The Turkic Languages

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3 The Structure of Turkic

Lars Johanson

Introduction
Throughout their history and in spite of their huge area of distribution, Turkic languages share essential structural features. Many of them are common to Eurasian languages of the Altaic and Uralic types. While often dealt with in typologically oriented linguistic work, most aspects of Turkic structure still call for more unbiased and differentiated description. The following survey will give some examples of characteristic common features and of more language-specific phenomena.

Sound Systems

Vowels and Consonants
Many Turkic languages, e.g. Turkish, exhibit eight vowel phonemes, a, i, o, u, e, i, ö, ü, which can be classified with respect to the features front vs. back, unrounded vs. rounded, and high vs. low:

<table>
<thead>
<tr>
<th>Front</th>
<th>Back</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>unrounded</td>
</tr>
<tr>
<td>high</td>
<td>i</td>
</tr>
<tr>
<td>low</td>
<td>e</td>
</tr>
</tbody>
</table>

Some Turkic languages display fewer or less clear-cut distinctions than indicated in this scheme. Thus, modern Uyghur lacks a clear differentiation i : i, while Iranised Uzbek dialects show centralising tendencies which affect all the distinctions e : a, ö : o, ü : u, i : i.

On the other hand, several Turkic languages display more distinctions than shown in the scheme. Some, such as Azerbaijani, exhibit an opposition between an open e and a more closed ê. Many languages have a phonemic contrast between long and short vowels. These length distinctions may be primary, as in Yakut, Turkmen and Khalaj. Long vowels may also be present in loanwords from Arabic, Persian etc., or developed secondarily through
consonant contractions. Long vowels are often diphthongs. Reduced vowels, on the other hand, are typical of the Volga region: Chuvash, Tatar, Bashkir. In these languages, due to the shifts dealt with in Chapter 5 (p. 92), the realisation of vowel distinctions deviates considerably from the scheme given above, though the basic relations in principle remain valid.

The consonant systems are more different from each other. The phonetic realisations with respect to the distinction front vs. back varies a good deal. Gagauz and Karaim, which are strongly influenced by Slavic, show palatalised front consonants. The Sayan Turkic languages Tuvan and Toña exhibit a glottal element functioning as a fortis (strong consonant) signal, e.g. aʔt 'horse'. Atypical sounds include the fricatives f, v, ž, th, and the affricates ts, dz. Long consonants normally only emerge at morpheme boundaries, but may also be found, for instance, in numerals and affective words, e.g. Uzbek ikki 'two', Turkish anne 'mother'.

**Syllable Structure**

A Turkic syllable typically consists of a vowel with one preceding and/or subsequent consonant, e.g. qum-da 'in the sand'. Vowel hiatus and initial consonant clusters are avoided. Final clusters with one nasal, liquid or sibilant occur commonly, e.g. Türk 'Turk', üst 'upper side'. When two morphs join, maximally three consonants may cluster together, e.g. dostlar 'friends'.

Word-initial n, m, q, l, r are avoided, the only seemingly native exception being the interrogative ne 'what' (cf. p. 106). Loanwords beginning with nasals and liquids are often provided with prothetic vowels, e.g. Kazakh or'is 'Russian'.

The most general sound harmony phenomenon is an intrasyllabic front vs. back harmony that affects whole syllables with their vowel and possible consonants. Each syllable is classified as front or back. The frontness or backness is signalled by both vowels and consonant segments. For example, a back syllable may be realised as qül 'slave', whereas its front counterpart is realised as kül 'ashes'. There are, however, numerous exceptions to this phonetic situation. Not all consonants have clearly distinguished front and back variants. The reduced vowels of some languages do not signal frontness and backness in a clear-cut way. In loanwords, phonetically front vowels may go with back consonants and vice versa, e.g. Turkish kär [kəɾ] 'profit' (< Persian). Nevertheless, the syllable as a whole is classified as phonologically front or back.

Normally, the front consonants k and g occur in front syllables, whereas the back consonants q, ʁ and y occur in back syllables. In Yakut, however, k also occurs with high back vowels, e.g. kış 'girl', whereas ʁ, pronounced as an affricate [ʁk], only occurs with the low vowels a and o, e.g. ʁäs 'goose'.

**Morphophonological Variation in Primary Stems**

As regards morphophonological variation in primary stems, the second syllable of certain stems has an unstable vowel that does not appear in front
of suffix-initial vowels, e.g. Tatar kürēk ‘beauty’, kürkē ‘its beauty’, Turkish oğul ‘son’, oğlu ‘her, his son’. In primary stems with an unstable vowel, consonant assimilation may also create cases of variation such as Tuvan egin ‘shoulder’ → ekti (≪ *ekni < *egni) ‘his/her shoulder’, ās (≪ *ayīz) ‘mouth’ → aqsi ‘his/her mouth’ (≪ *aqzī < *ayzī), with syllable-final devoicing triggering progressive assimilation.


Intervocalic lenes are often further weakened, that is fricativised or deleted, e.g. Turkish göğü [ ɾɛy] ‘its heaven’, Uyghur ayīyi ‘its foot’, Tuvan bali(< baliyi) ‘its fish’, Khakas azām (< azayim) ‘my foot’. Morphemes with final lenis thus have two allomorphs. Polysyllabic stems end in lenes, while monosyllabic stems may also end in fortes (strong consonants), e.g. Turkish yük ‘burden’, yüki ‘its burden’. This kind of lenis vs. fortes variation is not manifested in all Turkic languages, e.g. Khalaj topuq ‘ankle’, topuşuq ‘my ankle’, compare Turkish topuk, topuşuq.

Primary stem variation may also emerge through contraction, e.g. Uyghur qii-p ‘doing’ ← qii- + -i p ‘doing’, Tuvan ā-p ‘taking’ ← al- + -i p, or through regressive simplification of a consonant cluster, e.g. Uzbek Tāškēngā ‘to Tashkent’ ← Tāškent + -gā.

The reason may also be regressive devoicing, e.g. Kazakh jassam ‘if I write’ ← jaz- + -sAm. This kind of assimilation is frequent in Siberia, e.g. Yakut akka ‘to the horse’ ← at ‘horse’ + -GA. Siberian languages also exhibit other cases of primary stem variation due to diachronic processes, e.g. Yakut as- (before consonants) ~ any- (before vowels) ‘stick, pierce’ (see p. 107). A specific kind of morphophonological variation in primary stems is caused by Modern Uyghur so-called umlauting, a regressive assimilation of low vowels, e.g. baʃ ‘head’ → bēsim ‘my head’ (see pp. 93, 383).

Morphophonological Variation in Suffixes
The intersyllabic phonotactic relations are characterised by a number of assimilations of morphs within word forms.

Intersyllabic Sound Harmony
The rules of intersyllabic sound harmony vary across languages. Suffixes are often non-harmonic at an early stage of development. Their development into harmonic suffixes may also be blocked by foreign influence, e.g. by Iranian influence in dialects of Uzbekistan, Afghanistan and Iran.

Front vs. back harmony, mostly called ‘palatal harmony’, is a systematic
neutralisation of the phonological distinction front vs. back in suffix syllables under the influence of a dominant immediately preceding syllable. This means that the quality of the last syllable of a stem determines the quality of a following suffix with respect to front vs. back. Primary stems allow a free choice of front and back syllables, e.g. Tatar at ‘horse’, it ‘meat’, ’ét ‘dog’, ut ‘fire’, ńt ‘pass!’, őt ‘win!’, őt ‘singe!’.

In the case of suffixes subject to intersyllabic front vs. back harmony, however, a front or a back variant must be selected to match the last stem syllable. Though this harmony manifests itself most clearly in the choice of vowels, it affects the whole syllable. Thus, dative suffixes are of the type -GA with variants such as -ke, -ge, -qa, -ya. If the harmony rules are applied consistently, back and front syllables exclude each other within word forms, e.g. Turkish ev-ler-im-e ‘to my houses’, at-lar-un-a ‘to my horses’.

It would be wrong to claim that the harmony is caused by the preceding vowel. It is also observed after stems with weak or vanishing ‘minimal vowels’, e.g. in Tatar dialects, or after the neutral i in Uyghur. In loanwords, the final syllable may have a back vowel, but still be front, i.e. take on front suffixes, and vice versa, e.g. Turkish rol-ü ‘its role’, harb-i ‘its war’. Apart from non-harmonic suffixes, there also are many cases of phonetically less clear vowel realisations, notably in strongly Iranised dialects. But not even here do we find any general breakdown of the syllabic front vs. back harmony.

Some languages only display this kind of harmony, e.g. the Tatar third-person simple past forms čiğti ‘went out’, kettę ‘went’, őntę ‘won’, ötte ‘singed’. Others also apply a rounded vs. unrounded harmony, the so-called ‘labial harmony’, which is more of a real vowel assimilation. It implies neutralisation of the distinction rounded vs. unrounded in suffix syllables: the quality of the vowel of the last stem syllable determines the suffix vowel. One additional property of the preceding syllable is thus reflected in the suffix.

In many languages, this harmony only affects high suffix vowels, in Tatar and Bashkir centralised vowels (p. 92). This creates suffixes with vowels displaying a fourfold harmony such as the Turkish first-person singular possessive suffix -(X)m or the Bashkir third-person simple past suffix -DX, e.g. Turkish kizım ‘my girl’, atım ‘my horse’, elim ‘my hand’, ipım ‘my rope’, pulım ‘my stamp’, yolım ‘my way’, gülüm ‘my rose’, gölüm ‘my lake’, Bashkir siğti ‘went out’, kettę ‘went’, öttö ‘won’, öttö ‘singed’.

Some languages such as Yakut and Kirghiz go further, applying labial harmony to low-vowel suffixes as well (‘labial attraction’). The latter thus exhibit four variants, e.g. Yakut -LAr in ayalar ‘fathers’, oyolor ‘children’, kihiler ‘persons’, börölör ‘wolves’. However, no Turkic language applies this harmony consistently. For example, the roundedness of the Yakut stem vowels u, ü, ü, “o, and “ö is not reflected in suffixes, e.g. ular ‘waters’, and Kirghiz labial harmony does not apply after u, e.g. quşqa ‘to a/the bird, sýyä ‘to water’. The scope of labial harmony must be specified for each language.
The distinction low vs. high always has semantic implications and is not subject to harmony, e.g. Turkmen ādama ‘to a/the man’ (dative), ādami ‘the man (accusative)’.

Consonant Assimilations
Consonant assimilations create further suffix allomorphs. A very common phenomenon is progressive devoicing after voiceless consonants, \(d > t, \, j > č, \, g > k\), etc., e.g. Turkish gel-di ‘came’ vs. git-ti ‘went’, Uzbek ĕy-gā ‘to the house’ vs. ešik-kā ‘to the door’. The devoicing is relatively weak in some languages, and not always indicated orthographically. In the present volume, it is ignored in the notations for a few languages, e.g. Azerbaijani -mAKdA.

Certain languages display progressive assimilation of suffix-initial \(l\) to \(n, \, d, \, ð, \, t\), etc., e.g. in the plural suffix -LAr: Kazakh at-tar ‘horses’, köl-der ‘lakes’, Bashkir taw-ðar ‘mountains’, Tuven şol-dar ‘hands’, nom-nar ‘books’. Some Chuvash suffixes have allomorphs beginning with \(d = \) written \(t\) (after \(l, \, r, \, n\)) and with \(r\) (otherwise), e.g. värman-đa ‘in the forest’, tu-ra ‘on the mountain’ (see Table 27.5, p. 439).

Many suffixes have allomorphs with an initial consonant after stem-final vowels, and with an initial vowel after stem-final consonants. With the type -(V)C, the vowel is dropped when the stem ends in a vowel, e.g. Turkish ev-im ‘my house’, baba-m ‘my father’. With the type -(C)V, the consonant is dropped when the stem ends in a consonant, e.g. Turkish bašla-yan ‘beginning’, ol-an ‘being’, iki-šer ‘two each’, üç-er ‘three each’. There are diachronic reasons for this variation, and it would be wrong to claim that the segments indicated in brackets are ‘connective’ sounds inserted epenthetically to prevent hiatus or to break up consonant clusters.

A special kind of suffix variation is due to the so-called ‘pronominal \(n\)’ occurring in many languages between third-person possessive suffixes and case suffixes, e.g. Turkish -(s)I(n) in forms such as baba-sm-a ‘to his/her father’.

Prosodic Phenomena
The main factor in word-level accent is the capacity to carry high pitch. Underived items are accentable, e.g. at ‘horse’, or unaccentable, e.g. dA ‘and, too’. Most Turkic languages have pitch accent, that is increase of the tone height, on the last syllable of native lexical items.

Suffixes are classified into accentable ones, e.g. Turkish -DIm in Uyudúm ‘I slept’, and non-accentable ones, e.g. -(y)dIm in Uyúrdum ‘I would sleep’. Pitch accent occurs on the last accentable syllable in word forms, e.g. Turkish köylerde ‘in the villages’.

