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SOME PROBLEMS OF ANCIENT TURKIC

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For anyone working in the field of Altaic linguistic history, it is essential to form some definitive views about the point of departure. Leaving aside the vexed question of the Altaic proto-language for each of the three Altaic language groups, a hypothetical Common Language is used for reconstruction: Common Turkic, Common Mongolian and Common Manchu-Tungusian. On the other hand, the period of the oldest monuments of these language-groups is usually labelled as Old Turkish, Old Mongolian and Old Manchu-Tungusian.[1] Old Turkish can be divided into three sub-periods: Early Old Turkish from the time of the formation of the Turkish Khaganate up till the first known linguistic monuments in Runic script, Middle Old Turkish from these times till the arrival of the Arabs in the Turkish world, and Late Old Turkish till the time of the Mongols of Chingis khan.[2]

[1] From the fact that the "Old" period is a period of the first documents of the language, it is clear that Old Turkish, Old Mongolian and Old Manchu-Tungusian are not necessarily overlapping periods. All end in the 13th century with the events of the rising Mongolian Empire, but the beginning of Old Mongolian, including Tu-yü-hun and Kitai, and the beginning of Old Manchu-Tungusian, including Juchen, is an open question.

[2] There is also an other usage which marks the end of Old Turkish or *Alttürkisch* with the appearance of the Arabs, and calls Middle Turkish or *Mitteltürkisch* the later period. A. von Gabain (*Alttürkische Grammatik*, pp. 1–3) uses the term *Alttürkisch* in the sense of the language "der noch nicht vom Islam berührten Türken Mittelasiens," which means that the late Uigur documents of Turfan (13th century) are *Alttürkisch* while Kāsγarīs *Dīvān* (1074) is *Mitteltürkisch*, as it is also called by Brockelmann. Poppe uses Ancient Turkic for our Old Turkish, but for the period 6th–10th centuries, Middle Turkic begins with the 10th century and lasts till the 15th (see *Introduction to Altaic Linguistics*, Wiesbaden 1965, pp. 59–67). According

But what was there before Old Turkish, that is earlier than the 6th century? Was this period—which we could call Ancient Turkic[3]—a linguistically homogeneous one? Are we confronted with a Common or Proto-Language from which all the phenomena of the later periods can be definitively and unambiguously interpreted? It is clear that the Turkic languages prior to the 6th century were far from being homogenous. Theoretically, we can divide this Ancient Turkic language into two periods. The one nearer to Old Turkish was a period when the peoples and languages, later forming the Turkish Empire, were already independent but still in close contact with each other, or some of each other.[4] This was bound to result in early linguistic contacts among the Turkish languages and language-groups.

In the earlier period of Ancient Turkic, the later languages were only dialects and these dialects existed in a more or less continuous but vast territory. This period must have lasted for a very long time, and if there ever was a homogeneous Proto or Common Turkic language, it could only have existed prior to this.

to Sinor (*Introduction a l'étude de l'Eurasie Centrale*, Wiesbaden 1963, p. 86) "turc-ancien" or "vieux-turc" covers the period from the 8th till the 14th century. Baskakov (*Vvedenie v izučenie tjurkskick jazykov*, Moscow 1962, p. 123) uses the term *drevnetjurkskij* for the epoch lasting from the 5th till the loth century with subperiods such as Tu-chüeh (5th–8th centuries), Old Uigur (8-th–9th centuries) and Old Kirgiz (9th–10th centuries). Malov (*Pamjatniki drevnetjurkskoj pis' mennosti*, Moscow-Leningrad 1951, p. 3) uses the same term *drevnetjurkskij* for the periods from 5th till the 15th centuries. Similar inconsistencities could be quoted from many other works, but I do not consider the question of periodisation very important. It is merely a methodological help to arrange events, and each periodization can have good arguments in its favour.

[3] I use the Ancient and Old Turkish terms for the so called *z*-languages, and Turkic for the combined *z*- and *r*-languages. Poppe's Turkish is Modern Ottoman Turkish. We also have to speak about Old Bulgarian from the 6th till the 13th centuries (including the Danube and the Volga Bulgarians); thus Old Turkic means Old Turkish *and* Old Bulgarian. Ancient Turkic was called by Baskakov (*op. cit.*, p. 118) and Poppe (*op. cit.*, p. 57), the period of the language of the Huns. According to Baskakov, it lasted from 3rd century B.C. till the 4th century A.D. Since we know practically nothing about the language of the Huns, which was surely a more ethnical and political than a linguistical designation, I consider it more convenient to use the term Ancient Turkic.

[4] Late Ancient Turkic is practically the same epoch as Baskakov's "Hun period."

I have sketched all this merely to make it clear that it is surely an oversimplification to assume a homogeneous Common Turkic —not to speak of Altaic—without taking into account Ancient Turkic and trying to interpret on its basis phenomena in Old Turkish, Middle Turkish and New Turkish. It could be counter-argued that we know nothing about Ancient Turkic. This is not a valid argument, since Common Turkic is also a reconstructed form, and if any period can be reconstructed from Turkish linguistic monuments and the present languages and dialects, then it is surely that form which is the nearest to Old Turkish and not that which is the farthest from it.[5]

It seems to me, that quite a few problems of Turkish linguistic history can be solved more easily from a heterogeneous Ancient Turkic than from a homogeneous Common Turkic. To make this clear: if in a language *B* we find a phenomenon *b* and in a language *C* we meet a feature *c*, it is not certain that this can be interpreted if we only suppose a proto-language *A* with the feature *a* from which features *b* and *c* can be deduced genetically. This is the old problem of the "Wellentheorie" *versus* the "Stammbaumtheorie.[6]" The two theories do not necessarily exclude each other; they can be combined, and general linguistic experience teaches us that they must be combined. I would like, now, to put aside the question of a hypothetical, homogeneous Common

[5] It could be argued that there is no need to distinguish between Ancient and Common Turkic. I consider the difference between the homogeneous and heterogeneous (dialectal) stages essential.

[6] The "Stammbaumtheorie" was put forward on the influence of Darwin by Schleicher (*Die Darwinische Theorie und die Sprachwissenschaft*, Weimar 1863). The filiation of the languages was symbolized by the genetical tree similar to that of the living world. This theory was widely accepted, mainly by the influence of Max Müller. The "Wellentheorie" was outlined by Johannes Schmidt in his book *Die Verwandtschaftsverhältinisse der indogermanischen Sprachen*, Weimar 1872, and independently, similar ideas were pointed out in an early but then unpublished work of Schuchardt. Schmidt stressed that many features of the Indoeuropean languages can not be interpreted by the family-tree. The IE protolanguage had dialects, and some linguistic innovations spread over this dialectal territory as waves in the water. Although Schleicher never denied that there could have been contacts among the languages already separated, and Schmidt never denied that there was a homogeneous pre-Indoeuropean language, later studies tried to make two separate theories of them.

Turkic, leave sophistication about its reality[7] to later research and concentrate on Early Ancient Turkic.

Having a more or less continuous linguistic area inhabited by speakers of various Ancient Turkic dialects, theoretically, we have to suppose that, in this period, things happened practically in the same way as they do in all similar cases. There were differences among dialects, but the isoglosses of the dialectal phenomena did not coincide in each case with the borders of the dialects. Moreover, there were features spreading over the territory—phonological, morphological and syntactical—but their isoglosses and the isoglosses of their realisations in concrete words, formatives etc., were not necessarily the same in each case. These are well-known facts to everyone acquainted with the theory of linguistic geography. Linguistic changes began as slowly consolidating tendencies with the old and new features coexisting in one synchronic unity. Some changes created doublets which then became stabilized and continued side by side in later periods as frozen survivals of an old variation. To illustrate what I mean I will now refer to the history of some non-Altaic languages.

In 16th century French there was a tendency in *statu nascendi* for a change: *r* > *z*. The French equivalent of Latin *cathedra*: *chaire* became, in the Paris dialect, *chaise* as *père* > *pèse*, *mère* > *mèse*, *bericles* > *besicle* etc. But this tendency later lost ground and ceased. Only the doublet *chaire* and *chaise* preserved this dialectal tendency.[8] In the 4th century B.C. Latin there was a tendency for a change of the intervocalic [-*z*] to [-*r*-], as in *pecus* ~ *pecoris*, (< *pecosis*)[9] *honos* ~ *honoris* (< *honosis* > (*honor*) or *āsa* > *āra* etc. But in the word *positus*, the [-*z*-] was preserved because of the clear etymological contact with *situs*. Thus, we had later a preserved [-*z*-] in front of a [-*z*-] > [-*r*-] in the same linguistic unity. Corresponding to German *Haselnuss*, we have English *hazel-nut* where intervocalic -*z*- is preserved while German *Hase* figures in English as *hare*[10] with a sporadic [*z*] > [*r*] development, and thus we have historical doublets [-*z*-] > [-*z*-] and [-*z*-] > [-*r*-].

