I. The š ~ l alternation

One of the most intriguing puzzles in the Kor. historical phonology is that MNKor. words whose PA etyma had a *š show / whereas their older, i.e. OKor. counterparts have, in the same position, a Chin. phonogram being "an orthographic device for writing s or š" (Miller 1991, p. 181; since the s pronunciation scarcely seems to be possible, we write š alone in what follows). If we were actually dealing with a phonetic change here, its notation would look somewhat surprising: PA *š > OKor. š > MNKor. l. It is quite clear that such a zigzag development arouses astonishment and interest.

R. A. Miller tried to solve the problem by assuming a Tung. influence and a subsequent "re-Altaicization" of the OKor. pronunciation: "[...] the Old Korean sibilant s or š became /l, reverting to a form similar in manner of articulation to the original Altaic *š, whence it derived. This postulated re-Altaicization must have been the result of contact with Tungusic languages to the north" (Miller 1991, p. 182). The solution does not, however, appear fully convincing and this is why we would like to present another interpretation of the data.

The starting point for us is the observation that we also have some confused notations in OTkc., e.g. the use of the <š> and <š> runes with the phonetic value of /l. At the same time, everything indicates that the <š> rune was a late Tkc. innovation, as well as that it was created by adding a special diacritical mark to the <š>
It was the same mark which, some time earlier, has been used to create a new <s> rune, based on <n>, i.e. <n> + diacritical mark = <s>. Hence it is fully legitimate to say that the mark used in OTkc. was a palatalization mark, and thus <s> in reality = /l/ = [l']. In other words: what we today read (in accordance with all the non-Chuv. Tkc. languages) as s, was in actual fact read [l'] in the OTkc. time (for further details see Stachowski 1999, passim), but see § 4, too.

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Now, our thesis is that the existence of OKor. ı in opposition to MNKor. l is in reality more a graphic problem than a phonetic one, as well as that the problem can be (successfully, as we hope) solved on the analogy of the situation in OTkc., as sketched above.

An interesting fact that makes the analogy all the more possible is that the OTkc. and the OKor. periods cover approximately the same space of time, viz. the period from the 7th till the 10th century (neither Turcologists nor Koreanists are fully agreed about dating the end of the period in question; for OTkc. cf. Poppe 1965, p. 67, § 1.344 [10th c.] vs. Róna-Tas 1991, p. 29, 30 [13th c.]; for OKor. see Lee 1977, p. 65sq. [10th c.] vs. R. Kono, cited in Poppe 1965, p. 75 [the middle of the 15th c.]).

In the history of Altaistics two different phonetic values were supposed to be represented by the letter *İ which nowadays is the most usual transcriptional symbol of the consonant out of which the non-Chuv. Tkc. ı developed. Whereas G. J. Ramstedt reconstructed it as a palatal [:], N. Poppe believed instead that it rather was "ein spirantisches, stimmlöses ı (ähnlich dem ostjäkischen Ja)" spelled also ı' (Ramstedt 1957, p. 103; Poppe 1927, p. 110; VGAS 76). The analysis of the OTkc. runic and phonological systems (ı < l' written as <İ> + palatalization mark) indicated toward Ramstedt’s [l'] as the actual phonetic value of *İ.

Now, the situation becomes somewhat more complex (however, for a moment only) if we try to maintain that it was exactly the same sound which, in OKor., was written as s. Really, it cannot readily be accepted that a nation decided to use <s> in order to write [l'].

But another proposal of phonetic sounding the PA ı was Poppe’s voiceless spirant [l]. It occurs in Ost., strictly speaking in some Ost. dialects, whereas other dialects have a usual ı (or ı) at this position (Ionti 1988, p. 172).

Moreover, the Ost. ı has also a palatal variant: [İ], which, was, to the best of my knowledge, never mention ed by Poppe. And it is exactly this consonant that seems to be the best solution to the problem. The phonetic scenario could thus be as follows:

[4a] The Altaic proto-language had two l-type consonants: a ı and a ı'; the difference being of a double nature: spirantic and palatal pronunciation of ı'.

The most important advantage of the interpretation presented above is [5.1] that the parallel phonetic developmental and the parallel spelling problems of OTkc. and OKor. cannot possibly be viewed as results of a mutual influence, if only because of the geographical distance between the OTkc. and the OKor. linguistic area. Another important moment is [5.2] that in this way, a Kor. linguistic and orthographical phenomenon could be explained on the analogy of its Tkc. counterpart, i.e. by means of the Altaistic perspective. Still another essential point is [5.3] that asterisks before ı' can now be omitted for, in the event, this consonant is attested both in OTkc. and OKor.