As a rule, personal suffixes of the pronominal type, copula markers, negation suffixes (except the negative -mAz or -mAs aorist) etc. are unaccented, e.g. Uyghur Sen kimsen? ‘Who are you?’, Yázmidi ‘(S)he did not write’. This is also true of enclitic particles such as dA ‘and, too’.

There is also an interacting changeable dynamic stress accent, charac-
terised by more energy of articulation. It tends to fall on the first syllable, and seems to be the original factor of intersyllabic progressive sound harmony and of rhyme patterns in Old Turkic poetry. Being sensitive to phonetic factors such as weight, it often falls on heavy syllables, that is closed syllables or syllables with a long vowel, e.g. Turkish evde ['evdɛ] 'at home’.

Pitch and stress accent may coincide in a non-final syllable, followed by a corresponding fall in the next syllable, which yields a higher degree of prominence. Lexical items displaying this feature are mostly of foreign origin, recent borrowings or place and personal names. The accent falls on the nearest heavy penult or antepenult, e.g. Turkish lokanta [lɔktˈɑntɑ] 'restaurant', pencere [pɛnˈdɛɾɛ] 'window', or, if none of the syllables is heavy, on the nearest light syllable. Such patterns may, however, be replaced by word-final accent if the words in question are nativised.

Non-accentable suffixes often produce a coincidence of pitch and stress accent on the immediately preceding syllable, e.g. Turkish Güzelsin [ y'zɛlsɛn] 'You are beautiful’. This phenomenon allows minimal contrasts between words such as Uzbek yāzmā ['jɒzmaː] 'do not write' and [jɒzmə] 'writing', Ātiŋ ['ɒtiŋ] 'Throw!' and [ɒɲ] 'your horse'. Conjunctions and adverbially used elements tend to be accented on the first syllable, e.g. Tatar emma ['ɛmma] 'but'. Turkish yalniz ['jɑntɪz] ‘only’; compare [jɑntɪz] ‘alone’ (adjective). Items of compound origin and reduplications behave similarly, e.g. Tatar niče ['nɪtʃɛ] ‘how many’, appaq ['ɑpɑq] ‘very white’, Turkish nasıl ['nɑsɪl] ‘how’, şimdı ['ʃɪmɖɪ] ‘now’. This accent is often used for affective or emphatic effects, e.g. Turkish vocative kardes ['kɑrdɛʃ] ‘brother!’ ← ['kɑrdɛʃ].

Both accent types are subordinated to higher pitch and stress patterns at phrase, clause and sentence levels. The components of word accent are also distributed differently in the individual Turkic languages. Central Asian languages often tend to give more prominence to the initial syllable; languages of the Volga-Kama region to the last syllable. The differences between pitch and stress accent are usually ignored in studies of Turkic accent systems. In general, reliable dates on Turkic prosodic phenomena are rather scarce. Intonation patterns are particularly poorly investigated.

Morphology

Word Structure

Synthesis and Juxtaposition
The structure of the Turkic word is agglutinative, that is characterised by a highly synthetic structure with numerous bound morphemes, and a juxtaposing technique with clear-cut morpheme boundaries and predictable allomorphic variation. An example is the Turkish word parasızkılarından
'because of their poverty', consisting of para 'money', -slz privative suffix '-less', -lik abstractness suffix 'ness', -lArI(n) 3p.pl. possessive suffix, -DAn ablative suffix.

There are rich possibilities of expanding stems by numerous bound morphemes, which serve word formation and the expression of grammatical notions. For many grammatical notions, the synthetic expression is the only available method, e.g. Turkish passive yap- 'be done', causative sevdir- 'cause to love', genitive kralm 'the king's, of the king'. A high degree of combinability allows long chains of morphs. Since hundreds of forms may be derived from each single primary stem, it is difficult to present complete paradigms.

The bound morphemes mostly have a highly generalised content and thus a high applicability. For example, Turkish -lik 'ness' and -ci 'professional' are much more productive than corresponding English devices, e.g. gazeteci 'journalist' ← gazete 'newspaper', avc 'hunter' ← av 'hunting', sucu 'water seller' ← su 'water'.

Regularly All these factors contribute to a considerable morphological regularity. The morphemes have few and phonologically predictable allomorphs, added rather mechanically to the stem according to the rules of assimilation mentioned above. The agglutinative technique yields transparency: regular, easily segmentable structures. The content is readily matched with its segmental expression, e.g. Turkish i§-ler-in 'affair + plural + genitive', without any fusion of significants as, for instance, in the Latin counterpart rerum.

This regularity should, however, not mislead to unjustified simplifications concerning the meaning of complex forms. Certain combinations of morphs have grammatical functions not derivable from the functions of the components. Accent may also distinguish seemingly identical forms.

The few exceptions to phonological predictability include the choice of causative allomorphs and the choice between high and low vowels in the 'aorist' suffix -(V)r, e.g. Turkish bil-dir- 'let know', anla-t- 'let understand', bil-ir 'knows', dön-er 'turns'. Some irregularities in primary stems have been pointed out above. Nevertheless, Turkic languages basically lack declensional and conjugational classes, irregular verbs, suppletive forms, etc.

The method is consistently affixing, one morph following after the other. The primary stem is the leftmost morph (not segmentable synchronically). The affixes are thus suffixes, mostly monosyllabic ones. The primary stem can always be used as a free form, e.g. Turkish at 'horse' (nominal stem), At 'Throw!' (verbal stem). It remains intact, without infixes, additive or replacive elements. The few exceptions relate to the declension of pronouns, e.g. Turkish ben 'I', ban-a 'to me'. Neither are there usually real prefixes. Elements preceding primary stems are mostly nominal elements that can also
occur as free forms, e.g. ön ‘front’ in the Turkish loan translation öngör- ‘foresee, provide for’ ⇄ French prévoir. Some languages under strong foreign influence have a few copied prefixes, e.g. Uzbek nā-toyri ‘incorrect’.

The originals of loanwords often represent morphological processes alien to Turkic, prefixation, ablaut, metatheses, etc. One Arabic root may be represented by various forms, e.g. hākim in Turkish hûkûm ‘judgement’, hîkmet ‘wisdom’, hâkîm ‘judge’, hâkîm ‘wise’, mahkûm ‘sentenced’, mahkeme ‘law court’, muhâkeme ‘lawsuit’, muhmûm ‘solid’, etc. Such processes are unproductive in the Turkic languages that incorporate the loanwords in question. Copies of Arabic plurals with internal inflection are sometimes used as singulars and provided with Turkic plural suffixes, e.g. Turkish tüccâr-lar ‘merchants’ ⇄ singular tâcir.

Use of Suffixes
It is a typical feature of Turkic to use morphological devices economically and avoid redundance. There are few cases of agreement. Third-person singular forms are often unmarked and the singular is used after cardinals, and certain suffixes such as number, case, possessive and copula markers may be shared by several syntactically parallel segments and only attached to the last of them, e.g. Turkish Görmüş ve duymuş-lardı ‘They had seen and heard it’.

The order of suffixes is subject to rigid rules. Suffixes form distributional classes according to their ability to occupy relative positions within the word, that is their relative distance to the primary stem. Suffixes modifying the primary stem directly are closest to it, which means that derivational suffixes precede inflectional ones. Each added suffix tends to modify the whole preceding stem, e.g. Kirghiz üylörömðö (‘house + plural + my + in’) ‘in my houses’.

Suffixes and Enclitic Particles
Suffixes must be distinguished from enclitic particles, which are free unaccentable units. They include postpositions, relators of other kinds, modal items, etc., e.g. Uzbek burun ‘before’, edi ‘was’, Turkish ki ‘that’. Enclitics are similar to suffixes in that they are often subject to assimilatory processes such as sound harmony, e.g. Turkish da ‘and, too’. Note that some free enclitic markers have suffixes of the unaccentable type as variants, e.g. Turkish idi ~ -(y)DI ‘was’, ile ~ -(y)Ia ‘with’, Ottoman içün ~ -cün ‘for’.

Stem Formation
Verbal and nominal stems are sharply distinguished, homonymous stems such as English face being extremely few, e.g. âj– ‘be hungry’ and âj ‘hunger, hungry’. All stems, whether primary or secondary, can be used as free forms.

From verbal and nominal stems, expanded verbal or nominal stems are formed. Since nominal stems take on denominal suffixes, and verbal stems take on deverbal suffixes, there are four possibilities of derivation:
1 denominal nominal stems, e.g. Turkish *yol daş* ‘fellow traveller’ ← *yol* ‘way’
2 deverbal nominal stems, e.g. Turkish *yatak* ‘bed’ ← *yat-* ‘lie’
3 denominal verbal stems, e.g. Turkish *yolla-* ‘send’ ← *yol* ‘way’
4 deverbal verbal stems, e.g. Turkish *yolla-n-* ‘be sent’ ← *yolla-* ‘send’.

The last two devices should be compared with the possibilities of analytical derivation of verbal stems. Denominal verb formation also includes lexicalised verbal phrases containing auxiliary verbs (pro-verbs) such as *et-**, *eyle-*, *gil-*, *yap-* ‘do’+ incorporated nominal elements which do not function as free objects, e.g. Turkish *imza et-* ‘sign’ (compare *imza-la-*), *affet-* ‘forgive’.

Similarly, a converb and a form of a second verb may form verbal phrases with strong semantic fusion, e.g. Uzbek *âlip kël-* ‘bring’ (‘taking come’), *yiylâb yubâr-* (‘crying send’) ‘start crying’. For postverb constructions, see p. 42. There are also combinations of thematic stems (see p. 42) with auxiliary verbs such as *er-* ‘be’, *bol-* ‘become’.

**Word Classes**

The main word classes of Turkic languages are nominals and verbals. This division is not identical with the classification into nominal and verbal stems, since verbals may also be nominal stems. Nominals comprise nouns, adjectives, pronouns, and numerals. The remaining parts of speech will be referred to as indeclinables.

**Nominals**

**Nouns**

Wherever an indefinite article is used, it is formally identical with the numeral ‘one’, e.g. *bir* in Turkish *iyi bir* *at* ‘a good horse’. Many languages use this device rather infrequently, e.g. Kirghiz *çaqşi* ‘a/the good horse’. Turkic lacks definite articles, though demonstrative pronouns may sometimes seem to be used in a similar way. Grammatical gender is also absent and thus cannot constitute an agreement factor. Even morphologically marked feminine lexical items are lacking, except a few derived with copied foreign suffixes, e.g. Turkish *kraliçe* ‘queen’, Karaim *Karayka* ‘Karaim woman’.

Nominals may contain plural, possessive and case suffixes. Their order and combinability is basically common to all Turkic languages, though in Chuvash possessive suffixes precede the plural suffix. Examples of inflectional paradigms are given in the individual chapters of the present volume.

The plural suffix is generally *-lar* or *-lär*, e.g. Tatar *qolaqlar* ‘ears’, the Chuvash counterpart being *-sem*. Unmarked forms, e.g. *qolaq* ‘ear’, are referred to as singular forms, though they also have generic and collective uses (see p. 51).
Possessive suffixes typically express possession and correspond in function to English possessive pronouns. They often exhibit forms such as -(I)m, -(I)n, -(s)l(n), -(I)mlz, -(I)lz, -(I)r(l)n, signalling person and number of the possessor. The first- and second-person plural forms contain a plural element -lz.

There are usually five core cases expressed by accentable suffixes: a genitive in -(n)I or -(n)I, a dative in -GA or -(y)A, an accusative in -NI or -(y)l, a locative in -DA, and an ablative in -DAn. Headless genitives are created with suffixes of the type -KI, e.g. Kirghiz Bul at ayamdiqi 'This horse is my brother's'. The nominative is suffixless, identical with the bare stem. There are many deviations from this scheme, e.g. coincidence of accusative and dative in Chuvash, of accusative and genitive in Uzbek dialects, Kumyk and Karachay-Balkar, lack of the genitive in Yakut and partitive use of -DA in the same language. Many case suffixes correspond in function to English prepositions. The core cases do not signal very specific relations, but have rather wide functional areas. The genitive, the accusative, and partly the dative fulfil abstract-relational functions.

Certain descriptions also reckon with a more peripheral set of cases, equative ('like'), directive ('towards'), terminative ('until'), comitative ('together with'), instrumental ('by means of'), prodessive ('for'), comparative ('than'), etc. The markers of this group are mostly unaccentable. Some of them are rather like postpositions, since they govern primary cases. Many similar suffixes, including several Old Turkic ones commonly regarded as case markers, are unproductive and are only present in adverbial relicts.

Adjectives
Adjectives are not clearly distinguished from nouns in morphological respect. However, some suffixes primarily form adjectives, e.g. Turkish -I, which is only attached to nouns. Adjective phrases are formed from adverbial locative phrases with suffixes of the type -GI or -kI, e.g. Uzbek yâzdâgi 'taking place in summer' ← yâzda 'in summer', Chuvash kunî 'local' (with contraction) ← kunta 'here'. Under foreign influence, some languages may mark adjectives with special copied suffixes, e.g. Ottoman -t, copied from Arabic, Turkish -sal, a neologistic suffix, Altay -niy, -skiy, Khakas -nay, -skay, copied from Russian in invariable forms.

