

## THE INTERNAL DIVISION OF MODERN TURKIC AND ITS HISTORICAL IMPLICATIONS

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In this article I try to establish a model for the linguistic internal division of Modern Turkic. The model is based on synchronic data, but like previous models it tries to integrate the diachronic dimension. Besides phonetical data, it also features data from the fields of morphology, lexicology and syntax. The distributional patterns of these features are compared with each other under diachronic and geographical aspects. As a result we can define some subgroups of Turkic of different hierarchic rank. Furthermore these subgroups can be of different origin. Some of them are tied together by common linguistic features which seem to be transmitted within the languages of this group from one time level to another and constitute their common genetic heritage. Such groups I call genetic (sub-)branches, e.g. the Oghuz branch, the Kipchak branch, the Bulghar Turkic branch etc. Other subgroups of Turkic are clearly composed of languages from different branches, which have formed new territorial units and went into areal interaction. Such an areal group is, e.g., South Siberian Turkic. In the second part of the article I try to put processes of internal differentiation of genetic branches into subbranches and the formation and dissolution of areal groups in temporal relation to historical facts and developments.

*Key words:* Proto-Turkic, areal features, classification

### 1. Common Turkic and Norm Turkic

A feature is called Common Turkic if it is attestable in all Turkic languages, or if its absence in one, some, or most of them is explicable, e.g. the verb *\*al-* 'to take', the numerals from one to ten, or the preterite in *\*-DI*. Some other items which were elided or considerably changed in some modern languages can also be reconstructed as Common Turkic, e.g. pronominal *-n*, the forms of the tens as found in Old Turkic and Chuvash. It is not possible to list all the other probably Common Turkic features here. Since Common Turkic features are not distinctive, they are not helpful for an internal division of *Turcia*. Thus other parameters must be developed.

Norm Turkic is statistically defined. A feature is called Norm Turkic if it appears in a maximal group of linguistic units, i.e. not only in languages such as Turkish, Azeri, Tatar, Bashkir, Kazakh, Kirghiz, Uzbek, Turkmen and Modern Uighur,

but even in quite exotic languages like Tuvan and Saryg Yugur. Norm Turkic is bound together by a large set of common features constituting a genetic string. Norm Turkic languages show more or less complete loss of Ancient Turkic word-initial *\*h-*, have kept the opposition *č- : y-* in word-initial position, show a nominal plural suffix *+lAr*, possess a gerund in *-p*, display cognates of the conditional suffix *-sAr*, and have a third person imperative suffix going back to *-ZUn*, see also table 3 on p. 89.

## 2. Central Turkic and Border Turkic

I consider all Turkic languages as Central Turkic that show the sound change Ancient Turkic *-d(-) > -y(-)*, i.e. the classic feature illustrated by the (Old Turkic) word *adaq* 'foot'. Other features of Central Turkic are, e.g., forms of the personal interrogative pronoun reconstructable as *\*kim*, use of the verbs *toğ-* 'to give birth ~ be born' and *ket-* 'to go away', replacement of the first person plural ending *-mIz* by *-K* in the *DI*-preterite and the conditional, and existence of the suffix *+lIK* and of the privative suffix *+sIz*. All members of Central Turkic are Norm Turkic. Non-Central Turkic units are called Border Turkic.

Border Turkic consists of the three non-Norm Turkic units and some Norm Turkic ones. For Old Turkic *-d(-)*, non-Norm Turkic Chuvash shows *-r(-)*, Khalaj has *-d(-)* and Lena Turkic (Yakut and Dolgan) *-t(-)*. The Norm Turkic constituents of Border Turkic are Sayan Turkic (with *-d(-)*), parts of Chulym and of Yenisey Turkic,<sup>1</sup> Saryg Yugur and Fu-yü (with *-z(-)*). Especially Yenisey Turkic and Fu-yü belong closer together, see Schönig (1998b). Saryg Yugur additionally shows similarities to Sayan Turkic, especially to Tuvan. Both the *azaq-* and the (*h*)*adaq-* group represent final Old Turkic *-G*-sounds (*tagliğ* 'mountainous') and many archaic features (see 2.2–2.2.2). Besides, in Border Turkic languages many of the above-mentioned Central Turkic features are also missing. Especially Chuvash, Khalaj and North East Turkic (South Siberian Turkic and Lena Turkic) have postvocalic aorist forms corresponding with Old Turkic *-yUr* or a form of the word for 'stirrup' which seems to be more archaic than the Old Turkic form;<sup>2</sup> see also tables 4 and 5 on pp. 90–91.

### 2.1. The internal division of Central Turkic

Central Turkic shows three main branches: Oghuz, Kipchak and South East Turkic; they are tied together internally by genetic sub-strings. Salar and Altay Turkic together with parts of Chulym and Yenisey Turkic (see note 1) belong to Central Turkic by sharing the sound change *-d(-) > -y(-)*, but at the same time exhibit many exotic

<sup>1</sup> The Shor dialect of Khakas, the Kondoma dialect of Shor and the Lower Chulym Turkic dialects show *\*-d(-) > \*-y(-)*.

<sup>2</sup> Khalaj has *-yUr* (Doerfer 1988), Lena Turkic *-I:r*, Khakas *-ir*. In Shor and Sayan Turkic the quality of the stem-final vowels determines the quality of the contraction product. For Chuvash see Johanson (1976, p. 135).

and archaic features. Thus Salar has, e.g., a genitive in *+niyi*, see also tables 4 and 5 on pp. 90–91. The distribution of nasality of the intervocalic consonant in the cognates of *\*süyök* 'bone' and of the forms of the agent noun of the type (*verbal noun*) *+čI* correlate directly with the three branches; additionally they give a hint to the Kipchak background of Uzbek, see table 1 on p. 89.

The branches can be internally differentiated by features expressed by the classic keyword Old Turkic *taglıg* 'mountainous'. Its development clearly demonstrates that Kipchak, which as a whole shows the feature *tag* > *taw*, has two main sub-branches: Western-Central Kipchak (*tawli*) and Kirghiz-Kipchak (*to:lu:*). The distribution of forms of the verb for 'to cry' underscores this division, see table 1; furthermore Kirghiz-Kipchak (Kirghiz and Altay Turkic) exhibits features in the field of phonotactical rule sets different from those of other Kipchak languages, see 4.4.1. Western-Central Kipchak consists of Western Kipchak, i.e. Far Western Kipchak (Karaim and Misher Tatar), Volga-Ural-Caucasus Kipchak (Tatar, Bashkir (= Volga-Ural K.), Karachay-Balkar and Kymyk (= Caucasus K.), and Central Asian Kipchak (Karakalpak, Kazakh). Crimean Tatar is a Western Kipchak language. It was under strong Western Oghuz (Ottoman Turkish) influence. Volga-Ural Kipchak was the main Turkic contact language for Chuvash. Both *hävə*, e.g., *+(I)GIz* instead of *+(I)ŋIz* as the second person singular possessive suffix, and show palatalised forms of *sač* > *čač* > *čäč* 'hair', see also 4.4. Central Asian Kipchak is characterised, e.g., by *\*menen* forms to express 'with' (exhibiting a tendency to become enclitic), whereas the other Kipchak sub-branches mostly show *\*(+)mlnAn* forms (besides non-suffixal *\*bi(r)lä(n)* forms in all branches). Kirghiz-Kipchak took part in the development of North East Turkic, during which it gained some special features through areal interaction, see 4.4.1. Mainly Central Asian Kipchak, Kirghiz-Kipchak and South Siberian Turkic were under Oirat influence from the fifteenth until the eighteenth century. The Siberian Tatars, who later became subject to South Siberian Turkic influence, seem to be a mixed group of Central and Volga-Ural Kipchak type. Additionally, there are Kipchakoid elements in South Siberian Turkic, see 4.4.2.3. Especially Lena Turkic and Kipchak weaken *p* and *k* while they retain *t* in intervocalic position and additionally exhibit some structural similarities in the field of phonotactic rule sets, see 3.2. The development of first syllables consisting of a palatal vowel and a weak consonant, of which at least one element is labial, additionally underscores the inner division of Kipchak. These sound groups have normally converged in *üy* and became *öy* in Volga-Ural Kipchak; Far Western Kipchak shows variants with sometimes unetymological final *-w*, see Berta (1989). In Kirghiz-Kipchak we find *üy* besides contracted forms with long labial vowels. Of South East Turkic, Modern Uighur and Uzbek behave like Western-Central Kipchak languages, but Uzbek has not consistently changed *äv* to *üy*. Oghuz, especially Western Oghuz, is more conservative with its preservation of *äv*; Oghuz and some Modern Uighur dialects together with the non-Norm Turkic units exhibit a tendency to preserve nasality of the intervocalic consonant in *\*süyök* 'bone' (Azeri *sümük*, Turkmen *sünk*).

As in the cases of the afore mentioned sound groups and the agent noun, the intermediary position of Uzbek between Kipchak and South East Turkic is illustrated

by its (literary) form *tâgli*, which represents a pre-modern Western-Central Kipchak form *\*tağli*. Other features such as the neutralisation of the opposition *i : i* (presumably under Iranian influence) and loss of pronominal *n* connect it with South East Turkic on the level of areal interaction. Today South East Turkic is best represented by Modern Uighur. Unlike Uzbek, it has the ablative suffix *+DIn* instead of *+DAn*.<sup>3</sup> South East Turkic resembles Kipchak in many respects. With respect to the Northern : Southern and Western : Eastern divisions of Turkic (see 4.3 and 4.4), South East Turkic often takes a transitory position and shows more Eastern Turkic features. Modern Uighur has some features in common with Khalaj, see 3.3.

In addition to the features already mentioned Oghuz – like Chuvash, see 3.1 – has preserved old suffixes of the structure *+(C)V...* (e.g. a genitive suffix in *+(n)Iŋ* as in Old Turkic), but additionally also produced new ones of the same type. Whereas in most branches of modern Turkic case-marked *\*qay*-stems are used as interrogative pronouns for places, directions and the like, Oghuz has forms like Turkish *nerede* ‘where’ (derived from *ne* ‘what’), while Azeri shows the same derivational element *+ra* in *hara+* on a *\*qa(ñ)*-stem, see also below. Modern Uighur has *nädä* and *qayärdä*.

Oghuz can be divided into Western and Eastern Oghuz (mainly Turkmen and Khorasan Turkic).<sup>4</sup> Western Oghuz employs a binding consonant *y* in the postvocalic forms of, e.g., the dative in *+(y)A* or the gerund in *-(y)Ip*, whereas Eastern Oghuz Turkmen has long vowels as a result of contraction. Western Oghuz has labialised cognates of Old Turkic *bädük* ‘big, great’. Turkmen has preserved long vowels, whereas in Western Oghuz they only survived sporadically but reflexes of long vowels are visible on the following consonant, see 2.2.

Azeri has had intensive interaction with Persian, Turkish had additional interaction with Greek and other Indo-European languages of the Balkans, and Gagauz with Slavic languages. As the result of such interaction we find, e.g., elaborate systems of complex conditional forms or subordinated clauses with finite predication (the latter mainly in Azeri and Gagauz). Within Western Oghuz the transition from Turkish to Azeri can be demonstrated by features such as the preservation of low vowels, e.g. Old Turkic *bädük* > Azeri *böyük* : Turkish *büyük* ‘great’, the penetration of the 1st person plural marker *-(I)K* into paradigms other than those of the *DI*-preterite and the conditional in Azeri, and one also finds nasalisation of word-initial *\*b-* in Azeri, when a nasal consonant follows (like in most other Turkic languages). As for originally postpositional elements of the structural type *(b)i(r)lä(n)* designating ‘with’ in Western Oghuz, the form *ilä* predominates in the literary languages, while some Anatolian dialects also show *bilä* and *birlän*. At the same time, enclitic forms of the type *+(y)lä(n) ~ +(y)lA(n)* can be found in all types of sub-standards and dialects – as well as in neighbouring Khalaj.

