of two references to Balkan vowel harmony elsewhere in the literature. Campbell et al. (1986: 559), in listing features of the Balkan sprachbund so as to compare Meso-America with the Balkans regarding sprachbund status, mention "VOWEL HARMONY (or umlaut)", saying that "this trait's history is clear in Rumanian, Bulgarian, and Greek, where a stressed vowel has been influenced by the stressless vowel of the following syllable", and Thomason (2001: 108), apparently drawing on Campbell et al., lists among "the main areal phonological features" of the Balkans "some kind of vowel harmony in stressed syllables", locating it in Romanian, Bulgarian, Albanian, and Greek.

These claims are problematic in several ways. First, there are definitional issues regarding whether the label "vowel harmony" is justified (see Section 42.3). Second, on empirical grounds, it is not clear why Greek is mentioned in a Balkan context. A few sporadic instances of assimilations in adjacent syllables look like they could involve harmonizing, e.g. regional dialectal *ókso* 'outside' and *oxtrós* 'enemy' from earlier *ékso* and *exθrós*, respectively, still present in the standard language, or *aryaljós* 'loom' from *ergaleíon* 'tool',<sup>2</sup> but it is a safe generalization about the latter history of Greek that virtually all major vowel changes do not involve vowels in adjacent syllables,<sup>3</sup> at least not harmonically.<sup>4</sup>

Third, the Bulgarian alternation is not a change of *ja* to *e* historically under the influence of a front vowel in a following syllable but rather represents the preservation of the frontness of *æ* (\**ě*) before a syllable with a front vowel, a development that is admittedly assimilatory and

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<sup>2</sup> Revithiadou (Chapter 71, this volume) discusses cases like these in south-eastern dialectal varieties of Greek, and characterizes them as "marginal and non-productive ... [of] rather limited distribution."

<sup>3</sup> Newton (1972: 30–31) mentions a change whereby one vowel's height is affected by an adjacent vowel's height, but the effect is dissimilation (*eo* > *io*), i.e., anti-harmonic.

<sup>4</sup> Sporadic assimilations are found elsewhere in the Balkans, e.g. *sugurtë* < *sigurtë* 'sure', *dytyr* < *detyrë* 'obligation' in Kastrati Geg Albanian (Shkurtaj 1967), but these are independent.

thus somewhat harmonic in a broad sense; however, the backing of *æ* to *<sup>j</sup>a* in the absence of a following front vowel is not necessarily assimilatory—thus not harmonic—but could simply represent the surfacing of the underlying form of the vowel. Describing the phenomenon in terms of a change of *ja* to *e*, as, e.g., Schaller (1975: 64) does, might be appropriate synchronically for some Bulgarian dialects, but if this feature is to have significance for Balkan language contact, the present-day synchronic processes involved are irrelevant.

Finally, and perhaps most importantly, nothing specifically indicates that contact is involved in the appearance of these vowel developments in the languages mentioned, although many other phenomena in Bulgarian and Romanian are due to contact, e.g. numerous Slavic loanwords in the latter, Romanian use of ‘be’ as past tense auxiliary, where the Slavic use of ‘be’ replaced Romance ‘have’ (Gołąb 1976), etc. As Campbell et al. and Thomason have both astutely and accurately noted, the conditions for these various “harmonic” changes are not identical among the languages showing them.<sup>5</sup> Moreover, not all convergent features demand a contact explanation; the phonetic naturalness of raising triggered by a neighboring high vowel invites the possibility that the Bulgarian, Romanian, and Albanian developments (discounting Greek altogether here) are parallel independent changes, not contact-related convergence.<sup>6</sup>

Thus, even if the distribution of these changes and their characterization were more accurately portrayed, this set of developments is not a convincing candidate for vowel harmony diffusing across languages through contact.

#### **42.5 Limited vowel harmony via lexical borrowing**

Despite this negative result, there is a way in which Turkish-style vowel harmony spread into and found a realization in other Balkan languages, namely via lexical borrowing where grammatical affixes are involved. That is, borrowing Turkish suffixes in their harmonic forms attached to particular stems gave at least some Balkan languages two related forms of a grammatical suffix

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<sup>5</sup> Once borrowed, a feature is independent of its source-language form and can become different in detail. But differences still must give one pause when claiming borrowing.

<sup>6</sup> More complicated scenarios are possible, e.g. contact enhancing a natural tendency, but the point is that nothing here points to contact being responsible.

differing as to vowel quality and distributed according to a matching with the vowel quality of the word they attach to.

In particular, Albanian and Balkan Slavic borrowed some Turkish plural nouns complete with their Turkish plural morphology, sometimes with a native plural marker added. Thus, Albanian has *baba-llarë* ‘fathers’, from Turkish *babalar* (with an Albanian plural suffix *-ë*), and *bej-lerë* ‘Turkish notables’ (St. Turkish *beyler*), and Macedonian has (archaic) *kardaš-lar* ‘brothers’ (Turkish *kardaş-lar*) and *beg-ler-i* (Turkish *beyler*, with a Macedonian plural ending added), but, in colloquial or dialectal western Macedonian, also, e.g. *Blaželer* ‘Blaže’s family’. Likewise, in dialectal Albanian *mbretler* ‘kings’ occurs, with *-ler* on a Latin loan, and also *gjyshallar* ‘grandfathers’, a native word, and *trimllar* ‘heroes’ and *dhespotlerë* ‘bishops’, both non-Turkish loanwords. The sounds involved in these loans all occur in the borrowing languages, so this is not phonological adaptation in the borrowing process. Through these loanwords, especially since the singular forms in Albanian and Macedonian lack the Turkish plural suffix, these languages came to have a lexically restricted vowel alternation in a suffix associated with plural marking that mirrored the Turkish distribution of vowels, mostly with suffixal *-a-* after back-vowel words and suffixal *-e-* after front-vowel words.<sup>7</sup> This harmonic alternation is alien to Albanian and Balkan Slavic, being limited to roughly a dozen lexical items in all, mostly of Turkish origin, and is not absolute, as *trimllar* shows; but it is, nonetheless, an alternation which a full reckoning of the morphophonology of these languages would need to take into account. On the other hand, the adaptation of these suffixes in various dialects demonstrates that to the extent that these suffixes are productive, they do not necessarily follow the rules of vowel harmony. Regardless of how it is formalized, any account of the Albanian and Balkan Slavic *-a-* / *-e-* alternation in this highly restricted suffix would resemble, on a more limited scale, a minor importation of the Turkish alternation. In this case, though, it is not the Turkish “rule” that was borrowed into these languages, but rather material was borrowed from which one would infer or induce such a rule, so that the particular “rule” formulation occurred within the individual borrowing languages; the parallelism between this very limited “vowel

