Aslı Göksel and Celia Kerslake

Turkish

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Routledge
Taylor & Francis Group

LONDON AND NEW YORK

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ACKNOWLEDGEMENTS

INTRODUCTION

TURKISH AND ITS SPEAKERS

Turkish belongs to the Turkic family of languages, which have been spoken for many centuries across a vast territory from the Balkans to China. Within this family, which includes such languages as Uighur, Uzbek, Tatar and Kazakh, Turkish forms part of the southwestern or Oghuz branch. Its closest relatives are Gagauz (spoken by less than 200,000 people of Orthodox Christian religion, mostly in southern Moldova), Azerbaijanian (spoken by up to 20 million people in Iran and Azerbaijan) and Turkmen (spoken by some 3 million people in Turkmenistan and by about 400,000 in Iraq).

Turkish itself is spoken predominantly in the Republic of Turkey, of which it is the official language. No statistics are available as to how many of Turkey's population of 70 million have Turkish as their first language. Most of the ethnic minorities have undergone considerable (in some cases, total) linguistic assimilation. In the largest ethnic minority, that of the Kurds (which is variously estimated to make up between 8 per cent and 20 per cent of the country's population), a large number of people are bilingual. A reasonable estimate would probably be that Turkish is now the first language of 55–60 million of Turkey's citizens, with another few million people speaking it with equal fluency to their native language.

Turkish speakers outside Turkey fall into two groups. The first consists of communities located in various lands that were formerly, for several centuries, part of the Ottoman Empire. There are populations of this kind in Bulgaria (760,000), Greece (115,000), Macedonia (80,000) and Romania (23,000). Cyprus, also former Ottoman territory, has seen its Turkish-speaking population considerably enlarged by migration from Turkey since 1974. There may be as many as 150,000–200,000 Turkish speakers living in the Turkish Republic of Northern Cyprus at the time of writing.

The second group of Turkish speakers outside Turkey comprises those who, since the 1960s, have taken up residence in various western European countries, Australia and North America. The number in western Europe is nearly 4 million, of whom half live in Germany. The Australian Turkish community numbers some 40,000, and the number of Turkish speakers in North America is 50,000–60,000. Although in all these migrant communities there is a tendency for the use of Turkish to decline with each succeeding generation, it can probably be stated with reasonable certainty that Turkish is spoken as a first language or with native fluency by about 65 million people worldwide.

BREAK WITH THE OTTOMAN PAST

The Turkish language underwent two kinds of radical change as part of the revolutionary reform programme launched by Mustafa Kemal (Atatürk) after the establishment of the Republic in 1923. The first was a sudden and comprehensive change in the medium in which it was written, with the introduction of a specially adapted form of the Latin alphabet in 1928, accompanied by a total prohibition on any further use of the Arabic script for teaching or publication in Turkish. The second affected the substance of the language itself, particularly its lexicon, and comprised a systematic campaign, launched by the official Turkish Language Foundation in 1932, to 'liberate' Turkish from its 'subjugation' to other languages, i.e. to Arabic and Persian. In order to give some indication of the significance of this change it will be necessary to say something about the Ottoman form of Turkish, the precursor of the modern language.

As a linguistic term, 'Ottoman' denotes the form of Turkic which became the official and literary language of the Ottoman Empire (1300–1922). This was, essentially, the variety of Oghuz Turkic which developed in Anatolia after that region was settled by Oghuz Turks in the eleventh to thirteenth centuries. It was written in the Arabic script, the form of writing adopted not only by the Oghuz but by all the Turkic-speaking peoples who, from about the tenth century onwards, had accepted the Islamic faith. The primacy accorded in Islam to the Arabic language itself, the language of the Qur'an, had a profound impact on the intellectual life of Ottoman society. The language of scholarship and of Islamic law, and the medium of instruction in the only schools available to the Muslim population before the nineteenth century, the *medreses,* was Arabic. In literature, on the other hand, the influence that was more directly felt was that of Persian, since it was the aesthetics of Persian poetry and ornate prose that provided inspiration for the Ottoman literati. A truly cultured Ottoman was expected to have a fluent command of 'the three languages', and many Turkish-speaking Ottomans did indeed write treatises in Arabic and/or poetry in Persian.

As far as Ottoman itself was concerned, the degree to which written texts reflected the spoken idiom varied greatly according to the level of education of the writer and the purpose and intended readership of the document. In any kind of sophisticated writing the Turkish structural base became all but submerged, surfacing mainly in the inflectional morphology and in other non-lexical items such as pronouns, determiners, and auxiliary verbs. Arabic and Persian borrowings were not confined to the lexicon, but included grammatical elements also. Arabic words were often used in their distinctive plural forms, and adjectives were made to agree with them in terms of gender, as they would in Arabic itself. A host of Arabic prepositional phrases, completely alien to Turkish syntax, were imported more or less as lexical units. A number of Persian constructions became particularly prevalent. One was the ubiquitous *izafet,* by which the head of a noun phrase was linked to the modifying noun or adjective that *followed* it (as in *asakir-i Islam* 'armies of Islam' or *memalik-i Osmaniye* 'Ottoman dominions'). Another was the compound adjective, used mainly for ornamental or rhetorical reasons, and often designed to rhyme with its head noun (as in *padişah-ı alem-penah,* 'world-sheltering monarch' or *vezir-i Asaf-tedbir* 'vizier wise as Asaf'). It should be noted that the majority of these imported elements were totally absent from the language of the unschooled

Turkish-speaking masses. On the other hand, some common words of Arabic or Persian origin, such as *perde* 'curtain', *kitap* 'book', *namaz* 'ritual prayer', *cami* 'mosque', had become fully integrated into the general lexicon. The only significant foreign *grammatical* influence to be seen in the popular language was the Indo-European type of subordinate clause (introduced by a subordinating conjunction, and having a finite verb. (See the clauses with *ki* discussed in Chapters 24–6 of this book.)

The term 'Ottoman' was not applied to the language of the Ottoman state until the mid-nineteenth century, when, as part of the reform movement known as the Tanzimat, attempts were made by the government to foster a sense of Ottoman identity that might save the ailing empire. Before then, when it was necessary to distinguish Turkish from any other language, it had been called precisely that (*Türki* or *Türkçe*), however impregnated it might have been with Arabic and Persian elements. It was in the Tanzimat period that Turkish (under the politicized name 'Ottoman') first began to be taught in schools, the new state schools designed to train soldiers, bureaucrats and technical experts for the service of a modernized state. There was now a clear need for the language to be defined and streamlined, through the production of grammars and dictionaries, in order to maximize its effectiveness as a means of public communication. A newly emerging class of Turkish intellectuals, who had access to Western writings and were full of new ideas that they wanted to convey to a wide public, shared the state's interest in regularizing and simplifying the language, although their standpoint—liberal and patriotic—was largely opposed to the government. The new genres of writing in which they were involved, principally journalism, drama and the novel, all played their part in the evolution of a modern form of Ottoman, shorn of much of its rhetorical opacity, and with a regularized, transparent sentence structure much closer to that of modern Turkish.

The closing decades of the life of the Ottoman Empire witnessed the emergence of a new sense of ethnic identity among the Turkish educated elite, which had hitherto defined itself only as Ottoman and Muslim. The discoveries of European Turcologists drew attention to the long-forgotten linguistic and cultural links existing between the Turks of the Ottoman Empire and other peoples spread out far across Asia. The first scholarly dictionary of Ottoman Turkish to be written by a Turk, the *Lehçe-i Osmani* (Ottoman Dialect) of Ahmet Vefik (1877), clearly identified Ottoman as just one branch of a much wider, 'Turkish' language .[1] This revolutionary idea was at the heart of an incipient Turkish national consciousness that gathered strength as the empire increasingly fell victim to internal disintegration and the predations of the European powers.

After the constitutional revolution of 1908 the politically dominant Committee of Union and Progress gave all but overt encouragement to the formation of a number of societies and publications devoted to the promotion of this new sense of Turkish nationhood, which was incompatible with the official ideology of Ottomanism. As the Ottoman state teetered on the brink of final collapse, the Turkish language became for many intellectuals and writers the key to unlocking the spirit of unity and common purpose that alone, they believed, would enable the nation (in some as yet unknown form) to survive.

This message was first clearly enunciated in 1911 in the journal *Genç Kalemler* (Young Pens), which called on young writers to put themselves in the service of the nation by creating a 'national literature' in a 'new language'. The rules of this 'new

language' *(yeni lisan)* were defined quite precisely: no Arabic and Persian grammatical constructions were to be used, except in lexicalized phrases for which there was no available alternative; Arabic and Persian plural forms were to be avoided; Arabic and Persian words that were not current in the spoken language, and for which a Turkish equivalent was in common use, should similarly be rejected (e.g. for 'water' Arabic *ma* and Persian *ab* should both be abjured in favour of Turkish *su*). Already at this period there were extremists who wanted to see *all* Arabic and Persian loan words, even those long integrated into the popular language, replaced by Turkish synonyms, if necessary retrieved from old texts or imported from eastern 'dialects'. But at this stage the moderate view prevailed, and the 'new language' campaign was remarkably successful in its aims. By the period of the First World War the use of a natural, unadorned Turkish, close to the language of speech, had become the unquestioned stylistic imperative of literary writing. However, bureaucratic, legal and scholarly discourse remained more resistant to change, as evidenced even in the diction of Atatürk's famous six-day speech of 1927, the *Nutuk*.

The Kemalist language reform *(dil devrimi)* begun in the 1930s differed from all previous efforts in two important ways.[2] First, despite the nominally autonomous status of the Turkish Language Foundation (Türk Dil Kurumu, TDK), this was an openly state-sponsored campaign, funded by annual grants from the state budget and having at its disposal all the implementational apparatus of the bureaucracy, the education system, and the

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[1] The Turkic/Turkish distinction is a recent terminological innovation of western origin.
[2] For a recent study in English of the language reform movement see Lewis (1999).

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state radio monopoly. Second, the aims and scope of this project were far more radical and ambitious than anything that had gone before. There was now an overt commitment to complete purification of the language, and any word that was deemed worthy of acceptance was designated *öztürkçe* 'pure Turkish'. This new lexicon included, in addition to native words already in general use, the following new categories: (1) words used in Anatolian dialects but not part of the current standard language of the urban elite; (2) obsolete Turkish words discovered by searching through relatively unpretentious texts from the early and middle Ottoman periods; (3) neologisms derived from Turkish roots and suffixes; (4) other more dubious coinages, often similar in form to European words, which were justified by pseudo-etymologies. It should be noted that there was very little antagonism to the quite conspicuous European borrowings (such as *otobüs, gazete, elektrik, demokrasi*) which had entered the language as part of the general process of modernization from the late eighteenth century onwards, predominantly from French.

The remarkable fact about the project of socio-linguistic engineering comprising the language reform is the enthusiasm with which it was embraced by a large majority of the Turkish educated class. This applies not only to first-generation Kemalists but also to their children, some of whom, in the 1960s and 1970s, were inspired as much by socialism as by nationalism. In the middle decades of the twentieth century the 'language question' was a subject of fierce controversy, with the Kemalists and leftists equally committed to the purist ideal, regarding it as representing all that was modern, secular and progressive, while conservatives fought a rearguard action in defence of the nation's cultural heritage, and the moral, emotional and aesthetic values attached to many of the

words that had been consigned to disuse. Since the 1980s the heat has gone out of this debate, but this is due as much as anything to the fact that in large measure the aims of the reformers have been achieved, and that, for better or for worse, the lexicon of Turkish in the early twenty-first century is radically different from that of the early twentieth century.