Doublets preserving older synchronic alternations are evidenced from all languages. In most of the cases, the semantics of the two words diverged. Such well-known examples are: German *Reiter* and *Ritter*, *Bett* and *Beet*, *Rabe* and *Rappe*, French *plier* and *ployer*, Finnish *kaivo* "well, fountain," *kaivu* "pit, cavity"—and so on. It is especially interesting that in Hungarian we have such doublets as *hajlik* "to bend" and *kajla* "bent, awry." The Finno-

[7] There is a general controversy about the reality of the protolanguages. The formulation of Bloomfield is ambiguous: "A reconstructed form, then, is a formula that tells us which identities or systematic correspondences of phonemes appear in a set of related languages, moreover, since these identities and correspondences reflect features that were already present in the parent language, the reconstructed form is also a kind of phonemic diagram of the ancestral form" (*Language*, pp. 302–303). Pulgram (*The nature and use of proto-languages: Lingua* X (1961) pp. 18–37) thinks that the protolanguage is only a methodological device, a formula, but not a real language. Reformatskij (*Vvedenie v jazykoznanie*, Moscow 1960, pp. 325–326) polemizing with Meillet, stresses that the proto-language was a historical reality. It can not be questioned that, in some cases, the starting point of a set of related languages was a homogeneous linguistic unit, in the measure that homogeneity exists at all. It is another question whether in all cases of related languages we have to depart from a homogeneous proto-language. Trubetzkoy writes: "Der Begriff "Sprachfamilie" setzt gar nicht die gemeinsame Abstammung einer Anzahl von Sprachen von einer einzigen Ursprache voraus" (*Gedanken über das Indogermanenproblem*, *Acta Linguistica*, Copenhagen 1936, p. 81). I try to discuss these problems in a forthcoming work: *Linguistic Theory and Lingustic Relationship*".

[8] Cf. F. de Saussure, *Cours de linguistique générale*, Paris 1931, p. 214, K. Voretzsch-G. Rohlfs, *Einführung in das Studium der Altfranzösischen Sprache*, Halle, 1951, p. 243, G. Gougenheim, *Grammaire de la langue française du seizième siècle*, Lyon–Paris 1951, p. 30, Grétsy L., *A szóhasadas* (The word-split), Budapest 1962, pp. 16–17. This latter work is an excellent monograph on the theory and Hungarian realization of the linguistic doublets. I quote here and below examples with *z* > *r* and *r* > *z* developments in the hope that it will be clear from them, that the problem of rotacism and lambdacism can not be solved on pure phonetical considerations. It is a basic rule of historical phonology, that if and where, a phonetical development is possible, the reverse development is also possible. (See also B. A. Serebrennikov, *O nekotorych spornych voprosach sravnitel'noistoriceskoj fonetiki tjurkskich jazykov: Voprosy Jazykoznanija* 1960, pp. 62–72).

[9] As it is well known, Ramstedt proposed to connect the Mongolian *hüker* < **püker* with Latin *pecoris*. Since the *r*-form is not older in Latin than the middle of the 4th century B.C., this etymology can surely be dismissed. The Italian languages other than Latin, preserved the IE -*s*-, as Oskian and Umbrian. See F. Stolz-J. H. Schmalz, *Lateinische Grammatik, Handbuch der Klassischen Altertumswissenschaft II*, München 1890, p. 299, M. Niedermann, *Phonétique historique du latin*, Paris, 1959, pp. 129–130, L. R. Palmer, *The Latin Language*, London, (1954) p. 230.

[10] See Bonfante, *On reconstruction and linguistic method: Word I* (1945), p. 136, see also: *was* > *were*.

Ugrian velar *q-* became, in almost all cases, *h-* in Hungarian, but sporadically *q-* is preserved, as in the case above.[11]

Let us now suppose that in a period of Early Ancient Turkic, in one area of its linguistic territory, the opposition of old *r*:*z* and *l*:*š* was weakened. What happened? In the epicentre of the phenomenon, the tendency of the fusion of the two phonemes was strong, while in farther places there was only, in a lessening degree, an alternation. In some places and in some words the fusion occurred while in others it did not. If this is true, we have to find the lexical isoglosses pertaining to this feature in the epicentre practically parallel, while in other places they are more or less intersecting. Furthermore, we have to find doublets which conserved this old situation. The study of the words with so-called rotacism and lambdacism fully proves that, in reality, this is what actually happened.

Before presenting my material to show that the distribution of the forms with *z* and *r* and *š* and *l* respectively looks entirely like a dialectal distribution, I must call attention to the fact that it is not in each case that we have to do with the remnants of this Ancient Turkic dialectal variation. In some instances of doublets we have to do with Chuvash or Mongolian loanwords.

In the case of Turkish *küzük* "heddle," the Tatar equivalent of the word (*köre*) must be a Chuvash loanword because of phonological and linguistic-geographical reasons.[12] It is certain that the name of the fish "pike perch, Lucioperca Sandra," in Bashkir (*hïla*), Tatar and Karakalpak (*sïla*) are also of Chuvash origin.[13] The Jakut word *suru,* "to write," is of Mongolian origin

[11] For details and bibliography see Grétsy L., *op. cit.*, pp. 16–19, 178.

[12] *Küzük* (Kāšγarī), *küsük* (Abū Hayyān), *küzük* (Kirg), *küzük* (New Uig), *küzük yip* (TurkiT), *guzïg yïyïš* (Yellow Uig). The Chuvash form is *kĕrĕ, kərə* and the *r*-form is also present in Bashkir as *körös*. The Altai *kürük* "petlja," Baraba *kürük* "Hacken" and Jakut *kürūk, külūk* "krjuk" or at least the two second are surely Russian loanwords. The absence of the final *-k*, the illabiality of the second vowel and the fact that the word occurs in this form only in languages being in contact with Chuvash are arguments in favour of the loanword character of Tatar *köre*.

[13] I have dealt with this word during the 27th Congress of Orientalists. The Chuvash form of the word is *šăla* < *šïla* < *šiläγ* < *šilăk* < *šišak* < *tišäk*. Fortunately we have documentation for all stages. *Sïla* is present in Bashkir Tatar and Karakalpak, *siläγ* in Hungarian (*šileu* > *süllő*), all with the meaning "fish with teeth"

(cf. Mongolian *ǰuru-* < *ǰiru-* ~ Turkish *yaz-*) or Jakut *boruo-šku*, "calf," also points clearly to Mongolian *borō* (< *bïrayu* ~ Turkish *bïzayu*). Such examples are numerous, we find them not only in

