Následující text je shrnutím 3 hlavních vokalických změn ve staré češtině, které se označují jako přehlásky. Navrhněte, jak popsané změny modelovat v teorii element.

Zdroj textu:

Kosek, Pavel and Ziková, Markéta, "Czech Vowel Fronting (Česká Přehláska)", in:

Encyclopedia of Slavic Languages and Linguistics Online, Editor-in-Chief Marc L. Greenberg.

Leiden: Brill.

Old Czech Vowel Fronting (*Přehláska*)

<Abstract>The article provides an overview of conditioned vowel shifts (Cz přehláska) in Old Czech. The changes consist in the fronting of back vowels of any height, and they distinguish Czech from other Slavic languages.

Vowel fronting is a process whereby back <xref Vocalic Phonetics and Phonology>vowels</xref> become fronted. In Old Czech, the vowel fronting took place between the 12th and the 14th centuries; it is traditionally called *přehláska* (calque of the Germanic *Umlaut*). The *přehláska* phenomenon distinguishes <xref>Czech</xref> from other Slavic languages, as demonstrated by the adjectival root PSI */'ub- 'nice, dear': it has a front vowel in Czech /[i]b-, but a back vowel elsewhere in Slavic, e.g., Sk /[u:]b-, Ru /^[i][u]b-, and Sn /^[i][u]b-.

Like the <xref>Germanic</xref> *Umlaut*, Old Czech vowel fronting is an assimilatory sound change. *Umlaut* and *přehláska* differ in their triggers: it is the following vowel for the

Germanic *Umlaut*, but the preceding consonant for the OCz *přehláska*. Table 1 summarizes vowel-fronting triggers (i.e., soft consonants in the 12th c., before depalatalization) shown in two forms: IPA (left) and the traditional notation in Slavic philology (right).

Table 1: Soft consonants in Old Czech (Lamprecht 1972)

palatalized labials
$$[p^j b^j v^j m^j]$$
 /p' b' v' m'/
palatalized alveolars $[t^j d^j s^j z^j l^j r^j n^j \widehat{ts^j}]$ /t' d' s' z' l' r' n' c'/
palato-alveolars $[\int 3\widehat{t}]$ /š ž č/
palatals $[p j]$ /ň j/

The assimilatory nature of Old Czech vowel fronting is shown in (1): vowels are fronted to share the feature [+pal(atal)] with the preceding soft consonant:

(1)
$$V_{[-pal]} \rightarrow V_{[+pal]} / C_{[+pal]}$$

Low vowels

The oldest process is low-vowel fronting completed presumably by mid-13th century. Furthermore, it is assumed to have proceeded in two stages and involved changes in both frontness and height of the vowel. During the first stage, a low vowel [a] became more fronted and raised, yielding [æ]. In the next stage, the near-low [æ], i.e., /ä/, rose in height. The output of the raising is traditionally marked as /ě/ (<xref>jat</xref>), and it corresponds either to a mid-vowel [e] (Lamprecht et al. 1986: 103ff.) or to a mid-rising diphthong [i̯e] (Gebauer 1894: 187ff.). The two stages are illustrated in (2) for 'male.gen.sg', starting with the Proto-Czech (PCz) $mu\check{z}[a]$.

(2)

PCz
$$mu\check{z}[a] = /a/$$

↓ stage 1: fronting + raising

OCz $mu\check{z}[æ] = /\ddot{a}/$

↓ stage 2: raising

OCz $mu\check{z}[e/je] = /\check{e}/$

As the rule in (1) illustrates, the process was triggered after soft consonants (shown in table 1), but it was blocked when a hard consonant (listed in table 2) followed a potential vowel target.

Table 2: Hard consonants in Old Czech

labials [p b v m] /p b v m/

alveolars [t d s z l r n ts] /t d s z l r n c/

velars [g x] /g ch/

The blocking effect of hard consonants, marked as [-pal] below, is illustrated in table 3. The original low vowel underwent the [a]-to-[æ] fronting and the [æ]-to- $[e/\underline{i}e]$ raising, as shown in the plural past form of 'lie'. But in the singular (in the righthand column), the process was blocked by the hard consonant that followed the vowel, in this case by a nonpalatalized alveolar [l]. As a result, the theme marker alternates between (the original) [a] in $le\check{z}$ -a-l and the derived $[e/\underline{i}e]$ in $le\check{z}$ - \check{e} -l'i.