PREVIOUS GRAMMARS OF TURKISH

The first comprehensive modern treatment of Turkish grammar was Jean Deny's monumental *Grammaire de la langue turque, dialecte osmanli* (Paris, 1921). This was a significant first step towards the creation of a terminology that would accurately reflect the features of the language without trying to assimilate them to Indo-European preconceptions. While Deny's main focus was on the standard spoken and written language of Istanbul at the time of writing (pre-1914), his work also encompasses current popular and dialectal forms and older Ottoman usages. A Turkish translation by Ali Ulvi Elöve, with useful additional notes, was published twenty years later by the Turkish Ministry of Education (*Türk Dili Grameri (Osmanlı Lehçesi),* 1941).

Within Turkey itself, the change of alphabet and the language reform movement generated both a surge of interest in the structure of the language and a great pedagogical need for a new conceptualization and a new terminology. Tahsin Banguoğlu's *Ana Hatlariyle Türk Grameri* (Outlines of Turkish Grammar) (1940), was produced in response to a ministerial request for a work that might serve as a basis for school textbooks. Modern in its approach, and drawing on contemporary French linguistics, Banguoğlu's book identified itself as a descriptive, not a historical grammar, and was rich in examples reflecting the spoken language. It was reprinted in 1974 with updated terminology, under the title *Türkçenin Grameri* (The Grammar of Turkish), and is still highly regarded. Ahmet Cevat Emre's *Türk Dilbilgisi* (Turkish Grammar) (1945) was the earliest comprehensive grammar to be published by the Turkish Language Foundation (TDK). It was less systematic than Banguoğlu's work, and was not reprinted, but it remains of considerable historical interest.

Muharrem Ergin's *Türk Dil Bilgisi* (Turkish Grammar) (1952), a historical grammar of Oghuz Turkic, is a very different kind of work, and was written from a standpoint opposed to the radicalism of the TDK. It is highly traditional in its approach, and concentrates almost entirely on phonological and morphological phenomena.

The next milestone in the description of Turkish was the grammar published in Russian by the Soviet Turcologist A.N.Kononov in 1956. This work, unfortunately not linguistically accessible to the present authors, is recognized as having provided a highly valuable and original synthesis of research on Turkish down to that date.[3] Four years later appeared the *Osmanisch-Türkische Grammatik* of H.J.Kissling (Wiesbaden, 1960).

[3] See Hazai (1978), 77; Johanson (1990), 152.

Despite its title (which was intended to emphasize the essential continuity between Ottoman and modern Turkish), this book was designed as a practical reference tool for German-speaking learners of Turkish.

The first Turkish grammar to be written from a theoretical-linguistic standpoint was Lloyd B.Swift's *A Reference Grammar of Modern Turkish* (Bloomington, Ind., 1963). This was a pioneering attempt to describe the grammatical phenomena of Turkish in structural terms, i.e. as a complete system, and it marked an important new beginning in conceptual terms. At about the same time, two further grammars of a broadly pedagogical nature appeared in Turkey. Haydar Ediskun's *Yeni Türk Dilbilgisi* (New Turkish Grammar) (1963), reissued as *Türk Dilbilgisi* in 1985 and regularly reprinted down to today, was designed as a university textbook for non-specialist students. It includes an introductory section on language in general, and on the Turkish language reform movement in particular. Tahir

Nejat Gencan's clearly arranged and readable *Dilbilgisi* (Grammar), published by the TDK in 1964 and reprinted many times since, had the avowed objective of deriving the rules of Turkish from a wide-ranging assemblage of examples from admired writers (old and new), and from time-honoured usages such as proverbs.

The two grammars that are best known to English-speaking learners of, and researchers on, Turkish are those of Lewis (1967) and Underhill (1976). Geoffrey Lewis's philologically based *Turkish Grammar* (2nd edition 2000) is insightful and highly readable. The author uses examples drawn from mid-twentieth-century Turkish literary and journalistic texts, and devotes particular attention to the structures that are most alien to an English-speaking learner of Turkish. Robert Underhill's *Turkish Grammar* (Cambridge, Mass., 1976) is arranged as a coursebook. This means that pedagogical concerns determine the way in which the material is organized, and some space is allocated to vocabulary, exercises and matters of usage. Nevertheless, this work by a linguist from the generative tradition brought increased clarity to a number of topics, and continues to be much in demand both as a teaching tool (particularly in the USA) and as a resource for linguists.

The influence of generative linguistics had already been seen in the concise survey of Turkish grammar published by Yüksel Göknel in 1974 under the title *Modern Türkçe Dilbilgisi* (Modern Turkish Grammar). This includes, as well as a description of Turkish phonology, morphology and syntax, a section in which linguistic theories, predominantly generative, are applied to the structures discussed. A more recent comprehensive grammar in Turkish, Mehmet Hengirmen's *Türkçe Dilbilgisi* (Turkish Grammar) (1995), which describes itself as a textbook for students and teachers, is also inspired by this approach. In addition to the sections on Turkish grammar, it has a chapter on the application of generative theories of syntax to Turkish, as well as a chapter on the Turkic languages.

Jaklin Kornfilt's volume *Turkish* (London, 1997), is the most recent comprehensive grammar to appear in English. It forms part of Routledge's Descriptive Grammars series, addressed mainly to linguists who seek data on specific points across languages. The structure of the book is determined by a research questionnaire that has been applied uniformly to all the languages covered in the series. Kornfilt's analyses are well

supported by examples, some illustrating little discussed or hitherto unnoticed aspects of Turkish.

The last few years have also seen the appearance of pedagogical presentations of Turkish grammar in both French and German. Bernard Golstein's *Grammaire du Turc: ouvrage pratique à l'usage des francophones* (1997; second edition 1999) and Brigitte Moser-Weithmann's *Türkische Grammatik* (2001) are addressed respectively to French-speaking and German-speaking learners of Turkish. Despite their limitations of scope and analysis, the French-Turkish and German-Turkish comparative dimensions of these works furnish some interesting insights.

Scientific linguistic research on the structure and use of contemporary Turkish was a rare phenomenon before 1970.[4] The situation has, however, changed radically in the last three decades, as modern linguistic methodologies have increasingly made their impact. Already by the beginning of the 1980s there was sufficient research activity, both in and outside Turkey, for a series of biennial international conferences on Turkish linguistics to be launched, and the twelfth of these was about to take place as this book went to press. Attempting a scholarly description of Turkish grammar is no longer an isolated struggle. On the contrary, it requires an engagement with the collective achievement of an international body of scholars in a field that is increasingly well connected to the linguistic mainstream.

AIMS AND ORGANIZATION OF THIS GRAMMAR

What we have aimed to do in this book is to provide a description of the structure of contemporary standard Turkish that is both systematic and comprehensive. We have divided the book into three main parts, dealing respectively with phonology (the sound system), morphology (the structure of words) and syntax (the structure of sentences). We have paid particular attention to the distinction between morphology and syntax, in order to bring out as clearly as possible the systems in place at each level.

The chapters in Part 2 are concerned exclusively with the forms that words can take. In Turkish, because of its highly agglutinative structure, the description of word structure is largely a matter of identifying the different categories of suffixes, and the rules determining what kinds of stem they may attach to and in what order. All discussion of how words combine into phrases, clauses and sentences is confined to Part 3. This is also where semantic issues, i.e. the effects of structure on meaning, are discussed.

There is a hierarchy among the structures discussed in Part 3. For example, adjectival structures (Chapter 15) usually form part of noun phrases (Chapter 14). Noun phrases, for their part, can occur as complements within the verb phrase (Chapter 13), and/or combine with verb phrases to form clauses or sentences (Chapter 12). Furthermore, there is a parallelism between the phrasal structures described in Chapters 14–16 (having respectively a nominal, adjectival and adverbial function) and the clausal structures

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[4] See Underhill (1986).

described in Chapters 24–6 (which follow the same sequence). The ample use that we have made of cross-references throughout the text serves in part to draw attention to the systematic links between different levels of the language. It also makes it possible to draw the reader's attention from one use of a particular form (e.g. a suffix or clitic) to others described in another part of the book, and in so doing to help readers both to connect and to distinguish between different functions of the one form.

The book is intended to be useful to a wide range of people interested in Turkish, first and foremost university students and other advanced learners of the language, but also teachers and translators of Turkish, and academic linguists. Our methodology has been informed by questions of concern to general linguistic scholarship, but we have taken care to make all our explanations accessible to those without a formal linguistic training. We have strictly avoided any involvement with theoretical issues, and have kept our terminology as simple and neutral as possible. Every point has been clearly illustrated with examples. All the examples are translated, and selective use has also been made of linguistic glosses, which indicate the grammatical functions of individual suffixes. It should be noted that in the examples which are thus glossed, the segmentation is morphological, not phonological, i.e. the hyphens show the boundaries between roots and suffixes, and between the suffixes in a sequence; they do not mark syllable boundaries (as required by the conventions of Turkish orthography). A glossary of grammatical terms has been provided at the end of the book, and terms that can be found in the glossary are shown in bold on their first occurrence in a chapter.

Limitations of space make any claim to totally comprehensive coverage unrealistic, and we have had to exercise a degree of selectivity with regard to forms or usages that have marginal currency. Where we regard an item as in fairly common but declining use we have placed a triangle (▽) in front of it. This happens mainly in the case of words of Arabic origin which are adverbials or form part of postpositional or converbial structures, and are increasingly being replaced in actual usage by native or coined equivalents. Arabic and Persian inflectional forms are no longer a productive part of the Turkish language, and we have therefore excluded them entirely.

It is very important to note that this is a descriptive, not in any sense a prescriptive, grammar. In other words we have tried to record how the language is actually used at the present time, without offering any judgements as to what is 'right' or 'wrong'. We have sought to reflect *variety* of usage as well as regularity, and in this connection we have had to indicate in some places that a particular construction is used only by some speakers and not favoured by others. Another kind of variation is that relating to register, i.e. to the formality or otherwise of the speech situation or text type. In our discussion of particular forms and constructions we have been careful to mention if there is any stylistic restriction on their use. A downwards arrow (↓) has been placed in front of any form that is confined to very informal contexts. Otherwise, unless we have mentioned in the text that a particular form or construction is formal, informal, colloquial, etc., it can be assumed that it is in unrestricted use.

Most suffixes in Turkish are variable in form according to the rules of vowel harmony and consonant alternation, which are explained in Chapters 3 and 6 respectively. In this book any parts of a suffix that are subject to such variation are shown in capital letters, e.g. *-lAr, -sIn, -DI*. Similarly, many suffixes have an initial vowel or consonant that is

dropped in certain contexts. Such deletable elements are shown in brackets when a suffix is cited, e.g. *-(y)mIş*.

The English translations of the example sentences have been made as idiomatic as possible. Where the structure of the idiomatic translation is so different from that of the Turkish as to make it possibly difficult to see how it was arrived at, we have added in brackets a literal translation of all or part of the sentence. Where translations are provided for individual words (e.g. in Parts 1 and 2) it should not be assumed that these represent the only meanings that these words can have.

