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A new attempt to classify the Turkic languages (3)

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5. Northern Turkic

The Northern Turkic interactive area is mainly characterized by the tendency to rearrange the system of oppositions between (word- and sometimes syllable-)initial *y-*, the affricates and the sibilants. In most of the (sub-)units of Kipchak (except some far western ones), North East Turkic, New Uigur, and Chuvash, Old Turkic *y-* is represented as a sibilant or an affricate. An affricate is attested in older stages e.g. in Volga Bolgar or in the notation *joǵbu* for *yabǵu*. But according to Radloff's data it must be quite young in Kirghiz. The circumstance that in Bashkir *ǵ-* becomes *y-* even in loanwords points to the fact that not the representation of Old Turkic *y-* by a fricative or an affricate itself but the whole complex of sound shifts of dental and palatal fricatives has to be considered as the main feature. These sound change systems seem to have developed individually in each unit. The loss of the opposition *č-* : *y-* in non-Norm Turkic Chuvash and Lena Turkic is a consistent development in accordance with this tendency.

The form *+(I)GIz* of the second person singular possessive suffix in Volga-Ural-Caucasus Kipchak and Chuvash may be a product of analogical processes, which lead to a generalization of *-G* in the second persons in Chuvash, where we find *-U < *-(I)G* for the second person singular, while in Volga-Ural-Caucasus Kipchak only the plural of the second person is involved. There are comparable developments in Lena Turkic and Altay Turkic (see 4.2.1.); at least in Altay dialects we find *G*-forms of the second person plural. In Lena Turkic it is due to a tendency to replace *ŋ* in suffixes in intervocalic position by *G*. These developments may be inspired by a common tendency of "sporadic" replacement of *ŋ* by *g* in the whole Northern Turkic area. We also find *G* instead of *ŋ*

in the Orkhon inscriptions (e.g. Kül Tegin inscription, northern side, line 9: *öltäči ärtigiz*), in Kuman and in Middle Turkic Kipchak sources, see Schönig (1991).

A feature of Northern Turkic, except Chuvash, is the form of the first person plural suffix *+(I)Blz*, which is known from Ancient Turkic, Middle Turkic or from Southern units as *+(I)mlz*. This may be due to areal interaction in an area where drawing an analogy with the personal pronoun *biz* caused the change *m > b* (or the preservation of *b*: *+(I)Blz* being more archaic than the Old Turkic form?). In the same area (and in Khalaj) the accusative of the third person possessive is *+(s)ln* as in Old Turkic. The area in which *qay* and *qaysi* forms of the interrogative pronoun 'which' coexist in one and the same unit (see Schönig 1995c) may somehow be connected to the Northern Turkic area as well.

Mainly in Northern Turkic we find an aversion against the combination *-rk* in syllable-final position. In some cases we see the tendency to dissolve the cluster, mainly in Western Central Asian Turkic and Northern Turkic, e.g. in Tatar *törək* and *qiriq* instead of *türk* and *qırq* 'forty'.¹ In (Lena-)Sayan Turkic we find the tendency to change *-rk* to *-rt*, but to restore it if the cluster is in intervocalic position (e.g. Tuvan *bö“rt* 'cap', *börgü* 'his cap'; Sayan Turkic *qo“rt-* 'to fear', *qorğar*, 'fears').² On the

¹ The latter is *xirix* in Khakas; Radloff has *qiriq* for Tatar, Teleut and Shor, while Baraba, Sagay and Qoybal have alternating forms *qiriq ~ qırq*. Forms like *türk* in Khakas and Tuvan seem to be late imports into the literary languages. Other examples for dissolution of the consonant cluster are found e.g. in Bashkir *börək*, Kazakh *börjk*, Altay Turkic *börük*, Kirghiz *börük ~ börk*; in Western Central Asian Turkic we have Turkmen *börük* versus Uzbek *bürk*. Yellow Uigur has dissolved and undissolved clusters, e.g. *p'eryk* 'cap', but *qorx-*, *qu'r'q-* 'to hurt', see Tenišev (1976a). In the South and sometimes in Kirghiz we sometimes find the tendency to drop *r*, e.g. Kirghiz *berk*, *bek* 'strong, very', Turkish *berk* 'solid', *pek* 'very'; this tendency is very strong in New Uigur, e.g. *bä(r)k* 'solid', *bök* 'cap'.