The adjective in comparative constructions (see pp. 56–7) is in some languages followed by a comparative suffix, which may also simply signal a high degree of a property, e.g. Uzbek köprâq 'more, very much'. Yakut has a so-called comparative case in -TÂyAr (p. 421). Intensive forms may be formed from adjectives and adverbs with a preposed reduplication of the first syllable. Between the reduplication and the stem, an m, p, r or s is inserted, replacing a possible syllable-final consonant, e.g. Old Uyghur ap arîy 'quite clean', Uzbek yâm-yâsîl 'quite green', Kirghiz
röpkök ‘entirely blue’, Chuvash χυρ-χура ‘jet-black’, Turkish büsbütün ‘altogether’.

Pronouns

Personal and demonstrative pronouns form a morphologically distinct nominal subclass. They often exhibit oblique stems that differ from their nominative stems, whereas most other pronouns are inflected like nouns. Gender distinctions are lacking, e.g. Bashkir ul ‘it, she, he’.

As for personal pronouns, plural forms, with corresponding predicative forms, are often used for polite address. Reflexive pronouns can sometimes be used as more polite third-person personal pronouns, e.g. Turkish kendisi ‘(s)he [in person]’. As a rule, however, Turkic languages do not display very elaborate honorific systems.

Demonstratives mostly distinguish several deictic types for which features such as choice, distance and visibility seem to be relevant. Most Turkic languages have at least three-way systems, e.g. Bashkir bil, ošo, şul, without exact equivalents in the English system ‘near’ vs. ‘further away’. There are corresponding series of demonstrative nominals and adverbs, e.g. Turkish burasi ‘this place’, buradan ‘from here’. Corresponding interrogatives are Turkish neresi ‘what place’, nerede ‘where’, Uzbek qayerga ‘where to’, etc. Examples of pronominal verbs are Kazakh büyt- ‘do this way’, Yakut şavä-, Tuvan qança-, Ottoman neyle- ‘do what’, Kirghiz Qantıš kerek? ‘What [is necessary] to do?’

Possessive pronouns are formally genitives of personal and demonstrative pronouns. They are often, but not always, used for emphasis, e.g. Turkmen meniň adım ‘my name’, Uyghur meniň kitiplirim ‘my books’. Especially in spoken varieties, a free possessive pronoun may also be followed by a noun without a possessive suffix, e.g. Turkish bizim köy, Uyghur bizniń yéza ‘our village’, Uzbek bizniň kitıp ‘our book’, Kirghiz menin at(ım), Chuvash man(än) laša ‘my horse’. Independent forms are created with suffixes of the type -kl, e.g. Turkish bizimki, Uzbek bizniňi, Kazakh bizdiki, Chuvash pirênni ‘ours’. There are also corresponding interrogative, reflexive and other pronouns, e.g. Uyghur kiminiği ‘whose’, niminiği ‘belonging to what’, özemniki ‘belonging to myself’.

Reflexive pronouns such as kendi, öz, bot, Chuvash xa are used attributively in the sense of ‘own’, e.g. Uyghur öz kitiwim ‘my own book’, Kirghiz öz qolum ‘my own hand’, Tuvan bodumnuñ ažilim ‘my own work’, and in the sense of ‘(my)self etc., with possessive suffixes, e.g. Uyghur men(iñ) özem, Yakut min beyem ‘I myself’, Tuvan bodumya ‘to myself’, Chuvash esir şavär ‘you yourselves’, Karachay kesim ‘myself’. There are also reciprocal pronouns, mostly of the type bir(i)bir i ‘each other’.

Numerals

Modern Turkic languages normally have lexical cardinal numerals for the units one to nine, for the tens ten to ninety, for hundred, for thousand, etc. The
tens sixty to ninety are of the multiplicative types _altimiş, yettimiş, seksen, doqsan_, i.e. they contain the digits six to nine (_alti, yetti, sekiz, doquz_). Some languages use multiplicative juxtapositions formed with _ön_ ‘ten’ for lower tens as well, e.g. Tuvań _üžen_ ‘thirty’, Kirghiz dialects _çiton_ ‘seventy’, Fu-yü _durdin_ ‘forty’.

Ordinals are often formed with suffixes of the type -(I)nC/, e.g. Kirghiz _ekinči_ ‘second’, Uzbek _něčanči_ , Crimean Tatar _qačinči_ ‘which in order’. Chuvash uses the suffix -_mëš_. Collective numerals are formed with the type -ÄGU, e.g. Old Uyghur _üčëgü_ ‘three together’, Kirghiz _altö_ ‘six together’. There are also the types Uyghur -_ülën_, e.g. _ikkilen_ ‘two together’, Tuvan -(A)län, e.g. _beželën_ ‘five together’, Khakas -(O)lÄn, e.g. _altolän_ ‘six together’, and the special Chuvash possessive element -_ëšë_, e.g. _ikkëšë_ ‘two of them, a pair’. Distributives are often formed with the type -(s)Ar or -(s)Ar, e.g. Turkish _beşer_, Chuvash _pëlikšer_ ‘five each’, Crimean Tatar _yarımšar_ ‘a half each’.

_Personal Markers on Nominal Predicates_
The first- and second-person personal markers on nominal predicates, ‘subject representatives’, indicating the person and number of the first actant (see pp. 52–3), are unaccentable copula elements developed from personal pronouns, e.g. Turkish _Evdeyim_ ‘I am at home’, Bashkir _Min yaoiwsiini’n_ ‘I am a writer’, Kirghiz _Men qirïzmi’n_ ‘I am a Kirghiz’. In the third person, there is mostly no personal marker as a copula, e.g. Kazakh _Dosiin zaqsi‘ adam_ ‘My friend is a good man’, Khakas _Ol tôyišči_ ‘He is a worker’. In some languages, unaccentable suffixes of the type -_DIr_ ‘is’ < _turur_ ‘stands’ may be used in the third person.

Negative copulas are formed with particles such as Kazakh, Kirghiz, Uyghur _emes_, Uzbek _émäs_, Chuvash _mar_, Turkish _değil_, Azerbaijani _deyil_, Turkmen _dâl_, Tatar, Bashkir _tügel_ ‘(is) not’, e.g. Uyghur _U muellim emes_ ‘He is not a teacher’, Kazakh _Men muyalim emespin_ ‘I am not a teacher’, Turkish _Fena değil_ ‘It is not bad’.

The past tense copula is mostly the past form _edi_ ‘was’ of the old verb _ér_-‘be’; e.g. Turkish _Fena değildi_ (< _değil idi_ ) ‘It was not bad’. The Chuvash counterpart is _-çêš_. There are also conditional copula particles of the type _ése_ ‘if . . . is’ and indirective ones such as _imiš_ and _éken_ (p. 45). The old role of _ér_- has largely been taken over by copula verbs such as (b)ol- ‘become, be’.

_Verbals_

_Verbal Morphology_
The verbal morphology is complex, comprising productive markers of actionality, voice, possibility, negation, aspect, mood, tense, person, interrogation, etc., normally in the order given here. Long derived stems can thus be produced, e.g. Turkish _Kov-ala-n-ma-miş-ti-k_ (‘persecute + iterative +
passive + negation + post-terminal + anterior + 1p.pl.’) ‘We had not been persecuted’.

As regards actionality (German Aktionsart), any verb(al phrase) has a natural actional content with respect to phase structure. Transformatives imply an inherent crucial limit, a natural turning point, with the attainment of which a transformation takes place, e.g. öl- ‘die’, yat- ‘lie down, lie’. They comprise two subclasses: fini-transformatives, in which the end of the action is the crucial limit, e.g. öl- ‘die’, and initio-transformatives, in which the beginning of the action is the crucial limit, e.g. yat- ‘lie down, lie’. Non-transformatives do not imply any inherent crucial point, e.g. yaz- ‘write’.

Actionality suffixes, modifying the action expressed by the verb stem, include markers of intensity, frequentativity, etc., e.g. Crimean Tatar kes-kele- ‘cut continuously’, Tuvan biži-gile- ‘write repeatedly’. There are also desideratives and similatives such as Old Uyghur -(V)GsA and -(V)msIn, e.g. körügüse- ‘want to see’, kelimsin- ‘pretend to come’.

Simple suffixes of this type are weakly represented in modern languages. Analytical methods of derivation are more strongly developed. As already noted, a converb of a lexical verb and a second auxiliary verb may form a verbal phrase with strong semantic fusion. Such phrases have a common actancy pattern, and insertion of elements between the two verb forms is heavily restricted. The second verb – mostly with lost lexical meaning and generalised grammatical meaning – may contribute to describing the action in a more accurate manner, e.g. Uzbek ušlap āl- (‘grasping take’) ‘seize’, Uyghur ēlip bar- (‘taking go’) ‘lead’, Chuvash ilse pîr- (‘taking go’) ‘bring’, Turkish olup bit- (‘becoming end’) ‘happen’, Karachay aytib qoy- (‘saying put’) ‘blurt out’, or express actionality, i.e. specify a phase of the content of the preceding verb or indicate whether the action is lasting, repeated, momentary, attempted, etc., e.g. Turkish yazlp dur- (‘writing stand’) ‘write permanently’, gülive- (‘laughing give’) ‘burst out laughing’, Uzbek yiylâb yubâr- (‘crying send’) ‘start crying’, Uyghur oqup kör- (‘reading see’) ‘try to read’. Such actional auxiliaries, often erroneously called ‘aspect verbs’, correspond to Indo-European preverbs and may therefore also be referred to as postverbs. There is sometimes fusion of the two verbs, e.g. Uyghur yêziwal- < yêzi al- (‘writing take’), Tuvan biživit- < bižip it- (‘writing send’) ‘write down’.

Various thematic stems can also combine with copulative verbs such as er- ‘be’ and bol- ‘become’, e.g. Old Turkic -(V)r bol- (‘become doing’), signalling the transition to an intraterminal state (see pp. 43–4), Turkish -mış ol- (‘become having done’), signalling the transition into a post-terminal state (see p. 44).

Voice is expressed by passive, reflexive-middle, causative and cooperative–reciprocal suffixes, which modify the meaning of the preceding verbal stem and affect its actancy pattern by changing the syntactic roles of actants. The most common passive suffix is -(V)l, e.g. örtül- ‘be covered’. Suffixes of the type -(V)n often express the middle voice, e.g. Old Uyghur,
Karakhanid alîn- 'take for oneself'. Causative suffixes include -(V)r, -GUr, -KUr, -(V)t, -DUr, -(V)z etc., e.g. ölür- 'kill', yedür- 'give to eat'. Cooperative–reciprocal suffixes are generally of the type -(V)s, e.g. körüš- 'see each other, meet'. Note that these suffixes are used to express plurality in Kirghiz verb paradigms, e.g. Qalîstî 'They remained', singular Qaldî, Jazîstâ 'They write', singular Jazat.

Possibility markers are postverbal combinations of converbs with auxiliary verbs such as bil- ('know') and al- 'take', e.g. Kirghiz Bere alat 'S)he can give'. Most of them have developed into suffixes, e.g. Turkish Verebilir 'S)he can give'. The verbal negation suffix is -MA etc., e.g. Tuvan Kelbedîn 'You did not come'.

Verbal predicates, whether finite or non-finite, are marked with thematic suffixes expressing aspect, mood and tense. Certain verb forms may occur both as finite and as non-finite items. It is important to note that they do not have identical meanings in these different syntactic functions. This has often been ignored by grammarians.

Finite Forms

Finite Thematic Forms

Finite items constitute independent sentences and express various aspectual and modal perspectives relative to given temporal orientation points, notably the moment of speaking. Conjugated verb forms minimally consist of a verbal stem and a thematic suffix that signals such a perspective. Though most of them are morphologically nominal stems, e.g. Turkish gelîr 'coming', gelmiş 'having come', gelecek 'foreseen to come', they readily fulfil the syntactic role of constituting sentences. As mentioned, however, their finite functions differ from their non-finite ones.

The number of simple and compound aspect–mood–tense forms is relatively high, and their designations are not standardised in the grammatical literature. Modern languages exhibit numerous past tenses, mostly more than one present tense, but seldom genuine future items.

Turkic languages make use of a number of aspect or viewpoint markers, which offer different ways of envisaging events with respect to their limits, that is their beginning and their end: intraterminals, post-terminals and simple terminals. Most languages exhibit rather elaborate aspecto-temporal systems.