i.e. "Lucioperca Sandra," which is calqued by Hugarian *fogas* "fish with teeth," by German *Zahnfish* and *Zander* "id.," while the Hungarian word was borrowed by Rumanian (*şalau, şuleu*), by Slovakian (*šil, šilec*), and by Old Bavarian (*Schiele*). The form *šiläk* found its way into Mongolian where it figures as *sile'ü* in the Secret History; later it is present in Literary Mongolian as *silüge* and in Buryat as *šülge* with the meaning "two years old lamb," i.e. "the animal with full teeth; which dropped the milk-teeth." The same meaning has the Turkish word *šišäk*, which is present in Husrav and Sīrīn, in Ibn Muhanna, in the Anonymous of Leiden, Abū Hayyān, Bulγat al-Muštāq and the at-Tuhfat. The modern Turkish languages know the word in the same or similar meanings (Tatar, Bashkir, Osmanli, Üzbek, Turki, Baraba, Šor.) The term is calqued by Mongolian *sidüleng* "two year old lamb" i.e. "the animal with full teeth (*sidün*)." The form with the original *t-* is present in the *Dīvān* of Kāšγarī as *tišäk* "two year old lamb," and in Jakut *tisägä, tisäγä* also *tiŋese, tigäsä* "trechtravnoe životnoe, telenok ili žerebenok po tretemu godu (dvuchletnyj, dvuletok, strigun), tol'ko oseni étogo goda u nich vypadajut moločnüe zubü počemu nazyvajut'sja takže *tisir tisäγ(ŋ)ä*" (Pekarskij). The word is a deverbal noun from *tisä-* cf. *tisä-* "nach den Milchzähnen die zweiten Zähne bekommen" (Kazak Radloff Wb III 1395). On the suffix see: E. V. Sevortjan, *Affiksy imennogo slovoobrazovanija v azerbajdžanskom jazyke*, Moscow 1966, pp. 200–217. The word *šišäk* was connected with *čis-* (<**tiš-*) "to swell" by Radloff (Wb., IV 1084), by Ščerbak (*Nazvanija domašnych i dikich životnych v tjurkskich jazykach: Istoričeskoe razvitie leksiki tjurkskich jazykov*, Moscow 1961, p. 115) and Doerfer (*Türkische und Mongolische Elemente im Neupersischen III*, Wiesbaden 1967, p. 328 where the Persian and Armenian forms are also quoted). The counting an animal's age by its teeth is a well known practice among the Turks and Mongols (see K. Uray-Köhalmi, *Zwei Systeme der Altersbezeichnungen des Viehes bei den Mongolen: Studia Mongolica I:* 31, Ulan Bator 1959, pp. 3–9.). The Mongolian form was re-borrowed by Hakass (*šileke*) and Tuva (*šilege*), while the Mongolian *sidüleng* was borrowed by Jakut (*šüdüleŋ*). The history of this word shows that the Mongolian word had to be a loanword from Old Bulgarian, since if we suppose a hypothetical "Altaic" **til-ek* we would then expect Mongolian **čilüge* or **čilegü*. The word is present in Old Bulgarian with *š-* (cf. Hungarian. In the Chuvash language, "tooth" is *šăl* < **šil* and *šăla* was borrowed by Cheremiss: *šăla* "Pike perch"). The Mongolian form *sile'ü* < *silegü* clearly shows the Bulgarian origin of the word. The history of this word not only shows a clear and unambiguous example of a Bulgarian loanword in Mongolian, but also gives a hint to a relative chronology. This word could be lent only in a time when animal-breeding was already highly developed. This says no more, but no less than that there was an Ancient Bulgarian and Ancient Mongolian contact. I have no place here to quote the well-known controversy around the "Altaic affinity," nor outline in full my opinion, which I try to do in my forthcoming work on the Altaic hypothesis.

the Siberian, but also in other Turkish languages. It is clear that such examples have to be separated.

In the case of Turkish *baš*, "head," and *köz*, "eye," we expect forms in Chuvash with *l* and *r* respectively. However this is not the case, because we find *puś* and *kuś*. These Chuvash words cannot be loanwords and there is no reason for supposing a complicated starred form as e.g. *baltš*.[14] It simply happened that these two words, having a great functional frequency, did not undergo the fusion *z* > *r* and *š* > *l*, and thus preserved an earlier stage as Latin *positus* or Hungarian *kajla*. The fusion of *z* and *r* and *š* and *l* respectively was not an "ausnahmsloses Lautgesetz," it was only a tendency which was very strong in the territory of the later Bulgarian languages.

While in the cases above we have *z* and *š*-forms preserved in Chuvash, in other cases we find *r* and *l* forms in Turkish.

The Turkish word *öŋüz* "mucus"[15] has an *r*-form in Kirgiz (*öŋör*), in Altai (*öŋör*) and in Jakut (*öŋür*). It cannot excluded that these are Mongolian loanwords (cf. Mong. *önggör* "id."), but it is surprising that we also find the *z*-form in Jakut (*öŋüs* < **öŋüz*) with the same meaning and this can hardly be reconciled with supposing the borrowing of the *r*-form. The Turkish word *izdä-* "to seek, search" occurs in most of the Turkish languages with *-z*.[16] Therefore, the Jakut form *irdä-*, *irdiä-* could, perhaps, be a Mongolian loanword, though we have not yet been able to find it. But, we do find the *-r* form in the work of Kāšγarī, and this points to the fact that here we have to do with an old isogloss. The Mishär *kə̄fə̄r*, *kiber*[17] "proud," the Kirgiz *kibir* "medlitel'nyj (čelovek), kopuša, mjamlja" seems to be a Chuvash loanword (cf. Chuvash *kapăr* "narjad" > Cheremiss: *kovra*, *kovora* "Stutzer," *kaβə̂r* "Stolz"). But if we take into account that we find

[14] See Ramstedt, *Einführung in die Altaische Sprachwissenschaft I. Lautlehre*, MSFOu 104:1, 1957, p. 109.

[15] Cf. Bashkir *üŋeð* "plesen', gribok", Jakut *ügüs*, *öŋüs* "vjazkaja sliz', vjazkaja nečistota, pristajuščaja k stenkam moločnoj posudy" (Pekarskij).

[16] The word is a denominal verb of *iz* "trace." The verb can be met with, among other sources, in the Amonymous of Leiden (*äzdä-* read *izdä-*), in the Qawānīn (*izdä-*), in some Armeno-Kipchak documents (*izda-*, *izla-*, Grunin, Deny).

[17] Cf. *küvez* (Kāšγarī), *küvezlü* (Codex Cumanicus), *köγäz* (Tatar), *küwäs* (Misher), *küγez* (Nogai), *güvez* (Osmanli dialect).

an *r*-form in the Qutadγu Bilig with Uighur script (Vienna Ms 24:15 *kiber*)[18] corresponding to the form *küvez* of the Namagan MS in Arabic (41:1) then we have to consider the early occurrence of the *r*-form in Turkish. The *l*-forms of the Turkish word *tüš* "dream" in New Uigur (? *džōli-* "to speak while dreaming"), in Yellow Uigur (*tel*) and in Jakut (*tūl*) do not seem to be Chuvash or Mongolian loanwords, since in Chuvash we have *tĕlĕk* (< **töläk*), and in Mongolian *tölge* (< **töleg*), the latter in the sence of "fortune-telling."[19] On the other hand, Tuva *tölge* "fortune-telling" and Kirgiz *tölgö* "id." are Mongolian loanwords. The *l* of Jakut and Yellow Uigur must be very old because we find it in some of the old Uigur records of Turkestan.[20]

The earliest occurrence of the word *büz-* "to fold, to press together" is found in the work of Abu Hayyān in 1313. The *z*-form can be found only in the Oguz languages, in Turkmen, Azeri and Osmanli.[21] The *r*-form can be observed in Kāšγarī's work, in Tatar, Bashkir, Kirgiz, Turkmen, Osmanli, New Uigur, Turki, Altai, Jakut and derivatives e.g. the word for "headshawl" is found in almost all Turkish languages.[22]

[18] But also *kebes* (134:7), *kübes* (66:20). Mort of the Turkisk *-r*-forms are of Arabic origin (← *kiber*). But Mongolian *köger* has preserved a Turcic *-r*-form.

[19] See Manchu *tolgi-* "träumen", Evenki, Negidal, Nani *tolkin* "sno, snovidenie", Olča *tolčin* "id.", Manchu *tolgin* "id.", the verbal form is in Evenki *tolkit-* Solon *tolkiši-*, Negidal *tolkiči-*, Even *tolkat-*, Oroč *tokiči*, Orok *tolčitči-*, Olča *tolčiči-*, Nanaj, Manchu *tolkeče-*. The Manchu-Tungusian forms go back to a form **tölki-*, which has to be a relatively old Mongolian loanword.

[20] Cf. F. W. K. Müller, *Uigurica I* 10:5, p. 59, *Uigurica II*, 24:27, 58:1, *Suvarnaprabhasa* 593:23, 594:5, Radloff-Malov, *Uigurische Sprachdenkmäler* 96:79. The verb *tüšä-* occurs in *Uigurica II* 24:27 and Kāšγarī where *tüš tüšä-* is recorded. The *š*-form is known in almost all Middle Turkish sources and present languages.

[21] Türkmen: *büz-* "sokratit', suživat', sužit' ", Azeri *büz-* "stjagivat', sžimat'. morščit'," Osmanli *büz-* "to contract, constrict, make narrow."

