

## FURTHER EVIDENCE FOR «ZETACISM» AND «SIGMATISM»

BY

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In my paper read at the XXVII International Congress of Orientalists in 1967 and published in *Acta Orientalia Hungarica* in 1969,<sup>1</sup> I brought inner-Turkic evidence for «Zetacism» and «Sigmatism», and maintained that Chuvash *r* and *l* are older than Turkic *z* and *ʒ* respectively, and that the sound changes from \**r*<sup>2</sup> to \**z* and from \**l*<sup>2</sup> to \**ʒ* took place in Proto-Turkic only in final position, e.g. MK *sämiz* «fat» < \**sämir*<sup>2</sup>, but *sämri* «to become fat» < *sämir-i*<sup>2</sup>, MK *bāš* «boil, wound» < \**bāl*<sup>2</sup>, but *bāliy* «wounded», etc. In that paper, I also maintained that «Zetacism» and «Sigmatism» did not cease to operate at a certain point of time in the past, i.e. at the beginning of the Proto-Turkic period, but they continued in force sporadically after the Proto-Turkic period. In fact, we have a number of examples in *-z* and *-ʒ* which do not go back to Proto-Turkic, but only to Old Turkic, or, to be more exact, to certain dialects of Old Turkic: cf., e.g., IM, AH, Turk., Az. *büz-* «to pull together, constrict, contract, wrinkle», Turkm. *büz-* ~ *bür-* id., MK, Kaz., Kkk., Nog., etc. *bür-*, Tat., Bash. *bör-*, Khak., Nuig. *pür-*, Yak. *bür-* id., *bürčüy-* id. < \**bür-či*,-<sup>3</sup> etc., Uig. *toš-* ~ *tol-*

<sup>1</sup> *Zetacism and sigmatism in Proto-Turkic: AOH XXII, 1, 1969, pp. 51–80.*

<sup>2</sup> It should be emphasized that Turk., Kaz., Kirg. etc. *sämir-* «to become fat» has come into existence as a result of metathesis. The original non-metathetical form of this verb has survived only in the following languages: Nuig. *sämri-*, Tuv. *semiri-*, Turkm. *semre-*.

<sup>3</sup> This word should not be confused with Turk., Az. *bürti-* «to cover, wrap up, envelop», as done by Róna-Tas (cf. *Some problems of Ancient Turkic: Acta Orientalia XXXII, 1970, p. 127*). The latter is a different verb corresponding to Mongolian *büri-* «to cover, envelop; to upholster» and *bürke-* «to cover, cover up, envelop»: cf. Turkm. *büre-* «to cover, wrap up, envelop» < \**büri-*, freq. of \**bür-*, Turk. (TTS) *bürği* «headgear», Bulg. *bürgü* id., Tuhf. *bürgüt* «woman's clothing», MK *bürün-* «to wrap oneself up», Turk., Az. *bürün-* id., Turkm. *büren-* id., Kaz., Kklp., Nog. etc. *bürke-* «to cover, wrap up», Kirg. *bürkө-*, Khak. *pürge-*, Uzb. *burkät-* id., Chuv. *përke-* id., Nuig. *pürkän-* «to be covered», Tat., Bash. *börkän-* id.

On the other hand, Mongolian cognate of Turkic *büz-*//*bür-* «to pull together» seems to be *ürčiyi-* «to become shrunk and wrinkled, to frown, to wrinkle one's face» < *ürči-yi-*, Mong. *ürčigir* «wrinkled, crumpled, scowlong» < \**ürči-* < \**bür-či-*; for the loss of initial *b-* in Mongolian cf. Turk. *bul-* «to find, get, acquire, obtain» = Mong. *ol-* id.

«to become full», MK *toš-yur-* ~ *tol-tur-* «to fill», Nuig. *toš-* ~ *tol-* «to become full», Com. Turk. *tol-* < \**töl-* id., etc.

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The number of examples I gave in «Zetacism and Sigmatism in Proto-Turkic» was 56 for «Zetacism» and 12 for «Sigmatism». Since 1967 I have been collecting further evidence for the sound changes \**r*<sup>2</sup> > \**z* and \**l*<sup>2</sup> > \**š*. In this paper I would like to present the new material collected after the publication of my article.