Intraterminals, Post-terminals, Terminals With intraterminal items such as presents and imperfects, the event is envisaged within its limits, that is after its beginning and before its end. Some are more focal, putting a narrower focus on what is currently going on at the orientation point, sometimes in the sense of English progressives, e.g. Uzbek Kêlâyâtîr '(S)he is just coming', Noghay Barayâtîr '(S)he is just going', Kazakh Žazîp ôtîr, Uyghur Yêziwätîdû '(S)he is writing', Turkish okumaktaym, Kirghiz oqüdâmîn 'I am
reading’. Less focal items are used for events seen as ongoing within a broader period of time, for protracted, habitual or general events, e.g. Bashkir ешлеү ‘(S)he works’, Noghay Barad ‘(S)he goes’, Tatar Yaza, Uyghur Yazidу ‘(S)he writes’, Uzbek Bilämän ‘I know’, Kazakh Ol tlyt hy ay iyedi ‘(S)he always drinks tea’, Qus usadi ‘A/the bird flies’.

There are corresponding past items, more or less focal imperfects such as Turkmen Iyyerdim ‘I was just eating’, Azerbaijanian Alrrdi (< alit idý) ‘(S)he was taking, took’, Kumyk Bara edim ‘I was going, went’, Chuvash Şirattam ‘I was writing’. Several languages also have special habitual past forms, e.g. Kazakh Baratyn ‘(S)he used to go’, Kirghiz Oqüçumun ‘I used to write’, Khakas Xiýirjapmin ‘I used to read’.

With post-terminal items such as perfects, the event is envisaged after its relevant limit, i.e. typically after it has been carried out. The relevant limit varies according to the actional content (see p. 42). More focal items, with a narrow focus on the orientation point, are stative or resultative, e.g. Turkish Olmu§ bulunuyor (‘is in the state of having died’) ‘(S)he has (just) died’. Less focal items are similar to English perfects, signalling the current relevance of a past event, e.g. Uzbek Yazyän ‘(S)he has written’, Kumyk Baryan ‘(S)he has gone’, Uyghur Bu kitapni men oquyan ‘I have once read this book’. There are also corresponding pluperfects, indicating a post-terminal aspect in the past, e.g. Azerbaijanian Yazmiśdíj (< yazmiš + idik) ‘We had written’, Kumyk Baryan edim ‘I had gone’.

Special negative items include categorical pasts such as Uzbek Yazyänim yoq (‘there has not been any writing of mine’) ‘I have not written at all’, Kazakh Körgenim joq, Bashkir Kürgenem yoq ‘I have not seen it’, Turkmen Bilemöq ‘I do not know at all’, and items denoting that an event has not yet taken place, e.g. Kirghiz Kelelek ‘(S)he has not come yet’ (from -A elek), Yakut Bara ilik ‘(S)he has not gone yet’.

All Turkic languages have simple terminal items which present the event directly and as a whole, implying the attainment of its relevant limit: a simple past (‘preterite’) of the type -DI, e.g. Uzbek Yâzdim, Chuvash Sirtam ‘I wrote’.

Modal Forms Turkic also uses verbal suffixes to convey certain modal meanings with respect to the speaker’s attitude.

Imperatives exhibit different forms functioning at various levels of politeness. The thematic marker of the second-person singular is 0, e.g. Al ‘Take!’; Optatives express voluntative modality and often occur in purpose clauses. Optatives have close connections with imperatives and conditionals, sometimes occurring in similar functions. There are also necessitative or obligatory items of the types -mAK, -(y)AsI, -mAll etc., e.g. Kirghiz Jöömökpiüz ‘We must set out’, Tatar Barsibiz ‘We must go’, Azerbaijanian Gelmeliyem ‘I ought to come’, and intentional items such as Uzbek -mäkçi, e.g. Meni körmäkçi ‘(S)he will, intends to see me’, Uyghur Men yazmaqCimen ‘I am going to write’.
The so-called ‘aorist’ in -(V)r is mostly modal, expressing disposition, inclination, prospectivity etc., e.g. Tatar Kiler ‘(S)he may/will come’, Chuvash Śtrāp ‘I will write’. There are also more clear-cut prospectives or future items, e.g. Tatar Kileček ‘(S)he will come’. Most Turkic languages have special presumptive verb forms, e.g. Turkish Uyuyordur (intraterminal + DIr < turur ‘stands’) ‘(S)he is presumably sleeping’, Turkmen Ol ogoyānnır ‘(S)he is probably reading’, Uyghur Yazỹandu (post-terminal + du < turur ‘stands’) ‘(S)he has probably written’.

Indirective Forms  Turkic languages also possess indirective categories, certain kinds of evidential items used to qualify the experience of the event spoken about. Indirective statements concern the conclusion regarding an event and thus do not present the event itself in a direct way. The source of information may be hearsay, inference from results, or direct experience (‘as is obvious’, ‘as it turns out’, etc.). The expression of this epistemic modification varies across languages. Post-terminals such as -mlS and -(V)ptIr tend to get indirective interpretations as ‘subjective pasts’, e.g. Turkish Ali gelmiş ‘Ali has [reportedly, apparently, obviously] come’, Uzbek Yâziptilâr ‘They appear to have written’, Uyghur Yeziptu ‘(S)he appears to have written’, Kazakh Barïptî, Altay Barïptur, Yakut Barbît ‘(S)he appears to have gone’.

Besides these deverbal past tense devices, there are also tense-indifferent indirective copula particles of the types imiš, eken, which combine with nominal stems, e.g. Turkish imiş-(y)mliş, e.g. Ali geliyormuş ‘Ali is/was [reportedly, apparently, obviously] coming’, Uyghur imiş, eken, Turkmen -mlŠ, eken, Uzbek ėmiš, ėkân. The particle ėken tends to convey the meaning ‘as is/was obvious’ or ‘as it turns/turned out’.

Personal Markers
The most peripheric inflectional items are personal markers, ‘subject representatives’, indicating the person and number of the first actant (see pp. 52–3). The dominant type of first- and second-person markers is the one used after nominal predicates (see p. 41): unaccentable markers of pronominal origin, e.g. Turkish Geliyor-sun ‘You come, are coming’, Kirghiz Kele-biz ‘We come’. The third person is unmarked or sometimes marked by an unaccentable suffix of the type -DIr < turur ‘stands’. Certain thematic stems, notably the simple past, take on acceptable suffixes of the possessive type, e.g. Uzbek Kêldî-m ‘I came’. Note that some authors in the present volume do not analyse the simple past as DI + personal markers -(I)m, etc., but rather as D + personal markers -lm, etc.

The enclitic copula particles, developed from forms of the obsolete verb er- ‘be’, have already been mentioned. Past markers of the type edi ‘was’ locate the thematic perspectives temporally, e.g. Turkish Gelmištî ‘(S)he had come’. The roles of indirective copula particles such as ěmiš and ėken have just been mentioned.
Non-finite Forms

Non-finite Thematic Forms

Turkic is rich in non-finite predicative forms based on action nouns, participles and converbs. The corresponding suffixes function as thematic markers and serve to non-finitise verbal stems. Some of them take on personal markers.

Action Nouns

Action nouns refer to actions and are used to construct complement clauses, e.g. Turkish -DIK, -(y)AcAK, -(y)I§, -mA, Uzbek -Gän, -GänliK, -(à)yätgän, -(à)yätgänligi, -adigän/yidigän, -(i)š, Turkmen -A(:)n, -jak, Chuvash -ni. They are, as a rule, used with possessive suffixes as ‘subject representatives’, e.g. Turkish adlıgım (‘my taking’) ‘that I take/took’. After nominal stems, corresponding copulative markers are used, e.g. forms of copula verbs such as (b)ol- ‘become, be’, copula particles of the type eken, e.g. Uzbek ekän, ekänlik, or other older derivates of er- ‘be’, e.g. Ottoman idük, Turkmen -DIK. These markers also carry possessive suffixes, e.g. Turkish hasta oldugum (‘my being ill’) ‘that I am/was ill’.

Participles

Participles refer to entities participating in actions, and can be used as attributes or without a head. They are often identical in form with action nouns. Thus, the Turkish form duyduğum ‘my hearing’ means, in isolation, both ‘the fact that I hear(d)’ and ‘what I hear(d)’.

Many languages have special intraterminal (‘present’) participles, presenting the event as current, e.g. Uzbek -(à)yätgän, Kazakh -A qatqan, Chuvash -(A)kän, Khakass -(p)AqKän, Tuvan -(V)p turar, Turkmen -yän, e.g. Kirghiz oqup jatqan student ‘at the student who is/was reading’. Some of these intraterminal participles are less focal, e.g. Uzbek -adigän/yidigän. There are also participles with post-terminal or terminal meaning (perfect participles), e.g. Azerbaijani -mlš, -DIK -(y)An, Turkmen -A(:)n, Tatar -GA näy, Uzbek -Gän, Chuvash -näy.

There are also prospective (future) participles such as Bashkir -(y)AsAK, Kumyk -(A)̰zA K, Tuvan -(V)r, Chuvash -(A)s, e.g. Kumyk ozužaq 'who will read', and necessative participles such as Tatar -AsĒ/-ysĒ, Chuvash -mA/A, e.g. Tatar yazası, Chuvash şirmäla ‘(necessary) to write’. One type of participle denotes events that have not yet taken place (participium nondum facti, i.e. participle of the not yet done), e.g. Tuvan kelgelek ‘not having come yet’, Altay kirgelek ‘not having entered yet’, Kirghiz körö elek ‘not having seen yet’ (compare pp. 413, 427).

Active participles, e.g. -GA n, may often, notably in older languages, refer to entities different from the first actant of the verbs. This may yield ‘impersonal’ functions and seemingly ‘passive’ readings without passive suffixes, which is the basis for ‘impersonal’ interpretations of relative clauses (see p. 62), e.g. Khakas say-an inek (‘milk-PART cow’) ‘a/the cow [that somebody has] milked’.
In such cases, possessive markers may function in a way reminiscent of ergative markers: kör-gen-im ('see-PART-my') 'what I have seen'.

Converbs
Converbs are adverbial forms of the verb signalling various semantic relations to the content of the superordinate clause. A few converb markers are simple, morphologically unanalysable, e.g. -(y)V, -(V)B, -GAlI, -GAČ, -sA. More elaborate forms are based on verbal nouns and mostly marked with adverbial cases such as locative, dative, ablative, instrumental, equative or with postpositions. Some converbs lack a clear one-to-one relationship of affirmative and negative forms.

Intraterminal converbs are formed with -(y)V, -(y)ArAK, -(y)Vr + locative, etc., e.g. Bashkir ala 'taking', Tuvan kele 'coming', Turkish giderek '(by) going'. Converbs in -(y)V tend to occur in pairs, e.g. Yakut oχto oχto 'running'. There are also post-terminal converbs in -GAČ, -mlš + locative etc., e.g. Bashkir alγaθ, Tuvan alγaš 'having taken'. All Turkic languages have a terminal converb marker of the type -(V)B, Chuvash -sA, Yakut -(A)n, e.g. Turkish -(y)lp in gidip 'going (and ...)' (see p.64). Conditionals may sometimes occur in finite functions.

Personal Suffixes
Action nouns and participles generally take on personal suffixes of the possessive type, e.g. Turkish gel-diğ-im ('my coming') 'that I come/came'. Most simple converbs do not carry personal suffixes, but in Yakut they generally conjugate for person and number, e.g. bar-am-mi' me going/having gone'. More elaborate converb endings often contain personal markers, e.g. Old Turkic olor-duq-°m_a 'as I sat down'.

The simple conditional mostly takes on accentable personal suffixes of the possessive type, e.g. Turkish gel-se-m 'if I should come' (hypothetical), which also combine with the past copula particle, e.g. Turkish gel-se-ydim 'if I came' (counterfactual). There are also combinations of nominal verb forms with conditional copula markers of the type ēse 'if ... is', e.g. Turkish gelirsem 'If I come'.

Indeclinable Word Classes
The indeclinable word classes include adverbs, postpositions, copula particles, interjections and conjunctions or similar relators signalling connections between the parts of a sentence.

Adverbs
Adverbs do not constitute morphologically well-defined categories in modern Turkic languages, e.g. Gagauz bîn 'today', Uyghur bek 'very', emdî 'now', burun 'formerly', tümnügün 'yesterday', Bashkir biyîl 'this year', Kirghiz beri 'hither'. Many of them are fossilised case forms such as old directives or instrumentals, old participles and converbs, or forms of unknown origin, e.g. Uzbek soγrâ 'afterwards', Bashkir yeyên 'in summer', Old Turkic eðgüti
well’, *birle* ‘together’. Adverbs may also be formed with productive equative suffixes such as *-JA* or *-DAy*, e.g. Turkish *gizlice* ‘secretly’, Uzbek *bunday* ‘this way’. Case forms of pronouns are often used as conjunctional adverbs, ‘adjunctors’ (see pp. 48–9), e.g. Kazakh *sondıqtan* ‘thus’. Certain Turkic languages make frequent use of converb forms as adverbs, e.g. Uyghur *harmay* ‘unremittingly’, *yaxsilap* ‘in a friendly way’.