Other features appear in Gagauz, Azeri and Turkmen, but are missing in Turkish, e.g. the postvocalic accusative in *-nI*, and a negative aorist in *-mAr*, which has penetrated the paradigms of these languages. Quite a number of these features are

<sup>3</sup> The form *+DIn ~ +DIŋ* has also survived in Lower Chulyum Turkic and the Quu dialect of Altay Turkic.

<sup>4</sup> For a more detailed internal division of Oghuz see Doerfer (1990).

common to the remaining Central Turkic languages, e.g. cognates of the Old Turkic verb *qadı̄t-* 'to return' and reflexive pronouns based on *öz+*. To express impossibility Turkish and Gagauz have preserved the Ancient Turkic biverb *-A u-* in *-(y)AmA-*, whereas they use *-A bil-* to express possibility. In Azeri (im-)possibility is expressed by the biverb *-A bil(-me-)* as in Kipchak, South East Turkic and Chuvash; Turkmen also uses forms containing the *-p-gerund*.

Turkmen exhibits features separating it from Western Oghuz and tying it closer to other Central Turkic and *-GAN-*Turkic languages. In the case of the sound group *äv*, Turkmen tends to shift the feature [+labial] onto the vowel, so that we often encounter results like *öy*. Unlike Western Oghuz, we sometimes find preservation of *G* after the first syllable border. Furthermore Turkmen, like most *-GAN-*Turkic languages (see 4.1), has replaced the participle in *-mİš* by *-An* (< *-GAN* ?), shows postvocalic *-y-* forms of the vocalic gerund, exhibits *\*-mAyIn-* forms instead of formally analogised negative *-mA-(yI-)B-* forms in syntactically free use, and shows the same subject marking strategies in relative clauses, the headword of which is not referentially identical with the subject of the relative clause. Some of these Turkmen features are made up of Oghuz material shaped according to Central Asian Turkic patterns. Thus, although Turkmen has reflexes of Old Turkic *n̄*, it shows a *y-* form *haysi* for the attributively used Old Turkic pronoun *qa:ño* 'which' instead of Western Oghuz-Khalaj *han-* forms. In Turkmen the intraterminal participle *-yAn* is contrastively marked against the perfect participle *-An* by means of the same marker *y* which is used to mark the renewed present tense form *-yAr* against the aorist form *-(A)r*. Thus Turkmen uses the sign of intraterminality common to Oghuz and derived from *\*-A yori-* similar to the way Kipchak(oid) and South East Turkic languages use the marker *\*-A tur-*. The Old Turkic verb *i: d-* and its derivation *i: du ber-* 'to send', which have no cognate in Western Oghuz, are represented in Turkmen by a (non-auxiliary) verb *ibär-* 'to send' and an auxiliary verb *goyber-* < *\*qoyu ber-*. Furthermore Turkmen has adopted at least parts of the system of biverbal constructions expressing kinds of action (German Aktionsarten) from Central Asian Turkic. All these features were preserved in or passed over to Turkmen by means of areal interaction in the Central Asian area, see 4.2, see also Schönig (1997a–b).

## 2.2. Oghuz and Salar as Archaic Central Turkic

A set of archaic features mainly appears in Border Turkic and in the Central Turkic units Oghuz and Salar. Thus, the most archaic forms of the Old Turkic word *älig* have survived with the meaning 'hand' in Lena Turkic, Chuvash, Fu-yü, Saryg Yugur and sporadically in Modern Uighur, where they are still bisyllabic. Oghuz, Khalaj and Salar have preserved a short form *äl*. In most New Turkic languages *älig* is replaced by *qol* meaning both 'hand' and 'arm'. In the case of the word for 'lip', Oghuz, Khalaj, Chuvash and Salar have *\*to:taq*, Lena Turkic has *uos* (< *ağiz* [+tokanie] ?), and Saryg Yugur has *dəmsəy* in contrast to the other languages, which mostly have *ärin*. Long vowels are preserved as long vowels or diphthongs in Lena Turkic, Khalaj and Turk-

men; especially \**ö*: has survived as (*ä*)*va* in Chuvash. Western Oghuz, Sayan Turkic, Salar and Saryg Yugur show at least reflexes of vowel length on the following consonants, see Johanson (1986). The *-mlš*-participle is still used in Western Oghuz, Lena Turkic, Khalaj and Salar as a finite form; functionally narrowed it has survived in some Central Asian Turkic languages. Case suffixes of the type *+(C)V...* mainly survived in Oghuz and Chuvash and can be found only sporadically in other Turkic groups, e.g. the accusative suffix *+(n)I* in Lena Turkic or the dative suffix *+(G)A* in Salar. See also table 4 on p. 90.

### 2.2.1. Common features of Oghuz and Border Turkic

Common features especially of Oghuz and Border Turkic are, e.g., survival of the Ancient Turkic word \**hürüñ* 'white' (Lena Turkic, Karagas, Khalaj and Anatolian dialects), preservation of the nasality of Ancient Turkic *ñ* (at least partly in Khalaj, Lena-Sayan Turkic and Oghuz) and of *-ŋ* in the case of \**süñök* 'bone' (Oghuz, Chuvash, Lena Turkic and Modern Uighur dialects). Regarding the sound group \**äv* a round consonant can still be found in Western Oghuz, Khalaj, Yenisey Turkic and Fu-yü. Turkish, South Siberian Turkic, Chuvash and Lena Turkic are connected by absence of reflexive pronouns based on *öz+* and of the verb *qayt-* < *qadit-* for 'to return' as in remaining Central Turkic, see table 5 on p. 91.

### 2.2.2. Common features of non-Norm Turkic and Oghuz

Another set of features is absent in Border Turkic but attested in non-Norm Turkic and Oghuz. All non-Norm Turkic and (with only a few exceptions) Oghuz languages have preserved cognates of Old Turkic *-gUr*-causatives and have not developed *-GVz*- and *-GVt*-forms like most other New Turkic languages, see Schönig (1999a). Only Western Oghuz and Khalaj use *-DOK*-participles in relative clauses regularly. Khalaj, Turkish and Lena Turkic have preserved the verb *bul-* 'to find', which the other units have replaced by *tap-*. Khalaj, Lena Turkic and Oghuz still use *-mAdOK* as a negative participle, but only Gagauz and Lena Turkic still show the Ancient Turkic opposition between the positive and negative participles *-mlš*, *-DOK* : *-mAdOK*. Only Turkmen and Lena Turkic employ *-ŋ* exclusively to designate the imperative of the second person plural. Different from *-GAn*-Turkic (see 4.1), the cognates of Ancient Turkic *täñri* appear in Oghuz, Chuvash and Lena Turkic with back vowels, see Doerfer (1965, pp. 577–585). Oghuz, Khalaj and Chuvash exhibit biverbal forms for 'to begin to x' consisting of a verbal noun in *-mA(K)* of the verb meaning 'x' and *bašla-*, and show a common necessitative suffix [Oghuz *-mAll*, Chuvash *-mAllÄ*, Khalaj *-mAlU(G)*]; the corresponding forms in Tatar or in Uzbek may result from Ottoman language export.

### 3. Non-Norm Turkic

Non-Norm Turkic consists of Chuvash, Lena Turkic and Khalaj. Chuvash is most deviant from Norm Turkic. Lena Turkic and Khalaj show fewer non-Norm Turkic features but often special representations of Norm Turkic features, see also table 3 on p. 89.

#### 3.1. Chuvash

Chuvash is the only recent representative of Bulghar Turkic. It has a nominal plural suffix *+sem* and a suffix *-(t)Ār* for the third person of the imperative. Instead of the gerund in *-p*, a form *-sA* appears, which perhaps is connected with the Old Turkic conditional suffix *-sAr*. It behaves like Border Turkic by showing Old Turkic *-d(-) > -r(-)*, survival of Old Turkic *\*ō:* as *(ā)va*, preservation of the word for 'hand' in bisyllabic *alā*, a *\*kām*-form of the personal interrogative pronoun, and by employing *kay-* 'to go away' and *šura-* 'to give birth' (< *\*yara-*) instead of *ket-* and *toğ-*, use of the first person plural suffix *+mlz* in the *DI*-preterite, and forms of postvocalic aorists reconstructable as *-yUr*. Like Oghuz and Lena Turkic it has a velar cognate *turā* < *taŋri* ~ *tağri* of *tāŋri* 'god; sky'. The special position of Chuvash is underscored by numerous individual features, e.g. the verb *yēr-* for 'to cry', the auxiliary verb *tu-* to derive verbs from nouns, the use of *tavrān-* 'to return' (Old Turkic *tāgzin-*), and a base form *xā+* for the reflexive pronouns.<sup>5</sup> See also tables 4 and 5 on pp. 90–91.

With the form *yār-* of the verb *i:d-* 'to send' and the representation of Old Turkic *y-* as a spirant *š-* (< *ǰ-*) Chuvash seems to belong to the Northern Turkic area. But one must keep in mind that the latter correspondence in Chuvash may have another source than that in the other languages of this areal group, see Róna-Tas (1982a). Other features of Northern Turkic are missing in Chuvash, see 4.4. Like Eastern Turkic, Chuvash has preserved a cognate of the Old Turkic negative present tense copula *ärmāz* (> Chuvash *mār*). Chuvash exhibits Western Turkic forms for 'tree' (*yivāš*) and for 'twenty' (*širēm*), has preserved the verb *biraq-* 'to let etc.', and elides the final *-G* of the second syllable in *tagliḡ*; see also table 6 on p. 92.

Chuvash shows some common features with Border Turkic languages and Oghuz such as preservation of nasality of *-ŋ-* in *\*sūŋök* > *šāmā* 'bone', no overt formal connection between the opposing forms in the marking system of perfective *versus* cursive participles, the word *tuta* for 'lip', preservation of the Old Turkic genitive suffix type with *(C)V...-structure*, a necessitative suffix *-mAllā*, and *-mA pušla-* to designate the beginning of an action.<sup>6</sup> Other features are limited to Oghuz and Chuvash, e.g. the word for 'navel' *kāvapa* < *\*kō:bāk*. Especially Western Oghuz is tied

<sup>5</sup> Additionally Chuvash can be individualised by typically Bulghar Turkic features like the sound changes *\*z(-), \*d(-) > -r(-)*, *\*š(-) > -l(-)*, the use of *ku* instead of *bo/bu* as the demonstrative of proximity, the meaning 'white' of *\*sariḡ* instead of 'yellow', two different possessive suffixes of the third person, and ordinal suffixes of its own.

<sup>6</sup> An alternative form going back to *\*A bašla-* connects Chuvash with many Kipchak languages.

closer to Chuvash by the existence of the verb *barin-* 'to take shelter'; 'to lodge', which is cognate to Chuvash *purǎn-* 'to live'. The words for 'fishing pole' in Turkish (*olta*) and Chuvash (*vǎlta*) may belong in this series, too.