ABBREVIATIONS

ABL	ablative case
ACC	accusative case
ADJ	adjective/adjectival/adjectivizer
ADV	adverb/adverbializer
AOR	aorist
AT	attributive
AUX	auxiliary verb
C	consonant
CL	clitic
COM	comitative
COND	conditional
COND.COP	conditional copula
CONJ	conjunction/connective
COP	copula
CV	converb marker
DAT	dative case
DEF	definite
DER	derivational suffix
DET	determiner
EMPH	emphatic
ENUM	enumerator
EV.COP	evidential copula
EV/PF	evidential/perfective
FUT	future
GEN	genitive case
GM	generalizing modality
IMP	imperative
IMPF	imperfective
INDEF	indefinite
INF	infinitival
INFL	inflectional suffix

INS	instrumental
INT	interrogative
INTR	intransitive
lit.	literally
LOC	locative case
N	noun
NC	noun compound
N.DER	noun/nominal-deriving suffix
NEG	negative
NEG.AOR	negative aorist
OBL	oblique case
OBLG	obligative
obs.	obsolete
OPT	optative
PART	participle
PASS	passive
P.COP	past copula
PF	perfective
PL	plural
POSS	possessive
POT	potentiality
PROG	progressive
PRON	pronominalizer
PSB	possibility
REC	reciprocal
REF	reflexive
RP	relative pronoun
SG	singular
s/he	she, he (also 'it', depending on the context)
s.o.	someone
s.t.	something
s.w.	somewhere
SUB	subordinator
TAM	tense/aspect/modality
TR	transitive
V	vowel

V.DER	verb deriving suffix
VN	verbal noun marker
1	first person
2	second person
3	third person
Ø	zero

LIST OF CONVENTIONS OBSERVED IN THIS BOOK

italics in the text or in lists are used for Turkish examples

italics in the text are used for highlighting a point in the text

italics in the English translations correspond to the highlighted parts in the Turkish examples

bold in the Turkish examples highlights the point which is being discussed

bold italics in the Turkish examples emphasize a particular part in a highlighted section

bold in the text (apart from headings) is used to highlight the key concepts under discussion in a chapter, and/or to indicate a term that is explained in the glossary

. (full stop) between two English words in the glosses indicates that the corresponding item in Turkish is either one word, or two (or more) words which do not have a word-for-word translation into English

' ' indicates a letter in the alphabet

' ' in the text indicates a mention of a part of a suffix, or one of the forms of a suffix

'' indicates English translations of Turkish words, phrases and sentences

/ shows that either form is grammatical

/ / indicates the phonemic representation of a phonological unit

| indicates the boundary between two intonational phrases

[ ] indicates the phonetic realization of a phonological unit (i.e. the sound of a particular segment)

[ ] in the Turkish examples indicates a subordinate clause

[ ] in the translations indicates either (i) a word or phrase which is required for the grammaticality of the English translation or for stylistic reasons, but which does not occur in the Turkish example or (ii) in cases where a subordinate clause is marked in the Turkish example, a subordinate clause

( ) in a suffix indicates that the enclosed item is present only under certain morpho-phonological conditions

( ) in an example indicates that the item enclosed is optional

(…) indicates the omission or dislocation of a particular item

{ } used selectively to mark the boundaries of a noun phrase

∇ indicates that a form is dated or in decreasing use in standard Turkish

▽ indicates a verbal inflectional suffix which is in use but is limited in productivity

↓ indicates that the form is very informal

- (hyphen) in front of a form indicates that it is a suffix

- (hyphen) after a form indicates either that it is a verb (e.g. *gül-* 'laugh') or that it cannot occur without a suffix (e.g. *bura-* 'here')

- (hyphen) in the Turkish glosses indicates suffix boundaries

~ indicates syllable boundaries

'A.' and 'B.' at the beginning of examples indicate different speakers

capital letters in the suffixes indicate variability

capital letters in the Turkish examples and English translations indicate stressed words or syllables

small capital letters in the Turkish examples indicate secondary stress

´ (acute accent) indicates stress within individual words

THE TURKISH ALPHABET AND WRITING CONVENTIONS

The list below provides a rough guide to the pronunciation of the 22 consonants and 8 vowels in Turkish. Only the most prominent aspects of pronunciation are highlighted. The explanations are based on the speech habits of native speakers of British English and should be read in conjunction with Section 1.1.

Letter   Pronunciation

A, a   pronounced as *u* in 'c*u*p'

B, b   *b* as in '*b*it

C, c   *j* as in '*j*am'

Ç, ç   *ch* as in '*ch*ip'

D, d   *d* as in '*d*eep'

E, e   *e* as in 't*e*n'

F, f   *f* as in '*f*it' or 'full'

G, g   *g* as in '*g*et' or 'gull'

ğ   either lengthens the sound of the vowel preceding it or is silent between two vowels

H, h   *h* as in '*h*ope'; pronounced also in word medial and final positions and sometimes silent between two vowels

I, ı   pronounced as *a* in '*a*mong', '*a*lone'

İ, i   a shorter form of *ee* as in 'b*ee*t' or *i* as in 'b*i*t'

J, j   *s* as in 'lei*s*ure'

K, k   *k* as in '*k*ept', '*c*ure' and '*c*alf'

L, l   *l* as in '*l*amp', 'bu*ll*' or '*l*urid'

M, m   *m* as in '*m*ilk'

N, n   *n* as in '*n*o'

O, o   *o* as in 'off'

Ö, ö   resembles the sound which is produced when *e* as in 'b*e*t' is pronounced with the lips rounded, as in the German sound 'ö'

P, p   *p* as in '*p*in'

R, r   produced with the tip of the tongue touching the alveolar ridge

S, s	*s* as in 'hi*ss*'
Ş, ş	*sh* as in '*sh*eep'
T, t	*t* as in '*t*ime'
U, u	*u* as in 'c*u*te' or p*u*t'
Ü, ü	resembles the sound which is produced when *i* as in 'b*i*t' is pronounced with the lips rounded, as in the German sound 'ü'
V, v	*v* as in '*v*ery'
Y, y	*y* as in '*y*ou'
Z, *z*	*z* as in '*z*ig*z*ag'

CIRCUMFLEX

In the writing system, a circumflex '^' is sometimes placed over a vowel to indicate that it is long, e.g. *kâtil* [kʰa:tʰil] 'murderer', but this is neither regular nor a reliable means of identifying a long vowel (see 1.1.2.2).

Again, in some words of Persian or Arabic origin, a circumflex may be placed on a vowel to palatalize the previous consonant:

> *kâr*   'profit'
>
> *gâvur*   'foreigner' (derogatory)

In words such as *hâlâ* 'still', the circumflex fulfils both functions by showing as long the vowels (in both syllables) and palatalizing 'l'.

In view of the functional ambiguity of the circumflex, and the fact that its use is declining, it has been avoided altogether in this book except in the cases of *hâlâ* 'still', *kâr* 'profit', *kâh…kâh* 'now…now', where its omission could lead to ambiguity.

APOSTROPHE

The apostrophe is used for separating a proper noun from its inflectional suffixes, as in:

> *Semra'dan*   'from Semra'
>
> *Hürriyet'te*   'in *Hürriyet*' (a newspaper)

When a derivational suffix (Chapter 7) is attached to a proper name, the apostrophe can be placed before or after it:

Ankaralı'lar/Ankara'lılar   'the people of Ankara'

If the proper name is a *-(s)I* compound (10.2) the apostrophe is placed after *-(s)I* or *-lArI:*

İçişleri Bakanlığı'ndan   'from the Home Office'

İçişleri'ne   'to the Home Office' (shortened form)

Ticaret Odaları'nın   'of the Chamber of Commerce'

(Note that the 'n' of the suffixes *-(s)I(n)* and *-lArI(n)* is placed *after* the apostrophe.)
   Proper names are spelt as in their bare form, even in cases where the addition of a suffix changes the pronunciation (2.1):

Ahmet'in   [axmedín]   'Ahmet's'

Tarık'ın   [tʰa:rí:n]   'Tarık's'

SYLLABIFICATION AND DIVIDING A WORD AT THE END OF A LINE

All syllables contain one vowel in Turkish. A vowel cannot be the first item in a syllable unless it is at the beginning of a word, i.e. it always belongs to the same syllable as a preceding consonant if there is one:

a~*ta*~*ma*~*dım*   'I could not throw'

A syllable cannot begin with two consonants, except at the beginning of loan words:

at~**t***ım*   'I threw'

*par***k**~**t***an*   'from the park'

Note that the silent consonant 'ğ' conforms to the conditions on consonants:

ba~**ğ***ı*~*ra*~*ma*~*ya*~*ca*~**ğ***ım*   'I will not be able to shout'

At the end of a line, a word can be divided at any syllable boundary, *irrespective of whether the division breaks up a single semantic unit* (such as a stem or a suffix):

park 'park' *par*~*ka* 'to the park'

git- 'go' *gi*~*di*~*le*~*me*~*ye*~*ce*~*ği*~*ne* 'instead of [one] not being able to go
            [there]'

(Note that in the second example the verb root 'git', the passive suffix 'il' and the converbial suffix 'yeceğ' are broken up.)

PART 1
PHONOLOGY: THE SOUND SYSTEM

1
PHONOLOGICAL UNITS

Words are made up of sequences of distinct **phonological units** called **consonants** and **vowels**. Some consonants and vowels sound the same wherever they occur within a word, and have a single pronunciation. Others have more than one way of being pronounced, depending on the surrounding sounds. The various pronunciations of a phonological unit conditioned by its position are called its **allophones**.

Phonological units are indicated by double slashes (/ /), and their allophones by square brackets ([ ]). The corresponding Turkish alphabetical symbols are indicated by inverted commas (' '). Long vowels and doubled consonants are indicated by a following colon (:).

1.1 CONSONANTS AND VOWELS

1.1.1 CONSONANTS

The consonants in Turkish differ from each other in terms of whether they are **voiced** or **voiceless,** their **point of articulation** and their **manner of articulation**. The voiced/voiceless contrast is the most prevalent one in processes involving phonology and word structure (2.1, 6.1.2).

Voiceless consonants	*Voiced consonants*
/p/	/b/
/t/	/d/
/k/	/g/
/c/('k')	/ɟ/ ('g')
/tʃ/ ('ç')	/dʒ/ ('c')
/f/	/v/
/s/	/z/
/ʃ/('ş')	/ʒ/ ('j')
/h/	
	/ɣ/('ğ')

/m/

/n/

/ɫ/('l')

/l/

/r/

/j/('y')

1.1.1.1 Consonants and their allophones

The following factors affect the pronunciation of particular consonants in certain environments:

> **(i) palatalization** (producing a consonant with the tongue against the hard palate) affects the velar consonants /k/, /g/ and /ɫ/, and the glottal consonant /h/ in front vowel environments
>
> **(ii) aspiration** (producing a consonant with force) affects the voiceless plosives
>
> /p/, /t/, /k/, /c/, and the voiceless affricate /ʧ/
>
> **(iii) bilabialization** (producing a consonant by bringing the lips together) affects the voiced labio-dental consonant /v/ and to a lesser extent, its voiceless counterpart /f/

The descriptions below regarding the pronunciation of consonants in 'word-final position' apply only to those cases where a word is followed by a pause or uttered in isolation. Otherwise, the pronunciation of a word-final consonant is, in most cases, conditioned by the initial sound in the following word. For example, /p/ which is described below as aspirated at the end of a word or before a vowel sounds so only if it is followed by a pause or a word beginning with a vowel. If it is followed by a word starting with a consonant it is an unaspirated /p/. In other words, the 'p' of *tıpa* 'stopper', *Tıp Ansiklopedisi* 'Encyclopaedia of Medicine' and *tıp* 'medicine' (pronounced in isolation) are all aspirated, whereas the 'p' in *tıpkı* 'just like' or in *Tıp Dergisi* 'Journal of Medicine' is unaspirated.

Another point about pronunciation concerns two identical consonants that occur next to each other. Such clusters are pronounced with a delayed release as in *attım* [atʰːɪm] 'I threw [it]' (as opposed to *atım* [atʰɪm] 'my horse') and *kaç çocuk* [kʰaʧːoʤukʰ] 'how many children' (as opposed to *kaç okul* [kʰaʧokʰuɫ] 'how many schools').

The consonants of Turkish and their allophones are given below. Where the phonetic symbol is different from the orthography, the latter is indicated in brackets (e.g. /ʧ/ ('ç')).

