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ON THE PROBLEMS OF PROTO-UGRIC *ć AND ITS REFLEXES IN HUNGARIAN: ANALYZING THE ETYMOLOGIES

Abstract. In this paper, the problems with the reconstruction of an affricate phoneme *ć and its reflexes in Hungarian are discussed.[1] Proto-Ugric *ć is often reconstructed, but its alleged reflexes in Hungarian show unexplained variation (*s*, *z*, *cs*), and many of the etymologies involve other phonological irregularities. It is troubling that although in some cases Hungarian shows *s* and Khanty and Mansi *ć, often the reflexes of the affricate show discrepancy, with part of the languages showing regular reflexes of Proto-Uralic *ś. In this paper, the Ugric etymologies suggested in earlier etymological sources are analyzed and new solutions to the problem of Proto-Ugric *ć and its reflexes in Hungarian are suggested. The problems is also related to the study of the reflexes of Proto-Uralic *ć in Hungarian.

Keywords: Ugric, Hungarian, Ob-Ugric, historical phonology, etymology.

1. Introduction

This paper discusses one particular problem of Hungarian and Ugric historical phonology: the reflexes of Proto-Ugric *ć in Hungarian. This sound is reconstructed to a number of Proto-Ugric etymologies and it is assumed to have been part of Proto-Ugric phoneme system (see the both existing Proto-Ugric reconstructions of Sammallahti 1988 : 502, 517; Róna-Tas & Berta 2011 : 1015, 1025, 1027 and also the Proto-Ugric reconstruction of UEW as well as Honti 1999 : 129—130), but its reflexes in Hungarian show irregular variation, which probably points to the conclusion that not all the etymologies are correct. A phoneme *ć has usually been reconstructed to Proto-Uralic as well (MSzFE; UEW; also in handbooks like Maticsák 2020 : 353; Honti 2017 : 168—188), but it has also been argued that the phonemes *ś and *ć in Proto-Uralic reflect the same phoneme (Zhivlov 2014 : 114, footnote 3; Sammallahti 1988 : 482), as there

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are rather few words showing the difference, and the reflexes of these sounds merge in most branches. Whereas there are only few convincing examples of Proto-Uralic/Proto-Finno-Ugric **ć* reflected as something else than *sz* in Hungarian, in the Proto-Ugric vocabulary (as reconstructed in UEW, MSzFE) such reflexes are quite frequently found. Sammallahti (1988 : 490—491) reconstructed such opposition for Proto-Finno-Ugric but not for Proto-Uralic, as there are no convincing etymologies with a Samoyed-Finno-Ugric distribution that would point to **ć*. Furthermore, Sammallahti remarks that there are very few etymologies showing the opposition **ś* : **ć* even among the Finno-Ugric etymologies. Zhivlov (2014) argues that instead of reconstructing **ś* like Sammallahti did, only **ć* should be reconstructed. Zhivlov notes that the Saami reflex **ć* rather points to earlier **ć*, as a change from a sibilant to affricate is typologically rare. This is a rather big contrast to UEW's material, which includes many etymologies not accepted by later sources (see Zhivlov 2014 for criticism of the UEW). Based on the statistics of Csúcs & Honti & Salánki & Varga 1991, UEW's Proto-Uralic and Proto-Finno-Ugric etymologies show 17 cases of **ć* in anlaut; 19 instances of **ć* (as a single consonant) in the second syllable; 3 cases of the cluster **ćk*; and one case of the cluster **ćm* (the only Proto-Uralic/Proto-Finno-Ugric etymology showing this cluster, Proto-Uralic **koćmi* 'onion', has been recently criticized by Holopainen (2022 : 106)). In UEW, both **śk* and **ćk* clusters are reconstructed, but the reflexes seem to be similar in Hungarian and most branches (cf. PU (??) **čaćk*V > Hungarian *sas* 'eagle', **mośki-* > Hungarian *mos* 'wash'), so it is probable that the cases of Proto-Uralic **śk* and **ćk* reflect one and the same cluster.

In this paper, the Hungarian reflexes of **ć* in the Ugric vocabulary are discussed, and the alleged etymologies showing reflexes of this sound are analyzed critically, and also the reflexes in the Ob-Ugric languages are commented. This study contributes also to the study of the bigger picture of the Ugric vocabulary and historical phonology, as there is no commonly accepted reconstruction of Proto-Ugric (cf. Honti 2017 : 171). The existing reconstructions of Sammallahti (1988) and Róna-Tas & Berta (2011) have not been employed widely in subsequent research, and they have been criticized by Holopainen (2022). A full analyzis of the Ugric etymologies would probably contribute siginificantly to the discussion of the historical phonology of the Ugric languages and also to our understanding of the relationship between the Ugric languages. Some scholars have even refuted the reconstruction of Proto-Ugric altogether (Salminen 2002; Häkkinen 2007), partly due to the phonological problems. This paper discusses only small part of Ugric historical phonology and lexicon, but hopefully this can stimulate further studies.

The research material consists of Proto-Ugric etymologies showing **ć* suggested in earlier etymological sources. Criticism of more recent etymological sources is taken into account and the etymologies are analyzed in the light of modern research on Proto-Uralic, Hungarian and Ob-Ugric historical phonology (Sammallahti 1988; Róna-Tas & Berta 2011; Aikio 2015; Живлов 2006a; 2006b; 2018; Zhivlov 2014). The reconstructions of Proto-Khanty and Proto-Mansi follow the system of Zhivlov (Живлов 2006a : 28—29, 69—70; 2006b : 282—285) if no other source is mentioned. The Proto-Khanty and Proto-Mansi reconstructions marked with a question-mark are tentative reconstructions.

1.1. Notes on Proto-Uralic (Proto-Finno-Ugric) *ć

As noted above, a phoneme *ć is traditionally reconstructed to Proto-Uralic and Proto-Finno-Ugric, but this has been questioned more recently. Although it would require a separate study to discuss the Proto-Uralic situation in detail, some remarks are in order, as it has been assumed that Proto-Uralic *ć was retained as such in Proto-Ugric, and similar alleged reflexes of Proto-Uralic and Proto-Ugric *ć in Hungarian (*cs*, *s*) are found in UEW's material and also in some etymologies accepted by later research. Although most branches, such as Finnic, Saami and Mordvin, as well as Samoyed, clearly do not differentiate between the reflexes of the alleged *ć and *ś, some branches, such as Ugric and Permic, sometimes show different reflexes. While *ć usually becomes *sz* in Hungarian (for example, Proto-Uralic **kaća-* > Hungarian *haszon* (UEW 111; Sammallahti 1988 : 538; Aikio 2015 : 54), and similar *s* in Khanty and Mansi, there are some alleged examples of these languages showing an affricate reflex (Hungarian *cs*, Khanty and Mansi *ć) instead. Moreover, in consonant clusters the situation is more complicated. The situation in Permic is quite similar, as both affricate and sibilant reflexes are found (for example, Proto-Uralic **ćäŋäri* or **śäŋäri* 'shin' > Komi *ćęr* 'shinbone; bootleg' (UEW 612; Aikio 2015 : 63) but Proto-Uralic **ćȷmi* or **śȷmi* 'scale' > Komi, Udmurt *śęm* id.). The Uralic etymology of Hungarian *segg* 'ass' (< PU/PFU **ćäŋki*) shows unexpected *s* as the reflex of *ć; this etymology is accepted at least by Honti (2017 : 156—157) and Jalava & Grünthal (2020 : 123—124) in recent research.