**Postpositions**  
Turkic has rich systems of adpositions, grammatical relators which differentiate the relational concepts expressed by the cases. They are free word forms and, according to the left-branching syntax, postpositions. Some are homonymous with adverbs, e.g. *birle* ‘with’ or *sopra* ‘after’. Some go back to converbs, e.g. Uzbek *köra* ‘according to’, *ölip* ‘from’, Uyghur *qaraq* ‘to’. Many of them govern cases, e.g. the ablative, as in Uyghur *bizdin burun* ‘before us’, or the dative, as in Gagauz *bana deyni* ‘for me’. Some govern the genitive of personal and demonstrative pronouns, e.g. Kirghiz *menin menen*, Uzbek *men(i)I) blan* ‘with me’, Uyghur *sen/seniI) ücün* ‘for you’.

One kind of postposition clearly goes back to nouns, notably space nouns (nomina loci), provided with possessive and case suffixes, e.g. Uzbek *aldimdà* ‘before me’, *uniI) yaniga* ‘to him/her/it’. The possessive suffix may refer to a preceding noun phrase in the genitive or the nominative, e.g. Turkish *ev(in) önünde* ‘in front of the house’, *ev(in) arkasmdan* ‘from behind the house’, Bashkir *ötel ötönde* ‘on the table’, Uyghur *šeher yenida* ‘near the town’, Chuvash *têp şine* ‘on the ground’.

**Conjunctions**  
Turkic languages have few conjunctions. Even coordinative conjunctions meaning ‘and’, ‘or’, ‘but’, ‘for’ etc. are often copied from Persian, Arabic, Russian, etc., e.g. Uyghur *peqat* ‘but’, Shor *no* ‘but’. Old Turkic displays a few free conjunctors such as *azu* ‘or’; compare Tuvan *azi*. Many languages use enclitic particles such as Uzbek *Dà* in *Kêldî-dà, ketti* ‘(S)he came and left’. Elements denoting ‘with’, instrumental cases or postpositions such as *birle* and *ile*, may be used instead of coordinative devices, e.g. Uyghur *ata bilen ana* ‘father and mother’, Turkish *karga ile tilki* ‘the crow and the fox’, Chuvash *naukapa praktika* ‘science and practice’. With increasing Europeanisation, pure juxtaposition without syntedic elements as ‘and’, ‘or’ etc. becomes less frequent.

Turkic clauses are embedded by means of suffixed subordinative elements, non-finite predicative markers, referred to here as subjunctors (pp. 59–60). The use of free subordinative items, conjunctions and relative pronouns is thus untypical. Where such items do occur, they are homonymous with interrogatives, e.g. *qaçan* ‘when’, *kim* ‘who’, or copied from other languages. Fossilised converbs of verbs meaning ‘say’, e.g. *dep, deyû, diye, tese, têyen, dêgân, dégen*, serve as unquoting particles placed after quoted direct speech or content of thoughts, e.g. Uzbek *kêlasan dêb* (‘saying: you will come’) ‘with
the idea that you will/would come’, kėtsin dėb (‘saying: may he go!’) ‘in order for him to go’.

Many items referred to as conjunctions in the literature are in reality conjunctional adverbs, referred to here as adjunctors, e.g. Old Uyghur, Karakhanid anîn ‘therefore’, Kumyk şo sayalî ‘for that reason’, Kazakh sondiqtan ‘thus’, Chuvash ančaž ‘however’, Uyghur şuğlaşqa ‘therefore, hence’.

Syntax

Nominal Phrases

Since Turkic syntax is basically head-final or left-branching, i.e. dependents precede their heads according to the so-called ‘rectum–regens rule’, the head of a nominal phrase succeeds modifiers such as adjectival, genitival and participial attributes. A common order pattern is demonstrative pronoun + cardinal number + adjectival attribute + head, e.g. Turkish bu üç mavi kuş ‘these three blue birds’. In languages that use the numeral bir as an indefinite article, the latter tends to stand next to the head, e.g. Turkish büyük bir ev, Uzbek kättä bir iüt ‘a big house’. There is no agreement in number or case between dependents and heads.

One type of nominal phrase is the combination adjectival attribute + noun, e.g. Turkish büyük evler ‘big houses’. A second type, in which the attribute has predicative force, i.e. can take complements, is the combination participial attribute + noun, e.g. Turkish bekleyen adam ‘the man who is/was waiting’, kaldtgtm ev ‘the house I stay/stayed in’ (see relative clauses pp. 61–3).

The attributive use of adverbials is limited, e.g. Crimean Tatar acliqtan ölüm ‘death by starvation’, Turkish taştan duvar ‘wall of stone’, Londra’da (oturan) bir Türk ‘a Turk (living) in London’, halka (yapulan) hizmet ‘service (rendered) to the people’. Some adverbial expressions can be used attributively with the addition of the -ki, e.g. Turkish sokaktaki adam ‘the man in the street’, bugünkü görüşme ‘today’s meeting’.

Genitive Constructions

In the combination genitival attribute + noun, the first element, expressing the possessor, carries a genitive suffix, whereas the head, indicating the entity possessed, is provided with a possessive suffix. Examples with third-person possessive suffixes are Kirghiz attîn bași, Chuvash lašan püşė ‘a/the horse’s head’. Uzbek adâmniñ üyi (‘man’s house-his’) ‘the man’s house’, Turkish öğretmenin kitabi ‘the teacher’s book’, evin kapısı ‘the door of the house’, Tatar kitapññ tis ‘the cover of the book’, Bashkir qalanññ baqsaññ ‘the park of the town’. In Yakut, which lacks a genitive suffix, the attribute is in the nominative, e.g. kihî jiete ‘the man’s house’. If the head is an action noun, e.g. Turkish Ali’nin beklemesi ‘Ali’s waiting’, Kirghiz kündüñ çiwyş ‘the rise of
50 STRUCTURE OF TURKIC

the sun’, it has predicative force, i.e. can take complements. Genitive constructions with headless adjectives may be used to express superlativity, e.g. Uyghur anîn yaxšisi ‘the best of (the) horses’.

Compounds

The dominant type of nominal compound adheres to the possessive pattern noun + noun + third-person possessive suffix, e.g. Turkish el çanta-st ‘handbag’, ev kapt-st ‘front-door’, Turkmen yöl hereket-i, Kirghiz jol qiymil-î ‘road traffic’, Uyghur uyur helq-i ‘the Uyghur people’, Kirghiz qirîiz til-i ‘the Kirghiz language’. A possessive suffix expressing personal possession replaces the third-person suffix, e.g. Turkish el çanta-m ‘my handbag’. Unlike in the genitive construction, no element can be inserted between the nouns. Numerous cases of absence of the possessive suffix, notably in nominative forms of the compound, are observed in older and modern languages, e.g. Karachay-Balkar alma terek ‘apple-tree’ (compare cases such as alma tereg-in-den ‘from an/the apple-tree’). There is also a similar neologistic Turkish compound type, e.g. budunbilim (‘people science’) ‘ethnology’.

Identity attribution means that two nouns referring to the same entity are juxtaposed asyndetically as qualifying attribute + head, e.g. Turkish kadın öğretmen ‘woman teacher’, haydut polis ‘brigand policeman’, dostum Ali ‘my friend Ali’. The attribute often refers to materials, e.g. taş köprü ‘stone bridge’, Chuvash ġul šuri ‘stone house’, Turkmen altın Oayat ‘golden watch’, Turkish altın elma ‘golden apple’. The attribute may also be a participle with predicative force, that is the basis of a relative clause, e.g. Turkish konušan adam ‘the man who speaks/spoke’, sevdigim kadın ‘the woman I love(d)’.

The asyndetic type noun + noun is also used in coordinative compounds, so-called twin words or binomes. In this case, two parallel nouns with similar meanings form a synonym compound, hendiadys, e.g. Old Turkic iš kûč (‘work, strength’) ‘efforts’, or a hyponym compound to express a higher concept, e.g. Uzbek bâriš-keliš (‘going, coming’) ‘mutual relations’, Karachay ališ-beriš (‘taking, giving’) ‘trade’, Uzbek âtâ-dâna (‘father, mother’), Yakut iye-aγya (‘mother, father’) ‘parents’, Tuvan imirâ-sêk (‘mosquito, fly’) ‘flying insects’. This type often includes alliteration and rhyme formations, e.g. Kazakh kiyim-kešek ‘clothing’, Turkish karkoca (‘wife, husband’) ‘married couple’, dedikodu (‘said, laid’) ‘gossip’. Sometimes only one of the elements has a lexical meaning, e.g. Karakhanid Turkic yâš yõš ‘vegetables, greens’, Turkish çoluk çöçuk ‘family, wife and children’.

Turkic languages often display echolaly constructions expressing ‘etce­tera’, ‘and the like’: a given word is followed by a reduplicating ‘echo word’ with an initial labial consonant, m-, b- or p-, which replaces a possible original consonant, e.g. Uzbek nân pân ‘bread and similar baker’s ware’.

Adjective Phrases

Compound adjectives such as Karachay qaraqâş ‘with black eyebrows’ are rather frequent. Due to the head-final structure, adverbials precede their head
in the adjective phrase, e.g. Uzbek jüdä ıssiq 'very hot', Karaim astri kati 'very hard'. Adjectives may also be used as heads of nominal phrases, e.g. Uzbek yâşlär 'young ones'. In older languages and some modern Siberian languages, adjectives may serve as abstracts denoting qualities, e.g. Yakut bây 'rich(ness)', without a suffix of the type -lİK, which forms abstract nouns in most Turkic languages, e.g. Karachay baylıq 'wealth'.

Use of Possessive and Plural Forms
In addition to its normal possessive function, a third-person singular possessive suffix may refer to a known entity or, anaphorically, to something preceding it in the discourse, e.g. Kirghiz bäri 'all (of it, them)', Turkish başkasi 'the other (one)'. This limited function does not make it a definite article in the proper sense. There are often duplications of the possessive suffix such as in Turkish bir-i-si 'one of them', Uzbek köp-i-si 'most of it'. Third-person singular possessive suffixes can also have adverbialising functions, e.g. Uzbek kečäsi 'at night'.

Plural suffixes mostly signal individual plurality, e.g. Turkish elmalar '[single] apples', Chuvash pürtsem '[a number of individual] houses'. The singular has a broad, partly number-indifferent range of use, which also includes collective or generic reference, e.g. Turkish Elma aldım 'I bought apple(s)'. Plural suffixes may also be used in an honorific sense, to express respect. Plurality expressed by cardinal numerals and other quantifiers mostly excludes agreement in the form of plural marking, e.g. Turkish iki at ('two horse') 'two horses'. Numerators (counting words) are sometimes placed after the numeral, e.g. Turkmen thäni (literally 'count'), Uzbek dänä, Kirghiz däna 'piece', Uzbek bâš 'head' (for animals), Tatar töp 'root' (for plants). Uzbek has numerators of the type bittä, ikta, uštä, where -tä means 'piece(s)'.

The Syntax of Numerals
The syntax of numerals is rather regular. Complex numerals are formed by combining the primary cardinals for digits, tens, hundred, thousand, etc. Hundreds, thousands etc. are expressed multiplicatively, e.g. Turkish iki yüz 'two hundred', Tatar biş yöz 'five hundred', ikê yöz mëñ 'two hundred thousand'. Intermediate numbers are expressed additively, e.g. Turkish on iki ('ten two') 'twelve'. Higher numerals precede lower ones, the highest decimal place being the leftmost one, e.g. Tatar unbër 'eleven', mëñ elli ike '1052', Kazakh jüyirma jeti mış bëš jüz toqson bir '27,591', Turkish bin dokuz yüz doksan dokuz ('thousand nine hundred ninety nine') '1999'. Approximative numbers are often expressed by means of juxtaposition, e.g. Turkish altı yedi 'six or seven'.

While most Turkic languages count in tens and units, Karachay-Balkar displays, as in earlier Kumyk, a vigesimal system based on the number twenty as a counting unit, e.g. Karachay jüyirma bile on ('20 + 10') 'thirty', eki jüyirma bile on ('2 × 20 + 10') 'fifty', bëš jüyirma ('5 × 20') 'one hundred',
on jiýirma (‘10 × 20’) ‘two hundred’; compare French quatre-vingt (‘4 × 20’) ‘eighty’. Khalaj has interesting variants such as äkki ottuz (‘2 × 30’) ‘sixty’, äkki qirq (‘2 × 40’) ‘eighty’, üc hottuz u yirmi (‘3 × 30 + 20’) ‘one hundred and ten’, etc.

Yellow Uyghur still partly preserves an older subsystem of higher rank counting, combining the digit numeral with the numeral of the higher ten, e.g. per yiyrma (‘one twenty’) ‘eleven’, per otus (‘one thirty’) ‘twenty-one’ (see pp. 74, 144).

