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TURKISH PHONOLOGY AND MORPHOLOGY

(TÜRKÇE SES VE BİÇİM BİLGİSİ)

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Contents

Why Study Sounds?.....	2	UNIT 1
INTRODUCTION	3	
PHONETICS AND PHONOLOGY	3	
THE SPEECH CHAIN	6	
SOUND vs. LETTER	7	
Summary	9	
Self-test	10	
Turkish Alive	11	
References	12	
Key to “it is your turn”	13	
Turkish Consonants	14	UNIT 2
INTRODUCTION	15	
CONSONANT PRODUCTION	15	
The Vocal Tract	15	
CONSONANT DESCRIPTION	18	
Voicing	18	
Places of Articulation	19	
Manners of Articulation	20	
ALLOPHONES OF TURKISH CONSONANTS	24	
Summary	27	
Self-test	28	
Turkish Alive	29	
References	30	
Key to “it is your turn”	30	
Turkish Vowels	32	UNIT 3
INTRODUCTION	33	
VOWEL PRODUCTION	33	
VOWEL DESCRIPTION	34	
HEIGHT	35	
BACKNESS	36	
ROUNDING	36	
DIPHTHONGS.....	39	
ALLOPHONES OF TURKISH VOWELS	40	
Summary	42	
Self-test	43	
Turkish Alive	44	
References	44	
Key to “it is your turn”	45	
Phonological Processes in Turkish	46	UNIT 4
INTRODUCTION	47	
PHONOLOGY	47	
FINAL DEVOICING	48	
ASSIMILATION	51	
Place of Articulation Assimilation	51	
Voicing Assimilation	52	
VOWEL HARMONY	53	
Summary	55	
Self-test	56	

Turkish Alive	57
References	58
Key to “it is your turn”	58

UNIT 5

Morphology: The Wordland	60
INTRODUCTION	61
MORPHOLOGY	61
THE STRUCTURE OF WORDS	62
Syllable Structure vs Morpheme Structure	62
Free Morphemes vs Bound Morphemes	64
Derivational Morphemes vs Inflectional Morphemes	65
ORGANIZING PRINCIPLES OF TURKISH MORPHOLOGY	68
Morpheme Ordering	68
Allomorphy	70
The Morpheme Marking Reported Past/-mİş/	70
The Morpheme Marking Definite Past/-DI/	71
The Agentive Morpheme/-CI/	71
First Person Agreement Marker/-(y)Im/	71
Summary	72
Self-test	73
Turkish Alive	74
References & Bibliography	75
End Notes	75
Key to “it is your turn”	76

UNIT 6

Word-Formation Processes	78
INTRODUCTION	79
WORD-FORMATION PROCESSES	80
Derivation	80
Reduplication	82
Compounding	83
Nominal Compounds	84
Verbal Compounds	85
Adjectival Compounds	86
Onomatopoeia	86
Conversion	86
Borrowing	87
Coinage	87
Semantic Change	88
Metaphorical Extension	88
Clipping	88
Blending	89
Acronyms	89
Backformation	89
Multiple Processes	89
Summary	91
Self-test	92
Turkish Alive	93
References & Bibliography	94
End Note	94
Key to “it is your turn”	95

Grammatical Categories 96**UNIT 7**

INTRODUCTION	97
GRAMMATICAL CATEGORIES	97
Nominal Categories	98
Number.....	98
Gender.....	100
Case.....	100
Verbal and Nominal Categories	107
Agreement	107
Verbal Categories	109
Negation	109
Tense, Aspect, Mood (TAM)	109
Voice	121
Summary	127
Self-test	128
Turkish Alive	129
References & Bibliography	130
End Note	130
Key to “it is your turn”	130

Word Classes 134**UNIT 8**

INTRODUCTION	135
CLASSIFYING WORDS	136
CRITERIA FOR CLASSIFYING WORDS	137
Semantic Criteria	137
Grammatical Criteria	138
WORD CLASSES	138
Open Classes vs Closed Classes	139
OPEN CLASSES IN TURKISH	140
Nouns	140
Criteria for Nounhood	141
Verbs	142
Criteria for Verblood	144
Adjectives	145
Criteria for Adjectivehood	148
Adverbs	149
Criteria for Adverbhood	149
CLOSED CLASSES IN TURKISH	150
Postpositions	150
Pronouns	152
Types of Pronouns	153
Conjunctions	154
Interjections	156
Summary	157
Self-test	158
Turkish Alive	159
References & Bibliography	160
End Note	160
Key to “it is your turn”	160

Key to “self-test”..... 163**Glossary..... 165****Index 175**

Önsöz

Sevgili öğrenciler,

“Türkçe Ses ve Biçim Bilgisi” isimli bir ders programımızda neden bulunuyor diye kendi kendinize sormuş olabilirsiniz. Ne de olsa sizler İngilizce Öğretmenliği Programı öğrencilerisiniz ve ilk bakışta İngilizce ile ilgili pek çok konuyu irdelemenin daha doğru olduğunu düşünmekte de haklısınız. Oysa bir yabancı dil öğrenmenin, hele iyi bir yabancı dil öğrenmenin ve öğretmenin yolu çok iyi bir anadil bilgisi ve becerisinden geçer. Nasıl mı? Size şöyle açıklamaya çalışalım.

İnsanoğlu’nun sahip olduğu en önemli özelliği “dil” becerisidir. İnsan dil kullanarak doğadaki pek çok canlıya üstünlük kurabilmiştir. Dili iyi kullanmak onu daha etkin kılar. Dili iyi kullanmak ise dil konusunda iyi bilgi sahibi olmayı ve dil bilincini geliştirmeyi gerektirir. İnsanoğlu’nun dil bilincini geliştirebileceği ve canlandıracağı ilk alan ise kendi dilidir. Bir başka deyişle, anadili. Neredeyse doğduğumuz günden itibaren duyduğumuz, farkına bile varmadan edinin, kullandığımız anadilimizi konuşabilmek için, ne olduğunu, nasıl işlediğini bilmeye gerek bile duymayız. Bir şairin dediği gibi o bize “ana sütü gibi helal” verilmiş bir ödüldür. Ninnisiyle, masalı ve küfürü ile her an elimizin altındaki bu kıymetli ödülün, armağanın nedense hiç kıymetini de bilmeyiz. Kötü kullanmamızdan öte, bir de hiç merak etmeyiz. Nasıl bir dildir, ne özelliği vardır diye. Üstelik bir de “fakir dil”, “Türkçe’de her şey anlatılmaz” gibi bilir bilmez konuşuruz.

Yukarıda sözünü ettiğimiz türden yaklaşımlar ve önyargılar bizi yalnız kendi dilimiz konusunda değil genel anlamda “dil” olgusu konusunda da bilgisiz ve bilinçsiz kılıyor. Bu durumda da bir yabancı dil öğrenirken ikinci dilin yapısına, sözcük dağarcığına sanki hiç bir şey bilmezmiş gibi yaklaşıyoruz. Türkçe’de kurulmayacak cümleleri İngilizce’de kurmaya kalkıyoruz. Kendi dilimizi iyi geliştiremediğimiz için de ikinci dilde anlatma zorluğu çekiyoruz. Sözümüzün en başında dediğimiz gibi iyi bir ikinci dil kullanımının yolu iyi bir anadil bilgisi ve bilincinden geçer.

Bu dersimiz mucize yaratarak size tüm anadili bilincini verecek değil, ancak bir başlangıç. Türkçe’nin ses, biçim ve tümce yapısı hakkında bilgi sahibi olmanız umarız İngilizce’ye olan yaklaşımınızı daha sağlıklı hale getirir ve daha önemlisi Türkçe gibi zengin yapısı olan bir dili size tanıtır.

Kitabınızda iki ana bölüm bulunuyor. Bu bölümleri ses bilgisi ve biçim bilgisi olarak sıralayabiliriz. Her bölüm, kendi içerisinde dört üniteden oluşuyor ve ilgili bölümün alt başlıklarını içeriyor. Her üniteyi sizlerin kolayca anlayabileceği, sık sık kendinizi kontrol edebileceğiniz şekilde düzenledik. Yanıtları da kendinizi sıradıktan sonra kontrol edebilirsiniz.

Kitapla ilgili olarak eminim hepinizin aklına takılan bir sorunun açıklamasını da yapmamız gerekiyor. O da kitabın dilinin neden İngilizce olduğu. Bu kitabı hazırlarken dilbilim alanının gerektirdiği bilimsel ölçütleri ve açıklama yöntemlerini kullandık. Bu nedenle de dilbilim alanına özgü terimlerin sıklıkla açıklamalarda veya tanımlarda karşınıza çıkması çok doğal olacaktı. Geçtiğimiz yıl 3. sınıf öğrencileri olarak “Dilbilim” dersini işlemiş bulunuyorsunuz ve bu bilim dalının terimlerini ve tanımlarını o dersin çerçevesinde öğrendiniz. Bu iki olguya, yani sizin dilbilim terimlerini bilmenizi ve bizim açıklamalarımızda o terimleri kullanacak olmamızı bir araya getirince kitap dili için İngilizce mantıklı bir seçim oldu. Aksi taktirde sizleri hem Türkçe dilbilim terimleri öğrenmeye hem de Türkçe bilgilerini öğrenmeye aynı anda zorlamış olurduk. Bu da sizler için daha yorucu ve karmaşık olabilirdi.

Sizleri bu kitabı hazırlarken, yazdıklarımızın anlaşılabilirliği ve içiçeğin geçerliliğini sınamak için öğrencilerimizden yardım istedik. Onlar özellikle Morphology ve Syntax bölümlerini dikkatle okuyarak bize yol gösterdiler. Ayşenur Dizkara, Ebru Eylem Geçgil ve Yusuf Yılmaz’a sizler adına da burada teşekkür ediyoruz.

Umarız bu dersin sonunda kendi dilimizle ilgili biraz daha bilgi ve bilinç sahibi olur, dil bilincinizi geliştirir, her iki dil için de geçerli dil kullanma becerilerinizi arttırsınız.

Hepinize başarılar diliyorum.

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TURKISH PHONOLOGY AND MORPHOLOGY (TÜRKÇE SES VE BİÇİM BİLGİSİ)



Aims

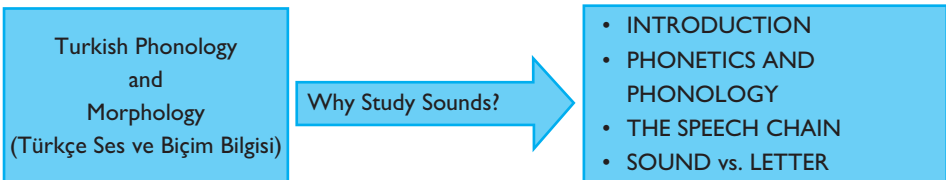
In this unit we will try to seek answers to the following questions:

- What is sound?
- Why is the study of sounds important?
- What is phonetics?
- What is phonology?
- What is underlying representation and why is it necessary?
- What is surface realization and how is it different from underlying representation?
- What is a phoneme?
- What is an allophone?

Key Words

- sound
- phonetics
- phonology
- sound vs. letter
- underlying representation
- surface realization
- phoneme
- allophone

Contents



Why Study Sounds?

INTRODUCTION

Language is used in everyday life for communication. Language is the knowledge of a creative communication system and that language is in the mind. Language, the knowledge of a creative communication system, surfaces as speech. Speech thus can be described as the conversion of language into meaningful combination of sounds. How sounds are combined to form a meaningful utterance is the concern of **phonology**. Thus, phonology is the study of how speech is organized, how sounds pattern together. **Phonetics**, on the other hand, is the study of sounds. Phonetics is concerned with how sounds are produced, the physical properties of sounds, and how they are perceived. In this unit, terminology used in the following 3 units is introduced, the reasons we study sounds are given, and the difference between phonetics and phonology are described.

PHONETICS AND PHONOLOGY

The domain of both phonetics and phonology is speech. Because of the shared domain, phonetics and phonology cannot be exclusive of each other although the focus of each field is different. **Phonology** deals with how speech is organized (Clark and Yallop, 1991). **Phonetics**, on the other hand, is concerned with the units of speech. More specifically, phonetics tries to arrive at a physical description of sounds. Thus, both phonetic and phonological components of the grammar has to be referred to when describing speech as there are two levels of representation in speech – phonological and phonetic representation. Grammar here refers to the rules of a language which enables one to produce and understand sentences.

