# Notes on Proto-Mansi word-final vocalism 

## I. Introduction

The history of the Mansi vocalism has been a subject of research already for more than a century. However, all three monographs published on the topic thus far (Hazay 1907, Kannisto 1919, Steinitz 1955) only treat first-syllable vocalism. Slightly more detail is found in Honti ( $1982=G O V$ ), who presents full Proto-Mansi $(\mathrm{PMs})$ reconstructions in his comparative Ob-Ugric lexicon, but he still gives no overview of either the PMs second-syllable vocalism, its development from Proto-Ob-Ugric, or its development into the attested Mansi varieties. In this paper I attempt to take a first step towards this goal, focusing on word-final vowels in nominal stems.

As research material, the 724 Proto-Mansi reconstructions and ios additional etymological cognate sets presented in GOV would seem to cover the bulk of the old inherited vocabulary of Mansi, and they provide a relatively comprehensive basis for probing the historical development of the Mansi varieties. To this could be still added a number of words of old Uralic heritage not covered by Honti due to the absence of cognates in Khanty (e.g. the reflexes of Proto-Uralic *kojwa 'birch', ${ }^{*}$ lämə 'broth', *wetz 'water'). Such examples are however not numerous, and they do not seem to change the emerging big picture. Substantially more additional data can be found in the Mansi dialect dictionaries based on the collections of Munkácsi and Kannisto, but their analysis would first require further etymological work; they certainly contain much newer vocabulary from various other sources (e.g. Russian, Tatar, Komi, Khanty) that cannot be assumed to represent a common inheritance among the Mansi varieties. It may suffice to note that many of the developments discussed below have parallels even among the Russian loanwords in Mansi (cf. Kálmán 1956).

I will often additionally refer to "Old Mansi", i.e. data from the manuscript records of Mansi dating from the late 17th to the early 19th centuries. Any additional

[^0]data of this type could in principle turn out to either agree with or to disprove most new proposals I will advance. The ultimately unpublished manuscript Altwogulische Dialekte by János Gulya, cited by Honti (1982), has unfortunately not been available for my consultation.

## 2. Known results

## 2.I. Final vowels in modern Mansi

Two straightforwardly reconstructible groups of word-final vowels in PMs have been recently treated explicitly by Riese (2001: 56-59, $120-125$ ). The first group is reconstructed by him and also already by Honti (1982) as ending in PMs open ${ }^{*}-\bar{a}$ or ${ }^{*}-\bar{a}$. According to Riese, a word-final vowel would remain in all Mansi varieties: Southern vowel-harmonic $-\bar{a} /-\bar{a}$, Western and Northern $-a$, Eastern $-љ$. This is indeed the typical set of reflexes (Table I).

| South | East | West | North | Proto-Mansi (GOV) | gloss |
| :---: | :---: | :---: | :---: | :---: | :---: |
| tol'ā | KU tol's | P tul'a | So. tul'a | *tưl'à (\#116) | 'ring (on finger)' |
| paskā | KU $p \bar{a} s \gamma^{2}$ | P passa | So. pāssa |  | 'mitten' |
| waykā | KU won入ə | P wojka | So. w亏̄ŋх | * wā̀k ${ }^{\text {a }}$ \#697) | 'pit' |

Table I. Examples of the default development of PMs ${ }^{*}-\bar{a}^{\mathbf{I}}$

Occasionally also full loss of the vowel appears to take place in some varieties of Central Mansi = Eastern + Western (Table 2). The evidence of Southern and Northern Mansi and retained final vowels in other Central Mansi varieties still point to development from the same PMs stem type. The development seems to be common, though not completely regular, particularly following a consonant cluster ending in a nasal. ${ }^{2}$

The second group of PMs final vowels which Riese and Honti (1982) reconstruct are stems ending in PMs close ${ }^{*}-\bar{\imath}$ or ${ }^{*}-\bar{\imath}$ (Table 3). These show more attrition. The final vowel is regularly retained as Southern vowel-harmonic $-\bar{e} /-\bar{i}$, Northern $-i$, but lost in Western and Eastern. Honti (1999: 28) has furthermore suggested that ${ }^{*}$ - $2 j$ be reconstructed for this group instead.

[^1]| South | East | West | North | Proto-Mansi (GOV) | gloss |
| :---: | :---: | :---: | :---: | :---: | :---: |
| asmā | KU åsma, Kassom | VS asam | So. osma | *ăsmā (\#69) | 'pillow' |
| märnä | KU mörna | P marn | - | * märnä (\#4II) | 'roe' |
| - | KU nårna | P naram | So. norma | * $n a ̆ r m a ̄ ~(\# 439) ~$ | 'stall' |
| - | KU pärna | P VS pärn, VN LU pärna | So. ponna | *pä̌ynā (\#492) | 'tree trunk' |
| - | KM ūsam | P wušma | So. $\bar{u} s m a$ | ${ }^{*} w \bar{u} s{ }^{\text {cha }}$ (\#660) | 'a type of fishtrap' |