Chuvash had intensive linguistic interaction with Kipchak. Both groups show the development *tag* > *taw* (Chuvash *tu/tǎv+*), use of *\*-A turur* as a renewed present tense (intraterminal) finite form (but not in the participles), and similar biverbal constructions. Furthermore the Chuvash *nomen agentis* in *-ǎvšǎ* resembles Kipchak *\*-UwčI*. For further common features see 2.1. Furthermore Chuvash has experienced strong influences from Volga Finnic and Russian. It also exhibits many Tatar loanwords, some of which are ultimately of Middle Mongol origin. Besides direct copies from Middle Mongol, we also find Chuvash–Mongolic correspondences going back to early Bulghar Turkic–Mongolic language contacts presumably in Southern Siberia from at least the second century BC until the fourth century AD.<sup>7</sup> Perhaps some correspondences between Chuvash and North East Turkic, especially with Lena Turkic, may also go back to the Siberian phase of Bulghar Turkic, too. Thus, Lena Turkic and Chuvash show a common set of features such as preservation of the Old Turkic low vowel of the second syllable of *olor-* 'to sit down; to sit' and in some suffixes, and loss of the word-initial opposition *č-* : *y-*. Furthermore, the Old Turkic verb *tašiq-* 'to go out' has survived in Yakut as *tagis-* or Chuvash *tux-*, i.e. in forms much closer to Old Turkic than the form *čiq-* in most of the modern Turkic languages; in Karagas we find *ta"š-* 'to break its banks (river etc.)'. Chuvash has some features in common with the Lena-Sayan Turkic area, e.g. the quite frequent sound change *\*a* > *i* in first syllables and the absence of *\*-nčI*-ordinals. Chuvash and Sayan Turkic do not employ a *-K*-marker for the first person plural. Another important hint indicating early Bulghar-Siberian Turkic connections is the shape of the words for 'stirrup', see 4.4.2.

### 3.2. Lena Turkic

In Lena Turkic the gerund in *-p* is replaced by *-An*, but the suffixes of the conditional and the third person singular of the imperative *-TAr* and *-TIn* can be connected to the Norm Turkic forms of Old Turkic *-sAr* and *-zUn* by the sound change (*\*z* >) *\*s* > *t* (as in Buryat). Besides *+lAr* we find additional plural forms like *+t* or *+tAr* < *\*+t+LAr* (see Schönig 1988).

Lena Turkic exhibits an array of Border Turkic features, e.g. a cognate *uñuox* of *\*süñök* 'bone' with preserved *-ŋ-* and a velar cognate *tañara* of Old Turkic *täñri*, which has kept the double-meaning 'god' and 'sky'; for Lena Turkic's North East Turkic features see 4.4.2. Together with Sayan Turkic it forms the Lena-Sayan Turkic area and exhibits closer ties to Karagas, see 4.4.2.2. Lena Turkic in the extreme Northeast and Turkish in the extreme Southwest of the Turkic area are connected by use of the verb *\*iön(ün)-* 'to turn around, return, go home' and survival of the reflexive pronoun *käntü* (known from Old Turkic) as *kini*, which is used as the personal

<sup>7</sup> Non-Bulghar Turkic *-d(-)* : Chuvash, Mongolic *-r(-)*, *-z(-)* : *-r(-)*, *y-* : *\*j-* ~ *č-*, *ti-* : *či-*, or lack of a pronominal *-n* in the nominative of the first and second person singular pronouns.



pronoun of the third person. Besides, Lena Turkic displays a wide variety of individual lexical, phonetic and morphologic specialities.<sup>8</sup>

There seem to be some special connections between Lena Turkic and Kipchakoid South Siberian Turkic, especially Khakas. It is still unclear whether they go back to older connections, or came into existence only during the formation of the North East Turkic area. Lena Turkic has some special features in common with Kirghiz(-Kipchak), e.g. extensive vowel harmony, the form of the *participium nondum facti* (see 4.4.1) or the additional meaning 'castrate' of *at* 'horse' (as in Fu-yü and the Altay dialect). For the connections between Lena Turkic and Kipchak in general see 2.1.

Lena Turkic belongs to the Northern Turkic area. It exhibits Eastern Turkic features as well as Western Turkic ones. As to the numerals with intervocalic consonants, Lena Turkic has its distinctive profile, see 4.3. Lena Turkic is part of a young North Eastern Siberian interactive area including mainly Tungusic and Mongolic languages, from which it has received some strong non-Turkic impulses, see Schönig (1988, 1990 and 1993a). See also tables 4–7 on pp. 90–93.

### 3.3. Khalaj

Khalaj, as the only Turkic language that has consistently preserved word-initial Ancient Turkic *h-*, shows a third person imperative suffix *-tA* and has no syntactically free gerund in *-p* in syntactically free use. But its plural and conditional suffixes are Norm Turkic. Individual features are, e.g., a non-Norm Turkic locative in *+ča*, a genitive in *+(U)ŋ*, and a negative present tense copula *da:ğ*. Khalaj had long-lasting interaction with Oghuz. A common Modern Uighur-Khalaj set of features consists of the use of the agent noun *-GUĖI*, of the necessitative suffix *-GUIUK*, of *-GAII/-GIII*-forms as the connecting element in constructions with *başla-* to express 'to begin to x', and generally doubled intervocalic consonants in numerals. Eastern Turkic features of Khalaj such as the preservation of the final *G*-sounds in *tā'gluğ* may belong here, too. On the other hand, the numeral for 'twenty' exhibits the Western Turkic form *\*yigirmi*.

For the numerous Border Turkic features of Khalaj see 2 and 2.2–2.2.2 and tables 4 and 5. Khalaj shares other features with Oghuz, especially Western Oghuz, with which it developed in close areal contact. Both branches have preserved the negative aorist in *-mAz* as in Old Turkic instead of today's more common *-mAs*,<sup>9</sup> and present tense forms going back to *\*-A yori-*. Especially, Western Oghuz-Khalaj interaction is indicated by the systematic development *\*b- > v-* or *Ø-* in the words *var-* 'to arrive', *var* 'exists', *ver-* 'to give' and *ol-* 'to be; to become',<sup>10</sup> survival of attribu-

<sup>8</sup> It shows, e.g., *köt-* for 'to fly', a deviant word for 'mouth' (see Schönig 1988), survival of Old Turkic *qırqın* '(slave-)girl' in the plural form *kirgıttar* to *kı:s* 'girl', and a comitative suffix *+II:n* going back to Old Turkic *+IXGXn* (see Schönig 1991).

<sup>9</sup> Chuvash has preserved this form only in the negative present tense copula *mar < ärmüz*. The Lena Turkic *-BAI*-forms could also have developed after the sound change *-z > -s*.

<sup>10</sup> In Saryg Yugur and Salar we sporadically find *ol*-forms of *\*bol-*, but only as one of a few alternatives like *bol-* or *vol-*, see Tenišev (1976a and 1976b). In Salar the sound change *b- > v-* also appears with the same set of monosyllabic verbs, see Dwyer (1998, p. 61).

tively used *qan*-forms going back to the Old Turkic pronoun *qa:ño* 'which', and regular use of possessive marked *+DIK*-participles as verbal cores of relative clauses. Some archaic features are preserved mainly in Khalaj and Turkish and a few other units, see 2.2.2. For 'hair' Khalaj has a Southern Turkic *sac̣*-form. For elements expressing 'with' see 2.1. See also tables 4–7 on pp. 90–93.

#### 4. The interactive areas

Besides genetically related groups we find quite a number of interactive areas where Turkic languages of different genetic strings exchanged linguistic features with each other and with non-Turkic languages. As mentioned before, Chuvash had intensive interaction with Volga Kipchak, in which Volga Finnic languages also were involved. Khalaj copied a lot of material from Oghuz (mainly Western Oghuz) and Persian. Other interactive areas contain far more Turkic languages of various genetic branches.

##### 4.1. -GAN-Turkic

The Central Turkic sub-branches Kipchak and Southeast Turkic together with South Siberian Turkic form the -GAN-Turkic area; Eastern Oghuz Turkmen and Salar have a transitory position and exhibit at least some features of this grouping. Its main feature is the use of the participle in -GAN instead of *-mİŝ* in finite and attributive positions, see also table 5 on p. 91. As the negative counterpart of the gerund in *-p* and the vocalic gerund, the form *\*-mAY(In)* is in use. Kipchak(oid) and South East Turkic languages use *\*-A tur-* to mark intraterminality on participles (*\*-GAN : \*A turğan*) and present tense forms (*-(V)r : \*A turur*), whereas Turkmen applies *\*-A yori-* in the same way, see 2.1. To the East of this area a second wave of renewal of intraterminal (present tense) forms by means of *\*-A/p yata tur-* has taken place. Some biverbal constructions expressing actionality follow identical patterns in many -GAN-Turkic languages. Furthermore -GAN-Turkic (like Chuvash) exhibits cognates of the Old Turkic verb *i:d-* 'to send' or (in Kipchak, South East Turkic and Turkmen) of its derivation *i:du ber-* 'id.' (see table 7 on p. 93) and has palatal cognates of the word *täyri* 'god; heaven'.

##### 4.1.1. Non-Oghuz -GAN-Turkic

Some features tie Kipchak and South East Turkic closer together and distinguish them from Oghuz. One of these features is the biverbal form *-A/p al(-ma)-* to express (im-)possibility of performing an action, which also appears in Salar, South Siberian Turkic and perhaps in Chuvash.<sup>11</sup> All case suffixes show a stable suffix-

<sup>11</sup> For Chuvash *-ay-* < *\*A al-* see Benzing (1959b, p. 721) and Levitskaja (1976, pp. 54–55). Lena Turkic has a suffix *-(A:)yA-*.

initial consonant by analogisation, i.e. suffixes of the structural types  $+(C)V\dots$  and  $+(V)C\dots$  were unified by analogisation with the third type  $+CV\dots$ . Thus we find a genitive suffix  $+nI\eta$  (Kirghiz  $+nIn$ , Salar  $+niyi$ ) instead of the Old Turkic type  $+(n)I\eta$ , see also table 5 on p. 91.

#### 4.2. Central Asian Turkic

The Kipchak and South East Turkic languages of Turkestan and the neighbouring areas form the Central Asian Turkic area, which can be characterised by the paradigms of politeness. Thus, e.g., in Uzbek, Kazakh, Kirghiz and Modern Uighur *sen* designates a second person singular of the same or lower rank than the speaker, *senler* is used as the plural form; *siz* designates a second person singular polite *senler*, and has the plural *sizler*, see table 6 on p. 92. Some languages show comparable forms in the paradigms of the personal and the possessive suffixes. See also Schönig (1987).

#### 4.3. Western Turkic and Eastern Turkic

Another isogloss divides the Turkic languages into an Eastern and a Western part (see table 6). It runs through the Kipchak group and the Central Asian Turkic area. North East Turkic, Uzbek and South East Turkic mostly behave like Eastern Turkic; Kirghiz-Kipchak, Siberian Tatar, Kazakh and Karakalpak often have a transitional status. Interestingly, Lena Turkic often behaves like Western Turkic. It has preserved the verb *bıraq-* 'to let' like Western Oghuz, Chuvash and Western Kipchak languages. Western Turkic and Lena Turkic still use the personal plural marker  $+z$ . In Eastern Turkic  $+z$  has entered into competition with the plural  $+IAr$  in the second person. This led in Central Asian Turkic to the paradigms of politeness, whereas in South Siberian Turkic and Salar we find total replacement of  $+IAr$  by  $+z$ . The syllable-final *G*-sounds of Old Turkic *tağlığ* are both preserved in Yenisey and Sayan Turkic, Saryg Yugur, Fu-yü and South East Turkic – but not in Lena Turkic or Salar, whereas in the West, Khalaj fits in with Eastern Turkic, see table 4 on p. 90. Sometimes Eastern Turkic and Chuvash are parallel to each other. A common archaic feature of Eastern Turkic (but not Lena Turkic) and Chuvash is the survival of the negative present tense copula *ärmäz*. From Western Turkic, Oghuz together with some Kipchak languages has forms going back to *tägül*; Khalaj has *da:ğ*. In other cases Lena Turkic clearly belongs to the Eastern Turkic area, e.g. with its labial form *büt-* of the verb 'to come to an end' as in Old Turkic, North East Turkic and Central Asian Turkic, instead of *bit-* like in Western Turkic (including Salar). The Ancient Turkic word pair *yiltiz* : *yultuz* ('root' : 'star') is preserved in Lena Turkic, some South Siberian Turkic languages, Saryg Yugur and South East Turkic;<sup>12</sup> in most of the other modern units the word for

<sup>12</sup> Uzbek has *ildiz* : *yulduz*, Modern Uigur *yiltiz* : *žultuz*, Lena Turkic *silis* : *sulus*. In Sayan Turkic we find, instead of forms with irregular sound change  $y- > s-$ , like Karagas *sildis* (see Ras-sadin 1971, pp. 229–230) meaning both, 'star' and 'root'; in Tuvan the meaning 'root' seems to be

'root' has vanished, see table 6 on p. 92. For 'to return' South Siberian Turkic, Saryg Yugur, Salar and Modern Uighur sometimes use cognates of Old Turkic *yan-*, see table 5 on p. 91. The privative suffix *+slz* is missing in the Eastern Turkic border languages, North East Turkic, Saryg Yugur and even Salar. In Eastern Turkic languages the passive suffix *-(I)l-* can be added to verbs ending in *l*, while modern Western Turkic regularly applies *-(I)n-* in such cases; Lena Turkic exhibits a system of its own.