In the phonological component of the grammar, the sounds are strung together where phonological rules apply. Therefore phonological representation is more abstract. The output of the phonological component is fed into the phonetic component. The output of the phonetic component, after the application of phonetic rules, is the realization of speech (i.e., the pronunciation of a sentence, utterance, etc.). There is evidence that the two levels of representation are different. For example, a suffix (more accurately a morpheme) may have more than one phonetic realization. Take the plural suffix in English as an example, which is represented as ‘-s’. In English, the plural suffix may be realized as ‘s’ (e.g., *cats*), as ‘z’ (e.g., *dogs*), or as ‘əz’ (e.g., *buses*). The plural suffix in English, then, has

three different pronunciations. The choice of which of the three alternatives occurs with which word is not arbitrary. Rather it is rule governed – which of the three pronunciations to occur is determined by the final sound of the word. Thus, the plural suffix is represented as /s/ in the phonological component but is realized as [s] or [z] or [əz] phonetically. Described as such, there is a mismatch between how we represent the plural suffix and how it is actually pronounced. If we say that there are three separate plural suffixes, ‘s’ (as in *cats*), ‘z’ (as in *dogs*), and ‘əz’ (as in *buses*), then that would suggest that each word and its plural form is memorized separately as unanalyzable wholes. There is evidence that that is not the case – when a native speaker is given the singular form of a word that s/he has never heard before, a nonsense word (a word that has no meaning) for example, and asked to produce the plural form, s/he would produce the correct pronunciation. This suggests that the **underlying representation** of the plural form is /s/ while its phonetic realization, or **surface realization**, may be [s] or [z] or [əz]. Thus the underlying representation and the surface realization may be different.

Let us consider an example from Turkish and take the plural suffix. The Turkish plural suffix has two different surface realization, *-ler* (as in *ev-ler*) and *-lar* (as in *dolap-lar*). You would all agree that *ev* and *evler* or *dolap* and *dolaplar* are not memorized separately. Otherwise, the following four forms in (I) and (II) would necessarily be memorized as separate words as well.

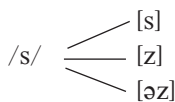
(1)

- | | | | |
|-----|-------------------|------|------------------|
| (I) | a. süt | (II) | a. av |
| | b. süt-çü | | b. av-cı |
| | c. süt-çü-ler | | c. av-cı-lar |
| | d. süt-çü-ler-den | | d. av-cı-lar-dan |

If that were the case, the shared meanings by the four words would not have been obvious. However, as native speakers, we know that the meanings of the four forms are related as they share the same root, we know the relation between the root and the suffixes, and the rules of using the correct form with a given word. That is why we know that the suffix *-çü* in (I) and *-cı* in (II) are the same suffix although these two forms are different phonetically (the same is true for the suffixes *-ler/-lar* and *-den/-dan*), and that these differences in the form are due to differences in the roots in terms of the sounds each root contains.

To show the relation between/among the different forms in the surface realization, an underlying representation for each root or suffix (more correctly affix) has to be posited. This underlying representation may or may not be identical to the surface realization. The underlying representation of the English plural suffix can be said to be ‘s’. As shown above, in certain cases ‘s’ will remain as ‘s’, underlying representation and surface realization being the same, and in other cases rules will change ‘s’ either to ‘z’ or ‘əz’, surface realizations being different from the underlying representation.

In the phonological component, an underlying representation for each unit (i.e., words, affixes) is posited. The underlying representation is notated between slashes (/ /). Thus /s/ would indicate that that is the underlying representation of the English plural suffix. The surface realization, on the other hand, is notated between square brackets ([]). Thus, the three different surface realizations would be represented as [s], [z], and [əz], as schematized below.



The differences in the surface realization are **systematic regularities** in that they are predictable. They are predictable because they are rule governed. A native speaker of English knows that the plural suffix of *chair* would be realized as [z] because in English, the plural suffix is realized as [s] after root-final voiceless consonants, as [z] after root-final voiced consonants and vowels, and as [əz] after root-final s, z, ʃ, ʒ, tʃ, and dʒ. As the root-final sound of *chair* is a voiced consonant, the plural suffix is realized as [z]. Similarly, a native speaker of Turkish knows that the plural suffix of, say, *‘masa’* would be realized as *‘-lar’* as in *‘masalar’*, but the same suffix would be realized as *‘-ler’* in *‘sebzeler’*. The choice of the appropriate realization is determined by the last vowel in the root, therefore it is predictable. Some properties are **idiosyncratic** in that they are *not* predictable. The fact that the initial sound of *‘sap’*, for example, is an idiosyncratic property of that word as there is no way of predicting that particular word should have ‘s’ as the initial sound. The same word could have been ‘rap’, ‘tap’, ‘map’, etc. and a native speaker would have no way of knowing which sound would occur in the initial position for that particular word. Such sounds which cause a change in the meaning are called **phonemes**. If we take ‘sap’ as an example again, changing the initial sound to ‘k’ would result in a different word ‘kap’. ‘Kap’ and ‘sap’ are two separate words with different meanings. The difference between the two words is the difference in the initial sound. This difference is not predictable, therefore an idiosyncratic property of these words.

Pairs such as ‘kap’ and ‘sap’ are called **minimal pairs** because the difference is only in one sound. This difference in one sound can be in other positions to form a minimal pair. ‘Kel’ and ‘kal’ are minimal pairs showing that /e/ and /a/ are phonemes. ‘Sap’ and ‘sat’ are minimal pairs showing that /p/ and /t/ are minimal pairs. In each of these pairs, a change in one sound, the other sounds being the same, changes the meaning of the word. Thus those sounds are phonemes as they change the meaning. There are sound changes which do not change the meaning of words. Consider the following Turkish examples.

(2)

(I) kil	(II) kıl
kel	kal
köle	kol
kül	kul

Compare the production of the initial consonant /k/ in different words. Where in the mouth do you form the /k/? For the words in the first column, /k/ is produced towards the back of the mouth. /k/ in the second column is produced even further back in the mouth. The places of articulation (discussed in detail in Unit 2) of the /k/’s in the two columns are different resulting in different surface realizations of the /k/’s in the first column and the second column. /k/ in the first column is a palatal sound indicated as [c], and a velar sound in the second column indicated as [k]. Although the surface realization of these two /k/’s are different, using one for the other does not cause a change in the meaning in Turkish (but it may in other languages). Thus, if the /k/ in ‘kil’ is produced further back in the mouth as a velar

sound it may sound funny or not native-like, but it would still be *kil* with the meaning of *kil*. We could then say that /k/ in Turkish has two different surface realizations or two variations, [c] and [k]. Such variations which do not change the meaning are called **allophones**. **Allophone** is then a variation of a sound which does not cause a change in the meaning of a word. Allophones are generally predictable in that one allophone occurs in one environment while the other occurs in a different environment. In Turkish, the occurrence of [k] and [c] is determined by the vowel. The vowels in the first column are called ‘front vowels’ thus the formation of /k/ is affected and is fronted. The vowels in the second column are called ‘back vowels’ and with the effect of the vowels /k/ is formed further back.

As mentioned above, slashes (/ /) are used to represent phonemes while square brackets ([]) are used to represent allophones. The reason is that phonemes are the representations at the phonological level, i.e., underlying representations, while allophones are the actual surface realizations. There is, then, one representation in the phonological component which may be realized as such or differently. And the different realizations of a phoneme are in most cases predictable because they are rule governed.

It is your turn!

1



Learn what the following terms mean:

- | | |
|---------------------------|------------------------------|
| a) systematic regularity | f) underlying representation |
| b) idiosyncratic property | g) surface realization |
| c) phoneme | h) phonetics |
| d) allophone | i) phonology |
| e) minimal pairs | |

THE SPEECH CHAIN

The complex knowledge of language surfaces as speech. The speech process is comprised of a speaker and a listener between which an acoustic signal is transmitted.

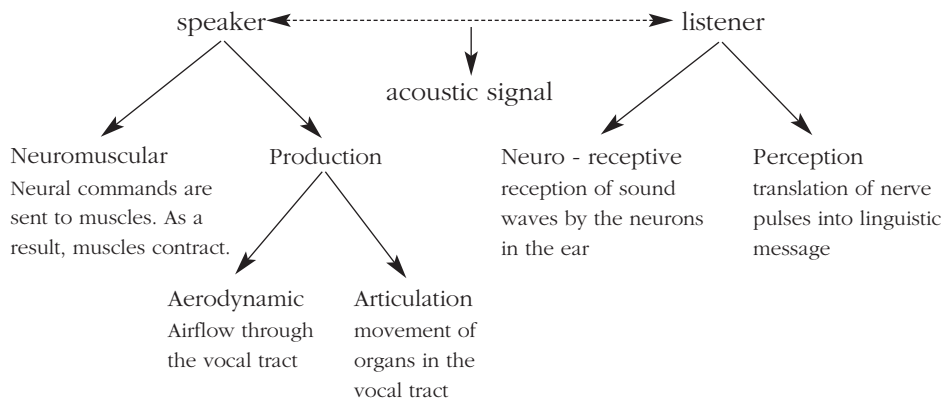


The speech process seems to be simple as every normal speaking and hearing person communicates mostly through speech. However, it is a very complex system. To illustrate the complexity of the speech process, let us describe briefly and simply what is involved in the production and the perception of speech. To produce speech sounds, neural commands are sent to muscles and as a result, muscles contract. In speech, precise and rapid coordination of more than eighty muscles are used (Laver, 1994:1). Air, the source of sound, is pushed out of the lungs with the contraction of muscles into the vocal apparatus. The air that passes through the vocal tract gains different qualities as a result of different shapes of the vocal tract. The sounds are transmitted through air which is an acoustic signal. That signal then reaches the listener's ear where the nerves in the ear are put into motion. Those nerve pulses are then translated into a linguistic message, which then ends up in the brain.

As there is a speaker and a listener and an acoustic signal produced by the speaker and received by the listener, sounds are described in three different ways. The three different descriptions of sounds are,

- Speaker-based description
- Acoustic description
- Listener-based description

Within each of the three types of description, there are a number of processes involved as shown below.



As seen above, speaker-based description of sounds describes sounds in terms of the speaker. This in itself can be described in terms of the muscles involved in speech production, the airflow through the vocal tract, and articulation (the movement of organs in the vocal tract).

Acoustic description is concerned with the sound waves that are transmitted in the air. Within acoustic description the acoustic properties of speech sounds such as the waveforms, duration, spectrographic representations of different sounds are described.

Listener-based description involves the reception of sound waves in the ear, the neurons responsible for receiving these waves, then translation of the nerve pulses into linguistic message.

The study of sounds is important because as mentioned above, sounds are the reflection of language which is the knowledge in the mind. Within the scope of phonetics, sounds that have meaning in speech are important. Sounds of laughter, pain, and excitement are not the focus of phonetics as the goal of phonetics is to arrive at a physical description of speech sounds that are linguistically relevant.

In this book, speaker-based description of speech sounds is given. In particular, sounds are described in terms of articulation – how speech sounds are produced. The details of articulatory description of consonants and vowels will be discussed in Unit 2.

Why do we study sounds?

SOUND vs. LETTER

In this book, as is the tradition within linguistics, when referring to sounds, **IPA** (International Phonetic Alphabet) is used. The reasons IPA, rather than letters, is used to represent sounds are two fold. One, letters are language specific. Each language may use different letters to represent the same sound. For example, the initial sounds of the Turkish word *şair* and the English word *sheep* are similar. But the two languages represent these similar sounds by using different symbols or



letters; *ş* in Turkish, *sh* in English. Turkish is considered an orthographic language, a language that is written the way it is pronounced, or pronounced the way it is written. In the Turkish writing system, the letter ‘*a*’ always represents the same sound. But not all languages are orthographic and English is one of those languages which is not. In English, the letter ‘*a*’ is used in the following words, *father*, *alive*, *all*, *fat*, *make*, but each of the ‘*a*’s represent a different sound; *ɑ*, *ə*, *ɔ*, *æ*, *e*, respectively.

Examples from only these two languages show that the sound a letter represents is not predictable across languages (e.g., Turkish and English) as well as within a language (e.g., English). Therefore a notational standard is needed whereby one symbol represents one sound not only within a language but also across languages. IPA provides such a standard.

The second reason why IPA is used to represent sounds is that we want to be able to represent all the sounds that occur in the languages of the world. As letters are language specific, letters of a specific language cannot represent sounds that do not occur in that language. For example, how can we represent the initial sound of *that* in the Turkish writing system? Since Turkish does not have the sound represented as ‘*th*’, Turkish orthography cannot reflect the sound.

Throughout this section, IPA is used when referring to both Turkish and English. Because spelling and pronunciation of a given word may be different, words are transcribed phonetically as we are concerned with how words are realized rather than how they are written.

It is your turn!



3

What is the difference between sounds and letters?