Table 2. Examples of loss of PMs ${ }^{*}-\bar{a}$, ${ }^{*}-\bar{a}$ after nasals in Central Mansi

| South | East | West | North | Proto-Mansi (GOV) | gloss |
| :---: | :---: | :---: | :---: | :---: | :---: |
| kālē | KU $\chi$ ¢${ }^{\circ}$ | P kōl | So. $\chi^{\bar{j}} l^{\prime}$ | *kālı̄ (\#243) | 'food for travel' |
| ńolē | KU ñol | P ńul | So. nuli | * nưllı (\#457) | 'Siberian fir' |
| kiplī | KU kēpal | LU kēpal | So. kèmpli | *kimplī (\#272) | 'seam' |
| mänćci | KU män's | P mãn' | So. māñ́si | *mäñ́ćç (\#398) | 'Mansi' |

Table 3. Examples of PMs ${ }^{*}-\bar{\imath},{ }^{*}-\bar{\imath}$

In the context of word-final vowels in Mansi, also the PMs bisyllabic consonant stems ending in *-2 should be noted (cf. Table 4, Honti 1999: 32-34, Riese 2001: 69). These are the source of word-final close vowels in varieties of Central Mansi: Eastern $-\bar{\nu}$, Vagilsk and Lozva (Western) -i. Southern Mansi shows a different path of vocalization, transcribed in the Mansi records of Artturi Kannisto as half-long -o, while Northern Mansi and the Pelym dialect of Western Mansi clearly retain the original consonant stem as $-i \gamma$. It has also been proposed that the corresponding word-final phonetic vowels in other varieties would still remain consonant stems phonologically. Southern $-\dot{o}$ has been analyzed already by Steinitz (1955:54) as a realization of underlying /-ow/, and further by Honti (1975: 13) as /-วw/. Eastern and Western $-\bar{\nu},-i$ is similarly analyzed by Honti (1999:32-33) as a realization of underlying /-aj/. On this latter point, one can add to Honti's arguments also the fact that in Eastern Mansi, long [ $\overline{\mathrm{i}}]$ is otherwise not securely established as a phoneme, and in stressed syllables it might be interpretable as an allophone of /ē/ (Kulonen 2007: 19). It further bears noting that Honti's analysis of Proto-Mansi ${ }^{*}[\overline{\mathrm{i}}]$ as $* / \partial \mathrm{j} /$ and Central Mansi $[\overline{\mathrm{i}}],[\mathrm{i}]$ as $/ \partial \mathrm{j} /$ are independent from each other, as they have no etymological connection: loss of earlier ${ }^{*}-\bar{\imath}$ must precede the
vocalization of ${ }^{*}-\partial \gamma$ to new $-\bar{\imath},-i$. Per the Northern and Pelym evidence, diachronically the latter has probably also proceeded through $-i \gamma$, with no phonetic [ $\partial j$ ] stage occurring at any point.

| South | East | West, other | Pelym | North | PMs (GOV) | gloss |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ērzw | KU $\bar{e} r \bar{\imath}$ | VN VS jèri | jeri\% | So. $\bar{e} r i \gamma$ | ${ }^{*}$ ir $\gamma \gamma$ (\#60) | 'song' |
| รั๐ธ̌z | KM sāsī | LU soosi | šoš̌ | So. sosi $\gamma$ | ${ }^{\text {*Sošz }}$ (\# ${ }_{\text {II2 } 2) ~}^{\text {) }}$ | 'currant' |
| TJ kürtzw | KU kirtī | LU LM kirti | kirti\% | LO kirti | *kirtz (\#330) | 'northern pintail' (Anas acuta) |
| sinzw | KU sēnī | VN VS seeni | sēni\% | So. sēni $\gamma$ | * Sinz (\#596) | 'polypore' |
| tärวw | KU tärī | VS LU LM täri | täri | So. tari $\gamma$ | * tär ${ }^{\text {r }}$ (\#648) | 'pine' |

Table 4. Examples of PMs *-ə $\boldsymbol{\gamma}$

### 2.2. Final vowels in Old Mansi

A third, much less obvious type of original PMs word-final vowels has also been identified. As first discussed in detail by Gulya (1960), some of the 18th-century Old Mansi records show word-final vowels in many more words than the records from the mid19th century on (cf. Table 5). Yet already some other Old Mansi records show some loss of these, and their loss is complete by the time of the first systematic Mansi field records of e.g. Reguly, Ahlqvist and Munkácsi. As this innovation covers all varieties of Mansi, earlier scholars were not able to distinguish these words from typical monosyllabic consonant stems. Honti (1982) takes no stance on the reconstruction of this group and only writes an indistinct PMs *-3 (he also appears to neglect some of Gulya's data). I will adopt here the more specific notation of Zhivlov (2006), who reconstructs *-ə.

| Old Mansi | South | East | West | North | PMs (GOV) | gloss |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Kg. boama | wāt | KU wōt | P wōt | So. $w \bar{\jmath} t$ | *wātz (\#724) | 'wind' |
| VTur. лема | l'èm | KU l'ām | P leém | So. l'ām | *l'ma (\#167) | 'bird cherry' |
| VTur. mopa | - | KU tūr | P tū $r$ | So. $t \bar{u} r$ | * tūrs (\#158) | 'lake' |
| Pel. мания | miń | KU mäń, KM mäńn | P mäñ | So. mäń | * măńa (\#428) | 'daughter-in-law' |
| Kg. mapa | tär | KU t $\bar{\gamma} r$ | P t̄ $\bar{r}$ | So. $t \bar{a} r$ | * tär (\#155) | 'root' |

