## Cinderella Syncope: the ever-changing metrical motivations for Latin vowel deletion Ranjan Sen (University of Sheffield)

Early Latin syncope (vowel deletion, e.g. \*k\*i:ŋk\*edekem > quīndecim 'fifteen') has resisted formulation in terms of strict synchronic rules or diachronic sound changes for three reasons. Firstly, syncope continued to occur throughout Latin history, with different metrical, phonotactic, and morphological constraints in different time periods and registers. Secondly, the interaction of metrical factors is complex, so syncope is not restricted to certain fixed positions, e.g. not 'trapped' light syllables (Mester 1994), nor weak positions in feet (Jacobs 2004), nor second and fourth syllables (Cowgill 1970). Thirdly, some syncopes are sensitive to a stratal synchronic phonological structure, as there is an opaque interaction between stress placement and deletion.

This analysis builds upon Sen's (2012) observation that different syncopes were brought about by metrical constraints which were constantly changing in their relative importance. Six consecutive syncopes are identified, reflecting diachronic constraint rerankings owing mainly to the gradual raising of quantity sensitivity (WSP and SWP) and parsing (Parse- $\sigma$ ) over alignment of all or head feet to an edge: (1) archaic SWP syncope, (2) archaic alignment syncope, (3) archaic parsing syncope, (4) late archaic \*(LLL) syncope, (5) early \*(LLL) syncope, and (6) early/classical parsing syncope. The phonotactic constraints on each syncope provide a good independent test: each syncope wave (affecting several word shapes) seems to show a single set of phonotactic restrictions, whereas syncopes motivated by other re-rankings have different environments.

Early syncopes brought about by the loss of a trisyllabic (LLL) foot (three light syllables) as in  $pu(\acute{e}.ri.ti)a \rightarrow pu(\acute{e}r)tia$  'boyhood' provide evidence for **stratal phonological structure**, as stress on the second syllable (confirmed by consistent verse ictus) demands a word-level stress assignment with an (LLL) foot (not  $(p\acute{u}.e).ri.ti.a$  or  $pu.e(r\acute{i}.ti).a)$ , but syncope in the third syllable shows a phrase-level dispreference for this foot shape (\*(LLL) » MAX-V), resulting in only binary feet as in classical Latin. The presented early Latin word- and phrase-level phonologies are further corroborated by their consistency with the metrical analysis of contemporaneous iambic shortenings (Sen 2023).

Finally, syncope illustrates the **life cycle of phonological processes** (e.g. Bermúdez-Otero 2015). Comparing second-syllable syncope in LLLH  $b\'alineum \rightarrow HLH b\'alineum'$  bath' with third-syllable syncope in identically shaped LLLH  $mis\'eritus \rightarrow LHH mis\'ertus'$  pitied' reveals a diachronic re-ranking which matches the historical record (1st cent. BCE in balneum; 1st cent CE in misertus). Earlier b'alneum is caused by phrase-level syncope respecting initial-syllable stress brought about the permitted (LLL) foot at the word level (as in pu'eritia): word-level (b'al.i.ne). $um \rightarrow phrase$ -level (b'al.ne.um. At that stage, m'seritus would have retained initial-syllable stress, but not syncopate at the phrase level owing to (1) the phonotactic constraint against /sr/ in the second syllable, and (2) the WSP violation in the unstressed second syllable if syncope occurred in the third syllable: \*m'sertus. Later syncopated m'sertus shows third-syllable syncope at the phrase level after (LLL) feet came to be dispreferred at the **word level**, resulting in second-syllable stress: word-level m'sertus (regular according to the Latin Penultimate Law of stress placement)  $\rightarrow$  phrase-level m'sertus. Notably (almost) all syncopated forms are ultimately lexicalised, reaching the end of the life cycle.

A comprehensive amphichronic account for Latin metrical structure has hitherto proved elusive; the present analysis makes significant progress in incorporating several phenomena under a single stratal phonology.