/p/ [p]   *şapka* 'hat', *aptal* 'stupid', *kitapçı* 'bookshop', *iplik* 'thread'

   [pʰ] *para* 'money', *pirinç* 'rice', *pırasa* 'leek', *top* 'ball', *ip* rope', *kapak* 'cover', *ipek* 'silk'

[p] is an unaspirated voiceless **bilabial plosive** which occurs before a consonant. [pʰ] is an aspirated voiceless bilabial plosive which occurs before vowels or in word-final position.

/b/   [b]   *bebek* 'baby, doll', *bora* 'gale', *biz* 'we', *ebe* 'midwife', *öbek* 'group', *abla* 'elder sister'

[b] is a voiced bilabial plosive. It does not occur in word-final position except in a few loan words such as *rab* '(the) Lord', *rob* 'robe' and *ab* 'water', and is rare in syllable-final position.

/t/   [t]   *katla-* 'fold', *saatçi* 'clockmaker', *etnik* 'ethnic', *atkı* 'scarf'

    [tʰ]   *tarak* 'comb', *tirşe* 'aquamarine', *türev* 'derivative', *etek* 'skirt', *otuz* 'thirty', *ütü* 'iron', *inat* 'insistence', *it-* 'push'

[t] is a voiceless unaspirated **denti-alveolar** plosive which occurs before a consonant. [tʰ] is an aspirated dental plosive which occurs before a vowel or in word-final position.

/d/   [d]   *dere* 'stream', *dam* 'roof', *doğru* 'correct', *diz* 'knee', *dümen* 'wheel', *kadın* 'woman', *badem* 'almond', *ödün* 'compromise', *adlı* 'named'

[d] is a voiced denti-alveolar plosive. It does not occur in word-final position except in a few words such as *ud* 'lute', *had* 'limit', *ad* 'name', most of which are borrowed, and is rare in syllable-final position.

/k/   [k]   *bakla* 'broad beans', *sıkma* 'squeezed', *okşa-* 'caress', *parkta* 'in the park'

    [kʰ]   *kafa* 'head', *sıkı* 'tight', *doruk* 'zenith', *sok-* 'push in', *kazak* 'sweater'

    [c]   *ikna (et-)* 'convince', *ekle-* 'add', *eksi* 'minus'

    [cʰ]   *keçi* 'goat', *kömür* 'coal', *iki* 'two', *sök-* 'dismantle', *bölük* 'squadron', *erk* 'power'

[k] is a voiceless unaspirated **velar** plosive which occurs at the end of a syllable containing a **back vowel** (one of /ı/, /a/, /o/ or /u/) and before a consonant. Its aspirated counterpart [kʰ] occurs before a back vowel and in word-final position following a back vowel. [c] and [cʰ] are voiceless **palatal** plosives which occur with **front vowels** (one of /e/, /i/, /ö/ or /ü/). [c] occurs at the end of a syllable containing a front vowel and before a consonant, and its aspirated counterpart [cʰ] occurs before a front vowel and in word-final position following a front vowel. The palatalization of [cʰ] is more pronounced when it follows /i/ or /ü/ and occurs at the end of a word, as in *yörük* 'nomad' or the final 'k' in *küçük* 'small'.

    An even more palatalized version of [cʰ] occurs before palatalized back vowels in some loan words, as in *kağıt* 'paper', *kufî* 'Cufic', *katip,* 'clerk, secretary', *mahkum* 'prisoner'. Note that [cʰ] in these instances constitutes a separate phonological unit (/c/), as it contrasts with [kʰ]: *kar* [kʰaɾ] 'snow' and *kâr* [cʰaɾ] 'profit'.

/g/   [g]   *gaz* 'gas', *gıdıkla-* 'tickle', *gocuk* 'duffle coat', 'anorak', *gaga* 'beak'

    [ɟ]   *gez-* 'stroll', *giy-* 'wear', *göç* 'migration', *Ege* 'Aegean'

[g] is a voiced velar plosive which occurs in syllables with the back vowels /ı/, /a/, /o/, and /u/. Its palatal counterpart [ɟ] occurs in syllables with the front vowels /i/, /e/, /ö/ and /ü/. /g/ does not occur in syllable-final or in word-final position except in loan words such as *program* 'programme', *psikolog* 'psychologist', *lig* 'league' and *katalog* 'catalogue'.

A slightly more palatalized version of the sound [ɟ] can also occur before a palatalized back vowel in loan words, as in *yegane* 'only', *gavur* 'infidel' (derogatory), *dergah* 'dervish convent'. Here [ɟ] belongs to the separate phonological unit /ɟ/, which is a voiced palatal plosive.

/tʃ/   [tʃ]   *biçki* 'cutting out', *saçma* 'nonsense', *içmeler* 'springs'
('ç')

[tʃʰ]   *çene* 'chin', *çabuk* 'quickly', *çöp* 'rubbish', *uçuk* 'pale', *ölçü* 'measurement', *kılıç* 'sword', *ilgeç* 'postposition'

[tʃ] is a voiceless **post-alveolar affricate** which occurs before a consonant. Its aspirated counterpart [tʃʰ] precedes vowels and also occurs in word-final position.

/dʒ/ ('c') [dʒ]   *caz* 'jazz', *cebir* 'algebra', *cuma* 'Friday', *cins* 'type', *acı* 'pain', *böcek* 'insect'

[dʒ] is a voiced post-alveolar affricate. It does not occur in syllable-final position and rarely occurs in word-final position (e.g. *hac* 'pilgrimage' and *sac* 'sheet iron', mostly for purposes of distinguishing these words from words containing its voiceless counterpart /tʃ/, i.e. *haç* 'cross' and *saç* 'hair').

/f/   [Φ]   *ufuk* 'horizon', *küfür* 'curse', *kof* 'rotten', *örf* 'common usage', 'custom'

[f]   *fakat* 'but', *nefes* 'breath', *defter* 'notebook', *lif* 'fibre'

[Φ] is a voiceless bilabial **fricative** which occurs in the pronunciation of some speakers before the rounded vowels /u/, /ü/, /o/ and /ö/ and to a lesser extent in word-final position following a rounded vowel. [f] is a voiceless **labio-dental** fricative which occurs elsewhere.

/v/   [ω]   *tavuk* 'chicken', *kavun* 'melon', *havuç* 'carrot'

[β]   *vücut* 'body', *vur-* 'hit', *ov-* 'massage', *döv-* 'beat'

[v]   *virgül* 'comma', *vatan* 'motherland', *ev* 'house', *tava* 'frying pan'

[ω] is a bilabial **glide** which occurs between two vowels where at least one of the vowels, usually the one following it, is rounded. [β] is a voiced bilabial fricative which also occurs with rounded vowels but only when it is not intervocalic (i.e. when it is in word-initial or syllable-final position). The difference between [ω] and [β] is very slight and is not audible in the speech of some speakers. [v], the voiced labio-dental fricative, occurs elsewhere.

/s/   [s]   *sarı* 'yellow', *somurt-* 'sulk', *su* 'water', *süt* 'milk', *ısı* 'heat', *askı* 'hanger', *pas* 'rust'

[s] is a voiceless denti-alveolar fricative.

/z/ [z] *zar* 'dice', 'membrane', *zehir* 'poison', *otuz* 'thirty', *doz* 'dosage', *uzun* 'long, tall', *azınlık*
        'minority'

[z] is a voiced denti-alveolar fricative.

/ʃ/   [ʃ] *işlek* 'busy', *şiir* 'poem', 'poetry', *şarkı* 'song', *aşık* 'lover', *meşin* 'leather', *kaş*
('ş')   'eyebrow', *güneş* 'sun'

[ʃ] is a voiceless post-alveolar fricative.

/ʒ/   [ʒ *jüpon* 'underskirt', *jet* 'jet', *jilet* 'razor blade', *garaj* 'garage', *bej* 'beige', *Jülide* (a
('j')   ]   name), *ajan* 'agent', *ejderha* 'dragon'

[ʒ] is a voiced post-alveolar fricative. It occurs in words borrowed from Indo-European languages, in particular from Persian and French.

/ɣ/ ('ğ')   *soğuk* 'cold', *bağır-* 'shout', *eğik* 'bent', *dağ* 'mountain', *gittiğim* 'that I went'

The so-called 'soft g' lacks a corresponding 'consonantal' sound in standard Turkish, although it is pronounced as a voiced velar fricative in some dialects. It behaves like a consonant when a suffix follows it (see 6.1.3), and is either inaudible as a consonant or may be pronounced as a palatal glide in the environment of front vowels and as a bilabial glide in the environment of rounded vowels. In particular:

(i) When it is in word-final or syllable-final position, it lengthens a preceding back vowel (*dağdan* [da:dan] 'from the mountain' and *sığ* [sɯ:] 'shallow'), but may be pronounced as a palatal glide when following a front vowel (*eğlen-* [ejlæn] 'have fun').

(ii) Between identical back vowels it is inaudible (*sığınak* [sɯ:nakʰ] 'shelter', *uğur* [u:ʕ] 'good luck').

(iii) Between identical front vowels it is either inaudible (*sevdiğim* [sevdi:m] 'that I love') or sounds like a palatal glide (*düğün* [düjün] 'wedding').

(iv) Between rounded vowels it is mostly inaudible but can also be pronounced as a bilabial glide *soğuk* ([soukʰ] or [soωukʰ] 'cold').

(v) Between a rounded vowel and an unrounded vowel it is mostly inaudible but can also be pronounced as a bilabial glide (*soğan* [soan] or [soωan] 'onion').

(vi) 'a+ğ+ı' sequences may either sound like a sequence of /a/ followed by /ı/ or like a sequence of two /a/ vowels (*ağır* [aɪʕ] or [a:ʕ] 'heavy').

(vii) 'ı+ğ+a' sequences, on the other hand, are pronounced as sequences of /a/ followed by /ı/ (*sığan* [sɯan] '[one] which fits').

(viii) When 'ğ' occurs between an 'e' and an 'i' it is either inaudible or pronounced as a palatal glide [j], hence words with the sequences 'e +ğ+i' and 'i+ğ+e' can sound like words written with a 'y', as in *değil* [dejil] 'not' and diğer [dijæʕ] 'other' (the former being similar to words *written* with a palatal glide, e.g. *meyil* 'slope'). 'e+ğ+i' sequences may also sound like a sequence of two /i/ vowels, hence *değil* is often pronounced [di:l] in colloquial speech.

For the pronunciation of 'ğ' in forms containing the future/participle suffix *-(y)AcAK,* see 8.2.3.3.

Note that vowel sequences formed as a result of an intervening 'ğ' are made up of two distinct syllables and are not diphthongs or long vowels. In these vowel sequences stress falls on the second syllable, provided that other conditions on word stress are met (see Chapter 4).

/h/   [ç]   **h**i*le* 'trick', *i**h**timal* 'possibility', *Sali**h*** (a name)

[x]   *ı**h**lamur* 'linden', *ah̦şap* 'wooden', *ka**h**ve* 'coffee', *saba**h*** 'morning'

[h]   **h**ala 'paternal aunt', **h**orla- 'snore', *a**h**ır* 'barn'

[ç] is a voiceless palatal fricative that occurs with front vowels in the following environments: before a front vowel, between a front vowel and a consonant, and after a front vowel in word-final position. When the vowel is /i/, the palatalization is more pronounced. [x], the voiceless velar fricative, follows a back vowel and precedes a consonant, or follows a back vowel in word-final position. [h], the voiceless glottal fricative, occurs before a back vowel. /h/ may be silent between two identical vowels, as in *pastahane* [pʰastʰa:nɛ] 'bakery shop' and *daha* [da:] 'more', or between a vowel (usually /a/) and a consonant, causing the preceding vowel to lengthen as in *kahve* [kʰa:vɛ] 'coffee' and *Ahmet* [a:metʰ].