Table 5. Examples of PMs * ${ }^{2}$-stems evidenced by Old Mansi data

While the known direct evidence is therefore limited to the Old Mansi records, it has subsequently been shown that more recent Central Mansi varieties still reveal indirect evidence of the PMs * ${ }^{2}$-stems. This dialect group shows twofold reflexes of most PMs first-syllable vowels: generally long vowels in open syllables, short vowels in closed syllables, while the original PMs vowel length contrasts are mostly reflected as various quality contrasts. The split of PMs open front ${ }^{*} \bar{a}>{ }^{*} \overline{\bar{z}}$ and ${ }^{*} \ddot{a}$ into short and long variants is particularly noteworthy, as this allows simplifying the reconstruction of the PMs nonclose front vowel system proposed by Steinitz (1955). Steinitz's short *ä can be rather identified as instances of * $\tilde{a}_{\text {ä }}$ secondarily shortened in Central Mansi, while his long ${ }^{*} \bar{e}$ can be rather identified as instances of his ${ }^{*} \check{e}$ secondarily lengthened in Central Mansi. Honti (1980: 178) further realigns the latter phoneme as a "new" open * $\check{\ddot{a}}$.

The role of the recent common Mansi apocope in this split does not seem to have been realized until recently. For example, Honti (1984:49) clearly states the general syllable-closure conditioning of the development of vowel length in Central Mansi, but he still attributes the phonemicization of the contrast to analogical generalization. Zhivlov (2006: 79-85) however demonstrates that long-vowel reflexes are regularly found in words reflecting PMs *CVCa, and he proposes that these long vowels would have first arisen regularly in the original open syllable, later phonemicized after the loss of *-ə. This convincing argument then further allows reconstructing PMs *-ə also in certain cases where Old Mansi records are lacking. In nominals of the shape CVC in modern Mansi, short vowels in Central Mansi indicate PMs *CVC, while consistent long vowels indicate PMs *CVCa (Table 6). Honti (1982) does not yet recognize the need to reconstruct a lost word-final ${ }^{*}$ in such cases, and he gives instead shorter reconstructions such as ${ }^{* *} m \bar{a} t,{ }^{* *} \dot{n} \bar{\imath} r,{ }^{* *} k \underline{\imath} r$ and ${ }^{* *} t a ̈ l l$.

| South | East | West | North | Proto-Mansi (GOV) | gloss |
| :---: | :---: | :---: | :---: | :---: | :---: |
| māt | KU KM KO mōt | P VN LU mōt | So. $m \bar{s} t$ | *mātz (\#376) | 'other' |
| - | KU KM KO ńèr | P VN VS LU ńēr | So. ńèr | * niorra (\#447) | 'foam' |
| kār | KU $\chi \bar{a} r$, KM KO kèr | P VN VS LU LM kēr | So. $\chi \bar{a} r$ | *kirr (\#319) | 'male' |
| täl | KU KM KO $t \overline{\bar{l}} \mathrm{l}$ | $\begin{aligned} & \text { P VS LU } t \bar{\jmath} l, \\ & \text { VN } t \overline{\bar{y}}, \end{aligned}$ | So. tāl | *täld (\#635) | 'winter' |

Table 6. Examples of PMs * ${ }^{\text {a-stems reconstructed by Zhivlov (2006) }}$

## 3. New results

## 3.I. Proto-Mansi *CVkCə

As discussed above in Section 2.2, vowel lengthening in Central Mansi provides consistent evidence for the reconstruction of $\mathrm{PMs}^{*}$-ə in nominal stems of the shape *CVCə. The Old Mansi data shows however that stems of the shape *CVCC also occurred in PMs (Gulya 1960: 38-41), cf. e.g. Kg. нельма 'tongue' < PMs *́nillmə (GOV \#463), нюрма 'meadow' < PMs *'n̄йrnə (GOV \#476), тулла 'feather' < PMs *tŏwlə (GOV \#624, ${ }^{* *}$ tŏwal). As before, lines of evidence can be found that allow indirectly uncovering some instances of $\mathrm{PMs}{ }^{*}-2$ after consonant clusters as well. The first of these is the spirantization of ${ }^{*} k,{ }^{*} k^{w}$ to $x, x^{w,}{ }^{3}$ which takes place in most of Central Mansi (cf. Honti 1999: 40-4I). An initial fact to be established is that the change is evidently regular in the syllable coda: word-finally and as the first member of a consonant cluster (Table 7).