Of less importance is another advantage which mainly concerns more or less subsidiary, technical elements of Altaistics:

[5.4] the acceptance of ı' suggested by the Korean data renders the reconciliation between Ramstedt’s ı' and Poppe’s ı possible and understandable.

As far as the chronology is concerned one may infer from what has been hitherto said that the ı' > Tkc. ı change called sigmatism occurred as a matter of fact later than it was generally supposed, i.e. in the 7th/8th c. it was not yet completed. In consequence, the existence of ı' words in a Tkc. source or language can no longer be readily used as a decisive argument for the Bulg.-Chuv. character of the word. Presumably, the same holds also true for the *r (<?r) > Tkc. ı' change (the analysis of the <2> rune shows that it, too, was created according to the same principle as the <s> rune, see Stachowski 1998, passim).

Now, if P. B. Golden has well-advised objections to the suggestion that the Khaz. river name Oukpok >= ukker-uk < ukker (= CThr. oguz "river") is a word of Bulg. type because in that event one would rather expect the prothetic v- in this word, i.e. *vukker-ruk (Golden 1980, I, p. 253), we may now say that the initial segment of Khaz. Oukpok, i.e. Oukp- actually corresponds to the CThr. oguz. and at the same time explain the lack of the prothetic v- by a non-Bulg. origin of the word, the latter having been primarily assumed on account of r (not z) in Oukp-.
II. The $S \sim t$ alternation

A well-known fact is that the CTkc. $s$ sometimes corresponds to Yak. $t$. A few scholars tried to formulate a rule explaining the phenomenon or at least rendering it predictable. The newest\(^1\) study of the problem is Tekin 1976 where also a survey of older statements is offered. However, Tekin’s solution cannot be accepted as final, either. The entire problem seems to be rather manifold and complex. Tekin’s model is in principle correct and it probably covers a large number of involved examples. Nevertheless, some formations require further inspection. The rule in question can be summarized as follows (Tekin 1976, p. 113):

- [1.1] PTkc. *-$s$- > Yak. *-$t$-
- [1.2] PTkc. *-$t$-, *-$s$, *-$z$ > Yak. *-$s$

Some words and affixes, however, depart from the rule, in that they have final *-$z$ or *-$s$ corresponding not to Yak. *-$s$, but to Yak. *-$t$ instead. According to Tekin 1976, p. 113sq., “[t]hese exceptions can be explained easily and satisfactorily.” For instance, it is assumed that *-$z$ in some cases had become voiceless and was then treated as *-$s$, i.e. changed $>-$-$t$ (e.g. CTkc. *otue ‘thirty’ = Yak. *otut id.). At first sight, the solution appears quite reasonable. We are, however, somewhat sceptical about the fact that the unexpected early devoicing of $z$ established by Tekin can always be brought into play whenever a Yak. word deviates from his own [1.2] rule.

Also examples for the medial *-$t$- < *-$s$- are not all of the same character because Tekin’s list contains both *-$t$- < *-$s$- and *-$t$- < *-$s$-, *-$t$- words. In case of Yak. *itiar- ‘to warm’ < *isgar-, Yak. *iti-r ‘to lift, raise’ < *asgar-, Yak. *sük ‘thimble’ < *jigsük (Tekin 1976, p. 111sq.), one has to reckon with the *-$sg$- > *-$tg$- and the *-$gs$- > *-$gt$- assimilation (i.e. *isgar-> *jigsük = Yak. *itiar-, *asgar-> *jigsük = Yak. *sük) which distinguishes these words very much from examples like Yak. *kitar ‘water-rate; mole’ < *kisar (ibid. 112). The conjecture about the influence of assimilatory tendencies is additionally supported by the Yak. verbal stem *yyar- ‘to put pillows’ < *jastaa- in which the consonant next to the *-$s$- did not disappear in modern Yak.; see also [2.11] and § 3.

The more one deals with the problem, the more one is convinced that a few different rules have to be established in order to explain all examples of the $S \sim t$ alternation (the symbolic $S$ standing for $s$, $z$, $\ddot{s}$, $\ddot{c}$). Also in the present study no synthetic solution can be offered. Our only aim is to present a somewhat unusual model which can be applied first of all in case of the $S \sim t$ alternation.