## I. Zetacism

1. Orkh. *baz* «peaceable, obedient» in *baz qil-* «to make peaceable, amicable; to subjugate», Uig. *baz* «peaceable, amicable, friendly» in *tüz baz qil-* «to make peaceful or calm, to pacify», AH *baz* «peace», *bazlaş-* «to make peace», Tarj. *bazlaş-* id., CC *bazlık*, *bazılık*, *bazlux* «peace, tranquility», Crm., Kar. T L. *baz* «peace, peaceable, peaceful», Kar. T. *bazlan-* «to make friends», *bazlaş-* «to be reconciled».

~ IM *barış-* «to be reconciled», IM (Taymas) *barlaş-* id., Tarj. *barış-* «to make peace», Turk. Az. *barış-* id., Turkm. *barlıš-* id., *barlıšiq*, *baršiq* «peace».

2. CC *bazık* «thick, coarse», AH *bazuq* «fat», Kum., Kar.-Bal. *bazıq* «thick, stout, fat», Kar. T. *bazıx* id., Tat. *bazıq* «thickset, stocky, strong», Bash. *badıq* «firm, solid, strong» < *baz-uq*.

~ Mong. *barbayar* «coarse (of textiles), broad and thick (of a beard)», *barbayi-* «to be coarse (of textiles), to be broad and thick (of a beard)», Khal. *barbay-* id.; Kirg. *barbay-* «to become thick, swell» < Mong., *barbayay* «big, large, clumsy» < Mong.

3. Uig., MK *báz-* «to tremble, shiver, shiver from cold», *bázıq* «shiver, trembling», *bázgák* «cold fever, malaria», CC *bezgek* id., Kaz., Kirg. *bezgek* id., Tat. *bizgák*, Bash. *biđgák*, Bash. id., Kum. *bezzek* id.

~ Mong. *berbeyi-* «to curl or huddle together because of cold», Khal. *berbiy-* «to grow numb, stiffen (from cold)», Kalm. *bezgea* «fever, malaria» < Turk.

4. Uig., MK, Tarj., AH, Tuhf., etc. *kizlä-* «to hide, conceal», Turk., Az. *gizlä-*, Turkm. *gizle-* id., Yak. *kistiä-*, *kistiä-* id. < \**kizlä-* < Uig., MK *kiz* «box, case, chest».

~ Mong. *kires-* «to hide, conceal oneself», Khal. *xirs-* «to press oneself close, to nestle» (of frightened birds).

5. Com. Turk. *köz* «eye», Yak. *kös* id. in *kös bärin-* «to be dependent, to obey», *çarax-kös gın-* «to see, look at, cast a glance», *bas-kös* «leader» (lit. «head-eye»), Chuv. *kuś* «eye» < Tat.

~ Yak. *kördö-*, *kördüö-* «to look for, search, seek; to wish, ask for, demand» < \**kör-lä-*; cf. Turk. *gözle-* «to look for, search, seek», *gözleg* «search, quest; reconnaissance; wish, desire».

6. Uig. *oz-*, *ooz-* «to flee, escape, be liberated, be freed», *ozyur-*, *osqur-* «to save, rescue, liberate», Khak. *osxır-* id., *os-* «to be saved, rescued».

~ Mong. *oryo-* «to flee, escape, take refuge, desert» < *or-ya-*, Khal. *orgo-* id., Kalm. *org<sup>a</sup>-* «to flee, run away; to be saved, rescued».

7. Uig., MK *qiz-yur-* «to torment, punish», *qizil-* «to be punished», *qiz-yul* «torture, torment, punishment» < *qiz-yul*, *qiyin qizyul* id.

~ Uig. *qirqin* «torment, torture, punishment», *qiyin qirqin* id.

8. Uig. *qiz* «stingy, miserly», *qizyan-*, *qisyan-* «to become stingy», *qizyaq* «stingy, miserly», MK *qisyan-* «to become stingy, miserly», Tarj. *qisqan-* «to be avaricious; to envy, be jealous», AH *qisqan-* id., Bulg. *qisyan-* id., CC *qizyan-* «to be avaricious, stingy», Tuhf. *qizyan-* «to become stingy, miserly», *qizyanşaq* «stingy, miserly», Kaz. *qizyan-* «to envy, be jealous», Kirg. *qizyan-* «to grudge, be stingy», Tat. *qizyan-* «to feel sorry, pity; to grudge, envy, be greedy, stingy», Bash. *qidyān-* «to regret, pity», Turk. *qisqan-* «to become stingy, miserly», *qisqanč* «stingy, miserly», etc.