Summary

It is through the use of language that we can communicate with one another. And language surfaces mainly as speech in our daily lives. We use other forms of communication such as written language, but every normal hearing and speaking person uses speech to communicate with others. Speech is made up of sequences of sounds that are language specific. Thus, each language has a set of sounds that are meaningful in that language. A sound may be meaningful in one language but not in another. For example, some languages spoken in Africa employ speech sounds similar to the sound we make in Turkish when we want to say 'no', sometimes written as 'çık çık'. This sound is a meaningful speech sound in those languages, whereas in Turkish it is not a speech sound. Therefore, we have to study sounds within a specific language to determine which sounds are meaningful. Sounds that are meaningful and can change the meaning are called **phonemes**, variations of phonemes that do not change meaning are called **allophones**. To determine whether a sound is a phoneme we need to form **minimal pairs**. Sounds are organized in certain ways to form words. How sounds are organized, the sequencing of sounds, and permissible sounds in different environments are also language specific. Certain combinations of sounds may be acceptable in one language but not in the other. Thus, languages have their own sound rules. Phonetics and phonology are two sub-fields in linguistics which focus on speech sounds and sound rules that govern speech.

Self-test

1. Whether a sound is a phoneme is determined by
 - a. its idiosyncratic property
 - b. its underlying representation
 - c. its surface realization
 - d. forming a minimal pair
 - e. its systematic regularities
2. Which of the following is **not** a property of language?
 - a. It is a communication system
 - b. It is in the mind
 - c. It is the conversion of sounds
 - d. It surfaces as speech
 - e. It is used for communication
3. Which of the following is **not** a reason why IPA is used to represent sounds?
 - a. Letters are language specific.
 - b. The writing systems of languages are not sufficient.
 - c. A letter may represent different sounds in different languages.
 - d. IPA is used internationally.
 - e. It is a convention in linguistics.
4. Which of the following statements best completes the sentence below?

The underlying representation of a word...

 - a. may be different from its surface realization
 - b. is same as its surface realization
 - c. is not necessary
 - d. is reflected in the orthography
 - e. is a part of its meaning
5. Which of the following statements is **not** true?
 - a. Phonetics tries to describe sounds.
 - b. A speaker, a listener and an acoustic signal is involved in the speech chain.
 - c. Allophone is the surface realization of a phoneme.
 - d. The underlying representation is indicated by square brackets.
 - e. Systematic regularities in a language are predictable.

Turkish Alive

Examine the following poem and identify the different variations of the same roots and or suffixes.

“

BİR ÇOCUĞUN RÜYASI İÇİN ŞİİR

Bir çocuğun rüyasında her zaman
Kaybolmuş bir sevgili vardır
Onu eskiciler çalmıştır
Bir akşamüstü hiç umulmadan

Kırların serinliği gelir
Konar bir çocuğun alnına
Onun için uyurken alınları
Beyaz ve gergindir çocukların

Senin de çocukluğun akrabadır
Yaz bahçeleriyle, elmalarla
Tozlar kalkmıştır bir akşamüstü
Mezarlığın ordaki bayırdan

Kaybolmuş bir sevgi her zaman
Kaybolmuş bir bilyaya benzer
Anımsanır ısıltısı
Belli belirsiz gözyaşlarıyla

Bir çocuğun rüyasında bazen
Bulunur kaybolmuş bir bilya
Kiraz ağaçları sallanır
Güvercinler uçuşur havada


Ataol BEHRAMOĞLU


”


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Key to “It is your turn!”

 Check your answers with the definitions given in the glossary.

 We study sounds because in our daily lives, we use mainly speech to communicate with others. Speech is made up of sounds. Each language uses a set of sounds which may be different from that of other languages. Sounds are combined to form meaningful utterances. Each language has its own rules about how sounds are combined to form meaningful utterances.

 Sound is an acoustic signal we produce by manipulating the air coming out of our lungs. Letter, on the other hand, is an arbitrary symbol used to represent a sound.

2

Aims

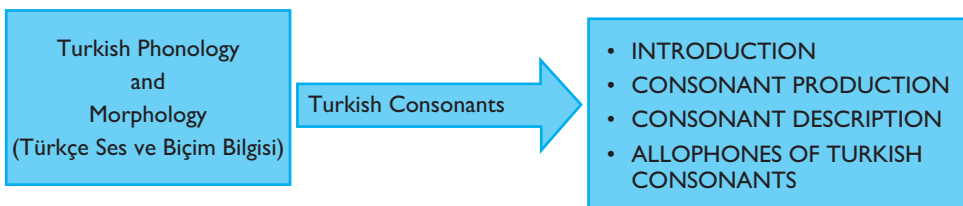
In this unit we will try to seek answers to the following questions:

- How are consonants produced?
- What are voiced and voiceless sounds?
- What are the different places of articulation?
- What are the different manners of articulation?
- How are consonants described?
- What are the allophonic variations of Turkish consonants?

Key Words

- consonants
- vocal tract
- oral tract
- nasal tract
- oral sounds
- nasal sounds
- voicing
- places of articulation
- manner of articulation
- allophones of Turkish consonants

Contents



Turkish Consonants

INTRODUCTION

Why is it that in a crossword puzzle, it is easier to guess the word when only the consonants of a word emerge rather than when only the vowels emerge? For example, can you guess what the following Turkish word are?

k - rt - nk - l -

1 - 1 - - -

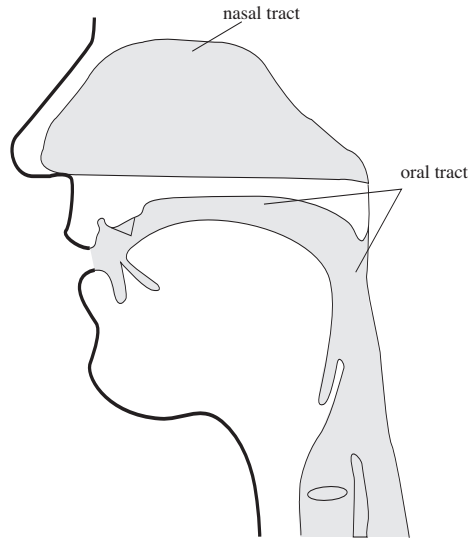
We use letters as a shorthand description of sounds. When we see the letter ‘m’ for example, we know to close our mouth by putting both lips together and letting the air out only from the nose. We know to fix our vocal cords in such a way so that there is vocal cord vibration. In other words, we know what the sound the letter ‘m’ represents. In this unit, we will learn to describe consonants that occur in Turkish.

CONSONANT PRODUCTION

Consonants are produced by blocking the air partially or completely in the vocal tract. Therefore, when consonants are described in terms of articulation, reference is made to where in the vocal tract these sounds are produced and which articulators are involved in producing these sounds. Before describing consonants then, let us describe the vocal tract and the articulators that are involved in the production of speech sounds.

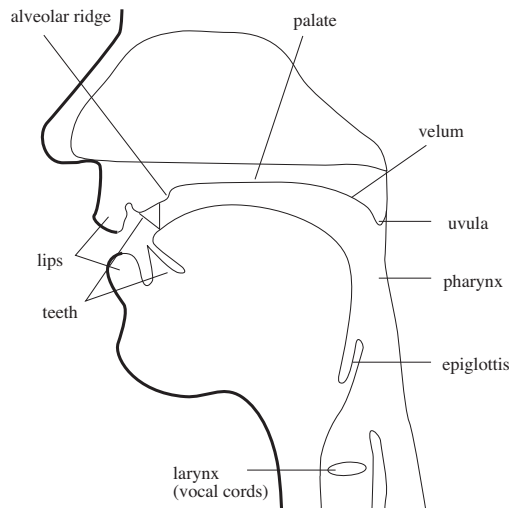
The Vocal Tract

The air passage above the larynx is known as the **vocal tract**. There are two cavities within the vocal tract: **Oral tract** and **nasal tract**. The two tracts, or cavities are illustrated in Figure 2.1. To produce some sounds, the air is let out of the oral tract or the mouth while for others, the air is let out of the nasal tract or the nose. If the air is let out of the mouth, then those sounds are called **oral sounds**. If the air is let out of the nose, then those sounds are called **nasal sounds**.

Figure 2.1*Oral and nasal tracts*

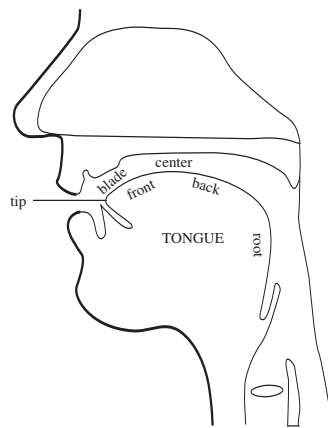
To illustrate the difference between oral and nasal sounds, first produce the sounds /l/, /s/, /f/. Where does the air come out? Now produce the sounds /m/ and /n/. Pay attention to where the air comes out. You have probably noticed that when producing the sounds /l/, /s/, and /f/, the air comes out of the mouth. You can test this by stopping your nose. Even when you stop your nose you can still produce these sounds. Because the air comes out of the mouth, such sounds are called **oral sounds**. When producing the sounds /m/ and /n/, the mouth is closed preventing the air coming out of the mouth. Instead the air comes out of the nose. Thus such sounds are called **nasal sounds**. Here the examples of oral and nasal sounds are given for consonants. In Turkish, oral-nasal distinction exists for consonants. But languages such as French make a distinction between oral and nasal vowels as well.

Now let us turn to the parts of the vocal tract. The parts of the vocal tract are illustrated in Figure 2.2.

Figure 2.2*Parts of the vocal tract*

The different parts of the vocal tract are called **articulators**. Articulators are the parts of the vocal tract that are used to produce sounds. Try to feel the different parts of the vocal tract. The lips and teeth are obvious. The upper surface of the mouth is called the roof of the mouth. Move the tip of your tongue along the roof of your mouth. You should feel different structures. Now start from the back of your teeth. You should feel a small protuberance behind your teeth. That is called the **alveolar ridge**. As you roll your tongue back a bit, but keeping to the front part of the roof of the mouth, you should feel a hard, bony structure. This is called the **hard palate**. If you curl your tongue further back, you should feel a softer structure called the **soft palate** or **the velum**. If your tongue does not curl back that far, you can feel your velum with your finger. The velum is a muscular flap which rises to shut off the nasal tract so that air exits through the mouth. When the velum is lowered, the air goes out the nose. At the end of the velum there is a small appendage hanging down. This appendage is called the **uvula**. The part between the uvula and the larynx is called the pharynx. In Turkish, neither uvula nor the pharynx is used to produce consonants. But these two articulators are used to produce consonants in other languages.

In the lower part of the mouth there is the tongue. In the production of consonants, different parts of the tongue are used depending on which part of the roof of the mouth is used. The parts of the tongue are illustrated in Figure 2.3.

Figure 2.3*Parts of the tongue*

Learn the names of the parts of the vocal tract. Write the names of the vocal organs in the figure below.

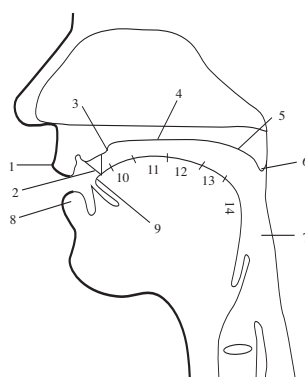


It is your turn!

1

Figure 2.4

- 1 _____
- 2 _____
- 3 _____
- 4 _____
- 5 _____
- 6 _____
- 7 _____
- 8 _____
- 9 _____
- 10 _____
- 11 _____
- 12 _____
- 13 _____
- 14 _____



Now that we know the different parts of the vocal tract, we can begin to describe consonants.

CONSONANT DESCRIPTION

Consonants are described in terms of

- voicing (presence or absence of vocal cord vibration)
- place of articulation (where in the vocal tract sounds are produced)
- manner of articulation (how sounds are produced in terms of airflow)

Voicing

Voicing is defined as the presence or absence of vocal cord vibration. **Vocal cords** are two muscular folds within the larynx behind the Adam's apple. You can manipulate your vocal cords by opening and closing them. The vocal cords are open when breathing. You can also close your vocal cords. Make the sound you would make when you are surprised: Two 'a's with a stop in between (may be written as 'a-a'). Stop after you make the first 'a'. Try breathing. You should not be able to because you have closed your vocal cords, not leaving a passage between them thus preventing the air from passing through.

The air that comes out of the lungs goes up through the trachea into the larynx and between the vocal cords. As the air passes between the vocal cords, vocal cords may be apart or close together. If the vocal cords are apart, the air passes through the vocal cords freely. If the vocal cords are close together, then there is a narrow passage between them which causes a build up of air pressure. This air pressure in turn causes vocal cords to vibrate. If the vocal cords vibrate in the production of sounds, then those sounds are **voiced**. If the vocal cords do not vibrate, then those sounds are **voiceless**.

