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Autor: Miller , Roy Andrew

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Kontakt/Contact

Digizeitschriften e.V.
SUB Göttingen
Platz der Göttinger Sieben 1
37073 Göttingen

✉ info@digizeitschriften.de

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Roy Andrew Miller

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Pritsak has argued that Mongolian and Tungus cognates for forms where Chuvash *l*, *r* correspond to Turkic *š*, *z*, as well as for internal Turkic *š*, *z* :: *l*, *r* etymological sets, imply developments of *š*, *z* from earlier *l*, *r* + *C* clusters. Reinvestigating this hypothesis in the light of a set of Middle Korean heteroclitc nouns in *-l.h-*, the paper suggests that Korean-Altaic cognates reveal a historical-linguistic scenario that explains how the Chuvash *l*, *r* :: Turkic *š*, *z* correspondences, as well as their parallel internal Turkic etymological sets, originally arose. The same scenario makes possible the incorporation of the Pritsak hypothesis into the classical Ramstedt-Poppe reconstruction of Altaic, where these correspondences appear as **l₂*, **r₂*, at the same time that it rigorously accounts for all these correspondences without recourse to historically irrelevant and essentially non-explanatory sobriquets such as “lambdacism”, “rhotacism”, and the like.

Roy Andrew Miller, 445 Kaiolu St., Apt. 204, Honolulu, HI 96815, U.S.A.

The historical implications of the observed correspondences of Trk. *š* with WMo. *l* and Tg. *l* on the one hand, and of Trk. *z* with WMo. *r* and Tg. *r* on the other, have been the subject of lively speculation and dispute among students of the Altaic languages for close to a century. The discussion of course has always been complicated by the troublesome Turkological fact that alone among the Turkic languages Chuvash, like Old Bulgar before it, corresponds to *š* and *z* with its own *l* and *r*, thus seeming on the surface of the matter at least to go together with Mongolian and Tungus in a completely un-Turkic fashion.

What may now be termed the “classical Ramstedt-Poppe” doctrine was devised early in the modern history of the comparative study of the Altaic languages.¹ Most simply put, it argued that since the data revealed that four different sets of phonological correspondences were involved, it was necessary to posit four original phonological entities in the proto-language in order to account for the same, viz. $*l = \text{Trk. } l, \text{ WMo. } l, \text{ Tg. } l, \text{ Chu. } l$; $*l_2 = \text{š, } l, l, l$; $*r = r, r, r, r$; $*r_2 = z, r, r, r$. Both Ramstedt and Poppe speculated at one time or another concerning the possible phonetic realization(s) of $*l_2$ and $*r_2$ in the proto-language, and in this connection also explored the possibility that the second variety of each original liquid might have been an altered, esp. palatalized, version of the other (i.e., $*l = [l]$, $*l_2 = [l']$, etc.² But despite this speculation, both these pioneers of Altaic comparativism consistently wrote and worked in terms of four distinctive, contrasting phonemes for this segment of the reconstructed phonology of their Altaic proto-language.

Since the Ramstedt-Poppe interpretation of the data was, in this fashion, ineluctably involved with their hypothesis of an original Altaic proto-language, it naturally had to be challenged, and if possible overthrown, when that hypothesis itself came to be subject of increasing scepticism, especially from 1962 on.³ If, as many scholars now began to argue, there had never been an original Altaic proto-language, then of course there could by the same token also never have been four original liquid phonemes in that language whose regular reflexes might account for the observed correspondences.

The surprising phonological congruence of Chuvash with Mongolian and Tungus as against the other Turkic languages in these correspondences predisposed many Turkologists to seek a solution entirely in terms of the history of the Turkic languages alone, without reference to

¹ Effectively the literature begins with Ramstedt (1922-1923) and Poppe (1924); since then it has grown to enormous proportions, too vast to be summarized here. Tekin (1969: 51-57) cited the major items, and still serves as a useful initial guide.

² Poppe (1924: 778) began this speculation on the “Klangfarbe” of $*l_2$, $*r_2$. Ramstedt (1957.1: 103-105) attempted further to refine the analysis with reference to supposedly parallel developments in other language groups.

³ On this dating see Miller (1996a: 90-96).

other segments of the Altaic linguistic world. Naturally enough, this approach went hand-in-hand with the increasingly strident denial of the existence of any earlier Altaic proto-language, and out of it in turn grew hypotheses that eventually sought (and mostly still seek) to explain all these resemblances among these languages as resulting from multifarious borrowings in one direction or another, back and forth against the vast expanse of Greater Eurasia.

It was in this vein, for example, that Sir Gerard Clauson set forth his magisterial summation of the history of the Turkic languages: "... a unitary Turkish [sic!] language, which was not genetically connected with any other language known to us, and specifically not connected genetically with the Mongolian and Tungus languages ... split into two main branches, 'standard Turkish' and '*l / r* Turkish', not later than, and perhaps before, the beginning of the Christian era ... Turkish loan-words in Mongolian and Hungarian ... were almost certainly borrowed from an *l / r* language, by the Mongols probably in the fifth or sixth centuries, and by the Hungarians probably in the ninth ..." (EDT, 1972: v). Sir Gerard acknowledged that "the only surviving *l / r* language, Chuvash ... throws light on the phonetic structure of individual standard Turkish words", but clearly he felt himself under no necessity to explain how or why this "split into two main branches" originally took place.

More recent statements, all essentially growing out of Sir Gerard's position in this and kindred matters, have displayed a surprisingly acrimonious escalation of rhetoric that contrasts strikingly with his placid prose. We are now told in no uncertain terms that the correspondence of Chu. *l* and *r* to Trk. *š, z* is a "phenomenon ... connected with the internal dialectology of Pre-Proto-Turkic, [so that] it is futile to search for traces of it in other genetic entities", moreover, that "[b]ehind the quasi-scientific accuracy of such assertions [i.e., that these Chu.-Trk. correspondences were only part of a larger Altaic phenomenon that also left significant traces in Korean and Japanese] there lies a fundamental misunderstanding of Turkic diachronic phonology", while reconstructions that *à la* Ramstedt-Poppe incorporate the historical implications of a proto-language implicit in their **l₂*, **r₂* analysis are no more than "phantom reconstructions".⁴

⁴ Janhunen (1996: 240-241 with notes 748-751). His chief authority for this version of "Turkic diachronic phonology" is Ščerbak (1970: 83-88), who postulated

The strident tone of this and several similar passages that might easily be cited in this context is best understood as illustrating the well-known adage that the best defense is a strong offense. They are especially aimed at attempts to identify both \check{s} and l reflexes for $*l_2$ in early Korean written materials, as well as documentation of s for $*l_2$ and r / t in regular phonological distribution for $*r_2$ in Japanese.⁵ Naturally enough, if any of these Japanese and Korean data, unknown to Ramstedt and Poppe, were to be found to be valid, it would be necessary to look once more at their original formulation and even possibly restoring it to the place it once occupied in the history of Altaic studies. But that would also mean resurrecting the idea of an Altaic proto-language. Better, therefore, simply to label all such attempts at discovering new data and possibly verifying the Ramstedt-Poppe hypothesis as “fundamental misunderstandings ..., phantom reconstructions, ... [and] quasi-scientific” at the outset, and thus spare the entire field the tedious necessity of perhaps once more restudying all these problems *ab initio*. How much easier to denigrate attempts to locate documentary evidence in languages yet insufficiently studied as “an absurdity” (Janhunen & Kho 1982), than to undertake to study, and to refute if possible, the evidence.

Nevertheless, and despite (or perhaps, because of?) this new discouraging level of rhetoric, some few have persisted in attempts to demonstrate the existence of Korean and Japanese linguistic materials that appear to document the fundamental soundness of the original Ramstedt-Poppe four-liquid hypothesis, and together with this the essential historicity of the now much-despised proto-Altaic linguistic unity.⁶ The

a “phonemic split” [sic!] of $*s > s / z > r$ and $*\check{s} > \check{s}$ but $*z > l$ conditioned by occurrence either following a two-syllable sequence or an original long vowel. Tekin (1969: 55-56) had already pointed out the contradictions in Ščerbak’s scenario on the basis of an earlier (1966) paper along the same lines which he cites (1969: 55 note 22).

⁵ Miller (1979a; 1979b; 1994: 93-97). Most recently Starostin (1997: 326) has accepted the $*l_2 :: OJ -s-$ correspondence, but still not that for $*r_2 :: r / t$.

⁶ Interestingly enough, even Nauta (1985: 124), who is far from accepting the Ramstedt-Poppe version of Altaic, finds it necessary to work in terms of four separate liquids for “Proto-Turkish”. Only his symbols differ from the “classical” formulation.

present contribution is one such attempt, focusing specifically upon what Korean materials easily available but not yet sufficiently explored in the linguistic literature may have to tell us about what may or may not be, as alleged, “fundamental misunderstandings ..., phantom reconstructions, ... quasi-scientific ... [and] an absurdity.”

These Korean materials center upon a small inventory of Middle Korean nouns that elsewhere, following K. H. Menges,⁷ we have termed “heteroclitics”, because of their distinctive stem morphology *vis-à-vis* the case-suffixes.⁸ Of course, this term is not to be understood as indicating that these MK nouns precisely replicate the morphology of the Indo-European heteroclitics; nevertheless, these nouns do have certain parallels with the I.-E. forms after which we have named them, and most important of all, the use of the term may help to emphasize that these Korean nouns, quite like the true I.-E. heteroclitics, conceal within their distinctive morphological formations a considerable array of significant historical information.⁹

⁷ Menges (1984: 243) first pointed out the importance of these MK nouns (“the question arises whether or not an ancient heterocclisis might be present in ... these stems”); and earlier he had countered the suggestion of Avrorin (1959: 132-34) that the formations of certain Tungus nouns might be explained by suppletion with the suggestion that the phenomenon involved actually was a type of heterocclisis, and that all these cases “verlangen eine eingehende Untersuchung” (1968: 184). Here, among other goals, we attempt to exploit the obvious connection existing between Menges’ insights into Tungus on the one hand and Korean on the other. Apart from his work the problem of possible heterocclisis in Altaic has scarcely been noted. Recently Tenišev (1997: 724 note 69) reports that the (forthcoming) Moscow comparative Altaic dictionary will use the rubric “heterocclitic” for noun-sets with Trk. *-r / z* (i.e., **-r₂*) corresponding to Tungus *-n* (cf. **ülkä-r* :: **pegule-n* ‘Pleiades’). But this phenomenon hardly deserves the denomination, and at any rate has nothing to do with the forms treated in the present contribution.