/m/   [m]   **m**asal 'fairytale', **m**ine 'enamel', **m**üzik 'music', *e**m**in* 'sure', *ku**m**ar* 'gambling', *ka**m**bur* 'hunchback', *tarı**m*** 'agriculture', *eki**m*** 'October'

[m] is a bilabial **nasal**.

/n/   [n]   **n**asıl 'how', **n**i**n**e 'grandmother', *o**n*** 'ten', *ü**n**lü* 'famous', *i**n**ek* 'cow', *soru**n*** 'problem'

[ŋ]   *ya**ŋ**gın* 'fire', *ba**ŋ**ka* 'bank', *ma**ŋ**gal* 'brazier'

[ɲ]   *e**ɲ**gin* 'boundless', *di**ɲ**gin* 'calm'

[n] is a dental nasal which occurs in all positions except when it is followed by /k/ or /g/. /n/ is realized as a velar nasal [ŋ] following a back vowel and preceding a velar plosive, and as a palatal nasal [ɲ] following a front vowel and preceding a palatal plosive.

There is no audible difference between 'n' and 'm' when either of these occurs before a labio-dental fricative ('f' or 'v'). In s uch ca ses , the preceding 'n' or 'm' becomes slightly nasalized: *Enver* [ẽvæɾ̩] (a name), *amfi* [ãfi] 'lecture room'.

/l/   [l]   **l**ey**l**ek 'stork', lira 'lira', *e**l**li* 'fifty', *gü**l*** 'rose', *ö**l**üm* 'death'

[ɫ]   *o**ɫ**uk* 'gutter', *ka**ɫ**ın* 'thick', *ba**ɫ*** 'honey', *pu**ɫ*** 'stamp'

[l] is a palatalized post-alveolar **lateral** which occurs adjacent to front vowels, and [ɫ] is a velarized dental lateral which occurs adjacent to back vowels. /l/ generally gets assimilated with a preceding /n/ in fast speech, e.g. *kadınlar* 'women' may be pronounced [kʰadınnaɾ̩] and *anla-* 'understand' as [anna].

The palatal sound [l] can also occur adjacent to back vowels in loan words such as *lale* [la:le] 'tulip', *laf* 'word(s)', *ilah* 'god', *rol* 'role'. Here it belongs to the phonological unit /l/.

/r/   [r]   **r**ahat 'comfort', **r**enk 'colour', i**r**i 'big', a**r**tık 'waste', o**r**uç 'fasting'

[ɾ̥]   tü**r** 'type', ge**r**- 'stretch', iksi**r** 'elixir', ka**r** 'snow', mo**r** 'violet'

[r] is a voiced alveolar **tap** produced with the tip of the tongue touching the alveolar ridge. It occurs in initial and medial positions. Its devoiced counterpart [ɾ̥] occurs in word-final position. /r/ is sometimes deleted in colloquial speech, in particular in the imperfective suffix -*Iyor* (see 8.2.3.3 for details) and in *bir* 'a', 'one'. In the case of *bir,* this usually occurs when it is not stressed (*bir ev* [bi év] 'a house') but also sometimes when it is stressed (*bir daha* [bída:] 'again', *sadece bir ev* [**sa:dedʒɛ** bí ev] 'only one house').

/j/   [j]   **y**er 'place', **y**oğurt 'yogurt', **y**ağ 'oil', a**y**ak 'foot', o**y**un 'game', a**y**na 'mirror', ka**y**- ('y')   'slide', hu**y** 'disposition'

[j] is a palatal glide. The sequence 'i+y' can be realized as a long vowel, as in *iyi* [i:] 'good' and *diyeceğim* [**di:dʒæm**] 'I will say'.

    The **glottal stop** survives mainly in the speech of some elderly speakers, and is going out of usage. It is confined to words of Arabic origin, and mostly to those in which it is intervocalic (*saat* [sa'aṭ^h] 'clock', 'watch', *fiil* [fi'il] 'verb', *teessüf* [t^{h}e'es:üΦ] 'sorrow', *taarruz* [t^{h}a'ar:uz] 'assault'). Note that an intervocalic glottal stop can also be pronounced as a long vowel (1.1.2.2).

1.1.2 VOWELS

Turkish has a very symmetrical vocalic system, consisting of the eight vowels /a/, /e/, /ɯ/ ('ı'), /i/, /o/, /œ/ ('ö'), /u/, /y/ ('ü'). The symbols /ɯ/, /œ/ and /y/ will henceforth be replaced by their counterparts in the Turkish orthography, /ı/, /ö/ and /ü/ respectively. These vowels differ from each other in terms of the height of the tongue, the **rounded**ness of the lips and the **front**ness of the tongue.

	High		*Non-high (mid and low)*	
	Rounded	*Unrounded*	*Rounded*	*Unrounded*
Front	ü	i	ö	e
Back	u	ı	o	a

In addition, Turkish has the long vowels /a:/, /u:/, /i:/ and /e:/ in loan words of Arabic and Persian origin.

1.1.2.1 Vowels and their allophones

Vowels can occur at the beginning and end of words, and between two consonants. In words of native origin, /o/ and /ö/ occur only in the first syllable (except for words which contain the imperfective suffix -*Iyor,* see 3.4 (vi) and 8.2.3.3).

Some general factors which affect the pronunciation of vowels are the following: the back vowels /a/, /o/ and /u/ are palatalized when following or preceding the palatal consonants /c/, /ɟ/ and /l/, which occur only in loan words. All vowels except /a/ and /o/ get lowered in word-final position.

/a/   [a]   *ka**r**a* 'black', *a**ş**ı* 'vaccination', *ku**r**ak* 'arid', *a**l**gı* 'perception', *ba**n**ka* 'bank'

    [a]   *laf* 'word(s)', 'banter', *lapa* 'mush', *alfabe* 'alphabet', *kağıt* 'paper'

[a] is a low, back and unrounded vowel. Its **fronted** allophone [ạ] occurs with the palatal consonants /c/, /ɟ/ and /l/ in loan words.

/e/   [e]   *s**e**vgi* 'love', *e**kim* 'October', *b**e**z* 'cloth', *s**e**nin* 'your'

    [ɛ]   *il**e*** 'with', *küf**e*** 'large basket', *bal**e*** 'ballet', *den**e**-* 'try'

    [æ]   *g**e**l-* 'come', *v**e**r-* 'give', *b**e**n* 'I', *s**e**n* 'you', *giz**e**m* 'mystery'

The non-high, front and unrounded vowel /e/ has three allophones. Going from the highest, i.e. mid, to the lowest, these are: the mid, front, closed vowel [e], its lowered counterpart [ɛ], an open-mid, front vowel, and [æ], a low front vowel. [e] sounds like a shorter form of the vowel sound in the English word *late,* [æ] resembles a shorter form of the vowel sound in *bat,* and [ɛ] is between the two, with a sound similar to the vowel in *air* in English.

[æ] occurs before /l/, /m/, /n/, /r/ in instances where the sequences *'er', 'em', 'en'* and *'el'* are not followed by a vowel, as in *her* 'each, all', *gerdi* 's/he stretched', *kent* 'town', *pergel* 'pair of compasses'. [ɛ] occurs in wordfinal position. [e] occurs elsewhere. All three occur in words such as *gezegende* [gezegændɛ] 'on the planet', *perende* [perændɛ] 'somersault' (see also 2.5). Note that /e/ may be pronounced either as [e] or [æ] in a limited number of words before /l/, /m/ and /n/. Hence, some speakers pronounce *elbise* 'dress', *kendi* 'self' or *hem* 'both' with [e], others with[æ].

/i/   [i]   *er**i**k* 'plum', *iletiş**i**m* 'communication'

    [I]   *ilg**i*** 'interest', *der**i*** 'skin', *ked**i*** 'cat'

[I] is a higher-than-mid, front, unrounded vowel which occurs in word-final position. Its pronunciation resembles the vowel sound in *bit* in English. [i], which occurs elsewhere, is a front, high, unrounded vowel, a shorter version of the vowel sound in *beat* in English.

/ı/   [ɪ]   *as**ı**l* 'real', *k**ı**şla* 'barracks', *ıl**ı**k* 'lukewarm', *k**ı**rm**ı**z**ı* 'red'

[ɪ] is an unrounded, high, back vowel.

/o/   [o]   **o** 'he/she/it/that', **bol** 'abundant', **otur-** 'sit', **kop-** 'snap', *pro**tok**ol*/'protocol'

    [ọ]   *lokum* 'Turkish delight', *ro**l*** 'role'

[o] is a mid, back, rounded vowel. Its palatalized counterpart [ọ] occurs adjacent to /l/ in loan words. /o/ occurs only in the initial syllable in words of Turkic origin, but may appear in any syllable in loan words.

/ö/   [ö]   **göl** 'lake', **ölçü** 'measurement', **dökül-** 'be spilt', **sözlük** 'dictionary', *kuv**ö**z* 'incubator', *şof**ö**r* 'chauffeur'

[ö] is a mid, front, rounded vowel. In loan words /ö/ can occur in any syllable, but like /o/ it appears only in the first syllable in native words.

/u/   [u]   b**ulu**ş 'finding', **u**fak 'small', *koş**ul*** 'condition'

    [ụ]   l**u**t 'lute', *bl**u**cin* 'denims', *l**u**gat* 'dictionary', *k**u**fî* 'Cufic'

    [Ʊ]   b**u** 'this', *kut**u*** 'box', *ord**u*** 'army'

[u] is a rounded, high, back vowel which sounds like the vowel in the English word *truth*. [ụ] is its palatalized allophone, which occurs adjacent to the palatal consonants /c/, /ɟ/ and /l/ in loan words. [Ʊ] is more lowered than [u] and occurs in word-final position. It is pronounced in a similar way to the vowel in *put* in English.

/ü/   [ü]   **üzüntü** 'sadness', **püre** 'mash', **süprüntü** 'rubbish', *öm**ür*** 'life'

    [Y]   *üzünt**ü*** 'sadness', *örg**ü*** 'knitted', *sövg**ü*** 'curse'

[ü] is a rounded, high, front vowel. [Y] is more lowered than [ü] and occurs only in word-final position.

1.1.2.2 Long vowels

Long vowels occur in words borrowed from Persian and Arabic. These have two separate sources. They are either long vowels in the original language or they originally contained a glottal stop (1.1.1.1), which, together with the vowel that precedes it, has become a long vowel in Turkish. Sometimes long vowels are indicated by a circumflex (ˆ) in the orthography. Those long vowels which derive from an intervocalic glottal stop are usually written as two vowels. The list below provides a few examples without distinguishing between these distinct sources:

/a:/   *matb**aa** 'press', *k**i**ra* 'rent', *m**a**vi* 'blue', **a**rif* 'wise person'

/u:/   *mevz**u** 'topic', *s**u**ret* 'copy', *b**u**se* 'kiss', *N**u**man* (a name)

/i:/   *f**ii**l* 'verb', **i**lan* 'advertisement', *s**i**ne* 'bosom', *D**i**dem* (a name)

/e:/   *t**ee**ssüf* 'sorrow', *t**e**min* 'acquisition', *t**e**sir* 'effect'

See 1.1.1.1 for the effect of 'ğ' and 'h' on preceding vowels, and 2.4 for vowel length under other circumstances.

1.2 THE DISTRIBUTION OF CONSONANTS AND VOWELS

In Turkish roots are predominantly monosyllabic, i.e. they contain a single vowel. There are no vowel sequences in Turkish, except in loan words (see 1.1.2.2).