[22] *Bür-* "zusammendrücken" (Kāšγarī), *büriš-* "Falte, Runzel" (Kāšγarī), *bürünčük* "Frauenschleicher" (Kāšγarī), *bürünčüklüg* "woman with veil" (Husrav and Širīn), *bürünčäk*, *bürünjäk* "shawl for the head" (Chagatai), *bürkū* "slack weather, heat" (Abū Hayyān, Bulγat al-Muštāq), *bürkü̈t* "women's over-dress" (at-Tuhfat), *bör-* " 'delat' sborki, skladki" (Tatar, Bashkir), *bür-* "zašivat' na skoruju ruku, činit' ", *bürkö-* "pokryvat' " (Kirgiz), *bür-* "yīgīrmak, büzmek(!)" (Türkmen), *bürü-* "to cover up, to envelop, to wrap" (Osmanli), *pür-* "delat' skladki" (New Uigur), *bürü-* "to wrinkle" (Turki), *bürme* "skladka, sborka (na plat'e)" (Altai), *pürke-* "nakryvat', pokryt', zabernut' vo čtonibud' " (Altai Verbickij) *pür-* "svivat',

The verb *köši-*, "to make shadow, to cover," occurs in the *Dīvān* of Kāšγarī together with the derivatives such as *köšigä* "shadow," *köšik* "shadow, cover." The derivative *köšige* "curtain, cover" is present in Tatar, Kirgiz, Osmanli, Turki, Hakass, Tuva; perhaps, some of them are re-borrowings from Mongolian.[23] The *l*-form in the basic verb is present in Hakass (*köle-*) and Altai (*kölö-*), its derivative *kölik, kölägä* "shadow" can be met with as early as Kāšγarī, in Middle Turkish documents as the *tefsir* published by Borovkov, in Husrav and Šīrīn, among the Turkmen words of the Leiden Anonym, in Chagatai, at Abu Hayyān in the Bulγat al-Muštāq, in the at-Tuhfat, in the Qawānīn, and in almost all of the present languages.[24]

In the cases enumerated, which could easily be multiplied, we find no semantic differences or, at any rate, not significant ones, between the doublets. But as I referred to in the cases of *chaire* and *chaise*, or *Rabe* and *Rappe*, etc., it is very common that there is not only a split in the form, but also a split in the semantic field.

skladyvat'" (Altai Teleut Verbickij), *pür-* "zavertyvat', svorašivat' čto-l. zatjagivat', delat' sborki" (Hakass), *bürge-* "overtyvat', zakoračivat', zavolakivat'" (Tuva), *bür-* "obkladyvat', obšivat', opušat', okajmljat' (kraja sumy), podrublivat'," see also Mongolian *büri-* "to cover, envelop, upholster," Evenki *bürkī* "'svjazyvat' tal'niki v vjazanki".

[23] *Köšige* "rideau de lit" (Uigur vocabulary of the Ming period), *köšegen* (Codex Cumanicus) "Bettgardine", *kōšānä* "cupola" (at-Tuhafat), *küšägä* "börkentšek, džilän" (Tatar dialectal), *köšögö* "zanaves" (Kirgiz), *köşelik* "a thing or piece for a corner, chimney-cloth" (cf. *köşe* "corner" Osmanli), *köšük* "setka dlja perevozki sena i solomy" (TurkiKuča), *kožögö* "zanaves" (Altai), *közege* "id." (Hakass), *közege* "id." (Hakass dialectal), *közöŋö* "der Vorhang vor dem Bette" (Hakass Kyzyl Radloff Wörtb. III301), *kožege* "zanaves, štara" (Tuva).

[24] *Kōlik* "Schatten", *kölīgā* "Tiefer Schatten" (Kāšγarī), *kōlākā, kōlkä* "ten'" (Tefsir), *kölätkä, kölige* "shadow" (Husrav and Šīrīn), *köl^{ä}gä* "id." (Türkmen in the Leiden Anonymous), *kölägā* (Chagatai), *k^{ö}lāk* "id.", *kölägä* "id.", *k^{ö}lgäy* "id." (Abū Hayyān), *kölgäy* "id." (Bulγat al-Muštāq), *kölägā* (at-Tuhfat), *kölgäy* (Qawānī), *külägä* (Tatar, Bashkir), *kölökö* (Kirgiz), *kölöŋkö* (Kazak Radloff II 1271), *kölge, kölege* (Türkmen), *kölge* (Azeri), *kergä* (Afshar), *gölge* (Osmanli), *kölängä, kölänkä* (New Uigur), *kölängä* (Turki Turfan), *külägeš* (Turki Aksu), *kölăŋki* (Taranči), *kül'eke, kül'exke* (Yellow Uigur), *kölötki* (Altai), *kölöγö* (Altai Teleut Radloff II 1271), *kölöŋö* "der Hinterhalt, Laueort, Anstand, Wall, die Schanze" (Baraba Radloff II 1272), *kölätki* (Hakass Sagai, Koibal, Šor Radloff II 1270), *köläk* (Šor, Hakass Sagai Radloff II 1270), *kölö-* "verfinstern, beschatten, schärzen vom Rauche, Russa "(Altai Radloff II 1270), *köle-* "zaslonjat' kogo-čto-l., davat' ten'" (Hakass), *xölege* "ten'" (Tuva), *külük* "id." (Jakut).

The Turks had, and most of them still do, have two words for "to write." *Biti-* was the word for writing with the brush, and *yaz-* for "cut, score, notch the Runic script." *Yaz-* can be found in the Uigur monuments of Turfan, in Kāšγarī, in almost all of the Middle Turkish documents and in New Turkish, in the Kipchak, Oguz and Turkestan languages, but not in the Siberian languages and Jakut.[25] The *-r*-form (*yar-*) developed in the sense "to split, carve," and occurs in the Runic Irk bitig, in numerous old monuments, and from the recent languages[26] in the Kipchak, Oguz, Turkestan and Siberian languages. It is important that these two words did not converge in Chuvash where we find *śir-* "write" and *śur-* "split."[27]

The word *täš-* "to pierce, to make a hole" occurs in Kāšγarī's work only in the passive voice (*täšil-* "durchbort werden"), the stem can be met with in Husrav and Šīrīn, Chagatai, in the work of the Anonymous of Leiden, in the at-Tuhfat, in the Qawānīn, in the recent languages in the Kipchak, Oguz, Turkestan and Siberian languages and in Jakut.[28] The *l*-form of the word shows

[25] On the distribution of the words with the meaning "to write" see A. Bodrogligeti, *Early Turkish terms connected with book and writing*: *Acta Orient. Hung.* XVIII (1965), pp. 93–117 and A. Róna-Tas, *Some notes on the terminology of Mongolian writing*: *Acta Orient. Hung.* XVIII (1965), pp. 119–147.

[26] *Yar-* (Irk bitig, Qutadγu Bilig Vienna Ms, Kāšγarī), *yaril-* "sich spalten" (*Turfantexte* VI 46:375), *yar-* "raskalyvat', rassekat'" (Tefsir), *yar-* "fendre" (Chagatai), *yarma* "Holzscheit, 'en gespalden holcz'" (Codex Cumanicus) *yaril-* "gespalten werden" (*ibid*), *yar-*"kolot', raskalyvat', rassekat', rasščepljat'" (Tatar, Bashkir), *džar-* "id." (Kirgiz), *yar-* "id." (Türkmen, Azeri, Osmanli), *yar-* (Turki), *d'ar-* "id." (Altai), *šar-* "id." (Hakass, Tuva).

[27] "Rvat', razryvat', kolot', pilit', porot', razrezat', borozdit'" (cf. Sirotkin, *Čuvašsko-russkij slovar'*, p. 369).

[28] Cf. *tišä* "toporik (s lezviem, nasažennym poperek toporica)" (Tefsir), *teš-* "to pierce", *tiš-* "to make a hole", *tiš* "hole" (Chagatai), *diš-* "to bore" (Leiden), *tešmek* "hole", *tešik* "id." (Codex Cumanicus), *täš-* "to bore, pierce" (at-Tuhfat), *täš-* "id." (Qawānīn), *tešik* "hole" (Armeno-Kipchak, Grunin), *tiš-* "dyrjat". Tatar, Bashkir), *teš-* "prodyrjavit', protykat'", *tešik* "dyra" (Kirgiz), *deš-* "dyrjavit', sverlit'" (Azeri), *deš-* "prodyrjavit'" (Turkmen), *deş-* "to incise, to lay open" (Osmanli), *tešiš* "prodyrjavlivanija", *töšük*, "otverstie, dyra", *täš-*, *töš-* "dyrjavit', delat' dyru" (New Uigur), *teš-*, *teş-*, *täš-*, *tiš-* "to pierce, to perforate, to penetrate, to make hole" (Turki), *töšük, tüšük, tüšük* "hole" (Turki), *teš-* "prodyrjavit', protknut'", (Altai), *tes-* "durchschossen, durchboren" (Hakass Sagai, Koibal Radloff IV 1097), *tis-* "prodyrjavlivat'" (Hakass), *deš-* "prodelyvat' otverstie,

a duality already in the early dialects. In the Turfan documents and in Kāšγarī's work, it occurs with the meaning "to pierce, to make a hole," while in the inscriptions of Kül Tegin and Bilge Khagan, it has the meaning: "to split, to open." This duality can also be met with later. In the *Tefsir*, both meanings are present, but in most of the present languages only the meaning "to split" occur, and it also has the meaning "to make long stripes." This shows clearly the influence of the word *til* "tongue." Influenced by the word *til*, the vocalism of the word has also changed, becoming *-i-* (and its developments), but Azeri and Osmanli preserved the older *-ä-*.[29]

The first occurrence of the word *qašuq* "spoon" is found in the records in Brahmi script; and in the Uigur documents of Turfan, it occurs in almost all Middle Turkish sources and in the Kipchak, Oguz, Turkestan and Siberian Turkish languages.[30] The Mongolian form of the word (*qalbaγa*) was borrowed by the Altai, Šor, Hakass and Jakut languages.[31] But the *l*-form *qalaq*

prodyrjavlivat', vykalivat' (glaza)" (Tuva), *täs-* "probivat' (dolbit'), prokalyvat', prodyrjavit', prorezyvat'" (Jakut).