⁸ See the sample of typical case-forms in Miller (1996b: 166). A full account of the forms and complete case paradigms are in Yi Sungnyŏng (1961: 134-137, 145).

⁹ For the Indo-European nominal heterocclisis, see Burrow (1955: 225-228), and Szemerényi (1990⁴: 183). The fact that the I.-E. heterocclitics are *r / n* stems, i.e., that the stem with *r* in nominative and accusative alters to *n* in the other cases, no

Common to all the MK heteroclitics is a stem-suffixed *-.h-* which is absent from the isolation and / or citation forms of these nouns, but appears before case-suffixes in initial vowels (MK *:tol* ‘stone’, but *:tol.h.i* (nom.), *:tol.h.äi* (gen.), *:tol.h.ai* (loc.), *:tol.h.äl* (acc.), *:tol.h.älo* (instr.), *:tol.k’wa* (< **-h.kwa*) (com.)). The historical origin of this *-.h-* < **-g-* is documented by a variety of evidence. On the one hand there are a number of these MK nouns with isolation forms in final open vowels that are transparently loans from Chinese; here the heteroclitic *-.h-* may easily be identified as originating in a final MChin. **-g* otherwise attested in the form that was borrowed into Korean (MK *’ca.h-* ‘a foot measure’ < MChin. **c’iäg* id.; MK *työ.h-* (NK *čö*) ‘flute, fife, whistle’ < MChin. **d’jeg* id.).¹⁰ On the other hand there are also historically significant borrowed forms in which this *-.h-* following another consonant plainly originates in an earlier **-g-* (MK *’näl.h-* ‘cutting edge, blade’, Ma. *narga* ‘harrow, rake’, cf. Trk. *taryaq* ‘a comb’).

But far and away the greater number of these MK heteroclitics belong to a clearly marked subset within this category: They show no hint of being loanwords from any other language; and they end in *-.h-*.¹¹

doubt lies behind the highly dubious terminology now proposed in Moscow (see note 7 *supra*). But the Altaic situation does have one significant similarity with Indo-European. Just as these *r / n* stems were still productive in Hittite but elsewhere only remnant archaisms, so do we find them well represented (though not productive) in MK but only remnant archaisms in Tungus.

¹⁰ These MChin. reconstructions are slight revisions of the usual Karlgren versions, on the basis of evidence that his **-k* finals were actually [G] in the variety of Chinese behind the earliest loans into Korean. This was true of Turkic as well, where the two forms cited also appear borrowed as Trk. *čīγ* (EDT 404b) and Trk. *iīγ* (Zieme 1991: 245). But at our present stage of understanding it is difficult to explain the Turkic vocalization of either of these loans.

¹¹ Inventories of these forms that purport to be complete appear in Kim Minsu (1952) (but many of his citations are incorrect and his data must be used with extreme caution), Nam (1957 rpt. 1962), Kim Hyöngkyu (1963), Martin (1992: 109). Only Kim Hyöngkyu hints at any value of these forms for the study of the relationship of Korean to other languages, but his remarks in this connection lead nowhere. Starostin (1991) treats a small sample of the MK heteroclitics (12 out of ± 80), but does not study or even identify the group as a whole, nor is he con-

Moreover, a significant number of these forms, far from appearing to be loanwords into Korean from any proximate other languages, may readily be identified as having entirely plausible Altaic, and in particular, Turkic, etymologies:

1. STONE. Trk. *tāš* (EDT 557a), Chu. *čul, čol*, Ev., Neg. Oroč., Ud., Olč., Orok., Nan. *žolo*, Lam. *žol*, MK *:tol.h-* (APP no. 68, p. 277; pp. 37-38).¹²
2. EGG. Trk. *āš* ‘food (in a broad sense)’ (EDT 256b), WMo. *alisun* ‘peel, rind (of fruit); chaff, husks’, ‘des pois fauchés’, MK *:al.h-* ‘egg; a lump, a piece (of something)’, NK ‘egg; a grain, a berry; counter for chestnuts, beans; any small round object, esp. edible, e.g., a grape’ (SKE 6-7; APP no. 228, p. 285; Nam 346b, Yu 526a, SEM 1088b).
3. SKY, HEAVEN. Trk. *quyāš* ‘the sun’ (EDT 679a), *küneš* ‘sun; sunshine, sunny side of a mounrain’ (EDT 734a), Chu. *χövel* ‘sun’, Old Koryö *†hannal* (Sasse no. 1, p. 99), MK *hanāl*, NK *hanül* ‘the sky, the heavens’ (Nam 467a, SEM 1781a) (APP no 78, p. 183, reconstructing pAlt. **guñal₂*; but the promised Altaic entry no. 206 is missing from p. 284).
4. COMPANION. Trk. *tūš* ‘equal, equivalent; opposed to, facing’ (EDT 550a), Chu. *töl* ‘companion, equal’, MK *:tāl.h-*, NK *tül* ‘(acting as) a group, all together; suffix for plural nouns’ (Nam 140b, SEM 533b) (APP no. 424, p. 292, **dül₂*, but separating this etymon from that behind MK *:tul.h-*, NK *tul* ‘2’, which may go instead with **r₂* words, although the Tungus evidence is neatly ambiguous (Ev. *žūr* but Neg. *žül* ‘2’, TMS 1.276a-277b).

sistent in how he cites their stems, randomly writing, e.g., *naráh* ‘country’ but *tōr(h)* ‘stone’ (1991: 257, 254).

¹² The documentation in these etymological summaries does not aim to be complete, much less exhaustive; many of these etyma have been in the literature for decades. In the main only sources that may otherwise be overlooked or that bear in a particular manner on moot points are cited. In the etymology for STONE, the problems of the vocalism of the proto-form are paramount, and are discussed in Miller (1985, 1986). Perhaps overlooking the details treated there led Janhunen (1996: 240) to castigate this too as a “phantom reconstruction”.

5. TEN. Trk. *-mīš*, *-mīš* in *altmīš* ‘60’, *yātmīš* ‘70’ (EDT 130b [‘with the unusual suffix *-mīš*’], 891b), Chu. *māl*, *mēl* in *utmāl*, *šitmēl* id; Old Koryō †*sumul* ‘20’ (Sasse no. 29, p. 101), MK *šūmūl.h-*, NK *sūmul* ‘20’ (Nam 318a, SEM 1025a).
6. COOKED MEAT. Trk. *sīš* ‘a spit, skewer, fork (from which cooked food is eaten)’ (EDT 856b), WMo. *silbi* ‘shin’, Ev. *silā-* ‘to grill, brown on a spit’, *silawun* ‘a spit’, *silā*, *silan* ‘meat (grilled on a spit)’, *silamačīn* ‘meat from the upper portions of the bear’s leg’, Nan. *sīlō* ‘*sašlyk* (meat, fish on a spit)’, Ma. *šolo-* ‘to roast, bake, grill’ (TMS 2.62a-b), MK *šāl.h-* ‘flesh; meat on the bones; skin; muscles’, NK *sal* ‘flesh; meat (of fruits, nuts; skin)’ (Nam 290b, SEM 895b).
7. COOKED GREENS. Trk. *yavīš.gū* ‘foliage; a kind of fruit’, *yabaš*, *yavaš* ‘delicate, tender’ (EDT 881b, 880b), MK *nā māl*, NK *namul* ‘greens, edible herbs; vegetables (for food)’ (Yu 124b, Nam 92b) (APP no. 426, p. 292).
8. POOL. Trk. *toš* “seems to mean something like ‘pool’” (EDT 557b-556a), MK *tol.h-* (Nam 159a), *:tol.h-* (Yu 229a) ‘a drain, gutter’ (translated by NK *tolang* ‘a ditch’, SEM 463ab), Ev. *tōlγa* ‘deep place at the shore; sand bar (at the steep shore of a river)’, *tōlγān* ‘eddy, whirlpool’, Lam. *tōlγu* ‘creek, backwater’ (TMS 2.194b).¹³

These MK data, with their clear and unambiguous notations of *-l.h-* in forms that may well be suspected of being cognate with Trk. forms in *-š* (and so also for other forms also in MK *-l.h-* that appear to be cognate with Trk. *z* forms), immediately cannot but put us in mind of the Pritsak hypothesis (1964). This, in general terms, was the suggestion that at some (presumably early) stage in the history of the Altaic languages, the phonemes that later were to be represented as the Trk. *š* and *z* members of the Chu. *l* = WMo. *l* = Tg. *l* and Chu. *r* = WMo. *r* = Tg. *r* sets of correspondences were actually the result of crasis within Turkic (but not in Chuvash) of combinations of original **l* and **r + C*.

¹³ Problems of meaning and especially neglect of the Chinese glosses to the MK sources have obscured this etymology, which is not represented in the existing literature. By POOL we mean either a man-made arrangement that holds or stores a small amount of water, or some natural configuration of the landscape that has the same effect.

If we follow the historical implications of this hypothesis to their logical conclusion, we will immediately see how important these MK heteroclitics in *-l.h-* may potentially be for a thoroughgoing and consistent historical explanation of the entire much disputed and thoroughly vexing problem of the bulk of these correspondences. The historical-phonological scenarios involved in these sets have variously been termed “lambdaism”, “rhotacism”, “sigmatism”, and “zetacism”;¹⁴ but the differences in their terminological designations prove upon inspection only to be reflections of one or the other of two *a priori* conclusions concerning the actual course of phonological events.

For those who have assumed for one reason or another that the answer to all this must somehow be located in Turkic materials and Turkic materials alone, it has been sufficient to allege that *š* and *z* spontaneously and sporadically somehow changed to Chuvash *l* and *r*; for such special pleaders the Mongolian and Tungus evidence was trivial. Those who assumed a larger (and older) Altaic linguistic unity, by more or less the same token, had to be content to allege that their **l₂* and **r₂* somehow changed to Turkic (but not Chuvash) *š* and *z*; in this case the alleged change was not, as in the former scenario, sporadic, but it was equally spontaneous, in the sense that the *rationale* for any variety of *l* and *r* suddenly to appear as *š* and *z* was, at best, always extremely tenuous.