| South | East | West | North | Proto-Mansi (GOV) | gloss |
| :---: | :---: | :---: | :---: | :---: | :---: |
| kolāk | KM $k^{\text {wold }}$ ¢ | P kulax | So. $\chi$ ula $\chi$ | *kŭlāk (\#259) | 'raven' |
| läk | KM $\breve{亏 J}_{\bar{x}}{ }^{w}$ | P lax $\sim \operatorname{lax}^{W}$ | So. lāk | ${ }^{*} l$ äk ${ }^{w}$ (\#351) | 'ring' |
| TČ lîn | KM lix | P l'ex | So. l'ēnk | *liyk (\#168) | 'wedge' |
| - | KM sölx | P süll | So. sulk | *sülk (\#815) | 'slush' |
| TČ jäkt- | KM jäxt- | LU LM jäxt- | So. jakt- | *jăkt-(\#182) | 'to cut' |
| - | KO ñexśm | P ńaxśom | So. ńāұsam | * $n$ îkçàm (\#444) | 'gills' |
| noks | KM n noxs | P noxws | So. ṅozas | *nóoks (\#449) | 'sable' |
| oksār | KM oxsar | P oxszor | So. oxsar | *obksār (\#679) | 'fox' |
| takn- | KM tåx | - | So.taxn- | *tăkn-(\#122) | 'to stick (intr.)' |
| pükñ̄ | KM pöxəń | P püxəń | So. pukní | *pü̈kń̄ (\#496) | 'navel' |
| - | KM ńixlat- | - | - | * ṅíllat-(\#787) | 'to sweat heavily' |
| tokr- | KM toxr- | P toxr- | So. tox ${ }^{\text {- }}$ | *tŏkr-(\#628) | 'to plug' |

Table 7. Examples of coda ${ }^{*} k>x$ in Central Mansi

[^2]The word for 'navel' displays an interesting further detail. The Southern and Northern Mansi evidence shows that the word is a PMs ${ }^{*} i$-stem, developing regularly to a consonant stem in Central Mansi. The resulting consonant cluster *xń is however then further broken apart by epenthetic $\partial$, a process still known to be synchronically active (cf. Riese 2002, Kulonen 2007: 26).

Central Mansi shows * $k>x$ also in other words which today have the shape CVCəC. The precedent of 'navel' suggests that these have evolved from PMs stems in *- kC , and that here, too, spirantization has taken place specifically in coda position, already before the loss of PMs word-final *-д and schwa epenthesis. With this relative chronology, no additional sound changes need to be assumed to account for the development of this word group, contra Honti, who proposes a separate spirantization rule before $a+$ sonorant. Examples of this stem shape in the available data are not numerous (Table 8). In two of the three cases, the reconstruction can however be verified by the Old Mansi evidence.

Dating the spirantization of ${ }^{*} k$ as earlier than the loss of $\mathrm{PMs}^{*} z$ can be additionally supported by the evidence of PMs *CVCa stems. No spirantization of *k
 < PMs *săkд (GOV \#570). PMs *-ə can be reconstructed here on the basis of the long vowels in the Central Mansi reflexes. A similar situation holds also for the PMs ${ }^{*} \mathrm{CV} \mathrm{\eta k}$ a stems, for which see below.

| Old Mansi | South | East | West | North | PMs (GOV) | gloss |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| VTur. тахма | täkam | KM tīxam | P taxam | So. tākam | *täkmə(\#634) | 'louse' |
| SSo. kächrae | TČ käxar | KM käxər | P küxar | So. kakkar | $\begin{gathered} \text { *käkrz (-) } \\ (\text { Honti 1999: 41) } \end{gathered}$ | 'stomach' |
| - | - | - | P joxal, <br> LM jaxal | N joxal | *jokla (\#180) | 'dried fish' |

Table 8. Cases of Proto-Mansi *CVkCə
The examples of $\mathrm{PMs}^{*}-\mathrm{kC}$ can be further contrasted also with a second group showing retained $k$. Clearly native cases with Khanty or further Uralic cognates are again quite rare. Honti (1999:41) only cites P mēkzm 'people', mēkən' 'chaff' (not attested beyond Mansi), and proposes retention following a long vowel. A similar development is also
 the stem-final obstruent. The correlation observed by Honti seems to be correct, but a more parsimonious historical explanation is also possible: both the long vowel and the retained $k$ can be seen as consequences of the overall stem structure, as both would be naturally expected in a PMs bisyllabic consonant stem of the shape * CVk ə $\mathrm{C}(-)$.

### 3.2. Proto-Mansi *CVNCə

A second split development of word-medial consonant clusters in Mansi can also be connected to the absence or presence of word-final ${ }^{*}$-ว. Consonant clusters consisting of a nasal + homorganic stop or fricative show in Mansi two different reflexes: wordfinally the nasal can be either lost or preserved (Honti 1999: 49-5I). Words showing loss in one variety are however highly likely to show it also in others. Loss versus retention should therefore be assumed to reflect a real Proto-Mansi contrast. It is simple to posit that variable treatment in word-final position is due to original intervocalic versus coda position: *-NCə > -NC (cf. Table 9) versus *-NC > -C (cf. Table ıо). Where available, this is indeed what the Old Mansi data shows as well. In the case of ${ }^{*} \eta k$, word-final spirantization in Central Mansi further confirms this reconstruction (cf. Section 3.I above).