[29] Cf. Kül Tegin East 22 *t^{äi}i^{i}n-* (also Bilge E 18), *tälin-* "durchlocht werden" *Turfantexte I* 8:32, cf. p. 18, *Uigurica III* 37:3, *Heilkunde I* 6:42), *täl-* "durchboren", *tälik* "Bohrloch" (Kāšγarī), *täl-* "probivat', dyrjavit'", *tälik*, *tälük* "otverstie, dyra" (Tefsir), *til-*, *täl-* "to pierce" (Husrav and Širīn), *til-* "to split" (Leiden), *tälik* "hole" (Abū Hayyān), *tälik*, *dälik* "id." (Bulγat al-Muštāq), *täl-* "to split" (at-Tuhfat), *tel-* "ščepat' (lučinu), razrezat' v dlinu" (Tatar), *tel-* "razrezat', prorezat' (lomtjami ili polosami)" (Bashkir), *til-* razrezat' na uzkie poloski, na lomtiki" (Kirgiz), *dil-* "dilim-dilim edip kesmek, dilik ačmak, yirmek" (Türkmen), *däl-* "probyvat', pronyzivat'" (Azeri), *del-* "to pierce, to perforate" (Osmanli), *til-* "rezat' na kuski, razdeljat'" (New Uigur), *tel-* "rezat' poloskami (napr. dinju)" (Turki Hami), *til-* "to split, to cut anything into strips lengthwise" (Turki Shaw), *til-* "otdyrat', razdyrat' na melkie časti, ščepat', rezat' plastami, remnjami" (Altai), *tïl-* "otdirat', razdirat' čto-l. na melkie časti" (Hakass), *dil-* "pilit', raspilivat' (drevno na dosku), rezat', razrezat' (kožu ne remni)" (Tuva), *tïr-*, *tït-*, *tït-* "razrezyvat', ščepat' (lučinu), rasščepljat', otdeljat' vdol' po slojam" (Jakut).

[30] Cf. *hkašoq* (Brahmi M:24), *qašuq* (Heilkunde II 18:63), *qašuq* "Löffel" *qašïqlïq* "zu Löffeln geeignet" (Kāšγarī), *qāšuq* (Ibn Muhanna), *qāšiq* (Ibn Muhanna Ist), *qašuq* (Chagatai), *qāšūq* (Leiden), *qašuq* (Codex Cumanucus), *qašuq* (Abu Hayyān), *qašuq* (at-Tuhfat), *qašuq* (Qawānīn), *xašux* (Armeno-Kipchak Deny, Grunin), *kašik* (Tatar), *qašiq* (Bashkir), *kašik* (Türkmen dial), *gašig* (Azeri), *kaşık* (Osmanli), *qošuq* (New Uigur), *qašuq*, *qošuq* (Turki), *xazix* (Hakass), *kažïk* (Šor Verbickij).

[31] Cf. *qalbaq* "Löffel" (Kazak Radloff II 270), *kalbak* "id." (Altai), *qalbaγas*

in the meaning "little spoon, laddle, stirring wood" occurs in the Kipchak, Turkestan, Siberian languages and as a Tatar loanword in Chuvash.[32]

The word *bilezük* "bracelet" is a fusion of the words *bilek* "wrist" and *yüzük* "ring." The earliest data is Kāšγarī, and it occurs in the Kipchak, Oguz, Siberian, Turkestan languages and in Jakut. The *-r-*form is present in Kirgiz, Azeri, Sart and Altai. It is remarkable that the Sart form (*bilärzük*) and the Azeri form (*bilerzik*) also contains *-z-*.[33]

The word for "insect" is *qoŋuz* in the Turkish languages. We find it in the Runic inscription of Toyok, in Uigur records of Turfan, and in Kāšγarī's *Dīvān*. It occurs in almost all Middle Turkish documents, and in every recent Turkish language. Important is the Karaim of Troki, where instead of the intervocalic *-ŋ-* an *-m-* (*qomuz*), and the Altai where the *-ŋ-* disappeared and a secondary long vowel developed (*qōs*, *qōzoq*), we find that the same happened in Hakass (*x̣ōs*).[34] This word cannot be separated

"širokonosaja utka "(Šor, Hakass, Sagai Radloff II 270), *xalbaγas* "vid utki" (Hakass), *xalba* "utka iz širokokljuvich, širokonoska, soksun, *Anas Clypeata Bris*", *xolbu* (*xalbï?*) *kus* = *xalba*, *xalbïga* "malaja ložka" (Jakut).

[32] Cf. *kalak* "ložka (metallističeskaja), lopatočka (derevjannaja)" (Tatar), *qalaq* "ložka, lopatka, lopatočka, špatel'" (Bashkir), *kalak* "sovok, doska dlja raskatyvanija testa, veslo" (Kirgiz), *qalaq* "ein Hölzchen mit flachem Ende, das man den Kindern statt eines Löffels giebt (Kazak Radloff II 228), *galam* "ložka" (Türkmen), *qalaq* "a kind of cushion in ring-form used on the pan when boiling food in steam (to prevent the steam from escaping)" (Turki), *kalak* "bol'šaja ložka inogda s dirami dlja vylavlivanija rybu i pelmenej, mešalka, točil'naja dostočka dlja propravlenija kos (senokosnych)" (Šor Verbickij), *xalax* (Hakass Sagai), *xalγax* (Hakass), "mutovka (palka dlja razmešivanija židkogo testa" (Hakass dial), *kalgak* "povareška, čerpak" (Tuva), see also Chuvash *kalak* "lopatočka, mutovka, veslo" (from Tatar).

[33] On this word, its history and distribution, see L. Ligeti *Noms turcs pour 'fers; bracelet; bague' dans les langues slaves et dans le hongrois: Studia Slavica* XII (1966), pp. 249–250.

[34] Cf. *qoŋuz* (Toyok: 29), *qonquz* (*Turfantexte* III 12:93), *qoŋuz* (Kāšγrī), *qonγuz* (Chagatai), *qonuz* (Bulγat al-Muštāq), *onuguz* (read *oŋuz*, at-Tuhfat), *koŋgiz* (Tatar), *quŋïz* (Tatar Radloff II: 900), *quŋïδ* (Bashkir), *koŋuz* (Kirgiz), *qomuz* (Karaim Trocki, Radloff II: 671), *konguş* (Osmanli), *qonγuz*, *qonγaz* (New Uigur), *qonγaz* (Turki), *qunguz* (Turki Shaw), *koŋïs* (Altai), *qōz* (Altai Teleut, Tuba Radloff II: 623), *koŋus* (Altai Teleut Verbickij), *koŋïs* (Altai Teleut, Kumandu Verbickij), *qoŋïzaq* "ein kleiner Käfer" (Altai Teleut Radloff II 522), *qōzoq* "id." (Altai Tuba Radloff II 630), *xōs* (*Russko-Hakasskij Slovar'*).

from the word for "ant": *qomursqa*. This word occurs first in the Runic Irk bitig, then in such Middle Turkish documents as the Anonymous of Leiden, Abū Hayyān, Bulγat al-Mustāq, at-Tuhfat, and in the Modern Kipchak, Siberian languages and in Jakut.[35] The Oguz and Turkestan languages have another word for "ant."[36] From the available data, I would only point out Hakass *qumusqa, x̣ïmïsx̣a, komïska* "ant" where *-r-* has been dropped, and Jakut *x̣omurduos, xoŋurduos,* where there is an alternation of *-ŋ-* ~ *-m-*, we have *-r* but the meaning is not "ant" but "insect."

