## The evidence for the constraint MINIMALITY in casual French speech

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Although careful speech and what the pronunciation dictionaries dictate in a language have been widely studied in Optimality Theory or OT ([9]), speech that is uttered in casual settings has not been extensively studied in phonological computation, focusing on language variation ([1;2:11;12]). The constraints in the OT literature are posited mostly based upon careful speech. Following up on published data in French ([2; 4]), this study formalizes varied pronunciations of the French word *ministre* /minist $\omega$ /  $\rightarrow$  [minist]  $\sim$  [minist] in non-careful speech within OT. Word-final consonants are truncated before the consonant onset of the next word ([10]). (These variants are shown in descending order of relative frequency ([2]).) The categorically reduced forms without a schwa are more easily recognizable among the listeners if they are frequently used ([2]). It would seem that the mental lexicon of native French speakers allows for a categorical reduction in part of the word-final obstruent-liquid-schwa (henceforth, OLS) or [ə] or [uə] or [uə] ([2]). Brand and Ernestus inquire what would enforce the deletion of the word-final OLS without skipping it from the final schwa in phonology ([2]). The present study considers this issue, building a constraint ranking which accommodates each of the varied outputs which compete for grammaticality. Some outputs, such as [miniskə], [minisk], and [ministə], are rarely produced ([2]), and they are deemed sub-optimal.

The present study suggests that the combinatorial effects of MINIMALITY or MINI ([8]), ALIGN-LEFT ([6]), and CONTIGUITY or CONTI ([7]) all rank the highest. MINI stipulates that the output consists of two moras, whereas ALIGN-LEFT requires the left edge of the word to align with the left edge of the prosodic word. CONTI stipulates that a continuous string in the input remains continuous in the output, which eliminates incorrect outputs such as [minisʁə] and [minisʁ]. MAX-IO ([7]) is crucially outranked by the higher-ranked constraints. MAX-IO stipulates that the input segments are preserved in their correspondent segments of the output. Thus, MINI, ALIGN-LEFT, CONTI » MAX-IO would seem to explain competing interactions, whereby the actual outputs, such as [ministʁ], [minist], and [minis] are accounted for. The intact output [ministʁə] is ruled out because this output bears three syllables, which is in violation of MINI. The modified ranking argument MINI, ALIGN-LEFT, NOCODA » MAX-IO can account for a categorical reduction of the word-final OLS in the phrase *peintre dans* /pɛ̃tʁə dɑ̃/  $\rightarrow$  [pɛ̃.dɑ̃] ([2]) as well. NOCODA ([7]) penalizes the use of a coda in the syllable. In addition, the combinatorial ranking of MINI, ALIGN-LEFT and CONTI over MAX-IO also holds its own in the analysis of truncation in French common words, as exemplified below:

(1) Truncated words in French ([3])

*certificat* /sɛʁtifika/  $\rightarrow$  [sɛʁtif], *cinéma* /sinema/  $\rightarrow$  [sine], *chronomètre* /kʁonomɛt/  $\rightarrow$  [kʁono], *aluminium* /alyminjom/  $\rightarrow$  [aly], *accumulateur* /akymylatœʁ/  $\rightarrow$  [aky]

The phonology of truncated forms, as addressed here, contrasts with that of monomoraic words, which are numerous in French ([5]). This freely violates word minimality.

## References

[1] Brand, B. and Ernestus, M. (2018). Listeners' processing of a given reduced word pronunciation variant directly reflects their exposure to this variant: evidence from native listeners and learners of French. *Quarterly Journal of Experimental Psychology* 71, 1240-1259. [2] Brand, B. and Ernestus,

M. (2018). Reduction of word-final obstruent-liquid-schwa clusters in Parisian French. Corpus Linguistics and Linguistic Theory. [3] Collins Online Dictionary (2019). Retrieved from https://www.collinsdictionary.com/ [4] Dell, F. (1973). Les règles et les sons: Introduction à la phonologie generative. Paris: Harmann. [5] Goad, H. and Buckley, M. (2006). Prosodic morphology in child French: Evidence for the foot. Catalan Journal of Linguistics 5, 1-27. [6] Hammond, M. (1999). The Phonology of English. Oxford: Oxford University Press. [7] McCarthy, J. J. (2008). Doing Optimality Theory: Applying theory to data. Malden, MA.: Backwell Publishing. [8] Odden, D. (2006). Minimality and onsetless syllables in Zinza. Phonology 23(3), 431-441. [9] Prince, A. and Smolensky, P. (1993/2004). Optimality Theory: Constraint interaction in Generative Grammar. Malden, MA.: Blackwell. [10] Schane, S. A. (1968). French phonology and morphology. Cambridge, MA.: The MIT Press. [11] Skaer, P. M. (2001). An introduction to the phonology of casual spoken English. Journal of Hiroshima University 27, 23-49. [12] Tucker, B. and Ernestus, M. (2016). Why we need to investigate casual speech to truly understand language production, processing and the mental lexicon. The Mental Lexicon 11 (3), 375-400.