To be able to distinguish voiced consonants from voiceless ones, produce the sound /ssssss/, then follow it with /zzzzzz/. Then, alternate between /s/ and /z/ producing /sssszzzzsssszzzz.../. You should notice that both of these sounds are formed in the same way and in the same place. The only difference between /s/ and /z/ is voicing where /s/ is voiceless as there is no vocal cord vibration, /z/ is voiced as there is vocal cord vibration. You can feel vocal cord vibration by placing your finger on the Adam's apple when you are producing /z/. You can also hear your vocal cords vibrate. Stop up your ears by putting your fingers on your ears. When you produce /z/ you should hear a buzzing sound which is vocal cord vibration. You can also try this with /f/ (voiceless) and /v/ (voiced).

Voicing is important in distinguishing sounds because there are pairs of sounds which are formed in the same way and in the same place and the only difference between such sounds is voicing; one sound being voiced and the other voiceless.

It is your turn!

2



Produce the following sounds. Decide whether they are voiced or voiceless.

Letter	Sound	voiced/voiceless
ş	ʃ	_____
l	l	_____
m	m	_____
ç	tʃ	_____
r	r	_____
c	dʒ	_____
j	ʒ	_____

Places of Articulation

Consonants are described in terms of where in the vocal tract they are produced. Here different places of articulation for Turkish consonants will be discussed.

Bilabial: two lips together

Say the words *bellek*, *pınar*, *masa*. Notice that the initial sounds of these words 'b', 'p', and 'm' are produced by putting two lips together. Hence these sounds are called bilabial sounds (*bi-* meaning 'two', *labial* meaning 'lip').

IPA symbols for these sounds are /b/, /p/, /m/, respectively.

Labiodental: lower lip and upper front teeth.

Say the words *fare* and *vali*. To produce 'f' and 'v', lower lip is raised to touch the upper teeth. These sounds are therefore called labiodental sounds (*labio* - meaning 'lip', *dental* referring to the 'teeth').

IPA symbols for these sounds are /f/, /v/, respectively.

Alveolar: tongue tip or blade and the alveolar ridge

In Turkish, the initial sounds of the words *dede*, *temel*, *sen*, *zümrüt*, *neden*, *limon*, *rahat* are alveolar consonants. To produce d, t, s, z, n, l, and r in the above words, the tip or the blade of the tongue is on the alveolar ridge.

IPA symbols for these sounds are /d/, /t/, /s/, /z/, /n/, /l/, /r/, respectively.

Palato-alveolar: tongue blade and back of the alveolar ridge.

The initial sounds in words such as *şeker*, *jip*, *çilek*, *can* are produced with the tongue blade in a space between the alveolar ridge and the palate.

IPA symbols for these sounds are /ʃ/, /ʒ/, /tʃ/, /dʒ/, respectively.

Palatal: front of the tongue and the hard palate

Say the words *yıl* and *yöre*. In producing the initial sound of these words, notice that the front of your tongue is raised towards the hard palate. Hence this sound is called palatal.

IPA symbol for this sound is /j/.

Velar: back of the tongue and the velum (or the soft palate)

Notice that when you say the words *kapı* and *garson*, the back of your tongue raises towards the soft palate forming the sounds k and g. Because they are formed at the velum, these sounds are called velar.

IPA symbols for these sounds are /k/ and /g/, respectively.

Glottal: articulation involving the glottis

The space between the vocal cords is called the **glottis**. The initial sound of *han* is a glottal sound as the air coming out of the lungs passes through the vocal cords and goes out of the mouth without any obstruction in the vocal tract.

IPA symbol for this sound is /h/.

These are the places of articulation used for Turkish consonants. There are other places of articulation used in other languages but not in Turkish. For example, English has **interdental consonants** formed by placing the tip of the tongue between the teeth. In words such as *thank* and *those*, contrasted with *tank* and *doze*, the initial sounds are formed in such a way. The IPA symbols for these

sounds are [θ] and [ð]. [θ] in *thank* is voiceless whereas [ð] in *those* is voiced. The number of places of articulation is of course finite but there are other places that languages of the world use.

It is your turn!

3



Form the following consonants. Decide the place of articulation for each consonant.

Consonant	place of articulation
j	_____
n	_____
t	_____
v	_____
ʃ	_____
dʒ	_____
g	_____

Manners of Articulation

In the production of consonants, the airstream out of the lungs is manipulated in different ways in the vocal tract to form different sounds. How this airstream is manipulated or how sounds are produced is referred to as **manner of articulation**. Below different manners of articulation for Turkish is discussed. Of course, the manners of articulation are not limited to those discussed here. There are numerous other ways of producing sounds employed by the languages of the world.

Stop: Complete obstruction in the oral tract with a raised velum

To form a stop, the air is stopped somewhere in the oral tract so that the airstream cannot escape from the mouth. The velum is raised so that air cannot escape from the nose either. For example, to produce [p] the two lips are pressed together so that the airstream is stopped completely from going out the mouth. Notice that you need to do the same thing for /b/. For /t/ and /d/, the tip/blade of the tongue is against the alveolar ridge to stop the airstream in the oral tract. For /k/ and /g/, the back of the tongue is raised to the velum so that the airstream is obstructed at the velum.

Stop sounds of Turkish are /p/, /b/, /t/, /d/, /k/, /g/.

Nasal: Complete obstruction in the oral tract with a lowered velum

Nasals are also stops as the airstream is obstructed completely in the oral tract. In the case of the nasals, in contrast to oral stops, the velum is lowered so that the air escapes through the nose. To contrast oral stops from nasal stops (or called nasals shortly) say the sounds /b/ and /m/. Both /b/ and /m/ are bilabial sounds formed at the lips. Notice that when you produce /b/ you cannot hear a sound until you open your lips. That is because you stop the airstream by closing your lips so that air cannot escape from your mouth. When you produce [m], on the other hand, although your lips are together not letting air go out your mouth, you can hear the sound [m]. The reason is that the velum is lowered so that the airstream can escape through the nose.

Nasal sounds of Turkish are /m/ and /n/.

Fricative: Partial obstruction so that there is friction

In the production of fricatives two articulators are close together so that a narrow passage is formed between the two articulators. As the air goes through that narrow passage, turbulence is produced causing friction. Hence sounds

produced this way are called fricatives. Say the sound /f/. The lower lip is raised to meet the upper teeth but without completely obstructing the air. As the air is pushed out of the narrow passage between the teeth and lower lip, turbulent airflow is produced. Notice what you do to produce sounds such as [s], [ʃ], and [h].

Fricative sounds of Turkish are /f/, /s/, /z/, /ʃ/, /ʒ/, /h/.

Approximant: Approximation of two articulators but without a turbulent airstream

To produce an approximant, two articulators are close together but not so close together to form a narrow passage. As the passage is not narrowed to an extent that a turbulent airflow is produced, the airstream flows more freely without causing friction. Say the sound /j/, for example. The front of the tongue is raised toward the hard palate but not so close together so that the air flows freely between the tongue and the palate. If you breathe in through the mouth, you can feel coolness on your hard palate. Approximants in Turkish are /v/, /j/ and /l/. These approximants are of two types depending on their airflow.

Central approximant: Air flows over the center of the tongue.

In the production of [j], the sides of the tongue touch the roof of the mouth behind the sides of the teeth and the air flows over the center of the tongue. Therefore, [j] is called a central approximant. [v] is a central approximant in Turkish as the lower teeth and upper lip come close together but not close enough to cause frication. Thus, [v] is a central approximant.

Lateral approximant: With a central obstruction, air flows over the sides of the tongue.

In the production of /l/, the tip/front of the tongue is at the alveolar ridge stopping the air from flowing over the center of the tongue. Instead, the air flows over the sides of the tongue. Hence /l/ is called a lateral (meaning 'side') approximant.

English has two additional central approximant sounds. The initial sounds of the following words 'work', 'was', 'one' is labiovelar central approximant /w/. The 'r' sound in English is also an alveolar central approximant symbolized as /ɹ/, different from that of Turkish.

Flap/tap: Single tap against the alveolar ridge

The Turkish 'r', /r/ is a flap whereby the tip of the tongue makes a single tap against the alveolar ridge. Notice what you do with your tongue when you say the word 'ara'. The tongue rapidly taps against the alveolar ridge.

Flap also occurs in American English in the medial position of words such as *latter* and *ladder*, causing both words to be pronounced the same way.

Affricate: combination of a stop and a fricative

The production of affricates involves a stop and a fricative. The affricate starts with a stop which is immediately followed by a fricative. Say the words *çay* and *cam*. The initial sound of *çay* is an affricate which starts with the stop /t/ followed by the fricative /ʃ/. Similarly, the initial sound of *cam* starts with [d] followed by /ʒ/.

The affricates of Turkish are /tʃ/ and /dʒ/.

It is your turn!

4



Form the following consonants. Decide the manner of articulation for each consonant.

Consonant	manner of articulation
k	_____
s	_____
m	_____
l	_____
ʒ	_____
j	_____
r	_____

The consonants of Turkish are summarized in Table 2.1. On the horizontal axis, the columns represent the places of articulation beginning with the front part of the mouth going towards the back. The vertical axis represents the places of articulation starting with a maximum constriction. The sound to the left of the box is voiceless, while the one to the right is voiced.

Table 2.1
Turkish
Consonants

Place Manner	Bilabial	Labio- dental	Alveolar	Palato- alveolar	Palatal	Velar	Glottal
Stop	p b		t d			k g	
Nasal	m		n				
Fricative		f	s z	ʃ ʒ			h
Approximate							
Central		v			j		
Lateral			l				
Flap/tap			r				
Affricate				tʃ dʒ			

In the description of Turkish sounds, we have not discussed ‘ğ’, what is called ‘soft g’ in the literature. Is ‘ğ’ a distinct sound in Turkish? This is a debatable issue. Some argue that it is a distinct sound while others argue that it is not. To decide for yourself, say words that contain ‘ğ’ such as ‘dağ’, ‘iğde’, ‘soğan’, etc. Is it a distinct sound? What is the place and manner of articulation? Is it voiced or voiceless?

‘ğ’ is a letter that occurs in the Turkish orthography (the writing system). But there is no distinct corresponding sound. Many agree that ‘ğ’ has the function of lengthening the vowel preceding it. The difference between the members of the pairs such as ‘ada-ağda’, ‘tura-tuğra’, ‘yama-yağma’, etc., is the length of the vowels preceding ‘ğ’. Thus, ‘ğ’ is not treated as a distinct consonant here.

It is your turn!

5



Produce the following consonants. Pay attention to where in the vocal tract you form the sound, how the airstream goes out the vocal tract, and whether there is vocal cord vibration or not. Then describe them without looking at the chart.

	voicing	place of articulation	manner of articulation
m	_____	_____	_____

s	_____	_____	_____
h	_____	_____	_____
l	_____	_____	_____
tʃ	_____	_____	_____
r	_____	_____	_____
d	_____	_____	_____

The IPA symbols as mentioned before, are used as “shorthand descriptions of the articulations involved” (Ladefoged, 1982:33). [f], for example, is used to describe a voiceless labiodental fricative. [dʒ], on the other hand, is used to describe a voiced palato-alveolar affricate. Conventionally, consonants are described in the following order: Voicing, place of articulation, and manner of articulation as illustrated above.

The consonants of Turkish and English are similar. However, English has consonants that do not occur in Turkish such as /θ/, /ð/, /w/, /ɹ/, /ŋ/, /v/. /θ/, and /ð/ are interdental fricatives produced with the tongue tip between the teeth as in the words ‘thumb’ and ‘those’ respectively. /w/ is a labiovelar central approximant produced at the velum with the lips rounded – two simultaneous articulations, one at the velum and the other at the lips. Examples of words containing /w/ are *white, war, whale*

/ɹ/, the initial sound of words ‘right’, ‘real’, ‘rock’ is an alveolar central approximant. In the production of /ɹ/, the sides of the tongue is against the sides of the teeth. The air flows over the center of the tongue. Some speakers may curl back the tip of the tongue. There is also some degree of lip rounding in the production of /ɹ/.

/ŋ/ is a velar nasal produced by a complete obstruction in the oral tract by raising the back of the tongue to the velum. The words ‘sing’, ‘rang’, ‘doing’ have [ŋ] as the final sound. [ŋ] is generally spelled as ‘-ng’ in English. The sound [ŋ] cannot occur in word-initial position in English.

The letter ‘v’ represents two different sounds in Turkish and English. Although the place of articulation is the same in the two languages, ‘v’, as discussed above, is a central approximant in Turkish but a fricative in English.

The English consonants are summarized in Table 2.2.

