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## Ohne Sinn, ohne Substanz, ohne Ziel? Abstract consonants in phonology

It is not infrequent for contemporary phonologists to posit abstract consonants, which are not realized as unambiguous speech segments, in their analyses. While there is precedence for this practice already among the structuralists (Sapir 1933; Chao 1934), the use of abstract consonant representations came into its own with the advent of generativist approaches in the 1960s (Chomsky and Halle 1968). The question of how abstract phonology is fast became a key debate within generativism, continuing throughout the 1970s and into the 1980s (Postal 1968; Kiparsky 1968; Hyman 1970, 1973; Harms 1973; Hooper 1976; Marlett 1981; Clements and Keyser 1983) and continues to be relevant in the present day. This paper undertakes a preliminary survey of how abstract consonants have been employed in the phonological literature, offering a tentative ontology of abstract consonant representations.

One use of abstract consonant representations is to maintain structural parallelism across a given class. For example, Mubi (East Chadic, Chadic) has triconsonantal and biconsonantal root templates with different patterns of verbal stem derivation, e.g. triconsonantal *tagal* ‘close’ and biconsonantal *ruŋ* ‘arrive’. However, there are also instances of verbs with two surface root consonants, which pattern as triconsonantal verbs, e.g. *aran* ‘add’, and verbs with one surface root consonant which pattern as biconsonantal verbs, e.g. *um* ‘see’. To maintain this parallelism, Prickett (2012: 60) posits an empty initial consonant at the beginning of these latter verbs, i.e. { $\emptyset$  r n} for *aran*, parallel to {t g l} for *tagal*; { $\emptyset$  m} for *um*, parallel to {r ɲ} *ruŋ*.

Somewhat different structural arguments are used by Russom (2017) for Old English. As all vowel-initial words can alliterate freely with each other in Old English poetry, he argues that they all begin with an abstract consonant, which he represents with an exclamation mark. Bisol (1992) posits final abstract consonants for words ending in a stressed open final syllable in Portuguese, remarking that they behave identically to ordinary consonant-final words in the allomorph of the diminutive suffix they select.

Abstract consonants tend to be often used to account for differences in phonological behaviour at word boundaries. The *cause célèbre* in generativism is the left-edge phenomenon of h-aspiré in Modern French (Gaatone 1978; Boersma 2007), but phonologists have used the abstract consonant to deal with quite different data at the right edge of the word (e.g. Drude 2014 for the Tupian language Awetí). Particularly frequent is a tendency to posit abstract consonants in the representation of geminates, particularly where gemination is morphologically conditioned (e.g. Bertinetto and Loporcaro 1988 for Italian; Janhunen 2015 for Finnish; the final features of Numic languages; the Q-element in Japanese). Ségéral and Scheer (2001) argue for ‘virtual’ geminates which are long in underlying representations but surface as short, single, phones, in languages as diverse as Somali and Cologne German.

In some cases, scholars have argued for abstract consonants which have no substantial segmental content, but which are specified for secondary localisation, thus playing a role in ‘filling in’ vowel quality in surrounding vowels. This is particularly common in cases of vertical vowel systems, where secondary localisation in surrounding consonants often plays an important role in conditioning vowel allophony. This is the case in Kabardian in Kuipers (1960); in Marshallese in Bender (1968); in Old Irish in Anderson (2016).

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