Uvular stop lenition and Shughni¹

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Lenition is a term that can refer to various phonological processes such as degemination and voicing [1, p. 3]. In this paper, I use it to refer to spirantization, i.e., the process when plosives lose the occlusion and turn into fricatives. Lenition has been studied in detail in many languages [2]–[4] and there are some accounts for Iranian languages [5]–[8], though most of them are concerned with Persian.

Uvular spirantization remains an understudied topic. It occurs in genetically unrelated languages and follows different scenarios. For example, in Misantla Totonac (Totonacan) [9, p. 35] /q/ may be realized as [χ] post-vocalically, and in some varieties of Arabic (Semitic), where phonemes corresponding to Modern Standard Arabic /q/ have [κ] as an allophone word-initially and intervocalically [10, pp. 23–24]. As for Iranian languages, it is well known that Persian /g/ is often spirantized intervocalically (/ α ga/ [α ' κ ga] 'sir') and in word-medial clusters (/vaqt/ [va κ t] 'time'; /motgan/ [mo't κ gan] 'solid' [5]). A similar pattern is reported in Tajik [11, p. 92], [12, p. 99], [13, p. 29]² and Balochi [14, p. 644]. In Wakhi, a Pamir language, the uvular phonemes / κ κ q/ are said to be present almost in Tajik or Turkic loanwords only, /q/ and / κ / being borrowed from Tajik dialects [15, pp. 24, 28, 33–34]. It is mentioned that / κ / and /q/, /q/ and /k/, / κ / and /q/ may (freely?) alternate, while in some loanwords, presumably older ones, the fricative articulation is preferred: [ta' κ sim] ~ [ta'ksim] 'dividing' but only [tə' κ li] 'wether', cf. Uzbek *tuqli* 'lamb'.

On the other hand, Shughni, another Iranian language spoken in the Pamir Mountains in Tajikistan and Afghanistan, normally³ prohibits spirantization of /q/, though one

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 $^{^2}$ I cannot agree with the anonymous reviewer who pointed out that in Standard Tajik, /q/ is plosive in any context, e.g., see Khaskashev's book on Standard Tajik.

³ Only one speaker occasionally produced [χ] in place of [q] intervocalically and after /l/ in fast speech according to the Shughni corpus [16]. Elicitation did not yield such results; moreover, pronunciations with [χ] instead of /q/ were rejected by the Shughni consultants.

might expect some Tajik influence and hence variability in its production. Nevertheless, uvular plosive spirantization seems to have taken place diachronically, which is reflected in some loanwords. For example, while /ıqtrˈdor/ 'power' retains the etymological /q/ (cf. Arabic /iqtiˈda:r/ 'power'), /na χ t/ 'cash' (cf. Arabic /naqd/ 'cash') does not.⁴

In the proposed talk, I will describe the allophones of Shughni /q/ in more detail and discuss probable means of the adaptation of loanwords containing etymological /q/. Although only scarce examples are available for some patterns of borrowing, I propose that /q/ is adopted as / χ / in word-final *qC* clusters, while other contexts do not usually trigger spirantization. There are also remarkable strategies of avoiding uvular lenition, including metathesis, paragoge and word-medial epenthesis.

The study is based on fieldwork data, dictionaries of Shughni and its corpus [16].

References

- [1] R. M. Kirchner, *An effort based approach to consonant lenition*. in Outstanding dissertations in linguistics. New York: Routledge, 2001.
- [2] J. Brandão de Carvalho, T. Scheer, and P. Ségéral, Eds., Lenition and Fortition, vol. 99. in Studies in Generative Grammar, vol. 99. Berlin, New York: Mouton de Gruyter, 2008. doi: 10.1515/9783110211443.
- [3] N. Gurevich, Lenition and Contrast: The Functional Consequences of Certain Phonetically Conditioned Sound Changes. London: Routledge, 2004.
- [4] A. Kaplan, 'Phonology Shaped by Phonetics: The Case of Intervocalic Lenition', Ph.D. thesis, University of California Santa Cruz, Santa Cruz, 2010.
- [5] K. Ariyaee and A. Kochetov, 'Acoustics of Persian uvular lenition in consonant clusters', in *Proceedings of the annual meeting of the 39th Canadian Linguistics Association*, 2022.
- [6] L. Bednarczuk, 'Consonant Lenition in Iranian', in Iranica Selecta. Studies in Honour of Professor Wojciech Skalmowski on the Occasion of his Seventieth Birthday, in Silk Road Studies, vol. 8. Turnhout: Brepols Publishers, 2003, pp. 1–13. doi: 10.1484/M.SRS-EB.5.112516.

⁴ The anonymous reviewer suggested that this is due to the different donor lects: retaining the plosive articulation means borrowing from Standard Tajik, while replacing with $/\chi$ / indicates that it was borrowed from another dialect. Since the variability, despite the objection of the reviewer, is evident even in the standard variety of Tajik (see the references above), this hypothesis is not quite plausible, though the register of the loanwords may be an important factor.

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- [7] M. Bijankhan and M. Nourbakhsh, 'Voice onset time in Persian initial and intervocalic stop production', *J. Int. Phon. Assoc.*, vol. 39, no. 3, pp. 335–364, Dec. 2009, doi: 10.1017/S0025100309990168.
- [8] M. Reza Asa, 'Barresi-e sowt-shentakhti-e shive-ye towlid-e hamkhan-e malazi-e /g/dar zabane Farsi-e me'yar (An acoustic study of the manner of articulation of the uvular consonant /g/ in standard Persian)', *Elm-E Zaban Sci. Lang.*, vol. 4, no. 6, Aug. 2016, doi: 10.22054/ls.2016.8398.
- [9] C. J. MacKay, *A Grammar of Misantla Totonac*. Salt Lake City: The University of Utah Press, 1999.
- [10] E. Mustafawi, 'Arabic phonology', in *The Routledge Handbook of Arabic Linguistics*, E. Benmamoun and R. Bassiouney, Eds., London: Routledge, 2018, pp. 11–31. [Online]. Available: https://doi.org/10.4324/9781315147062
- [11] V. S. Sokolova, *Fonetika tadzhikskogo yazyka*. in Iranskaya seriya. Materialy i issledovaniya po iranskim yazykam, no. 4. Moskva, Leningrad: Izdatel'stvo Akademii Nauk SSSR, 1949.
- [12] T. N. Khaskashev, Fonetikai zaboni adabii hozirai tojik [Modern Standard Tajik Phonetics], vol. 1. Dushanbe: TGU, 1983.
- [13] J. R. Perry, A Tajik Persian Reference Grammar. Leiden; Boston: Brill, 2005.
- [14] C. Jahani and A. Korn, 'Balochi', in *The Iranian Languages*, G. Windfuhr, Ed., London and New York: Routledge, 2009, pp. 634–692.
- [15] I. M. Stebline-Kamensky, *Ethymological dictionary of the Wakhi language*. St. Petersburg: Peterburgskoye Vostokovedeniye, 1999.
- [16] Y. Makarov, M. Melenchenko, and D. Novokshanov, 'Digital Resources for the Shughni Language', in *Proceedings of The Workshop on Resources and Technologies for Indigenous, Endangered and Lesser-resourced Languages in Eurasia within the 13th Language Resources and Evaluation Conference*, Marseille, France: European Language Resources Association, Jun. 2022, pp. 61–64. [Online]. Available: https://aclanthology.org/2022.eurali-1.9