The most common combinations of consonants (C) and vowels (V) are VC (*at* 'horse', *ol-* 'be', *in-* 'descend', *iş* 'work', *üç* 'three') and CVC sequences (*gel-* 'come', *bak-* 'look', *güz* 'autumn', *göl* 'lake'). There are also CV sequences such as *bu* 'this', *şu* 'that', *su* 'water', *ne* 'what', *de-,* 'say', but these are fewer in number and those which are nominals usually require an additional consonant ('n' or 'y') when they combine with suffixes (6.1.3). Other types are VCV sequences such as *ara-* 'look for', *ile* 'with', *öte* 'far side', and VCC and CVCC sequences such as *ört-* 'cover', *sert* 'hard', *genç* 'young'. There is a single occurrence of a root which consists only of a single vowel, the word *o* 'he, she, it, that'. This word requires a consonant when it combines with a suffix (6.2 (ii)).

In this book we treat the following words also as roots, although they have more than one syllable:

> **(i)** Loan words such as *hazır* 'ready', *kitap* 'book', *köşe* 'corner' and *otomatik* 'automatic'. Some such words are derived forms in their original language but cannot be broken up into smaller units in Turkish.
> **(ii)** Words of Turkic origin which do not have a recognizable monosyllabic root in modern Turkish, such as *damar* 'vein', *ördek* 'duck', *eski* 'old', *ana* 'mother', *bekle-* 'wait', *oku-* 'read' and *çalış-* 'work'.

In the overwhelming majority of cases, a word which contains more than one syllable in Turkish is a derived word (see 7.2). For the rules of syllabification in Turkish see p. xl.

1.2.1 CONSONANT CLUSTERS

Consonant clusters, i.e. sequences of two different consonants, occur word-initially only in loan words. Some speakers insert one of the vowels /i/ or /ı/ in or before the cluster:

Alternative pronunciation

spor 'sport'	[ispʰoɾ, sipʰoɾ]
stil 'style'	[istʰil, sitʰil]
stres 'stress'	[sitres]
tren 'train'	[tʰiræn]
psikoloji 'psychology'	[pʰiscʰoloʒi, pʰisicʰoloʒi]
kral 'king'	[kʰiraɫ]

*gr*ev 'strike'   [gɪrev]

*pl*an 'plan'   [pʰilan]

Consonant clusters are frequently found in word-final position, as in *ilk* 'first', *alt* 'lower', *sark-* 'hang', *kork-* 'fear', *zamk* 'adhesive', *renk* 'colour', *kart* 'tough', *üst* 'top', *aşk* 'love', *baht* 'luck', *teyp* 'tape recorder', *genç* 'young', *felç* 'paralysis', *bronz* 'bronze', *şans* 'luck', *alarm* 'alarm'.

2
SOUND CHANGE PRODUCED IN THE STEM BY SUFFIXATION

There are a number of contexts where the addition of a suffix causes a change in the quality of the last consonant or vowel of a stem. Certain of these changes are confined to specific lexical items, whereas others occur as part of a general phonological process in the language. Those which occur only in certain words are:

> **(i)** A voiceless consonant alternating with its voiced counterpart, e.g. *kitap* 'book' but *kitabım* 'my book' (2.1)
> **(ii)** A single consonant alternating with its doubled counterpart, e.g. *sır* 'secret' but *sırrım* 'my secret' (2.2)
> **(iii)** A high vowel alternating with zero (i.e. absence of that vowel), e.g. *burun* 'nose' but *burnum* 'my nose' (2.3)
> **(iv)** A short vowel alternating with a long vowel, e.g. *zaman* 'time' but *zamanım* [zam**a:**nım] 'my time' (2.4)

The changes which are part of a general phonological process are:

> **(v)** Final 'k' alternating with 'ğ' in nominals, e.g. *çocuk* 'child' but *çocuğum* 'my child' (2.1)
> **(vi)** [æ] alternating with [e], e.g. *ben* [bæn] 'I' but *benim*[benim] 'mine' (2.5)
> **(vii)** Final 'a', 'e', 'u' and 'ü' alternating with 'ı' or 'i', e.g. *de-* 'say' but *diyecek* 's/he will say' (2.6)

2.1 ALTERNATIONS OF VOICELESS/VOICED CONSONANTS:
'p'/'b', 't'/'d', 'k'/'g', 'k'/'ğ', 'ç'/'c'

In some stems ending in one of the voiceless consonants 'p', 't', 'k' and 'ç', this final consonant changes to its voiced counterpart before a suffix beginning with a vowel.

'p'	is replaced by	'b'
't'	is replaced by	'd'
'(n)k'	is replaced by	'(n)g'
'ç'	is replaced by	'c'
'k'	is replaced by	'ğ'

Some of these alternations take place in words borrowed from Arabic or Persian, where the word originally ends in a voiced consonant ('b', 'd', 'g' or 'c', as in *kitab* 'book'). As

Turkish does not have any of these consonants in final position (1.1.1) the final segment is devoiced in the bare form (hence *kitap*) or in syllable-final position (i.e. when followed by a suffix beginning with a consonant, e.g. *kitaptan* 'from the book'). The original voiced consonant is retained when it is followed by a suffix beginning with a vowel (e.g. *kitabım* 'my book'). Alternations in voiceless/voiced consonants also occur in many words of Turkish origin. Note that only some of the words which in their bare form end in a voiceless consonant are subject to change.

    (i) final 'p'   →   'b'

      *dola**p*** 'cupboard'   *dola**b**a* 'to the cupboard'

      *ce**p*** 'pocket'   *ce**b**im* 'my pocket'

    (ii) final 't'   →   'd'

      *kili**t*** 'lock'   *kili**d**im* 'my lock'

      *kana**t*** 'wing'   *kana**d**ı* 'its wing'

There are relatively few nominal roots that undergo 't'/'d' alternation. The class of nouns ending in a non-changing 't' includes the large number of Arabic borrowings which end in the Arabic feminine suffix *-et/at,* such as *cumhuriyet* 'republic' → *cumhuriyetin* 'of the republic', and French loan words ending in 't', e.g. *bilet* 'ticket' → *biletim* 'my ticket', *ceket* 'jacket' → *ceketim* 'my jacket'.

    (iii) final 'n'+'k' → 'n'+'g'

      *ren**k*** 'colour'   *ren**g**e* 'to the colour'

      *den**k*** 'equal'   *den**g**i* 'his/her/its equal'

'k' alternates with 'g' only when it is preceded by 'n' (otherwise it alternates with 'ğ'; see (v) below). Nouns of this form which have been borrowed in recent times from European languages do not normally undergo 'k'/'g' alternation:

      *tan**k*** 'tank'   *tan**k**ı* 'his/her/its tank'

      *ban**k*** 'bench'   *ban**k**ı* 'his/her/its bench'

    (iv) final 'ç'   →   'c'

      *ağa**ç*** 'tree'   *ağa**c**ı* 'his/her/its tree'

      *gü**ç*** 'power'   *gü**c**ün* 'your power'

      *ta**ç*** 'crown'   *ta**c**a* 'to the crown'

    (v) While the scope of the aforementioned alternations is limited to particular words and is a lexical matter, the next alternation is a general rule which applies to nominals ending with 'k' when they are combined with a vowel-initial suffix. In such cases 'k' alternates with 'ğ'. Due to the pronunciation properties of 'ğ' (1.1.1.1) this process is also referred to as 'k'/Ø alternation.

final 'k'   →   'ğ'

yaprak 'leaf'	*yaprağı* 'its leaf'
gök 'sky'	*göğe* 'to the sky'
otomatik 'automatic'	*otomatiğe* '(in)to automatic'

Note that only a final 'k' which is preceded by a vowel undergoes 'k'/'ğ' alternation. Final 'k' alternates with 'g' when preceded by 'n' (see (iii) above), otherwise it remains as 'k' (eg. *zamk* 'adhesive' and *zamkı* 'the adhesive' (ACC)). 'k'/'ğ' alternation also affects suffixes ending in 'k', such as *-DIK* (8.5.1.1), *-(y)AcAK* (8.2.3.3, 8.5.1.1) and *-mAK* (8.5.1.2):

gelecek 's/he's going to come'	*geleceğim* 'I'm going to come'
aldık 'we bought'	*aldığımız* 'the one/that we bought'

In the case of *-mAK,* 'k' also alternates with 'y':

almak 'to buy'

almaya/almağa '(in order) to buy' (also pronounced [**aɫmıja**] or [**aɫma:**])

'k'/'ğ' alternation does not affect words with long vowels (2.4). For example, *tebrik* 'congratulation(s)', where 'i' is originally long, does not undergo 'k'/'ğ' alternation, hence, tebri**k**i [tʰebri:cʰI] 'his/her congratulation(s)'.

There are certain categories to which alternations of voiceless/voiced consonants do not generally apply:

(a) Most monovocalic nominal roots are not subject to these changes:

saç	'hair'	*saçım*	'my hair'
yük	'load'	*yüküm*	'my load'
top	'ball'	*topum*	'my ball'
at	'horse'	*atım*	'my horse'

(b) The vast majority of verbal roots are not subject to these changes. A verbal root such as *kap-* 'snatch' retains its final consonant in suffixation, hence *kapın* 'snatch!', although the identical-sounding nominal root *kap* 'container' reverts to its original voiced consonant when a suffix beginning with a vowel is added: *kabın* 'your container'. Similarly the verb *ak-*'flow' retains its final consonant under suffixation (e.g. *akan* 'flowing') but the adjective *ak* 'white' may not (cf. *ağar-* 'become white', but *akı* 'its white (part)'). There are only a few verbs that have a change in their final consonant when followed by a vowel-initial suffix:

et-	(auxiliary verb/'do')	*eder* 's/he does'
git-	'go'	*gidiyor* 's/he is going'
güt-	'cherish'	*güdecek* 's/he will cherish'
tat-	'taste'	*tadınca* 'upon tasting'

The only way to be sure whether a noun ending in 'p', 't', 'k', or 'ç' is subject to alternation with 'b', 'd', 'g'/'ğ' or 'c' is to look in a dictionary. Despite the fact that the nominals which do not undergo change outnumber those that do, the standard practice adopted in dictionaries is to take the pattern of change shown above as the norm, and to mark only those nouns which retain a final 'p', 't', 'k', or 'ç'. Thus *ağaç, çocuk, kitap* and *kağıt* (all of which undergo change) will be found without annotation, whereas *saç, top* and *millet* are presented in the form *saç (-çı), top (-pu), millet (-ti)*.

2.2 ALTERNATIONS OF SINGLE CONSONANTS WITH DOUBLE CONSONANTS

In a small number of nouns ending in 'b', 't', 'd', 'k', 'l', 's', 'z', 'm' and 'n' the final consonant is duplicated when a vowel is attached to it. These are words borrowed from Arabic, which, in their original roots, have geminates, i.e. doubled consonants. In Turkish such words appear with a single consonant in their bare form or when followed by a suffix beginning with a consonant.

*ha**k** 'right'*	*ha**k**lar 'rights'*	*ha**kk**ın 'your right'*
*hi**s** 'emotion'*	*hi**s**ten 'of the emotion'*	*hi**ss**i 'emotional'*
*sı**r** 'secret'*	*sı**r**lar 'secrets'*	*sı**rr**ımız 'our secret'*
*ha**t** 'line'*	*ha**t**lar 'lines'*	*demiryolu ha**tt**ı 'railway line'*
*zı**t** 'opposite'*	*zı**t**sa 'if [it's] the opposite'*	*zı**dd**ı 'the opposite of it'*

Some of these words keep their original double consonants when they combine with the auxiliaries *et-* 'do' and *ol-* 'be' (13.3.2): *ha**ll**et-* 'solve', *ha**ll**ol-* 'be solved', *hi**ss**et-* 'feel'. Others appear in nominal-verb compounds with a single consonant: *hak et-* 'deserve'.