~ Tuv. *qirzan-* «to spare, save, be economical or thrifty»

~ Chuv. *xərzen-* «to spare, grudge; be stingy, avaricious, miserly», *xərzenček* «avaricious, stingy, miserly», *xərzes* id. < \**qirqanč*.

~ Mong. *kire-*, *keri-* «to be stingy or miserly», *kirig*, *kireg*, *kerig* «avaricious, miserly, stingy», Khal. *xere-* «to be stingy or miserly».

9. MK, CC *siz-* «to thaw, melt, smelt», IM, AH *siz-* id., *sizdir-* «to smelt ore», MK *sizyur-* id., Osm. *sizir-* id., Tel., Bar. *sizqir-* id., Tuv. *sizqir-* «to melt fat», Kirg. *sizjir-* id.

~ Chuv. *šāral-* «to melt (butter, fat), smelt ore» < \**sir-i-t-*, *šāran-* «to melt, thaw (butter, fat, metal)» < \**sir-i-n-*.

~ Mong. *siri*- «to smelt ore, melt», Khal. *šire*-, Kalm. *šir*- id., Kor. *siru*- id.;<sup>4</sup> Kaz., Kkk. *šizgür*- id. < Mong. < Turk.

10. MK, Chag., Turk., Turkm., Alt., Khak. *süs*- «to push, shove, butt», Tuv., Nuig. *üs*- id., Kaz., Kkk., Nog., Kum. *süz*- id., Tat. *söz*- id., Bash. *höd*- id., Uzb. *suz*- id., Nuig. (Hami) *süz*-, *suz*- id., Yel. Uig. *süz*-, *suz*-, *süs*- id. < \**süz*- < *sü*-z- (cf. Chuv. *säk*- id. < \**sü*-k-).

~ Mong. *sör*-, *sörü*- «to move in a contrary direction, go against the wind or current, resist, be opposed, be against», Khal. *sör*- id., Kalm. *sör*- id.

11. MK *süz*-, *süz*- «to filter», Tarj., IM, AH, Tuhf., etc. *süz*- id., Chag. Kaz., Kkk., etc. *süz*- id., Tat. *söz*-, Bash. *höd*- id., Uzb. *suz*- id., Nuig. *süz*-, Turk., Turkm. *süz*- id.

~ Chuv. *sër*- id. < \**sür*-, Hung. *szür*- id. < Bulg.

~ Mong. *sigür*-, *šügüre*- «to filter through, percolate» < \**sigüre*-, Mong. *sigü*- «to filter, strain, percolate», Khal., Kalm. *šür*- id., Khal. *šü*- id.; Yak. *sürt*- id. < Mong. + Turk. -t-, Tuv. *šüre*- id. < Mong., Khak., Alt. *šü*- id. < Mong.

12. Uig., MK, IM, Tuhf., Chag. *tiz*- «to arrange in a row, string, thread», Kaz., Nog., Kar.-Bal., Kum. *tiz*- id., Alt. *tiz*-, Khak. *tis*-, *čis*- id., Tuv. *dis*- id., Turk., Kkk. *diz*- id., Nuig. *tiz*- id., Tat. *tez*-, Bash. *ted*- id., Yak. *tis*- id.

~ Orkh. *tirkış* «caravan», Turkm. *tirkış* «file, chain, line».

~ Chuv. *tir*- «to string, thread».

13. Uig. *toz* «birch trees», MK *töz* «(birch bark) used for wrapping bows», Kaz., Kirg. *toz* «birch bark», Tat. *tuz*, Bash. *tuđ* id., Chag., ET *tos* id., Yak. *tuos* id.

~ Mong. *durusun* «shell, bark, birch bark», Khal. *durs* id., Kalm. *dursun* id., Mong. *toos*, Kalm. *tös* «birch bark» < Turk., Kalm. *tösxa* «birch» < Turk.

14. MK *töğüz*, *üğüz* «spot on the forehead of a horse».

~ Mong. *töğeli* id. < \**tögeri*, Khal. *töl*, Kalm. *tölö* id., Kirg. *töbö* id. < Mong.