| Old Mansi | South | East | West | North | PMs (GOV) | gloss |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Kg . амба | ämp | KU $\bar{j} m p$ | P $\bar{m} \mathrm{~m} p$ | So. $\bar{a} m p$ | * ${ }^{\text {ämpz (\#33) }}$ | 'dog' |
| - | kämp | KU kämp | P kämp | So. kamp | *kämpz (\#270) | 'hill' |
| Kg. лонта | lōnt | KU lont | P lunt | So. lunt | ${ }^{*}$ lūntz (\#360) | 'goose' |
| Kg. канта | kānt | KU $\chi$ ōnt | VS kōnt | So. $\chi \overline{\bar{j}} \mathrm{n}$, | *kāntz (\#750) | 'war, army' |
| Kg. шанши | s̈änš | KU ¢亏̄ns | P šanš | So. sāns | * ¢änša (\#103) | 'knee' |
| Kg. конся | kōńc | - | - | - | *kūñ́ć (\#299) | 'star' |
| - | - | KM onk | Poykw | So. $\bar{\eta} \eta$ | * ¢̄¢kə (\#44) | 'resin' |
| - | - | KU injk | P jenk | So. $\bar{e} \eta k$ | * ${ }^{\text {¢ }}$ ka $(\# 48)$ | 'younger sister of husband' |
| SSo angu | TČ üŋ | KM $\bar{\eta} \eta k$ | P $\bar{j} \mathrm{j}$ | So. $\bar{a} \eta k^{w}$ | * $\ddot{\square} \eta k^{\prime} w_{2}(\# 49)$ | 'mother' |
| - | tay | KU toŋ $\chi$ | P tonw $k$ | So. ton $\chi$ | *tăŋkə (\#145) | 'hoof |
| ( SoO танг̇г) | tāŋ | $\mathrm{KU} \operatorname{tă\eta \chi }$ | Ptēŋk | So. tāך | *tī¢ka (\#148) | 'fin' |
| - | - | KU jījk | P jaykalm | LO jānk | *jä̀kə (\#196) | 'swamp' |
| Kg. янка | l'äy | KU jī̀jk | Pjōnk | So. jāךk | *jä̀ ${ }^{\text {a }}$ (\#197) | 'ice' |
| Kg. банка | päy | KU päyk | P päyk | So. puyk | *pä̈nkz(\#526) | 'tooth' |
| SoG panga | - | KM pę̧k | P pēŋk | So. $p \bar{a} \eta \chi$ | *pîyka (\#527) | 'fly agaric' |

Table 9. Examples of Proto-Mansi *-NCə

Loss of the nasal to some extent depends also on the specific dialect and specific consonant cluster. Without striving for complete coverage, it can be observed that Northern Mansi generally retains final $m p, n t, \eta k / \eta \chi$ even in original consonant stems, and it loses the nasal only in the case of ${ }^{*} n s{ }^{\prime}$ and ${ }^{*} n n^{\prime}<{ }^{*} n ' c ́$, while Central Mansi varieties only show occasional retained $n t$, possibly generalized from the inflectional stem. A number of the cases seem to have lost the nasal in all reflexes (it can be still identified thanks to Khanty cognates such as *cónčč 'back', *linńć'slobber', * wäñc' 'small', *näyk 'larch'); but given the more variable dialect distribution of nasal loss in other cases, it is likely that loss has taken place only after the Proto-Mansi stage in these cases as well. One erroneous etymological comparison can also be identified: the word for 'birch bark', reflected
 consistent long vowel reflexes. This cannot then be compared with Khanty *sinćcid., as suggested already by the mismatch between Mansi ${ }^{*}{ }_{s}\left(\left\langle^{*}{ }^{\kappa}\right)\right.$ and Khanty ${ }^{*} c$.

| Old Mansi | South | East | West | North | PMs (GOV) | gloss |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Čd. кynz | kop | KU $\chi$ op | P kup | So. $\chi$ ump | *kümp (\#271) | 'wave' |
| - | - | KU $\chi$ åt | P kant | So. xant | *kănt (\#291) | 'earwax' |
| - | TČ kot | KU $\chi \overline{\bar{u}}$ t | P kunt | - | *kūnt (\#292) | 'backpack' |
| - | - | KU kēnt | P ket | So. kēnt | *kint (\#751) | 'hat' |
| VTur. уючь | sos ${ }^{\text {cos }}$ | KU šonš | P šuš | So. sus | * ${ }_{\text {süñs }}(\# 104$ ) | 'flea' |
| - | siis | KU sis | P sis | So. sis |  | 'back' |
| TM usch | $\overline{o s}$ | $\mathrm{KU} \bar{u} \bar{s}^{\prime}$ | LU us | So. $\bar{u} s$ | * $\bar{u} n \stackrel{\text { r }}{ }(\# 688)$ | 'nelma' |
| - | - | KU los' | - | So.lus' | *luñ́ć (\#36I) | 'slobber' |
| - | üs' | KU wis' | P is | - | *Wiñ'́ (\#696) | 'small' |
| - | sük | KU säx ${ }^{w}$ | VN säx | So. sayk ${ }^{\text {w }}$ | * ä̈̆jk $^{\text {w }}$ (\#8I) | 'hill' |
| - | - | KU så | P sax | So. sāŋk | *sä̈nk (\#106) | 'heat' |
| VTur. чегz | ${ }_{s i} k^{w}$ | KU séx ${ }^{\text {w }}$ | P sēx ${ }^{\text {w }}$ | So. sēpk ${ }^{\text {w }}$ | *sī¢ ${ }^{w}$ (\#108) | 'fog' |
| - | TČ lín | KM lix | P l'ex | So. l'ènk | * ${ }^{\text {in }}$ ¢ $k(\# 168$ ) | 'wedge' |
| - | - | KU ńix | P ńix | - | * nínk (\#432) | 'larch' |
| VTur. нюхх | - | KU ńix | VN ńix | So. ńink ${ }^{\text {w }}$ | *ńĭ¢ $k^{w}$ (\#467) | 'maggot' |