It should be noted that since bare stems do not give any indication that they end in geminates, such words have to be learned individually. Nouns belonging to this class are indicated in dictionary entries in the form *sır (-rrı), hat (-ttı), zıt (-ddı)*. The form of any nominal-verb compounds derived from these words also has to be checked in a dictionary.

2.3 VOWEL/Ø ALTERNATION

There are a number of nouns in which the high vowel ('ı', 'i', 'u' or 'ü') of the final syllable in the bare form does not appear when a suffix beginning with a vowel is attached to the root (e.g. *isim* 'name' but *ismi* 'his/her name'). Many of these are words of Arabic origin which do not have a vowel in this position. For example, the Arabic word *ism* 'name' does not contain a vowel between 's' and 'm'. In Turkish when such a word appears in its bare form an **epenthetic vowel** is inserted, hence the second 'i' in *isim*.

It is important to remember that this is not a general phonological process. It occurs in some words of Arabic origin and in a very few roots of Turkish origin. When such roots

combine with a stressable suffix (4.3.1) containing a high vowel, such as the accusative case marker -*(y)I,* there is invariably no epenthetic vowel in the inflected form. However, there may be variation among speakers regarding the inclusion of epenthetic vowels in words with a suffix containing a non-high vowel (such as the dative case marker -*(y)A).*

Root	*Root+I* (e.g. -*(y)I* (ACC))	*Root+A* (e.g. -*(y)A* (DAT))
karın 'belly'	*karnı*	*karna* or *karına*
şehir 'town'	*şehri*	*şehre* or *şehire*
izin 'permission'	*izni*	*izne* or *izine*

It is not possible to know without looking in a dictionary whether the final high vowel in the bare form of a root is epenthetic or not. Stems which look identical may differ in this respect:

koyun 'bosom'	→	*koynu* 'his/her bosom'
koyun 'sheep'	→	*koyunu* 'his/her sheep'
nehir 'river'	→	*nehri* 'the river' (ACC)
Nehir 'Nehir' (a name)	→	*Nehir'i* 'Nehir' (ACC)

If a root containing an epenthetic vowel is followed by an auxiliary verb beginning with a vowel (*et-* 'do' or *ol-* 'be' (13.3.2)), the epenthetic vowel does not appear, and the noun and verb coalesce into a single word:

> *sabır* 'patience'   *sabrı* 'his/her patience'   *sabret-* 'be patient'
>
> *kahır* 'distress'   *kahrı* 'his/her distress'   *kahrol-* 'bed damned'

In the rare cases where a root with an epenthetic vowel is followed by an unstressable suffix (4.3.2) beginning with a vowel, e.g. the group 2 person marker -*(y)Im* (8.4), the epenthetic vowel is retained for purposes of stress; thus *nehrím* 'my river' but *nehírim* 'I am a river' (poetic).

2.4 SHORT/LONG VOWEL ALTERNATIONS

In a number of stems which have 'a', 'u' or 'i' in the final syllable, these vowels are replaced with their long counterparts /a:/, /u:/ and /i:/ when a suffix beginning with a vowel is attached:

> *meram* 'plight'   *mera:mını* 'your/his/her plight'(ACC)
>
> *hukuk* 'law'   *huku:ken* 'legally'
>
> *zaman* 'time'   *zama:nım* 'my time'
>
> *zemin* 'ground'   *zemi:ni* 'the ground' (ACC)

As in gemination (2.2) and in most cases of epenthesis (2.3), the alternation of short vowels with their long counterparts occurs in words of Arabic origin, in this case those which originally contain a long vowel. These words have to be learned individually, as there is no indication in the roots that they contain a long vowel. This process can also take place across word boundaries when such words are followed by an auxiliary verb beginning with a vowel (*et-* 'do' or *ol-* 'be' (13.3.2)):

> *mer**a**k* 'curiosity'   *mer**a:**k et-* 'be curious'
>
> *em**in*** 'sure'   *em**i:**n ol-* 'be sure'

Short/long vowel alternation does not affect proper nouns that are derived from common nouns with long vowels:

murat 'wish' → *mura:dı* 'his/her wish'

Murat 'Murat' (a name) → *Murat'ı* ([murat^hI] or [muradI]) 'Murat' (ACC)

2.5 æ/e ALTERNATION

[æ], which is a lowered allophone of /e/, does not occur in environments where it is followed by a consonant+vowel sequence (1.1.2.1). In cases where a stem or suffix has [æ] but is followed by a consonant+vowel sequence as a result of (further) suffixation, this [æ] is replaced by [e]:

> *gel-* 'come' [ɟæl]   [ɟældim] 'I came'   [ɟeliɕ] 's/he
> comes'
>
> *evler* 'houses' [evlæɾ]   [evlɛrdɛ] 'in (the) houses'   [evlerim] 'my houses'
>
> *sen* 'you' [sæn]   [sændɛ] 'on you'   [senin] 'your'

2.6 ALTERNATION OF 'a', 'e', 'u' AND 'ü' WITH 'ı' AND 'i'

In the spoken language, some suffixes which conjoin to a stem by means of the consonant 'y' (6.1.3) may affect the pronunciation of a preceding 'a', 'e', 'u' or 'ü'. The presence of 'y' often causes these vowels to be pronounced as 'i'. Alternatively, 'a' and 'u' can be pronounced as 'ı'. The suffixes that most commonly cause such a change are the suffix -*(y)AcAK* (8.2.3.3, 8.5.1.1), the participle suffix -*(y)An* (8.5.2.1), the adverbial suffix -*(y)IncA* (8.5.2.2) and the combination of the optative suffix with the 1st person optative marker: -*(y)AyIm* (8.2.3.1, 8.4). In the case of the verb roots *de-* 'say' and *ye-* 'eat', the change is reflected in the orthography:

> *de-* 'say'   *d**i**-yen* (say-PART) '(the one) who says'
>
> *ye-* 'eat'   *y**i**-yecek* (eat-FUT) 's/he will eat'

In most cases, however, only the pronunciation is affected:

atla- 'jump'
　atlayan (jump-PART) '(the one) who jumps', pronounced [**atɫayan**], [athɯjan] or [atlijan]

özle- 'miss'
　özleyince (miss-CV) 'upon missing', pronounced [**özɫejindʒɛ**] or [**özɫiːndʒɛ**]

oku- 'read'
　okuyacak 's/he is going to read', pronounced [**okʰ ujdʒakʰ**] or [**okʰ ijdʒakʰ**]

üşü- 'be
cold'
　üşüyeyim 'let me be cold', pronounced [üʃiːm] [üʃijejim]

Note that the effect of 'y' on a previous vowel can result in the violation of vowel harmony (e.g. [atliyan] above).

　Inflectional suffixes which end in 'a' or 'e' also tend to be affected by a following 'y'. For example, the vowel of the negative suffix *-mA* is usually replaced (in pronunciation) with a high vowel when followed by a suffix beginning with 'y':

atlama- 'not   *atlamayabiliyorum* (jump-NEG-PSB-IMPF-1SG) 'I [may or] may not jump',
jump'   pronounced [atɫama**a**jabilijorum]/[atɫam**ɯ**jabilijorum]/ [atɫam**i**jabilijorum]

The imperfective suffix *-(I)yor* has a similar effect on the final 'a' or 'e' of the stem it attaches to; see 8.2.3.3.

3
VOWEL HARMONY

Vowel harmony is a phonological process which determines what vowel will appear in all but the first syllable of a word. In roots with more than one syllable, the second vowel harmonizes with the first one:

> *kabak* 'marrow'   *etek* 'skirt'
>
> *uzak* 'far'   *ipek* 'silk'

Similarly, when a suffix is attached to a stem, it harmonizes with the properties of the vowel in the preceding syllable, irrespective of whether the stem is of native or foreign origin:

> *kuş-lar* 'birds'   ***ev-ler*** 'houses'
>
> *puma-lar* 'pumas'   *otobüs-ler* 'buses'

After describing the types of vowel harmony in 3.1, we discuss how vowel harmony operates in suffixes (3.2) and in roots (3.3). In 3.4 exceptions to vowel harmony are given.

3.1 TYPES OF VOWEL HARMONY

As a result of vowel harmony, only the following sequences are permissible in native Turkish words:

	'a'	can only be followed by	'a'or 'ı'
Back vowels	'ı'	can only be followed by	'a' or 'ı'
	'o'	can only be followed by	'a' or 'u'
	'u'	can only be followed by	'a' or 'u'
	'e'	can only be followed by	'e' or 'i'
Front vowels	'i'	can only be followed by	'e' or 'i'
	'ö'	can only be followed by	'e' or 'ü'
	'ü'	can only be followed by	'e' or 'ü'

Vowel harmony in Turkish is a combination of two kinds of harmonization process. One of these is **fronting harmony,** which is the assimilation of a vowel with the vowel in the preceding syllable in terms of frontness. A front vowel can only be followed by a front

vowel and a back vowel can only be followed by a back vowel, as in *aç-ıl-dı* '[it] was opened', *güç-tü* '[it] was difficult, *böl-üm* 'part', *düş-en* 'falling'.

The other type of harmony process is **rounding harmony,** which is the assimilation of a vowel with the vowel in the preceding syllable in terms of roundedness. Unless it is in the first syllable of a word, a rounded vowel occurs only when it is preceded by another rounded vowel. (For exceptions see 3.3.) Roundedness is thus a property which is copied from the rounded vowel of the previous syllable. This process only affects suffixes and clitics with high vowels. Some examples are *üz-ül-dü-nüz* 'you became sad', *sor-ul-ur* 'it is asked', *öv-ün-dük* 'we boasted'.

The vowels 'o' and 'ö' only occur in the initial syllable of a word, except in loan words such as *lodos* 'south-westerly gale', *otobüs* 'bus' *and protokol* 'protocol'.

3.2 VOWEL HARMONY IN SUFFIXES AND CLITICS

A handful of exceptions aside (see 3.4), vowel harmony operates in all suffixes and clitics, irrespective of whether these are attached to words of native or foreign origin. In terms of vowel harmony, there are two types of suffix in Turkish, I-type and A-type. In this chapter, we use the term 'suffix' as a cover term for suffixes proper and clitics (Chapter 11).

3.2.1 VOWEL HARMONY IN I-TYPE SUFFIXES

The vowels of I-type suffixes are high, but they get their other features (i.e. frontness and roundedness) from the preceding vowel. Fronting and rounding harmonies determine whether the vowel in this type of suffix will be 'i', 'ı', 'ü', or 'u' when affixed to a particular word. For example, a stem with a front unrounded vowel combines with the form which contains the front unrounded vowel 'i', and a stem with a back rounded vowel combines with the form with the back rounded vowel 'u'. When an I-type suffix is attached to a root or stem:

'ı' is selected if the preceding vowel is 'ı' or 'a'	**'i'** is selected if the preceding vowel is 'i' or 'e'
kız-ın 'your daughter' *baş-ın* 'your head'	*diz-in* 'your knee' *el-in* 'your hand'
'u' is selected if the preceding vowel is 'u' or 'o'	**'ü'** is selected if the preceding vowel is 'ü' or 'ö'
burn-un 'your nose' *kol-un* 'your arm'	*yüz-ün* 'your face' *göz-ün* 'your eye'

Examples of I-type suffixes are the genitive suffix *-(n)ın, -(n)in, -(n)un, -(n)ün,* the accusative suffix *-(y)ı, -(y)i, -(y)u, -y(ü)* and the evidential/ perfective suffix *-mış, -miş, -muş, -müş*. The consonants and vowels in brackets are deletable (6.1.3). Capital letters indicate alternating sounds (6.1.2).