It is important to remember that the Pritsak hypothesis was evolved entirely independently of the Korean data here placed under contribution. It is particularly because of this that they have considerable potential for substantiating that hypothesis, at the same time that that hypothesis may help to show their critical role in the eventual elucidation of this vital segment of the Altaic phonology.

This is because with the data relating to the MK heteroclitic nouns in hand we may for the first time document, and not simply hypothesize, a stage in the history of Altaic at which what must have been the direct ancestors of later Turkic *š* and *z* plainly consisted of combinations of *l* (and by implication *r* as well) plus an immediately following consonant. This consonant was identical with the **-g-* that underlies the MK *-h-* that marks the case-suffix morphology of these nouns; and most significant of all, we know as well from the Korean data that this **-g-* was

¹⁴ Tekin (1969: 51-57) is a convenient introduction to the vast literature that treats these diverse “isms”.

absent in a certain few morpho-syntactic contexts, but present in most others—notably absent in absolute, citation-forms, and in certain vocatives, but always present in the other syntactic contexts involved with case suffixes.

This in turn means that in seeking a historical explanation for this body of data we may finally introduce into the materials at hand documented instances that fully substantiate the Pritsak hypothesis, because they show specific inherited forms illustrating the *l* and *r* phonemes in question both in isolation and in combination with an immediately following consonant: The former situation, in other words, making it possible to account for the Chuvash *l* and *r* forms, the latter, in effect, and accepting Pritsak's hypothesis, accounting for general Turkic *š* and *z*.

In other words, we propose that it was forms parallel to the MK isolation forms *tol* 'stone', *hanāl* 'sky',¹⁵ etc., that were directly inherited by, and that are historically reflected in, Chu. *čul*, *čol*, *χövel*, etc.; but it was forms parallel to the obliquus MK *-h-* formations, i.e., *tol.h-*, *hanāl.h-*, etc., that were inherited by, and that are historically reflected in, Trk. *tāš*, *quyāš*, *küñeš*. This is because **-l.g-* not only in Korean > *-l.h-*, but also in Turkic generally, and in terms of Pritsak's formulation and hypothesis, it also > *š*, i.e., **l+C* > *š* where **C* = *g*; and so also for *z* < **r+C*.

Continuing along these same lines of logical extension, but, it should be noticed, always basing the essential outline of our putative historical-linguistic scenarios on the documented data of the Korean materials, we may proceed to sketch the following overall account of "what happened in history" with respect to the developments within the larger Altaic horizon, prior to the early but nevertheless still demonstrably secondary stage in the history of these languages revealed by the "Trk. = Chu. = Mo. = Tg." correspondences with which we are familiar from the handbooks:

At the earliest stage in the history of the Altaic languages that we may at present recover, their phonological inventory embraced two contrasting liquids, **l* and **r*, neither of which was ever found in word-initial

¹⁵ MK was a language with significant (phonemic) elements of tone, written in our transcription with *˙* and *˘*. But these suprasegmentals prove to have no historical connection with our problem, and so from this point on we simplify our transcription by omitting these indications in most citations.

position. Representative examples of words with **-l* from this earliest stage include **diōl* ‘stone’, and **guñal* ‘sky’, along with many others. Forms of this type were inherited directly and with their *Auslaut* **-l* intact into later stages of Altaic in a wide geographic range, yielding, e.g., attested Chu. *čul*, *čol* ‘stone’ and *χōvel* ‘sky’, as well as Old Koryō *†tol* id. and *†hannal* id., together with many other *-l* forms in many other languages. But, in one portion of this earliest stage of the Altaic linguistic unity, a limited number of the **-l* words acquired an early oblique formation in **-g-*, and were inherited into certain geographically restricted portions of the Altaic *Sprachraum* with this secondary suffix already firmly fixed in place. In overall terms, this happened at the two geographical extremes of the Altaic areal, in Turkic at the one extreme and in the language underlying our Middle Korean written records at the other. Accordingly we may wish to postulate a single phenomenon of oblique suffixation, the representative of which subsequently bifurcated into a remote-eastern and a remote-western representative; or we may perhaps equally well postulate two simultaneous such developments at either extreme of the *Sprachraum*, though the latter seems somewhat less likely.

At any rate, the *-l* forms with their **-g-* in place were then independently inherited into Turkic, where these **-l-+C* combinations regularly yielded *-š* in accordance with Pritsak’s hypothesis—and as a consequence at the same time they contrasted with the otherwise and separately inherited **-g-*-less forms (**diōl* > *čul*, *čol*, **diōl.g* > *tāš*. etc.), eventually also to yield the “*š* = *l*” correspondence of our handbooks and the raw materials upon which have subsequently been erected elaborate speculative scenarios of “lambdacism”, “sigmatism”, and the like.

Mutatis mutandis, precisely the same course of linguistic events transpired in the case of original *-r*. Original *-r* forms were inherited intact in Chuvash, Mongol and Tungus (and also in Korean, though there, as in Japanese of course, the *l* / *r* distinction itself was early levelled out), but certain oblique formations in *-r.g-* regularly yielded Trk. *z* (and MK *-l.h-*), as we shall document in more detail later. This *l* / *r* levelling produced different results in Japanese and Korean, even though in each it yielded only a single phoneme. In Japanese what we write as /r/ is mostly [r] but in many ideolects has sporadic [l]-like allophones. In Korean the single phoneme that we write as /l/ has clear-cut allophones as [r] in *Inlaut* and [l] in *Auslaut*: “Im Koreanischen ... ist *l* ein positives und *r* ein negatives aphonematisches Grenzsignal” (Trubetzkoy 1962³:

257). This is the situation in NK and presumably also in MK as well, where we must remember that what we write as /l/ may historically, as well as phonologically, be either *r* or *l*.

For the sake of clarifying this initial statement, certain details have been intentionally left unmentioned thus far, particularly with regard to the Korean and Japanese developments of these original *l* and *r* phonemes and their combinations; and while not all these items may be fully inventoried here, a few of the more striking of them are worth noting at this point.

Most important to note and understand is the Korean situation, especially with respect to the historical-linguistic position of the Old Korean and other early text-evidence that shows without question the existence of unambiguous *š*-reflexes for a number of $*l_2$ words, all the more significant because in the texts these are clearly recorded with a Chinese phonogram that must be *š* or *s* but cannot possibly be *l* or *r*.¹⁶ (These are, it hardly need be repeated, the same texts whose discovery has been dubbed “an absurdity”, etc., by Janhunen, see *supra*.) Thanks to these texts, we know that certain Old Korean languages (of which there were at least three) had *š* for $*l_2$, exactly like Turkic and Japanese—or to rephrase the data in terms of the present paper, these languages all inherited the words in question in the $*-l+g-$ obliquus shape, unlike Chuvash, Mongolian and Tungus, which inherited the rectus shape, without the $*-g-$. From this, it must now be concluded that MK was not a linear descendant from any of these Old Korean languages, as is conventionally alleged in Korean academic circles today, but instead represents a slightly divergent inheritance from the original Altaic linguistic unity. It resembled the Old Korean languages in that it too inherited the obliquus formations, but unlike them, it did not undergo the $*-l + g- > *t^š > š$ series of changes that we shall attempt to elucidate below.

¹⁶ Despite the plain evidence of the phonogram texts, the majority of modern Korean scholars persist in “reading” the *š*, *s* phonogram as *l*, *r*, and most western students follow them unwittingly in this foible (e.g. Sasse 1989). But even such an artificial and anachronistic approach is better than that of Itabashi (1996), who argues that the same phonogram was sometimes used to write *r*, *l*, but sometimes also *š*, *s*, and moreover that it is possible for him now to determine by introspection which of these sounds was intended in any specific writing.

Specifically, MK and NK in its turn were not, as frequently assumed, direct descendants of the Old Korean language of the Silla kingdom.¹⁷ This is not to deny that certain elements and features were common both to the Old Silla language and to the later MK and NK languages and may even now be identified as such. But in this all-important matter of their reflexes for the inherited Altaic **l₂*, **r₂* phonemes, Old Silla clearly drew upon one specific course of inheritance, a course analogous to that drawn upon by Turkic except for Chuvash at the other geographical extreme of Eurasia, while MK and following closely upon it NK drew instead upon another course of Altaic inheritance, parallel to that exploited by Chuvash, Mongolian and Tungus.

If at first this seems only to complicate the early linguistic history of the peninsula, we should reflect that one of the most important potential powers of historical linguistics lies in revealing precisely this variety of convolute developments that other varieties of historiography all too easily fail to notice. The conventional statements in the handbooks concerning the direct link between Silla and MK have simply resulted from a genial confusion of political and military history with historical linguistics. The Silla state and its armies unified the Korean peninsula, to be sure, but the linguistic evidence points toward a rather less simplistic course of events than the political and military narrations suggest. Most importantly, we should reflect upon our great good luck as linguists that actually this was not so; otherwise we would not be so well served as we are by the simultaneous existence of both *š* and *l* materials from this same narrow Korean area. If Silla had actually been able to impose its language in every detail upon the nation that it dominated after AD 668, our grasp of the Altaic connections of Korean would be far less secure than it is today.¹⁸

¹⁷ The discussion of this important point in Miller (1996a: 70-71) makes it no longer necessary to explain the MK and NK survivals of *l* / *r* forms as having resulted from a “re-Altaicization” of the peninsula. At best this was always the weakest link in our chain of argument, and we are happy to be able finally to jettison it.

¹⁸ The Old Koryŏ language, for which we have a Chinese-Koryŏ bilingual glossary that dates from ca. 1103 or shortly thereafter (Miller 1998a: 34), is also informative with respect to pre-MK developments of **l₂*, **r₂*. The most important of these data are studied in Miller (1996b); in addition, the glossary has ‘stone’ as

Despite the enormous volume of the existing literature that continues to surround these problems of Altaic $*l_2$, $*r_2$, one searches it in vain for attempts at concrete suggestions that might explain the phonetic details of the changes postulated by advocates of either (or any) persuasion: It has been felt sufficient to take a position on the issues involved (i.e. either assume l, r to have been original in one form or another, or else \check{s}, z), and then to state firmly and frequently that either $l, r > \check{s}, z$, or that $\check{s}, z > l, r$, without ever hinting at a plausible phonetic, much less a phonemic, mechanism or scenario that might possibly be supposed to have triggered these changes. To be sure, Indo-Europeanists have not set us a particularly good example in this connection. Every handbook will tell us that I.-E. $*k^w$ yielded labials before Gk. α, o , and κ, γ, χ before or after u , but τ before ε, ι (i.e. *quis* :: $\tau\acute{\iota}\varsigma$); but all the handbooks are strangely silent about how and why this original labial velar appears as a Greek dental in these specific phonemic contexts. The rule is easy to remember; but one cannot help asking “why?” The Indo-Europeanists do not seem to find this a problem; but our field is not so well worked over or so well thought of that we may be afforded this luxury of silence.