² For Lena Turkic Yakut, Rassadin (1971: 221) also has *kort-*, *korgar*, which is not attested in BöWB, JakRS, RJakS and Stachowski (1993) gives *kuttan-*. Modern Lena Turkic shows this change in the Yakut particle *bert* 'very, actually'. But it also has dissolved forms like *bärgähä* 'cap' or *bärkä* 'very; powerful'. We sporadically find comparable changes in Buryat Mongol, e.g. *ten'd'er < tenger* 'sky', see Bertagayev (1968: 32).

lexical level we may perhaps assume **qodan* to be a “Northern” word for ‘hare’ (but Yakut *kuobax*), while the South prefers forms of *tabiš-ğan*.

Sometimes even New Uigur shows a closer connection to Northern Turkic. The representation of Old Turkic *sač* ‘hair’ as *čač* may go back to an old Kipchakoid layer, see 3.2.5. The velar form is attested e.g. in literary Karachay-Balkar, in the Altay Turkic literary language, Tuba, Qumanda and Kirghiz *čač*, Balkar *cac*, Karakalpak, Kazakh, Fu-yü, Yenisey Turkic Shor, Altay Turkic Quu *šaš*, Yenisey Turkic Qoybal, Sagay and Khakas *sas* and Lena Turkic *as* (< **sas* < **čač*). Yellow Uigur with *šač* and *sač* takes an intermediary position between the North and the South, while Salar with its **sač*-forms exhibits Southern forms exclusively. Mainly in the West we find palatalized **čäč*-forms, e.g. Tatar *čäč* or Bashkir *säs*; Chuvash *śūs* goes back to **čač* and shows secondary palatalization like Volga Kipchak. Karaim has **sač*-, **čač*- and *čäč*-forms (see KarRPS 470a). In Sayan Turkic, Karagas has something like *če*“š, while Tuvan has *ča*“š ‘ženskaja kosa’. South East Turkic New Uigur units show *čač* (literary language) and *sač*, while Standard Uzbek has *säč*. The Khalaj and Oghuz forms (and perhaps under its influence, Crimean Tatar) go back to *sač*. One can assume that the *sač* > *čač* tendency became active in the North after parts of South East Turkic (e.g. the dialect responsible for the situation in Standard Uzbek) and Yellow Uigur had fallen under its influence; Fu-yü may have older connections via Kipchakoid South Siberian Turkic to Kipchak. The palatalized **čäč*-form is typical for the “Far West” (see 6.), especially for Volga Turkic; the Karagas form is quite young and has developed independently, as attested by Castrén (1857: 144), where we still find a velar form *taš*.

Analogized forms of gerundial negation (e.g. **-mAp* or **-mAyIp* for the gerund in *-B*) are very rare in Northern Turkic and seem to exist mainly in Oghuz and some non-Oghuz Central Asian Turkic units like Uzbek and New Uigur, where they seem to be mostly limited to post-verbal constructions. They may have even developed here in a relatively early period when the older Uzbek-Kazakh unit still existed. But it also seems possible that they came to be as a result of later areal contacts with non-Kipchak Western Central Asian Turkic units. In any case, the fully analogized gerundial negations may be called a Southern Turkic feature.

5.1 From Northern Turkic to pre-North East Turkic

Within the Northern Turkic *y- / ʏ-area we find a section of prominent progressive nasalization. Progressive nasalization of suffix-initial {D, L}-morphophonemes by means of word-final nasals is a widespread phenomenon in Turkic, although it is not regularly noted in the literary languages. The most frequent grammatical suffixes concerned³ are those of the locative, ablative, *DI*-preterite and plural. If we ignore the ablative suffix for the time being, we see that progressive nasalization is most powerful in Lena Turkic, where it appears with the other three suffixes. With suffixes consisting of open syllables (locative and *DI*-preterite) it appears only sporadically outside Lena Turkic (e.g. in Baraba or *Qaŋlı*-Nogay). With the plural suffix *+LAr we find it in Tatar, Central Nogay (sporadically in Aq-Nogay and Baraba), Yellow Uigur and South Siberian Turkic except Southern Altay Turkic (which behaves like Kirghiz). The ablative suffix +DAn (+DIn) is a special case because it ends with a nasal consonant. Consequently, we find nasalization here more often than in connection with the plural suffix, as in Tatar, Bashkir, Nogay, Karakalpak, Kazakh, Baraba, Kirghiz (mainly after possessive suffixes), Altay Turkic (but not consistently in Northern Altay Turkic Qumanda), Yenisey Turkic and sometimes in Fu-yü. Lena Turkic shows a very strange distribution of variants of this suffix with postconsonantal +tAn and postvocalic +ttAn, see Schönig (1993c).