In most of the Turkish monuments and languages Turkish *qopuz* has the meaning "stringed musical instrument," already so quoted by Kāšγarī. This is also the meaning of the word (*quγur*) in Mongolian. In the Siberian languages, there are other words: in Altai, *komuryay* and *kōrok*, in Hakass *kobrak*, in Šor *kobïryay-* having the meaning "pipe". The two words are doublets. The developments of *qopuz* have, in some Turkestan and Siberian languages, the meaning "jew's harp" an instrument with iron tongues on which one plays with the mouth and the fingers. In Jakut, the word *x̣omus* has the meanings "stringed instrument, Jew's harp and pipe."[37]

[35] Irk bitig: 56 *qomursqa*, see further: *qumursγa* (Chagatai), *q^{u}m^{u}rsqā* (Leiden), *qumursuγa* (Abū Hayyān), *qïmïrsaγï* (Bulγat al-Muštāq), *qūmrūsqā* (at-Tuhfat), *kïrmïska* (Tatar), *qïmïrśqa* (Bashkir), *kumurska* (Kirgiz), *komurska* (Altai), *kumursqa* (Altai Tölös, Čulym Küärik, Hakass Kaibal Radloff II 1049), *qumusqa* (Hakass Koibal, Sagai Radloff II 1049), *qïmïrtaš* (Šor Verbickij), *xïmïsxa* (Hakass), *komïska* (Hakass Verbickij), *komïskaš* (Šor Verbickij), *komïrska, komurska* (Altai Kumandu Verbickij) *xomurduos, xoŋurduos* "dvorosek, skripun nasekomoe žuk vodoljub vodnoj žuk, *Hydrophilos*, žestokriloe nasekomoe, bukaška, bukarka, bucharka, žuk, žučok" (Jakut). The *r*-form is perhaps also present in Chuvash *xurt-xămăr* "pčely" cf. *kurut-koŋuz* (New Yugur).

[36] The word is *qarindža* and its developments.

[37] See *qobuz* (Kāšγarī), *qobuz* (Husrav and Šīrīn), *qopuz* (Ibn Muhanna), *qobuz* (Chagatai), *qopuz* (Chagatai Badā'i' al-luγat), *qobuz* (Leiden), *qabuz* (Abū Hayyān), *qobuz* (Abū Hayyān MsD), *qobuz, qopuz* (Abū Hayyān Ist.), *kïbïz* "komuz (tatarskij gubnoj muzikal'nyj instrument" (Tatar), *koboz* "violin" (Tatar Balint), *qubiδ, quniδ* "kubyz" (Bashkir), *komuz* "kumuz (trechstručnyj ščipkovyj muzykal'nyj instrument" (Kirgiz), *qobïz* "kumuz (derevjannyj smyčkovyj muzikal'nyj instrument" (Karakalpak), *kobïz* "garmon'", *kïl kobïz* "komuz (muzikal'nyj instrument vida smyčkovych)" (Nogai), *qobuz* "Geige" (Karaim Radloff II 662), *gopuz* "vargan, devičij gubnoj muzikal'nyj instrument" (Türkmen), *kopuz* "lute" (Osmanli), *qovuz* "kubuz, vargan" (New Yugur), *qubuz* "A Turkestan-made Jew's harp" (Turki), *qûbuz, qupuz* "a Jew's harp, also a rough guitar with horse-hair string" (Turki Shaw), *qobuz* "Brummeisen" (Taranchi, Radloff II 662), *qoŋis, qoŋus* "muzykal'nyj stručnyj instrument (u ujgurov ja ne videl v 1910, 1911, 1913 gg. muz. instrumentov," writes Malov) (Yellow Uigur), *komus* "vargan (metalličeskij muzykal'nyj instrument v forme nebol'šoj podkovski s tonkim metalličeskim jazyčkom, pripajannym k seredine ee, pri ispolnenii vkladyvanetsja v rot, zvuki že izvlekajutsja kolebanijem jazyčka pal'cami)" (Altai), *xomïs* "komus (muzikalnyj instrument)" (Hakass), *komus, kómus* "muzykal'nyj instrument, balalajka" (Hakass Verbickij), *qobus* Balalaika" (Šor Radloff II 661), *xomus* "komus, vargan, drymba" (Tuva), *xomus* "kobys, kobuz, vargan, dudka" (Jakut), *xamïs* "kobyz, edinstvennyj jakutskij muzikal'nyj instrument sostojaščij iz železnoj ramki s pružinoj posredine, na kotoryj igrajut pal'cami, vujavši ramku v guby i varirua tony pomoščju zubov i jazyka" (Jakut). According to Professor Ligeti (*Un vocabulaire sino-ouigour des Ming*: *Acta Orient. Hung* XIX (1966), p. 168) the form *qubur* "espèce de guitare (p'i-pa)" of the Uigur vocabulary of the Ming-period "remonte au mongol". The Siberian *r*-forms can not be of Mongolian origin because of the vocalism of the first syllable, the diminutive suffix and the meaning.

I do not have space to discuss all similar doublets here. I enumerate only some of them: *bāz* "gland", *bärtš* "gland, udder," *boγaz* "throat," *boγurdaq* "oesophagus," *qïz* "girl," *qïrqïn* and *qïrnaq* "female slave," *omuz* "shoulder, shoulder-blade," *omurtaγ, omurγa* "collarbone, vertebra," *özek* "pole," *örgen* "peg," *söz* "wörd," *sörtšek* "speach," *tez* "quick," *terk* "quick," *baš* "head," *paltšak* "great face, with great head," *ašuq* "knuckle-bone, dice," Russian альчик "dice," *yaš* "young" *yaltšiq* "young, young plant," etc.[38] I would like to quote only one more example:

The first occurrence of the word *tïz* "knee" is found in the Kül Tegin inscription, and it occurs in almost all of the linguistic records as well as in the present languages. The Hakass form with a diminutive suffix (*tizek, tistenek*) is remarkable, the same is found in Tuva (*diskek*) and in Jakut (*tisäx* the "end of an object," *tüsäx* "the forepart of the femur, knee").[39] Its *r*-form

[38] I deal with these words in my forthcoming work on the Altaic hypothesis.

[39] Cf. *tizl^{ig}* "who has knees" (Kül Tegin E2, 15, 18, Bilge E3, 13, N10), *tiz* (Irk bitig 93), *tiz* (*Turfantexte V* 4:4, *Uigurica II* 47:78, III 28:12, *Uig. Sprachd.* 101:6, *Suv.* 349:2, *Heilk.* II 32:1), *tïz* (Kāšγarī), *tiz* (Yugnaki Uigur), *dïz* (Yugnaki Arab), *tiz* (Tefsir), *tiz* (Husrav and Šīrīn), *dïz* (Ibn Muhanna), *tiz* (Chagatai), *tiz* (Leiden), *tiz* (Codex Cumanicus), *diz, tiz* (Abū Hayyān), *tiz* (at-Tuhfat), *tiz* (Qawānīn), *tez* (Tatar), *teδ* (Bashkir), *tiz* Kirgiz South), *tize* (Kirgiz), *dize* (Karakalpak), *tiz* (Nogai), *dïz* (Turkmen), *diz* (Azeri), *diz* (Osmanli), *tiz* (New Uigur), *tiz* (Üzbeg), *tiz* (Turki), *tiz, tïz, tuz* (Salar), *tiz, tez* (Yellow Uigur), *tize* (Altai), *tizä* (Altai, Teleut, Lebed, Šor Radloff III 1397), *tiš* (Čulym Küärik Radloff III 1401), *tis* (Hakass

is the word *tirsgäk* "elbow" which can be found at Kāšγarī, in the East Middle Turkish monuments, in the Kipchak, Oguz, Turkestan and Siberian languages and in Jakut. The word *tirsek* has the meaning "Achilles tendon" in Kirgiz, "knee-cap" in Küärik. The most interesting feature is that where Hakass *tïrsek* also means "the knee of the animal's hind leg," it is a very clear reference to the way of the semantic split; the joints of the fore and hind extremities originally had the same designation, and this split later used both pieces of the doublet.[40] The Hungarian word *térd* "knee" is a Bulgarian loanword, but it has a diminutive suffix of Hungarian origin.[41]

It is not incidental that I have mainly quoted such examples where we find *z* and *r* and *l* and *š* forms respectively within the Turkish linguistic area where there is no morphological opposition of the type *kör-* "to see", *köz* "eye." These examples were recently collected by Pritsak and Tekin.[42] We have several reasons for not accepting the hypothesis that we have originally morphophonological reasons for such doublets:

1. If the $z > r$ or $r > z$ development had morphophonological

Koibal, Kacha, Sagai Radloff III 1394), *tïzek*, *tïslenek* (Hakass), *tïs* (Hakass dial), *diskek* (Tuva), *tisäx* "konec, konec koncov, v predmete, *tüsäx* "perednaja storona ljažki, kolena" (Jakut).