Table 3: Blocking effect of hard consonants

	$C_{[+pal]}$	$C_{[+pal]}_C_{[-pal]}$
PCz input	<i>lež</i> [a] <i>l'i</i>	lež[a]l
[a] > [æ]	lež[æ]l'i	
[æ] > [e/i̯e]	<i>lež</i> [e/i̯e] <i>l'i</i>	
OCz output	lež[e/i̯e]l'i (= /ležěl'i/)	<i>lež</i> [a]l (= /ležal/)
	'lie.3 _{PL.PST} '	'lie.3sg.pst'

The first stage of the *přehláska* involved fronting and raising the vowel [a] to a near-low vowel [æ]. However, this vowel had already existed in Proto-Czech: it evolved from a $\langle xref \rangle$ Proto-Slavic $\langle xref \rangle$ front nasal vowel [ẽ] $\langle e/; e.g., PSl p'[e]t'b'$ 'five' $\langle PCz p'[æ]t'$. Both [æ]s also underwent raising when preceded by soft consonants $\langle p'[æ]t' \rangle p'[e/ie]t\rangle - and$, similarly, also for either [æ], not only was raising stopped before hard consonants, but lowering (a reverse process) was also triggered, yielding [æ] lowering to [a]. The two options for PCz [æ] are shown in table 4: the root vowel [æ] either rose to $\langle e/ie\rangle$ (in $\langle p'[e/ie]t'\rangle$ 'five') or lowered to [a] (in $\langle p[a]tnadste\rangle$ 'fifteen'), depending on whether the following consonant was soft [ti] or hard [t]. (In addition, the lowering is presumably accompanied by labial depalatalization: $\langle p^i \rangle \rangle \langle p^i \rangle \rangle$ before the lowered vowel; see Trávníček 1923, Havránek 1940, Komárek 1969: 54–57 and Lamprecht et al. 1986: 60ff.)

Table 4: Raising vs. lowering: $[æ] > [e/\underline{i}e]$ vs. $[æ] > [a] / _C_{[-pal]}$

$C_{[+pal]}$			$C_{\text{[+pal]}}C_{\text{[-pal]}}$	
PCz input	p'[æ]t'	PCz input	p'[æ]tnádste	

[æ] > [e/i̯e]
$$p'$$
[e/i̯e] t' [æ] > [a] p [a] $tn\acute{a}dste$

OCz output p' [e/i̯e] t' (= /p'ět'/) OCz output p [a] $tn\acute{a}dste$ (= /patnádste/)

'five' 'fifteen'

High vowels

The high-vowel fronting took place around the mid-1300s. As opposed to the low [a], the high vowel [u] became fronted even when followed by a hard consonant, as illustrated in the righthand column in table 5.

Table 5: Contexts of [u] fronting

	$C_{[+pal]}_C_{[+pal]}$	$C_{[+pal]}_C_{[-pal]}$
PCz input	Jež[uː]š	ješ[u]tný
[u] > [i] (OCz output)	Jež[iː]š	ješ[i]tný
	'Jesus'	'conceited'

Like the low-vowel fronting, the high-vowel fronting, too, is assumed to have proceeded in two stages, and there are two scenarios illustrated by 'soul.Acc.sg' in (3), differing in the expected output of the intermediate stage: it is either a labial front vowel [y] shown in (3a) or a diphthong with initial iotation [iu], as in (3b).

(3) a.
$$[u] > [y] > [i]$$
 b. $[u] > [\underline{i}u] > [i]$ (Komárek 1969; Lamprecht et al. 1986) (Gebauer 1894)

PCz
$$du\check{s}[u]$$
 $du\check{s}[u]$ $du\check{s}[u]$ $du\check{s}[u]$ $du\check{s}[u]$ $du\check{s}[y] = /\ddot{u}/du\check{s}[y] = /\ddot{u}/du\check{s}[y]$ $du\check{s}[y]$ $du\check{s}[y]$ $du\check{s}[y]$ $du\check{s}[y]$ $du\check{s}[y]$ $du\check{s}[y]$

Mid-vowels

The fronting of a mid-vowel [o] yielded the same result as the low-vowel fronting discussed above: the output was /ĕ/, corresponding either to a mid-vowel [e] or to a mid-rising diphthong [i̯e]. The [o]-to-[e/i̯e] change took place under similar conditions to those of the high-vowel fronting: hard consonants on the right of the targeted vowel did not block the fronting. The results are shown in the rightmost column in table 6. The *přehláska* of mid-vowels was completed by the late 14th century; see Šmilauer (1950).

Table 6: Contexts of [o] fronting

	$C_{[+pal]}_C_{[+pal]}$	$C_{[+pal]}_C_{[-pal]}$
PCz input	muž[o]v'i	muž[oː]v
[o] > [e] (OCz output)	muž[e/i̯e]v'i	muž[eː/i̯eː]v
	'male.dat.sg'	'male.poss'

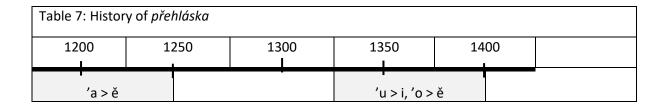
Similarly to the high-vowel fronting, the mid-vowel fronting is assumed to involve an intermediate stage with a front labial vowel, as shown in (4).