Table io. Examples of Proto-Mansi *-NC

The development of Central Mansi vowel length in these stem types seems ambiguous. Zhivlov (2006: 80) suggests on the basis of "ämpz 'dog', ${ }^{*} j \bar{a} \eta k z$ 'ice' that a long vowel would be regular in $\mathrm{PMs}{ }^{*}$ ว-stems. However, a fully general rule of vowel lengthening before *-NCə does not seem to hold. Short or shortened reflexes are common as
 reconstruction is assured by the Old Mansi evidence; compare also PMs *intz 'horn' > e.g. Kg. aнma, KM ēńt ~ảńt, P ońt (GOV \#s2). A few long reflexes in PMs consonant stems appear as well, in the cases of *kūnt 'backpack', ${ }^{*} k i n t$ 'hat', ${ }^{*}{ }^{s} \eta \eta k^{w}$ 'fog'. Southern Mansi lin as the reflex of $l^{*} i \eta k$ 'wedge' shows additionally the sound change ${ }^{*} \eta k>\eta$, more typical for the original stems in ${ }^{*}-\eta k a$, and at least this is likely a case of analogical reshaping.

### 3.3. Mixed vowel correspondences

As discussed in Section 2, altogether three types of PMs vowel stems have been identified in earlier research. However, among the modern Mansi varieties, also further final vowel correspondences can be found, which have so far not been accounted for. No truly new reflexes appear among these: the correspondences simply mix * $A$-type, ${ }^{*} I$-type and ${ }^{*}$-type (zero) reflexes. ${ }^{4}$ Riese (2001: I25) for example lists a number of examples suggesting vacillation between ${ }^{*}-\bar{a}$ and ${ }^{*}-\bar{i}$. This already suggests that much (perhaps all) of the situation is built on the three basic vowel stem types. "Unexpected" final vowels can often be simply explained as suffixal. However, phonological solutions can be still sought as well, by identifying conditional developments affecting the PMs stem vowels. Above in Section 2.I I have already briefly mentioned examples that are likely to indicate loss of $\mathrm{PMs}^{*}-\bar{a},{ }^{*}-\bar{a}$ in Central Mansi varieties, seemingly conditioned by a preceding nasal consonant. In the following I will additionally propose two cases where secondary developments of $\mathrm{PMs}^{*}$-ə could be contemplated.

One relatively common "mix-up" is a correspondence of Southern Mansi $-\bar{\imath}$ with a Northern Mansi consonant stem (Table ir): the former suggests PMs ${ }^{*}-\bar{\nu}$, the latter PMs ${ }^{*}$-д or ${ }^{*}$-C. Central Mansi always shows a consonant stem, which could continue any of these options. The most plausible hypotheses for a conditional development are therefore ${ }^{*}-\bar{\imath}>\varnothing$ in Northern; ${ }^{*}-\leadsto>-\bar{\imath}$ in Southern; and suffixation of ${ }^{*}-\bar{\imath}$ in Southern. The one available piece of Old Mansi evidence best points towards the second of these. An examination of the examples reveals also a potential conditioning factor: all cases involve a front vowel in the first syllable, followed by a palatal consonant: * $j$ or ${ }^{*} c$. It can be proposed that, in this particular environment, $\mathrm{PMs}{ }^{*}-2$ was colored to $-\imath$ in Southern Mansi instead of being lost. Both parts of the conditioning environment seem to be necessary, as no similar coloring appears after PMs back vowels: cf. e.g. kōńć 'star' < PMs *kūñća (GOV \#299), sā̄ll' 'duck species' < PMs *sīll' (GOV \#s6I), wāj ~

[^3]VTur. вая 'fat' < PMs *wājə (GOV \#666). Since Southern Mansi reflects also PMs ${ }^{*} \bar{a}$ - and ${ }^{*} i$-stems as either $-\bar{a},-\bar{e}$ or $-\bar{a},-\bar{i}$ depending on vowel harmony, it is plausible that $\mathrm{PMs}{ }^{*} \partial$-stems also showed a similar split in front and back allophones before their loss. It can be hypothesized that only the front allophone would have been further raised to $-\bar{\imath}$ after palatal consonants.

