Empty elements in French phonology: what for?
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Analyses of schwa, liaison and h\ *aspiré* in French have relied heavily on empty elements and have had a major impact more generally on the development of a typology of "defective" segments. My aim in this talk is to evaluate how exactly emptiness contributes to accounts of these three phenomena. I conclude that they are more insightfully understood without use of defective segments and that syllabic constituents, which are crucial elements of the defective segment analyses, play no role. I advocate a sequential approach on the segmental level coupled with a more structured lexicon.

Liaison consonants, schwa and h\ *aspiré* involve:
- **floating segments** with respect to the skeleton and/or the syllable, i.e. segments with no or only partial suprasegmental structure (for liaison consonants as floating consonants, see e.g. Clements & Keyser 1983, Booij 1983-84, Encrevé 1988, Prunet 1992, Tranel 1995, Davis 2000; for schwas as floating vowels, see e.g. Tranel 1987)
- **empty syllabic positions**, without featural content (for schwas as empty nuclei, see e.g. Anderson 1982, Charette 1991; for h\ *aspiré* words as beginning with an empty onset position, see e.g. Encrevé 1988, Sung 1989, Girard & Lyche 1997).

All these analyses share two basic characteristics:

1) **The defective structure serves to establish lexical distinctions:**
   a. between variable schwa and other stable vowels (/œ/ and /ø/ in particular), e.g. *pelouse* 'lawn' [p(œ)luz] vs. *jeunesse* 'youth' [ʒœnɛs] *[ʒneš]
   b. between variable liaison consonants and fixed final consonants e.g. *grand* 'small' [grâ(t)] vs. *trente* 'thirty' [trât] *[trâ]
   c. between words beginning with h\ *aspiré*, which block liaison, vowel elision, suppletion and schwa omission (leaving *enchaînement* aside), and true vowel-initial words, which trigger these processes.
      
   e.g. liaison **des hibous** 'owls' [deibu] **des idiots** 'idiots' [dezidjo]
   elision **la honte** 'the shame' [laøt] **l'onde** 'the wave' [lɔd]
   suppletion **vieux hibou** 'old owl' [vjoïbu] **vieil idiot** 'old idiot' [vjɛlidjo]
   schwa **de honte** 'of shame' [dœøt] **d'onde** 'of wave' [dɔd]

2) **The processes involved** (schwa omission, liaison, elision, suppletion, *enchaînement*) **all crucially depend on prosodic constituents** below the word, especially syllabic constituents. The distribution of schwa is determined by syllable well-formedness; liaison, elision, suppletion and *enchaînement* apply before onsetless syllables.

The necessity of defective elements for our understanding of schwa, liaison and h\ *aspiré* would be challenged if it can be shown that one or both of the above characteristics is unmotivated. More specifically, I argue that:

1) the behavior of schwa is not adequately predicted by syllable well-formedness;
2) the variable pronunciation of liaison consonants is insightfully understood as deriving from epenthesis and/or lexical allomorphy, rather than defective representations;
3) h\ *aspiré* is equivalently represented with syllable boundaries rather than empty onsets.

1) **Schwa:** The distribution of schwa cannot be predicted by syllable well-formedness.
   a. Schwa omission often yields consonant clusters that cannot be syllabified, according to the patterns attested in the language. Extending the range of permissible syllables or allowing for extrasyllabic consonants results in a circular analysis (or one that cannot avoid brute force).
Sequences of three consonants are allowed in (1a) and (2a), but not (1b) and (2b), where at least one schwa must be pronounced in the underlined positions. Yet none of the medial consonants in (1-2) may form a complex coda with the preceding segment or a complex onset with the following one that is otherwise attested in French.

b. Schwa is more often omitted in the context VC__ than in VCC__, e.g. la demande 'the request' [ladmâd] vs. une demande 'a request' [yndœmâd]. Yet speakers usually syllabify la demande [la.dmâd], not *[lad.mâd], which is the only syllabification predicted by syllable-based accounts.

c. La distribution of schwa depends on segmental, morphological and prosodic factors (above the word), without reference to the syllable. The segmental generalizations are interpreted in terms of perceptual cues and sonority level (Côté 2000).

2) **Liaison**: (Obligatory) liaison consonants are normally epenthetic (only prenominal adjectives of the type bon 'good' involve suppletion between the liaison and non-liaison forms /bɔ/, /bɔn/, where liaison consonants correspond to fixed final consonants (Tranel 1990)). Liaison as epenthesis has been advocated by Klausenburger (1974) and Tranel (1981); this analysis receives further support from additional types of data:

a. Acquisition: Children appear to go through three stages during the acquisition of liaison. Liaison consonants are first encoded as initial consonants of the following word; they appear to later detach from that position but nothing suggests that they attach to the preceding word. In particular, while confusion between liaison consonants and fixed initial consonants is frequent, confusion between liaison consonants and fixed final consonants is never observed (Chevrot & Fayol 2001, Dugua 2002, Nardy 2003)

b. Liaison at a distance: Adults often produce forms like ben mieux isolé 'much better insulated' [bɛ̃ mi̯ɛz silõle], where liaison [n] is triggered by ben but is separated from it by another word. This is highly unexpected if [n] is belongs to ben.

c. Liaison consonants vs. consonants used in derivation: Floating consonant analyses assume that liaison consonants in prenominal adjectives are the same as those used to form the feminine or in derivation, e.g. the liaison [z] associated with gros 'big' is derived from the same consonant as the [s] used in the feminine grosse 'big-fem' and the derived noun grosseur 'size'. Yet there is no necessary correspondence between the consonants used in liaison and derivation, e.g. gros arbre [grõarbr] with [t] instead of [z] is frequent, but mistakes with the [s] of grosse and grosseur never occur.

3) **H aspiré**: H aspiré words are adequately represented with an initial syllable boundary, which eliminates reference to syllabic constituents. Empty onsets do not necessarily account for the obligatoriness of schwa in a preceding clitic, e.g. le hibou 'the owl' [leœibu̯] *[libu], while schwa remains optional before true consonant-initial words, e.g. le bureau [leœyro]. The analysis of h aspiré is also made more complicated by the fact that h aspiré words often block some but not all of the processes associated with h aspiré. Typically, we observe the following hierarchy in the ease of application of processes: enchaînement > suppletion > schwa omission in clitics > liaison in [t] > liaison in [z] and [n]. Such a hierarchy cannot be obtained with a simply structural account (but is compatible with an optimality-theoretic one).
References