The area of nasalized ablative forms plus that of Lena Turkic contains an area of special phonotactical rule sets. This area includes Bashkir, Kazakh, Kirghiz (sometimes Nogay and Karakalpak) and North East Turkic. Here, besides {D}-suffixes, even suffixes with initial {L} and {N} morphophonemes show different initial consonantal allophones in accordance to the rules of clusilic (in Bashkir: obstruentic) dissimilation after word-final consonants;⁴ in these units the power of clusilic dissimilation is sometimes stronger than that of progressive nasalization. The languages differ considerably with respect to the word-final sounds

³ Derivational suffixes sometimes behave differently, see Schönig (1993c).

⁴ Clusilic dissimilation means that a sequence of two non-clusiles has to be dissolved into a sequence of a non-clusile and a clusile: [-clu] + [-clu] > [-clu]. [+clu]. Clusilic dissimilation was perhaps already in operation in Orkhon Turkic, at least for suffix-initial {D} after stem final [l, n], see Johanson (1979) and Schönig (1993c).

after which this dissimilation takes place. Especially in North East Turkic the internal isoglosses drawn by the rule sets do not follow patterns drawn by other features. Lena Turkic shows some structural similarities with the Kipchak languages.⁵ The Kirghiz-Kipchak units Kirghiz and Altay Turkic show internal similarities, too. Another group consists of Siberian Tatar, Khakas, Karagas, while Shor and Tuvan constitute another group. Bashkir plays a special role by showing obstruentic instead of clusilic dissimilation and by having unified the suffix-initial {D}- and {N}-phonemes in one class. Therefore we find e.g. in Bashkir *ině* instead of Old Turkic *ārdi*, Middle Turkic *ārdi*, *ādi* etc. ‘was’. All the languages concerned show obstruentic plus voice assimilation after voiceless final consonants.

In the eastern part of this “phonotactical area” (starting with Nogay, Karakalpak, Kazakh and Kirghiz) suffixes with initial {M} are affected by clusilic dissimilation, too; here, there is a tendency to recategorize {M} as {B}. Of the units in which initial {M} has become recategorized completely as {B} (i.e. not Tatar, Bashkir, Nogay, Karakalpak, Kazakh and Fu-yü), only Kirghiz and Southern Altay Turkic have *not* kept variants with initial *m* after word-final nasal—the same Kirghiz-Kipchak units for which clusilic dissimilation instead of nasalization of the {L}-morphophoneme of the plural suffix is attested. In South Siberian Turkic we find units with dissimilated B-forms after stem-final consonants which do not cause dissimilation in suffixes with initial {D, L}-morphophonemes.

5.1.1 Pre-North East Turkic

Inside the {M} > {B} area we find a smaller area designated by the category which Benzing (1959b) has called *participium nondum facti*. The

⁵ The Kipchak and the Lena Turkic systems of clusilic dissimilation are still close to the Orkhon Turkic model (see fn. 4 and Schönig 1993c). *l* and *n* are “critical” word-final sounds which often produce *d*-variants of {L} and {N} suffixes. Perhaps these tendencies spread amongst the pre-Northern Turkic units onto other voiced consonants when pre-Lena Turkic was still close to them. After Lena Turkic and some Western Kipchak units had separated, the dissimilation tendencies remained active in the East of the Northern Turkic area and even spread onto the {M} suffixes.

area includes Kirghiz, Siberian Tatar idioms, Fu-yü⁶ and North East Turkic—with the exception of Modern Karagas; the latter seems astonishing but it is another indication of the complicated mechanisms in this small unit's genesis. The category is expressed by three types of suffixes which may derive from a common root: Kirghiz and Lena Turkic have *-A elek* and *-A ilik*, South Siberian Turkic *-GAIAK* and Fu-yü Kirghiz *-GALAš*. If we assume the Kirghiz and Lena Turkic forms to be closer to a common protoform (*if* it existed), it is not so easy to interpret the other forms as regular developments. At any rate, the distribution points to another interesting pattern: As in the case of the phonotactical rules, Kirghiz (as a Kipchak language) and Lena Turkic are bound closer together. The fact that Altay Turkic behaves differently from Kirghiz shows that the final establishment of the category's formal sign must have occurred after the dissolution of Kirghiz-Kipchak, which still may have existed as a unit when the category itself developed. The precursor of Fu-yü Kirghiz must have had closer contacts to the predecessors of South Siberian Turkic, but was then independent enough to create a slightly different form.