[40] Cf. *tirsgäk* "Armknochen" (Kāšγarī), *tirsäk* "Ellenbogen" (Türkmen in Leiden), *tirsäk* "id." (Chagatai Zenker, Bada'i'), "lien, jointure du bras, coude" (Chagatai Pavet de Courteille), *tersäk* "lokot', *techn*: koleno, kolenice" (Tatar), *terhäk* "lokot'" (Bashkir), *tirsek* "achilesovo suchožilie" (Kirgiz), *tirsek* "lokot'" (Karakalpak), *tirsek* "id." (Nogai), *tirsek* "id." (Turkmen), *dirsek* "lokot', izgib, sgib" (Azeri), *dirsek* "elbow, (fig.) knee or angle (of pipe or timber), winding, bend," *dirsekli* "kneed, bent" (Osmanli), *tirsak* "'lokot', (techn.) koleno (truby)" (Uzbek), *tigenek* "lokot'" (Yellow Uigur, Hill), *tirsäk* "Kniekehle" (Čulim Küärik Radloff III 1377), *tirsek* "koleno zadnej nogi životnogo" (Hakass), *tüsürges*, *süsürges* "perednaja čast' bedra (ljažki), koleno" (Jakut), see also Chuvash *čĕr*, *čĕrkĕ*, *čerxi*, *čerkux*, *čĕrkuxxi* "koleno".

[41] The Hungarian word corresponds to an Old Bulgarian form **tïr*. The diminutive suffix *-d* was productive in Old Hungarian and goes back to FU **-nt*.

[42] O. Pritsak, *Der "Rhotazimus" und "Lamdbazismus"*; *UAJb* 1964 pp. 337–349. Here I can only refer to the very interesting paper, read by Tekin on the 27th Congress of Orientalists (Ann Arbor, Michigan) where I was also present and had the opportunity to discuss some of the details. I did not have the opportunity to read the full text which will be published in a forthcoming issue of *Acta Orientalia Hungarica*.

reasons, what are we to do with such words as: *küzän* "polecat," *azïγ* "molar tooth," *ešik* "door," *küzük* "heddle," *qozï* "lamb," *tišäk* "two year old lamb," *yuzaq* "lock," *qazγuq* "stake," *ašuq* "knucklebone," *ešid-* "to hear," *kösek* "camel-colt," *sazaγan* "drake," *sïzil-* "to tremble," *qāzan* "couldron" etc.? In these words we would have to suppose an infix which is uncommon in the Altaic languages.[43]

2. If the $r > z$ or $z > r$ development were a morphophonological one, then we have to explain the cessation of the opposition of $r:z$ and $š:l$ in the Chuvash phonological system separately. This would mean that we have to work with two hypothesises, instead of one.

3. If the $r > z$ or $z > r$ development were a morphophonological one, how could we interpret that the isoglosses of the separate items of the doublets do not coincide. Why do we have *izdä-* in the Anonymous work of Leiden, in Qawānīn or in the Armeno-Kipchak documents and *irdä-* in Kāšγarī and Jakut, why *tüš* in some Old Turkish monuments and *tül* in others?

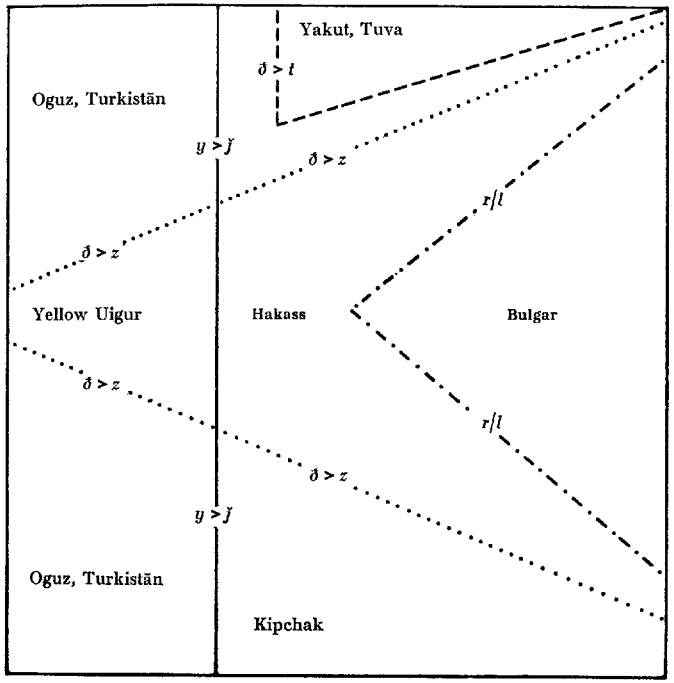
[43] I quote here only some *r*-forms and *l*-forms of the words above: *kürene* (Mongolian), *görény* "polecat" (Hungarian); *urlă šăl* (Chuvash) *araγa* "molar tooth" (Mongolian), *ălăk* "door" (Chuvash), for *küzük* cf. p. 214, *quraγan* "lamb" (Mongolian > Siberian Turkish languages), for *tišäk* see pp. 214–216, *săra* "lock" (Chuvash), *karó* "stake" (Hungarian), альчик (Russian. which is not Turkish *alči* "one side of the dice" < **al*, but Turkish *ašuq*, cf. the Turkmen expression: *ašïγï alči otur-* "bagtí getirmek", an Old Bulgarian loan-word in Russian). *ilt-* "to hear" (Chuvash), *gölige* "pup" (Mongolian), *kölyök* "id.". (Hungarian), *sárkány* "drake" (Hungarian), *sărăl-* "to tremble" (Chuvash), *xuran* "couldron" (Chuvash). It can, perhaps, be argued that all these words are derivations and that the *r*-forms were present in the primary stem. But then we have to solve the following questions: a: the suffixes joined the stem later than the $z/r + X$ fusion, but in such cases the *-rt-* is preserved, see *käz* "Kerbe des Pfeiles" *käzlä-* "einkerben", *kärt-* "einschnitte machen", *kärtik* "Kerbe" (Kāšγarī), b: this complex had the same history in intervocalic position as on the word-end, but e.g. *-lč-* is present in intervocalic position (cf. *balčïk* "Schmutz," *alčaq* "milde, fein" etc.), and then why not **kölček* "camelcolt" or **elčik* "door?" c: Here the problem raised under 4. below is especially difficult. If there was an *X* after the word end, which fusioned with the *-r* or *-z* preceding it, what has happened with the words which had other finals? Was this *X* specific to the stems undergoing rotacism and lambdacism (irrespective of the direction of this development)? Infixation is uncommon to the Altaic languages in the historically detectable past. But I would not adopt a wholly negative attitude to this question for a much earlier period.

4. If the $r > z$ or $z > r$ development were a morphophonological one, how are we to interpret such correspondences as Turkish *öküz* ~ Chuvash *văkăr*? If there has been something unknown x (say *-ti*) after the word-end, be it *-z* or *-r*, why has it disappeared in Chuvash and not in Turkish or *vice versa*. This could only have had dialectal reasons, and thus we have come back to my starting point. On the other hand, if there had been something in the case of the words ending in *r* and *l* or *š* and *z*, then we should also expect it after other word endings. The supposition that this has disappeared in all phonetical situations seems to be too bold in my opinion.

It is another question that in a time, and in some places where the phonological opposition of *r*:*z* and *l*:*š* was weakened, the economy of the language worked in the direction of using this functionless duality for morphological reasons. As there were semantic doublets, morphological doublets may also have existed. These developed on the dialectal basis sketched above.