Predications
With respect to relational typology, Turkic languages adhere to a so-called nominative-accusative pattern. There is a first actant which may manifest itself as the subject of a predication. The nominative marks the first actant of intransitive verbs, independently of semantic roles, agents and non-agents being coded in the same way. With transitive verbs, the nominative marks the first actant = mostly agent, and the accusative marks the second actant = mostly patient. There are no clear tendencies to code, as in so-called ‘active languages’, agentivc complements of intransitives differently from non-agentivc ones, or to mark, as in ‘ergative languages’, the agent of transitives with a special case. Note that some post-terminal participles and verbal adjectives may refer to non-agentivc first actants of intransitive verbs, whereas they refer to non-agentivc second actants of transitive verbs, e.g. Turkish yantk (‘having) burned’ ← intransitive yan- ‘burn’, kesik (‘having been) cut’ ← transitive kes- ‘cut’.

A Turkic predication minimally consists of a predicate. An overt subject is optional, and personal markers are often missing in the third person, e.g. Turkish Yer ‘[He, she, it] eats’. A verbal predicate consists of a predicate core, provided with a thematic marker and mostly with a personal marker, e.g. Turkish [Sen] gel-iyor-sun ‘You come’. A nominal predicate contains a nominal or adverbial item as the predicate core, e.g. Turkish Öğretmen ‘[(S)he is a] teacher’, Burada ‘[It is] here’.

Actancy Patterns
The predicate can be expanded according to specific actancy patterns, which determine the overt syntactic relations between predicate core and complements. Most of these relations are signalled by case suffixes and postpositions.

First Actants
A central first actant, typically (but not always) agent, that is source of the action, is necessary for subject realisation. It may be realised overtly as a subject and/or as a personal marker as ‘subject representative’, e.g. Ali asker ‘Ali is a soldier’, Uyudu-m ‘I have slept’. Personal markers are used whether an overt subject is present or not. Some thematic stems, however, do not take on personal suffixes, e.g. Turkmen Men geljek ‘I will come’, Uyghur Men yazyan ‘I have written’. In Salar and Yellow Uyghur, finite verb forms
normally dispense with personal markers altogether, Salar *Men kiler* ‘I will come’, Yellow Uyghur *Sen parar* ‘You will go’. Number agreement between inanimate subject referents and the predicate core is virtually never marked, e.g. Uzbek *Éïkîr yâpiq* ‘The doors are closed’. With animate subject referents, there are varying language-specific rules, but there is a tendency to avoid two plural markers very close to each other, e.g. Turkish *Öğrenciler geldi(*ler)* ‘Students/the students have come’.

As was noted in connection with the particles, lack of a first actant referent yields ‘impersonal’ predications. This is often possible without passive-marking, especially at older language stages. There are remnants of diathetically less elaborated systems, where actant relations are less explicitly marked and where subject omission may suggest that no specific first actant is meant, e.g. Karakhanid *Altı arslan tutar* [One] can catch a lion by guile*. This diathetical indifference is still common in certain types of relative clauses (see p. 62). Even some finite items in modern languages may be used this way, e.g. the necessitative -*mAll* in Turkish sentences such as *Ne yapmals? ‘What should one do?’*

Second Actants

Second actants typically represent affected or effected goals of the action. In simple active verbal clauses, second actants of transitives are realised as direct objects, typically as ‘patients’, in the form of accusative or nominative complements according to certain rules of topicality/specificity, e.g. Uzbek *kitâpni oqi-*, Kirghiz *kitepti oqu-*, Chuvash *keneke vula- ‘read the book’; compare the corresponding syntagms Uzbek *kitâp oqi-*, Kirghiz *kitep oqu-*, Chuvash *keneke vula- ‘read (one or more) books’.

Second actants of intransitives are realised as complements by means of adverbial cases or postpositions, e.g. the dative as with Kirghiz *jaq-*, Karakalpak *una-* , Noghay *yara- ‘please’, Noghay *yoliq- ‘meet’, Karakalpak *isen-*, Noghay *înan- ‘believe’, Kirghiz *oqso-*, Karakalpak *usa-*, Yakut *mârinâ ‘resemble’, the ablative as with Kirghiz *tayman-*, Azerbaijani *gorx-*, Karakalpak *qorq-*, Yakut *kuttan- ‘fear’, the locative as with Turkish *israr et- ‘insist on’, or postpositions as with Turkish *ile yetin- ‘be contented with’.

Third Actants

A third actant may occur as a complement in the dative, as ‘indirect object’, typically the ‘recipient’, the entity that receives a ‘patient’, e.g. Turkish *bir şeyi bir kimseye ver- ‘give something to somebody’, Uzbek *Mêggâ kitâpni bêrin ‘Give me the book!’, Kirghiz *Asan maya kitepti berdi ‘Hasan gave me the book’. It can also be in other cases, e.g. in the ablative such as in Turkish *bir kimseyi birşeyden kurtar- ‘rescue somebody from something’.

Other Relations

Free adverbial constituents, not required by any actancy pattern, function as qualifiers at different levels and express location, direction, origin, means,
beneficient, manner, time, companionship, reason, etc. In addition to their abstract–relational uses, Turkic datives have local, directive, allative, and terminative functions. In some Siberian languages, the dative is also used in functions otherwise typical of the locative, e.g. Tuvan Men Qızılça curacy turyan men 'I have lived in Kyzyl'. The locatives have very wide meanings of place in time or space, 'in, on, at', etc. The ablatives denote, in a concrete or figurative sense, source, origin, starting-point ('from', 'out of'), way, channel ('along', 'through'), reason, means, standard of comparison, etc. Equatives express similarity, but also have mensurative and prosecutive functions, expressing extension in time and space. As noted above, they sometimes serve as general adverb suffixes, e.g. Crimean Tatar sayiča 'numerically', Turkish güzelce 'beautifully', Fransçca 'French' (< 'in the French way').

Other relations are specified by various means, notably postpositions, i.e. relators that form a constituent with a given dependent and connect it with the predicate core, e.g. Turkish bir kimse ile konuş- 'talk with somebody'.

Manner adverbials may be expressed by equative suffixes, convers or other means, e.g. Turkish gizlice 'secretly', gizli olarak ('being secret') 'secretly', gizli bir şekilde 'in a secret way'. Many time adverbials are unmarked, e.g. Turkish bir gün 'one day', bir saat 'for an hour'.

A secondary predicative relationship in the sense of 'being', 'as', 'in the function of' may be established between a nominal constituent and a second copredicative nominal. Subjective predicatives ('subject adjuncts') are often provided with essive markers meaning 'being', e.g. Turkish Öğretmen olarak çalışiyor, Kirghiz Muyalim bolup isteyt '(S)he works as a teacher'. With certain transitive verbs, a corresponding secondary predicative relationship may obtain between the direct object and an objective predicative ('object adjunct'), even without an essive marker, e.g. Turkish Ali'yi başkan seçtiler 'They elected Ali (to be) president'.

**Diathetic Patterns**

Diathetic relations are encoded by means of passive, causative, reflexive, medial and cooperative–reciprocal voice markers, which systematically modify the basic actancy patterns and the roles of participants.

Cooperative–reciprocals and Reflexives

Cooperative–reciprocal markers such as -(V)s express cooperation or competition of participants.

So-called reflexive markers such as -(V)n indicate that the action does not transcend the domain of the first actant referent, but remains immanent, not related to any external entity ('immanence'). The first actant may be the goal of the action ('reflexive'), or the source of an action without a specified goal ('deobjective', 'anti-transitive', etc.). The first actant can also be the beneficient of the action ('middle voice'), in which case the verb may govern direct objects: 'do something for oneself'. For example, the Tuvan reflexive form bižittin- ← biži- 'write' can be interpreted as 'write' (deobjective), 'write...
for oneself', and 'be written'. Unambiguously reflexive meanings are mostly expressed by reflexive pronouns, e.g. Turkish kendini öldürü- 'kill oneself'. Furthermore, the suffix -(V)n is ambiguous in many Turkic languages, since it may also serve as an allomorph of passive markers, e.g. Turkish taran- 'be combed, comb oneself'. Old Turkic -ln and -(~)d seem to signal the middle voice, whereas -(~)K derives intransitives from transitives in a more general way. Many reflexive verbs have special lexical meanings, e.g. Turkish sev- 'love', sevin- 'rejoice'.

Passives
Common to passive and causative patterns is that they signal 'transcendence' in the sense that the range of the action transcends the domain of the first actant, which is either the goal or the source of the action (see p. 56). In the first case, with passives, the transcendence is exogenic (originating from outside). In the second case, with causatives, it is endogenic (originating from within).

Passive patterns typically have one actant less than the corresponding active – 'initial' or 'non-diathetic' – pattern. The first actant of the corresponding active pattern, the 'initial subject', is demoted. It is not necessarily expressed, not even with passives derived from intransitives, e.g. Turkish Burada güzel yaşantıyor 'One lives well here' (cf. p. 228). With passives derived from transitives, a non-first actant of the corresponding active pattern is promoted to first-actantship, typically as 'patient', e.g. Turkish Ali resim çekti 'Ali took a picture/pictures' → Resim çekildi 'A picture/pictures was/were taken'.

Passivisation is thus often used as a device not only for backgrounding but also for concealing the agent of an action. This function is similar to that of 'impersonal' active constructions not referring to specific first actants (see p. 53). An agent may be optionally indicated by adjuncts based on postpositions such as Old Turkic üze or items copied from other languages such as Turkish tarafından and Uzbek tämänidan. Some languages, e.g. Chuvash, make rather restrictive use of passives.

In languages such as Chaghatay, Uzbek and Uyghur, passive verbs may also occur with accusative-marked direct objects, e.g. Chaghatay Ol rama-zânni Xojandta ötkerildi ‘That Ramadan was spent in Khojand’, Uzbek Çâyni içildi ‘The tea was drunk’, Uyghur Aşni yeyilgen ‘The food was eaten’. Here, first actant suspension by means of the passive is combined with direct object topicalisation by means of the accusative (see p. 58).

Passive markers may also be used for pure intransitivising, e.g. Turkish açılı- 'open (intransitive)', or to express reflexive meaning, e.g. Turkish katul- 'attach oneself, join'.

Causatives
Causative patterns typically provide one actant more than the corresponding initial non-diathetic patterns. Causative markers signal that the first actant is
the source of the action as its causer (initiator, permitter, etc.).

The first actant of a corresponding non-diathetic pattern ('initial subject') is demoted and expresses the causee in the function of a direct or indirect object. Causative suffixes added to intransitives yield transitives, e.g. İbrahim, Ali'yi öldirdi ‘Ibrahim killed Ali’, ‘Ibrahim caused Ali to die’. Added to transitives, they yield causative patterns in which the direct object of the corresponding non-causative active pattern may occur, e.g. Turkish İbrahim resmi çekirdi ‘Ibrahim had the picture taken’. A causee agent, corresponding to the first actant of the non-diathetic pattern, can be optionally expressed, like the agent in passive patterns, though in this case mostly a dative complement is used, e.g. Turkish İbrahim resmi Ali’ye çekirdi ‘Ibrahim had the picture taken by Ali’.

In some languages, causative suffixes added to transitives may also imply that the first actant is the patient, the entity affected by the action, e.g. Tuvan ölür- ‘let kill’ or ‘be killed’ ← ölür- ‘kill’. This is the meaning of ‘transcendence’ mentioned above. The agent, the entity performing the action and corresponding to the first actant of the non-diathetic pattern, is in the dative, e.g. Tuvan Xoy börüye cidirken ‘the sheep was eaten by the wolf’. The first actant referent is animate, and there is an implication of disadvantage for it, though the responsibility for this is not necessarily attributed to it. Such ‘reversive’ forms and patterns are widespread in Eurasian languages, and present in Old Turkic already. Without being identical to any of them, they show affinity to permissive causative constructions ('let do') and also to passives ('be done'), since an initial non-subject constituent is promoted to subject position.

There are also complex causative-passive, causative-causative, and causative-causative-passive forms such as Uyghur körsütül- ‘be shown’, Turkish öldürl- ‘be killed’, öldürt- ‘cause to kill’, öldürtül- ‘be caused to kill’.

However, causative suffixes cannot be followed by so-called passive suffixes unless these have antitransitive or reflexive readings, e.g. Turkish kivrüp- ‘cause to curl’. There is little need to causativise passives such as açılır- ‘be opened’, since the primary stems, e.g. aç- ‘open’, function as their transitive counterparts.

Possessive Constructions

Possessive constructions, corresponding to English ‘have’ constructions, are of the type possessor + genitive suffix + possessed entity + possessive suffix + bar ‘existent’ or yoq ‘non-existent’, e.g. Uzbek Pulim bár ‘(my money existent)’ ‘I have money’, Uyghur Dadisi yoq ‘(S)he has no father’; compare, however, the Khalaj type hat vàrum ‘I have a horse’ with vàr + possessive suffix. There are also locative constructions of the type Kirghiz Anda kitep bar ‘(S)he has a book’, Turkish Ali’de para var ‘(at Ali money existent)’ ‘Ali has money’. In non-finite clauses, the words bar and yoq are mostly replaced by a verb of the type bol- ‘become, be’ and its negation bolma-, e.g. Turkish parası olmayan ‘(the one)
not having money', *parasi olmadiği* (‘his/her not having money’) ‘that (s)he does/did not have money’, *parasi olmayarak* ‘without having money’.