A specialty of Kirghiz-Kipchak and Yenisey Turkic is unification of suffix-final consonants of the genitive *+nŋ* and ablative *+DAn*. They became *n* in Kirghiz and *ŋ* in Altay and Yenisey Turkic and in Chulym Turkic Kūärik. Firstly, this feature again demonstrates the strong tendency towards morphophonemical unification and analogization in this area. Secondly, it perhaps reveals the process of differentiation and reformation of a Turkic (genetic or areal) sub-group: An older Kirghiz-Kipchak / Yenisey Turkic unit split into Kirghiz and Kipchakoid South Siberian Turkic. A comparable borderline between Kirghiz and Kip-

⁶ For Fu-yü Kirghiz, Hu & Imart (1987: 35) note that this form is "often" used as a negation of the perfect participle in *-GAn*. Unfortunately the materials do not include text examples of this use. Perhaps the additional meaning 'castrate' of *at* (normally 'horse') in Northern Kirghiz (see KrgRS 77a; Radloff I: 442a, gives for Altay (dialect) and Kirghiz *at* only 'das beschnittene Pferd, Wallach') and Lena Turkic (BöWB 3b) can be considered another common feature of these two units. Both meanings have survived in Lena Turkic even in the denominal verb *atta:-* (< **at+la:-*) meaning 'to provide with a horse' as well as 'to castrate', see Schöning (1988). For *at* in general see Doerfer (1965: 4-5).

chakoid South Siberian Turkic is drawn by the distribution of velarity / palatality of the numeral ‘twenty’, see 3.2.5. and 6.1.

6. Western Turkic and Eastern Turkic

An archaic feature of Lena Turkic leads us to another strongly oscillating borderline beneath the Turkic languages, which divides them into an eastern and a western part. It runs through the Kipchak group and the Central Asian Turkic area; Kirghiz-Kipchak, Siberian Tatar, North East Turkic, Uzbek and South East Turkic mostly behave like Eastern Turkic, Kazakh and Karakalpak often have a transitory status. Lena Turkic is the only Turkic language which has kept the old double meaning ‘god’ and ‘sky’ of Old Turkic *täŋri*. This word appears in the West with back vowels (e.g. in Turkish *tanrı*, Turkmen *taŋri* or Chuvash *tură* < **taŋri* ~ **tağri*), in the East with front vowels. The only exception in the East is Lena Turkic, which shows a velar variant (Yak. *taŋara*).⁷ A comparable distribution can be found for the verb **bīraq-* ‘to let, etc.’, which is preserved in Western Turkic (Western Oghuz, Chuvash and many Western Kipchak units) and Yakut (see Sevortjan 1978: 307).

Whereas the East is more conservative regarding the vocalism of **täŋri*, the West and Lena Turkic are more conservative with respect to the personal plural marking strategies. In Central Asian Turkic and South Siberian Turkic the plural sign +*z* has entered into competition with the plural sign *+*lAr* in the second person. As a result we now find in non-Oghuz Central Asian Turkic—e.g. in Uzbek, Kazakh, Kirghiz and New Uigur—paradigms of politeness. Here, *sen* and the possessive suffix +*ŋ* designate a second person singular of equal or lower rank than the speaker, *senler* and *+*ŋlAr* are used as plural forms; *siz* and +*ŋlz* designate a second person singular of higher rank and have the plurals *sizler* and +*ŋlzlAr*. In South Siberian Turkic the personal plural sign has vanished completely in the second person. There, no paradigms of politeness have developed; for the second person plural forms like *siler* or *sirer* are used as pronouns, *+*ŋAr* as possessive suffixes.

⁷ For *täŋri* see Doerfer (1965: 577-585). Perhaps it belongs to the Turkic words which become velarized in Lena Turkic if they contain velar or guttural consonants, e.g. Yakut *uŋuox* ‘bone’ < **süŋ(g)ök* (see Schönig 1988). A comparable phenomenon is found in Chuvash (see Benzing 1959c: 705).

A third archaic Eastern Turkic feature shows a similar distribution: The treatment of syllable-final *g*-sounds in the keyword **tağliġ*. Contrary to Western Turkic Oghuz (**dağli*) and Western-Central Kipchak with Chuvash (**tawli*) and Kirghiz-Kipchak (*to:lu:*), the Eastern Turkic units have preserved both velar obstruents—again with the exception of Lena Turkic, which has a contracted form *tia* with the deviant meaning ‘mountain forest’, found in Sayan Turkic, as well. In Eastern Turkic the word is preserved as **tağliġ* in Yenisey and Sayan Turkic and Yellow Uigur, while in South East Turkic these sounds show a strong tendency to desonorization (**tağliq*), as can be seen in New Uigur and partly in Uzbek. The far eastern Border Turkic units Salar and Fu-yü have desonorization even of the final *-g* in **tağ* (*daxlix*). Khalaj, with *tā'ğlug*, fits with Eastern Turkic like Lena Turkic often fits with Western Turkic.

