

VEDIC ROOTS AND THE “SONORITY HIERARCHY”

0 In a proposed paper we will focus on a sonority hierarchy in the formation of Vedic verbal roots, on a sonority hierarchy in Vedic verbal reduplication and on the sonority hierarchy as a principle affecting the further phonemic development of Middle Indo-Aryan.

1 Any Vedic verbal root is formed (besides the vocalic peak) by two segments, forming its pattern: **a root initial and a root coda**.

2 Our further aim is to describe the **patterns both of the root initial and root coda** according to the sonority scale. We assume for Vedic four sonority classes: stops (T), sibilant (S), nasal (N) and resonant (R), termed such here for the sake of simplicity.

2.1 A root initial is formed by the following clusters (besides cases where the root has no initial at all): *T-*, *S-*, *N-*, *R-*, *ST-*, *SN-*, *SR-*, *TT-*, *TS-*, *TN-*, *TR-*, *NN-*, *NR-*, *RR-*, *STR-*, *TSR-*, *TSN-*.

2.2 A root coda can occur through the clusters (besides a zero coda) *-T*, *-S*, *-N*, *-R*, *-TT*, *-TS*, *-ST*, *-NT*, *-NS*, *-RT*, *-RS*, *-RN*, *-RR*, *-RST*, *-RTS*.

2.3 As can easily be seen, the root initials are generally **mirrored** in the root codas, which is a major feature in patterning of OIA verbal roots:

initial	coda
ST-	-TS
SN-	-NS
SR-	-RS
TT-	-TT
TS-	-ST
TN-	-NT
TR-	-RT
NN-	—
NR-	-RN
RR-	-RR
STR-	-RTS
TSR-	-RST
TSN-	—

3 The **reduplication of the consonantal cluster onset** in OIA shows a different mechanism than the reduplication found anywhere else in the Indo-European family, since all other languages in which reduplication plays a role reduplicate the first left consonant in a cluster, while OIA respects the sonority hierarchy, since any two or three-consonant root initial is reduplicated with a consonant higher in the sonority scale, hence clusters of types *ST-*, *TS-*, *STR-*, *TSR-* and *TSN-* are reduplicated with *T-* only, not with a first member (the-first-takes-it-all principle), as is the case in Avestan or Greek.

4 The **Middle Indo-Aryan development of clusters** follows the principle of the sonority hierarchy since all consonants in a cluster are assimilated, in their sonority, to the consonant of the highest sonority present in a cluster: the OIA clusters *ST*, *TS*, *TR*, *TN*, *TN*, *NT* are realized as MIA *TT*; OIA clusters *SN*, *NS*, *SR*, *RS* as MIA *SS*, OIA *NR* and *RN* as MIA *NN*.

5 According to data above it seems that a sonority hierarchy could be one of organizing principles in the development of Indo-Aryan languages.

Selected references:

- BEEKES, R. S. P. 1988: *A Grammar of Gatha-Avestan*. Leiden: Brill.
- BEEKES, R. S. P. 2011²: *Comparative Indo-European Linguistics: An Introduction*. Amsterdam: John Benjamins.
- BRUGMANN, K. 1897²: *Grundriß der vergleichenden Grammatik der indogermanischen Sprachen*. Strassburg: K. J. Trübner .
- BUBENIK, V. 1996: *The Structure and Development of Middle Indo-Aryan Dialects*, Delhi: Motilal Banarsi das.
- BURROW, T. 1955: *The Sanskrit Language*. London: Faber and Faber.
- FAHS, A. 1989: *Grammatik des Pali*, Leipzig: VEB Verlag Enzyklopädie.
- GEIGER, W. 1994: *A Pāli Grammar*. Oxford: Pali Text Society.
- KOBAYASHI, M. 2004: *Historical Phonology of Old Indo-Aryan Consonants*. Tokyo: Research Institute for Languages and Cultures of Asia and Africa.
- KURYŁOWICZ, J. 1940: *Le problème de la racine, réponses au questionnaires*. In: *V^{eme} Congrès international des Linguistes*. 12-13. Bruges: Imprimerie Sainte Catherin.
- MACDONELL, A. A. 1910: *Vedic Grammar (Grundriss der Indo-arischen Philologie und Altertumskunde I.4)*, Strassburg: Karl J. Trübner.
- MACDONELL, A. A. 1916: *A Vedic Grammar for Students*, Oxford: Clarendon Press.
- MASICA 1991: C. P.: *The Indo-Aryan Languages*, Cambridge: Cambridge Press.
- MURRAY, R. W. 1982: *Consonant cluster development in Pali*. Folisa Linguistica Historica 3. 2, 163-184.
- NIEPOKUJ, M. 1996: *The development of verbal reduplication in Indo-European*, Washington D.C.: Journal of Indo-European Studies Monograph.
- PISCHEL, R. 1900: *Grammatik der Prakrit-Sprachen*. Strassburg: Karl J. Trübner.
- REICHELT, H. 1909: *Awestisches Elementarbuch*. Heidelberg: Carl Winter.
- SIHLER, A. L. 1995: *New Comparative Grammar of Greek and Latin*. New York – Oxford: Oxford University Press.
- SZEMERÉNYI, O. 1990: *Einführung in die vergleichende Sprachwissenschaft*. Darmstadt: Wissenschaftliche Buchgesellschaft.
- TISCHLER, J. 1976: *Zur Reduplikation im Indogermanischen*, Innsbruck: Innsbrucker Beiträge zur Sprachenwissenschaft.
- VARMA, S. 1961: *Critical Studies in the Phonetic observations of Indian Grammarians*, Delhi: Munshi Ram Manohar Lal.
- WHITNEY, W. D. 2000: *The Sanskrit Language*. Delhi: Motilal Banarsi das.
- WHITNEY, W. D. 1885: *The Roots, Verb-Forms and Primary Derivatives of the Sanskrit Language*. Leipzig: Breitkopf und Härtel.