\(^1\) In the meantime, an article by G. D. S. Anderson (On Proto-Yakht *$t$, “Ural-Altaische Jahrbücher”, Neue Folge 15 [1997/1998], p. 170-172) was also published, but it offers no deeper insight into the problem.
In quite a few examples, the Yak. and the Dolg. possess both s and t variants (or else exclusively the s variant) which go back either to a s or to a t etymon: [2.10] The Yak. intensifying reduplication suffix is -byy (not -ys against GJa 159, § 250), e.g. Yak. tynnly 'cold' > tyy-byys-tynnly 'very cold', kuräxny 'dry' > ku-book-kuränäx 'quite dry'). – The same holds true for Dolg., but here, there are also -by variants: êö-his-êälêk 'perfectly white, snow-white' (Artemev 1992, p. 122) ~ êä-bit-êälêk id. (DW 73) < ëälêk ~ êälêk 'white'.

[2.11] Dolg. kurupasky 'partridge' (FM) > Russ. kurupaksa id. – If our earlier conjecture about the -ik < -*sk- [cf. as in Yak. *üül=, *üül=, sütük in § 1; cf. also ëskür- in § 3] is right, we may then think of a hypercorrect change of Russ. -ik-, perceived as resulting from the *-sk- > -ik- assimilation, into the "original" (and hence "correct") -sk-. Uncertain, cf. Russ.dial. kuroqaska id.

[2.12] Yak. urüü ~ urüüs 'mercury, quicksilver' (Slepecov 1967, p. 110, 114) < Russ. rtüü 'id.'


[2.14] Yak. šuppas 'west wind' = Dolg. haqpar 'West' > Russ. zapad 'West'. The phenomenon of the Russ. s > Tke. t change is attested in other Tke. languages, too, although far more scarcely:


Strange as it may seem, the problem of the origin and the real nature of the S ~ Tke. alternation has never been investigated at large. However, it is worth mentioning that at the beginning of this century, W. Bang assumed the too, although far more severely: § 1 b: "Neben also words with the original mina agentis suffix words in never been thoroughly discussed, but the phenomenon itself has been observed by different scholars. E. V. Severtzan, for instance, accepted it likewise for his PTKc. reconstructions, e.g. in assuming *qibur ~ *qûr- as the original root of Tke. qûz- 'to lose one's way, get lost' (ESTJa I 95). In Miller/Naumann 1994, p. 77-79 the phenomenon is backdated into the PA epoch (cf. also Popp 1927, p. 100: Kipc. tätymal 'bejahrt, erfahrener Mann' = Mos. dasu- 'sich gewöhnen').

Interestingly enough, Kor. has developed a morphonological pattern that can be used as an explanatory model for Tke. languages. In NKor. there exist numerous words in -t ~ -sV whose Old and Early MKor. counterparts have had -t alone; but also words with the original -s undergo the same alternation model (e.g. NKor. put ~ putV 'writing brush' < Chin. pjööl [Miller 1992, p. 233, 234; Miller/Naumann 1994, p. 76; cf. also Ramstedt 1939, p. 7f.]; NKor. kat ~ kasV 'hat' [Ramstedt 1939, p. 25, § 57]; NKor. set ~ sesV 'three' and tasyt ~ tasysV 'five' [ibid. 55]). Moreover, the model applies also to recent loanwords like NKor. aut ~ ausV < Engl. out (Miller 1992, p. 233).

Remarkably, the same rule can, as it seems, be also applied to the Yak. -t ~ CTke. -s alternation: [4.1] *jêl = *[têl] > Yak. -t; as to *m > h, also this problem deserves more attention and a synthetic study; for our purpose, it is enough to say that the suffix initial Tke. m = Yak. b = STke. b ~ v-correspondence is regular and well-attested.

Examples:

[4.3a] the Past Participle suffix */-mys/ = */-myêt/ > Yak. -byy: as to *m > h, also this problem deserves more attention and a synthetic study; for our purpose, it is enough to say that the suffix initial Tke. m = Yak. b = STke. b ~ v-correspondence is regular and well-attested.


[4.4a] *ulus/ = *[ulut] > Yak. ulut 'people, nation'.