Eastern Turkic has retained many features of Ancient Turkic, but also exhibits some renewals, e.g. the personal plural sign *+z*, see above. Furthermore, mainly in Central Asian Turkic and South Siberian Turkic (but not in Saryg Yugur) the form *qač* 'how much, how many' is replaced by *qanča*. Sayan Turkic Tuvan does not have *qač*, whereas in Karagas and Lena Turkic we find both forms. Many Eastern Turkic languages (except Lena-Sayan Turkic) show renewed present tense forms containing the segment *-A/p yat-*.

The words for 'tree' show archaic forms going back to *\*hiğač* > *yığač* only in the "Far East" (for Khalaj *hağač* see Doerfer 1995). The form *\*(h)agač* exists in Oghuz, Kipchak and Chuvash, but also in Kipchakoid South Siberian Turkic, Fu-yü, and Salar. Kirghiz behaves differently from Altay Turkic by having *jiğač* (resembling, e.g., Lobnor *yığač* or Saryg Yugur *yığaš*). The Sayan Turkic forms (Tuvan *iyäš* (with nasal *y*), Karagas *ñeš*) also point to the Eastern protoform. Many South East Turkic languages have a form with initial *y-* followed by a low vowel, like Modern Uighur *yağač*, Uzbek *yâğâč*. The distribution of the auxiliary verbs for denominal verb derivation leads to a comparable pattern that underscores the division of North East Turkic into Lena-Sayanic and Kipchakoid South Siberian (see 4.4.2.3 and table 6 on p. 92). Oghuz, Kipchak, Kipchakoid South Siberian Turkic and Salar are connected by the dominance of the verb *et-*. Mainly in Oghuz – but with, e.g., Tatar evidence, too – the verb *ädlä-* has survived in the West and is frequently used in Azeri; Chuvash has its own form *tu-*. In South East Turkic we also find the old auxiliary *gil-*, which is now restricted mainly to contexts of dignity in Oghuz and Kipchak, and still widely in use. It has kept this role in Lena-Sayan Turkic, which does not have *et-*; additionally we find *\*qin-* in Sayan Turkic Karagas and Lena Turkic.

The distribution of the forms of some Turkic numerals is connected with the Western Turkic : Eastern Turkic division. The cognates of Old Turkic *biñ* 'thousand' have front vowels in Western Turkic; Turkmen *müñ* additionally is labialised. Eastern Turkic normally has a back vowel as in *miñ* (Nogay, Karakalpak, Kazakh, Baraba, Chulym Turkic) and *muñ* (North East Turkic except Chulym Turkic). The South East Turkic, Salar and Saryg Yugur form *miñ* can also be interpreted as *\*biñ*. But as shown by Kirghiz *miñ* one also encounters palatal forms in the East. The numeral 'twenty' – if not replaced – has word-final non-high vowel in many Eastern Turkic languages (*yigirma* ~ *yigirmä* ~ *yägirmä* ~ *yägärbä*);<sup>13</sup> only Khakas *čibirgi* and Tuvan *čä:rbī*

lost. Furthermore we find the old word for 'root' in Saryg Yugur *yiltis*, *yiltis*, Küarik *yildis* and Kyzyl *šilti* (see Sevortjan 1974, I, p. 350), Soyot *yiltis* (Radloff 1905, III, p. 488), Sagay *čiltis* (Radloff III, p. 2087).

<sup>13</sup> Palatal forms with low word-final vowels exist in South East Turkic, Baraba and Altay Turkic. A back vowel form *\*yigirma* appears in Central Kipchak, Kirghiz, Uzbek dialects and

show high word-final vowels (< \**yägirmi*; a similar form is reflected in the Babur-name). The shortened form *ĵibir* in Fu-yü can be traced back to a metathesised form of the Khakas type. In Radloff's Karaim of Troki a form *igirmä* exists, which may be an independently developed metathesised form of \**yägirmi* (> *ägirmi* in Radloff's Karaim of Lutsk), as Crimean Karaim *yägrimi* and Turkmen *yigrimi* are. Forms with high final vowel dominate in Khalaj, Oghuz, Crimean Tatar, Karaim, Volga-Ural Kipchak and Salar; the Chuvash form belongs here, too. The various Saryg Yugur, Salar and Modern Uighur sources exhibit forms with low as well as with high final vowel (Tenišev 1976a and b; Sevortjan 1989, IV, p. 201), see table 6 on p. 92. In \**sü:rbē* Lena Turkic shows an enigmatic labial vowel in the first syllable; its final low vowel may be secondary, if the form is not metathesised. Of the numerals with intervocalic consonants, mainly the numeral 'fifty' observes the Western Turkic : Eastern Turkic borderline. It has a strong form with doubled intervocalic consonant, \**ällig*, mainly in Western Turkic (Oghuz, Western-Central Kipchak), while the weak form \**ülig* with a single intervocalic consonant is dominant in Eastern Turkic (Täläüt, Yenisey Turkic, Chulym Turkic and Kirghiz). Other languages have developed their numerals by means of internal analogisation. Khalaj and South East Turkic have generalised the strong forms, whereas Sayan Turkic only has weak ones. In Lena Turkic we find weak forms for 'eight' and 'nine' and perhaps 'thirty' (with closed final syllables) and strong forms for 'two' and 'seven' (with open final syllables). Chuvash has two series – one weak and one strong.

#### 4.4. Northern Turkic

The Northern Turkic area is characterised by the tendency to rearrange the system of oppositions between (word- and sometimes syllable-)initial *y-*, the affricates and the sibilants. In most of Kipchak, Modern Uighur, North East Turkic and Chuvash, Old Turkic *y-* corresponds to a sibilant or an affricate. According to Radloff's Kirghiz data and the development of loanwords from Middle Mongol, in non-Bulghar Turkic constituents this must be derived from quite recent developments, see Róna-Tas (1982a). Due to analogical processes we find *-G-* instead of *-ŋ-* in the possessive suffixes of the second (plural) persons in Chuvash, Volga-Ural-Caucasus Kipchak, Lena Turkic and Altay Turkic. There seems to be a common tendency of replacement of *ŋ* by *G* in the whole Northern Turkic area, see Schönig (1991). A feature of Northern Turkic (but not of Chuvash) is the form of the first person plural suffix *+(I)BIz*, whereas Southern units and Old Turkic have *+(I)mIz*, see table 7 on p. 93. In the same area and in Khalaj the accusative of the third person possessive suffix is *+(s)In* as in Old Turkic.

Old Turkic *sač* 'hair' appears in Northern Turkic as *čäč* – only Lena Turkic with *as* exhibits a Southern *sač*-form. In Volga-Ural Kipchak and in Chuvash *čäč* is palatalised to *čäč̣̈́*. Salar, Oghuz, Khalaj and Standard Uzbek have Southern *sač*-

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Chulym Turkic Küärik (but Radloff's Küärik has *yigirbä*) and in Caucasus Kipchak. Mixed front-back forms exist in Kazakh, Karakalpak, Caucasus Kipchak and Radloff's Taranchi.

forms. Saryg Yugur and Modern Uighur with *čac*- and *sač*-forms take an intermediary position between the North and the South, see also table 7. Karaim has *sač*-, *čac*- and *čäč*-forms. Perhaps the *sač* > *čac*-shift became active in the North after Uzbek had left the place, but parts of South East Turkic and Saryg Yugur had fallen under Northern influence. Sayan Turkic Karagas shows *čä"š*, which in Castrén's material still appears with a back vowel. Tuvan does not exhibit a cognate, but has *baš dügü*.<sup>14</sup> The deviant behaviour of Lena Turkic (as in the case of some Eastern Turkic features) together with the Karagas form may point to the fact that the development *sač* > *čac* appeared relatively late, when the Lena Turks had loosened their contacts with the remainder of Northern Turkic and the sound change *č*- > *š*- was no longer active in Sayan Turkic.<sup>15</sup>

On the lexical level we may assume *\*qodan* to be the Northern Norm Turkic word for 'hare' (but Yakut has *kuobax*), while the South prefers forms of *tabišgan*. Preservation of Old Turkic *ī:d*- 'to send' in North East Turkic, Chuvash, Karaim, Kazakh and Kirghiz may be considered as a Northern Border Turkic feature.<sup>16</sup> Analogised forms *\*mAp* or *\*mAyIp* as negative forms of the gerund in *-p* are very rare in Northern Turkic, and may be called a typically Southern Turkic feature.

#### 4.4.1. From Northern Turkic to North East Turkic

Within Northern Turkic we find an area of prominent progressive nasalisation of suffix-initial {D, L}-morphophonemes by stem-final nasals. Progressive nasalisation with suffixes consisting of open syllables only appears sporadically outside Lena Turkic, whereas the ablative suffix *+DAn* (*+DIn*) ending with a nasal consonant shows many cases of nasalisation – but not in Lena Turkic. With the plural suffix *+LAr* we find nasalisation in some Kipchak languages, in Saryg Yugur and South Siberian Turkic except Southern Altay Turkic, which behaves like Kirghiz.

Another Northern area of special phonotactic rule sets contains Bashkir, Nogay, Karakalpak, Kazakh, Kirghiz and North East Turkic, see table 7 on p. 93. Here, suffixes with initial {D}-, {L}- and {N}-morphophonemes show different initial consonantal allophones in accordance to the rules of plosive dissimilation after word-final consonants.<sup>17</sup> The languages differ considerably with respect to the word-final sounds which precede this dissimilation. In North East Turkic the internal isoglosses drawn by the rule sets do not follow patterns depicted by other features. Lena Turkic shows some structural similarities with the Kipchak languages. The Kirghiz-Kipchak units,

<sup>14</sup> Due to a wrong link in the database, Tuvan *ča"š* 'ženskaja kosa' was erroneously cited in this context in Schönig (1998a, p. 132).

<sup>15</sup> One may argue that in the case of *čac* the sound change *č* > *š* is incomplete, because it would have produced a form with *š* in initial and final position of the same syllable. But there are other syllables of the structure *šVš*.

<sup>16</sup> But the latter three languages also show forms going back to the combination *\*i:du ber-*, as in Kipchak and South East Turkic.

<sup>17</sup> Plosive dissimilation means that a sequence of two non-plosives has to be dissolved into a sequence of one non-plosive and one plosive, see Schönig (1993b).

Kirghiz and Altay Turkic, constitute a group of their own. Bashkir plays a special role by showing obstruent instead of plosive dissimilation, and by having unified the suffix-initial {D}- and {N}-phonemes. All the languages concerned show plosive assimilation plus voice assimilation after voiceless final consonants. In a sub-area of this "phonotactic area" – in Nogay, Karakalpak, Kazakh, Kirghiz and Northeast Turkic – suffixes with initial {M} are affected by plosive dissimilation, too. Of the languages, in which initial {M} has become recategorised *completely* as {B} (i.e. *not* Nogay, Karakalpak, Kazakh or 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 plosive dissimilation instead of nasalisation of the {L}-morphophoneme is attested.