Although UEW presents a number of etymologies with *ć, the situation is very different in Sammallahti's (1988) word-list. Sammallahti reconstructs Proto-Uralic/Finno-Ugric **ćolmi-* and **ćappi-*, with *cs* in Hungarian. Although the reconstruction of Uralic **ćolmi* is commonly accepted, **ćappi-* has been criticized by Luobbal Sámmol Sámmol Ánte (2014), as all the assumed cognates show irregularities. In addition, Sammallahti (1988 : 541) reconstructs **eśkä-* instead of **éc*V- (UEW) to account for Hungarian *esik* and Komi, Udmurt *uś* 'fall'; this seems like a good solution for *s*, as this would explain Hungarian consonantism regularly, and also Permic *ś* could be derived from **ćk* without problems. However, the vocalism of this Uralic etymology is irregular, and the whole Uralic etymology seems implausible. The Finno-Ugric etymology for Hungarian *süly* 'scurve', still mentioned by Sammallahti (1988 : 549), is considered improbable by Róna-Tas and Berta (2011), who argue that the Hungarian word and the alleged Mari and Mordvin cognates are rather borrowed from Turkic.

Although *ć > *s* is supported by only some uncertain examples that manifest great irregularity, the change **ćk* > *s* seems to be regular in Hungarian (Sammallahti 1988 : 517), as at least a couple of secure etymologies support this: Proto-Uralic **mośki-* > Hungarian *mos* 'wash' is the only unambiguous example, but also Hungarian *vas* 'iron', although not a regular reflex of Proto-Uralic **wäćkä* 'metal' (Aikio 2015 : 42), probably reflects earlier **ćk*. Proto-Uralic **čaćkV* 'eagle' > Hungarian *sas*, as reconstructed by the UEW, is a rather uncertain example as the Komi cognate (*źuź*, *śuź*, *źuz*, *śuz*) shows irregular variation in dialects (note that the Hungarian word cannot reflect **kć* or **kś* as has been assumed by Sammallahti (1988 : 517, 549) this would result in *sz*, cf. Живлов 2018).

Proto-Hungarian dialectal differences are sometimes offered as explanations for these discrepancies in Hungarian. Evaluation of this question would require a different study, but the issue is of little relevance for the Ugric

vocabulary discussed here. Regarding Proto-Ugric vocabulary, Proto-Ugric **saγɜ-rɜ*, *sakrɜ* 'hair' (> Hungarian *szőr*, ? *sörény* 'mane'; MSzFE 598—599, s.v. *szőr*; UEW 886—887) is the only etymology for which such explanation is sometimes offered (MszFE; UEW). However, as also a regular reflex with *sz* (*szőr*) is found in Hungarian, pointing to Pre-Ugric/Proto-Uralic **ś*, no Proto-Ugric **ć* has been reconstructed for this word. The Mansi cognates do not point to an affricate (South Mansi TJ *šā̄r* 'lófark-szőr; Pferdeschweif', East KM *sə̄r*, West P *šār*, North So *sāγər* 'Roßhaar').

2. Ugric etymologies showing aberrant reflexes of *ć

2.1. Etymologies listed as "certain" in the UEW

2.1.1. Word-initial *ć

Proto-Ugric *ćukkɜ-* **(***ćukkɜ-lɜ-***) 'kiss' > Hungarian** *csókol* **'kiss', Mansi: East (KU)**[2] *śoχəl-* **'suudella, küssen' < Proto-Mansi** **ćɔkəl-*

(MSzFE 122, s.v. *csókol*; EWUng 223, s.v. *csókol*; UEW 838—839; ÚESz s.v. *csókol*)

Interestingly, this is the only Ugric etymology with Hungarian word-initial *cs-* that is considered as "certain" by the UEW. Regarding vocalism, this is a regular etymology: Hungarian and Mansi cognates both show regular reflexes of Proto-Uralic **u*. The derivational element *-l* is also identical in both languages, so it would be implausible to assume coincidental similarity. However, the existence of the word in only one subdialect of Mansi raises some doubts about the old age of the word.

2.1.2. Word-internal *ć

PUg **kaćV-* **> Hungarian** *hasad* **'split', Mansi: South (TJ)** *kün-kaśmāt-* **'bersten, reißen, abspringen (eine Schlittenkufe, ein Balken, ein Brett)',** *kün-kaśl-* **'bersten, reißen, abspringen (eine Schlittenkufe, ein Balken, ein Brett)', (East) KU** *el-χaśəmat-* **'sich ablösen, losgehen, abfallen (ein Flicklappen)',** *el-χaśl-* **'sich ablösen, losgehen, abfallen (ein Flicklappen)', West (LO)** *χot-χaśmat-* **'zerreißen, sich abnutzen, sich abtragen (Kleidungsstücke)',** *χot-χaśl-* **'zerreißen, sich abnutzen, sich abtragen (Kleidungsstücke)' < Proto-Mansi** **kać-*

(MSzFE 272—273; EWUng 534, s.v. *hasad*; UEW 854; ÚESz s.v. *hasad*)

This Ugric etymology is accepted by EWUng, but in more recent research, alternative explanations to the etymology of the Hungarian word have been suggested (unfortunately, ÚESz does not take these explanations into account but largely repeats the views of EWUng). Metsäranta (2017 : 220) has suggested that the Hungarian word reflects PU **kačka-* 'bite' (> Fi *katke-*). In this case, Hungarian shows the expected development **č* > *s*. There seem to be no convincing parallels to the cluster **čk* in Hungarian (even in the material of the UEW there are no examples, see Csúcs, Honti, Salánki, Varga 1991 : 165—166), but as **k* was lost in all other clusters, we can assume the same here.

[2] The abbreviations of the dialects of Khanty and Mansi used in this paper are the ones used by the UEW.

Another etymology of *hasad* has also been suggested recently: Luobbal Sámmol Sámmol Ánte (Aikio) (2022 : 8) suggests that *hasad* goes back to PU **kiśk*V- (> Fi *kisko-* 'pull, tear'), but the vowel develoment *i* > *a* would require additional parallels before this idea could be accepted. Metsäranta's explanation (2017 : 220) appears more probable.

The origin of the Mansi word remains uncertain. Proto-Mansi short **a* cannot reflect any Uralic back-vowel regularly (Zhivlov 2014 : 124), so the old connection with Hungarian *hasad* seems impossible. Further research on the etymology of the Mansi word is needed, but in the light of the competing explanations for the Hungarian word and the irregularities the Ugric etymology should be rejected.