Table 2.2
English Consonants

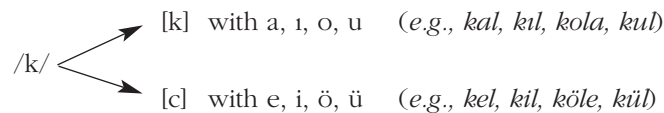
Place Manner	Bilabial	Inter- dental	Labio- dental	Alveolar	Palato- alveolar	Palatal	Velar	Glottal
Stop	p b			t d			k g	
Nasal	m			n			ŋ	
Fricative		θ ð	f v	s z	ʃ ʒ			h
Approximate								
Central	(w)			ɹ		j	(w)	
Lateral				l				
Affricate					tʃ dʒ			

ALLOPHONES OF TURKISH CONSONANTS

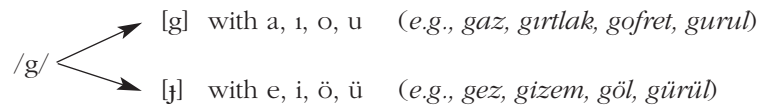
The consonants discussed above are the consonant phonemes of Turkish. Remember that a phoneme is a sound that distinguishes meaning. All of the above consonants distinguish meaning. If the initial sound of the word *‘tek’* is changed to *‘d’*, for example, we would get *‘dek’* which has a different meaning than *‘tek’*. There are instances however when a consonant is realized differently than as described in the consonant chart but without causing meaning change. Consider the following examples. First say the words in Column I, then words in Column II, paying attention to place of articulation of /k/. Then compare each word in Columns I and II as *‘kal-ke’*, so on.

I	II
kal	kel
kola	köle
kul	kül
kıl	kil

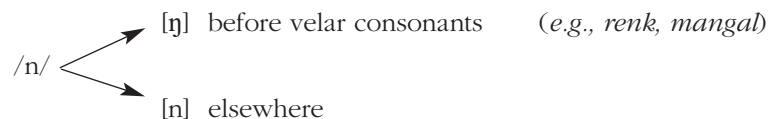
Notice that the place of articulation for the word-initial /k/ in words in Column I is different from that for Column II. The /k/’s in Column I are further back than the ones in Column II. The words in Column I contain velar stops while the words in Column II contain palatal stops. The occurrence of palatal vs. velar stops is conditioned by the neighboring vowels. Voiceless velar stop [k] occurs with the vowels *‘a, ı, o, u’*, voiceless palatal stop [c] occurs with the vowels *‘e, i, ö, ü’*. The allophones of /k/ are presented below (with the IPA symbol for each allophone).



Similar process occurs with the voiced velar stop /g/. Compare word pairs such as *‘gaz-gez’*, *‘gofret-göl’*, *‘gurul-gürül’*, *‘gırtlak-gizem’*. Notice that the place of constriction is forwarded becoming palatal for the second members of the pairs. As with /k/ voiced velar stop [g] occurs with the vowels *‘a, ı, o, u’*; voiced palatal stop [j] occurs with the vowels *‘e, i, ö, ü’*. The allophones of /g/ are presented below.

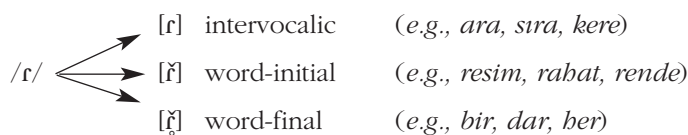


Alveolar nasal /n/ in Turkish has two allophones. Say the names of the following cities, *Antalya* and *Ankara*. Now say the names again, forming /n/ in each context separately. Notice that when producing *‘Antalya’*, /n/ is formed at the alveolar ridge. When producing *‘Ankara’*, on the other hand, /n/ is formed at the velum, hence, becoming a velar nasal [ŋ]. The reason for /n/ becoming [ŋ] is due to the neighboring sound. In *‘Ankara’*, /n/ is followed by /k/ which is a velar consonant. As a result, /n/ is realized as a velar nasal [ŋ]. Thus, the allophones of /n/ can be shown as below.

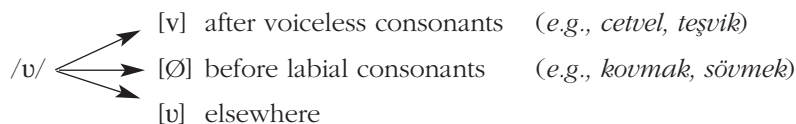


The necessary condition for /n/ becoming [ŋ] is that /n/ needs to be followed by a velar consonant as in words such as *‘renk, dengi’*. In Turkish, /k/ and /g/ are the only velar consonants. The opposite, velar consonant preceding /n/ as in *‘tekné’*, does not satisfy the condition for alveolar nasal becoming a velar nasal. Thus, in all other environments, alveolar nasal is used.

Turkish ‘r’, an alveolar flap /r/, is realized differently depending on the position of ‘r’ within a word. Compare the ‘r’s in the following words, *‘ara’*, *‘rüya’*, *‘bir’*. Notice that the /r/ in each word is different. The /r/ in *‘ara’* is a voiced alveolar flap. In words such as *‘rüya’*, *‘resim’*, *‘renk’*, /r/ is formed with a narrow passage between the tongue and the alveolar ridge. As the airflow is forced through this narrow passage, frication occurs. Thus, word-initial /r/ is fricated and described as ‘voiced fricated alveolar flap’ symbolized as [ɾ]. In word-final position, the /r/ is fricated also. But in word-final position, the frication is voiceless. Say the words *‘bir’*, *‘şeker’*, *‘kar’*. Notice that if you hold /r/ long enough you could hear a sound like a whistle. That sound is frication and it is voiceless. The IPA symbol for voiceless fricated alveolar flap is [ɽ]. The allophones of /r/ are represented as shown below.

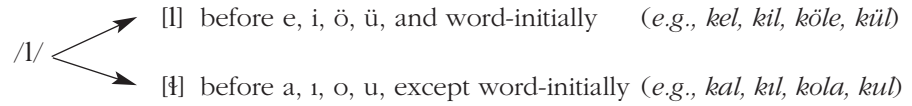


In Turkish, /v/ is a voiced labiodental central approximant, and most commonly it occurs as an approximant (Kopkalli-Yavuz, 1999). Depending on the neighboring sounds, it may have different realizations. After voiceless consonants (i.e., stops, fricatives, affricates), it may be realized as a voiced labiodental fricative [v] as in words such as *‘cetvel’*, *‘teşvik’*. In the environment of labial sounds, before labial consonants such as /b/, /v/, it may delete (represented as Ø, meaning ‘null’). Do you delete /v/ in your pronunciation of words such as *‘kovmak’*, *‘sevmek’*, *‘sövmek’*? This allophone may be idiolectic, different for each person rather than a general rule. The allophones of /v/ are shown below with one allophone being optional or speaker-dependent.



Another consonant which is realized differently in different environments is the alveolar lateral approximant /l/. Turkish /l/ has two allophones [l] and [ɭ]. [l] is an alveolar lateral approximant produced with a central obstruction and air flowing from the sides of the tongue. [ɭ] is a velarized ‘l’ produced in the same way except that the back of the tongue is raised toward the velum. As a general rule, in Turkish [l] occurs in the environment of vowels *‘e’*, *‘i’*, *‘ö’*, *‘ü’*. Conversely, [ɭ] occurs in the environment of vowels *‘a’*, *‘ı’*, *‘o’*, *‘u’*. Compare the pronunciation of the following pairs, *‘bele-bala’*, *‘sel-sal’*, *‘kel-kal’*. In the production of the second members of the pairs, the back of the tongue is raised. However, in word-initial position, regardless of the vowel environment, /l/ is always realized as [l]. Consider the following words in which /l/ is followed by the vowels ‘a’, ‘ı’, ‘o’, ‘u’: *‘lambda’*,

‘*lokum*’, ‘*Luftansa*’. In such words, the expectation would be for /l/ to be realized as [ɫ]. But that is not the case. /l/ is realized as [l] in such words. The allophones of /l/ are shown below.



English /l/ also has the same two allophones, however the distribution of these allophones is different from that of Turkish. Similar to Turkish, [l] occurs with vowels such as ‘i’, ‘e’ and [ɫ] with vowels such as ‘a’, ‘o’, and ‘u’. Unlike Turkish, [ɫ] occurs in word-final position regardless of the preceding vowel. Thus the final sound of words such as ‘*kill*’, ‘*sell*’, ‘*male*’ is pronounced as [ɫ]

Summary

The production of consonants involves either complete or partial obstruction. Where this obstruction is realized refers to the place of articulation. The nature of the obstruction refers to manner of articulation. Whether there is vocal cord vibration or not distinguishes voiced consonants from voiceless consonants. Thus, the description of consonants must include **voicing** (presence/absence of vocal cord vibration), **place of articulation** (where in the vocal tract the consonant is produced), and **manner of articulation** (how the consonant is produced). Voicing distinguishes two sounds that are formed at the same place in the same manner. For example, both [t] and [d] are alveolar stops differing only in their voicing. Voiced consonants in Turkish are [b], [d], [g], [z], [ʒ], [m], [n], [ɾ], [v], [j], [l], [dʒ]. Voiceless consonants are [p], [t], [k], [f], [s], [ʃ], [h], [tʃ].

Consonants may be realized differently in different environments. The different realizations of a sound are the allophones of the same phoneme. Some Turkish consonants have different realizations in different environments. The phonemes which have different allophones in Turkish are /k/, /g/, /n/, /ɾ/, /v/, and /l/.

Self-test

1. Which of the following describes the initial sound of the Turkish word *'civa*?

- a) voiced alveolar stop
- b) voiced palato-alveolar affricate
- c) voiced palato-alveolar fricative
- d) voiceless palato-alveolar fricative
- e) voiceless palato-alveolar affricate

2. To which of the symbol does *voiceless glottal fricative* correspond?

- a) f
- b) s
- c) h
- d) ʃ
- e) r

3. Which of the following sets contains all **voiced** sounds?

- a) f, s, t, k, p
- b) b, d, g, r, l
- c) v, z, d, ʃ, m
- d) m, n, s, d, dʒ
- e) f, v, s, z, h

4. Which of the following sets contains only **stops**?

- a) t, k, p
- b) m, n, r
- c) s, ʃ, h
- d) b, v, m
- e) l, r, h

5. Which of the following sets contains **alveolar** sounds?

- a) r, l, s, k, p
- b) s, z, n, l, h
- c) d, t, s, z, ʃ
- d) l, s, d, m, z
- e) n, l, t, z, s

Turkish Alive

Transcribe the consonants in the following passage.

“

O gece yatağında beni şiddetli bir ateş bastırdı. Bir türlü uyuyamıyor, sayıklıyor, ağa düşmüş kocaman bir balık gibi kendimi oradan oraya atıyordum.

Bereket versin geceler kısaydı. Ortalık aydınlanıncaya kadar Müjgân beni yalnız bırakmadı.

Vücudumda bir şey değişmiş gibi kendi kendime karşı yenilmez bir korku ve tiksinti duyuyordum. İkide birde bir bebek hıçkırığıyla Müjgân'ın boynuna sarılıyor. “Niçin öyle söyledin, abla?” diye hıçkırıyordum.

O, besbelli yeni bir hücumu uğramaktan ürktüğü için ne “evet”, ne “hayır” diyor, sadece saçlarımı okşayarak, başımı kucağına alarak beni yatıştırmaya çalışıyordu. Yalnız, sabaha karşı o da asabileşerek isyan etti, hırçın bir sesele beni azarladı.

From Güntekin, R.N. **Çalıkuşu** (25.Baskı, 1979. İstanbul: İnkılâp ve Aka Kitabevleri) sayfa 64.

”

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Key to "It is your turn!"



- 1- upper lip
- 2- teeth
- 3- alveolar ridge
- 4- palate
- 5- velum
- 6- uvula
- 7- pharynx
- 8- lower lip
- 9- tip
- 10- blade
- 11- front
- 12- center
- 13- back
- 14- root



Sound voiced/voiceless

- | | |
|----|-----------|
| ʃ | voiceless |
| l | voiced |
| m | voiced |
| tʃ | voiceless |
| r | voiced |
| dʒ | voiced |
| ʒ | voiced |



Consonant	place of articulation
j	palatal
n	alveolar
t	alveolar
v	labiodental
ʃ	palato-alveolar
dʒ	palato-alveolar
g	velar



Consonant	manner of articulation
k	stop
s	fricative
m	nasal
l	lateral approximant
ʒ	fricative
j	central approximant
r	flap



	voicing	place of articulation	manner of articulation
m	voiced	bilabial	nasal
s	voiceless	alveolar	fricative
h	voiceless	glottal	fricative
l	voiced	alveolar	lateral
approximant			
tʃ	voiceless	palato-alveolar	affricate
r	voiced	alveolar	flap
d	voiced	alveolar	stop

3

Aims

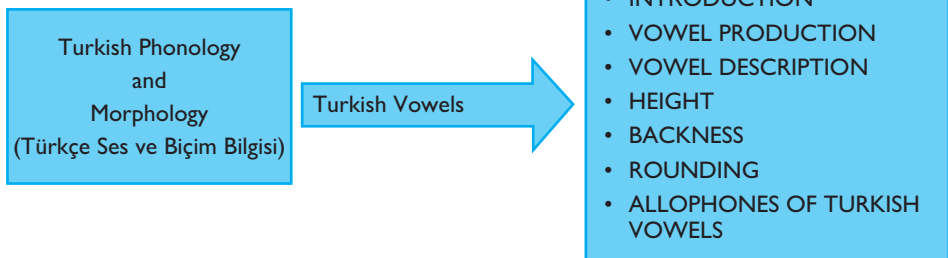
In this unit we will try to seek answers to the following questions:

- How are vowels produced?
- How are vowels described?
- What is height in vowels?
- What is backness in vowels?
- What is rounding in vowels?
- How are vowels described?
- What are the allophonic variations of Turkish vowels?