Questions in considerable number naturally present themselves concerning the genesis of the Turkic reflexes \check{s} and z that we here suggest somehow grew out of earlier $*l+g$ and $*r+g$ combinations; and equally naturally, if unfortunately, not all of these can be answered at the present time. But at the outset of any search for such answers, surely attention must focus upon the structural imbalance posed within general Turkic (and Turkish) phonology by the simultaneous coexistence and contrast of \check{s} and z , this strangely mismatched pair of phonemes that differ one from the other both in method of articulation and in voice.

From the contrasts elsewhere in the system and in terms of general, i.e. usual phonological canons, we should expect either a set $\check{s} :: \check{z}$ or a set $s :: z$ with the single contrast-factor of voice, or else sets of the order $\check{s} :: s$ or $\check{z} :: z$, with the single contrast-factor of method of articulation. Instead, the set that we do have, $\check{s} :: z$, is obviously skewed; and we know that such skewing, or structural imbalance, in a given phonological system or structure is frequently a valid clue to historical changes in

$\dagger tol$, and ‘two’ as $\dagger tu\beta ul$ (Sasse nos. 57, 20), and so independently already points in the direction of the later MK and NK $-l-$ forms.

the course of the history of the language. This in turn means that we will wish at the outset to investigate whether it may be possible to establish something of the history of the specific historical-linguistic changes responsible for this observed structural anomaly, and in particular to test whether it may be possible to correlate certain, even if not all, of this structural skewing with the documented data from MK that we have here attempted to correlate with the history of Turkic forms displaying these anomalies.

Initial attention in this connection probably should be directed simultaneously toward two actually disparate sets of data: (1) The (again!) imbalanced distribution of the voiceless and voiced Turkic affricates *č* and *ǰ* *vis-à-vis* the word-structure, *č* occurring initial and medial, but *ǰ* never initial; (2) the observed and well-documented development of Tungus (and by implication also Altaic) medial consonant clusters of *r*, *l* + *k*, *g* into affricates of the order of *č* and *ǰ* in Manchu. Keeping in mind always that our writings of *č* and *ǰ* are in part determined by graphic convenience (although to be sure they do have the incidental merit of symbolizing the unitary phonological, i.e. phonemic value of each), and that at least in non-phonemic, purely phonetic terms each is to be understood as a writing for a sequence of stop + sibilant release, of the order /*č*/ = [*tʃ*], /*ǰ*/ = [*dʒ*], we may well be on the way toward making a start at bringing the historical-linguistic events involved into some variety of order.

In general terms, the pattern for these relevant developments in Manchu seems clear enough: Poppe (1960: 85-88) cites etymologies in support of Altaic and Tg. **l₁k* > Ma. -*č*-, but **r₁g* > Ma. -*ǰ*-. But within these etymologies we actually find **r* varying sporadically with **l*, and **k* with **g*, so that Poppe, honest as always, did not hesitate to admit that we have here to deal with “eine schwer zu erklärende Doppelvertretung”. This was in effect another way of saying that what we find in the forms in question is best described in general, and not overly specific terms, as an attested affricate, voiced or voiceless, resulting from crasis of either of the two liquids apparently available at the earliest stages of the language, with a velar stop, which again may have been voiced or voiceless.

It should not be difficult to see how this in turn correlates with the structural imbalance of the Turkic *š* and *z*, at the same time that it partially also reflects the structural asymmetry of Turkic *č* and *ǰ*. In the case of an original **l*, close juncture with an immediately following **g*—such

as is documented in the MK heteroclitic nouns in *-l.h-* —at some fairly early point in the history of the Turkic languages appears to have generated a voiceless affricate [tʰ], in a phonotactic process precisely parallel to that which we may document between Altaic-Tungus and Manchu. Similarly, and again in parallel with similar developments in Manchu, early combinations of original **r* with **g* immediately following in close-juncture generated the voiced affricate [dʒ]. Subsequently each of these postulated pre-Turkic affricates was simplified both phonetically and phonologically. The change that both now underwent, which we may term “asibilisation”, reduced the articulatory force of the stop constituent of each in successive stages until it ended in zero, and then in its place brought the original *š* and *z* off-glides into roles of full phonemic prominence. With this the evolution of the Turkic *š* reflex for what in the classic Ramstedt-Poppe reconstruction of Altaic historical phonology is **l₂*—i.e. our **-l+g-* documented in MK *-l.h-* —was complete; and for the first time not only do we have a scenario that goes well along the way of explaining where this *š* comes from, and how it arrived where it is now found within the Turkic phonological structure, but also, and as part of that explanation, tells us what we believe Ramstedt and Poppe were actually recording when they wrote their **l₂*—not a symbol for a given, specific phoneme to be identified as such at any given time in the pre-history of Turkic or even in the proto-history of Altaic, but rather a symbol for a complex but entirely rational sequence of historical-phonological events. The formulation here suggested by no means seeks to overthrow the Ramstedt-Poppe reconstruction in this particular: Instead, it seeks to build upon and if possible to enhance the explanatory powers of their work by introducing into the discussion data that they did not have available.

Similarly, for **r+g > [dʒ]*. Here the originally secondary sibilant-release element of the affricate further underwent another easily explainable change in pronunciation either before or after (most likely after) the articulatory reduction of the [d] to zero, and became [z] for the reason that nowhere else in the Turkic system did a [ž] exist, and to have introduced it at this point would apparently have done too great violence to the structural imperatives of the language. (Such constraints were, needless to say, not operative in the case of [š] which was already well entrenched into the phonological matrix.) And so here too we now have a single scenario, based on observed and documented parallels in cognate languages, explaining what was involved in the actual history of the

Ramstedt-Poppe $*r_2$. As with $*l_2$, so also $*r_2$ is no longer necessarily a phonological *deus ex machina*: Both may be demonstrated to be symbols for completely routine and understandable phonetic change that eventually expanded from the level of surface realizations [t̪], [d̪] to that of significant phonological entities /š/, /z/.

One question that will surely be asked, and one indeed that should be asked, is, to put it in the most simplistic terms possible, where did the [t] and [d] stops, about which these affricate clusters first centered, come from? These dental stops (or, perhaps, phonemically, this dental stop) elsewhere too are (is) no stranger to the $*r_2$ scene. In an important if small set of morphologically anomalous MK verbs, most of which may be demonstrated to originate etymologically in Altaic roots in $*r_2$, we find two phonologically conditioned reflexes for $*r_2$, one the dental stop /t/ (realized as [d]), the other the unique Korean single-liquid /l/ (realized as [r]). And equally striking, Old Japanese preserves substantial etymological evidence demonstrating that there too we must reckon with the same two reflexes of $*r_2$; there we find /t/ following an original long vowel but /r/ following an original short vowel. These data show that, at least for $*r_2$, Turkic is not the only Altaic area in which we must reckon with this curious phenomenon of a dental stop reflex; they also show that the question of where this reflex (or, these reflexes) came from is no trivial matter.

At the moment no simple answer is forthcoming, and only one tentative suggestion that may eventually prove to point in the direction of future investigation may be made. Menges has several times drawn attention to a tendency toward special developments on the part of liquids in certain Tungus languages, notably Udi, when occurring in close-juncture with a following consonant, stressing the fact that when this following consonant is an occlusive, the preceding *l* and *r* themselves frequently shift to an occlusive (Menges 1968: 184). He has also described the interpolation of what he has called a “*Gleitlaut d*” into Tungus liquid and nasal groups with *r* as their second component, a phenomenon whose parallel in certain Turkmen dialects as well may be significant (Menges 1968: 100). Relevant here also is the “*vibrans d̪*, *t̪*” of some Evenki dialects to which he has further called attention, in its role as a phonetic, if not phonemic, interpolation-replacement for otherwise binary liquid and nasal groups (Menges 1968: 100). Starostin (1991: 291, no. 383) has even speculated that it is possible to connect OJ *usi* ‘cow’ with the Tungus words for ‘flesh, meat’, reconstructing an

original pAlt. $*ul_2V$ despite the lack of Turkic evidence for this etymon (but the $-s-$ in OJ *usi* would of course serve as a surrogate in this case for Turkic \check{s}). This then brings into the range of the etymology a rich variety of Tungus forms that exhibit precisely the *Gleitlaut* d and *vibrans* d' , t' of which Menges earlier wrote (e.g. Ev. *ulle*, *ulde*, *uldre*; Lam. *uld'a*, *uldo*, Oroč. *ukte* ~ *utte* < $*ulte$, all 'meat; flesh', TMS 2.262a-b.) Cincius (1949: 195-203 § 55) had exhibited these reflexes, but took an earlier $*l$, n , m , etc. + $*s$ sequence as primary, in which surely misleading idea she was uncritically followed by Benzing (1955: 39, 41, 46, §§ 51c, 53d, 57d). Similarly suggestive and also bearing upon the problem at hand are such sets of forms as Ev. *ollo*, Lam. *olra*, Orok. *xolto*, Olč., Nan. *xolto* 'fish', var. 'fish soup(s)' (TMS 2.14a-b). The possible historical significance of the dental stops that turn up in these Tungus 'meat' and 'fish' words was early indicated by Menges (1968: 134); now, in the light of the present suggested analysis of $*l_2$, $*r_2$, and particularly in view of Starostin's somewhat bold but by no means impossible reconstruction of $*l_2$ for an Altaic root 'meat', which would then be cognate with the Tungus forms in $-lt-$, $-d'$ -, and $-ldr-$ cited above, we appear to be well on the way toward answering this important question concerning the origin of the dental stops that apparently account for the later \check{s} and z of the greater portion of the Turkic languages, by way of affricates of the order of $[t^s]$ and $[d^z]$.