Proto-Ugric *ke(ń)ćä, *kańćɜ, kaćɜ* > ? Hungarian *keshed* 'to become narrow', *keskëny* 'narrow', Khanty: East (V) *käńt'-* 'abmagern', North (Kaz) *kańś-* 'eintrocknen' < Proto-Khanty *kə̄ńć-, Mansi: North (So) *kāńś-* 'zusammenschrumpfen, kleiner werden', (N) *kańś-* 'auszehren, hinschwinden' (N) *kańśl-* 'soványodik, sínylődik; abmagern, schmachten' < Proto-Mansi *kə̄ńć-

(MSzFE 358, s.v. *keskëny*; EWUng 742, s.v. *keshedt*; UEW 855—856; ÚESz s.v. *keshed*)

UEW gives two reconstruction variants here; same is found already in MszFE and the practice has been followed by subsequent Hungarian etymological dictionaries. However, it is quite clear that one of the variants is based on Ob-Ugric evidence only, as there is no evidence for a cluster **ńć* in Hungarian. Deriving Hungarian *keskëny*, *keshed* from **kańćɜ* would be completely irregular, as there are no convincing examples of a change **ńć* > *s* in the inherited vocabulary of Hungarian: the regular reflex of **ńć* would be Hungarian *gy* (eg, Proto-Uralic **kuńći* > Hungarian *húgy* 'urine'). It is clear that **ńć* has to be reconstructed for the Ob-Ugric forms (the cluster is retained in Ob-Ugric regularly), but Hungarian cannot be derived from this as the regular reflex of **ńć* is *gy* in Hungarian. The etymology is clearly irregular, and no Proto-Ugric word can be reconstructed. Probably the similarity of the Hungarian and the Ob-Ugric words is only accidental. Despite the obvious irregularities, both EWUng and ÚESz consider the Ugric etymology probable. Abondolo (1996 : 82, No. 233) considers the Ugric etymology of Hungarian *keshed* possible but notes that UEW might be right in considering *keskëny* and *keshed* to be of separate origin. Abondolo's idea is difficult to understand because of the obvious irregularity that is described above.

The internal relationship between the Ob-Ugric cognates is irregular. Honti (1982 : 153, No 296) reconstructs Proto-Ob-Ugric **kə̄ńć but according to Zhivlov (2023 : 149), the correspondence Khanty **ā* ~ Mansi **ā* is not found in inherited Uralic vocabulary.

In MSzFE, the Ugric etymology of Hungarian *keskëny*, *keshed* is considered disputed, and both the Ugric etymology and the possible connection to North Saami *geazzi*, Ter Saami *kieɳ^{d}ṭse* (< Proto-Saami **kēncē*, Lehtiranta 1989 : 48—49) are mentioned. However, it is also noted that the Saami word has to reflect an earlier **nč* that is incompatible with the consonantism of the Hungarian word. Because of this, the alternative Uralic etymology cannot be correct. The origin of *keskëny* and *keshed* remains open.

Proto-Ugric *_kećä-_ > Hungarian _kísér_ 'follow', Khanty: East (V) _kŏt̓-_ 'Spuren folgen, auf dem Weg bleiben, den Weg finden', South (DN) _kŏt̓-_ 'Spuren folgen, auf dem Weg bleiben', North (Kaz) _kŭś-_ 'Spuren aufnehmen, auf dem Weg bleiben, nach den Spuren verfolgen' < Proto-Khanty *_küć-_

(MSzFE 367, s.v. *kísér*; EWUng 756—757, s.v. *kísér*; UEW 856; ÚESz s.v. *kísér*)

The Ugric etymology presented in MszFE and UEW is accepted by EWUng and ÚESz. However, Luobbal Sámmol Sámmol Ánte (Aikio) (2015 : 10—11) criticized the Ugric etymology as irregular (the vocalism is problematic) and suggests an alternative and more convincing etymology for the Khanty word: he assumes that it reflects Proto-Uralic *_küji-_ 'track; follow' as a derivative. This idea is convincing, and so is Aikio's criticism of the Ugric etymology: Hungarian *í* is not a regular reflex of any Proto-Ugric or Proto-Uralic front-vowel (cf. Sammallahti 1988 : 513—515). It is unclear what is the basis of UEW's reconstruction with *_e_, as this does not fit either Hungarian or Khanty regularly. Hungarian dialects show form *késér*, noted by the UEW *_e_ > _é_ would be regular in Hungarian (Sammallahti 1988 : 514), and if this is the original form, the reconstruction *_kećä-_ might account for the Hungarian form. However, it is clear that the Ugric etymology has to be rejected, as the alternative Uralic etymology for the Khanty cognate is phonologically regular and involves no problems. Because of this, there is no reason to assume that Hungarian *s* goes back to *_ć_ here.

Proto-Ugric ? *_k_V_ć_V 'bitter' (UEW: _kšćз_ (_kšćз-rз_)) > ? Hungarian _keserű_, Mansi: East (K) _kwåśkėrtaχt-_ 'savanyúnak érzik (_кислым пахнет_); etwas schmekt jemandem sauer', (KM) _käsəml-_ 'räuchern', West (P) _kwaśėrt-: šämäm påšėmnė kwaśėrtaweî_ 'szemeimet csípi, égeti a füst; der Rauch beißt mir in den Augen', _käššəm_: _käššəm-woŋ̮kə_ 'Räuchergrube', (LO) _kassəml-_ 'räuchern', North (N) _kwosėrtaχt-_ 'einen scharfen herben, bitteren Geschmack od. Geruch haben'

(MSzFE 357, s.v. *keserű*; EWUng 741—742, Ugric; UEW 861; ÚESz s.v. *keserű*)

The Hungarian word is an old derivative. MSzFE (437, s.v. *keserű*) notes that the vowel-relations within Mansi are unclear and irregular. Semantically the Hungarian and Mansi words are indeed close, and it would be difficult to deny their relationship. However, the reconstruction of a Proto-Ugric etymology is impossible due to the irregularity. It might be possible to assume that these words have been borrowed from some common source. EWUng and ÚESz accepts the Ugric background of Hungarian *keserű*.

SSA (s.v. *kitkerä*) notes that these Ugric words have been previously connected with Finnish *katku*, *katkera*, *kitkerä*, but SSA considers such connection implausible. Connecting *katkera* with these words would indeed be phonologically impossible. The front-vocalic *kitkerä* seems somewhat less problematic: Finnish *kitke-* could reflect earlier *_kički-_, and Hungarian *s* could be derived from *_čk_ (cf. *hasad* above). The vowel *e* would be problematic, however, as *_i_ usually yields closed *ë* in Hungarian (Pystynen 2015; Zhivlov 2023 : 142). In some cases, Hungarian open *e* is found, however, for example *_šiŋiri_ 'mouse' > Hungarian *egér* (see now Zhivlov 2023 : 142 for possible conditions of this change). Rehabilitating the connection of *kitkerä* and *keser-* remains a possibility,

but it cannot be considered certain because of the problem with the open *e* in Hungarian. The Mansi word cannot certainly be derived from **kički-* because of the vocalism.

Proto-Ugric ****kućə* **'side, place or soom beside something' > Hungarian *-hoz*, *-hëz*, *-höz*, **Khanty: East (V)** *kuťəŋ* **'Nähe, Raum neben etwas', South (DN)** *χăť*: *ějχăťjoŋ* **'elf (***ěj* 'eins', *joŋ* 'zeh,')' < Proto-Khanty ?? ****k*V*ć*

(MszFE; EWUng 581, s.v. *hozzá*; UEW; ÚESz s.v. *-hoz*)

This is one of the few examples of the alleged change **ć* > *z*. The Hungarian and Khanty words are semantically close, and the Proto-Ugric etymology might seem plausible at first sigh; it is accepted by EWUng and ÚESz. The relations between the Khanty vowels are not entirely regular (cf. Живлов 2006a : 28). This cats doubt on the validity of the Ugric comparison. All the Khanty words point to Proto-Khanty **ć*.