The verb for 'to cry' shows a form *ïyla-* < *\*igla-* in Kirghiz-Kipchak (and Bashkir), which matches South Siberian Turkic forms like Yenisey Turkic *ilga-* and Sayan Turkic *igla-*. Fu-yü with *jilgi-* ~ *yilgi-* has a (non-Kirghiz-)Kipchak-South East Turkic form with Yenisey Turkic metathesis. Saryg Yugur shows intermediary forms *yigla-* ~ *igla-* between Kipchak-South East Turkic and South Siberian Turkic. Lena Turkic with *ita:-* and Chuvash with *yër-* stand apart; see also table 7 on p. 93.

Within the {M} > {B}-area we find a smaller area designated by the category of what Benzing (1959a) has called *participium nondum facti*. This area includes Kirghiz, Siberian Tatar varieties, Fu-yü and North East Turkic (except Karagas). The category is expressed by suffixes which may originate from a common root: Kirghiz and Lena Turkic have *-A elek* and *-A ilik*, South Siberian Turkic *-GAIAK* and Fu-yü *-GAIAs̄*. That Kirghiz and Lena Turkic are bound closer together may be due to the fact that they are located at the borders of the participial area and have kept ancient forms of this etymologically enigmatic suffix. That Altay Turkic behaves differently from Kirghiz indicates that the final establishment of the formal marker category happened after the dissolution of Kirghiz-Kipchak, which still may have been a unit when the *nondum facti* category itself developed. The Fu-yü were still part of South Siberian Turkic when the category was established. But because of their displacement to Manchuria in the 18th century, the ultimate form of the suffix developed slightly differently.

#### 4.4.2. North East Turkic

South Siberian Turkic together with Lena Turkic formed another interactive area not too long ago – North East Turkic. More or less exclusive features of this area are the *nomen actoris* in *+A(:)ččl*, and the total replacement of the privative suffix *\*+s/lz* by constructions of the type *noun (+ poss. suf.) + \*yoq*, which can also be found (in addition to *\*+s/lz*) in other Turkic languages. As in Fu-yü and Saryg Yugur a replacement of formally non-transparent Old Turkic has taken place in analogy to Old Turkic decimal numerals *sek(k)iz on* 'eighty' and *toq(q)uz on* 'ninety'.<sup>18</sup> The replacement of

<sup>18</sup> As in the case of phonotactic rule sets, units belonging to different sub-branches show the same development. Karagas and Saryg Yugur start with 'twenty', Tuvan with 'thirty', Fu-yü, Altay Turkic and Lena Turkic with 'forty'. Only the Yenisey-Chulym (Siberian *azaq-*)Turkic-group starts as a whole with 'sixty'. Salar has an alternative additive system starting with 'sixty' *elli on* ~

*toğ-* by *törö-* belongs here, too. All these features have been inspired by neighbouring or substrate languages, in which the tens are derived from the ones in a transparent way.<sup>19</sup> As to the reflexive pronouns, Lena Turkic uses *bäyä*, a borrowing from Mongolic, where it originally meant 'shape, body' – like Old Turkic *\*bod*, which is used as the base of the reflexive pronouns in South Siberian Turkic. But while South Siberian Turkic has only copied the Mongolic model, Lena Turkic has made a direct copy. In addition to the form *kindik* of the word for 'navel' most of the South Siberian Turkic languages show a short form *kin*; Lena Turkic and Karagas only have *ki(:)n*. The North East Turkic protoform of the numeral for 'thousand' can be reconstructed as *mun*, see also 4.4.2.2 and tables 5–7 on pp. 91–93.

North East Turkic and Chuvash share some special Border Turkic features. The common tendency towards devoicing of word-initial and word-final obstruents and voicing of intervocalic ones may be of independent origin. But the shape of 'stirrup' can be interpreted as a hint of old direct connections with Bulghar Turkic (see Róna-Tas 1982b). Whereas most Turkic languages show forms pointing back to a protoform with round initial vowel, North East Turkic, Saryg Yugur, Baraba and Chuvash exhibit forms with unround initial vowel. Only Altay Turkic has a round vowel and does not behave like the rest of North East Turkic.

Altay Turkic often behaves differently from North East Turkic. Beside the form of 'stirrup' and the Central Turkic feature *\*d(-) > -y(-)*, Altay Turkic has kept the derivational suffix *\*+LIK*, shows no consistent preservation of the first person plural ending *+mlz* in the *DI*-preterite, exhibits no replacement of the verb *\*toğ-* 'to give birth; to be born', and has not kept postvocalic *-yUr*-aorists or the formal correspondence between the postvocalic forms of the vocalic gerund *-yU* and the aorist, as most of the other North East Turkic languages have.<sup>20</sup> In some cases at least some varieties of Shor and Khakas share this behaviour, see table 4 on p. 90.

#### 4.4.2.1. South Siberian Turkic

The Border Turkic languages, Yenisey Turkic (including Fu-yü) and Sayan Turkic together with the transitory Chulym Turkic and Altay Turkic form the South Siberian Turkic area. It has only a few features common to every single language within it. Thus it uses, e.g., cognates of Old Turkic *bod* to derive reflexive pronouns, and has

*altmiš*, see Tenišev (1976b, p. 121). In Karachay-Balkar we find a vingesimal system inspired by neighbouring Caucasian languages (see Pritsak 1959, p. JN 220).

<sup>19</sup> That the formally incoherent Old Turkic system of ones and tens is very old is proved by the fact that Saryg Yugur, which shows a very strong tendency to decimalisation, uses in its archaic counting system *üçon* for 'thirty', but *pes otis* for 'twenty-five'. The privative *\*yoq*-constructions could be inspired by Mongolic constructions with *\*ügei* ('does not exist' = *\*yoq*). The *nomen actoris* in *-A(:)čĕl* goes back to the Mongolic *nomen imperfecti* (class.mon. *-Ga*, see Poppe 1955, p. 273) in connection with the Turkic-Mongolic suffix *+čĕl* "to form nouns of vocation" (Poppe 1954, p. 45).

<sup>20</sup> The Old Turkic connection between the suffixes of the vocalic gerund and the aorist *C-V(r)*; *V-yU(r)* is preserved in Lena Turkic and Yenisey Turkic in *...CA(r)*; *...I:(r)* or *...ü(r)*. For Sayan Turkic see Schönig (1989). Altay Turkic has postvocalic *-r*-aorist and *-y*-gerund like a (Kirghiz-)Kipchak language.



replaced the personal plural marker *+z* by *+lAr* in the second persons, see also 4.2. For *\*kin(dik)* 'navel' see 4.4.2. Another common feature is the Samoyed and Yenisey (*ket*) substrate already mentioned by Castrén (1857); see also Menges (1955–56) and Janhunen (1989).

Together with non-Norm Turkic Chuvash and Khalaj most South Siberian Turkic languages (including Fu-yü and Saryg Yugur) have forms of the personal interrogative pronoun which are reconstructable as *\*käm*. But it is impossible to decide whether Lena Turkic belongs to the *\*käm*- or to the *\*kim*-group. Sayan Turkic gains a special profile by showing forms such as Tuvan *\*qim* or Karagas *\*qum*, see table 4 on p. 90.

The Sayan Turkic languages Tuvan and Karagas show many differences in detail. Additionally they exhibit different sets of copies from Mongolic. Besides Middle Mongol and Oirat layers Tuvan exhibits traces of strong influence from Khalkha, whereas Karagas had interaction with Buryat. In Yenisey Turkic and Sayan Turkic, combinations of the auxiliary verb *ü:d-* 'to send' and the gerund in *-p* have become suffixes. Khakas and Fu-yü exhibit metathesised forms for the word for 'twenty', and have *ib* for 'house'. A special feature of Yenisey Turkic are *-ĴAŋ*-participles to express habituality, continuation etc. Saryg Yugur has preserved the Old Turkic counting system. Fu-yü exhibits shortened forms *bił ~ bul* of the postposition *bi(r)lä(n)* 'with' and the numeral *jibir* 'twenty'.

#### 4.4.2.2. Lena-Sayan Turkic

Lena-Sayan Turkic is mainly characterised by the absence of some widespread Central Turkic features, e.g. forms going back to modern Norm Turkic *çiq-* 'to go out', cognates of the impersonal interrogative pronoun *ne(mä)*, biverbs with *bašla-* to express 'to begin to', and a single renewed present tense suffix; Lena-Sayan Turkic does not use *et-* for denominal verb derivation. It shares Border Turkic features with Chuvash, like the absence of *-nčI*-ordinals,<sup>21</sup> see table 7 on p. 93, and the quite frequent representation of Old Turkic *a* as *i* in first syllables. Nasality of Old Turkic *ń* is partly preserved as in Khalaj and Oghuz. Lena-Sayan Turkic shows suffixes of the inclusive and exclusive first plural persons of the imperative paradigm with the structure *first person inclusive = first person exclusive + second person plural*.<sup>22</sup> The cognates of Old Turkic *tag* 'mountain' have (at least additionally) the meaning 'mountain forest'.

Of Sayan Turkic, Karagas is more closely connected to Lena Turkic by features only attestable in these two languages. Thus the numeral for 'thousand' has been replaced by a Russian loanword,<sup>23</sup> a verb *\*qin-* is used to derive verbs from nouns, and for navel only the short form *ki(:)n* exists. Both units have a partitive case, expressed by suffixes formally identical with the Old Turkic locative-ablative suffix *+DA*. Furthermore, we may assume that an ordinal suffix *+nč*, as in Old Turkic,

<sup>21</sup> According to Thomsen (1959, p. 566), Saryg Yugur had an ordinal suffix *+nč*, too. But Tenišev (1976a, p. 74) only mentions *+(I)ndzi* or *+(I)ndziliq*.

<sup>22</sup> For the situation in Turkmen see Clark (1998).

<sup>23</sup> We find Dolgan *ti:hačča*, Yakut *tih:nča* and Karagas *ti:sičči*. The original form *muŋ* can be reconstructed for Yakut by means of instances such as *muŋ älbäx* 'very much'.

has survived here (but see Stachowski (1994)). As the only North East Turkic units they show *qač-* besides the *qanča*-form of the interrogative 'how much, how many' and use of the word *ürün* 'white'. See also 2.2.2.

#### 4.4.2.3. Kipchakoid South Siberian Turkic

Altay, Chulym and Yenisey Turkic together with Fu-yü exhibit some common features different from Sayan Turkic, but also known from Kipchak. This division of South Siberian Turkic into a Kipchakoid South Siberian Turkic and a Sayan Turkic branch can be seen, e.g., in the use of *K* as a personal marker of the first person plural in Kipchakoid South Siberian Turkic mainly in the imperative paradigm; this feature closely connects it mainly to the modern Kipchak languages and Lena Turkic.<sup>24</sup> In contrast to Lena-Sayan Turkic (see 4.4.2.2), Kipchakoid South Siberian Turkic shows suffixes of the inclusive and exclusive first plural persons of the imperative paradigm with the structure *first person inclusive = first person exclusive + plural*. Sayan Turkic prefers postpositional *bilä*-forms to express 'with', whereas great parts of Kipchakoid South Siberian Turkic show a strong tendency to use *bilä(n)* enclitically. Furthermore, Kipchakoid South Siberian Turkic, like Central Turkic, uses *et-* for denominal verb derivation and shows strategies of marking intraterminality in the participial systems like Kipchak and South East Turkic.