Is it possible to suggest a likely Altaic (or other?) etymology for this suffixed $*-g-$ that, as we now have seen, appears to have played an important role in the genesis of these MK heteroclitics, and over and beyond that, in the evolution of one of the major hallmarks of comparative Altaic phonology as well? As we might well expect, more than one such etymological possibility presents itself, among which the two following appear to be the most promising:

1. Heteroclitics such as MK *tol.h-* 'stone' cannot but put us in mind of the form and function of the Tungus collective-suffix $*+g$, thus reconstructed by Benzing and defined by him as a morphological marker "für Sachen ohne Einzelbedeutung, die an einer Stelle vereinigt vorkommen" (1955: 1016-17, § 78). Both formally and semantically certain of his examples are highly reminiscent of representative MK heteroclitic nouns; cf. esp. Tg. $*\check{j}olo$ 'Stein', but $\check{j}olo.g$ 'steiniges Gelände' (Benzing

1955: 1017; Ev. *ǰoloy, ǰoluy* in TMS 1.263b).¹⁹ Semantically and morphologically such forms as Tg. **pere* ‘bottom’, Ev. *here*, Sol. *eri*, Lam. *her*, Ma. *fere* (TMS 2.370b-371a), against Tg. **pere.g* ‘ground’, Ev. *hergi*, Lam. *hergil*, Ud. *xegie* (TMS 2.368a-369a) put us in mind of MK *sta.h-* ‘ground; the earth’, one of the MK heteroclitics in vocalic *Auslaut* and hence not immediately relevant to our present investigation, even though its morphology may well, as suggested, be parallel with that of certain of the *-l.h-* forms in this set.

2. But equally and indeed if anything even more suggestive etymologically is the Altaic accusative case-suffix **-g*, originally reconstructed in this form by Poppe (1955: 574-576; 1977) for the pronominal (as contrasted with the nominal) declension, but subsequently identified also in a wider variety of syntactic and lexical contexts that now make it possible to assign this morpheme a role in the Altaic linguistic unity well over-and-beyond its later somewhat restricted employment in the pronominal paradigm.²⁰ Whether we should directly identify this **-g*, documented in our MK records as having been suffixed throughout the paradigms of these heteroclitic nouns, specifically with the Altaic accusative case-suffix is a moot question; it would be better perhaps to term it a generalized obliquus-suffix that was at the same time both formally and semantically identical with the otherwise widely distributed Altaic accusative morpheme.

Earlier suggestions along these same lines have already met with heavy fire in the literature. As too usual in such matters, these counter-blasts have not involved refutation of arguments or corrections of data

¹⁹ Both OJ (*Nihon shoki*, ed. *Nihon koten bungaku taikei*, 1.611-612 note 8) and OK (*Samkuk saki*, ed. Chōsen shigakkai, chapter 36, p. 2) sources preserve partial phonogram writings for a Paekche Old Korean word for ‘stone’ that has a final syllable in *†ak*; surely this form has some connection either with the later MK heteroclitic *tol.h-* or with Tg. **ǰolo.g* (or perhaps with both?). But none of these forms have anything to do with the early NK *tolk* ‘stone’ registered once in a text of 1736 (Yu 230b), glossing a Chinese passage from the *Odes* (3.1.1), “[my mind] is not a stone”; there the *-k* is no more than an ill-educated scribe’s attempt to write the heteroclitic with the nom. case suffix, and the comments of Krippes (1991: 220) on the citation are entirely misleading.

²⁰ Miller (1977, 1992-1993: 302-303).

but instead relied for their impact chiefly upon sarcasm and innuendo, holding up to implied ridicule our suggestion of “an analogical extension of the accusative form, which for some reason [Miller] seems to think more common, to the other forms of the paradigm” (Martin 1991: 255 note 13).

For anyone enjoying even a modest familiarity with what has been learned of the history of some of the better documented language families of the world, this coyly-highlighted “some reason” will hardly be either obscure or irrelevant. The proliferation of the Vulgar Latin accusatives and the apparently irresistible force that they exerted in the course of their invasion of the other case-forms is too well-known to students of historical linguistics to require further comment or elaborate citation of forms. “Received wisdom has it that the Romance noun is normally derived from the Latin accusative form, the singular of which is usually cited as the etymon. ... The best evidence that Romance nouns do not normally derive from the nominative Latin forms is provided by the third declension, where very frequently, mainly as a result of sound changes that occurred in Latin, the nominative singular stem is shorter than that of the rest of the paradigm. Nearly always it is the longer (oblique) form that seems to survive into Romance ...” (Posner 1996: 119-120). It was even the oblique plural, and not the nominative singular, that invaded the territory of the singular predicative adjective in Romance; small wonder then that Romance linguists routinely cite the Latin etyma of their nouns in the accusative form but without the final consonant (Posner 1996: 118, xvi). With examples such as Fr. *pont*, Sp. *puente*, Ital. *ponte* not from *pons* but from *pontem*, and Fr. *rien* and *mon* from *rem* and *meum* constantly in mind, the Romance linguist has good reason to assign this all-important role to the accusatives, or if one prefers, to the oblique forms.

Moving back to the languages with which we are here concerned, this same paradigm-invading potential of the Altaic accusatives is documented in such frequently encountered accusatives carried over as nominatives, or at best as rectus, resp. absolutus forms as the Jurchen accusatives in *-i* that we often find in the isolation form under which words are entered in Chinese-Jurchen bilingual materials. Two citations will easily serve to represent the many that might be quoted: Jrc. *’oh-žan-ni* ‘master’, i.e. †*ežän.i*, an accusative in *-i* found as the citation form for the Jurchen cognate of Ev., Neg., Orok. *edī* ‘man’, Ma. *ežen* ‘master’ (TMS 2.438b; cf. Menges 1995: 206); Jrc. *puh.’a-i*, i.e. †*bu’a.i*, ‘district’, cog-

nate with Ev. *buŷa*, Sol. *búŷa*, Olč. *bā*, *būa*, Ma. *ba* id. (TMS 1.100a-101a). These *-i* accusatives also have impeccable Altaic credentials.²¹ Poppe (1955: 576, 1977) reconstructed this case-suffix specifically from the accusatives of the pronominal paradigms, but as we have shown elsewhere at considerable length, in most of the Altaic languages but particularly in Old Japanese this accusative *-i* was a morphological element of enormously wide employment, particularly embracing (but by no means restricted to) marking the subjects in indirect discourse constructions (1989b, 1992-1993: 303). It is not always an easy matter, particularly in early Korean texts, to distinguish between evidence for this same *-i* accusative and an unfortunately homophonous so-called “*-i* subject case” (NK *ču.kyōk* < NJ *shukyaku*). Part of the problem lies in the school-terminology for these forms, which are actually obliquus in terms of their syntactic employment as well, in all probability, in their ultimate historical origin as survivors of the Altaic third-person-possessive in *-i* (Ramstedt 1939: 38; Menges 1984: 242). At any rate, this obliquus *-i* was early petrified in Korean (Yang 1974⁸: 606); and Korean forms with this case-suffix in place were taken over in significant numbers in many of the early Korean loanwords that distinguished the liturgical lexicon of Old Japanese Buddhism, *primus inter pares* in this category being the term itself for *buddha*, OJ *Fōtōkē*, which entered OJ from Paekche OK *†putt’a.i*; later and elsewhere in Korean (and sometimes without the *-i*) the word yielded MK *put’yōi*, *put’yō*, and NK *puč’ō* (Miller 1989a: 242-243). In a word, whether one looks to the east or to the west, there is no dearth of evidence documenting the paradigm-invading vitality of obliquus, especially accusative case-forms in a variety of different languages, the Altaic included; and our reason for earlier (and still now) suspecting that such an invasion was also involved in the history of the MK heteroclitics is anything but obscure or unfounded.

Favoring the identification of this accusative **-g* in tracing the Altaic history of the MK heteroclitics over the collective-suffix of the same shape, which in effect is our present proposal, has more than one ulti-

²¹ These same Chinese-Jurchen bilinguals frequently cite obliquus Jurchen forms showing the Jurchen reflex of the Tg. **-ba* / **-bā* accusative in place, thus Jrc. *yih-rh’oh-poh*, i.e. *†ire’e.be* ‘nation; large settlement’ (WMo., Ma. *irgen*) (TMS 1.326b; Doerfer 1985: 117).

mate etymological advantage, two of which we shall here discuss briefly.

Most important of these two is one that brings us directly back to the specific question of the Chuvash reflex-data that remain our main concern.

The hypothesis set forth thus far supposes that Turkic at one geographical extreme of the Altaic *Sprachraum* and certain kinds of Korean as well as Japanese at the other inherited certain nouns in original **-l* to which a paradigmatic-intrusive obliquus, resp. accusative case-suffix **-g* had been attached; and that it was these **-l+g-* combinations that were in turn responsible for the Trk. *-š*, OKor. *-š*, OJ *-s-* reflexes. By the same reasoning, Chuvash must not have inherited these **-l+g-* forms. Its **-l* nouns remained pristine and unsuffixed, and hence were ultimately transmitted, through Old Bulgarian, as *-l* forms. So far well and good. But this leaves us with the responsibility for answering the obvious question that next arises: *Why* not?

For once the answer is simple, direct, and easy to identify. Pre-Chuvash did not know the obliquus-contaminated forms with **-g*, and so Chuvash did not inherit *š* but instead simple *l*, because Chuvash did not know the Altaic **-g* accusatives. All traces of the **-g* accusatives in Chuvash, if indeed any ever existed, which seems unlikely, were obliterated by the early falling together of the accusative and the dative (Poppe 1925: 416-419; Benzing 1942: 434-435, 462-463; Räsänen 1957: 58-59; Menges 1995²: 113). Benzing's admirably detailed scenario evolved in order to account for the early disappearance of the Altaic accusative **-g* in the form of its Turkic reflex *-lg* is a model of historical-linguistic accountability (1942: 462, § 69). He argues that it must once have been present, but that sound-changes early rendered it homophonous with the dative. In our terms this is no more than another way of saying that the reason behind Chuvash's non-inheritance of these **-g*-suffixed forms is clear. Chuvash did not inherit **-l-g-* because it early lost the **-g* component of this combination, hence we have Chu. *čul*, *čol* 'stone' but Trk. *tāš*.²²

²² Involved also with the absence of the **-g* accusatives from Chuvash is that language's marking of its distinction between specific and non-specific objects (Benzing 1942: 434; 1955: 1028). This is a feature also familiar from Korean and Japanese, and deserves special study in future.