The alleged parallels (EWUNg; ÚESz s.v. *-hoz*) to the change **ć* > *z* are not good etymologies: Hungarian *szűz* 'virgin' has a competing Turkic etymology (Róna-Tas & Berta 2011 : 833—836: Proto-Turkic **süzök* 'clarified, strained, pure, transparent') that involves less problems than the Finno-Ugric explanation, and *fűz* 'salix' (< ? **peć*V) shows completely irregular vocalism in the alleged Permic cognates (Udmurt *pučį* 'Knospe, Auge, unentwickeltes Palmkätzchen', Komi *paća* 'ветви ивы, вербы; ива, верба'). There is no compelling evidence of Proto-Uralic **s* being reflected as *z* in Hungarian, so the irregular Ugric examples of *z* < **ć* cannot be backed up by Finno-Ugric/Uralic evidence. There are no convincing examples of Hungarian *sz* from Proto-Uralic **ć* being voiced (in all dialects), so a secondary voicing in Hungarian does not seem a viable option to explain the problematic reflex.

Proto-Ugric (?) ****läćV* **> Hungarian *les* **'lauern, nachstellen', Khanty: North** *lāśi* **'Anstand',** *lāśi-* **'lauern' < Proto-Khanty ****lǟći-*; **Mansi: South (TJ)** *läć-*, **East (KU)** *lə̄ś-*, **West (P)** *lāś-*, **North (So)** *lāś-* **< Proto-Mansi ****lǟći-*

(MSzFE 402, s.v. *les*; EWUng 892, s.v. *les*; UEW 863; ÚESz s.v. *les*)

This etymology involves less problems as most of the other words discussed here. The Ugric etymology is accepted by EWUng. Proto-Mansi **ā̆* points regularly to Proto-Ugric **ä* that also fits Hungarian *e* regularly. According to MSzFE, the Khanty word, found only in one subdialect, is perhaps a loan from Mansi (and the Proto-Khanty long **ā̆* that the North Khanty *a* ~ *ā* would reflect, is not the regular reflex of PU/PUg **ä*, Zhivlov 2023 : 149). The word is missing from Honti's (1982) Proto-Ob-Ugric material.

Here everything points to an earlier affricate, so the reconstruction of a Proto-Ugric **ć* could be well-founded. On the other hand, it should be noted that Hungarian *les* could reflect also **läćk*V: as noted above, it is known that *s* < **ćk* is regular in Hungarian. Regarding Khanty and Mansi, there are no certain examples of Proto-Uralic **ćk*, so we do not know what would be the regular reflexes of Proto-Ugric **läćk*V. However, the one example that Csúcs et al. (1991 : 164) list shows *ś* (Proto-Mansi **ć*) in Mansi, so if this is indeed the regular outcome, we could reconstruct Proto-Ugric **läćkV*. In the material of Csúcs et al., Khanty likewise shows only one example of such cluster, also showing Proto-Khanty **ć*. However, Zhivlov (2023 : 146) assumes that Proto-Mansi **š* is the regular reflex of Proto-Uralic **ćk* (cf. **aćka-* 'step' > Proto-Mansi

Proto-Ugric *o*ć*t*V*r*V > Hu *ostor*, Mansi South (TJ) *aśtəˑr*, East (KU) *ōśtər*, North (N) *ə̄śter* 'Peitsche' < Proto-Mansi *ā*ć*tər* (Живлов 2013)

(MSzFE 506—507; EWUng 1072—1073; UEW 333, 877; Holopainen 2019 : 156—158; ÚESz s.v. *ostor*)

This word is a well-known loanword from Indo-Iranian (Korenchy 1972; UEW; EWUng; Живлов 2013): the word was borrowed from Proto-Indo-Iranian *a*ć*trā-* or from Proto-Iranian *a*š*trā-* (see Holopainen 2019 : 156—158 for discussion of the phonology of the Indo-Iranian source form). The vowel-relationship between the Mansi and Hungarian words points to a parallel borrowing, as has been observed by Holopainen (2019). Because of this, it is quite certain that the word does not show Proto-Ugric *ć. However, it is interesting that this is the only example in UEW's material that shows a cluster *ć*t. Because no parallels to *ć*t > *s* in Hungarian are known (there are no other Proto-Ugric, Proto-Finno-Ugric or Proto-Uralic etymologies with this cluster in the material of the UEW or any other etymological dictionary), it is impossible to say whether such a change would be regular. On the other hand, it has been pointed out that the Indo-Iranian word probably had *š*t in Proto-Indo-Iranian already (Kümmel 2020 : 242). It is also possible that the Hungarian word was borrowed only later, from an Indo-Iranian form that had *š*t.

To conclude, this etymology is most likely not a real Proto-Ugric word, and because of this, it does not give secure information on the background of Hungarian *š in this case. Different solutions can be suggested, depending on the age of the loanword. In the lack of parallels for Hungarian *s* < *ć*t* it is difficult to say more.

Proto-Ugric *wäćä* (UEW: *wə̈ć₃*) 'penis' > Hungarian *vese*, *ves* 'kidney', Mansi South (TJ) *üćəw*, East (KU) *wə̄śəj*, West (P) *wäśəγ*, Mansi (So) *wośiγ* 'penis' < Proto-Mansi *wäćəγ* (UEW 899—90)

(MSzFE 686—687, s.v. *vese* (*vesét*); EWUng 1625; UEW 899; ÚESz s.v. *vese*)

Regarding the vocalism, this phonologically unproblematic etymology, as both Hungarian *e* and Proto-Mansi *ā* can be derived from Proto-Ugric *ä* regularly. However, the semantics is somewhat troubling. The Mansi word is a derivative. *-*γ* is a productive derivational suffix in Mansi (Riese 2001 : 45—47). No competing etymologies for the Hungarian word have been suggested.

Regarding the semantics, MSzFE and EWUng mention Old High German *nioro*, *niero*: 'Hode, Lende; Niere', and MSzFE also mentions Finnish *muna* 'egg; testicle' and *munuainen* 'kidney'. These are not exact parallels, but quite close. A similar meaning shift 'kidney' — 'testicle' is attested also elsewhere, for example in Tamil *vakku* 'kidney', a loanword from Prakrit *vakka* id., has also acquired the meaning 'testicle' (see https://datsemshift.ru/shift4094). It seems that the semantic difference is thus no obstacle. However, it remains unclear how the predecessor of the *s ~ *ć correspondence in Hungarian *vese* and Mansi *wäćəγ* can be reconstructed.

Proto-Ugric ? *ʊ̯Vć̯V- (UEW: *ʊ̯ɜć̯ɜ-) 'become damp, get wet; naß werden' > Hungarian *ázik* 'get wet'; Khanty: East (V) *lăstə-* **'tauchen, begießen, befeuchten', South (Kr)** *tăstə-* **'tauchen (z.B. Garn in Fabrstoff)', North (Kaz)** *лŏstə-* **'in Wasser anfeuchten' < ? PKh *** *лasl̮-*

(MszFE 104; UEW 845; EWUng 63, s.v. *ázik*; ÚESz s.v. *ázik*)

This is a complicated etymology: two competing explanations have been suggested in MSzFE and UEW and both of them involve problems. In EWUng and ÚESz both possible etymologies are mentioned. The Ugric etymology is one of the examples allegedly showing Hungarian *z* as a reflex of Proto-Ugric **ć̯*.