Like Western Turkic and Lena Turkic, sometimes Eastern Turkic and Chuvash correspond. A common archaic feature of Eastern Turkic (excluding Lena Turkic) and Chuvash is the survival of the Old Turkic negative present tense copula **ärmāz* (čuv. *mār*). Of Western Turkic, Oghuz together with some Kipchak and South East Turkic units have forms going back to something like **tägül*. For Khalaj *da:g* see Doerfer (1971: 174). In other cases Lena Turkic clearly belongs to the Eastern Turkic area. The Eastern Turkic units have preserved the Old Turkic form of the verb ‘to come to an end, to finish’ as **bü-* (in North East Turkic, Kirghiz, Kazakh, Karakalpak and South East Turkic) and not as (more archaic) **bit-* like in Western Turkic. Furthermore, the Old Turkic word pair *yiltiz* : *yultuz* (‘root’ : ‘star’) is preserved in some North East Turkic units, in Yellow Uigur and in South East Turkic Uzbek and New Uigur; in most of the other modern units the old word for ‘root’ has vanished.⁸ At least in some Eastern Turkic units it is still possible (like in Old Turkic and Middle Turkic Chagatay) to add the passive suffix *-(I)l-* to verbs ending in *l*, e.g. Yenisey Turkic Khakas *alilča* ‘is taken’;

⁸ Uzbek has *ildiz* : *yulduz*, New Uigur *yiltiz* : *žultuz*, Lena Turkic *silis* : *sulus*. In Sayan Turkic we find, instead of forms with regular *y-* > *č-* sound change, forms with *y-* > *s-*, like Karagas *sildis* (see Rassadin 1971: 229-230) or *seltès* (Castrèn 1857) meaning both, ‘star’ and ‘root’. In modern Tuvan the meaning ‘root’ seems to be lost. Furthermore we find the old word for ‘root’ in Yellow Uigur *yiltis*, *yiltis*, Küarik *yildis* and in Kyzyl something like *šiltti* (see e.g. Sevortjan 1974: 350), Soyot *yiltis* (Radloff III 488), Sagay *čiltis* (Radloff III 2087).

modern Western Turkic idioms regularly apply *-(I)n-* in these cases. Lena Turkic uses *-n-* after vowels and *-lln-* after consonants except *y*.

It is easy to see that Eastern Turkic is in many regards closer to Old Turkic than Western Turkic. The aforementioned preservation of *+DIn-* ablatives in e.g. New Uigur, Chulym Turkic and Northern Altay Turkic is another example of Eastern Turkic archaisms. But—as in the case of the personal plural sign *+z*—there are renewals in Eastern Turkic, too. Thus, in Eastern Turkic, mainly in Western Central Asian Turkic, Kirghiz and Kipchakoid South Siberian Turkic (but not e.g. Yellow Uigur) have replaced the form **qač* ‘how much, how many’ by forms of *qanča*. In Sayan Turkic the form **qač* exists as *qaš* in Tuvan. In Karagas we find *qa“š* besides the form *qanja*. The same situation as in Karagas is found in Lena Turkic with Yakut *xačča*, Dolgan *kačča* < **qanča* and Yakut *xas*, Dolgan *kas* < **qač*, cf. 3.2.4.2. Many Eastern Turkic units (except the Lena-Sayanic ones) show a tendency to create new present tense forms by using *-A / p yatır / yatar* forms.

In the same way that some Eastern Turkic features are concentrated in the “Far East”, some Western Turkic features appear mainly in the “Far West”. So, the words for ‘tree’ have archaic forms in the “Far East” and in Khalaj *hağaç* (under Western Oghuz influence < **hiğaç*?, see Doerfer 1995). We find the Western Turkic form e.g. in Oghuz or in Kipchak (e.g. Tatar, Nogay, Kazakh, Karakalpak), but also in Kipchakoid South Siberian Turkic, e.g. Khakas *ağas*, Shor, Altay Turkic *ağas* or Tuba *ağas*; Fu-yü has *agaš*, *agiš*, *ayeš* (Hu & Imart 1987: 15), Salar *ağas*. Chuvash has *yivăš*, which has to be connected to the Western Turkic form. Interestingly, Kirghiz behaves differently from Altay Turkic, like an Eastern Turkic unit, by showing forms which point back to initial **y-*. It has *jiğaç*, which belongs to forms like Lobnor *yığaç* or Yellow Uigur *yığas*. South East Turkic occupies an intermediary position with initial *y-* but a low vowel like New Uigur *yağaç*, Uzbek *yâğâč*. The Sayan Turkic forms Tuvan *iyaš* (with nasal *y*), Karagas *ñeš* (see Sevortjan 1974: 71–72) point to the eastern protoform, too, but show the specific nasalization which sometimes appears with *-ğ-* at the first syllable border.