Key Words

- vowels
- height
- backness
- rounding
- high vowels
- mid vowels
- low vowels
- front vowels
- central vowels
- back vowels
- rounded vowels
- unrounded vowels
- allophones of Turkish vowels

Contents



Turkish Vowels

INTRODUCTION

Can you form a syllable with only consonants? Can 'z' for example, be a syllable by itself? Why not? Can 'a' be a syllable? Yes; a-i-le. What is the difference between consonants and vowels that allows vowels to form a syllable?

Production of vowels is different from that of consonants. In consonant production there is a constriction somewhere in the vocal tract. Thus consonants are defined in terms of where and how this constriction occurs. In vowel production there is no constriction. The air flows through the vocal tract relatively freely. Then, how do we describe vowels? This unit focuses on vowels – how vowels are produced and how vowels are described. Specifically, the focus is, of course, on Turkish vowels.

VOWEL PRODUCTION

Unlike consonants, in the production of vowels, the airstream is not obstructed in any way. The air flows freely through the vocal tract. Vowel production is a continuum whereby there are no clear boundaries of tongue position for different vowels. Because vowel production is a continuum, it is possible to produce different vowels between any two vowels. Produce the vowels represented with the letters 'i' then move gradually to 'ı'. Make each vowel as long as possible. As you move gradually from 'i' to 'ı' you should produce vowels between these two vowels. Now try the reverse: Begin with 'ı' then move gradually to 'i'. Again stop as long as possible on the vowels and in between. Notice that the movement from one vowel to another changes the auditory quality of vowels. The change in the quality of the vowels is a result of the movement of the tongue and the lips. How the tongue moves exactly to produce different vowels however is not very clear. Say the sounds 'a', 'o', and 'ı'. Can you tell where your tongue is for each of the vowels? You probably cannot with certainty. That is because there are no distinct boundaries of tongue position when producing vowels as there are in consonant production.

In describing consonants, a distinction between voiced and voiceless was necessary as voicing is the only distinction for some consonants produced at the same place and in the same manner. For vowels such a distinction is not necessary as by definition all vowels are voiced.

It is your turn!

1



How does vowel production differ from consonant production?

VOWEL DESCRIPTION

Vowel description is difficult because unlike consonants which have distinct boundaries, vowel production is a continuum. Furthermore, consonants are described in terms of location and degree of airflow constriction. Vowel description, on the other hand, is based on auditory quality of the vowels because the position of the tongue is not clear in the production of vowels.

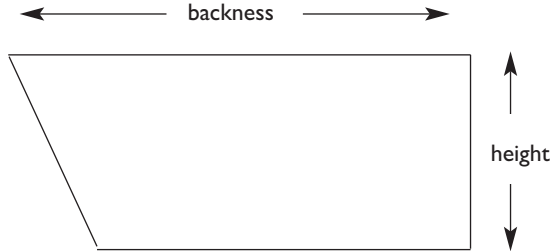
Traditionally, vowels are described in terms of

- height
- backness
- lip position

Traditional vowel description/classification refers to the position of the highest point of tongue body in the vocal tract. Although there is movement of the tongue body from one vowel to another, there is no one-to-one correspondence. Therefore, vowel classification is based on how the vowels sound relative to other vowels. Nonetheless, vowels are classified as high-low and front-back. The tongue is represented two-dimensionally as shown in Figure 3.1. The horizontal axis represents the backness of the tongue whereas the vertical axis represents the height of the tongue.

Figure 3.1

Representation of the tongue



As stated above, vowels are described in terms of auditory quality rather than the position of the tongue. The terms ‘high-low, front-back’ are just labels referring to auditory quality rather than tongue position. These terms are used to describe how vowels sound relative to other vowels. The reference point is the vowel ‘schwa’ [ə], also called a **neutral vowel** because it is produced with the tongue at rest position. Try to produce a schwa. When you are not speaking, your tongue is at rest position. Open your lips a bit without moving your tongue. The sound you produce is [ə]. Vowels are said to be higher or more back than [ə].

Let us illustrate how the labels height and backness are used in vowel description with three vowels at extreme points in the vowel space relative to [ə].

Figure 3.2

Front	central	back	
i		u	height
	ə		mid
	a		low

Compare the position of the tongue for 'i' with [ə]. Start with [ə] and move to 'i'. Notice that your tongue rises towards the roof of the mouth and the higher point of the tongue moves forward. Hence, 'i' is described as a high front vowel. Now try the same with the vowel 'u'. As you go from [ə] to 'u', the tongue is raised but this time the higher point of the tongue moves towards the back of the mouth. Thus, 'u' is called a high back vowel. Now compare [ə] with 'a'. To produce 'a', the tongue lowers at the center of the mouth. Notice that [ə] and 'a' are both central vowels as shown in Figure 3.2. The difference between these two vowels is in the height dimension. The height of a vowel correlates with jaw opening. The lower the vowel is, the more open the jaw is. Compare 'i' and 'a' paying attention to jaw opening. While the mouth is relatively closed for 'i', the mouth opens for 'a'. 'a' is therefore called a low vowel.

a) How are vowels described?

b) What do the terms height and backness refer to?



It is your turn!

2

HEIGHT

Height refers to the height of the tongue body in the vocal tract. In vowels there are three heights: High, mid, low. For the production of **high vowels** the tongue is raised towards the roof of the mouth. When the tongue is lowered, to a lower position than that of [ə], **low vowels** are produced. If the tongue height is similar to that of [ə], then the vowel is a **mid vowel**.

The initial sounds of the following words contain high vowels; 'işim', 'ürmek', 'üzüm', 'umut'. The IPA symbols for these vowels are /i/, /u/, /y/, /u/, respectively. Notice how the tongue is raised towards the roof of the mouth to form these vowels.

The following words have mid vowels in word-initial position, 'ekmek', 'övin', 'orman'. Produce these vowels. When compared to [ə], the height of the tongue for the mid vowels is the same as that of [ə], which is also a mid vowel. The IPA symbols for the initial sounds of the above words are as follows: /ɛ/, /œ/, /o/, respectively.

Turkish has only one low vowel – 'a' as in 'ağla'. The IPA symbol for 'a' is /a/. Compare the production of vowel /a/ with /ə/. For /a/, the jaw opens more than it does for [ə].

It is your turn!

3

- a) What are the three heights?
b) Fill in the heights of the following vowels.

height

a _____
i _____
ε _____
u _____
œ _____

BACKNESS

Backness refers to the position of the highest point of tongue body in the vocal tract. As mentioned above, height refers to how high or low the tongue is in reference to [ə]. Backness, on the other hand, refers to where in the oral tract the tongue has the highest point. Again, remember that these are relative to tongue positions of other vowels. For example, where is the highest point of the tongue in the production of [ə]? It is difficult to determine exactly the highest point of the tongue. We can illustrate front-back difference with pairs of vowels which are described as having the same height but with a front-back difference. High vowels are such pairs that have front and back counterparts. Produce first /i/ then /u/. Notice how the highest point of your tongue moves back from /i/ to /u/. /i/ is a high front vowel whereas /u/ is a high back vowel. Try the reverse. Begin with /u/, then gradually move to /i/. You should notice your tongue move towards the front part of the mouth as you approach /i/. /y/ and /u/ are similar pairs in that /y/ is a high front vowel whereas /u/ is a high back vowel. Begin with /y/ then move to /u/. Have you noticed your tongue moving back to form /u/? When you do the reverse, you should feel your tongue move forward for /y/.

Backness has three degrees: Front, central, back. In Turkish, **front vowels** are /i/, /y/, and /ε/. There is only one **central vowel** which is [a]. **Back vowels** are /u/, /u/, and /o/.

It is your turn!

4

- a) What are the three degrees of backness?
b) Fill in the backness of the following vowels.

backness

u _____
y _____
u _____
a _____
œ _____

ROUNDING

In addition to height and backness, vowels are distinguished in terms of lip position. In the production of some vowels, the lips are protruded or rounded to form what is called **rounded vowels**. For some vowels, the lips are not protruded, rather they are spread. Such vowels are called **unrounded vowels**. In Turkish, rounding is a parameter that distinguishes vowels.

In Turkish, there are two high front vowels, /i/ and /y/. The only difference between these vowels is rounding. /i/ is unrounded while /y/ is rounded. Produce

the sounds, first /i/ then /y/. You should notice that by changing only the position of your lips you could produce these two vowels. Now try the same with high back vowels. First produce /ɯ/. Then without changing the position of your tongue, round your lips and you should produce /u/.

Front mid vowels also differ in terms of rounding. /ɛ/ is an unrounded vowel as in the word 'emek' whereas /œ/ is a rounded vowel as in the word 'örümcek'. Test for yourself that /ɛ/ and /œ/ differ only in rounding. First produce /ɛ/, holding it for a while. As you produce /ɛ/ round your lips. You should notice that /ɛ/ turns into an /œ/ as you round your lips.

/o/ is a rounded vowel but without an unrounded counterpart.

Fill in the rounding of the following vowels.

rounding

a _____
 ɯ _____
 ɛ _____
 y _____
 œ _____



It is your turn!

5

Turkish vowels are summarized in Figure 3.3.

Figure 3.3

Turkish Vowels

Front		central	back		
i	y		ɯ	u	height
ɛ	œ			o	mid
	a				low

- Vowels to the left are unrounded.
- Vowels to the right are rounded.

Vowels are described in the order of height, backness, and rounding. Thus /i/ is a high front unrounded vowel, /o/ is a mid back rounded vowel.

Describe the following vowels.

	height	backness	rounding
ɛ	_____	_____	_____
a	_____	_____	_____
u	_____	_____	_____
i	_____	_____	_____
œ	_____	_____	_____
y	_____	_____	_____
ɯ	_____	_____	_____
o	_____	_____	_____



It is your turn!

6

Turkish distinguishes vowels in terms of height, backness, and rounding. Other languages utilize other parameters to distinguish vowels. English, for example, has **tense-lax** distinction. Tense-lax is a cover term to distinguish pairs of vowels such as /i/ in the word ‘*eat*’ and /ɪ/ in the word ‘*it*’ in English. The need for such a distinction is illustrated below.

American English has 12 pure vowels. The vowels are presented in Figure 3.4.

Figure 3.4

English Vowels

Front	central	back	
i ɪ		ʊ u	height
e ɛ	ə ʌ	o	mid
æ	a	ɔ	low

All of the 12 vowels are distinct phonemes. Examples of each of the phonemes are given below.

/i/	see, key, read, seem, mean, week
/ɪ/	it, win, did, him, river, dinner, six
/e/	say, day, may, rain, table, sail
/ɛ/	red, head, ten, ready, guest, best
/æ/	add, bad, man, answer, fat, apple
/a/	stop, job, Mom, John, college
/ʌ/	fun, run, sun, son, bus, study
/u/	two, room, June, ruler, too, food
/ʊ/	good, foot, wood, stood, cookie, books
/o/	go, show, drove, open, no, pore
/ɔ/	saw, song, dog, August, law, coffee
/ə/	awhile, alive, a bus, arrive

As seen in the chart (Figure 3.4), there are two vowels in 4 of the boxes. In the Turkish vowel system, when there are two vowels in a box they are distinguished in terms of rounding. But in English, that is not the case as illustrated below.

	height	backness	rounding
/i/	high	front	unrounded
/ɪ/	high	front	unrounded
/e/	mid	front	unrounded
/ɛ/	mid	front	unrounded

As can be seen in the above examples /i/ and /ɪ/ cannot be distinguished by these three descriptors. Therefore another descriptor is necessary for English vowels. For English **tense/lax** distinction is used to distinguish such pairs. Tense/lax is a cover term for English which does not have a phonetic basis. Tenseness is said to affect

- vowel length – tense vowels are longer
- tongue position – tense vowels have more extreme tongue position
- lip position – tense vowels have more extreme lip position

In English, tense vowels are i, e, ʌ, a, u, o, ɔ and lax vowels are ɪ, ε, æ, ə, ʊ

Thus English vowels are described in terms of tense/lax, height, backness, and rounding.

