Prosody reveals syntactic structure: secondary predication in metrical finite corpus data

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The mapping of syntax to prosody is regulated by correspondence requirements that hold between abstract syntactic structure and prosodic structure (Selkirk 2011; Elfner 2012; Ito and Mester 2013, among others). Preferentially, syntactic constituents map to prosodic constituents of the same level: morphosyntactic words (X^0) map to prosodic words (ω), syntactic phrases (X^0) map to prosodic phrases (ω), and clauses (CP/TP) map to intonation phrases (ω) Selkirk 2011. Given the crucial interaction between syntax and prosody, prosodic structure can be used to identify and differentiate syntactic structure.

Secondary predicates, or nonverbal expressions which share an argument with but which are distinct from the primary predicate (Heidinger 2022), tend to be marked with special prosody; depictives are thought to be more prosodically independent than resultatives (cf. Irimia 2012: 208 and references therein). This is characteristic property of secondary predication. A further distinguishing feature is the tendency to occur in STAGE-LEVEL predicates (Carlson 1977; Simpson 2005; Casaretto 2020). This is a consequence of a state-yielding operator in the syntactic/semantic structure (Kratzer 2005; Pylkkänen 2008; Ramchand 2008). In line with MATCH theory, the structure licensing this operator maps to a distinct prosodic ι domain.

This study examines the distribution of secondary predication across finite metrical corpora, including the Homeric poems (Greek) and the RgVeda (Vedic Sanskrit). I argue that prosody plays a central role in identifying secondary predicates in these corpora; the rigid metrical requirements of the texts under discussion aid in the disambiguation of secondary predicates from attributive XPs. In other words, it is the prosody, and not a purely syntactic distribution, which serves to identify resultatives and depictives in these languages despite rich systems of scrambling, fronting, and topicalization.

This survey suggests that secondary predicates in Greek and Vedic tend to exhibit uniform prosodic behavior. In particular, secondary predicates are isolated via (i) adjacency to caesura (†), (ii) line final (||) or post-verbal position, (iii) the process of *enjambment* whereby syntactic units are broken across multiple prosodic domains at the expense of Selkirk (2011)'s MATCH constraints, or (iv) a combination of these strategies. The Greek data in (1) illustrate this point.

- (1) Greek
 - a. **ton** d' ōs oun enoēse podarkēs dīos he.ACC but thus really see.AOR.ACT.3SG swift.NOM.SG.M divine.NOM.SG.M

Achilleus || gymnon

Achilles.NOM.SG | naked.ACC.SG.M

"now as brilliant swift-footed Achilles saw him **naked**"

(II 21.49-50)

b. aùtàr èpeì dē **kukloterès** † **méga tókson**but when PTCL made.round.ACC.SG.N † great.ACC.SG.N bow.ACC.SG.N
éteine

stretch.3SG.AOR.ACT

"But when he had pulled the great weapon 'till it made a circle" (Il 04.124)

The principles regulating the word order in Greek examples (1a–1b) are not yet well understood. As a corollary, the position of secondary predicates relative to postverbal nominals is not con-

sistent: the AP follows the pronominal object in (1a) *him saw Achilles naked*, where the state of being naked is concurrent with the action indicated by the matrix verb), while in (1b) the resultative precedes the internal argument (*made round bow had pulled*, where the state of having been made round is achieved as a result of the action indicted by the matrix verb). Given the inconsistent marking of secondary predication in the syntax, secondary predicates are distinguished from attributive APs using prosodic cues. Prosodic isolation of secondary predicates in Homeric is accomplished by enjambment (1a): the depictive/resultative APs and post-verbal nominals are parsed in different lines. Adjacency to caesura (1b) constitutes another salient strategy.

The Vedic data in (2) also demonstrate the implementation of the aforementioned isolation strategies: line final/post-verbal position (2a) and adjacency to a caesura (2b).

(2) Vedic

- a. purutrā **vṛtró** † aśayad **vyàstaḥ** in.many.places Vṛtra.NOM.SG.M † lie.3SG.PST fling.apart.PTCP.NOM.SG.M "Vrtra lay (there), **flung apart** in many places" (RV 1.32.7d)
- b. dādrhāṇó vájram † índro hold.PTCP.PERF.MID.NOM.SG.M Vajra.ACC.SG.M † Indra.NOM.SG.M gábhastyoḥ || **kṣádmeva tigmám** † ásanāya hand.LOC.DUAL.M || knife.ACC.SG.N-like sharp.ACC.SG.N † for.throwing.DAT.SG sáṁ śyad LP hone.PRS.INJ.3SG "holding the Vajra in (his) hands, Indra honed (it) **sharp** like a carving knife" (RV 1.130.04ab)

In (2a), the depictive expresses the overlap of the concurrent status of laying (primary predicate) and the state of being *flung apart* (secondary predicate). The secondary predicate is subject-oriented and follows the matrix verb syntactically (*Vrtra lay flung apart*). In contrast, the secondary predicate in (2b) precedes its matrix verb (*knife sharp was honed*) in the syntax. Semantically, the *sharpness* (secondary predicate) is the end/result state of the *honing* (primary predicate) and therefore does not demonstrate overlap with the matrix verb, unlike (2a). Vedic secondary predicates, which are not predictable based solely on their syntactic distribution, are subject to isolation strategies encoded by the meter, as with the Homeric poems.

These findings therefore lend support to the demonstration of the importance of caesurae and line-boundaries in syntactic analyses of ancient metrical corpora (Hale and Kissock 2021). Further, they show that finite metrical corpora can offer important evidence for the special prosody of secondary predicates—this special prosody is consequence of sensitivity to an ι boundary that corresponds to a *resP* (Kratzer 2005; Ramchand 2008) or *depP* (Pylkkänen 2008) projection in the syntactic/semantic structure.

Selected references: Carlson, G.N. (1977). "Reference to kinds in English". PhD thesis, UMass Amherst. ■ Casaretto, A. (2020). "Onsecondary predicates in Vedic Sanskrit–Syntax and Semantics" IJDL. ■ Hale, M. and M. Kissock (2021). "n the syntax of comparative clauses in Vedic Sanskrit…like someone eating the foam off the water". *Trends in South Asian Linguistics* 367. ■ Kratzer, A. (1995). *Stage-level and individual-level predicates*. ■ Kratzer, A. (2005). "Building resultatives". In Maienborn, Claudia and Angelika Wöllstein, *Event arguments: foundations and applications*. ■ Selkirk, E. (1996). "The prosodic structure of function words". In: *Signal to syntax*. ■ Selkirk, E. (2011). "The syntax–Phonology Interface". *The handbook of phonological theory*.