Stem	*I-type suffix*	*Forms*	*Stem+I-type suffix*
çay 'tea'	*-(I)m* (1SG.POSS)	*-m, -ım, -im, -um, -üm*	*çay-ım* 'my tea'

su 'water'	*-lI* (ADJ)	*-lı, -li, -lu, -lü*	*su-lu* 'watery'
güzel 'nice'	*mI* (INT)	*-mı, -mi, -mu, -mü*	*güzel mi* 'is it nice'
sor- 'ask'	*-DI* (PF)	*-dı, -di, -du, -dü -tı, -ti, -tu, -tü*	*sor-du* 's/he asked'

3.2.2 VOWEL HARMONY IN A-TYPE SUFFIXES

The vowels of A-type suffixes are unrounded and non-high, but are variable in terms of whether they are back or front. The choice of the appropriate vowel in an A-type suffix depends on whether the vowel in the syllable preceding it is front or back. A stem with a front vowel combines with the 'e' form of the suffix; a stem with a back vowel combines with the 'a' form. A-type suffixes are only affected by fronting harmony. The roundedness or unroundedness of the preceding vowel does not affect them. When an A-type suffix attaches to a root or stem:

'a' is selected if the preceding vowel is 'a', 'ı',   'e' is selected if the preceding vowel is 'e', 'i',
'o' or 'u'   'ö' or 'ü'

hava-dan 'from the air'	*ev-den* 'from the house'
kız-dan 'from the girl'	*biz-den* 'from us'
yol-dan 'by the road'	*göl-den* 'from the lake'
şun-dan 'of this'	*tür-den* 'of the type'

Examples of A-type suffixes are the plural suffix *-lar, -ler,* the dative suffix *-(y)a, -(y)e,* the conditional suffix *-sa, -se* and the future marker *-(y)acak, -(y)ecek.*

Stem	A-type suffix	Forms	Stem+A-type suffix
tür 'type'	*-lAr* (PL)	*-lar, -ler*	*tür-ler* 'types'
yık- 'destroy'	*-mA* (NEG)	*-ma, -me*	*yık-ma* 'don't destroy'
gelenek 'tradition'	*-sAl* (ADJ)	*-sal, -sel*	*gelenek-sel* 'traditional'

3.3 VOWEL HARMONY IN ROOTS

Vowel harmony operates in native roots, e.g. *kabak* 'marrow', *oda* 'room', *uzak* 'far', *erik* 'plum' and *inek* 'cow'. With only a few exceptions (3.4 (i)), fronting harmony occurs in all native roots.

As for rounding harmony, again the majority of native words display this, but there are a few cases where the vowel in the second syllable is rounded despite the fact that the preceding vowel is not. This is usually the result of an intervening labial consonant ('p', 'b', 'f', 'v' or 'm'): *savun-*'defend', *tavuk* 'chicken', *kabuk* 'shell', 'skin'.

3.4 EXCEPTIONS TO VOWEL HARMONY

(i) A few native roots, such as *anne* 'mother' and *elma* 'apple', and stems which contain invariable suffixes, such as *kardeş* 'sibling' are non-harmonic.

   (ii) Compounds (some of which are written as a single word, see Chapter 10) are non-harmonic: *bugün* 'today', *keçiboynuzu* 'carob', *Karagöz* (a shadow theatre character).

   (iii) Loan words often violate the rules of vowel harmony, e.g. *kitap* 'book', *kalem* 'pencil', *lale* 'tulip', *penaltı* 'penalty', *fasulye* 'bean(s)', *marul* 'lettuce', *masum* 'innocent', *jaluzi* 'Venetian blind' and *lobi* 'lobby'.

   (iv) The vowel of a suffix may get harmonized as a front vowel even where a loan word does not have a front vowel in the last syllable:

*hakikat-**siz***	(truth-ADJ)	'disloyal'
*bahs-**i***	(topic-ACC)	'the topic (ACC)'
*harb-**in***	(war-GEN)	'of the war'
*kalp-l**er***	(heart-PL)	'hearts'

This happens regularly in loan words that end in a palatal 'l':

*gol-**ü***	(goal-3SG.POSS)	'his/her goal'
*etol-d**en***	(scarf-ABL)	'from the scarf'
*hal-**im***	(condition-1SG.POSS)	'my condition'

Loan words that behave in this way appear in the dictionary as *hakikat(-ti), gol(-lü),* etc.

   (v) Suffixes and prefixes of foreign origin are invariable:

*-izm: Şaman**izm*** 'Shamanism'
  *-en: tamam**en*** 'completely'
  *anti-: **anti**demokratik* 'antidemocratic'
  *bi-: **bi**haber* 'unaware', 'ignorant'

(vi) A few native suffixes, or parts of suffixes, are invariable:

   (a) The second vowel in the bound auxiliaries *-(y)Ab**il**, -(y)Iv**er**,* ▽*-(y)Ag**el**,* ▽*-(y)Ad**ur**,* ▽*-(y)Ak**al**,* and ▽*-(y)Ay**az*** (8.2.3.2): *kalkab**i**ldi* 's/he managed to stand up'; the non-deletable vowel of the imperfective suffix *-(I)y**or*** (8.2.3.3): *görüy**or**um* 'I see'; the converbial marker *-(y)k**en*** (8.5.2.2): *bakmışk**en*** 'having looked'

   (b) The vowels in the following derivational suffixes (7.2.2.2):

*-gen: altıg**en*** 'hexagon'
  *-gil: halamg**il*** 'my aunt and her family'
  *-(I)mtrak: pembemtr**ak*** 'pinkish'
  *-leyin: sabahl**eyin*** 'in the morning'

(c) The suffix *-ki* (8.1.4) optionally undergoes vowel harmony after *gün* 'day' and *dün* 'yesterday': *dünki/dünkü* 'yesterday's'.

(vii) The following clitics are invariable (11.1): *bile, ki, ya, ile* and *ise: baktım ki* 'upon seeing', *söyledim ya* 'but I have said [it]', *Korhan ile* 'Korhan and…', *bunlar ise* 'as for these'.

See also 2.6.

4
WORD STRESS

The term **stress** refers to the high pitch and loudness with which a syllable is pronounced relative to others in the same word or sequence of words. This chapter discusses the position of stress in isolated words. The syllable which is stressed in an isolated word is the same one which is stressed when that particular word is the most prominent one within a sequence of words (see Chapters 5 and 23). In this chapter an acute accent will be used to indicate a stressed syllable. The conditions determining **sentence stress,** i.e. which particular word within a sentence is to be stressed, are discussed in Chapter 23.

4.1 STRESS IN ROOTS

4.1.1 REGULAR ROOTS

Most roots in Turkish (including all polysyllabic verbal roots and some loan words) are stressable on the final syllable:

kadín	'woman'
kalabalík	'crowd'
cumhuriyét	'republic'
hastá	'ill'
kutú	'box'
beklé	'wait'
öğrén	'learn'

Where a particular root is stressable on a syllable other than the last, this is indicated in dictionary entries.

In vocative forms, i.e. forms of address, stress is placed on the penultimate syllable:

Kádın!	'Hey woman!'
Çocúklar!	'Hey kids!'
Hüséyin!	'Hüseyin!'

If a diminutive suffix (*-CIK*, 7.2.2.2, or its inflected form *-CIğIm*) is added to a form of address, the stress remains in its original position:

      Semrá'cığım   'Semra darling!'

4.1.2 IRREGULAR ROOTS AND STEMS

The following groups of words have irregular root stress:

(i) Adverbs are mostly stressable on the first syllable:

şímdi	'now'
bélki	'perhaps'
yárın	'tomorrow'
áncak	'only', 'only just'

Note that this rule does not apply to words which function primarily as adjectives (16.1.2), but to those that are adverbs in their primary function (16.1.1). Thus in *Bunu koláy yaptım* 'I did this easily', the adjectival *koláy* 'easy' retains its regular stress position even though it functions as an adverb in this sentence.

(ii) Many nouns of foreign origin (in particular, those which are borrowed from a language other than Arabic or Persian) do not conform to the stress pattern of native words, and are stressed on a syllable other than the final one:

lokánta (Italian)	'restaurant'
bánka (Italian)	'bank'
iskémle (French)	'chair'
táksi (French)	'taxi'
lóbi (English)	'lobby'
fútbol (English)	'soccer'
péncere (Persian)	'window'
politíka (Greek)	'politics'
iskéle (Greek)	'quay'
satsúma (Japanese)	'satsuma'

(iii) Place names have a non-final stress position:

Tűrkiye, Ánkara, İstánbul, Táksim, Adána, İngiltére, Fránsa, Afríka

Exceptions are place names ending in the suffix *-istan,* which are stressed on the last syllable:

Hindistán	'India'
Gürcistán	'Georgia'

Some speakers place the stress in place names ending in *-istan* on the penultimate syllable (e.g. *Gürcístan*).

Note that the difference in stress is the only distinguishing factor between some place names and otherwise identical common nouns:

mısír 'maize'	*Mísır* 'Egypt'
ordú 'army'	*Órdu* (a city on the Black Sea coast of Turkey)
bebék 'baby'	*Bébek* (a district in Istanbul)

(iv) The following question words and those that contain the suffix *-rA* (see 4.3.2 (iii)) are stressed on the first syllable:

hángi	'which'
háni	'where' (informal)
násıl	'how'
níçin	'why'

(v) Stems which have reduplicative prefixes (Chapter 9) and most of the stems containing loan prefixes (7.4) are stressed on the prefix:

kápkara	'pitch black'
ásosyal	'antisocial'

(vi) Stems that contain unstressable suffixes, see 4.3.1.
   (vii) Stems which are compounds (4.2).

4.2 STRESS IN COMPOUNDS

Most noun compounds are stressed on (the stressable syllable of) the first element:

búgün (*bu* 'this'+*gün* 'day')		'today'
báşbakan (*baş* 'head'+*bakan* 'minister')	'prime minister'

This is also true of *-(s)I* compounds (10.2), irrespective of whether the two roots are written together or separately:

sokák lambası	'street light'
telefón rehberi	'telephone directory'
çáy bardağı	'tea glass'
dérs kitapları	'textbooks'
búzdolabı	'refrigerator' (lit. 'ice cupboard')
kasímpatı	'chrysanthemum' (lit. 'November aster')
deréotu	'dill' (lit. 'stream weed')

However, there are exceptions, and some compounds are stressed on the final syllable, like regular stems:

alışveríş (*alíş* 'taking'+*veríş* 'giving') 'shopping'
   bilgisayár (*bilgí* 'knowledge'+*sayár* '[something] that counts') 'computer'
   kabakulák (*kaba* 'coarse', 'puffy'+*kulak* 'ear') 'mumps'

In compounds consisting of two verbs (13.3.1.2) or a nominal and a verb (13.3.2), stress falls on (the stressable syllable of) the first word:

     anlamís ol-   'have understood'

     bitiríyor gözük-   'seem [to] be finishing'

     yardím et-   'help'

     hastá ol-   'become ill'

For stress in compound verb forms containing bound auxiliaries, see 4.3.1 (iii).

4.3 STRESS IN SUFFIXES

In terms of stress, the suffixes of Turkish are divided into two classes: stressable and unstressable.

4.3.1 STRESSABLE SUFFIXES

The great majority of Turkish suffixes belong to this class. The effect of stressable suffixes on the position of potential word stress is as follows:
   (i) When a stressable suffix is added to a root in which the final syllable (whether part of the root, or itself a suffix) is also stressable, the position of word stress moves to the new final syllable.

     kitáp   'book'

     kitap-lár   'books'

     kitaplar-ím   'my books'

     kitaplarım-dá   'in my books'

     kitaplarımda-kí 'the one in my books'

     kitaplarımdaki-lér 'the ones in my books'

     kitaplarımdakiler-é 'to the ones in my books'

     kír-   'break'

     kır-íl   'be broken'

     kırıl-acák   'it will be broken'

     krılacak-lár   'they will be broken'