	Tense/lax	height	backness	rounding
/i/	tense	high	front	unrounded
/ɪ/	lax	high	front	unrounded
/o/	tense	mid	back	rounded
/u/	tense	high	back	rounded
/ε/	lax	mid	front	unrounded
/ə/	lax	mid	central	unrounded
/ɔ/	tense	low	back	rounded
/e/	tense	mid	front	unrounded
/ʊ/	lax	high	back	rounded
/ʌ/	tense	mid	central	unrounded
/æ/	lax	low	front	unrounded
/a/	tense	low	central	unrounded

As can be seen in the chart and in the examples, for English vowels the following generalization can be made: All back vowels are rounded, all rounded vowels are back. Inversely, all non-back vowels are unrounded, all unrounded vowels are non-back.

DIPHTHONGS

Diphthong is a vowel in which there is a change in quality during a single syllable. Thus, it is a vowel which starts as one vowel but ends as a different vowel within the same syllable as shown in Figure 3.5. There are 3 diphthongs in American English:

- /ai/ my, lie, die, rye
- /au/ cow, how, now
- /oi/ boy, toy, royal

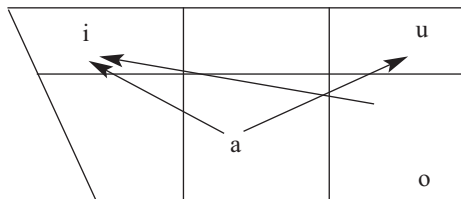


Figure 3.5

Diphthongs in American English

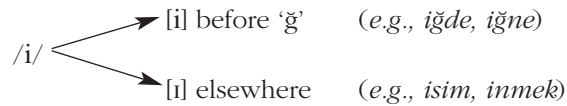
British English also has these diphthongs but others as well. As our focus is not English vowels, they will not be discussed here.

Turkish does not have diphthongs. Although the Turkish word ‘ay’ and the English word ‘eye’ are similar in their pronunciation, the Turkish word does not contain a diphthong while the English word does. The Turkish word is transcribed as /aj/, a vowel and a consonant, but the English word is transcribed as /ai/ with a diphthong. Why is there a difference in the transcription if the two words sound

similar? The evidence suggesting that the Turkish word does not contain a diphthong comes from the syllable structure. The word ‘ay’ when added the suffix –ı becomes ‘a-yı’, the sound ‘y’ goes to the next syllable. If it were a diphthong, it would have stayed in the same syllable since a diphthong is considered to be a single vowel.

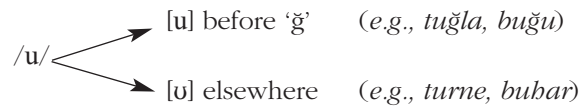
ALLOPHONES OF TURKISH VOWELS

Turkish vowels presented above are the phonemic representations. In the actual realization of speech, variations of these vowels are used. Compare the way you say the initial vowel of the following words, ‘*iğne*’, ‘*inek*’. The /i/ in ‘*iğne*’ is more similar to the tense high front vowel of English produced with more spread lips, and more extreme tongue position as opposed to the /i/ in ‘*inek*’. The /i/ in ‘*inek*’ is realized as [ɪ], similar to lax high front vowel of English. In Turkish, [i] and [ɪ] are allophones, or variations of the same phoneme /i/. The use of [i] for [ɪ], or the use of [ɪ] for [i] would not change the meaning of words. Thus, the high front unrounded vowel /i/ has two allophones in Turkish as represented below.



This suggests that the occurrence of [i] is restricted to the environment of ‘ğ’. [ɪ] occurs in all other environments.

Similarly, high back vowel /u/ has two allophones, [u] and [ʊ]. Compare the words ‘*tuğra*’ and ‘*tura*’. /u/ in ‘*tuğra*’ is longer, more rounded, and produced with a more extreme tongue position than that of ‘*tura*’. As with the high front vowel, [u] occurs before ‘ğ’ and [ʊ] in other environments. The allophones of /u/ is schematized below.

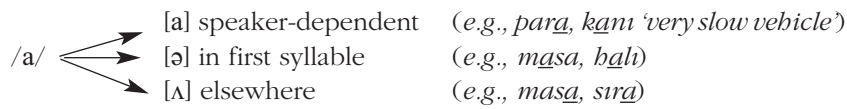


Mid front vowel /ɛ/ has three allophones. The more commonly used allophone is [ɛ] as in the words ‘*eser*’, ‘*elma*’, ‘*ekşi*’. In words such as ‘*eğer*’, ‘*eğlence*’, ‘*değil*’ /ɛ/ is realized with a ‘j’ glide, thus sounding more like the English [eɪ]. In some dialects, or idiolects, /ɛ/ is realized as [æ] in certain environments as in words such as ‘*genç*’, ‘*Mehmet*’ (first ‘e’), ‘*mendil*’. Consequently, the phoneme /ɛ/ has three allophones as shown below.



One other phoneme that has three allophones is /a/. The allophones of /a/ are [a], [ʌ], [ə]. Compare the pronunciation of the two /a/’s in the word ‘*masa*’. Do you notice the difference in the qualities of the first and the second /a/’s? The first /a/ is a schwa, a very short and almost nondistinctive vowel (Kopkallı-Yavuz,

2000) whereas the second /a/ is more like the English tense mid central vowel [ʌ]. Thus, the allophones of /a/ are as follows.



The first allophone [a] is used much less commonly as Turkish has the tendency to centralize all the vowels. Vowels, rather than being realized at extreme points in the vowel space, are approximated more towards the center. The reason may be that there are no distinct phonemes in the central part in Turkish. Thus, a change in the vowel quality would not cause a change in the meaning of words.

Transcribe the following words considering the allophonic variations when necessary.

hayat _____
 leblebi _____
 örümcek _____
 istiklal _____
 mürekkep _____



It is your turn!

7

Summary

Vowels are sounds produced without an obstruction in the vocal tract. As there is no constriction involved in the production of vowels, vowels are described differently than consonants. Turkish vowels are described in terms of height, backness, and rounding. Languages such as English need other parameters to distinguish vowels such as ‘tense-lax’ distinction. Turkish does not distinguish between tense and lax vowels phonemically but lax counterparts are used more widely than tense vowels in Turkish. As there are 8 vowel phonemes in Turkish and the distinction between some vowels is in rounding, there is room for movement in the vowel space. Thus, Turkish vowels have allophones, different realizations of vowels, that are not conditioned by the neighboring sounds or the position within a word. Rather, most of the vowels tend to centralize.

Turkish vowels are described as follows:

	height	backness	rounding
/i/	high	front	unrounded
/y/	high	front	rounded
/ɯ/	high	back	unrounded
/u/	high	back	rounded
/ɛ/	mid	front	unrounded
/œ/	mid	front	rounded
/o/	mid	back	rounded
/a/	low	central	unrounded
/ʌ/	mid	central	unrounded

Self-test

1. Which of the following describes the vowel [œ]?
 - a. high front rounded
 - b. mid back rounded
 - c. mid front rounded
 - d. high back rounded
 - e. mid back unrounded

2. Which of the words contain a *mid back rounded vowel* in **word initial** position?
 - a. uzman
 - b. ortak
 - c. üzgün
 - d. arayış
 - e. endişe

3. What is the symbol corresponding to *high front unrounded vowel*?
 - a. i
 - b. ε
 - c. ʊ
 - d. y
 - e. u

4. Which best transcribes the word 'tuğra'?
 - a. tʊgrʌ
 - b. turʌ
 - c. tʊrʌ
 - d. tʊrə
 - e. turə

5. Which of the following is a description of the vowel [y]?
 - a. high back unrounded
 - b. mid front rounded
 - c. low back rounded
 - d. mid central unrounded
 - e. high front rounded

Turkish Alive

Transcribe the following passage.

“

Üvey babam Falih Rıfkı sayesinde, babamın yokluğunu hiç hissetmedim. O sırada pek para kazanamadığı için, evimize iç güvey geldiğinde, yanında getirdiği tek şey, benim için aldığı oyuncaklarla dolu küçük bir sandıktı. Büyüdükten sonra, o sandığın atılmasına uzun zaman gönlüm razı olmadı. Falih Rıfkı'nın üvey baba olarak tek kusuru, beni fazlasıyla şımartmasıydı belki. Kardeşim Halil doğduktan sonra da ben her zaman ön plandaydım.

From Urgan, Mina. 1998. *Bir Dinazorun Anıları*. İstanbul: Yapı Kredi Kültür Sanat Yayıncılık. Sayfa 132.

”

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Key to “It is your turn!”

It is your turn! 1

Vowels are produced without constriction in the vocal tract whereas consonants are produced with a constriction somewhere in the vocal tract.

It is your turn! 2

- Vowels are described in terms of height, backness, and lip position (rounding).
- Vowels are described relative to [ə]. Height refers to the height of the vocal tract. Backness refers to the position of the highest point of the tongue body.

It is your turn! 3

- The three heights are high, mid, low.
- height**

a	low
i	high
ɛ	mid
u	high
œ	mid

It is your turn! 4

- The three degrees of backness are front, central, back.
- backness**

u	back
y	front
ʊ	back
a	central
œ	front

It is your turn! 5

- | | |
|---|-----------------|
| | rounding |
| a | unrounded |
| ʊ | unrounded |
| ɛ | unrounded |
| y | rounded |
| œ | rounded |

It is your turn! 6

	height	backness	rounding
ɛ	mid	front	unrounded
a	low	central	unrounded
u	high	back	rounded
i	high	front	unrounded
œ	mid	front	rounded
y	high	front	rounded
ʊ	high	back	unrounded
o	mid	back	rounded

It is your turn! 7

hayat	həjɑt
leblebi	ləblɛbɪ
örümcek	œrymdʒɛc
istiklal	ɪstɪclɑl
mürekkep	myɾɛc:ɛp

4

Aims

In this unit we will try to seek answers to the following questions:

- 👁️ What is phonology?
- 👁️ What are some phonological processes in Turkish?
- 👁️ What is 'final devoicing'? How can final devoicing rule be described in Turkish?
- 👁️ What is 'assimilation'? What are the types of assimilation in Turkish?
- 👁️ What is 'vowel harmony'? What are the types of vowel harmony in Turkish?

Key Words

- phonology
- final devoicing
- assimilation
- place of articulation assimilation
- voicing assimilation
- vowel harmony
- backness harmony
- rounding harmony

Contents



Phonological Processes in Turkish

INTRODUCTION

How do we, as native speakers of Turkish, know that ‘dolap’ and ‘dolabı’, ‘burun’ and ‘burnu’ are related in meaning although they have different forms?

“Phonology is concerned with the organization of speech” (Clark and Yallop, 1991:2). Described as such, phonology deals with how sounds pattern together. Each language has its own set of rules of which sounds can occur together and which sounds cannot, which sounds can occur in which environment or position within a word. This unit focuses on three major phonological processes in Turkish and how the rules of those processes are described.

PHONOLOGY

All languages have rules about how speech is organized. These rules are language specific in that each language has its own phonological rules and a phonological rule may occur in one language while not in other languages. Or, the same phonological rule may occur in different languages with some variations. A language, for example, may allow certain sound sequences but not others. Knowing a language means knowing which sound sequences are permissible and which sound sequences are not permissible in that language. Consider the following nonsense words (words that do not have meaning in Turkish). Which of the following could be acceptable Turkish words?

- (1) (I) cunur
- (II) kambat
- (III) sortunk
- (IV) skinez
- (V) arktrat

Based on your intuitions, you probably said that (I), (II), and (III) could be Turkish words but (IV) and (V) could not be Turkish words. (I) could be a Turkish word because all the sounds in ‘*cunur*’ occur in Turkish. Furthermore, the combination of the sounds is such that it is permissible in Turkish. Similarly, because the sounds and the order of the sounds comply with the rules of Turkish, (II) could be a Turkish word also. (III) does not seem like a Turkish word at first glance because of the word-final ‘-nk’ combination, but that is a permissible

combination word-finally in Turkish as in the words such as *'renk'*, *'denk'*, *'künk'*. (IV) and (V) cannot be Turkish words because both have non-permissible combinations. The word in (IV) has two consonants together without an intervening vowel (called **consonant cluster**) in word-initial position which Turkish does not allow. Turkish has borrowed words such as *'spor'* which appears to have a consonant cluster in word-initial position but it is not realized as such in actual utterances. *'Spor'* is pronounced as two syllables with a vowel in between the two consonants, *'sı-por'*, thus not breaking the rules of Turkish. (V) also has a consonant cluster in syllable-initial position. Based on our intuitions about Turkish syllable structure, *'arktrat'* can be broken down either as *'ar-ktrat'* or as *'ark-trat'*. In the first case, there are three consonants together in syllable initial position. In the second case, there are consonant clusters both in syllable-final and syllable-initial positions. Syllable-final *'rk'* sequence is permissible as it occurs in words such as *'Türk'*, *'fark'*, *'kork'*. Syllable initial consonant clusters however are not allowed in Turkish no matter what the consonant combination may be.