15. Uig., MK *töz* «root, basis, origin, descent», Alt., etc. *tös* «basis, ground, foundation», Tuv. *dös* id., Khak. *töstü*- «to lay a basis» < \**tözlä*-.

<sup>4</sup> Cf. Ramstedt, *Jaut.*, p. 72 and 112. Turk. *süz*- should not be confused with *süz*- «to filter» which is a different word.

~ Orkh., Uig., MK, etc. *törü-* «to originate, be born», Uig. *törči-* id.

~ MK *törkün* «place where relatives get together, one's parent's house», Kirg. *törkün* «relatives of a married woman», *törkün tözün* id., Kaz. *törkin* id.

~ Mong. *törküm* «the family of a married woman, the home of a married woman before her marriage».

16. Uig., MK, Chag. *tüz-* «to put in order, arrange, form, organize», Kirg., etc. *tüz-* id., Turk., Qz., Turk. *düz-* id., Chag. *tüzük* «regular, well-arranged, orderly; order, arrangement, rule, regulation, law».

~ Mong. *dürim* «rule, regulation, law».

17. MK *yamiz* «groins», Uig. *yamiz*, *yomuz* id., Kar.-Bal. *jamiz* id., Tob. *yamuz*, *yambuz* id. < *yam-i-z* dual. (cf. MK, AH, IM *yamdu* id. < *yam-du*).

~ MK *yamraš-* «to mix with, mingle with» (of lambs and ewes) < *yamir-a-š-*, Kaz. *jamira-* «to be admitted to ewes or cows for sucking» (of lambs and calves) < *yamir-a-*, Kirg. *jamira-* id.

18. Kirg. *šapiz* «low; flat» < \**yalpiz* (cf. MK *yalpi* «wide and flat»).

~ Kirg. *šapiray-* «to become low and flat» < \**yalpiray-* < *yalpir-a-*.

19. MK *yoza-* «to become barren, sterile» < *yoza-*, Turk. *yoza* «barren, sterile» (of male animals), *yozul-* «to become barren, sterile, to become incapable of producing offsprings» (of camels), Turk. *yoza* «barren and dry; unplowed, uncultivated; untrained, wild».

~ Mong *doru* «weak, impotent, incapable, incompetent; having no good qualities», Khal. *dor* id.

## II. Late Zetacism

1. Kaz., Kkk., Nog., Kum., Kar.-Bal., Nuig. *az-* «to grow thin, become emaciated», Uzb. *áz-* id., Kkk., Kar.-Bal. *azyin* «thin, lean, emaciated», Nuig. *azyin*, Uzb. *azyin* id., Nog. *azyan*, Kum. *azman* id., Kirg. *azinqi* id.

~ Khak., Tuv. *ar-* «to grow thin, become emaciated», Kkk. *arī-* id., Khak. *arīχ* «thin, lean, emaciated», Tuv. *aryan* id., Kaz., Kirg., etc. *arīq* id., Uzb. *arīq*, Nuig. *oruq* id., Turk. *arriq* id. < \**āruq*. MK *arīq* id. (Oghuz, Kipchak), *aruq* «tired, exhausted», *ār-* «to become tired, exhausted».

2. Turk. *toz-* «to wear out», Uzb. *toz-* id., *áz-ib toz-ib* «being emaciated» Nog. *áz-īp toz-īp qal-* «to become extremely emaciated, weaken», Kirg. *az-toz-* id., *azyan tozyon* «starving».

~ MK *tör-* «to grow thin, become lean», Yak. *tuor-* id., *torjon* «hungry», Tuv. *dor-* «to grow thin, become emaciated, weakens», *ar-dor-* id., Orkh., Uig. *toruq* «thin, lean, emaciated», Orkh. *tor-* «to become lean, emaciated», *öl-tor-* «to starve», etc.

~ Mong. *tura-* «to become lean, emaciated; to lose weight; to become exhausted, worn out», *turaqan* «lean, thin, emaciated».

3. Az. *yoz-* «to interpret», *yozma* «interpretation», *yozdur-*, *yozdurt-* caus. of *yoz-*.

~ MK *yör-* «to interpret, explain», Uig. *yor-*, *yör-* id., *yörtig* «interpretation, explanation, meaning», Kaz. *for-* «to interpret, explain», Kirg. *foru-* id., Turk., Turkm. *yor-* id., Tat. *yura-* id., Bash. *yura-* id.