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<sup>7</sup> The Turkish automatic alternation of velar vs. palatal /l/ based on back vs. front following vowels was automatic in Balkan Slavic, too, but realized by distinct phonemes /ɫ/ and /l/ in Albanian.

harmony” in Albanian and Balkan Slavic and the more widespread and productive process in Turkish is at best indirect. Nonetheless, these cases show ways in which vowel harmony can spread under conditions of language contact, via borrowing of relevant harmonically alternating forms.

A parallel development can be found in varieties of Greek in contact with Turkish, giving a form of vowel harmony in Greek even though it is not a process found elsewhere in Greek phonology. For instance, Ronzevalle’s (1911) account of Greek of Ottoman-era Adrianople (present-day Edirne, on the current Greece-Turkey border) shows Turkish words borrowed without being adapted to Greek phonological patterns. The lack of adaptation meant that harmonically alternating forms of a Turkish suffix entered this variety of Greek attached to particular loanwords. For instance, with the abstract noun suffix *-lVκ*,<sup>8</sup> Ronzevalle (1911: 71n.3) says this suffix is “grécisée en λικ<sup>i</sup> [lik-] ou λυκ<sup>i</sup> [luκ-] suivant les règles de l’euphonie turque”.<sup>9</sup> Thus, Turkish *arkadaşlık*, derived from *arkadaş* ‘friend’ with the back allomorph, is borrowed as *arkada[luκ<sup>i</sup>]* ‘friendship’ (91), with the back vowel maintained, whereas the loanword *pezevenklík<sup>i</sup>* ‘pimping’ (273), from the base word *pezevenk* ‘pimp’, also borrowed, has the front vowel allomorph. Similarly, Dawkins (1916: §§9, 70, 194) has examples from Cappadocian Greek and Silli Greek of Asia Minor with Turkish suffixes borrowed in different harmonic forms, thus bringing vowel harmony into those dialects (see also Chapter 71, this volume, on harmony-like developments in Inner Asia Minor Greek).

In each such case, however, there is no direct transfer of a harmony process through contact. Rather, vowel harmony spreads indirectly; based on borrowed material, a vowel harmony process can be induced in a strictly endogenous, language-internal way. It thus remains an open question whether the process of vowel harmony can spread; we suspect it can, as the scholars talking about vowel harmony have assumed, but it would take bilingual speakers projecting the harmonic patterns of their presumably dominant first language onto a secondarily acquired language. What makes us believe such a situation is possible is the occurrence of the opposite effect, discussed in Section 42.6.

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<sup>8</sup> “V” signals the Turkish harmonic vowel.

<sup>9</sup> “Hellenized to λικ<sup>i</sup> [= lik-] or λυκ<sup>i</sup> [= luκ-] following the rules of Turkish euphony”.

#### **42.6 Can vowel harmony be lost through contact?**

The inverse of speakers imposing harmonic tendencies in their first language onto their use of a second language occurs in the Balkans, and gives a situation in which vowel harmony is lost through contact (see also Chapters 44, 45, this volume on decay of vowel harmony). The harmonic system of standard Turkish has vowels in a word generally agreeing in frontness and roundedness and affixes likewise harmonizing with the rightmost vowel of the word it attaches to (see Chapter 59, this volume). This system is not fully realized in West Rumelian Turkish (WRT). Since WRT shows significant convergence to features of other Balkan languages, and since no Balkan language has endogenous vowel harmony, it can be assumed that the absence of the fullest version of harmony in WRT is due in part to contact with, i.e. bilingualism in, a non-harmonizing Balkan language (Friedman 1982; Dombrowski 2013: 122–148). However, modern standard Turkish vowel harmony developed over several centuries extending into the early modern period, and both western southeast European and northeast Anatolian outliers of the core innovative Turkish region did not simply lose some instances of vowel harmony—although such levelings did occur—but in certain cases did not develop it. An example is the Turkish perfect/evidential suffix that developed from the auxiliary *imiş*. As the auxiliary became an agglutinative suffix, it underwent high-vowel harmony, except at the aforementioned outlier edges. Thus, in discussing vowel harmony in the context of contact linguistics, historical factors must always be weighed carefully.

#### **42.7 Conclusion**

To conclude, claims in the literature about the spread of vowel harmony as a Balkanism are vastly overstated, but the borrowing of lexical material can give a language the wherewithal for a limited morphophonemic vowel harmony rule to be induced. Moreover, the loss of vowel harmony in contact situations seems to be a legitimate possibility. Thus vowel harmony, in some form, is not off limits in language contact.

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