Of almost equal importance is the second consideration, which involves the etymological identification of the accusative **-g* with the widely attested and distributed eastern-Altaic accusative case-suffix **-ba* / **-bä* (Ma. *be*, OJ *wo*, etc.; the *o*-vocalization of the OJ suffix, a neutralization of expected **ö*, because the sequence **wö* did not occur in OJ, is due to labial attraction following the initial). The ultimate etymological relationship between the Altaic accusatives in **-ba* / **-bä* and those in **-g* may readily be traced in terms of Poppe's formulation of a regular development of original Altaic **-b-* either as later *-b-* or as later *-g-* when conditioned by the "strong" or "weak" nature of the vowel immediately following; in this context "strong" refers to occurrence before a long, or in many cases an originally high-pitch vowel (Poppe 1960: 40-41, 46; Miller 1992-1993: 302).²³ Further discussion of this important application of Poppe's reconstruction would take us mostly into Japanological areas and hence too far afield; but the formulation is incidentally not without value for providing an Altaic etymology for at least one additional Korean heteroclit, MK *u.h-* 'top, upper part', NK *wi* (which form however presupposes earlier **ugi*), cf. Trk. *ūγ* 'upper part, top ribs of a tent' (EDT 76a), Ev. *uγī*, *uwī*, *ūhi* 'top', Lam. *ujīγ*, Neg. *uwu*, *uγu*, *uu*, etc. id. (TMS 2.245a-246b), OJ *uFë* < **uFa.i* 'top' (the OJ having again evidence of paradigm invasion probably by a Korean **-i*). The inclusion of the Japanese form in Ramstedt's etymology of this Korean heteroclit (1949: 285) was surprisingly prescient; to that etymology Poppe (1960: 107) further added WMo. *ögedē* 'nach oben', but the long vowel in his "ko. *ū* < **ög*" was a lapsus). Obviously we have here to deal with another important Altaic form, one well represented in all the various branches of the family, whose reflexes may be brought into a rigorous scenario of phonological development only by studying them in terms of Poppe's formulation of the allophones of certain consonants in his so-called "weak" and "strong" positions. Similarly, it may be possible to identify the same phonological alternation, originating in shifts in pitch-position, resp. vowel-length, in the original language, in such forms as Nan. *gīrbī* 'precipice; vertical shore', which

²³ Curiously enough, Poppe himself seems to have overlooked this application of his own law to the accusative case suffixes, writing, "das mandschurische Akkusativsuffix **-ba* kann man mit nichts identifizieren. ... Ich kann kein anderes, ähnliches Suffix in anderen Sprachen finden" (1952: 6; similarly, 1955: 575).

has been suggested as cognate with MK *kil.h-* ‘road, way’ (TMS 1.155b after Ramstedt 1949: 112; but Ramstedt did not know the heteroclitic in *.h-*).²⁴

To be distinguished from all the above, but nevertheless not without both Altaic and Turkological etymological interest, is a small set of MK heteroclitic nouns in *-s.k-* (listed in Nam 549). Several of these have interesting etymologies. MK *pas.k-* ‘outside, apart’ certainly goes with Trk. *bašqa* ‘another, beside, separate’ and provides Korean evidence for a relic-survival of the Altaic dative **-ka*.²⁵ MK *is.k-* ‘moss, lichen’ goes with Ma. *nisi.kte* id., apparently isolated in Manchu (TMS 1.600b), but earlier attested without the initial *n-* in Old Korean phonogram writings as well (1995: 82). But the most interesting of all these *-s.k-* heteroclitics is MK *tos.k-* ‘a mat, esp. a bamboo mat spread on the ground for sitting upon’. The shape and meaning of this form together immediately suggest an etymological connection with Trk. *töšäq* ‘mattress, bedding, carpet; something spread out for sleeping’ (EDT 563b; Erdal 1991.1: 249). So close, indeed, are these resemblances that one is tempted to regard the MK noun as a borrowing from some Turkic original; and we know that the Turkic formation has elsewhere at least left multiple and easily identifiable loans (e.g., Doerfer 1965.2: 617-618, § 967, listing Iranian, Urdu, Arabic *inter alia*). But we can hardly overlook the fact that the Turkic *-š-* points backward in time to **-l+C-*; and in the same sense as *töšäq*, the Uighur *Suvarṇa-prabhāsa* translation has *tölet* (EDT 563b, 494a; Erdal 1991.2: 425: “in fact always spelt *tölt*”). The received, and no doubt descriptively correct, Turkological opinion sees in *töšäq* a deverbal noun from *töšä-* ‘to spread out (a mattress, etc.)’ (EDT 561b; Erdal 1991.2: 621) (but, as we shall have occasion to remark below, this does not go very far toward reconciling the *-l-* forms of the *Suvarṇa-prabhāsa* with the *-š-* forms of the balance of the Turkic data). Unfortu-

²⁴ Ramstedt (1957: 122-123) did hint at the possibility that some cases of **l₂* might have originated in **-lb-*. Unfortunately in his later attempt to expand this idea Street (1980) became involved in highly speculative etymologies, and in (1985) only further clouded the issue by many quite unlikely and inaccurate Japanese etymologies.

²⁵ On the MK *-s.k-* heteroclitics see Miller (1996a: 149-150), but correcting the misprint there of Trk. *bašk* to read instead *baška*.

nately the MK *-s.k-* heteroclitics are too few in number to permit us, at the present time at least, to speculate upon their possible etymological contribution to the study of these Turkic forms; but surely they deserve notice in connection with the problem inherent in the Turkic data.

Most of our attention thus far has focused on etymologies that appear to throw light upon the genesis of the Ramstedt-Poppe Altaic **l₂*, i.e. Trk. *š* :: Chu. *l*. But this is only because of an accident of the data. The majority of the MK *-l.h-* heteroclitics for which Turkic, resp. Altaic cognates may be suggested happen to point in the direction of **l₂*. But **r₂* is, as we might suspect on general grounds of structural parallel and balance, also indicated in more than one etymology, among which the following are the most striking:

9. SHADE. Trk. *quz* (*qūz*?) ‘the northern side of a mountain seldom reached by the sun; a place where the sun does not reach’ (EDT 680b: “base of the word (etymology obscure) Az. *ğuzey*, Osm. *kuzay* / *kuzey*; Tkm. *ğuzay* ‘north; northern’”), MK *kǎnǎl.h-* ‘dark, shady; north side of a hill’ (glossed by Chin. *yīn* of *yáng yīn* ‘positive and negative principle(s)’), NK *kūnūl* ‘shade (of a tree); protection (of parents)’. The etymology is not without its phonological difficulties, but its rigorous semantic congruence speaks in its favor. One possibility is that the medial MK *-n-* is a survival of an original **-ń-*, its loss reflected in the Trk. *-ū-*, and somehow connected (by semantic-category contamination?) with the medial of **guńal₂* ‘sky, heaven’ (§ 3 *supra*). At any rate, the MK form is clear evidence for the **r+g* origin of the Turkic *-z* in this word.
10. SOURCE. Trk. *tōz* ‘root, basis, origin’ (EDT 571a-b), MK *stāl.h-* ‘origin, ultimate source’ (in texts between 1462 and 1467), MK *č’āl.h-* ‘origin, source; well-spring’ (in texts from 1481 on; neither form survives in NK; Nam 142a, Yu 183b; Nam 447b, Yu 691b). Each of the MK forms presents its phonological problems, but the overall semantic congruence is convincing, especially because the older form sometimes and the newer form consistently glosses Chin. *yüán* ‘origin; source; well-spring’ in both its abstract and concrete (“Brunner”) senses. The *č-* affricate is a normal later development of **t+y*, **t+i*; the aspiration as *č’-* may be due to the intrusive oblique *.h-* < **-g* in a variety of regressive assimilation that we shall discuss *infra*; the initial cluster of the older form is presently not to be explained. Benzing (1955: 1017) identifies his Tg. **+g* collective suffix in Lam. *ńewte.g* ‘Quelle(n)’ < *ńewte* ‘Quelle’, but his form with *.g* is unknown to TMS 1.650a.

11. MUD. Trk. Chag., Kirg. *saz*, Chu. *šur*, *šor* ‘swamp, marsh’, WMo. *siruya*, *siruyai* ‘dust; soil, earth’, Ev. *siruyi*, *siruk*, *hiruyi* ‘gravel, pebbles; sandbank’, Sol. *sergi* ‘gravel’, Nan. *sijā*, *sirō* / *ũ* id., *sirge* ‘isthmus’ (TMS 2.96a-b), Old Koryŏ †*hālk* ‘earth’ (Sasse no. 53, p. 104), early MK †*hūl* id. (Ogura 1941 no. 65), MK *hālk* ‘mud; earth’ (Nam 480a, Yu 738a), NK *hūlk* ‘mud, clay; earth, soil’ (VGAS 30, 114 (“*sir*₂ ‘Sumpf’”), EAS 2.705 (“Ung. *sár* ‘Steppe’”), APP no. 24, p. 252; no 403, p. 291 (“**sārV*”). The other Altaic forms appear to indicate that the Korean words in *-k-* are later, changed forms of earlier **-l.h-* < **-r.g-* clusters, and hence help to account for the Trk. *-z*, Chu. *-r* correspondence.
12. HUNDRED. Trk. *yūz* ‘a hundred’; “sometimes used less precisely for ‘a great many’” (EDT 983a), Chu. *šēr*, MK *yōlō.h-* ‘all, every one, all of’ (Nam 373a, Yu 562a, glossing Chin. *chū* ‘all, every’, Mathews 1362), NK *yōlō-*, *yōlōs* ‘a large number, many’. SEM 1162b suggests that the word is *yōl* ‘ten’ + a suffix *-ōs*; MK *yōl.h-* ‘ten’ is probably, to be sure, somehow involved with the history of the form, but the details remain somewhat obscure. Is OJ *yörödu* ‘a very large number’, often glossing Chin. *wàn* ‘10,000’, somehow also connected here (*-rōd-* < **-rt-*)?
13. PASSAGE. Trk. Uigh. (v. Gabain) *uz*, MTrk. *uzi* ‘mountain pass’ (DTS 620a, VEWT 517b) (EDT 278b, “*ōz* ‘valley and the like’ translates *wādī*”), Chu. *var*, has no overt Korean cognate involving a cluster with *l+C*; but Lee (1958: 118 no 230) compared MK *o’lai* ‘gate, entry door’ with Ma. *uče* ‘door’, i.e. Tg. **örkä*, Ev., Sol., Lam. *urke*, Nan., Neg. *ujke*, Ud. *uke*, Olč. *uče*, Orok. *ute* id. (Benzing 1955: 47-48, § 59; TMS 2.286a-b), WMo. *örüke* ‘smoke vent in a yurt’, MMo. *örüge* ‘roof aperture’ (VGAS 56, 87). The diminutive cited by Clauson as Uigh. *özek* ‘small valley’ (EDT 285a) is glossed in the Chinese original with a word that means ‘mountain pass’, not, with Sir Gerard ‘a stream or valley between two mountains’. A precise correspondence in both form and meaning would be OJ *ura* ‘bight, inlet, small bay; place where sea or lake water reaches into land’ (OJ *-r-* < **r₂* following a long vowel).