It is quite natural that the weakening of the opposition *r*:*z* and *š*:*l* was not the only dialectal feature which spread with different intensity and isoglosses over the dialectal area of Ancient Turkic. A similar feature was the development of the initial *y*- to *ǰ*-. The fact that we have *ǰ*-languages with *r* and *l* and *ǰ*-languages with *z* and *š* raises the problem of which was the relatively older development. I think that this question is not a necessary one. The *ǰ*-development had a different isogloss from the discontinuation of the *r*:*z* and *l*:*š* opposition. The *ǰ*-isogloss encircled the dialects from which developed later the Bulgarian, the Kipchak and some Siberian language.[44]

[44] I have no space here to discuss all opinions concerning the history of the *y*- and *j*- in Turkish, and its relative chronology in respect to rotacism and lambdacism. According to Ramstedt and Poppe (see Poppe, *Vergleichende Grammatik der altaischen Sprachen*, Wiesbaden 1960, p. 27 with bibliography) "Im Urtürkischen waren **d*-, **j*- und **y*- zusammengefallen und hatten dort ein *y*- ergeben." This means that *j*- became *y*- in Ancient Turkic, and then later became *j*- in Old Bulgarian and in some Kipchak and Siberian languages. In this case, the Old Bulgarian (a *j* + *r* language) and the Kipchak and Siberian languages (*j* + *z* languages) have a common development in front of the other *y* + *z* languages. But this raises the question: if the *y* > *j* was an earlier development than *r* > *z*, then in the *j*- languages and the *y*- languages, the *r* > *z* development had to be independent. If the *r* > *z* development was the earlier one, then the *y* > *j* development in Old Bulgarian and in the Kipchak and Siberian languages independently developed. All these are highly unlikely, and show that in this case the family-tree conception leads to contradictions.



The same situation occurred with the fortunes of the intervocalic and final *ð*. Thinking in the terms of the geneological tree, we can hardly interpret the fact that the *ð* > *z* development occurred in a *y* + *z* language (Yellow Uigur), in a *ǰ* + *z* language (Hakass) and in a *ǰ* + *r* language (Chuvash). But there is no problem if we suppose that this was also an isogloss, coinciding neither with the *ǰ*- isogloss, nor with the isogloss of the submergence of the *r*:*z* and *l*:*š* opposition (see figure above).

Similar not-coinciding isoglosses can be traced in the case of other Ancient Turkic phonological, morphological and, perhaps, also syntactical developments. I will conclude my discussion with some problems of lexicology.

The word *ïzan* "furrow" occurs only in Tatar, Bashkir and

Nogai. The Chuvash *yăran* (< **íran*) cannot be a loanword from the later period, because of the *r*-form, it is Ancient Turkic. It was a lexical isogloss in a narrower dialectal area. For "sun," in addition to the common word *kün*, the Turkish languages have two other words: *küneš* and *quyaš* (all three have, perhaps, a common origin). The word *quyaš* can be found in the Kipchak languages (Tatar, Bashkir, Karakalpak, Karaim of Troki), in the Turkestan languages (New Uigur, Turki), and in the Siberian languages, Šor and Altai. The word *küneš* is present in some Kipchak languages (Bashkir, Kumük), in the Oguz languages (Turkmen, Azeri, Osmanli) and in the Altai language. The word *quyaš* in the form *xĕvel* occurs in Chuvash.

The word for "stirrup" *üzäŋi* has labial initial in all available linguistic records: in Tatar, Bashkir, Kirgiz, Turkmen, Azeri, Osmanli, New Uigur, Turki, and Altai; while it has illabial initial in Yellow Uigur, Baraba, Hakass, Tuva and Jakut. The Chuvash equivalent *yărana* can only be connected with the latter, but the correspondence has to be an Ancient Turkic one because of the r-form.[45]

Summing up my conclusions: between the very hypothetical Common or Proto-Turkic and Old Turkish, there was a long Ancient Turkic period. In its earlier period, the Ancient Turkic dialects existed in a more or less continuous linguistic area. Several linguistic developments in this area spread over the territory with different intensity and different isoglosses. This more or less synchronic and geographical development crossed the diachronic one. What we have now before us is not a unilateral development and cannot be deduced directly from a homogeneous proto-language. Undoubtedly, this draws a more complicated picture, but I think it is closer to historical reality. Now, we are faced with the task of exploring the dialectal structure of Ancient Turkic.

I would add only one final point. What could the cause of the discontinuation of the *z*:*r* and *l*:*š* opposition be? It is always hazardous to seek the "causes" of linguistic changes. Nevertheless, I would venture to suppose the influence of a substratum. This language had to have a phonological system in which the opposition of *z*:*r* and *š*:*l* was not present, and it had to be a language which was in a long and close contact with at least some of the Ancient Turkic dialects. Could this language not have been Ancient Mongolian?

[45] It is clear from the examples above that we have two types of lexical isoglosses: in one case the word is present in some dialcets and absent in others, in the second case the word has one form in some dialects and another in other dialects. In the first case, it could be argued that which is not present now could have been present in an earlier period. But the fact that it disappeared in a coherent dialectal area is also a dialectal phenomena. The most important data for *üzäŋi* "stirrup" are the following: a) with labial initial." *üzeŋü* "lestnica" (Tefsir), *üzängülük* "strzemie, strzemiona" (Husrav and Šīrīn), *üzäŋi* (Rabγuzi), *üzängü* (Ibn Muhanna), *üzki* or *üzägi* "échelle, escalier" (Chagatai, Zenker), *yüzängü* "étrier" (ibid), *üzägü* (Leiden), *üzäŋi*, *üzeŋi* (Codex Cumanicus), *üzengi* (at-Tuhfat), *üzängi* (Qawani), *özänge* "stremja, stremjanka, lestnica" (Tatar), *öðänge* (Bashkir), *üzöŋgü* (Kirgiz), *üzeŋŋi* (Türkmen), *üzängi* (Azeri), *üzengi* (Osmanli), *üzäŋgi* (New Uigur), *ùzäŋi*, *òz'ängü* (Turki), *üzeŋi* (Altai), The forms with illabial initial: *ezengí*, *ezengo*, *ezeŋgo*, *ezengolax* (Yellow Uigur), *izäŋgü* (Baraba Radloff I 1538), *izäŋi* (Hakass Sagai, Koibal, Kacha Radloff I 1638), *ɨzeŋe* (Hakass), *ezeŋgi* (Tuva), *isäŋä*, *iŋäsä* (Jakut).

C O R R I G E N D A

p.209 Note 1, line 1: documents of the read: documents of a
p.210 line 7: homogenous read: homogeneous
p.212 line 10: realisations read: realizations
p.213 line 5: (< honosis> [honor] read: (< honosis > honor)
p.214 line 4: opposition read: oppositions
line 5: was weakened read: weakened
Note 13, line 1: during read: at
p.216 line 17: cannot excluded read: cannot be excluded
Note 16, line 2: Anonymous read: Anonymous
p.217 line 8: $_{\text{K}}$töläk read: $^{\text{K}}$tülük
$_{\text{K}}$töleg read: $^{\text{K}}$tölüge
sence read: sense
Note 18, line 1: Mort read: Most
Turkisk read: Turkic
line 2: Turcic read: Turkic
Note 22 last line below: zabernut' read: zavernut'
p.218 Note 24 second line from below: Russa read: Russe
p.219 line 1: still do, have read: still have
line 12: šir- read: šir-
p.220 line 7: occur read: occurs
line 13: script; read: script
Note 29, line 2: 32, cf. read: 32 (cf.
second line from below: kožu ne read: kožu na
p.221 line 15: -ŋ- an read: -ŋ- we find an
line 16: (qōs, qōzoq), we find that read: (qōs, qōzoq) that
p.222 Note 35, line 3: Altai Tölös, Čulym Küärik, Hakass Kaibal read:
Altai, Tölös, Čulym, Küärik, Hakass, Koibal
line 6: skripun nasekomoe žuk vodoljub read:
skripun, nasekomoe, žuk, vodoljub
Note 37, line 4: instrument" read: instrument)"
p.223 line 3: qiz read: qīz
line 8: ᴀЛЬЧИК read: ᴀЛЬЧИК
p.224 line 5: that where Hakass read: that Hakass
line 14: area where there read: area in which there
Note 40, last line: čërxi, čërxux, čërxaxxi read: čërśi, čërxuś, čërxuśśi
p.225 Note 43, line 4: sčra read: šára
line 5: ᴀЛЬЧИК read: ᴀЛЬЧИК
p.228 line 1: iran read: Iran
lines 13-14: available linguistic records read: all available old records;
Note 45, line 2: dialcets read: dialects
line 6: phenomena read: phenomenon
line 7: initial " read: initial:

The manuscript has been finished in 1968