[4.4b] *ulus + 3.sg. possessive suffix */-i/ > */ulusi/ = *[ulüsi] > CTke. ulüsi 'id.; settlement, town'.

In both examples the added -i can be reasonably interpreted as the 3.sg. possessive suffix. This would at the same time explain, why Yak. -t often corresponds to CTke. -s (not -i), viz. for the evolving of -s < */-sîl/ = */-şî/ the lexicalization of the 3.sg. possessive formation of the given substantive was absolutely necessary which is, as everybody knows, a sporadic and irregular phenomenon.

Probably, the pronunciation */-myêt/ was not yet totally obsolete in the OTke. period. This seems to be suggested by records with the <-ms> runie sequence, I myself thought until now that they should be read as *[myêt] or simply *[myêt]; in the latter case, the writing <-ms> could be interpreted as historical spelling, invented originally for the pronunciation like *[myêt] or even *[myêt] (for this latter, the spelling *[<ms>] seems, however, more realistic) and left without modifications after the real pronunciation had changed into [myêt]. In the present situation I can only quote my earlier positive opinion of R. Giraud's conception: "Giraud IBT [= Giraud 1961] 47f. hat vermutlich vollkommen recht, wenn er in bezug auf die Schreibung <-ms> von einer 'graphie traditionelle' spricht" (Stachowski 1998, § 4). One cannot help admiring Giraud's knowledge and intuition.

In the light of what has been said until now it becomes still more understandable why it was precisely the <-s> rune that was used to write this suffix and that, against the general opinion, its use has in reality "nichts mit der Qualitat des vorangehenden Vokals zu tun" (ibid.).
Now, let us return to the [2.2] example: Oyr. künät ‘hot weather’ < *kün jaś(y).
The use or lack of the 3.sg. possessive suffix *-i ~ *-y seems to have been subject
to different rules in different periods. Be that as it may, its use was in any case
explained by the PA reconstruct of the word for ‘shine, flash’): *jas, not
*jaś, as the PA reconstruct of the word for ‘shine, flash’).

We are perfectly aware of the fact that the explanation proposed above does not
solve the entire S ~ t alternation problem in Turkology. On the other hand, however,
our proposal is, as we hope, a step forward on the way toward a better under­
standing of the reasons for and the phonological mechanism of the
transformation in OKor.

Above, two parallels between Kor. and Tkc. were presented. However, both
languages seem to show some other similarities, as well. An example which still
needs further investigation is the NKor. initial affixa te (*d- or *l-?), see Ramstedt
1939, p. 12, § 28) which can perhaps be compared with Tkc. word pairs like Tkc.
na ‘what?’ > *t0 (in *t0 + intensifier *ok > *tök > Yak. tu ok id.; for another ex­
planation for na and to see Ramstedt 1922-23, p. 34, repeated in Ramstedt 1952,
p. 77, but omitted in VGAS 32 s.v. jawun) that suggest a PA *-t- or *-d- (this would
thus be a good parallel to *b- > Tkc. m - b-, see Ramstedt 1957, p. 74). To in­
vestigate all Kor.-Tkc. parallels of this sort (of course, under consideration of their
varying importance because e.g. the resemblance of the s ~ h alternation in Kor.
and in Yak. appears to be a mere coincidence) seems to be one of the most inter­
esting tasks in Altaistic researches nowadays.

Abbreviations

Anat. = Anatolian; Azerb. = Azerbaijani; Bulg. = Bulgar-Turkic; Chin. = Chinese: 
Chuv. = Chuvash; CTkc. = Common Turkic [= non-Chuvash Turkic]; dia. = dia­
lect(al); Dolg. = Dolgan; Engl. = English; Hung. = Hungarian; Kazh. = Kazher,
Kipé. = Kipchak; Kor. = Korean; MKor. = Middle Korean; MTKor. = Middle
and New Korean; Mo. = Mongolian; MTkc. = Middle Turkic; NKor. = New
Korean; NYak. = New Yakut; OKor. = Old Korean; Ost. = Ostyak; OTkc. = Old
Turkic; Ott. = Ottoman turkish; OYak. = Old Yakut; Oyr. = Oyrut; PA = Proto­
Altaic; PTC. = Proto-Turkic; Russ. = Russian; STkc. = Siberian Turkic; Tkc. =
Turkic; Tof. = Tofalar; Tung. = Tungusic; Uzb. = Uzbek; Uyg. = Uygar; Yak. =
Yakut.
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