Quite apart from these data pointing to **r+C* origins of **r₂*, i.e. Trk. *z*, Chu. *r*, it must also be noted in passing that Korean has a significant amount of evidence, most of which must await fuller treatment elsewhere, that appears to show that MK *-z-* itself was sometimes a reflex of this original Altaic phoneme—if not, which in more than one case is also possible, the result of loans rather than genetic inheritances.

MK *kāzāl.h-*, NK *ka'ül* 'autumn' has frequently been compared with Trk. *kūz* 'autumn' (EDT 757a); and MK *kyōzū*,²⁶ *kyōzül.h-*, NK *kyō'ul* 'winter' has frequently been compared with Trk. *qış* 'winter' (EDT 670a).²⁷ The heteroclititic *-l.h-* in the 'autumn' form is surely original. Fortunately we have an Old Korean writing of the last portion of this word in phonograms, OChin. **ts'ātši*,²⁸ with the usual Old Korean phonogram *ši* in close juncture with *-t-*, providing a striking confirmation from written records of the affricate development of *š < *lg* that we suggested above, independently of the evidence of this text. Probably the 'winter' word acquired its *-l.h-* by semantic attraction from 'autumn';²⁹ but confusingly enough, it is clear that in early MK at least both words are recorded with vocalic finals, †*kōzā* 'autumn' and †*kyōzā* 'winter' (Ogura 1941, nos. 122, 132). More work with the texts will be necessary before the genial confusion of these forms can be sorted out into an order that will make it possible fully to exploit them for comparative ends.³⁰ And one cannot but wonder if Trk. *qiz-* 'to be red, glow with heat', *qizil* 'red' (EDT 681a, 683b) are not somehow related to MK *kūzūlum* 'soot', NK *kū'ül'üm* id., *kū'ul-* 'to become black with soot'.

²⁶ The word appears *sic*, without *-l*, in the Chinese-MK dictionary of 1527, at A 1a, but the secondary lexical sources (i.e., Nam, Yu) have overlooked, or tacitly "corrected", the passage.

²⁷ *Inter alia* by Krippes (1991: 220). But both his Turkic and his Korean forms are mostly incorrect.

²⁸ Poem 13 in Yang (1974⁸: 613) = poem A XIII 2 in Sasse (1989: 242), who routinely misreads the phonogram *ši* as *l*. In the OK poetic corpus this word is remarkably well documented. Another poem (Yang no. 11/5) has the word in a rectus form, and a third (Yang no. 20/20) documents a later, non-Silla OK form in *-l*.

²⁹ Meanwhile, these *-l*-less forms render unnecessary the rule given in Martin (1992: 58) for "elision of *l* before an apical". The 1748 text he cites simply documents an original *-l*-less version of the form.

³⁰ Available materials on the modern dialects either show only *-l* forms for both 'autumn' and 'winter' (Ch'oe 1988: 166-167), or 'autumn' with *-l* throughout and 'winter' with predominant *-l* forms interspersed with a number of historically significant *-lgi*, *-lge* forms (Ogura 1944: 18-21), which must reflect the MK *-l.h-* forms.

Another hint that early Korean may under certain circumstances have had a *z* reflex for $*r_2$ is provided by such early loanwords as OJ *aze*, *aza* ‘raised path (boundary) separating fields’ (where the *-e* of the first member of the doublet especially speaks for a Korean origin, i.e. $* < a.i$); an older Korean intermediary form is yet to be identified, but a plausible cognate is readily available in NK *irang* ‘the ridge and furrow of a field’ (SEM 1324a), Trk. *īz* ‘footprint, track, trace’ (EDT 277a-b), WMo. *iraya* ‘furrow, wake in the water (after a boat)’, Ma. *irun* ‘furrow’, Nan. *iru(n-)* ‘garden bed; ridge; furrow’ (SKE 71-72; VGAS 115; TMS 1.328b). The *aze*, *aza* forms cannot be genetic inheritances from $*r_2$, which regularly yielded OJ *r* or *t* depending upon the quantity of the vowel immediately preceding it; therefore they appear to be the result of an early borrowing, a fact also not entirely without interest for the history of the dissemination of agricultural practices in the Far East.³¹

If, as we hope we have been able to demonstrate, the small set of MK heteroclitics has preserved traces in its stem alternation of a phonological phenomenon that helps to clarify the genesis of at least a portion of the Trk. *š*, *z* :: Chu. *l*, *r* correspondences that have provided such a variety of problems of an analytical and historical nature for Altaic linguistics in recent decades, this should not be misunderstood as implying that all cases of this much-mooted correspondence revert to the originals of this small set of sources. Of course the original language had verbs as well as nouns, and other nouns over and above the ancestors of the MK heteroclitics. When these correspondences turn up elsewhere in the comparative Turkic lexicon each must be investigated separately, with a view to determining their source(s). For a number of verbs that happen both in MK and in NK to have a remarkably skewed morphophonemic structure, we have recently (1998b) collected evidence that here too reflexes of Altaic $*r_2$ may very well account for the observed situation, a solution that fits in well with the suggestions of the present paper since there too, Korean had, and still has, both *t* and *l* (i.e., historically, *t* and *r*) reflexes in a number of inflected roots and stems that elsewhere in Altaic show clear traces of $*r_2$.

³¹ At the very least, these comparative data, especially as they involve Turkic, throw grave doubt on the utility of Vovin (1993), who attempts to interpret MK */z/* as [ñ].

As we pointed out near the beginning of our discussion, it is to K. H. Menges that we owe the initial recognition of the historical-linguistic importance of the MK heteroclitics; he also was the first to identify the phenomenon of nominal heteroclitism in a small number of widely distributed Tungus roots. Two of these also deserve notice in terms of our present investigation, even though not all immediately involve Turkic cognates:

1. Menges (1968: 184) proposed reconstructing **jō.g* to account for the heteroclitism he detected in the morphology of a set of Tungus forms for ‘house’ or ‘yurt’, e.g. Ev. *jū*, Sol. *jūγ*, Neg. *jō*, Oroč. *jūg*, Olč. *jūγ*, Orok. *dūkü*, Nan. *jō(γ-)* (TMS 1.266b-267b). A Korean cognate may now be identified for this important term, in MK *ʔ’ō.h-* ‘dwelling’ (Nam 457b-458a; Yu 713a). The rich comparative potential of this word has been obscured by over-reliance upon the sense of its NK cognate, ‘site; place; building lot; foundation’ (Martin 1992: 809b), similarly Ramstedt, EAS 1.174 (‘Stelle, Platz, Pflicht, Situation’), 2.244-45, § 126 (‘Stelle, Platz’). The Chinese glosses in the MK lexical sources make clear that it originally signified ‘court; a room’ as well as ‘site, foundation’. The aspiration of the initial in MK *ʔ’ō.h-* is also by no means lacking in historical-comparative significance. In addition to the traces it provides for older Altaic, resp. Turkic phonological heritage, the *-.h-* < **-g-* that we now understand as identifying this set of forms further left traces within NK in the form of an aspiration of the morpheme initial in those cases where the pre-Korean version of this initial structurally permitted aspiration; in other words, *p-*, *t-*, *k-* were aspirated when they derived from **p*, **t*, **k*, but not when they reverted, e.g., to **b*, **d*, **g* or **j*. This relatively simple phonotactic imperative explains why we find NK *k’o* ‘nose’ from MK *ko.h-*,³² NK *k’al* ‘knife; sword’ from MK *kal.h-*,³³

³² With the MK and NK ‘nose’ forms compare Tg. **ngōrg* ‘nose’, from **ngō-* ‘to smell, sniff’, **ngō* ‘odor, smell, scent’, Ud. *ngy^hö* ‘nose’, Orok. *naksa*, Nan. *ngokso* (Benzing 1955: 985; TMS 1.587b, 663a-664a).

³³ These Korean words for ‘knife; sword’ have been extensively if inconclusively studied in the literature (Joki 1973: 275-276; TMEN 3.496-498; Menges 1984: 269-270), mainly with a view to identifying an extra-Altaic original. But the present state of the problem is only that “a borrowing from some common source is assumed” (Gamkrelidze & Ivanov 1995.1: 826).

and NK *p'al* ‘an arm’ from MK *pāl.h-*,³⁴ but NK *tol* ‘stone’ from MK *:tol.h-*. In this last word both original **di-* and its (dialectal?) **j-* were initial phonemes whose phonotactic parameters did not permit aspiration either in the original language or in its stages intermediate along the way to Old and Middle Korean; hence the modern cognate has *t-*, not *t’-*.³⁵ Similarly immune to this secondary, but hardly sporadic, aspiration were heteroclititic nouns of the order of MK *:si:nai.h-* ‘mountain torrent; *Schlucht*’ since no aspirated *s-* ever existed at any stage in the system, either Altaic or Proto-Korean. (The MK word is cognate with WMo. *sinay.a* ‘bend of a river; mountain range, mountain spur’, thus showing a literal, genetic source for its *-h-*; unfortunately it is misglossed in Lee (1977: 180) as ‘Bach’ and in Martin (1992: 109) as ‘stream’, where moreover the [l] in his *:si[l]-:nayh* form is wholly imaginary.)