By internal analogisation of suffix-final nasal consonants of the genitive *+nIn* and ablative *+DAn* the Kipchakoid branch is more closely connected to Kirghiz, which at the same time is separated by this feature from the remaining Kipchak languages. The final nasals became *n* in Kirghiz and *ŋ* in Altay and Yenisey Turkic and in Chulym Turkic *Küärük*. But whereas Kirghiz has velar forms of the numeral for 'twenty' and exhibits at least some forms of the paradigms of politeness, Altay Turkic has palatal forms of the numeral and only *+LAr*-marked forms of the second person plural. These features – like the forms of the *participium nondum facti*, see 4.4.1 – reveal the process of dissolution and reformation of Turkic genetic or areal subgroups: an older Kirghiz-Kipchak (Kirghiz and Altay Turkic)/Yenisey Turkic unit split into Kirghiz and Kipchakoid South Siberian Turkic (Altay and Yenisey Turkic).

I call this group only Kipchakoid because important features of modern Kipchak are missing. Thus the preservation of intervocalic *-t-* has been given up, the feature *tag > taw* has not been developed, and the numerals with intervocalic consonants have stabilised in forms more or less different from the modern Kipchak type.

## 5. Diachronic aspects

Because the data used in the proposed model all belong to Modern Turkic, mainly the synchronic situation is reflected. But of course the various constellations through which we progressed contain a number of diachronic implications. I shall now try

<sup>24</sup> The *-K*-forms in Azeri have emerged by internal analogisations or by areal contacts with Kinchak and South East Turkic tribes.

to summarise some major lines of possible development of the Turkic languages which may be derived from the proposed model, and try to connect them with historical data.

The existence of non-Norm Turkic or Border Turkic features in a language does not automatically indicate that it left Proto-Turkic in earliest times. The amount of non-Central Turkic features is only a measure of an abstract distance from Central Turkic. Such features may have developed quite late, e.g., in relative isolation from other Turkic languages. Archaic features indicate that a language had separated from remaining Turkic languages in the Ancient Turkic period. But the existence of numerous archaic features in a language may only indicate a more thorough separation of its forerunner from remaining Ancient Turkic in a relatively late period. It does not necessarily mean that the language in question separated earlier than another one which exhibits a smaller number of such features. If we can make use of diachronic data, we may be able to determine the *terminus post quem non* for the development of a feature used in the model. However in many cases we only can guess by means of internal reconstructions or comparative investigations at what time such features came into existence.

That the precursors of the non-Norm Turkic languages separated quite early from the rest of Turkic is not only indicated by their amount of non-Norm Turkic and Border Turkic features, which in many cases consist of preservation of Ancient Turkic features. In the framework of the Northern Turkic : Southern Turkic and Western Turkic : Eastern Turkic divisions they additionally show features of that area to which they do *not* belong geographically – or they exhibit isolated, individual forms. This behaviour is paralleled by Salar in the “Far East” of *Turcia*, which due to its presumably Oghuz origin still displays some Western Turkic features. These features had been developed in Western Turkic before the exodus of the Salars to Qinghai in the Chinggisid period (see below). Many of the features in question also appear with archaic or special forms in Oghuz languages. This underlines the relatively early separation of Oghuz from the remainder of Central Turkic (see below).<sup>25</sup> The remaining “normal” Border Turkic languages usually confirm the geographical distribution of linguistic features. The distribution of the features in question reveals some main lines within the internal division of Modern Turkic, see table 8 on p. 94.

The amount and the distribution of non-Norm Turkic and Border Turkic features in Chuvash point out that its Bulghar Turkic ancestral group separated first from the remaining Proto-Turkic ones, presumably as early as in the Hsiung-nu period in the first centuries BC. In those times, the Bulghar Turks lived in Southern Siberia, where they had contacts with speakers of Samoyedic and Mongolic, which is attested by a whole set of mutual copies, see e.g. Róna-Tas (1988 and 1991). They left this area in the fourth century to move westwards into the Volga region.

<sup>25</sup> Such features are, e.g., preservation of final *-G*-sounds in *tagliğ*, (il-)labiality of the vowel in *büt- ~ büt-* ‘to come to an end, fulfil’, preservation of the plural sign *+z* in the second person, the forms of the words for ‘lip’, ‘hair’, ‘hand’, ‘to cry’, ‘to go out’ and ‘to return’, of the negative present tense copula, of the reflexive pronouns, of the ordinal suffixes and the genitive suffixes, and the verbs used for denominal verb derivation.

Lena Turkic and Khalaj are much closer to Norm Turkic than Chuvash. Some of their non-Norm Turkic features may have developed relatively late, but others indicate an early separation from Norm Turkic. The ancestors of the Lena Turks may be identical with the Üč Qurıqan in the vicinity of Lake Baykal. But one should be very careful to correlate historical groups, the language of which is totally unknown, with recent groups. If at least some of the common features of modern Chuvash and Lena Turkic go back to common roots, we may assume that ancestral groups of Lena Turkic were independent enough from the remaining Proto-Turkic group to maintain special relations with the Bulghar Turks. If so, this must have happened before the Bulghar Turks left Southern Siberia in the fourth century.

The forerunners of the modern Border Turkic branches *azaq*-Turkic and Sayan (*adaq*-)Turkic also show some special features in common with Chuvash and Lena Turkic. It is possible (but it does not seem very likely to me) that the ancestors of the Lena Turks and even the Bulghar Turks originally spoke a language of the *azaq*-Turkic type, see Räsänen (1949, p. 29); yet unlike other members of this group and the forerunner of Sayan Turkic, the precursors of Lena Turkic and Bulghar Turkic did not remain in very close contact with the forerunner of Central Turkic. But common features of modern Lena, Sayan and *azaq*-Turkic do not necessarily indicate that their ancestors were more closely related or in direct contact. Some of these features are archaic features which were kept by non-Norm Turkic and Border Turkic languages, but changed in Central Turkic. Other features may simply point to language contacts between those parts of Norm Turkic whose speakers lived close to the early Bulghar Turkic habitat in Southern Siberia. It seems that there were connections between the precursors of Sayan Turkic, *azaq*-Turkic Saryg Yugur and Old Uighur; in the case of the Saryg Yugurs this is attestable by historical data.

The special common features of Sayan Turkic and Lena Turkic bear witness to at least temporarily close areal contacts, but they may even indicate a genetically closer connection between these branches of Turkic. The deviant representations of some widespread Central Turkic and *-GAN*-Turkic features in this area together with the assumed date of the Lena Turkic exodus to the North (see below) indicates a phase of relative independence from the main body of Turkic from perhaps the Late Ancient Turkic period on. This phase probably ended in the Chinggisid period. Then – in the framework of the *-GAN*-Turkic area – Sayan Turkic, which was spoken in areas closer to Central Turkic languages, began to establish more intensive contacts with these groups than with the ancestral groups of Lena Turkic. The close connection between Lena Turkic and Karagas indicates that the ancestral groups of the Sayan Turkic groups, which were responsible for the Turkicisation of the South Samoyed (Karagas), were in more intensive or longer lasting contact with the precursors of the Lena Turks than with the ancestral groups of the modern Tuvans. That the internal division of Sayan Turkic goes back to relatively recent constellations is underscored by the fact that Karagas and Lena Turkic exhibit a layer of Buryat copies, whereas in Tuvan we find many traces of strong Khalkha impact.

Khalaj has many features in common with Old Turkic. We may assume that it separated from Central Turkic in the Late Ancient Turkic period. This is underscored

by the position of Arghu within the Turkic dialects in Kāšgari's dictionary – according to Doerfer (1987) the presumed forerunner of Khalaj. It is unclear whether there were direct connections between the forerunners of *hadaq*-Turkic Khalaj and *adaq*-Turkic Sayan Turkic. Taking into account the features held in common with Old Turkic in both groups, one may assume that they are indirectly connected by older – genetic or areal – connections to groups which played a decisive role in the formation of the Old Turkic written languages. The common features of Khalaj and Modern Uighur may go back to a more or less independent preservation of Late Ancient Turkic eastern dialect features. According to Kāšgari, we find among the many correspondences with eastern dialects of his time an action noun in *-GU* in Arghu, Čigil, Yaghma, Tukhsi, Uighur to Upper Sin, and Khakaniyya Turkic, and the *nomen agentis* in *-GUĖI* in Arghu, Čigil, Kashghar, Balasaghun, Barsghan, Uighur to Upper Sin, and in the vernaculars of most of the Türk (Dankoff–Kelly III, p. 279).<sup>26</sup>

The special position of modern Oghuz within Central Turkic partly goes back to the fact that at least parts of the Oghuz started moving westward as early as after the collapse of the Second Turkic Empire in the eighth century. Thus they were able to preserve features which in the course of time changed in the remaining group of Turkic, or to change such features individually. Additionally, Oghuz started to undergo intensive interaction with Persian. After the collapse of the Khazar empire in the tenth century, parts of the Oghuz crossed the Volga River. Some of the Oghuz-Chuvash correspondences may go back to this period. At the end of the tenth and in the eleventh century a part of the Oghuz – the Seljuk confederation – moved into Iran, thus commencing the period of Turkic immigration into Azerbaijan and Anatolia.

The Kipchak Turks were already present in the Volga region in the eleventh century. The intensive interaction between Kipchak and the Bulghar Turkic ancestral groups of Chuvash may date back to those times. The interaction between these two groups went on until recent times.

In Kāšgari's dictionary from the eleventh century we find numerous reflexes of dialectal differentiations. It seems that preservation of the nasality of Ancient Turkic *-ñ-* was already in this period a feature of dialects, which exhibit a whole set of special features: Oghuz, Arghu and Bulghar.<sup>27</sup> In fact Arghu and Bulghar exhibit a whole set of special features not known to other Turkic dialects of this period. Thus Kāšgari's Oghuz shows the same ambiguous behaviour as modern Oghuz does. It has many features of the main ("central") group of the dialects, but at the same time is connected to dialects with deviant features – the "Border Turkic" of this period. It is still not fully understood how one might connect modern Oghuz data with the Oghuz data of this period. The beginnings of Oghuz-Khalaj interaction may date back to Kāšgari's times. We may assume that in Khalaj-Oghuz (at least during the last few centuries: Khalaj-Azeri) contacts the Khalaj speakers were on the receiving end.

The data in Kāšgari's dictionary may also point to a connection between Kipchak and the *azaq*-Turkic dialects of this period. According to Kāšgari the Kip-

<sup>26</sup> But at the same time Arghu also has the "western" form *-DAĖI* of the *nomen agentis*.

<sup>27</sup> See the instances given by Dankoff–Kelly 1982–1985, III, p. 277.

chak together with the Yaghma, Tukhsi, Yabaqu, Tatar, Qay, Čömül and Oghuz change every *ǰ* to *y*. At the same time “some of Kipchak” together with the Yemäk, Suvar, Bulgar “and those [in the area] stretching to Rus and Rum” (Dankoff-Kelly I, p. 85) change every *ǰ* to *z*. This information is very vague, and we know nothing about the sub-group called “some of Kipchak”. But if we take Kāšgari’s information seriously, there was a vernacular in the eleventh century that resembles modern Kipchakoid South Siberian Turkic by being “Kipchak” and at the same time showing the feature *azaq*.

The question of Kipchakoid South Siberian Turkic leads to the “Kirghiz” problem. The forerunner of the Kirghiz-Kipchak sub-group was perhaps a member of the Ancient Kirghiz state in the tenth century and took on the name “Kirghiz” for reasons of prestige – if they are not genetically related with the later Turkicised Ancient Kirghiz, who were probably of Palaeo-Siberian origin. Unfortunately Kāšgari gives no detailed information about the language of the Kirghiz of his period. That Kirghiz-Kipchak shows some special connections to *azaq*-Turkic (see Schönig 1999b) points to the fact that speakers of Kirghiz-Kipchak remained in South Siberia or neighbouring areas for a long time, forming a link between Central Turkic and eastern Border Turkic groups.

