Double-linked left-edge vowels in CVCV. A case of Poznan-Cracow Voicing

Grzegorz Michalski (Adam Mickiewicz University)

This paper advocates the idea that in CVCV phonology, left-edge vowels may be attached to a V slot and a C slot on the skeleton at the same time. It is argued that in Polish, any vowel present at the left edge of a phonological representation is double-linked, primarily to a V slot, secondarily to the preceding C slot. It is concluded that the presence of a double-linked vowel and the presence or absence of an empty CV between two phonological chunks (words, morphemes) can explain the phenomenon of Poznan-Cracow Voicing.

This paper presents an analysis of regressive voicing of obstruents in Poznan-Cracow Polish in the presence of a vowel, found in casual speech across word boundaries, as shown in (1).

(1) *brat ojca* 'father's brother'; /brat/ + /ˈɔjtsa/ → [braˈdɔjtsa]

[±voice] is a distinctive feature of Polish obstruents, as shown in (2).

(2) *pat* 'stalemate' /pat/ vs. *bat* 'whip' /bat/

Despite the same phonetic setting, the phenomenon shown in (1) is only attested across word boundaries, whereas it is not attested word-internally, as presented in (3).

(3) *bratowa* 'brother's wife'; /brat/ + –/ˈɔva/ → [braˈtɔva]

For rule-based derivational theories of phonology, the answer to this puzzle is straightforward. At any lexical level the process of regressive vowel-to-obstruent voicing is absent; hence no voicing applies to (2) or (3), whereas at the post-lexical level the process is free to apply in Poznan-Cracow Polish, yielding (1). The only necessary condition here is that post-lexically, the voicing does not affect obstruents left voiceless at earlier stages of the derivation; otherwise the [±voice] distinction, as in (2), would be lost, contrary to fact. This solution, however, is rejected in CVCV, since CVCV is not a rule-based derivational theory.

In CVCV all phonological processes are supposed to stem from lateral relations between the segments linked to a skeleton made from alternating C and V slots (Scheer 2004). What is more, CVCV bans serial derivation in phonology proper (Scheer 2006). Hence, a CVCV analysis of the phenomenon in question needs to find the difference between (1) and (3) in their phonological representations, without recurring to rules and level distinction.

In order to concatenate chunks correctly, CVCV has an accompanying Translator's Office in the morphosyntax–phonology interface (dubbed Direct Interface; cf. Scheer 2006). In short, with respect to the phonological skeleton, the interface cannot manipulate the melody, but it can manipulate skeletal slots by means of adding or not adding an empty CV between the chunks.

As a solution, this paper explores the concept of double-linked chunk-initial vowels, with a primary node between the phonological expression (the segment) and the first V slot in the skeleton, and a secondary node between the expression and the preceding (word-initial) C slot. The insertion of an empty CV by the Translator's Office or the lack thereof will ensure that the voicing assimilation is not attainable in (2) or (3), but may be fully automatic in (1). In short, if there is no extra CV sent from the Office, the obstruent and the vowel in question are separated only by the final empty nucleus (FEN) of the first chunk. This allows for the [+voice] feature to spread from the initial C slot of the second chunk to the last C slot of the first chunk. If, however, there is an empty CV in-between, the obstruent and the vowel are separated by three skeletal slots, making an automatic spreading impossible. It is then the Translator's Office's task to differentiate levels of the structure received at PF to produce the expected result.

References

Scheer, Tobias. 2004. *A Lateral Theory of Phonology. What is CVCV and why should it be?* Berlin: Mouton de Gruyter.

Scheer, Tobias. 2005. Postcard theory: how higher level modules communicate with phonology through a translator's office. Paper presented at the 36th Poznań Linguistic Meeting (PLM 2005), Poznań.

Scheer, Tobias. 2006. Direct Interface. Course of classes taught at EGG Olomouc'06, Olomouc.