Rorövarorsoppororåkoket: Language games and Swedish phonology

This presentation approaches a number of phenomena in Swedish and in phonological theory from the perspective of language games. Language game data will be used to demonstrate a previously undescribed process of vowel raising in Swedish, to motivate a phonological account of Swedish nasal assimilation, and to justify the existence of productive opacity which is not morphologically conditioned. The focus will be on rövarspråket, a well-known language game among Swedish-speaking children. This research continues a long tradition of exploring what language games can tell us about phonology (see Bagemihl 1988, Davis 1993 among others). The conclusions about phonological theory are in agreement with previous work on language games in Cuna (Sherzer 1970) and Arabic (Al-Mozainy 1981).

In rövarspråket, each consonant /Ci/ is replaced with the sequence /CiɔCi/, so that /språk/ 'language' becomes /sɔspɔprɔroːk/ 'sospoporåkok'. It will be argued that the counterfeeding interaction between vowel shortening and centralization before /r/ observed in actual Swedish is productive in this language game. In Standard Central Swedish, short /œ/ optionally centralizes to [œ] before /r/ (Riad 2014). Centralization is productive in recent loanwords, so that speakers with a short vowel in /service/ 'service' allow both ['sœr:vis] and ['sœr:vis]. This process interacts with unstressed vowel shortening, part of which involves the mapping from UR /œ:/ to SR [œ], as in [voajɛrɪsːm] voyeurism 'voyeurism' from /voajɔːrɪsm/ (Andersson 2016). Vowel shortening of this type is fully productive in rövarspråket, as in [œˈnɔnː] önon, the rövarspråket form of /ön/ 'the island'.

In Swedish words and in rövarspråket, vowel shortening counterfeeds centralization. This is illustrated in (1) below for the words [fœrˈklɔːra] förklara 'explain!' and [fɔfœˈrɔrː] foföror, the rövarspråket form of /fɔːr/ 'for'. In both words, centralization is ungrammatical in Standard Central Swedish: *[/fɵrˈklɔːra], *[/fɔfɵˈrɔrː].

(1)

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Much recent work has questioned whether true phonological opacity exists. Some question the productivity of the processes involved (Sanders 2001), while others attribute opacity to the interaction between morphology and phonology (Green 2004, Anttila et al. 2008). However, both the opacity and the processes in (1) are productive in rövarspråket, and “preceding the first copy of an /r/ in rövarspråket” is hardly a morphological environment to which native speakers are exposed. The language game therefore provides external evidence for productive phonological opacity. Opaque interactions productive in language games have been noted in earlier research (Sherzer 1970, Al-Mozainy 1981). However, recent criticisms of productive phonological opacity do not discuss these data. It is therefore worth drawing attention to further examples from more languages to illustrate that this is a phenomenon which must be accounted for in our theories of phonology.

In addition to making theoretical contributions, language games can also provide new insights on issues specific to Swedish. For some speakers of Standard Central Swedish, the vowels /ɛ, œ/ are optionally raised to [e, ø] respectively in an environment which will be called 'pre-palatal' here. The vowels raise before /iː, yː, i, y, ɛ/, within morphemes, but also across morpheme and word boundaries. Note that the velars /k, g, ŋ/ are significantly fronted, and may be transcribed more accurately as palatalized [kʲ, gʲ, ŋʲ], although [k, g, ŋ]
may be heard before back vowels. This pre-palatal raising has not to my knowledge been described elsewhere in the literature on Swedish phonology.

Raising and fronting in palatal environments is phonetically motivated, as high front vowels, like palatal consonants, require constrictions near the palate. Given the phonetic motivation and the optionality of raising, it is not clear that this process is phonological, i.e. that it is a change in one or more features in the mapping between UR and SR. However, evidence from rövarspråket allows us to tell that the environment for raising is not phonetically defined. Consider forms like [sɔstoteˈgɔːɡ] sostotegog, rövarspråket for /steːɡ/ steg 'step'. Palatalization of /g/ is transcribed here, though it is absent on the first [ɡ] which precedes a back vowel. The original /ɛ:/ first shortens to ɛ in an unstressed syllable. And although the following /ɡ/ is not palatalized, pre-palatal raising can still apply and turn the vowel to [ɛ]. One could attempt to redefine a phonetic environment for raising in terms of a palatal or velar constriction, but this would not work; /βj/, for many a non-palatalized velar (Ladefoged and Maddieson 1996: 172), fails to trigger raising in forms like [ˈmeʃːˈmeːt] Mehmet 'Mehmet (name)', *[ˈmeʃːˈmeːt]. Therefore, the triggers for raising cannot be phonetically defined, whether in terms of palatals or velars.

If this argument is correct, it has significant consequences for nasal assimilation of /n/ to following consonants in Swedish, which is highly variable in when it applies and what the output is (Riad 2014: 88-91). Nasal assimilation feeds raising in forms like /ɛn kat/ en katt 'a cat'. Nasal assimilation turns /ɛn kat/ to ɛn kat. The vowel ɛ is now pre-palatal, and can raise to give [ɛn ˈkatː]. If phonetic processes apply after phonological ones, and if pre-palatal raising is phonological, then nasal assimilation, which feeds raising, must also have been phonologized. It is only due to the interaction of raising and assimilation, and the language game data above, that the phonological status of these two processes can be deduced.

The work presented here investigates the use of language games as phonological evidence in Swedish. Some of the data are of relevance to Swedish phonology, such as the description of a new phonological process – pre-palatal raising – and the implications for nasal assimilation. Other data are also of wider relevance to phonological theory more generally, such as the documentation of a case of productive phonological opacity supported by external evidence. It is hoped that this will stimulate more work on language games, and on those empirical and theoretical phenomena which they can shed light on.

References