| Old Mansi | South | East | West | North | PMs (GOV) | gloss |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| - | äçī | KU ${ }^{\text {jos }}$ | - | LO $\bar{a}^{\prime}$ | * ${ }_{\text {a }}^{\text {cóa (\#1) }}$ | 'grandfather' |
| - | $i c i o ̄$ | KU ${ }_{\text {is }}{ }^{\prime}$ | $\mathrm{P} \bar{e} \bar{s}^{\prime}$ | So. $\bar{e}{ }^{\prime}$ | *ićo (\#2) | 'niece' |
| SSo. naije | $n a ̈ j i ̄$ | KU n $n \bar{j}$ | P naj | So. $n \bar{a} j$ | * $n a ̄ j z(\# 420)$ | 'lady' |
| - | $n a ̈ j i ̄$ | KU $n \bar{y} j$ | P naj | So. $n \bar{a} j$ | * näjə (\#421) | 'fire' |
| - | wäjī | KU $\omega \overline{\bar{j}}$ | $\mathrm{P} \omega \omega_{\bar{j}}$ | So. wāj | *wājo (\#665) | 'sock, stocking' |

Table ir. PMs ${ }^{*}-a>-\bar{\imath}$ in Southern Mansi after front vowel + palatal consonant

Besides basic word stems, the same correspondence further appears also in word derivation. A common adjectival suffix in Mansi is ${ }^{*}-j$; Riese (2001: 63) however notes that, added to monosyllabic CV stems, the suffix surfaces in Southern Mansi indeed as $-j \bar{\imath}$. This may well suggest that this suffix should be reconstructed as $\mathrm{PMs}^{*}$ - $j$ ə instead.

In three words also the "opposite" mixed correspondence can be attested: Southern consonant stem ~ Northern -i ('breath', 'lip' and 'clay' in Table I2). Taken alone, these examples would not be enough to raise much suspicion of a regular correspondence. However, all of them show PMs short close vowels ${ }^{*} i,{ }^{*} u$ in the first syllable. These two vowels are never lengthened in Central Mansi, due to which it is difficult to positively identify any examples of PMs stems of the shape ${ }^{*} \mathrm{CiC} 2,{ }^{*} \mathrm{CuC}$. At the same time, PMs first-syllable ${ }^{*} i^{*} u$ appear to combine relatively often with ${ }^{*}-\bar{i}$, and several examples moreover either lack a Southern Mansi reflex ('shape', 'roof in boat', 'oath' in Table i2), or could be also derived through my above-suggested rule *-ə >-ī ('nest').

Even then, the inner-Mansi sound correspondences alone do not give reason to suspect that the latter two groups could not be simply PMs ${ }^{*}$-stems. To motivate the above phonological speculation, it should be further noted that most cases of PMs ${ }^{*} i$-stems are either clear derivatives, or words of obscure origin in semantic areas typical for substrate lexicon. ${ }^{5}$ The identifiable PMs *2-stems instead tend to be neutral underived nominals, often with well-established Uralic etymologies. Native Uralic word stems of the shape ${ }^{*} \mathrm{CiCa},{ }^{*} \mathrm{CuC}$ thus appear to be a missing part of the known ProtoMansi lexicon so far. Words such as 'breath', 'clay', 'nest', 'lip' could be promising

[^4]candidates for "discovering" such a group, if a development *- $\gg-i$ in Northern Mansi were assumed to have taken place in these vowel combinations. In the absence of a clear understanding of the Uralic origins of the PMs stem vowel system, however, this train of thought could still quite likely be in error.

| South | East | West | North | Proto-Mansi (GOV) | gloss |
| :---: | :---: | :---: | :---: | :---: | :---: |
| läl | KO lil | LU VS lil (P läl) | So. lili | ? * ${ }^{\text {lila (\#359) }}$ | 'breath' |
| pit'sm | KU pit'sm | P pit'om | So. pit'mi | ? * itit'ma (\#487) $^{\text {a }}$ | 'lip' |
| sowl' | KU sūl' | - | So. suli | ? *suwl'̇ (\#580) | 'clay' |
| - | KU $\chi$ or | - | So. $\chi$ uri | ? *kura (\#312) | 'shape' |
| - | - | - | So. $\chi$ uri | ? *kurz (\#313) | 'roof in boat' |
| - | KO ṅul | P ńul | So. ṅuli | ? *ńula (\#455) | 'oath' |
| pitı乞 | KU $p i t^{\prime}$ | P piti ${ }^{\text {, LU VS }}$ pit ${ }^{\prime}$ | LO pití | ? *pit'ə(\#484) | 'nest' |

Table I2. PMs ${ }^{*}-\boldsymbol{>}>-i$ in Northern Mansi after PMs ${ }^{*} i$, ${ }^{*} u$ ?

## 4. Conclusion

Earlier research has already identified three classes of word-final vowels in Mansi nominal stems: ${ }^{*}-A,{ }^{*}-I,{ }^{*}-\partial$, of which the last is challenging to tell apart from original consonant stems. I hope to have shown that further progress can be made regardless when paying attention to conditional secondary developments in the historical phonology of the Mansi varieties, and that the "poorer" vowel inventory of non-initial syllables deserves its share of attention as well. In the future these results can hopefully be further incorporated into the bigger picture of Uralic historical phonology.