~ Mong. *irua* «omen», Khal. *yoro*, Kalm. *yoro* id. < \**irua* < \**yirua* (Pope, 32).

### III. Sigmatism

1. MK *äs-* «to dig with hands or feet», Turk. *äs-*, Az. *eš-* id., Kirg. *eš-* «to row», Kaz. *es-* id., Tat. *iš-* id., Tuv. *äs-* «to row, shovel, rakes», Khak. *is-* «to row», *iski* «oar», Uzb. (dial.) *eš-* «to row», Nuig. *äs-* id., *eškäk* «oar».

~ Chuv. *al-* «to plow», *alt-* «to dig»

~ Mong. *selbi-* «to row», Khal. *selbe-* Kalm. *selw-* id., Mong. *selbigür* «oar», Khal. *selbür*, Kalm. *selwlr* id.<sup>5</sup>

2. Kkk. *is-* «to rub, massage» < \**iš-*, *istir-* caus., *işqila-* freq., *işqi* «grater». Kaz. *işqila-* «to rub, massage», Nog. *işqila-* id., Tat., Bash. *işqi-* id., Kirg. *işqi-* id., *işqila-* id., Kum., Kar.-Bal. *işi-* id., Kirg. *fişi-* id., Alt. *yış-* id., Uzb. *işqa-*, *işqala-* id., Nuig. *işqi-*, *işqili-* id.

~ Mong. *ili-*, *ile-*, *ele-* «to caress, stroke with one's hand; to rub, massage», Kalm. *il-* «to stroke, caress, fondle», *ilēts* «masseur».

3. MK, Turkm. *iš* «work», Yak. *is* «work, hand work, needle work», Tat. *eš* «work», Chuv. *eš* id. < Tat.

~ Mong. *üyile* «work», Khal. *üyl*, Kalm. *ülü* id. < \**üwile* < \**iwile*.

<sup>5</sup> Pope equates Turk. *äs-*, Chuv. *al-* with Mong. *ele-* «sich durchreiben, sich abnutzen» (cf. *Verg.*, p. 78, 126). This etymology, however, does not seem very likely from the semantical point of view. I equate Mong. *ele-* «to wear out» with Turk. \**as-* in *aski-* «worn-out, old» in my paper entitled *On the alternation l ~ s in Turkic and Mongolian*.

4. MK *qās* «eyebrow; edge, brink», Turk. *qās* «eyebrow; edge, side, front», Yak. *χās* «eyebrows», Tar., Nuig. *qās* «eyebrow; edge, side, front».  
~ Tub., Shor *qalqa* «forehead, spot on the forehead of a horse»  
~ Mong. *qalja* «directly in front or ahead», Khal. *χalz*, id.; cf. also Mong. *qalja* «frontal band or stripe for decoration», Khal. *χalz* id., Mong. *qaljan* «blaze on the forehead of a horse or ox».

5. Chag., Nuig. *qasaŋ* «lazy, stubborn», Kirg. *qasaŋ* «lazy, idle», Kkk. *qasaŋ* id., *qasaŋliq* «laziness».  
~ Chuv. *χullen* «slowly»  
~ Mong. *qalira-* «to be lazy or indolent, to avoid work», *qaluri-* id., Khal. *χalira-* «to loose interest», Kalm. *χāl'r-* «to go away, be absent from, to step back, flee»; Mong. *qasiŋ*, *qasaŋ* «slow, lazy» < Turk.

6. Kirg. *šaš-* «to hurry, hasten, be in a hurry» < \**sāš-*  
~ Mong. *silaba-lja-*, *šalabalja-* «to hurry, rush; to be quick, swift», *silamayay* «prompt, quick», *šalama*, *šalamayay* id., *šalba* «quickly» < \**silba*.

7. MK *saš-ur-* «to separate, divide», Turk. *šaš-* «to miss one's way, go astray, deviate», *šaši* «squinting, squint eyed», Turk. *čāš-* «to be scattered, disperse, break up», *čāši* «slanting, squinting; squint eyed» < \**sāš-*.  
~ Mong. *salja-* «to separate, divide, take apart, break up», *sal-*, *salu-* «to separate, branch off, part with, be detached, isolated, parted from».