(4) [o] > [ø] > [e] (Komárek 1969; Lamprecht et al. 1986)

PCz
$$mu\check{z}[o]v'i$$

$$\downarrow \qquad \text{stage 1: fronting}$$
OCz $mu\check{z}[\emptyset]v'i = /\ddot{o}/$

The following table summarizes the history of the *přehláska* sound changes.



Old Czech vowel fronting and morphology

The vowel-fronting processes affected the morphological system of Old Czech. The *přehláska* strengthened the distinction between hard and soft nominal paradigms (see also <xref>Inflectional Systems/xref>: the soft paradigms acquired new front-vowel endings, as illustrated in table 8. There are three paradigm cells in the table, and each of them is realized by two different vowel-initial endings in Old Czech, depending on whether they attach to a hard stem ('town') or a soft stem ('sea').

Table 8: Hard vs. soft paradigms

	PCz			OCz		
	GEN.SG	DAT.SG	DAT.PL	GEN.SG	DAT.SG	DAT.PL
hard stem 'town'	měst -[a]	měst -[u]	měst -[oː]m	měst -[a]	měst -[u]	měst -[oː]m

The distinction between hard and soft paradigms, caused by OCz *přehláska* is still present in contemporary Czech. However, sometimes there were changes in the development of Czech that reversed *přehláska*. A prototypical example is the dative singular marker of animate masculine nouns: the marker was first fronted (*muž-ov'i > muž-ěvi 'male'*), and then the front vowel was replaced analogically by the original back vowel (*muž-ěvi > muž-ovi*), cf. hard-stem *volovi 'ox.*DAT.SG'.

Přehláska also gave rise to intra-paradigmatic allomorphy with back-front vowel alternation. An example of this are verbal stems such as $le\check{z}a-l-le\check{z}\check{e}-li$ 'lay-PST.PTCP.M.SG — lay-PST.PTCP.M.PL' or $zaja-t-zaj\check{e}-ti$ 'capture-PASS.PTCP.M.SG — capture-PASS.PTCP.M.PL' in which the stem vowel regularly alternates between [a] and a fronted [e]. However, in these cases, the stem-vowel alternation has been undone, and it is interpreted as an effect of paradigm leveling. To avoid the allomorphy, the stem vowel became invariably either [e] $(le\check{z}[a]l) > le\check{z}[e]l-le\check{z}[e]li)$ or [a] (zaj[e]ti > zaj[a]ti-zaj[a]t).

Old Czech vowel fronting and contemporary Czech dialects

The contemporary Czech-language territory is divided along the west—east axis, and the distribution of front vowels [i] and [e] on the one hand and non-front vowels [u] and [a] on the other in the eastern (<xref>Moravian</xref>) dialects is partly similar to that found in Proto-Czech, i.e., before the vowel-fronting processes (*přehláska*)were triggered. This is evident, among other things, in that soft stems combine with back-vowel endings in these dialects. Thus, there is a synchronic variation between standard Czech forms such as *muž-e* 'male-GEN.SG' and *moř-i* 'sea-DAT.SG' and dialectal forms *muž-a* and *moř-u*. In this respect, the

eastern (Moravian) dialects are thus more similar to other Slavic languages than to standard Czech, precisely by lacking the *přehláska* fronting.

Nonstandard abbreviations used in this article

PCz Proto-Czech

References

Gebauer, Jan. ²1963 (¹1894). *Historická mluvnice jazyka českého*, vol. I: *Hláskosloví*. Prague. Havránek, Bohuslav. 1940. K depalatalizaci v oblasti českého jazyka. *Listy filologické* 67/3–4, 266–279.

Komárek, Miroslav. 1982. *Nástin fonologického vývoje českého jazyka*. Prague.

Komárek, Miroslav. rev. ed. ³1969. *Historická mluvnice česká*, vol I: *Hláskosloví*. Prague.

Lamprecht, Arnošt. 1972. K depalatalizaci v staré češtině. *Slovo a slovesnost* 33/2, 154–159.

Lamprecht, Arnošt, Dušan Šlosar and Jaroslav Bauer. 1986. *Historická mluvnice češtiny*.

Prague.

Lehr-Spławiński, Tadeusz, and Zdzisław Stieber. 1957. *Gramatika historyczna języka czeskiego*. Warsaw.

Liewehr, Ferdinand. 1933. Einführung in die historische Grammatik der tschechischen Sprache, vol. I. Brno.

Smilauer, Vladimír. 1950. Staročeská přehláska o > ě. Časopis pro moderní filologii 33/2, 72.

Townsend, Charles E., and Laura A. Janda. 1996. Common and comparative Slavic: Phonology and inflection. Columbus OH.

Trávníček, František. 1923. K střídnicím za praslovanské ę v českém jazyce. Brno.

Trávníček, František. 1935. Historická mluvnice československá: Úvod, hláskosloví a tvarosloví. Prague.

Markéta Ziková – Masaryk University (Brno, Czech Republic)

Pavel Kosek – Masaryk University (Brno, Czech Republic)

Keywords: phonology; sound change; vowel; Old Czech