## **Does Persian prefer Arabic to French and English?**

Koorosh Ariyaee (University of Toronto) and Ali Salehi (Stony Brook University) This paper studies the adaptation of loanwords in Persian from donor languages of Arabic, French and English through the Core-Periphery model (Itô and Mester 1999). Considering that loans exhibit more adaptation to the host language phonology based on the duration of the time they have been used in the host language (Kemmer 2017), we propose that in Persian older loans like Arabic words (borrowed ca 7<sup>th</sup> c. AD (Morony 1986)) are more nativized than recent ones from French and English (borrowed ca 19<sup>th</sup> c. (Kłagisz 2015:39)). Given that, compared to former work (Shademan 2003), this is the first account that aims to show the hierarchical and gradual nativization of loans in Persian by use of Core-Periphery model. This model categorizes words from core stratum to periphery based on violations of certain constraints in the host language phonology. The core stratum includes native words which satisfy constraints maximally. The other strata, as we move outwards the core, are assimilated loans and unassimilated foreign items forming the periphery. Moving toward the outer strata, we see more violation of constraints, until we see words at the periphery that satisfy small subset of constraints. In this study, based on the violation of constraints in (1-3), we show that Persian lexicon is stratified into three strata: core, middle and periphery. The core stratum satisfying all constraints includes native Persian words and Arabic loans used in vernacular Persian (VP). The middle stratum violating one constraint (3), includes native Persian items and Arabic loans used in formal Persian (FP), and not in VP. At the periphery the unassimilated foreign words (English and French) violate two constraints (2 & 3). (1)PERSIANPHONOLOGY(PERSPHON): cover for set of constraints (ONSET, \*COMPLEXONSET, etc.)

(2) \*\_CCC#: no triple consonant clusters at the ends of the words

(3) \*aN: no [a] preceding any nasal consonant; pre-nasal a must raise to u

**The argument ranking:** First, PERSPHON constraint is top-ranked and is satisfied by all three strata; hence, all loans satisfy PERSPHON set of constraints like \*COMPLEXONSET (4). Second, \*\_CCC# is satisfied by the core and the middle strata as neither Persian nor Arabic allow such consonant clusters word-finally. But it is violated by French (5) and English (6) loans at the periphery stratum. Finally, the low-ranked \*aN constraint, which triggers pre-nasal vowel raising, is only satisfied by core items since it is only in VP when *a* appears pre-nasally, it raises to *u*. Thus, \*aN is satisfied only by native Persian words (7) and Arabic loans (8) used in VP (the core). Native Persian words (9) and Arabic borrowings (10) used in formal Persian (FP) that form the middle stratum resist pre-nasal raising and hence violate \*aN. Similarly, French (11) and English (12) loans at the periphery stratum do not undergo this operation and violate \*aN as well. Thus, the argument ranking illustrating the core-periphery relation of Persian lexicon items is shown in (13). (4)/splet/ $\rightarrow$ [?es.pe.rej] 'spray' (5)/pRkestr/ $\rightarrow$ [?orkestr] 'orchestra' (6)/walts/ $\rightarrow$ [valts] 'waltz'

(4) /spiei/→[?es.pe.rej] 'spray'
(7) /lane/→[lune] 'nest'

(8) /tæmam/→[tæmum] 'end'

(9) /kæran/→[kæran], \*[kærun] 'horizon'

(10) /?elham/→[?elham], \*[?elhum] 'revelation'

 $(11)/[\tilde{a}s/ \rightarrow [fans], *[funs] 'chance' (12)/manite/\rightarrow [manitor], *[munitor] 'monitor'$ 

(13)	PERSPHON	*_CCC#	*aN
VP (core)	$\checkmark$	$\checkmark$	✓
FP (middle)	$\checkmark$	$\checkmark$	*
Foreign (periphery)	$\checkmark$	*	*

As the first OT account on Persian loanword stratification, this study uses Core-Periphery model to show the hierarchical character of Persian loanword

nativization; older loans (Arabic) are more nativized than recent ones (French and English). Furthermore, this stratification reveals that Arabic is so nativized in Persian lexicon that the core stratum of Persian includes Arabic loans (used in VP) whereas there are native Persian items (formal words) that are not part of the core. This shows the extensive influence of the donor language on the host language lexicon.

## References

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