8. MK *siš* «skewer, spit», Turk., etc. *šiš*; Turk. *čiš* id.  
~ Mong. *siro*, *šoro* «fork, spit» < \**sira-* «to fry» < \**sil-*, Man. *sil-*, Tung. *sil-* «to roast on a spit, barbeque», *silawūn* «spits».

9. Chag. *tašla-* «to throw away, leave», Uzb. *tašla-*, Nuig. *tašla-* id., Tat., Bash. *tašla-*, Kirg. *tašta-*, Kaz., Kkk. *tasta-*, Nog. *tasla-*, Khak. *tasta-* id. < *taš-la-* freq., Tuv. *daža-* id. < *taš-a-*.  
~ Mong. *tal-bi-*, *tabi-*, «to place, put, set, lay or put down; to set free, release, to leave behind, let loose, throw away», *talbi-ju ilegü-* «to throw away», *talbila-* id.

10. MK *tiš* «tooth», Turk. *diš*, Yak. *tis* id.  
~ Chuv. *šäl* id. < \**sil*

~ Mong. *sidün* «tooth» < \**sil-dün*,<sup>6</sup> cf. *silüge* «two-year-old sheep», Khal. *šulge* id., Mong. *sidülen* id. < *sidüle-* «to theethe».

11. MK *išäk* «two-year-old lamb» IM (Taymas) *sišäk* id., Tarj., AH, Tuhf., etc. *šišäk* id., Kirg. *šišäk* id., Nog. *sisek* «one-year-old lamb», Kaz. *sek* id., Kar.-Bal. *išäk* «one-year old», Uzb. *šišäk* id., Turk., Az *šišäk* id., Turkm. *išček* id. < \**sišäk*. Yak. *išəŋə*, «three-yearold animal» < \**išä-* «to teethe».

~ Chuv. *šäla* «pike perch» < «fish with teeth»

~ Mong. *silüge* «two-year-old sheep, three-year-old sheep», Khal., Bur. *šulge* id., Mong. (SH) *šile'ü* id. < \**silegü*, Mong. *sidülen* id. < *sidüle-* «to teethe» *sidün* «tooth» < \**sil-dün*,<sup>7</sup> see above.

12. MK, Uig. *töšä-* «to spread, spread out, lay», < *töš-ä-*, *töšäk* «bed», Com. Turk. *töšä-*, *töššäk* id.

~ Uig. *tölit* «bed, bedding equipment», *tölit* *töšäk* id., *töläk* «mat, pad».<sup>8</sup>

13. MK *tüş-* «to come across, meet, coincides», Turkm. *düş-* id., *düşüş-* «to confront one another, to meet face to face».

~ Mong. *tul-* «to touch, to reach, to run against», *tulukča-* «to touch each other, to support each other, to collide, run into».

14. MK *tüş* «by, near, around, opposite», Turkm. *düş* id., Tuv. *duš* «opposite, facing», Kirg. *tuš* «opposite side, front; time, moment, occasion», Khak. *tus* «place; time, moment, occasion»

~ Chuv. *těl* «about, around; by, at, nearby» e.g., *škul tēlēnce* «opposite the schools».

<sup>6</sup> For the loss of *l* before *d* cf. Mong. *kötöl* «lead horse», *kötöd* «lead horses» (see J. C. Street, *The language of the Secret History of the Mongols*, New Haven, 1957, p. 10). For the suffix *-dün* cf. Mong. *ömüdün* «trousers, underpants» corresponding to Turk. *öm* id.

This etymology is an excellent example of the alternation *t* ~ *s* which exists in Turkic and probably existed in Proto-Altaiic: Cf. MK *talag* «spleen» (Kip.) *sulag*. Chuv. *sula* id., Turk. *sän* «thou», Man.-Tung. *si* id. Mong. *ši* id. < \**ti*, etc.

<sup>7</sup> Röna-Tas maintains that Mong. *silüge*, *šile'ü* is a loan-word in Mongolian borrowed from Old Bulgarian (see *Acta Orientalia* XXXII, 1970, p. 215). This assumption, however, does not seem very likely.