In the Middle Turkic period some Turkic languages more or less different from Late Ancient Turkic became dominant. The precursors of the three main branches of modern Central Turkic are attested by Old Ottoman (Oghuz), Middle Kipchak and Chagatay (South East Turkic). Bulghar Turkic is represented by the Volga Bulgharian epitaphs. The remaining branches are not attested. But we can tell by the existence of the *-GAN*-Turkic area that in the political conditions of the thirteenth and fourteenth centuries the speakers of many Central Turkic languages under direct Chinggisid rule (Kipchak, South East Turkic, Salar and parts of Oghuz) together with ancestral groups of South Siberian Turkic again had the occasion for contacts and developed or preserved a whole set of common features. The Western Oghuz were under Ilkhanid rule. Because of the political situation they were often cut off from contacts with other Turkic groups. The Oghuz of Western Anatolia, who were only under indirect Ilkhanid rule, may have been almost totally isolated for a while. These Western Anatolian groups also remained outside the inner sphere of Timurid power in the fifteenth century, and were not part of the Qara Qoyunlu and Aq Qoyunlu statehoods after the decline of Timurid power. Due to these political constellations, Western Anatolian Oghuz could develop quite differently from *-GAN*-Turkic and preserve many archaic features, which vanished in the *-GAN*-Turkic area. In contrast, the Eastern Anatolian dialects, and other Oghuz groups in Iran gained more features in common with *-GAN*-Turkic and additionally entered into intensive areal interaction with non-Turkic languages. Because most Border Turkic languages were part of the Chinggisid realm, they exhibit some features closer to or identical with Central Turkic and *-GAN*-Turkic features, whereas Oghuz sometimes – like modern non-Norm Turkic languages – has deviant archaic forms. Khalaj, as another language of the former Ilkhanid realm, shows at least some features in common with *-GAN*-Turkic. But these may go back to earlier connections with non-Oghuz groups.

Salar may have been part of an older Oghuz unity and perhaps is genetically related with Oghuz. During the Chinggisid period the Salar were separated from the Oghuz and went to Xinjiang and Qinghai. There they experienced South East Turkic and perhaps Northern Turkic impact. Besides, there was influence from Chinese, Mongolic and Tibetan. Some special common features of Salar and Saryg Yugur may go back to such non-Turkic influence. Especially Saryg Yugur exhibits traces of long-term close contacts with Mongolic groups which today bear the same designation (Šira Yugur).

South East Turkic developed in the Ulus Chagatay; the Kirghiz-Kipchak presumably were part of this statehood, too (see below). The modern Western-Central Kipchak languages came into existence mainly in the realms of the Golden Horde. The internal differentiation of Western-Central Kipchak reflects the internal division of the Golden Horde. The Horde of Batu ("Blue Horde") is somehow represented by Western Kipchak, whereas the White Horde is reflected by the Central Kipchak languages. Siberian Tatar probably originated in the Horde of Sibir. The many Western Oghuz features of Crimean Tatar are due to direct Ottoman influence on the Crimean Khanate from the fifteenth to the eighteenth century. Phenomena from contact with Indo-European languages in all areas of grammar can be found in Far Western Kipchak Karaim, the precursor of which separated from the rest of Western Kipchak perhaps in the fourteenth century in connection with the rise of Lithuanian power. Its case is paralleled by Western Oghuz Gagauz -- like Karaim, a language spoken in geographical and cultural isolation from the remaining Turkic world for centuries.

The transitional position of Uzbek between Kipchak and South East Turkic results from a development from a Kipchak language to a "mixed" Kipchak-South East Turkic one. The Uzbek confederation left the Central Kipchak community and emigrated to Mawarannahr at the beginning of the sixteenth century. The Uzbeks settled together with speakers of Persian and Chagatay Turkic. Because of their literary prestige both languages gained much influence on Uzbek. Thus, the modern Uzbek standard language shows both Kipchak and South East Turkic features, whereas purely Kipchak speaking groups remained on the countryside. Uzbek does not exhibit the sound change *tag* > *taw*, which is one characteristic of modern Kipchak (including Kirghiz-Kipchak). Furthermore it does not show the typical features of the Northern Turkic or the phonotactic area. Thus we may assume that these areas became interactive only after the Uzbek had loosened their contacts to the North, i.e. after the fifteenth century. From at least the sixteenth century on, Ottoman Turkish had some influence on Uzbek and on Kipchak languages spoken by Muslim populations which were in closer contact with the Ottoman empire.

The Central Asian area reflects to some extent features of the prestige language Chagatay. Taking into consideration that Kirghiz is one of its members, we must assume that the area was still active at least during the Kirghiz immigration into the Tien-shan in the seventeenth century. I also assume that some parallels between Kirghiz(-Kipchak) and Kazakh date back to this relatively late period and are not due to older closer connections.

The Northern Turkic area reflects some older features of early Turkic languages spoken in the north of *Turcia*. To a certain degree Northern Turkic is the counterpart of the area with direct or more intensive contacts with the statehoods of the Ottomans and Safavids from the sixteenth century on. The Northern Turkic area contains the phonotactic area, which contains the Pre-North East Turkic area, which itself contains the North East Turkic area. Moving from the outside to the inside of this concentric structure we find diminishing influence from the more or less "Islamic" Central Turkic languages, and at the same time an increasing impact of Mongolic languages, which was strongest in the North East. Mainly in the {M} > {B}-sub-area of the phonotactic area, languages from different genetic sub-branches developed under strong Mongolic influence at least from the fifteenth century on. They became more similar to each other through areal interaction, i.e. they developed new and elided old features in a way unknown to most other Turkic languages. In this respect they resemble other Turkic groups in relative isolation, e.g. Salar, Saryg Yugur and Khalaj. Especially the Oirat conquest of large parts of Central Asia from the fifteenth century on is not only responsible for the development of some of the "inner" areas of Northern Turkic, but also for the presence of some Northern Turkic features of Modern Uighur.

Southern Siberian Turkic is one of the youngest areal groups and came into existence only after the dissolution of the North East Turkic area. The Lena Turks began to move from the vicinity of Lake Baykal to the Lena basin perhaps in the sixteenth century. In the same century the Kipchak element in Southern Siberia seems to have been reinforced by immigrant groups from the collapsing Khanate of Sibir. Of the Kirghiz-Kipchaks the Kirghiz remained at the southern margin of this area. They withdrew southward perhaps in the sixteenth century. From then on the Altay Turkic part of Kirghiz-Kipchak developed in closer contact with Kipchakoid *azaq*-Turkic groups, of which the Fu-yü were displaced to Manchuria in the middle of the eighteenth century. At the beginning of this century the Jungars had already removed the ruling Ancient Kirghiz groups from Southern Siberia. There remained relatively small Turkic groups from different genetic sub-branches living together and entering into intensive linguistic interaction. They also had linguistic exchange with speakers of South Samoyed and Yenisey languages, which in the course of time became Turkicised – a development still in progress during the nineteenth century.

The Western Turkic : Eastern Turkic division may ultimately originate in the Late Ancient Turkic period, when non-Bulghar Turkic tribes started to move westwards and their language became differentiated to a certain degree. Perhaps this first division then was reinforced by the political conditions of the thirteenth and fourteenth centuries. The many oscillations of the internal borderline may be due to the fact that during a relatively long period the Western and Eastern Turkic areas ultimately consisted of smaller interactive areas, which were more or less located West and East of this borderline. The borderline we find today seems to be the result of interfering isoglosses of different areas which were interactive at different times.

As we can see, at least some implications of the proposed model are in accordance with more or less well-known facts from the development of Turkic and the



history of its speakers. Further investigations of Middle and Ancient Turkic will reveal whether other predictions derived from this model are really reliable – a decisive test for any kind of scientific model.

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Table 1. The internal division of Central Turkic

	Oghuz		Kipchak				South East T.	
	Western Oghuz	Turkmen	Western-Central K.			Kirghiz -K.	Uzbek	Modern Uighur
			Far W.	VUC	CA			
<i>*süñök</i>	+nasal		-nasal				(+nasal)	
agent n.	-IʃI		-UwčI				-GUči	
<i>*äv</i>	<i>äv</i>	<i>äv ~ üy</i>	<i>üy ~ üw</i>	<i>öy ~ üy</i>	<i>üy</i>	<i>üy ~ ü:</i>	<i>üy ~ äv</i>	<i>üy (~ üg)</i>
'house'								
'hair'	<i>sač</i>		<i>čač</i>	<i>čäč</i>		<i>čač</i>	<i>sač</i>	<i>čač ~ saš</i>
<i>*tağliğ</i>	<i>dağli</i>			<i>tawli</i>		<i>to:lu:</i>	<i>iğli</i>	<i>tağliq</i>
'to cry'	<i>*yiğla- ~ *ağla-</i>		<i>*yiğla-</i>			<i>*iğla-</i>	<i>*yiğla-</i>	
neg. ger.	<i>*mAylp</i>		<i>*mAyln</i>			<i>-BAy</i>	<i>*mAyln</i>	

Table 2. The internal division of Oghuz

	Western Oghuz		Eastern Oghuz
	Turkish	Azeri	Turkmen
<i>*i:du ber-</i>	∅		<i>iber-</i>
participles	<i>-mİš : -(y)An; -DIK</i>		<i>-An : -yAn</i>
long vowels	(reflexes)		+
<i>*bädük</i>	<i>büyük</i>	<i>böyük</i>	<i>beyik</i>
'which'	<i>hangi</i>	<i>hansı</i>	<i>haysi</i>
'where?'	<i>nerede</i>	<i>harada</i>	<i>nirede</i>
impossibilitive	<i>*A uma-</i>	<i>-A bilme-</i>	<i>-A ~ -p bilme-</i>
<i>b ... n &gt;</i>	<i>b ... n</i>		<i>m ... n</i>
reflexive pronoun	<i>kendi</i>		<i>öz</i>
accusative	<i>+(y)I</i>		<i>+(n)I</i>

Table 3. Norm Turkic and non-Norm Turkic

	Norm Turkic	Chuvash	Lena Turkic	Khalaj
<i>h-</i>	∅	∅	∅	<i>h-</i>
<i>č- : y-</i>	+	∅	∅	+
nominal plural	<i>+lAr</i>	<i>+sem</i>	<i>+lAr</i> and others	<i>+lAr</i>
gerund in <i>-p</i>	+	∅	∅	∅
conditional <i>*-sAr</i>	+	∅	+	+
imper. <i>*-zUn</i>	+	∅	+	∅

Table 4. Central Turkic and Border Turkic

	'foot'	'mountainous'	postvocalic aorist	'who?'	1st.ps.pl. past in +DL.m/z	'to give birth ~ be born'	ket- 'to go away'	privative in +s/z	'stirrup'
Old T.	<i>adaq</i>	<i>tagliḡ</i>	*yUr	<i>kām, kim</i> <sup>28</sup>	+	<i>toḡ-</i>	+	+	<i>üzängü</i>
Central T.	<i>ayaq</i>	see tab. 1	-r	* <i>kim</i>	Ø	* <i>toḡ-</i>	+	+	* <i>üzängü</i>
Salar	<i>ayax</i>	<i>dagli</i>	-r	* <i>kin</i>	+	* <i>toḡ-</i>	Ø	Ø	
Altay T.	<i>ayaq</i>	<i>tu.lu.;</i> <i>tagliḡ</i>	-r	* <i>kām</i>	+ ~ Ø	* <i>toḡ-, *törä-</i>	Ø	Ø	<i>üzeñi</i>
Saryg Yug.	<i>azaq</i>	<i>tagliḡ</i>	-r	* <i>kām</i>	+	* <i>toḡ-</i>	Ø	Ø	<i>ezenky</i>
Fu-yü	<i>azix</i>	<i>daxlix</i>		* <i>kām</i>	+	* <i>toḡ-</i>	Ø	Ø	
Yenisey T.	* <i>azaq</i>	<i>tagliḡ</i>	*yUr	* <i>kām</i>	+	* <i>toḡ-, *törä-</i>	Ø	Ø	xks. <i>izeñe</i>
Sayan T.	<i>adaq</i>	<i>dagliḡ</i>	*yUr	<i>qim, qum</i>	+	* <i>törä-</i>	Ø	Ø	tuv. <i>ezeñgi</i> kgs. <i>ezeñge</i>
Lena T.	* <i>ataq</i>	<i>tiala.x</i> <sup>29</sup>	*yUr	<i>kim</i> < ?	+	* <i>törä-</i>	Ø	Ø	yak. <i>injähä</i>
Khalaj	<i>hadaq</i>	<i>tā ḡlug</i>	*yUr	* <i>kem</i> <sup>30</sup>	Ø	* <i>toḡ-</i>	Ø	+	
Chuvash	<i>ura</i>	<i>tullä</i>	*yUr	* <i>kām</i>	+	<i>šural-</i>	Ø	+	<i>yārana</i>

<sup>28</sup> The form *kām* appears in runiform script, *kām* in the remaining sources.<sup>29</sup> With the deviant meaning 'with forest'. Furthermore, the suffix +LA.x is no direct cognate of Old Turkic +XG.<sup>30</sup> See Doerfer (1988, p. 107).