MSzFE (104) considers Hungarian *áz* to be of Proto-Finno-Ugric etymology and presents Komi *sez-* 'feucht werden', Mansi TJ *tat̕-* 'naß werden' (etc.) and Khanty V *lăl-* 'feucht, naß werden' (etc.) as cognates. UEW reconstructs two different word families with the meaning 'get wet', Proto-Ugric **ʊ̯ɜć̯ɜ-* (with the cognates listed above) and Proto-Finno-Ugric **sɤsɜ-* (with the Komi cognate and the Khanty and Mansi cognates mentioned in this paragraph). However, it is probable that at least the Khanty words (V *lăl-* ~ *lăstə-* etc.) listed under these word-articles are reflexes of the same word (Zhivlov 2023 : 145 with reference to Ante Aikio, personal communication). UEW notes that Hungarian *áz-* cannot belong to Proto-Finno-Ugric **sɤsɜ-* because of *-z-*, but the same explanation prevents us also from connecting the Hungarian word with Khanty *lăstə-*, as the relationship is irregular also in this case. However, Ante Aikio (personal communication) has noted that Hungarian *z* is a derivational suffix in this case, which means that only *á-* would be a reflex of the Ugric stem **s*V*s*V-. This means that the Hungarian and Khanty words can be connected but as Hungarian *z* is not a reflex of **ć̯* here, the issue has to be left for further research.

2.2. Etymologies considered "uncertain" by the UEW

2.2.1. Word-initial **ć̯*

Proto-Ugric (?) ***ć̯V*r*lV **'rapids' (UEW: *cärlɜ* **(***ćärlɜ***)) Hungarian** *sellő* **'Nixe, Wasserfrau; Stromschnelle', Mansi: North (N)** *sārlä* **'a folyónak lejt sebb helye, hol a víz nagy sebességgel ömlik alá', West (LU)** *särlə***:** *särlə-waŋkə* **'ляжина (в болотах)', South (TJ)** *särlī* **'настрёвник (на лугах)' < ? Proto-Mansi ***$s\bar{\ddot{a}}rlə$

(MSzFE 551, s.v. *sellő*: EWUng 1316, s.v. *sellő*; UEW 841; ÚESz s.v. *sellő*)

The etymology is doubted by all etymological dictionares and EWUng states that the Ugric origin is improbable; this is repeated also bz ÚESz. UEW offers two alternative reconstructions: Hungarian *s* would reflect **č* regularly. The meaning 'Nixe, Wasserfrau' in Hungarian is secondary according to UEW and EWUng. The Mansi sibilant *s* does not point to Proto-Ugric affricate **ć̯*. The vowel-correspondences within the Mansi dialects are irregular, as the short *ä* in South and West Mansi does not reflect regularly the long $\bar{\ddot{a}}$ that Noth Mansi points to. The etymological dictionaries mention the possibility that Hungarian *sellő* could be derived from the verb *serlik*, which is of unclear origin; some kind of relationship with *sürög* has been suggested (EWUng 1321, s.v. *serít*, 1374, s.v. *sürög*), but the vocalism is doubtful and this issue requires further research.

Proto-Ugric (?) *ćVηV 'time' (UEW: *ćeŋз* (*ćiŋз*)) Hungarian *-ség*, *-ság* abstract suffix, Mansi: East (KU) *śüw* 'Zeit; ein gewisses Maß, eine gewisse Menge; Art', West (P) *śiγ* 'Zeit; ein gewisses Maß, eine gewisse Menge; Art', South (TJ) *ćäw* 'Zeit; ein gewisses Maß, eine gewisse Menge; Art'

(MSzFE 547—549; UEW 838)

This etymology manifests several suspicious correspondences: in addition to the rare correspondence Hungarian *s* ~ Mansi **ć*, the correspondence Hungarian *g* ~ Mansi *w*, which is an irregular correspondence, found among many Ugric etymologies (see Bakró-Nagy 2003 for a discussion of the developments of **η* in Ugric).

Furthermore, the vocalism is irregular, as the Mansi vowel cannot be derived regularly from **e* that has to be the predecessor of Hungarian *é* (if the front-vocalic *-ség* is the original form).

In UEW, also another possible etymology for Hungarian *-ség* ~ *-ság* is mentioned: a reconstruction **čeŋki* (**čeŋke* in UEW's notation) with the meaning 'steam, mist (or) warm' is reconstructed, with suggested cognates in Finnic (Finnish *henki* 'spirit'), Permic (Udmurt *ǯog* 'sehr warm, drückend heiß, schwül') and Ob-Ugric (Khanty Trj *čěŋk* 'Wärme, Hitze', Mansi TJ *säk* 'Schwüle'). This etymology is not much better on phonological level, as the correspondences of the word-initial consonant and the vocalism are irregular, and also the semantic side remains quite unclear. As this etymology cannot be supported either, the etymology of Hungarian *-ség* ~ *-ság* remains unknown.

Proto-Ugric (?) *ćVkkV (UEW: *ćškkз*) > Hungarian *szík* 'Alkaliboden, Sodaboden, Sodaerde', *szejke* ?, Mansi: South (TJ) *ćik*, East (KU) *śäχ*, West (P) *śäχ* 'Salz'

MSzFE 586—587, s.v. *szik*, *szík*; EWUng 1431—1432, s.v. *szík*; UEW 839; ÚESz s.v. *szik*)

This etymology involves different semantic and phonological problems, and the issue is made complicated by the possible Iranian origin. The Proto-Ugric etymology is doubted by EWUng, and also ÚESz considers it uncertain. The Iranian etymology is mentioned by the UEW with two question-marks and as a possibility in EWUng. Korenchy (1972 : 77—78) discusses the loan-etymology, notes that it is uncertain: the word is possibly a loan from Middle Iranian **čäχ* 'salt', reconstructed on the basis of Ossetic *cäχχ* (Абаев 1958 : 310), but this is uncertain due to the unclear (Caucasian?) background of the Ossetic word.[3] Liimola (1973) does not criticize the etymology per se, but notes that Mansi *χ* developed from **k* relatively late, and this obviously makes the similarity of the Mansi and Ossetic words less striking. The affricate **ć* would be somewhat problematic, as Mansi **š* (< **č*) is found as the substitution of the Alanic affricate **č*/*c* in most other loans (see Holopainen 2019 : 259, 267). Also, Hungarian *sz* would be very problematic in the case of a loan, as no parallels to this are found (the Alanic etymology of Hungarian *sajt* 'cheese' is a possible example but this etymology is uncertain, see Róna-Tas & Berta 2011 : 1335—1336). It could be possible that the words in Hungarian, Mansi and Ossetic are somehow related, but an Iranian loan into Proto-Ugric or separate loans into Hungarian and Mansi is not very probable.

[3] It has been assumed that the same Alanic word has been borrowed into Mari (Наполь-ских 2015 : 166), but this requires further research (cf. Bereczki 2013 : 235—236).

The vowel-relations between Hungarian *szík*, *szejke* and Mansi *ćik*, *śäχ* are irregular. Even the Hungarian forms *szík*, *szejke* are very difficult to derive from one form. It is impossible to reconstruct a Proto-Ugric word.

Proto-Ugric (?) *ćV*ŋk*V 'knot; tie a knot' (UEW: *ćəŋkɜ*) > Hungarian *cseg*, *csög* 'knot', Mansi: East (K) *śiŋkəlt-* 'einen Knoten knüpfen', West (P) *śäŋkəl* 'Knoten'

EWUng 229, s.v. *csög-bog*: not Ug; UEW 839—840

Although the semantic connection between Hungarian *cseg*, *csög* and the suggested Mansi cognates is plausible, the vocalism causes problems: Hungarian open *e* in *cseg* rather points to Proto-Ugric/Proto-Uralic **ä*, but the Mansi vocalism cannot be regularly derived from this. Mansi vocalism is dubious, which makes the reconstruction of a Proto-Ugric word untenable. The Ugric etymology is considered improbable by EWUng, and this is a plausible conclusion.