<sup>8</sup> Uig. *tölit* occurs in TT VIII D 12 and *töläk* «mat, pad» in G. Hazai—P. Ziemeš, *Fragmente der uigurischen Version des «Jin'gangjing mit den Gathas des Meister Fu»*, Berliner Turfantexte I, Berlin 1971, p. 30, C 6. Former readings with *ü*, i.e. *tülit*, *tülte-* and *tültäk* in *Alltürkische Grammatik*, *Analytischer Index* and Arat's *Eski Türk Şiiri*, p. 202 should be corrected.

15. MK, etc. *uša* «gossip», CC *uša* id., Kaz., Kkk. *ösek* id. < \**öšäk* \**öša*, Kirg. *uša* «gossip», *uša*ta- «to gossip».

~ Mong. *ol-gi-* «to gossip», Khal. *olgi-* «to gossip, backbite, to blame», *olgi*, *olgiyan* «malicious gossip, false rumors».

16. MK *uš-* «to crowd, throng, come together», Turkm. *uüş-*, Gag. *uš-* id.

~ Mong. *üyilje-* «to crowd, throng».

17. MK *üşi-* «to feel chilly, to freeze», *üşik* «cold», Chag., Osm., etc. *üşü-* «to feel cold», Nuig. *üşü-* id., ET (Jar.) *üşü-* «to get frost-bitten, to freeze», *üşük* «frost, night-frost».

~ Yak. *ušuy-* «to feel chilly, cold, to freeze» < \**ušli-*, *ušli-* caus.

~ Mong. *ölčir* «(one) who is not afraid of the cold or is able to stand the cold» < *öl-čir*.

\*

In conclusion, I would like to sum up what I have said and demonstrated so far on the subject:

1. There is no «Rhotacism»<sup>9</sup> and «Lambdacism», but only «Zetacism» and «Sigmatism» in the history of Turkic languages;

2. «Zetacism», i.e. the sound change from \**r*<sup>2</sup> to \**z*, and «Sigmatism», i.e. the sound change from \**l*<sup>2</sup> to \**š*, took place in Proto-Turkic only in final position; in all other positions, these sounds, i.e. \**r*<sup>2</sup> and \**l*<sup>2</sup> lost their particular qualities and converged with the «normal» *r*<sup>1</sup> and *l*<sup>1</sup> respectively: MK *sämiz* «fat», but *sämri-* «to become fat» < *sämir-i-* (denominal verb in -i-), Turkm. *ğuduz-* «having hydrophobia, mad» < \**ğütuz*, but *ğüdura-* «to be wild with joy, to become unruly and unmanageable» < \**ğütü-* < \**ğütür-u-* (denominal verb in -u-), MK *boğuz* «throat», but *boğrul* «having white on the throat» < \**boğur-ul* (cf. MK *bögrül* «having white on the flank», *boymul* «having white on the neck» < \**boynul*, *başıl* «having white on the head», etc.), Com. Turk. *köküz* «breast», but Kirg. *kökürök* id. < \**kökür-äk*, MK

<sup>9</sup> The only «Rhotacism» which took place in Turkic is the change from \**d* or to *r* in Old Bulgarian and Chuvash: \**adaq* «foot» > Chuv. *ura*, \**qod-* «to put, place» > Chuv. *xur-*, \**odun-* «to wake up» > Chuv. *vürän-*, etc.

*bāš* «boil, wounds», but *bāliŷ* «wounded», Com. Turk. *akūš* «many, numerous», but MK *akli-* «to increase, multiply», Yak. *aktūy-* id. < \**akli-* < \**akul-i-* (denominal verb in -i-), etc.

3. «Zetacism» and «Sigmatism» also occurred sporadically after the Proto-Turkic period. This explains why we have a number of forms with *z* and *š* alternating with forms with *r* and *l* in final position: Turk., Az. *būz-* «to pull together, constrict, contract, wrinkle», Turkm. *būz-* ~ *bur-* id., MK, Kaz., Kirg., etc. *būr-* id., Tat., Bash. *bōr-* id., Khak., Nuig. *pūr-* id., Yak. *būr-* id., Az. *yoz-* «to interpret» ~ Com. Turk. *yor-* id., MK, Uig., Nuig. *toš-* ~ *tol-* «to become full», Com. Turk. *tol-* < \**tōl-* id., etc.