## **Workshop 9: Marginal phonemes**

Keywords: phonology, phonotactics, contrast, xenophones, onomatopoeia

**Organizers:** Rueter, Jack (University of Helsinki)

Fejes, László (HUN-REN Hungarian Research Centre for Linguistics)

Marginal phonemes are phonemes which are rarely contrastive. The specification of the phoneme inventory is an essential part of the description of a language (cf. Hall 2013: 218). Speech sounds contrasting lexemes or word forms are considered to be the realisations of distinct phonemes. However, phonemes cannot be contrasted in every context (cf. Hall 2013: 231–237). The functional load of phonemes can be varied. The low functional load of marginal phonemes suggests their elimination: in fact, they are frequently in free variation with some central phonemes. Consequently, the existence of marginal phonemes is unexpected. Matisoff (1994: 121–122) argues that marginal phonetic features can be exploited for affective or symbolic purposes: "their very rarity makes them appropriate for grammatical or symbolic duty" (although his examples are not phonemes but tones). He also mentions that elements with low functional loads can help to avoid the overburdening of the system by the emergence of new homophones. Additionally, language contact and bilingualism can also support the perseverance of marginal phonemes.

Hall (2013) presents a wide range of examples of marginal phonemes from various languages. Her catalogue suggests that the existence of marginal phonemes is not a marginal phenomenon cross-linguistically; instead, it seems that every language is expected to have some marginal phonemes. Nonetheless, e.g. Uralic languages are hardly represented among her examples: two cases from North Saami are mentioned based on Bals et al. (2007) and Bye (2009), Enets is mentioned with a reference to Anderson (2004), and Salminen (2007) is also referred (Hall 2013: 217, 233, 239, 241, 248). However the descriptions of Uralic languages usually mention some phonemes only occurring in loanwords, onomatopoeic words or rarely (in given phonological contexts). Finnish is extremely rich in marginal phonemes.

The lack of data on Uralic languages can be explained by the fact that the issue of marginal phonemes has never been addressed in Uralic linguistics as a general problem. Even when their transitionality is discussed, it is done from a historical, and not a synchronic point of view (cf. Keresztes 1993). Despite the widely known and often cited principle, "once a phoneme – always a phoneme", descriptions of various languages often ignore or deny the phonemic status of units which are contrastive only in a restricted set of environments.

Phonemes can be marginal in certain typical ways. It is characteristic of Uralic languages that some vowel phonemes are only contrastive in the initial syllables of words, as in subsequent syllables some of them cannot occur. This kind of restriction can concern subsets of natural classes (cf. Hall 2013: 242–243): typically rounded vowels do not (or just exceptionally) occur in non-initial syllables (e.g. in Hill Mari, Komi or Ob-Ugric) or just some of them occur in this position (as in Standard Estonian or Udmurt). In some languages, e.g. in Finnish or Hungarian, certain feature contrasts are restricted due to harmony (typically, the front/back feature is determined by the preceding syllables, thus the front/back contrast is excluded or restricted). In Finnish, voiced obstruents generally occur in loanwords (except for /d/, which occurs only in the weak grade of morphemes with consonant gradation, e.g. /katu/ 'street.NOM.SG': /kadu-n/ 'street-GEN.SG'); labial fricatives are exceptional as voiceless /f/ only occurs in foreign words but voiced /v/ is wide-spread in native words as well). Similarly, postalveolar sibilants /ʃ/ and /ʒ/ are restricted to loanwords. In contrast to /d//f// ʃf/ and /ʒ/, /b/ and /g/ also occur in geminates; and – following the pattern of the similar

voiceless plosives – also participate in consonant gradation (/moba-ta?/ 'mob-INF': /mob:a:-n/ 'mob-PRS.1SG', /bloga-ta?/ 'blog-INF': /blog:a:-n/ 'blog-PRS.1SG'). However, less educated Finnish speakers (and even educated ones in informal situations) tend to substitute [b] with [p], and [g] with [k], /ʃ/ and /ʒ/ with /s/. Therefore, Nuutinen (1994) argues that these sounds do not have a phonemic status in Finnish.

Some of these segments can only be identified in specific layers of the lexicon (cf. Hall 2013: 237–239). Such marginal phonemes are the xenophones, which are contrastive only in foreign words (see the Finnish examples above). The presence of xenophones seems to be a universal phenomenon, and every language contacting and borrowing from other languages is supposed to have some examples. The use of xenophones may even depend on which language the word is borrowed from, cf. Evans 2022: 1002. Yet another type of marginal phonemes is the set of phonemes occuring merely in onomatopoeic words. E.g. in Erzya, the bilabial tremulant /B/ is only found in onomatopoeic animal calls and motherese words like /Buay/ 'outside'.

Other marginal phonemes occur in native words, but solely in a given environment. In Standard Udmurt, /w/ is attested only in the initial syllables of about 50 stems, always following a word-initial /k/ and before /a/ (in one exception, before /i/: /kwip/ 'three'). Livonian / $\alpha$ / and / $\alpha$ / emerge only in initial syllables following word-initial labial consonants (Viitso 2008: 311). In Moksha, /a/ and /æ/ are considered to be distinct phonemes, but in non-initial syllables, /æ/ only occurs following palatalised consonants, and even then solely word-finally or followed by either another palatalized consonant or a sibilant: consequently, it alters with /a/ in paradigms (Bartens 1999: 30). In any case, it is very difficult to find minimal pairs with /a/ and /æ/ (/kali/ 'willow' and /kæli/ 'tongue, language'; cf. also Toldova et al. 2018: 29). Some marginal phonemes occur in native words but not in a restricted environment: these are simply rare. In the Beserman dialect of Udmurt, /i/ is attested in 17 words, some of which are native (Idrisov 2012).