**Comparative, Equative and Similative Constructions**

The comparative degree of gradable adjectives and adverbs is normally expressed by adding an ablative suffix to the segment denoting the standard of comparison, e.g. Turkish *buzdan soğuk* ‘colder than ice’, Uzbek *mendän yaxşı* ‘better than I’, Chuvash *turan pıšak* ‘bigger than the mountain’. The adjective may be preceded by a word for ‘more’, or, as noted above, followed by a comparative suffix e.g. Turkish *daha iyi*, Tatar *yaxşıraq* ‘better’, Chuvash *pıšakraq* ‘bigger’, Uyghur *uzunraq* ‘longer’. Superlatives are mostly formed with adverbs such as *en*, Chuvash *çi*, in front of the adjective, e.g. Uzbek *en yaxşı* ‘best’.

In grammatical constructions expressing equality or similarity, e.g. ‘A is as big as B’ and ‘A sings like B’, a postpositional phrase or an equative suffix usually marks the standard of comparison (‘as’, ‘like’), e.g. Azerbaijani *geder*, Uyghur *geder* ‘so much’, Azerbaijani *kimi* ‘like’, Turkmen *yäli*, Tatar *kébek*, Yakut *kurduk*. Thus, ‘white as snow’ may be rendered as Karakalpak *qarday aq*, Uzbek *qarday äppaq*, Tatar *qar sikelle aq*, Yakut *xär kurduk mayan*, etc. The standard marker may be accompanied by a reinforcing emphatic element such as Turkish *tupku* ‘exactly, just’.

**Order of Constituents**

Since the Turkic languages are, as noted above, basically head-final, the unmarked order of constituents is subject + object + predicate core. The predicate core is normally clause-final, preceded by complements and free adverbials, the subject being the first complement. Adverbials referring to the entire clause often appear initially. Postpositions per definition take the final position in postpositional phrases. Note that the order of determination within the clause is the reverse of the successive modification through suffixes within the word. The order rules are also valid for non-finite clauses, and even tend to be more rigidly observed there than in finite clauses.

**Finite Clauses**

Predications are realised as clauses, basic text-building units occurring in pluripredicative constructions within the limits of sentences. They may be finitised as main clauses and non-finitised as dependent clauses.

In the former case, they function as independent sentences, optimally marked for aspect, mood, tense, personal reference and illocution. Their first actants are realised as subjects in the nominative.

In yes/no questions, an interrogation marker is placed after the whole predication or the constituent asked for, e.g. Turkish *Ali bugün geliyor mu?* ‘Does Ali come today (or does he not)?’, *Ali mı bugün geliyor?* ‘Is it Ali who comes today (or who)?’, *Ali bugün mü geliyor?* ‘Is it today Ali comes (or when)?’ The placement of the marker in relation to personal markers varies
across languages, and also some language-internally to some degree, e.g. Uyghur Sen muellim-mu-sen? ~ Sen muellim-sen-mu? ‘Are you a teacher?’; compare the only Turkish option Sen öğreten misin?

The verbal negation can vary its scope without changing its place, whereas more mobile nominal negation particles such as emes and değil (Chuvash mar) ‘not’ may be used specifically for constituent negation, e.g. Uyghur Bëşim emes, köüzüm ayîydu ‘What aches is not my head, but my eyes’. Note that certain verb forms of a stronger participial nature do not use -mA, but such particles, e.g. Tatar Kileček tügêl ‘(S)he is not coming’, Turkmen Men gitçek dæl ‘I will certainly not go’.

Chuvash has a special imperative negation: the postposed particle mar in the first persons and the preposed element an in the other persons, e.g. An kil ‘Do not come!’

*Discourse-Pragmatic Functions of Word Order*

Finite clauses often display systematic deviations from the unmarked constituent order. This versatility is motivated by modifications of the functional sentence perspective, by the assignment of communicative, discourse-pragmatic functions.

**Postpredicative Elements**

The permitted deviations often include loosening of the final position of the predicate core. The postpredicative position may be occupied by extraposed elements from the clause, defocused constituents, often representing topics already activated, afterthoughts, etc. The elements are often detached from the preceding predicate core by an intonational juncture, e.g. Turkish Gitti, postact ‘He has already gone, the postman’. The postpredicative position seems to be a natural place for some types of sentence adverbials, for example those expressing comments on the proposition such as Turkish herhalde ‘certainly, probably’.

The postpredicative position is not the position for new information, for interrogative pronouns and adverbs or for unmarked direct objects with specific reference. Subject pronouns found in this position cannot have topic function. Note that postpredicative elements are not confined to less carefully planned speech, but have also been part of written varieties throughout the history of Turkic.

**Topic**

There are mostly no fixed syntactic configurations to the left of the predicate core. Since the syntactic relations between constituents are clear from case-marking, word order modifications may be used for prominence relations, notably for topic and focus assignment.

As expected, the initial position is the preferred place of the sentence topic, the constituent which often contains known information and about which the rest of the predication gives new information. In rhetorically neutral sentences
it is identical with the subject, e.g. Turkish Ali resmi çekti ‘Ali took the picture’. There are also special topicalisation markers following the topicalised nominal phrase such as Turkish ise, Turkmen bolha (‘if it is’) ‘as for’, e.g. Turkish Ali ise resmi çekti ‘As for Ali, he took the picture’.

Other constituents may be topicalised by taking the initial position, e.g. Resmi Ali çekti ‘As for the picture, Ali took it’. A direct object can be topicalised by passive constructions, e.g. Resim Ali tarafından çekildi ‘The picture was taken by Ali’, but this option is less often chosen because of the devices offered by the constituent order.

Focus
The position immediately in front of the predicate core is used for focused constituents, offering new or relatively important information. This is the natural position for unmarked direct objects and for interrogative pronouns asking for new information, e.g. Tatar Sin kěmně kürdêg? ‘Whom did you see?’

A non-object in this position is emphasised, so that the sentence cited above, Resmi Ali çekti, may also be rendered as ‘It was Ali who took the picture’.

This device is more common than only marking focus by stress in situ, as in English (‘Ali took the picture’), where non-subjects normally do not take the initial position in active clauses. Another method is to use a cleft sentence with a participle as subject in initial position and the focused element as a nominal predicate, e.g. Turkish Resmi çekeni Ali’ydi (‘The one taking the picture was Ali’) ‘It was Ali who took the picture’.

Position and Specificity
In most Turkic languages, the position in front of the predicate core is open to non-topical nominative direct objects, e.g. Ali (bir) resim çekti ‘Ali took a picture’, and thus allows a formal contrast with respect to specificity. An accusative object in this position seems to be marked as ‘specific’, e.g. Turkish Ali, resmi çekti ‘Ali took the picture’, Ali, bir resmi çekti ‘Ali took a certain picture’, whereas a nominative object is not. When the direct object is separated from the governing verb, accusative marking is mostly necessary, e.g. Uyghur Jawapni muellim berdi ‘It was the teacher who gave the answer’. The topicalisation itself may also often suggest ‘specific’ readings.

Participant Reference
Most Turkic languages are relatively unexplicit with respect to participant reference. Under certain conditions, actants may remain overtly unexpressed. A constituent representing an old text topic may often be omitted. Thus, anaphoric pronouns can also largely be dispensed with if the referent is assessed as identifiable from co-text and/or situational context, e.g. Azerbaijani Gelir ‘[(S)he/it] comes’. This is also true of causers and causees in causative patterns, e.g. Turkish Çalısturyor ‘(S)he lets [someone] work’. Explicit expression is, however, normally required in a predication that starts
a discourse. A subject pronoun such as o ‘he, she, it’ cannot introduce a new text topic if it occurs in postpredicative position.

Non-finite clauses
Action nouns, participles and converbs allow non-finite realisations of predications as embedded clauses. The suffixes of these categories function as subjunctors, marking the clauses as embedded, much like English subordinative conjunctions and relative pronouns or adverbs. As dependents, non-finite clauses typically precede their heads. The embedding is recursive in that the clauses may contain non-finite clauses themselves. They may also be coordinated with each other. Their thematic suffixes occupy positions corresponding to those of aspect–mood–tense suffixes of finite clauses, but the inventories in question are different and less elaborate. For example, not all forms carry personal markers.

Action Clauses
Clauses based on paradigmatic verbal nouns, action nouns, are complement clauses, mostly corresponding to English that clauses. They mostly take on possessive personal markers, and their syntactic functions in the matrix clause are marked by case markers or postpositions. The formal relationship with their subjects mostly corresponds to genitive constructions, e.g. Orhan’un bildiği (‘Orhan’s knowing’) ‘that Orhan knows/knew’. The nominative is also often used, e.g. Chuvash açasem kayn ‘the children having gone’. In cases where the subject can take on both cases, genitive-marking tends to express ‘specificity’, much like the accusative-marking dealt with above, e.g. Turkish paraphraramın kaybolduğu ‘the fact that money/the money disappeared’.

There is usually a difference between factive and non-factive action clauses. The former are construed with suffixes such as -GAn and -DIK + possessive suffixes, e.g. Turkish Ali’nin burada oturduğuunu söylüyor ‘(S)he says that Ali lives/lived here’, Uzbek Kəlgəninin bilămän ‘I know that (s)he has come’, Aybekniň bu kitābni yazyänini bilămän ‘I know that Aybek has written this book’, Kirghiz Men sizdiñ ayitla bolonuguzdu bilmemy ‘I know that you have been to the village’, Turkmen Nirē göçenini bilməq ‘I do not know where (s)he has moved’. The suffixes used have various aspecto-temporal meanings. Thus, Uzbek -(â)yattan is intraterminal, presenting the event as current, while -Gän is not.

Action clauses based on nominal predicates use copulative forms such as Uzbek ékän, Turkish olduk or extended forms such as Uzbek ekânilık and Kirghiz ekendik + possessive suffixes. Forms in -LIK and -DIK go back to the copula verb er- ‘be’, compare Ottoman idük, e.g. in Turkmen Onuŋ ayamdıyini tanadım ‘I realised that he was my elder brother’. Suffixes of this kind can be added to participial forms, e.g. Turkmen -A(n:)ndIK and -yändIK in gelendiyi ‘his/her having come’ or ölyəndiyi ‘his/her being dying’, Kirghiz -GändIK in Bala oquyandiryn bilmemy ‘I know that the child reads’, Uzbek -GanlıK, -(â)yattanlıK, etc. Such extended action noun forms are not
used as attributes to form relative clauses.

Action clauses referring to non-factive actions are based on suffixes such as -mA, -(I)s and -(U)w, e.g.

- Tatar əşləw ‘work(ing)’
- Kazakh əsaw ‘do(ing)’
- Kumyk getiw ‘go(ing)’

They can be used to form purpose clauses such as

- Turkish Ali gelmelerini söylüyor ‘Ali says their coming’
- ‘Ali says that they shall come’, or infinitival complement clauses, often governed by modal lexical items, e.g.

- Uzbek Kettişimiz keräk ‘our going necessary’
- ‘We must go’.

Such clauses often imply first-actant coreference with their verbal head without carrying personal markers, e.g.

- Uzbek Mən içişini istäymän ‘I want to drink’,
- Turkish Ali gelmek istiyor ‘Ali wants to come’.

**Relative Clauses**

Relative clauses, nominal actor clauses, refer to participant entities to which actions are ascribed, and are based on participles. They can be used as the head of a nominal phrase, e.g.

- Turkish gelen ‘(the) one coming/having come’
- Kirghiz aytqani ‘what (s)he has said’
- Uyghur getiqani ‘what you have said’

They can also be attributed to a head in the sense of an identity attribution (see p. 50), e.g.

- Uyghur kelgen kisi ‘the man who has come’,
- Azerbaijanian oezduryum kitab ‘the book I read’.

The participial markers used, e.g.

- Turkish -(y)An, -DIK, -(y)AcAK, -mʃ, -mʃolan,
- Uzbek -Gan, -(a)yəqan, -ağan/-yəqan,
- Tuvan -(V)r, -(Gän),

are relative subjunctors comparable to English relative pronouns and adverbs. They also signal various aspecto-temporal meanings. There are thus post-terminal participles as in Kazakh kelgen kisi, Chuvash kilnə ʃın ‘the person who has arrived’,

- Tuvan uşqan iyəq ‘the fallen tree’,
- more focal intraterminal participles as in Kazakh kele əzəqan kisi, Uzbek kəlayağan kisi, Chuvash kilken ʃın ‘the person just coming’,

- less focal intraterminal participles as in Uzbek əzədəyən ʃini ‘the (usually) writing’,

- prospective participles as in Tuvan kelir ʃili ‘the coming year’, etc.

Some subjunctors have a more general terminal use, e.g.

- the Turkish and Azerbaijanian markers -(y)An and -DIK.

Predicates such as gören and gördügü can thus be rendered as ‘who sees/saw/has seen’ and ‘whom [somebody] sees/saw/has seen’.