Proto-Ugric (?) *ćV*rk*V 'sprout, blastus, embryo' (UEW: *ćərɜ* (*ćərkɜ*)) > Hungarian *csíra* 'sprout', Mansi: South (TJ) *ćürkī·t-* 'keimen, sprossen', East (KU) *śərk* 'Keim', West (P) *śürk*, *śirk* 'Keim'

(MSzFE 120; EWUng: s.v. *csíra*; UEW 840; ÚESz s.v. *csíra*)

The vocalism is irregular: Hungarian *í—a* combination points to earlier, Proto-Hungarian/Old HUngarian **i*, and this does not correspond regularly to the front-vowels in Mansi. EWUng is critical of the etymology. It is probable that the words are somehow connected, but no regular Proto-Ugric etymology can be reconstructed. A word meaning 'sprout' might be a loanword; some other words related to plants and animals in Ugric seem to be loans, as they show irregular vowel-relations (Holopainen 2021).

Proto-Ugric (?) **ćump*V (UEW: *ćumpɜ* (*ćumpɜ-lɜ*)) 'drinking vessel (made of birch bark)' > Hungarian dial. *csobolyó*, *csobolya* 'Handlägel; flaches Fäßchen der Feldarbeiter und Hirten für Wasser; kleines rundes Holzgefäß (für Wasser oder Wein); scheibenförmiges Holzfäßchen mit einem Loch an der Seite', Khanty: North (Kaz) *śŭmpal* 'Trinkgefäß aus Birkenrinde', South (DN) *t̆ŏmpal* 'Kelle von Birkenrinde' < Proto-Khanty ? **ćŏmpaʌ* (Honti 1982: **ćŏmpaʌ*); Mansi: East (KU) *śumpəl* 'Trinkgefäß aus Birkenrinde', North (So) *śumpal* 'Trinkgefäß aus Birkenrinde' < Proto-Mansi **ćumpāl* (Honti 1982: **ćŭmpāl*)

? Udmurt *ćib*, Komi *ćib* 'shovel', Fi *sammi* 'Kufe', *čumbūne* 'tuohinen, äyskäri; Trinkgefäß aus Birkenrinde'

(MSzFE 120—121; EWUng 222, s.v. *csobolya*; UEW 43—44, 839)

The irregular variation in the phonology of the different forms within Hungarian makes a Proto-Ugric origin unlikely and the Ugric etymology has been doubted also by EWUng. The vowel-relations between the alleged cognates in Ugric and Permic are clearly irregular. UEW considers this a possible Proto-Ugric etymology, with uncertain Finno-Ugric cognates, but the Ugric etymology is also ridden with problems. The alleged cognates in other related languages show similar problems. Regarding the suggested Finnic cognates, there is no way to derive the Finnish and Veps words from one Finnic source as neither the vocalism or the consonantism corresponds regularly; the word is also missing from Kallio's Proto-Finnic word-list (2019). The Permic cognates show irregular vocalism as well.

Proto-Ugric (?) ****ćuŋk*VrV- **'shrink, shrivel (up)' (UEW: *ćuŋkз-* (*ćuŋkз-rз-*)**) > Hungarian** *sugorod-* **'sich verdichten'**, *zsugorod-* **'schrumpfen, einschrumpfen, zusammenschrumpfen, schwinden', Mansi: South (TJ)** *ćäŋ̮k̮ər*: *jil-ćäŋ̮k̮ər* **'käydä kumaraksi; krumm werden', East (KU)** *śiŋkər-* **'бедствовать', West (P)** *śaŋkərməntäm*: *tētāl śaŋkərməntäm* **'голодом пропадет', North (So)** *śuŋkərli*: *sās śuŋkərli* **'береста скорчится'**

(MSzFE 705, s.v. *zsugorodik*; 1681—1682, s.v. *zsugorog*: phonological problems with the Ugric etymology; UEW 839; ÚESz, s.v. *zsugorog*)

The Hungarian word shows numerous irregularities. Hungarian *u* does not usually reflect earlier (Proto-Ugric, Proto-Uralic) **u*, the usual reflexes being *o* or *ú*, with conditions that are not cpmpletely clear (Sammallahti 1988 : 513). It is also quite clear that the Mansi vocalism is irregular, as the vowel-relations even within the Mansi dialects do not point regularly to any single Proto-Mansi vowel (cf. Живлов 2006a : 69—70).

2.2.2. Word-internal *ć

Proto-Ugric (?) ****l*VćV **'wide, broad, loose' (UEW: *lśćз***) > Hungarian** *laza* **'locker, aufgelockert, lose', Khanty: East (Trj)** *ļaťək* **'weit, geräumig (Gefäß, Hof usw.), wohinein viel geht, weit (Stiefel, Anzug)', South (Šerk)** *laśək* **'weich', (DN)** *laťək* **'weit (z.B. Stiefel), geräumig' < Proto-Khanty (?) ****lǟćək***, Mansi: South (TJ)** *laćət* **'weit, geräumig', East (KU)** *laśt* **'weit, geräumig', North (So)** *lośit* **'weit, geräumig', West (P)** *laśt* **'weit, geräumig' < Proto-Mansi ****laćt*

(MSzFE 391—392; EWUng 877, s.v. *laza*; UEW 864; ÚESz s.v. *laza*)

This is one of the few suggested etymologies showing *z* in Hungarian allegedly reflecting Proto-Ugric **ć*. However, the etymology is filled with problems, and the etymology is doubted by EWUng and ÚESz. Also the semantic connection is quite vague. The etymology is missing from Honti's (1982) material and also not commented in Zhivlov's study on Ob-Ugric vocalism (Живлов 2006a). Khanty vocalism points to an earlier front-vowel that is incompatible with the vocalism of the Mansi word (the vowel *ȧ* in the Tremjugan dialect can only reflect earlier **ǟ* in Zhivlov's reconstruction (Живлов 2006a; 2006b)), so a Proto-Ob-Ugric word cannot be reconstructed. Both Khanty and Mansi show affricate **ć* that cannot point to an earlier sibilant.

Proto-Ugric ****muć*V- **'smile' (UEW: *mućз-*, *muśз-***) > Hungarian** *mosolyog* **'smile',** *mosoly* **'smile (noun)', Mansi: East (KU)** *mosət-* **'улыбнуться', West (P)** *mus-* **'mosolyog, lächeln', North (So)** *musat-* **'улыбнуться' < Proto-Mansi ****mus-*

(MSzFE 451, s.v. *mosolyog*; EWUng 997—998; UEW 872—873; ÚESz s.v. *mosolyog*)

Although this etymology is listed as uncertain in the UEW and considered as onomatopoetic by MSzFE and uncertain by ÚESz, there are no major problems with the Ugric etymology. Mansi cognates P *mus-* etc. show Proto-Mansi **s* that points regularly to Proto-Uralic **ć*. However, otherwise the etymologies seem regular, as both Hungarian and Mansi point to Proto-Ugric **u*. As noted earlier, Hungarian *s* could reflect older **ćk*, so it would be tempting to reconstruct such a cluster for the Proto-Ugric word. However, it remains unclear whether Proto-Mansi **s* could be derived from such a cluster.