2. Menges (1968: 184) also proposed reconstructing **dere.g* to account for the heterocclisis he detected in a large set of Tungus forms including Ev. *dēr* ‘surface’, *dere* ‘face’, Sol. *derge*, *derel* ‘face’, Neg. *deyel*, Oroč. *dey* ‘face’, Orok. *dere(l)* id., Nan. *derey*, *derel* id., Ma. *dere* ‘face; table’ (TMS 1.236a-b). But to a syncopated allomorph of **dere.g* in the shape **der.g*, it would not by any means be impossible to relate Trk. *yüz* ‘the face’, Chu. *něr* ‘appearance, beauty’ (EDT 983a), with the *-z* accounted for by the **-r.g* of the proto-form (i.e. $*r_2 < r+C$). This probably also solves the problem of the *térge* (Kašy.), *dérge* (Osm.) ‘a portable table on which food is carried in’ (EDT 544a), which Clauson found impossible to analyze morphologically.³⁶ Similarly relevant is Chu. *tără* ‘top, summit, apex’, which shows, as expected, an original

³⁴ Choi Han-woo (1989: 49) compares these Korean words for ‘arm’ with Trk. *arq* ‘excrement’ (EDT 213a), WMo. *argal*, Ma. *fajan* (VGAS 11), for reasons that remain obscure. Poppe’s “kor. *pal* ‘Mist’” was an error, because the word is borrowed from Chinese (Rosén 1986: 85); but of course even at best the form has nothing to do with ‘arm’.

³⁵ This effectively solves the problem of the initial *j-* of the Tungus forms that led Ramstedt (1949: 272) to label the ‘stone’ etymology “questionable”. The comments of Krippes (1991: 220) who also found the etymology “troublesome” are incomprehensible.

³⁶ On the semantic parameters of this ‘surface’, ‘face’, ‘table’ etymon, see Kolesnikova (1972: 276-277).

plain **-r* stem without trace of the oblique **g*; but even more striking is NK *t'al* 'a mask'. For this word we unfortunately lack any genuinely early written form (Yu 712a can cite nothing earlier than the Korean-Chinese-Manchu triglot of 1776); but on the basis of both form and meaning, and especially in the light of what we now know about the historical origin of the aspirated initials in the NK reflexes of the MK heteroclitics, it is not difficult to see in NK *t'al* 'mask' a regular development from earlier **dere.g* ~ **der.g*.

In yet another of his important early Altaic phonological formulations that is too easily overlooked, Menges has also gone far toward explaining how we may reasonably solve a puzzle that might otherwise confront us in this and other secondary applications of the Pritsak hypothesis. This is the apparent contradiction inherent in the overall Altaic as well as in the Turkic data, where we note that sequences of *l, r* plus various consonants have also survived intact, alongside the cases that we, along with Pritsak, now wish to suggest no longer show such an overt cluster but instead a fusion ("Verschmelzung") or other assimilatory change ultimately responsible for the correspondences that are our present concern. For Tekin (1969: 53-54), who believed that "the sound groups *rt* and *lt* are among the ... most durable consonant clusters in Turkic," the evidence that these sequences did occur (or for him, survived) was sufficient grounds for dismissing Pritsak's hypothesis out of hand. But he did not realize that a year earlier Menges had, in an entirely independent and different context, provided an answer that easily resolves this apparent internal contradiction in Altaic historical phonology.

Doublet forms in Manchu and other Tungus languages involving obvious cognates with *-rg-* on the one hand and *-ř-* on the other had long been noted and studied as somehow providing a clue to Tungus linguistic history. Ligeti (1960: 241-243) had discussed the apparent contradictions in the Manchu and other Tungus reflexes of **-rk-*, **-rg-*, variously *-rk-*, *-rg-* ~ *-č-*, *-ř-*, at length.³⁷ But it remained for Menges (1968: 251) to

³⁷ Unfortunately the full implications of the carefully reasoned and extremely cautious statements of Ligeti (1960) concerning this problem were not fully understood by Rozycki (1994), who attempts to use this phonetic criterion for identifying and dating (!) loanwords in a fashion never intended. See especially his pp. 227-229, where what he dubbs his "strict methodology" neatly reverses the actual chronology of the data.

point out unambiguously that the evidence points, not to sporadic or contradictory developments, but rather to forms descended from differently vocalized allomorphs: Ma. *terge* alongside *seĵen* ‘vehicle’ is to be explained as descending from **terege* alongside **terge*, with the origin of the allomorphy in turn to be sought in prosodic or suprasegmental (pitch, tone) factors. Similarly, the *-rg-* in Ma. *dergi* shows earlier **dere.gi*, but the *-ĵ-* in Ma. *feĵile* ‘under’ shows **-rg-*, cf. Ev. *her-gī* id. In other words, no internal contradictions of the neogrammarians’ assumption of regular sound change is involved, either with Pritsak’s original formulation, or with our proposed extension of the same in terms of the MK data that, as we have suggested, appear to cast light upon the questions long posed by the persistence of Chu. *l, r* against Trk. *š, z*. It would appear that the MK heteroclitics, and by that same token the Altaic heteroclitic noun phenomenon in general, have implications for the genetic relationship of all these languages far beyond the admittedly limited scope of their lexical resources.

At the very least, the present proposal, like that of Pritsak years ago, has one point in its favor, which may not be immediately apparent to every student of historical Altaistics, or even to every Turkologist, and so deserves to be stated here in conclusion. Proposals such as these, if eventually they prove acceptable, deserve to be favored over the bulk of the other suggestions currently found in the literature, for the simple reason that they postulate process-and-result scenarios as explanations for observed data where until now we have had no real explanations at all, only nomenclature. What does it mean to the historical linguist to be told that “[t]he semantic, phonological and collocational affinity of *tölt* and *töçä-* can be explained lambdacistically” (Erdal 1991.2: 425), or that “*karīm* is (rhotacistically) derived from *kaz-*” (Erdal 1991.1: 293)? All this is mere nomenclature, an arcane variety of name-calling. The words used, like “sigmatism” and “zetacism”, contribute no more to the description of historical linguistic change than epithets like “absurd” serve usefully to refute arguments based on the interpretation of data.

Even less informative are statements, deftly worded to avoid even a hint at a historical connection, that describe a relationship between Trk. *sögüş* ‘roast meat’ and *sögül-* ‘to roast meat’ as “cognate” but carefully leave it at that (EDT 823a-b), or that refer to Trk. *köšī-* ‘to hide the sun’ and *köli-* ‘to be shady, to give shade to’ as “an example of an *l / š* relationship in Standard Turkish” (EDT 716a). Trk. *kör-* ‘to see’ and *kōz* ‘the eye’ are admitted to have “obviously a very old etymological con-

nection” (EDT 736a): But what then was it? And how does it help to be told not only that Trk. *tül* ‘dream’ is synonymous with *tüş* id., but that the two constitute “an unusual example of a *l / r* form in Uyğ[ur]” (EDT 490b)? This well-known doublet of *l / š* nouns, along with the *-l*-noun, *-š*-verb pattern in Trk. *tül tüšä-* ‘to dream a dream’, have of course prompted other explanations more informative than Sir Gerard’s. Notable is that of Róna-Tas (1986), who with an eye on Chu. *tělek* ‘dream’, saw in WMo. *tölge* ‘Weissagung’ an old Chuvash-Bolgar loanword, and found in Chu. *tül-* ‘herausfinden’ the necessary semantic bridge between ‘dream’ and ‘divination’. His argument to the effect that these words tell us nothing about any proto-language but merely illustrate how “lexical isoglosses need not coincide with phonological ones” has recently (1998: 69) been expanded and recast as part of a restatement of the Ščerbak scheme, now elegantly set forth in the abstract though virtually unsupported by data.

But even if the unsolved problems of the Ščerbak hypothesis should one day be resolved, these ‘dream’ words offer no obstacle to the argument of the present paper. The **-lg-* of an Altaic prototype of *tölge* would regularly yield Trk. *-š*, while Chu. *tül-* would equally regularly descend from the simplex root **töl-* underlying the deverbal *tölge*.³⁸

Perhaps widening the range of Altaic comparative materials, particularly by considering what may be available in Korean, may eventually shift discussions of these and parallel phenomena away from impressionistic name-calling, and into the somewhat clearer light of attested phonological processes.

Abbreviations

Frequently cited literature

APP = Starostin 1991	SEM = Martin et al. 1967
DTS = Nadeljaev et al. 1969	TMEN 2 = Doerfer 1965
EAS = Ramstedt 1957	TMEN 3 = Doerfer 1967
EDT = Clauson 1972	TMS = Cincius et al. 1975, 1977

³⁸ We may also wish to compare MK **tūlp-* ‘penetrate; find out (a way, how to do something); master (secrets of learning)’, translated by (but not directly cognate with) NK *ttülh-*. The NK form shows *-h-* < **-g-* which is to be related to the *-p-* < **-b-* of the MK form by Poppe’s Law of “strong” and “weak” positions.

Mathews = Mathews 1952	VEWT = Räsänen 1969
Nam = Nam Kwang'u 1972 ²	VGAS = Poppe 1960
SKE = Ramstedt 1949	Yu = Yu Ch'angdong 1984 ⁵
Sasse = Sasse 1976	

Languages

Chag. = Chagatai	NK = New Korean
Chu. = Chuvash	OJ = Old Japanese
Ev. = Evenki	OK = Old Korean
Jrc. = Jurchen	Olč. = Olča
I.-E. = Indo-European	Oroč. = Oročii
Kirg. = Kirgiz	Orok. = Oroki
Lam. = Lamut	Osm. = Osmanli
Ma. = Manchu	pAlt. = proto-Altaic
MChin. = Middle Chinese	Sol. = Solon
MK = Middle Korean	Tg. = Tungus
MMo. = Middle Mongolian	Trk. = Turkic
MTrk. = Middle Turkic	Ud. = Udi
Nan. = Nanai	Uigh. = Uighur
Neg. = Negidal	WMo. = Written Mongolian

Special signs:

- * A form unattested but reconstructed by the comparative method.
- † A form attested in a text written with Chinese characters used as phonograms.

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