Table 5. Preservation of Old Turkic features in Modern Turkic

	'hand'	'lip'	long vowels	finite -mš	genitive suffix	reflexive pronoun	'to return'	-GVz- causatives
Old T.	<i>älig</i>	<i>ärin</i>	*+	+	+(n)lŋ	<i>käntü+</i>	<i>yan-, qadit-</i>	Ø
Sayan T.	* <i>qol</i>	<i>ärin</i>	reflexes	Ø	+Nlŋ	* <i>bod+</i>	* <i>yan-</i>	+
Yenisey T.	* <i>qol</i>	* <i>ärin</i>	Ø	Ø	+Nlŋ	* <i>bod+</i>	* <i>yan-</i>	+
Altay T.	* <i>qol</i>	<i>ärin</i>	Ø	Ø	+Nlŋ	* <i>bod+</i>	* <i>yan-</i>	+
Fu-yü	<i>alix 'palm'</i>		Ø	Ø	+Nlŋ	* <i>bod+</i>	* <i>yan-</i>	+
Saryg Yug.	<i>ily, elig</i>	<i>dämsəy</i>	reflexes	Ø	+Nlŋ	* <i>bod+</i> , * <i>ö:z+</i>	* <i>yan-</i>	+
Lena T.	<i>ili:</i>	<i>uos</i>	+	+	Ø	<i>bäyä+</i>	<i>tönün-</i>	Ø
Chuvash	<i>alä</i>	<i>tuta</i>	only * <i>ö:</i>	Ø	+(n)Än	<i>xä+</i>	<i>tavrän-</i>	Ø (?)
Khalaj	<i>äl</i>	<i>dadaq</i>	+	+	*+-(U)ŋ <sup>31</sup>	* <i>ö:z+</i>		Ø
Salar	<i>äl</i>	<i>dodax</i>	reflexes	+	+niyi	* <i>ö:z+</i>	* <i>yan-</i>	+
Turkmen	<i>äl</i>	<i>do:daq, erin</i>	+	Ø	+(n)lŋ	* <i>ö:z+</i>	* <i>qadit-</i>	Ø ~ (+)
Azeri	<i>äl</i>	<i>dodag</i>	reflexes	+	+(n)ln	* <i>ö:z+</i>	* <i>qadit-</i>	Ø ~ (+)
Turkish	<i>äl</i>	<i>dudak</i>	reflexes	+	+(n)ln	* <i>käntü+</i>	<i>dön-</i>	Ø ~ (+)
Modern Uighur	* <i>qol</i> , * <i>älig</i>	<i>kelpuk, läv</i>	Ø	(+)	*+nŋ	* <i>ö:z+</i>	* <i>qadit-, *yan-</i>	+
remaining Centr. T.	* <i>qol</i>	* <i>ärin</i>	Ø	Ø	*+nŋ	* <i>ö:z+</i>	* <i>qadit-</i>	+

<sup>31</sup> With palatalised velar nasal, see Doerfer (1988, p. 79).

Table 6. Eastern : Western Turkic isoglosses

	2nd ps. plural	'is not'	yılıtız : yultuz	'to finish etc. (intr.)'	'thousand' <sup>32</sup>	'tree'	denominal verb et-	'twenty'
Old T.	+z	ärmáz	+	büt-	biñ	(y)jagač	Ø	y(á)girmi y(á)gürmä
Lena T.	*+z	*bo:lmadoq	+	büt-	*muñ	mas	Ø	*sü:rbe
Sayan T.	*+IAR	*ärmáz	(+)	büt-	muñ	*yigač	Ø	tuv. čärbi
Yenisey T.	*+IAR	nimäs 'is not'	(+)	*büt-	muñ	*{(h)jagač	+	Xks. čibirgi Šor. čägürbä
Fu-yü	*+IAR		Ø		muñ	*{(h)jagač	+	ñibir
Altay T.	*+IAR	*ärmáz	Ø	büt-	muñ	*{(h)jagač	+	ñi:rmä
Saryg Yugur	*+IAR	*ärmáz	+	fyt-, p <sup>u</sup> ñ-pñ- etc.	miñ, muñ	*yigač	+	ñigirma, yigirmi
Salar	*+IAR	*ärmáz	Ø	bit-	miñ	*{(h)jagač	+	yigirme, yigirmi
Modern Uighur	+z, *+IAR	*ärmáz	+	piüt-	miñ, miñ	yagač, *yigač	(+)	*yägürmä, žigirma
Kirghiz	+z, *+IAR	*ärmáz	Ø	büt-	miñ	*yigač	+	ñiyirma
Kazakh	+z, *+IAR	*ärmáz	Ø	büt-	miñ	*{(h)jagač	+	žiyirma
Chuvash	*+z	*ärmáz	Ø	pét-	pin	*{(h)jagač	Ø	širəm
Tatar	+z	*tägül	Ø	bét-	měj	*{(h)jagač	+	yөгärmě
Turkmen	+z	*tägül	Ø	bit-	müñ	*{(h)jagač	+	yigirmi
Turkish	+z	*tägül	Ø	bit-	bin	*{(h)jagač	+	yürmi
Khalaj	+z	da:g	Ø	bit-	miñk, min	hağaç	+	yüymü

<sup>32</sup> The Turkic numeral is replaced by a loanword from Russian in Lena Turkic (Dolgan *ti:hačča*, Yakut *titi:nča*) and Sayan Turkic Karagas (*ti:sičči*).

<sup>33</sup> See *arz iet* 'vottragen, vorbringen' (Doerfer-Tezean 1980, p. 111a); perhaps a copy from Azeri.

Table 7. Northern Turkic and related areas

	1st ps.pl. possessive	'hair'	*i:d(u ber)-'to send'	ordinals in *+(I)nčI	plusive dissimilation	'to cry'	'navel'
Old T.	+(X)mXz	sač	i:d(u ber)-	∅	(+)	(y)igla-	kindik
Chuvash	*+(X)mXz	šiiš	*i:d-	∅	∅	yér-	*kö:bäk
Lena T.	+BI	*sač	*i:d-	∅	+	ita:-	ki:n
Sayan T.	+(I)vis	Kgs. čä"š	*i:d-	∅	+	igla-	Tuv. xin(dik) Kgs. hin
Yenisey T.	+(I)bis	*čač	*i:d-	+	+	iłga-	*kin(dik)
Fu-yü	+(I)bis	šaš		+	+	jilgi-, yilgi-	kindik
Altay T.	+(I)bis	čač	*i:d-	+	+	iyła-	kin(dik)
Kirghiz	+(I)blz	čač	*i:d(u ber)-	+	+	iyła-	kindik
Tatar	+(I)blz	čüč	*i:du ber-	+	∅	yıla-	këndäk
Saryg Yug.	+(I)g	šaž ~ sač		+	+	(y)igla-	
Salar	[+(I)g]	*sač		+	∅	yigla-, (yağla-)	*kindik
Kazakh	+(I)mlz	šaš	*i:d(u ber)-	+	+	žila-	kündik
Modern Uighur	+(I)mlz	čač (lit.) ~ sač (dial.)	*i:du ber-	+	∅	žigla-	kindik
Turkmen	+(I)mlδ	sač	*i:du ber-	+ ~ others	∅	ağla-	*kö:bäk
Turkish	+(I)mlz	sač	∅	+	∅	ağla-	*kö:bäk
Khalaj	*+(X)mXz	sač		+ ~ others	∅	hiğla-	kindik

Table 8. Norm Turkic features, Central Turkic features, Eastern Turkic features in languages of the Western Turkic area, Western Turkic features in the Eastern Turkic area and individually developed features in non-Norm Turkic, Border Turkic and Archaic Central Turkic (the features in question are printed bold)

		Western Turkic area				Eastern Turkic area				
		Khalaj	Oghuz		Kipchak	Modern Uighur	Salar	South Siberian Turkic		Lena Turkic
			Turkish	Azeri				Turkmen	Yenisey Turkic	
gerund in -p	Ø			+						Ø
<i>adaq</i>	ura	<b>hadaq</b>		<i>ayaq</i>					<b>adaq</b>	* <b>ataq</b>
'to go out'	tux-			*čiq- -					ün-, ta'š-	tagiš-
ordinal suffix	+(Ä)məs(é)	*+(l)mč	*+(l)mčl	*+(l)mčl	*+(l)mčl				+(O)š(KI)	+ (O)s
denominal verb	tu-	<i>et-</i>	<i>yap-, et-</i>	<i>et-</i>	<i>et-</i>			<i>et-</i>	qıl-	qıl-, qın-
'to cry'	yér-	<i>hiğla-</i>	<i>hiğla-</i>	<i>hiğla-</i>	<i>hiğla-</i>			<i>hiğla-</i>	<i>igla-</i>	ıta:-
genitive suffix	+(n)Än	+(U)ŋ	+ *(n)ŋ	+ *(n)ŋ	+ *nŋ			+ *nŋ	+ *nŋ	Ø
'is not'	*ärmáz	<b>da:g</b>	*täğül	*ärmáz, *täğül	*ärmáz, *täğül			<i>nimäs</i>	*ärmáz	*bo:lmadoq
<i>taglıg</i>	<i>tullä</i>	<b>tä'glug</b>	<i>dağlı</i>	<i>dağlı</i>	<i>tawlı, to:lu:</i>			<i>taglıg</i>	<i>dağlıg</i>	<i>ıtala:x</i>
'hand'	alä		<i>äl</i>		<i>*qol</i>			<i>*qol</i>	<i>*erin</i>	<i>ılı:</i>
'lip'		*to:taq		<i>do:daq, erin</i>				<i>*qol</i>	<i>*erin</i>	uos
<i>bit- ~ büt-</i>		*bit-			<i>bit- ~ büt-</i>			<i>*bit-</i>	<i>*büt-</i>	
2nd ps.pl. sign	*čäč	*+z	*+z		+z ~ +z/+IAR			+ *IAR	+ *IAR	+z
'hair'	*tägzin-		*+z		*čäč ~ *sač			*čäč	*yan-	*sač
'to return'	xä+	*ö:z+	*+z	*qadı-	*ö:z+			*yan-	*bod+	*tön(ün)-
reflexive pronoun										bäyä+
		Southern Turkic area				Northern Turkic area				