The distribution of the main auxiliary verbs for denominal verb derivation *et-* and *qıl-* forms a comparable pattern at the same time reinforcing the Lena-Sayan Turkic : Kipchakoid South Siberian Turkic antagonism (see 3.2.5.). Oghuz, Kipchak, Kipchakoid South Siberian Turkic and Salar are more closely connected by the dominance of *et-*; in modern Turkish, *yap-* is offensively taking over the function of *et-*. Mainly in

Oghuz—but with e.g. Tatar evidence, too—the auxiliary verb *ädlä-* has survived in the “Far West”, see Clauson (1972: 57a-b) and Sevortjan (1974: 248-249); it is very frequently used in Azeri. Chuvash has its own unit *tu-*. Mainly in South East Turkic, including Uzbek and New Uigur, we also find the old auxiliary *qil-*, now restricted mainly to contexts of dignity in Oghuz and Kipchak, still widely functioning. It has retained this role in Lena-Sayan Turkic, which does not have *et-*, see 3.2.4.1. In onomatopoeic derivations we especially find **qin-* in Sayan Turkic Karagas and Lena Turkic, see 3.2.4.2.

6.1 The Turkic numerals

The distribution of the forms of some Turkic numerals is somehow connected with the Western Turkic: Eastern Turkic division. The Old Turkic numeral **biŋ* ‘thousand’ has a palatal vowel in Western Turkic; in Turkmen *müŋ* it additionally is labialized. The South East Turkic forms in Uzbek and Uigur *miŋ* can be interpreted as **biŋ*, too; but as shown by Kirghiz *miŋ*, one also encounters palatal forms in Eastern Turkic, which normally has *mīŋ* (e.g. in Nogay, Karakalpak, Kazakh, Baraba, Chulyum Turkic). In North East Turkic, except Chulyum Turkic, the vowel additionally is labialized: *muŋ*; for the situation in Lena Turkic and Karagas see 3.2.4.2.

The forms of the numeral ‘twenty’—if not replaced, see Part 1, fn. 7—have word-final low vowels in many Eastern Turkic units (**yigirma* or *yigirmä*),⁹ only Khakas *čibirgī* and Tuvan *čä:rbi* show high word-final vowels (**yägirmi*; a similar form is reflected in the Babur-name, too). The shortened metathetical form *žibir* in Fu-yü should be traced

⁹ We find velar forms (**yigirma*) mainly in the Eastern Turkic area, i.e. in Nogay, Kazakh (*žiyirma*), Karakalpak, Kirghiz (*žigirma*), in Uzbek dialects, in Chulyum Turkic Küärik (but Radloff’s Küärik has *yigirbä*) and, in a western extension, in Caucasus Turkic Karachay, Balkar and in Kymyk dialects; mainly in Kazakh, Karakalpak and Caucasus Turkic we sometimes find at least one *i*-sound. Palatal low word-final vowels (**yigirmä*) are attested in South East Turkic Uzbek *yigirma* and New Uigur *žigirmä* (for variations in Uigur dialects see Pritsak 1959c: 547), in Baraba *yëgirmä*, Altay Turkic *d’irme*, Radloff’s Altay *yi:rmä* and Qoybal *yibirgä*. Lena Turkic with its **sü:rbe* forms shows a mysterious labial vowel in the first syllable, and its final low vowel may be secondary (as in the case of the third person possessive suffix).

