Accent shifting is asymmetrical. Evidence from textsetting of misaligned lyrics in Italian pop and rap

This paper analyses the relationship between Italian metrical phonology and musical textsetting, following Halle & Lerdahl, 1993. Italian prosody regularly alternates strong and weak syllables. Pop and rap songs also present a similar pattern in the grouping and metrical structure of the musical beat. Whenever possible, strong syllables coincide with downbeats (alignment). When textsetting is misaligned, beats force foot restructuring. Evidence comes from a corpus I compiled of 1000+ musical upbeat phrases compared with word-initial, unstressed syllables in the spoken language. I demonstrate that accent shifting is governed by a Super¹ Repair Strategy, presenting examples of **retraction**: secondary accent resurfacing (Vogel & Scalise, 1982) and **protraction**: catalectic footing (Jakobs, 1994) at phrase margin.

Retraction. Data in my corpus show 86% of instances of retraction where stress shifts onto a weak foot or proclitic, aligning secondary stress with a downbeat. (1a) shows misalignment (red dots, red stars) between lexical stress (metrical grid; Liberman, 1975) and metrical beats (syllable placement follows the practice established by Adams, 2008: each column in the chart represents a sixteenth-note subdivision of the beat). Visually, two stars (in blue, foot level stress) should not be aligned with full beats. (1b) shows the accent shifting, promoting secondary stress to PrW level (red stars have moved left) and demoting lexical stress to foot level. Consequently the textsetting is in phase. In my corpus, retraction also forces stable iambs in the language to surface as trochees in 8% of cases (e.g. avrà>àvra, Gesù>Gésu). Elsewhere in Italian, no repair strategy occurs (Marotta, 2000) to bring binary iambic structures back to the unmarked bimoraic trochaic foot template (Krämer, 2009); on the contrary, iambic structures are stable in the language and created in the morphology (e.g. hypocoristics: Salvatore>Toto, Federico>Fefe; oxytone infinitives in Tuscan variety of Italian: cantàre>cantà, vedére>vedé; diachronic iambic restructuring of archaic trochees: cittàde>città, virtùde>virtù). The (musical) Super Repair Strategy succeeds where the (metrical) Repair Strategy fails.

Protraction. When a final stray syllable aligns with the downbeats, primary stress shifts onto it. Whilst secondary stress on the left of the primary is accepted in the literature, its existence on the right is debated (Nespor, 1993, Lepschy & Lepschy, 1977). I provide examples that a degenerate foot (DF) at the end of the word is not only 'stressable' but also 'repairable': the Super Repair Strategy forces the monosyllable foot to branch, resorting it to a default trochee on the right. In (2), I provide an example of catalexis (Jakobs, 1994, Burzio, 1994) from the corpus: $[(.,sal.ko.)(.'lid.dza.)<.no.>] \rightarrow [(.,sal.ko.)(.'lid.dza.)(.'no.Ø.)]. (2a) shows the phrase time-span reduction (Jackendoff, Lerdahl, 1980); (2b) shows the prosodic structure of the lyrics, where lexical stress is on the middle foot ['lid.dza]; In (2c), textsetting causes accent to shift forward and the DF to branch to the right. A catalectic, left-headed, binary foot is created. The strong syllable on the downbeat [.no.], head of the constituent, governs the last note of the phrase, a prosodically relevant (but segmentally empty) element.$

In sum, based on my findings in the musical idiom, text-tune mismatching causes accent shifting that behaves asymmetrically: whilst retraction happens on different constituents (weak foot, repaired trochee, stray initial syllable, clitic), protraction forces stress onto one position, and one position only: the right edge of the word.

¹ 'Super' as it applies a formal linguistic methodology to an object of study *beyond* language, in this case to music. See Super Linguistics at University of Oslo and LINGUAE, DEC École Normale Supérieure.

(1a) textsetting misalignment

Textsetting - Rap From "Potere alla parola" by Frankie hi-nrg mc (1993)

Lines 25-27: 'depleting the arsenal of words suffocated by webs of an entire generation of silence'



(Selected) References

Textsetting - Rap

From "Quelli che benpensano", by Frankie

hi-nrg mc (1997)

and very drunk

Line 29:

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strong bear downbeat

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