## Abbreviations

For a fuller listing of the known Mansi varieties, see e.g. Honti (1982: 207-214, 1999: 13-14).

## Old Mansi

| Čd. | Cherdin | SoO | Upper Sosva |
| :--- | :--- | :--- | :--- |
| Kg. | Kungur | SSo | Southern Sosva |
| Pel. | Pelym region | TM | Middle Tavda |
| SoG | Sosva region | VTur. | Verkhoturye |

## Southern Mansi

TČ Tavda, village Čandyri
TJ Tavda, village Janyčkova

## Western Mansi

P Pelym
LM Middle Lozva
LU Lower Lozva
VS Southern Vagilsk
VN Northern Vagilsk

Eastern Mansi
KU Lower Konda
KM Middle Konda
KO Upper Konda

## Northern Mansi

So. Sosva
LO Upper Lozva

## References

GOV = see Honti 1982.
Gulya, János 1960: A manysi nyelv szóvégi magánhangzóinak történetéhez. - Nyelvtudományi Közlemények 62: 33-50.
Hazay, Olivér 1907: A vogul nyelvjárások elsö szótagbeli magánbangzói. Qualitativ szempontból. Budapest.
Honti, László 1975: System der paradigmatischen Suffixmorpheme des wogulischen Dialekts an der Tavda. Budapest: Akadémiai Kiadó.
Honti, László 1980: Milyen volt az obi-ugor alapnyelv teljes magánhangzórendszere? - Nyelvtudományi Közlemények 82: 173-190.

Honti, László 1982: Geschichte des obugrischen Vokalismus der ersten Silbe. Bibliotheca Uralica 6. Budapest: Akadémiai Kiadó.
Honti, László 1984: Ein Beitrag zur Vokalgeschichte des Wogulischen. - Finnisch-Ugrische Mitteilungen 8: 45-57.
Honti, László 1999: Az obi-ugor konszonantizmus története. Studia Uralo-Altaica Supplementum 9. Szeged.
Kálmán, Béla 1956: Die Auslautvokale der russischen Lehnwörter im Wogulischen. - UralAltaische Jabrbücher 18: 265-268.
Kannisto, Artturi 1919: Zur Geschichte des Vokalismus der ersten Silbe im Wogulischen vom qualitativen Standpunkt. Suomalais-Ugrilaisen Seuran Toimituksia 46. Helsinki.
Kulonen, Ulla-Maija 2007: Itämansin kielioppi ja tekstejä. Apuneuvoja suomalais-ugrilaisten kielten opintoja varten 15 . Helsinki: Suomalais-Ugrilainen Seura.
Riese, Timothy 2ooi: Historische Nominalderivation des Wogulischen. Studia Uralica io. Wiesbaden: Harrassowitz.
Riese, Timothy 2002: Auslautende Konsonantenverbindungen im Nordwogulischen. - Eugene Helimski \& Anna Widmer (eds.), Wüśa wŭśa - sei gegrüßt! Beiträge zur Finnougristik zu Ehren von Gert Sauer dargebracht zu seinem siebzigsten Geburtstag. Veröffentlichungen der Societas Uralo-Altaica 57. 279-286.
Steinitz, Wolfgang i955: Geschichte des wogulischen Vokalismus. Berlin: Akademie-Verlag.
Zhivlov 2006 = Живлов, Михаил Александрович 2006: Реконструкция праобско-угорского вокализма. [Unpublished Candidate's thesis. Moscow.]


[^0]:     - Scripta miscellanea in honorem Ulla-Maija Forsberg. Suomalais-Ugrilaisen Seuran Toimituksia ~ Mémoires de la Société Finno-Ougrienne 275. Helsinki 2020. Pp. 249-26I. [https://doi.org/io.3334I/sus.II.I9](https://doi.org/io.3334I/sus.II.I9)

[^1]:    I. The conventional abbreviations of the Mansi dialects can be found at the end of the article. In most cases I limit myself to citing one representative dialect form per each of the four main groups of the Mansi varieties (Southern, Eastern, Western and Northern).
    2. The cluster itself is often further broken apart by epenthetic 2.

[^2]:    3. According to the phonetically close transcription of Kannisto, this is also indeed the velar fricative $[\mathrm{x}]$ (FUT $\chi$ ), not the uvular/back-velar fricative $[\chi]$ (FUT $\chi$ ) that occurs in Northern Mansi and the Lower Konda dialect of Eastern Mansi as the general reflex of PMs * $k$ in a back-vocalic environment (cf. Honti 1999: 39).
[^3]:    4. Mixed correspondences with ${ }^{*} \partial y$-type reflexes can also be found. I leave these aside in the present study, since it seems clear that $/ \gamma /$ cannot be assumed to have developed secondarily from an earlier simple vowel, and hence these cases must go back to either bisyllabic consonantal ${ }^{*} V \gamma$-stems or to secondary suffixation.
[^4]:    
    