Proto-Ugric *pV$ć$V- 'drop, fall drop by drop, bubble' (UEW: $pəśз$- ($pəć з$-)) > Hungarian $buzog$- 'wallen, sprudeln, sich eifrig bemühen, sich begeistern für etw.', $buzdít$- 'aneifern, aufmuntern', Khanty: East (V) $pasəγ$-, North (O) $pasi$- 'tropfen', South (DN) $posə$- 'tropfen' < Proto-Khanty *$pasəγ$- (Honti 1982)**, Mansi: East (KU) $pāsγ$-, North (So) $pāsγ$-, West (P) $pass$-, South (TJ) $pɐsk$- 'tropfen' < Proto-Mansi *$pɨ̄səγ$ ~ *$pasγəγ$ (Honti 1982 : 179—180, No. 546)**

(MSzFE 111—112; UEW 881—882; EWUng 152, s.v. *buzog*; ÚESz s.v. *buzog*)

Both MszFE and UEW are doubtful of the etymology because of problems with Hungarian voiced *b* and *z* that are both completely irregular. EWUng (152, s.v. *buzog*) accepts the Ugric etymology, even though the phonological problems are noted; ÚESz notes that the origin is uncertain. Abondolo (1996 : 110, No. 373), who accepts that the Ob-Ugric cognates are regular, is critical of including the Hungarian etymology here. It is quite clear that this etymology should be rejected due to numerous irregularities: Hungarian *b* from *p* would be completely irregular, and *z* cannot reflect earlier **ś* or **ć*. The Ob-Ugric cognates show mutual regularity (Abondolo 1996), so a Proto-Ob-Ugric word could be reconstructed. However, they clearly do not point to an earlier affricate but to a Proto-Ugric sibilant **s*.

Proto-Ugric (?) *wV$ć$V 'thin; narrow' (UEW: $wäńćз$, $wäćз$) > Hungarian $vézna$ 'schmächtig, spindeldürr, spindeldünn, dünn, dürr', dial. 'sovány, cingár; mager, hager', Khanty: East (V) $wäńì$ 'schmal, dünn', North (Kaz) $waś$ 'schmal, dünn', South (DN) $wàt$ 'schmal, dünn' < Proto-Khanty *$wə̄ńć$- (Honti: *$wäńć$), Mansi: East (K) $wiś$, West (P) $iś$, South (TJ) $ī̯š̄$ 'klein' < ? Proto-Mansi *$wić$ (Honti: *$wɨ̆ć$)

(UEW 898; EWUng 1631, s.v. *vézna*; ÚESz s.v. *vézna*)

The Ugric etymology is completely irregular, and the similarity of the Hungarian and Ob-Ugric words is probably accidental. The etymology is not included in the MSzFE, and EWUng considers the Ugric etymology improbable. The same is repeated also by ÚESz. The Ob-Ugric cognates have a regular relationship, and Proto-Ob-Ugric *$wɨ̄ńćз$ is reconstructed by Honti (1982 : 195, No. 696); this is accepted also by Zhivlov (Живлов 2006a : 168) who reconstructs Proto-Ob-Ugric *$wɨ̄ńćä$.

3. Other possible Proto-Ugric etymologies with *$ć$?

The following etymology, considered a Proto-Finno-Ugric word in UEW, might be another instance of Proto-Ugric **ć*, as the suggested Mari cognate is problematic:

Proto-Uralic/Proto-Finno-Ugric *V$ć$V- **(UEW: $śćз$-) 'yawn' > Hungarian $ásít$ 'yawn', Mari U $ušte$- 'die Verstorbenen anbeten und mit Opfer verehren, eine Gedächtnisfeier für die Gestorbenen abhalten', C, B $ušte$- 'yawn', Khanty East $usɣ̯l$-, South $wăses$-, North os- 'yawn' < Proto-Khanty *wus- (Honti 1982 : 197), Mansi South $ōsə·nt$-, East $ūsənt$-, West $ūsəntāl$-, North $ūsɨnt$- 'yawn' < Proto-Mansi *$ūsənt$- (Honti 1982 : 197)**

(MSzFE 97—98; EWUng 52, s.v. *ásít*; Bereczki 2013 : 292—293; Abondolo 1996 : 101, No 326; UEW 591; ÚESz s.v. *ásít*)

This Uralic etymology has recently been doubted by Bereczki (2013 : 292—293). He notes that Mari *üštem* 'yawn' is due to contraction from earlier *ueštam*, and not the same word as *uštem* 'die Verstorbenen anbeten und mit Opfer verehren, eine Gedächtnisfeier für die Gestorbenen abhalten'. Both of these Mari words were listed as cognates by the UEW. According to Bereczki, the Mari words do not reflect *V*ć*V-, contrary to what is assumed by the UEW. It should be added that in Aikio's current reconstruction of Proto-Mari vocalism, Mari full-vowel **u* regularly reflects Proto-Uralic **o* (Luobbal Sámmol Sámmol Ánte (Aikio) 2014 : 157).

Because of the problems with the Mari word, it is plausible to analyze the Ugric cognates in more detail. Regarding the Ugric cognates, the Mansi words can be reconstructed as Proto-Mansi **ūsənt-*: the vocalism reflects regularly a Pre-Mansi **a-a*-stem, which formally corresponds to Hungarian *á* regularly (see Zhivlov 2014 : 124). It is interesting, however, that Mansi shows here no trace of any affricate reflex, but shows **s* that is the regular reflex of Proto-Uralic **ć/ś*. The Khanty word likewise shows **s*. However, contrary to the Mansi word, the Khanty cognate listed in the UEW does not point to an old **a-a*-stem. Honti (1982 : 197, No. 720) reconstructs Proto-Ob-Ugric **wūs-* 'gähnen'. From the point of view of vocalism, a Proto-Ugric etymology **a*C*a-* could be reconstructed. EWUng and ÚESz consider the Hungarian word to be of onomatopoetic origin, noting that the Finno-Ugric origin is not probable, but this conclusion is not a very good option, as it remains unclear how the verb *ásít* could be explained as "onomatopoetic".

UEW lists the Hungarian dialectal words *ácsingóz-* 'sich sehnen', *ácsorog-* 'herumstellen, lungern, herumlungern' and the archaic *ácsorog-* 'sich sehnen, giering wünschen' and *ácsorog-* 'etwas zu erlangen wünschen'. This words are semantically not close to 'yawn', and the relationship *s* ~ *cs* is irregular. It is better to reject this assumed relationship and search other etymologies for these words.

4. Conclusions

The discussion of the etymologies above has shown that the Ugric etymologies allegedly showing Proto-Ugric **ć* involve severe problems, and many of the etymologies should be rejected.

Irregular and implausible etymologies are the following: Proto-Ugric **ϑ*V*ć*V- > Hungarian *ázik*, Proto-Ugric **p*V*ć*V- > Hungarian *buzog*, Proto-Ugric **ćump*V- > Hungarian *csobolya*, Proto-Ugric **kaća-* > Hungarian *hasad*, Proto-Ugric **k*V*ć*V- > Hungarian *keserű*, Proto-Ugric **k*V*ć*V- ~ **k*V*nč*V- > Hungarian *keshed*, Proto-Ugric **keć*V- > Hungarian *kísér*, Proto-Ugric **l*V*ć*V- > Hungarian *laza*, Proto-Ugric **w*V*ć*V- > Hungarian *vézna*, Proto-Ugric **ćuŋk*V- > Hungarian *zsugorodik*;

Plausible or possible cases of Proto-Ugric **ć* > Hungarian *s* are the following: Proto-Ugric **aća-* > Hungarian *ásít*, Proto-Ugric **läćä-* > Hungarian *les*, Proto-Ugric **muć*V- > Hungarian *mosolyog*, Proto-Ugric **wäćä-* (or **wäćkä-*) > Hungarian *vese*.