back to a form of the Khakas type, especially if we consider the many other features these two Turkic units share. Finally, there are forms like **yägirmä* in South Siberian Turkic Quu, Qoybal, Shor (*čägirbä*), *yägärbä* (in Radloff's Quu materials) and *yärvä* in Chulym Turkic. In Radloff's Karaïm of Troki the form *igirmä* exists, too, but it may be an independently developed metathetical form of **yägirmi*, which has survived as *ägirmi* in Radloff's Karaïm of Luck and *yägrimi* in Crimean Karaïm (see Radloff 1893-1911 and Xafuz 1995). Mixed front-back forms appear e.g. in Karakalpak (*čigirma*) or in Radloff's Kazakh or Taranchi materials. The various Yellow Uigur sources show *yïïrmo* / *jïïrmo* and *yigirmi* (see Tenišev 1976a: 72, Severtjan 1989: 201). The form **yigirmi* appears in Salar, too, and is the predominant form in Western Turkic, i.e. Khalaj, Oghuz, Crimean Tatar, Karaïm, Volga Kipchak and Chuvash (*širem*).¹⁰

As to the numerals with intervocalic consonants, we do not find such a relatively clear distribution for the numerals either having "strong" forms with doubled or *fortis* or "weak" forms with single or *lenis* consonants.¹¹ Here only a few features observe the Western Turkic : Eastern Turkic borderline, whereas others seem to be bound closer to other interactive areas or even to genetic strings. Thus Chuvash once again constitutes a separate group by showing both series, Khalaj and South East Turkic Uzbek and New Uigur by generalizing the "strong" forms,¹² whereas Sayan Turkic only uses "weak" forms. In Lena Turkic we find weak forms for 'eight' and 'nine' and perhaps 'thirty' (with closed final syllables) and strong forms with doubled consonants for 'two' and 'se-

¹⁰ From a phonetical point of view, it seems plausible that the basic form was velar and lost its velarity later on through the influence of word-initial *y- —and perhaps additionally by analogy to the semantically corresponding **eki* 'two'. But one should keep in mind that this numeral is a composite form consisting of a palatal and a velar part. On the other hand, the distribution of the **yigirmi* forms could easily be explained as the preservation of an archaic form at both ends of *Turcia*.

¹¹ In accordance with Johanson (1986b), I consider the question of fortis and lenis consonants to be directly connected with short and long vowels of the first syllable, so that there is no need to discuss their distribution separately.

¹² This intervocalic consonant doubling occurs in many other words in South East Turkic, as well.

ven' (with open final syllables); there are some similarities with the Lena Turkic system, especially in Yenisey Turkic Khakas and in non-“far western” Kipchak, see the data given below. All these units can be suspected of having developed their numerals by means of internal normalization processes.

For the numeral ‘fifty’ (replaced by analytical forms in Sayan Turkic, Lena Turkic and most Altay Turkic units, see 3.2.2.) the strong form **ällig* mainly appears in Western Turkic (Khalaj, Oghuz, Volga-Ural-Caucasus and Western Central Asian Turkic-Kipchak), while the weak form **älig* dominates in the East, i.e. in Radloff’s Altay Turkic Teleut (*ölü*), in Yenisey Turkic, Chulym Turkic and Kirghiz.¹³

For the remaining numerals with intervocalic consonants the distribution is not so clearly connected with the Western Turkic and Eastern Turkic areas. Only for ‘seven’ may we assume a comparable distribution. Here a weak form **yädi* is dominant in Western Turkic units such as Tatar, Karaim, Crimean Tatar and Oghuz except Azeri; the latter shows *yeddi*, with a doubled—but at least weak—intervocalic consonant, a form which perhaps developed analogously to the neighboring numerals *säkkiz* ‘eight’ and *doqquz* ‘nine’. Of units located further east, Baraba shows *yädi* forms, too. In the Kipchak units Bashkir, Karachay, Balkar, Nogay, Karakalpak and Kazakh as well as in Kirghiz, Chulym Turkic and Yellow Uigur the forms for ‘seven’ can be reconstructed with a single *-t-* as **yäti* (as in Sayan Turkic). The remaining South Siberian Turkic units (Altay Turkic *jäti*, Yenisey Turkic Khakas *čiti*, Shor *čätti*) and Fu-yü (*čiti*) point to a protoform with doubled consonant as in Lena Turkic and Caucasus Kipchak Kumyk. If so, then weak forms of ‘seven’ can be considered a Western Turkic feature. Taking into account the three protoforms **yädi*, **yäti* and **yätti*, we may call the form **yädi* of the Kipchak units in the “Far West” weak (despite the fact that intervocalic *-t-* normally does not become sonorized to *-d-* in any Kipchak

¹³ This is more or less the same area where the analogization of case-suffix-final nasal consonants has taken place, see 3.2.5. We do not know about Altay Turkic because the numeral is replaced here by an analytic derivation. But we may assume that the whole Kirgiz-Kipchak group had **älig*. We have thus gained another feature which ties Kirghiz closer to North East Turkic while at the same time separating it from the rest of Kipchak.

unit), the widespread **yäti* a non-weak form, and Eastern Turkic **yätti* the strong form.