**Coreference with the First Actant**

If the first actant of the relative clause is coreferential with the head, it is not signalled by any personal marker, e.g.

- Tatar kilgen kəsə, Chuvash kilnə etem ‘the man who has come’. In this case, Turkish and similar Oghuz varieties use the type of relative subjunctors that do not take on personal markers, e.g.

- -(y)An.

The same situation obtains if the head is coreferential with the ‘possessor’ of the subject of the relative clause, e.g.

- Turkish evi yanadan adam ‘the man whose house is burning/burnt’,
- Uzbek anäsı kəsəl bolən bələ ‘the child whose mother is ill’,
- Kirghiz qizi sulə bolon kişi ‘the person whose daughter is beautiful’.

Here the heads, adam ‘man’ etc., are coreferential with
the genitival attributes of the corresponding constructions adamin evi ‘a/the man’s house’, etc.

There are also similar nominal constructions, e.g. Uzbek kallasi katta kisi ‘a/the man whose head is big’, where kisi ‘man’ is coreferential with the possessor of katta kallas ‘big head’, Kirghiz baliyi bar kol (‘its fish existent lake’) ‘a/the lake full of fish’. Possessive constructions of this kind, e.g. Uzbek anasi kasal ‘whose mother is ill’, Kirghiz qolu aqiq (‘his/her hand open’) ‘generous’, eli kop (‘its people numerous’) ‘densely populated’, are sometimes called ‘bahuvrihi’ compounds by analogy with the pattern exemplified in Old Indian bahu vrihi (‘abundant rice’) ‘rich in rice’ (with the reverse order of elements).

Coreference with Other Entities

The head may also be coreferential with an entity other than the first actant, i.e. another actant or an entity expressing time, location, direction, source, instrument, etc. In such cases most Turkic languages make use of the same participles and the same order of elements.

An isolated syntagm such as korgin kisi, Chuvash kurna sin etc. may thus in principle mean both ‘a/the person who has seen’ and ‘a/the person whom somebody has seen’. The precise relation between the modifying clause and its head noun is established by pragmatic means alone. As noted above, this allows ‘impersonal’ expressions that do not refer to any specific first actant referent, e.g. Uzbek barayan yer ‘a/the place [someone has] gone to’, Kirghiz jazyan qat ‘a/the letter [someone has] written’. With causatives, the agent is in the dative, e.g. Kirghiz maya soyduryan qoy ‘a/the sheep which they [= someone] had me slaughter’. These constructions should not be confused with constructions containing passives such as Kirghiz jazilyan qat ‘a/the written letter’.

The first actant may be expressed by a subject, e.g. a subject pronoun as in Azerbaijani men acan gapi ‘a/the door I open(ed)’, Uzbek men yazyan kitab ‘a/the book I have written’, men barayan yer ‘a/the place I have gone to’, Tatar sin korgin kexe, Chuvash esey kurna etem ‘a/the man you have seen’, esey yulakan yura ‘a/the song you are singing’, epir kayakan poyezd ‘a/the train we are going in’, Kirghiz ayam jazbayan qat ‘a/the letter that my father has not written’, Uyghur men oquyan kitap ‘a/the book I have read’. This simple construction is common in many languages.

The first actant may also be expressed by a personal marker of the possessive kind. This marker may be added to the head of the construction, e.g. Uzbek yazyan kitabim ‘a/the book I have written’, barayan yerim ‘a/the place I have gone to’, Kumyk satib alyan atim ‘a/the horse I have bought’. A corresponding subject referring to a specific entity normally stands in the genitive, e.g. Turkmen meniyan alan kitabim ‘a/the book I have bought’, Uzbek Navaini yazyan asarlar ‘works/the works which Navai has written’, meniyan yazyan kitabim ‘a/the book I have written’, meniyan barayan yerim ‘a/the place I have gone to’.
The personal marker may also be added to the participle, e.g. Old Turkic eštımış ‘what (s)he has heard’, Turkish aldığım ‘what I take/took/have taken’. Turkish and partly Azerbaijani use special types of subjunctors in these cases, -DİK, -(y)AcAK etc., e.g. Turkish oturduğum köy ‘the village I live(d) in’, geldiğim gün ‘the day I arrive(d)’. The presence of personal markers requires genitive subjects, e.g. Orhan’un gördüğü adam ‘the man whom Orhan sees/saw/has seen’. A corresponding relativisation out of possessive constructions is possible when the head is coreferential with a ‘possessor’ of an entity other than the first actant, e.g. Turkish babasını tanıdığım çocuk ‘the child whose father I know/knew/have known’.

Thus, relative constructions such as gördüğün ayı ‘the horse you see/saw/ have seen’ and yediğim et ‘the meat I eat/ate/have eaten’ correspond to the Kirghiz type sen körgön at, men jegen et. However, even Turkish may use the latter type, notably if the first actant referent is non-topical/non-specific and the head refers to a place, e.g. su akan yer ‘a place where water flows’, döndurma satılan dükkân ‘a/the shop where ice-cream is sold’. It can also, for example, use the participle in -(y)AcAK in the impersonal way discussed above, e.g. okuyacak bir kitap ‘a book to read’; compare Kirghiz oCUR kitap.

As noted above, the precise relation between the relative clause and its head is not specified by the syntactic construction itself. Thus, Kirghiz men kelgen şär means ‘the town I have come to’ or ‘the town I have come from’, and Turkish tașındığım ev may mean ‘the house I move/moved have moved into’ or ‘the house I move/moved have moved out of’. If necessary, the relation may of course be specified, e.g. by means of possessive postpositions such as içine ‘into its interior’ and içinden ‘from its interior’, e.g. Turkish içine tașındığım ‘into which I move(d)’ and içinden tașındığım ‘from which I move(d)’.

Non-propulsive Relative Clauses
Due to the left-branching subordination, prepositive Turkic relative clauses are not propulsive, i.e. cannot advance the plot beyond the point of time represented by the head clause unless the sequence of the events is specified by other means, e.g. Turkish Tașındığım evi buldum ‘*I found the house, which I moved into’.

Converb Clauses
Converb clauses, adverbial action clauses, are based on converb markers. The latter are mostly monofunctional, i.e. do not serve to form other clause types. Some are morphologically simple, e.g. Turkish gelerek ‘coming’, Uzbek yâzgâş ‘having written’, whereas others may be rather complex, for example, consisting of combinations of participles with case markers, postpositions or nouns, e.g. Kirghiz kelgende ‘when arriving’, Turkish geldikten sonra ‘after coming’, geldiğî zaman ‘when (s)he comes/came’. Subjects of converb clauses are usually in the nominative. Some markers require identity between the first
actants of the converb clause and the head clause, e.g. Yakut -Aj(:)n, Turkish -(y)Ip (with few exceptions). Most markers do not require this identity, e.g. Turkish Ali gelince Osman şaşırdı ‘When Ali came, Osman was surprised’.

Semantic Relations
Converb markers express various semantic relations, a wide range of aspectual, temporal and other relational concepts: intraterminality, post-terminality, terminality, anteriority, posteriority, temporal inclusion (‘while’), abtemporality (‘since’), terminativity and limitation (‘until’, ‘as long as’), reason (‘because’), means, instrumental (‘by’), purpose (‘in order to’), contrast (‘whereas’), accordance (‘as’), substitution (‘instead of’), preference (‘rather than’), condition (‘if’), etc.

Conditional clauses are usually based on suffixes of the type -sA, with personal markers of the possessive kind, and copula particles of the type èse ‘if . . . is’. The conditional forms may contain particles and auxiliary verbs to express various temporal and other distinctions, e.g. Uyghur yazgan bolsan ilden ‘if you had written’. In many languages, conditional clauses may be introduced by copies of the Persian conjunction agar, e.g. Uyghur eger yazsam ‘if I (should) write’.

Subjunctors of the types diye, dep ‘saying’ (see pp. 48, 117) form other kinds of adverbial clauses, e.g. purposive and motivating causal clauses containing optatives or prospectives, e.g. Turkish ev yansan diye (‘saying: the house may burn’) ‘in order for the house to burn’, Chuvash sazär iles tese (‘saying: will buy sugar’) ‘in order to buy sugar’.

Non-modifying Converb Clauses
Not all converb clauses are used in a propositionally restrictive sense, modifying the head clause semantically. Those based on markers of the -(V)B type, Yakut -(A)n, Chuvash -sA, Tuvan -GAś, etc. may, though they are syntactically dependent clauses, represent events of equal narrative value with the event of the head clause. They can thus often be rendered with English coordinative constructions, e.g. Gülüp odadan çıktı ‘(S)he laughed and left the room’,Kirghiz Oqup tüsündü ‘(S)he read and understood’, Chuvash Kilsê kurçê ‘(S)he came and saw it’. These non-modifying converbs are terminal and thus propulsive, capable of ordering events linearly, e.g. Turkish Ali kayıp düzü ‘Ali slipped and fell’. Beside their purely joining function, these markers may get various contextual readings such as anteriority, cause, concession, manner and condition. Ambiguity between converb clauses of this kind and the postverb constructions mentioned above (p. 42), e.g. Kirghiz Oqup turdu ‘(S)he read it and stood up’ versus ‘(S)he kept reading’, are prevented by prosodic features, notably pitch patterns.

Non-modifying terminal converbs of this type are ideal for the discourse function of narrative linking and serve as central text-constructing units in traditional narrative styles. They allow periodic chain sentences of considerable length to be constructed, corresponding to whole text paragraphs in other styles:
extended sequences of propulsive clauses, representing thematically closely interconnected narratively equal events, e.g. Kirghiz *Men ertej menen turup zaryadka žasp kiyinip žünup mektepke barazatam* ‘I get up in the morning, do gymnastics, dress, wash myself and go to school’ (see pp. 353–4). No link in such chains necessarily modifies the next one, and only the final head clause is fully equipped to permit a definitive personal, aspectual, modal, temporal and illocutional interpretation of the chain. Different converb types may be used as text-subdividing devices signalling different degrees of thematic closeness between the events of the chain. These old and widespread narrative patterns are vanishing in more Europeanised styles.

Questions of Scope
Since finite clauses are asserted as a whole, embedded modifying converb clauses are outside the scope of illocutionary markers signalling assertion. They are also outside the scope of a negation of the head clause, and must take on negative markers of their own. Negative converb markers such as Turkish 

\[-mAdAn, \text{Tuvan }-\text{BAyn etc. are modifying (‘without doing/having done’), e.g. Turkish } Selam vermeden gittim ‘I left without greeting’. Non-modifying converb clauses may, however, be included in the scope of negation, e.g. Turkish Gelip görmedin ‘You did not come and [did not] see’. There are also non-modifying negative markers of the type 

\[-mAyIB, \text{ e.g. Turkish } Selam vermeyip çktım ‘I did not greet, but left’.\]

A final interrogative particle questions the content of a whole sentence, e.g. Turkish *Ali gelince gittin mi?* ‘Did you leave when Ali came?’ As with all modifying adverbial constituents, the content of a modifying converb clause may be interrogated separately by shifting the position of the interrogation marker, e.g. Turkish *Ali gelince mi gittin?* ‘Was it when Ali came that you left?’

Other Forms of Junction
There are also other forms of clause junction, commonly regarded as copies of Indo-European subordinative structures, e.g. postpositive clauses which modify the preceding clause or a constituent of it. They are provided with predicative markers typical of finite clauses and preceded by junctors such as *kim or ki* ‘who, that’, *qačan* ‘when’ etc.

Though such clauses may resemble English constituent and relative clauses, they often differ considerably from them. The junctor signals a close semantic connection with the subsequent clause, but normally does not introduce it, e.g. Turkish *Sanrım ki, gelecek* ‘I think (s)he will come’, Uzbek *Mên bildim ki, siz kélgan èdègi* ‘I got to know that you had come’. Clauses of this type are mostly not embedded as postpredicative constituents of the preceding clause, but appended to it in a looser way. In certain modern languages such as Turkish, most imitations of this kind are not stylistically acceptable any more.

On the other hand, languages which have been under strong Persian or Slavic influence tend to reproduce the originals in a more genuine way. Some
of them make use of native junctors modelled on foreign ones, e.g. Gagauz ani ‘who, which, that’. There are even tendencies to use conditionals and optatives in the sense of Indo-European subjunctives.

Free junctors plus conditional or optative predicate cores (‘whoever’, ‘whenever’, etc.) are very often used for generalising relative and adverbial constructions, e.g. Old Uyghur *kim qorqsar* ‘whoever fears’, Turkish *ne olursa olsun* ‘whatever may happen’. Languages under predominantly Slavic influence prefer indicative forms in such cases, e.g. Chuvash *Käm ĕšlemest, văl şîmest* ‘Who does not work, does not/should not eat’ (present tense).

**Further Reading**

Since existing general descriptions of Turkic structure have a more or less diachronic orientation, most of the relevant literature will be listed in the bibliography added to Chapter 5. References to descriptions of Turkish structure will be given in Chapter 11. The following list includes titles in which the terminology and the analyses adopted in this chapter are elaborated on.