Among the case sof Proto-Ugric **ć* > Hungarian *cs*, there is one etymology that otherwise would be regular, namely Proto-Ugric **ćukk*V- > Hungarian *csókol*. However, as this is one isolated example, it cannot be used as evidence, especially as a word meaning 'kiss' could show irregular developments because

of affection. Since there is at least one possible example of similar develoment in the inherited Proto-Uralic vocabulary in Hungarian, namely Hungarian *csomó* 'knot' from Proto-Uralic **ćolmi*, this issue requires further research.

It seems then among the few etymologies that remain as possible instances of Proto-Ugric **ć*, Hungarian *s* seems to be the regular reflex. The alleged examples of *z*, *zs* and also the other examples showing *cs* are so irregular that they have to be rejected. It is also interesting that the plausible etymologies show *s* in word-internal position. Based on this analyzis, one could assume that **ć* > *s* is regular in Hungarian. However, the reconstruction of Proto-Ugric **ć* in these cases is troubling, as in many cases, Khanty or Mansi shows a sibilant *s* that rather points to Proto-Ugric **s* (< Proto-Uralic **ś*). If Proto-Ugric had both **ś* and **ć*, we would expect all the Ugric languages to show different reflexes for **ć* and **ś* but this is not the situation we have. It is also suspicious that among the Proto-Uralic (or Proto-Finno-Ugric) cognates, no convincing etymologies of Hungarian *s* reflecting earlier **ć* are found, except in the **ćk* cluster discussed above.

One could ask whether the Ugric cases of Hungarian *s* could rather be derived from forms with earlier cluster **ćk*. There is actually no obstacle to reconstruct the predecessors of the Hungarian words mentioned above as **aćk*V-, **läćk*V-, **mućk*V-, **wäćk*V. However, the cognates in Khanty and Mansi make the situation more complicated. As mentioned above, the default reflex of **ćk* in Mansi is **š*, whereas no convincing reflexes of this cluster in Khanty are known (Zhivlov 2023). We do not find Mansi **š* as the reflex of the assumed **ćk* in any of the cognates above. However, we have to keep in mind that it is not completely clear under which conditions **š* emerged in Proto-Mansi in the first place (cf. Zhivlov 2023 : 144), so we cannot be totally certain whether the change **s* < **ćk* would not be plausible. If Proto-Mansi **s* could reflect ****ćk***, we could reconstruct Proto-Ugric **mućk*V- 'smile' and **aćk*V- 'yawn'. As we have no convincing cases of **ćk* in Khanty, the Proto-Khanty **s* in the word for 'yawn' could be assumed to be a reflex of **ćk*.

However, all of this remains rather hypothetical and clearly further research is needed. Although this paper has managed to show that most of the alleged cases of Proto-Ugric **ć* are wrong, more research is clearly needed to work out possible solutions for the correspondences found in the few etymologies that are otherwise plausible. Here one has to keep in mind that as the "Proto-Ugric" words generally show much irregularity and probably consist largely of loans from unkown languages (see Holopainen 2021), it is possible that the "plausible" cases listed in this paper turn out to be parallel loanwords as well. Nevertheless, as a working hypothesis for future research one can at least cautiously assume that different Proto-Ugric clusters are behind the correspondences Hungarian *s* ~ Mansi **s* and Hungarian *s* ~ Mansi **ć*.

There is one more issue that should be noted here. It is interesting that the two words manifesting the correspondence Hungarian *s* (formally < **ćk*) and Mansi ****s*** (< Pre-Mansi ?) are verbs. We could, technically, assume here that Hungarian forms with *s* reflect forms with a *-k* suffix, whereas the Mansi (and Khanty) cognates pointing to a simple **ś* reflect underived forms. The problem is that no suitable derivational suffix can be found. It is intriguing, however, that a verbal suffix **-ćk-* or **-śk-* can be reconstructed to Proto-Uralic (Kövesi 1965 : 320, 344—350; Csúcs 2005 : 297). This suffix has no known reflexes in the Ugric languages, and the functions in Permic and Finnic are

different, so it is difficult to reconstruct the function of this suffix to Proto-Uralic. No traces of this suffix have been identified in Hungarian so far. However, in these verbs, we could assume that the suffix **ćk* is involved.

It could be assumed that the Hungarian forms *ásik*, *mos-* (in *mosolyog*) reflect forms augmented with such a suffix, so Pre-Hungarian **aćk*V-, **mućk*V-, whereas Mansi forms with **s* would reflect the bare stem. However, due to the limited material and the uncertain function of the suffix, it would require more research to establish the reflex of such Proto-Uralic suffix in Hungarian, and at the moment this idea remains very hypothetical.

To conclude, it can be stated that these cautious hypotheses have to be tested by further research. Furthermore, an analyzis of the reflexes of the Proto-Ob-Ugric affricate **ć* would be an important task for future research, and it could contribute further to our understanding of Proto-Ugric historical phonology, too.

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Abbreviations

EWUng — Loránd B e n k ő, Etymologisches Wörterbuch des Ungarischen, Budapest 1992—1997; **ÚESz** — Új magyar etimológiai szótár — online kiadás. https://uesz.nytud.hu/.

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САМПСА ХОЛОПАЙНЕН (*Вена*)

О ПРОБЛЕМАХ ПРАУГОРСКОЙ АФФРИКАТЫ *ć И ЕЕ ВЕНГЕРСКИХ СООТВЕТСТВИЙ: ЭТИМОЛОГИЧЕСКИЙ АНАЛИЗ

В статье рассматриваются проблемы реконструкции аффрикаты *ć и ее венгерских соответствий. Рассматриваемая праугорская аффриката реконструировалась часто, но среди представленных венгерских соответствий встречается необъяснимое варьирование (*s, z, cz*), а во многих этимологиях и иные фонологические колебания. Хотя в некоторых случаях соответствиями являются венг. *s* и хант. и манс. *ć*, часты отступления и ряд языков регулярно демонстрирует уральский *ś. В работе анализируются представленные в этимологических источниках угорские этимологии и предлагаются новые решения проблем праугорской аффрикаты *ć и ее венгерских соответствий. Существуют также проблемы и с венгерскими соответствиями прауральского *ć.

SAMPSA HOLOPAINEN (Viin)

UGRI ALGKEELE *ć NING TA UNGARI VASTETE PROBLEEMIDEST: ETÜMOLOOGIATE ANALÜÜS

Artiklis on käsitletud afrikaat *ć rekonstrueerimise ja selle ungari vastete probleeme. Ugri algkeele *ć-d on sageli rekonstrueeritud, kuid selle väidetavate ungari vastete puhul esineb seletamatut varieerumist (*s, z, cs*) ning paljudes etümoloogiates on ka muid fonoloogilisi ebakorrapärasusi. Kuigi mõnel juhul on vasteteks ungari *s* ning handi ja mansi *ć*, on sageli ikkagi lahknevusi ja osa keeli osutavad regulaarselt uurali *ś-ile. Töös on analüüsitud varasemates etümoloogilistes allikates esitatud ugri etümoloogiaid ning pakutud ugri algkeele *ć ning ta ungari vastete probleemidele uusi lahendusi. Samuti on probleeme uurali algkeele *ć ungari vastete puhul.