The situation for ‘thirty’ is less illuminating. Most of the Turkic languages, which have preserved this numeral and do not belong to the normalizing units mentioned above, show **otuz* forms with a single intervocalic *-t-*. In parts of Chulym Turkic materials, in Yenisey Turkic Shor and Altay Turkic we find something like **odus*, which can be interpreted as a (weak) form of the **otuz* type.¹⁴ The form *otīs* in South Siberian Turkic Yenisey Turkic Khakas (and partly Chulym Turkic), the *otus* forms in Altay Turkic and perhaps Fu-yü *otus* have to be interpreted as strong forms.

For ‘two’ we find **eki* forms with intervocalic *-k-* in most of the units except Sayan Turkic, Yenisey Turkic Shor and Chulym Turkic, which have weak forms, and consonant doubling in South East Turkic, Lena Turkic and Khalaj (see above); Yellow Uigur displays *išqī, šikī, iškī, šike, ški*. In Kipchak as well as in most Kipchakoid South Siberian Turkic units and perhaps in Fu-yü, *-k-* forms have to be interpreted as strong because of the intervocalic weakening of simple *-k-*. The situation in Oghuz is not that clear, but interpretation as a strong form seems very probable to me.

For ‘eight’ and ‘nine’ we find in the non-normalizing units strong forms of the **sekiz / *toquz* type in Oghuz except Azeri, which has forms with double consonants even for ‘seven’ (see above); Yellow Uigur has *sekes, sekīs, sak’īs, sa:qīs; to’qīs*. In contrast, the Kipchak languages and South Siberian Turkic have weak forms with intervocalic *-G-*sounds. Of the Kipchak units, Baraba has a strong form for ‘eight’ but a weak one for ‘nine’; Crimean Tatar, on the other hand shows strong forms (perhaps a result of Turkish influence).

¹⁴ Here I would like to briefly specify what has been said about the loss of the verb *toġ-* ‘to give birth / to be born’ in 3.2.3. Thanks to my dear colleague Irina Nevskaya, I learned that I had forgotten to mention that such a verb still exists not only in South Siberian Turkic Altay Turkic but also in Yenisey Turkic Shor (see e.g. Radloff III: 1422 *toġ-* ‘gebären’ in Altay Turkic Altay (dialect), Teleut and Yenisey Turkic Shor).

7. Conclusion

I hope that I have been able to demonstrate that a meaningful classification of the Turkic languages cannot be based on genetic features alone. In the course of time, genetic groups like Oghuz, Kipchak, South East Turkic etc. underwent internal differentiations and broke up into subgroups which separated from each other, entering linguistic interaction with other Turkic as well as non-Turkic groups. During their respective development, these subgroups were able to retain some of their genetic features or even to transfer them by means of areal interaction onto other units and subgroups; other features were either modified or completely lost under the influence of other units of the interactive area to which they belonged. Good examples of such developments are e.g. the interaction between Chuvash and Kipchak, Khalaj and Western Oghuz, Oghuz Turkmen and Western Central Asian Turkic or the shaping of North East Turkic / South Siberian Turkic. Especially in the latter case, we witness the evolution of a new areal group of Turkic through the interaction of different genetic subgroups (at least Kirghiz-Kipchak, Yenisey Turkic, Sayan Turkic and Lena Turkic) and non-Turkic units (at least Mongolic, Samoyedic, Yeniseyic and, partly, Tungusic). At the same time, we observe the dissolution of Kirghiz-Kipchak. Other areal formations, such as the Oghuz-Chuvash or the Kipchak-Lena Turkic connection, are more enigmatic and deserve more detailed investigation. It is worth reiterating that genetic groups may also result from old areal interaction, i.e. perhaps they, too, originated as areal groups.

I have tried to present my classification attempt in a way which enables the reader to understand the assumed underlying processes of genetic heritage and areal interaction. The matter, however, is so complex that I can not be sure whether I have been completely successful. Having presented all these data, I should now summarize my assumptions about the development of New Turkic coherently—even if I could only take into account a relatively small percentage of New Turkic data and have not discussed the Middle Turkic and Ancient Turkic materials in very much detail. But having occupied the reader's attention long enough and tried the editor's good will to publish such an extended paper, I have decided to do that in a separate article.

I would be very satisfied if this paper gave some new impulses to the discussion about the classification of the Turkic languages.

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