Some marginal phonemes are realised as a sound which is frequent in the language, but usually they are the allophones of a central phoneme. Meanwhile, the cases when they have to be analysed as distinct phonemes are marginal (cf. Hall 2013: 230–237, especially 231–234). In Erzya, [i] is an allophone of /i/ after non-palatalized alveolar consonants, and /i/ only occurs in other positions in onomatopoeic stems (Rueter 2010: 16, 59–61).

The occurrence of marginal morphemes can be restricted by morphology. In native Finnish words, [ŋ] occurs as an allophone of /n/ before /k/, and otherwise as intervocalic [ŋ:] in the weak grade of stems (historically before closed syllables, but also in open ones contemporarily: /vahiŋ:oitan/ 'damage;PRS;1SG'). Hall (2013) does not mention any cases in which a marginal phoneme occurs only in a given morphological context. Finnish also has a marginal phoneme /2/, which only occurs morpheme-finally, being the only consonant which, in addition to the alveolar ones, occurs also word-finally. However, it is usually assimilated by the following consonant, especially across word boundaries, resulting in a geminate. It is realised as a long glottal stop word-finally before words beginning with a vowel. Clause- or utterance-finally, however, it may remain unrealized. Although its phonemic status is usually denied (cf. Hakulinen et al. 2004: §34–36), many morphophonological alternations can be explained purely as phonological ones if we suppose an underlying /?/.

Similarly to Finnish and other Uralic languages, there are many languages in which phenomena related to marginal phonemes have escaped the attention of research. We welcome abstracts concerning marginal morphemes, especially papers on less-studied European languages applying specific (fieldwork, corpus linguistic, experimental) etc. methods. We invite papers both with descriptive or theoretical orientation, approaching the

topic either from a synchronic, historical, dialectological, psycho- or sociolinguistic perspective.

The theoretical questions to be addressed in individual talks include (but are not restricted to) the following: 1. How and in what (phonological, sociolinguistic etc.) context do marginal phonemes emerge, survive or vanish (possibly become central)? 2. Is the presence of marginal phonemes a marginal phenomenon or does (almost) every language have marginal phonemes? 3. What do marginal phonemes say about the concept of phoneme? 4. How can phoneme marginality be typologised?

## References

- Anderson, Gregory D. S. 2004. The Languages of Central Siberia: Introduction and Overview. In Edward J. Vajda (ed.), *Languages & Prehistory of Central Siberia*, 1–119. Amsterdam: John Benjamins.
- Bals, Berit Anne Odden, David Rice, Curt. 2007. *The phonology of gradation in North Saami*. Columbus, OH.
- Bye, Patrik. 2009. *Three types of marginal contrast*. Paper presented at the Torontø-Tromsø Phonoløgy Workshøp, Toronto, ON, October 9–11.
- Evans, Nicholas. 2022. Marginal phonemes and dialogic interaction. *Russian Journal of Linguistics* 26(4): 995–1011. DOI 10.22363/2687-0088-32349
- Hakulinen, Auli & Vilkuna, Maria & Korhonen, Riitta & Koivisto, Vesa & Heinonen, Tarja Riitta & Alho, Irja. 2004: *Iso suomen kielioppi*. Helsinki: Suomalaisen Kirjallisuuden Seura.
- Hall, Kathleen Currie. 2013. A typology of intermediate phonological relationships. *The Linguistic Review 30*(2): 215–275. DOI 10.1515/tlr-2013-0008
- Idrisov, R. I. 2012. Vokalizm besermjanskogo dialekta udmurtskogo jazyka na materiale govora derevni Šamardan Jukamenskogo rajona Udmurtii. In *Finno-ugorskie jazyki: fragmenty grammatičeskogo opisanija. Formal'nyj i funkcional'nyj podxody*. Moskva: Jazyki slavjanskix kul'tur. 591–607.
- Keresztes László. 1993. Új magánhangzó-fonémák a magyarban? *Hungarologische Beitrage 1*. 45–51. Jyväskylä : Universität Jyväskylä.
- Matisoff, James A. 1994. Tone, intonation, and sound symbolism in Lahu: loading the syllable canon. In Hinton, Leane & Nichols, Joanna & Ohala, John J. (eds.). *Sound symbolism*. Cambridge: Cambridge University Press. 115–129.
- Nuutinen, Olli. 1994. Vinskaa, venskaa, tanskaa ja ranskaa. In *Hetkisen pituus ja muita kirjoituksia kielestä*. Tietolipas 128. 64–79. Suomalaisen Kirjallisuuden Seura. Helsinki.
- Rueter, Jack. 2010. *Adnominal Person in the Morphological System of Erzya*. (Suomalaisugrilaisen Seuran Toimituksia 261). Helsinki: Suomalais-Ugrilainen Seura.
- Salminen, Tapani. 2007. Notes on Forest Nenets phonology. Suomalais-Ugrilaisen Seuran Toimituksia / Mémoires de la Société Finno-Ougrienne 253. 349–372.
- Toldova, S. Ju. Xolodilova, M. A. Tatevosov, S. G. Kaškin, E. V. Kozlov, A. A. Kozlov, L. S. Kuhto, A. V. Privizenceva, M. Ju. Stenin, I. A. 2018. *Ėlementy mokšanskogo jazyka v tipologičeskom osveščenii*. Moskva: Buki Vedi.
- Viitso, Tiit-Rein. 2008. *Liivi keel ja läänemeresoome keelemaastikud*. Tartu Tallinn: Eesti Keele Sihtasutus.