## Locative alternation at the crossroads of Pāṇini's grammar and formal syntax

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The so-called "locative alternation", exemplified in English by (1a-b), has been recently argued to be attested in Rgvedic Sanskrit as well (Ginevra 2024:52-54). Thus, the verb  $p\bar{r}$ - 'to fill' comes up with two distinct strategies to convey the fact that a THEME (also referred to as LOCATUM) is transferred to a LOCATION: by marking the theme and the location with accusative and dative case, respectively (2a); by marking the theme and the location with instrumental and accusative case, respectively (2b).

- (1a) They **loaded** [hay]<sup>THEME</sup> [onto the truck]<sup>LOCATION</sup>.
- (1b) They **loaded** [the truck]<sup>LOCATION</sup> [with hay]<sup>THEME</sup>.
- (2a) ápaḥ **pṛṇītá** [bheṣajáṃ]<sup>THEME</sup> ... [tanvè]<sup>LOCATION</sup> mama (*Rgveda* I.23.21ab) 'O waters, fully grant healing onto my body'.
- (2b) [sómebhir]<sup>THEME</sup> ... **pṛṇatā** [bhojám índram]<sup>LOCATION</sup> (*Rgveda* II.14.10b) 'Fill Indra the Provider with Soma juices'. (tr. Jamison & Brereton 2014)

The theme-location pair may also be envisaged as POSSESSUM-POSSESSOR, respectively (Hale & Keyser 2002:19). Following Belvin & den Dikken (1997:170), the notion of location or possessor extends beyond physical containment, thereby overlapping with the notion of RECIPIENT. This explains the dative-marking of the location in (2a).

In this study I argue that Pāṇini's grammar teaches a notational variant of the locative alternation, where the theme/locatum is dubbed as KARMAN and the location (when it is envisaged as a recipient) as SAMPRADĀNA. Thus, A 2.3.3 ( $trt\bar{t}y\bar{a}$  ca hoś chandasi) provides for the use of the instrumental – as an alternative to the accusative – to mark the theme of the verb hu- 'to sacrifice, to offer as an oblation' in Vedic Sanskrit (Lowe 2024:114-115). This rule licenses the alternation of (3) with (4), where hu- is construed with the accusative of the location and the instrumental of the theme, analogous to yaj- 'to worship, to offer as worship'. This alternation matches the locative alternation between (2a) and (2b) in all relevant respects.

- (3) [imấ gíra]<sup>THEME</sup> [ādityébhyaḥ]<sup>LOCATION</sup> ... **juhomi** (*Rgveda* II.27.1ab) 'I offer these songs as oblations to the Ādityas'.
- (4) ásrāmas [tvā]<sup>LOCATION</sup> [havíṣā]<sup>THEME</sup> **yajāmy**/ áśloṇas [tvā]<sup>LOCATION</sup> [ghṛténa]<sup>THEME</sup> **juhomi** (*Atharvaveda Śaunakīya* I.31.3ab)

'I, not being lamed, provide you with an oblation as a form of worship. I, not being limp, provide you with ghee as an oblation'.

The question now arises as to what theta-role (or  $k\bar{a}raka$ ) is conveyed by the accusative-marked  $tv\bar{a}$  in (4). It cannot be a theme, because the theme – already expressed by  $havi\bar{s}\bar{a}$  in (4) – can be expressed only once in a sentence (A 2.3.1: anabhihite). It is then not unreasonable to envisage the theta-role expressed by  $tv\bar{a}$  as a location in Pāṇini's grammar, too. In this way, Pāṇini would take (3) and (4) as being underlain by the same theta-roles, the difference between these sentences being confined to the surface level of case assignment.

However, it remains unclear whether, in Pāṇini's grammar, (4) should be derived transformationally from (3) (along the lines of Larson's 1988 approach to the double object construction), or whether two independent derivations should rather be posited (as in Hale & Keyser's 2002:241-245 analysis of the locative alternation). This study brings formal syntactic theory to bear on these questions, thereby contributing to illuminating the differences and similarities between Pāṇini's grammar and modern-day linguistics.

## References

Belvin, Robert and Marcel den Dikken. 1997. There, happens, to, be, have. Lingua 101(3-4): 151-183. https://doi.org/10.1016/S0024-3841(96)00049-6

Ginevra, Riccardo. 2024. Locative alternation in Proto-Indo-European: A Lexical-Constructional approach to the morpho-syntax and semantics of polysemous roots (PIE \*leug, \*uel-, and \*pleh<sub>1</sub>-). Indo-European Linguistics 12(1): 26-61. <a href="https://doi.org/10.1163/22125892-bja10036">https://doi.org/10.1163/22125892-bja10036</a>

Hale, Ken and Samuel Jay Keyser. 2002. Prolegomenon to a Theory of Argument Structure. Cambridge, MA: MIT Press. <a href="https://doi.org/10.7551/mitpress/5634.001.0001">https://doi.org/10.7551/mitpress/5634.001.0001</a>

Jamison, Stephanie W. and Joel P. Brereton. 2014. The Rigveda: The Earliest Religious Poetry of India, 3 Volumes. Oxford: Oxford University Press.

Larson, Richard K. 1988. On the Double Object Construction. Linguistic Inquiry 19(3): 335-391. https://www.jstor.org/stable/25164901

Lowe, John J. 2024. Modern Linguistics in Ancient India. Cambridge: Cambridge University Press. https://doi.org/10.1017/9781009364522