Any native speaker of Turkish would also agree that (I), (II), and (III) could be Turkish words but (IV) and (V) could not be acceptable Turkish words although they may not be able to state the reasons. That is because native speakers of a language acquire the rules of that language – they know what is permissible and what is not. Thus, Turkish speakers know that Turkish does not allow syllable-initial consonant clusters and although syllable-final clusters are permissible, the combination of consonants that can occur is limited. This may not be an overt knowledge, a native speaker may not be able to verbalize the rule. Rather Turkish speakers know intuitively which sequences are possible in Turkish. Knowing a language then means knowing the set of rules of that language.

Phonological rules of a language are language specific in that each language may choose to utilize different phonological rules or same rules but with some differences. Turkish utilizes phonological rules that other languages also utilize. In this unit, some of the phonological rules of Turkish are described and discussed.

FINAL DEVOICING

Turkish speakers know that the following non-sense words are not acceptable Turkish words.

- (2) (I) sahab
- (II) alad
- (III) sorag
- (IV) akac

If told that the above words have meanings, native speakers would argue that these could not be Turkish but that they may be words borrowed from other languages. If asked why these cannot be Turkish words, not everyone could be able to state the reason(s), or name the rule but would know that these are not acceptable in Turkish.

The reason why these words cannot be acceptable in Turkish is that Turkish does not allow voiced stops (b,d,g) and affricate (dʒ) to occur in word-final position. This is a rule called **Final Devoicing Rule** which states that voiced sounds become voiceless in word or syllable final position. The words above end either with a voiced stop or affricate, therefore not acceptable Turkish words.

Turkish is not the only language which utilizes final devoicing rule. Some of the languages which utilize final devoicing rule are German, Russian, Polish, and Catalan. The way Turkish uses final devoicing rule is different from those languages in two respects. One, in Turkish only voiced stops and affricate undergo this rule whereas in the other languages mentioned, fricatives as well as stops and affricates devoice in word final position. Two, the rule is reflected in the orthography in Turkish but not in other languages. Consider the following words.

(3)	orthography	phonetic representation	orthography	phonetic representation
	kitap	[kɪtʌp]	kitabı	[kɪtʌbɯ]
	tat	[tʌt]	tadı	[tʌdɯ]
	renk	[rɛŋk]	rengi	[rɛŋgɪ]
	ağaç	[ʌ:tʃ]*	ağacı	[ʌ:dʒɯ]

* Colon (:) is used to indicate a long sound. Here, /ʌ/ is a long vowel because it precedes 'ğ'

In (3) b, d, g, dʒ in the second column are spelled with the letters representing p, t, k, tʃ respectively when they occur in word-final position as seen in the first column.

In Turkish grammar books, final devoicing rule is stipulated as voiceless stops and affricate becoming voiced when a suffix beginning with a vowel is attached. When such a rule is applied to, for example, *kitap* → *kitab-ı*, /p/ becomes /b/ because the accusative suffix *-ı* is attached. However, this rule does not account for words in which voiceless stops do not become voiced when vowel initial suffix is attached as illustrated below.

(4)	sap	sap-ı	<i>not</i>	*sab-ı
	sanat	sanat-ı	<i>not</i>	*sanad-ı
	Türk	Türk-ü	<i>not</i>	*Türg-ü
	saç	saç-ı	<i>not</i>	*sac-ı

* Asterix (*) indicates unacceptable words.

When the alternating roots (i.e. kap [kʌp] → kabı [kʌbɯ]) are assumed to have voiced stops or affricate and become voiceless in word-final or syllable-final position, words in (4) are also accounted for as final devoicing rule does not apply to such words.

In phonology, as discussed in Unit 1, a distinction between **underlying representation** (UR) and **surface realization** (SR) is made to explain such phenomena. Underlying representation means that a word may have a different form than its actual realization (i.e., how the word is said). Surface realization, on the other hand, refers to how it is actually said. The examples in (5) illustrate the underlying representation (UR) and surface realization (SR) of the following words.

(5)		UR	SR
	kap	/kʌb/	[kʌp]
	sap	/sʌp/	[sʌp]
	kanat	/kʌnʌd/	[kʌnʌt]
	sanat	/sʌnʌt/	[sʌnʌt]

Underlying representations have to be posited because otherwise (a) the rule cannot account for all the surface realizations (as illustrated in (4)), or (b) different rules have to be stipulated which may result in exceptions as the rule given in Turkish grammar books. Remember that that rule states that voiceless stops and affricate become voiced when they occur between two vowels. When the rule is stipulated as such, then as many exceptions as the rule governed surface realizations emerge. Thus, it is necessary to posit an underlying representation for each word and to assume that the underlying representations of alternating (i.e., /kʌb/, /kʌnʌd/, /ʃɛŋg/) and non-alternating roots (i.e., /sʌp/, /sʌnʌt/, /tyʃk/) are different to derive the correct forms as illustrated below.

(6)	UR	FD	SR
kap	/kʌb/	/kʌp/	[kʌp]
sap	/sʌp/	n/a*	[sʌp]
kanat	/kʌnʌd/	/kʌnʌt/	[kʌnʌt]
sanat	/sʌnʌt/	n/a	[sʌnʌt]
renk	/ʃɛŋg/	/ʃɛŋk/	[ʃɛŋç]
Türk	/tyʃk/	n/a	[tyʃç] (transcribed with (c) because /k/ is realized as palatal)

* n/a is a short hand for ‘not applicable’ meaning the rule does not apply.

Final devoicing in Turkish is described as applying syllable-finally (e.g. Göker, 1986). Examples are shown in (7). The second column in which the suffix *-i* is attached (accusative case) illustrate the underlying voicing of the final stops; singular forms illustrate syllable final devoicing that is also word final; the plural forms illustrate syllable final devoicing before a consonant-initial (voiced lateral approximant) suffix.

(7)	UR	-i	singular	plural	gloss
	/kʌb/	[kʌbwi]	[kʌp]	[kʌpʈʌʃ]	‘container’
	/sʌp/	[sʌpwi]	[sʌp]	[sʌpʈʌʃ]	‘stalk’
	/kʌnʌd/	[kʌnʌdwi]	[kʌnʌt]	[kʌnʌtʈʌʃ]	‘wing’
	/sʌnʌt/	[sʌnʌtwi]	[sʌnʌt]	[sʌnʌtʈʌʃ]	‘arts’

When a vowel-initial suffix is attached to consonant roots, the root final consonant is no longer syllable final; rather it becomes the initial sound of the next syllable. Thus final devoicing does not apply in such cases as final devoicing rule in Turkish applies to syllable final voiced stops and affricate.

It is your turn!



- a) State the final devoicing rule in Turkish.
- b) Determine the underlying representation of the following words:
 - a. haç ‘cross’
 - b. haç ‘pilgrimage’
 - c. saç ‘sheet metal’
 - d. saç ‘hair’
 - e. hayat ‘life’
 - f. denk ‘equal’

ASSIMILATION

Assimilation is a phonological process whereby one sound becomes like the neighboring sound. Two types of assimilation processes -- place of articulation assimilation and voicing assimilation -- are discussed below.

Place of Articulation Assimilation

Consider the following example, '*Yarın İstanbul'a gidiyorum.*' Focus on the word '*İstanbul*'. As you say '*İstanbul*', notice that the alveolar nasal /n/ preceding the bilabial stop /b/ is pronounced as a bilabial nasal /m/. If you say the word too slowly, you probably would not produce a bilabial nasal, but in casual speech (i.e., at a normal speed) the alveolar nasal is produced as a bilabial nasal. If you cannot notice it in your own speech, ask someone to say the sentence and watch their lip as they produce '*İstanbul*'. /n/ preceding /b/ becomes /m/ due to coarticulation. In speech, we anticipate (begin to form) a sound while producing the preceding sound. In this case, while producing /n/ we begin to form /b/ for which lips come together, resulting in /m/.

There are other such examples where /n/ becomes /m/ when preceding a bilabial stop:

- | | | | | | | |
|-----|-----------|---|-----------|--------|---|--------|
| (8) | penbe | → | pembe | anbar | → | ambar |
| | saklanbaç | → | saklambaç | cünbüş | → | cümbüş |

As seen in these examples, this process is reflected in the orthography. '*İstanbul*' is an exception as it is written with the letter 'n' but this could be because '*İstanbul*' is a proper noun.

These are examples of **place of articulation assimilation**. Place of articulation assimilation, then, means that the place of articulation of one sound becomes like the neighboring sound. In words such as '*sandık*', '*tandır*', '*mendil*' /n/ is followed by an alveolar stop. As both /n/ and /d/ are alveolar sounds, there is no change in the realization of /n/, it remains as an alveolar nasal. When /n/ is followed by a velar stop /k/ or /g/, /n/ is realized as /ŋ/. Because /ŋ/ is not a distinct phoneme in Turkish, realization of /n/ as a velar nasal is not reflected in the orthography. If you say the following words '*nankör*', '*dengi*', '*sanki*', paying attention to what you are doing with your tongue, you should notice that the back of your tongue is at the velum for closure thus producing /ŋ/. '*Antalya*' and '*Ankara*' may better illustrate the difference between the two /n/'s. You should notice that the closure you form for the two /n/'s is in different places. The /n/ in *Antalya* is formed at the front of the mouth, at the alveolar ridge, while /n/ in *Ankara* is formed at the back of the mouth – at the velum (see the section on 'Allophones of Turkish Consonants').

As you may have noticed the examples presented so far are words containing nasals. That is because place of articulation assimilation is most evident in nasals. Furthermore, it is the alveolar nasal which undergoes the assimilation process. Bilabial nasal does not assimilate to the following sound.

- | | | |
|-----|-----------|-----------------|
| (9) | Şam –da | not * Şan –da |
| | kalem –de | not * kalen –de |

Place of articulation assimilation in Turkish is **regressive** (from right to left; going backward) in that the consonant following the nasal determines the place of

articulation. Examples containing the three places of articulation of nasals illustrate that the assimilation is regressive.

(10)	kanbur	/kʌnbʊr/	→	[kʌmbʊʁ]
	sandık	/sʌndɯk/	→	[sʌndɯk]
	kangal	/kʌŋgʌl/	→	[kʌŋgʌl]

Examples below, on the other hand, show that when alveolar nasal is preceded by a velar (e.g., tekne [tɛkne] *not* [tɛkɲe]) or bilabial stop (e.g., şebnem [ʃɛbnɛm] *not* [ʃɛbmɛm]), it does not assimilate in place of articulation suggesting that place of articulation is not a progressive process.

It is your turn!

2

Find your own set of place of articulation assimilation examples.

Voicing Assimilation

Voicing assimilation is a process whereby the voicing of a consonant becomes similar to that of the neighboring consonant. Voicing assimilation is relevant for consonants because consonants are distinguished in terms of voicing whereas voicing is not a distinguishing property of vowels. **The process of voicing assimilation is most apparent in stop-initial and affricate-initial suffixes.** Consider the following examples.

(11)		-de		-te
	ev	ev-de	kep	kep-te
	ben	ben-de	hedef	hedef-te
	sel	sel-de	çiçek	çiçek-te
	yer	yer-de	ses	ses-te
	belde	belde-de	beş	beş-te

When the suffix *-de* (indicating location) is attached to a root, two different forms with respect to the initial consonant, *-de* and *-te* surface (the difference in the vowels will be discussed in the following section). The suffix surfaces as *-de* in the first column but as *-te* in the second column. Can you explain why?

The words in the first column end with a voiced sound. /v, n, l, r, ʌ/ are all voiced. The initial consonant of the suffix *-de* therefore is also voiced. The words in the second column, on the other hand, end with a voiceless consonant. /p, f, k, s, ʃ/ are all voiceless. Thus, the initial consonant of the suffix becomes voiceless, *-te*. This is called voicing assimilation – voicing of the suffix agrees with the voicing of the root final sound.

There are a number of stop-initial or affricate-initial suffixes in Turkish which alternate, i.e., exhibit voicing assimilation. One example of those alternating suffixes is *-cı* with the meaning ‘maker’ as illustrated in (12)

(12)	<i>root-final</i>			
	<i>voiced</i>		<i>voiceless</i>	
	fırın	fırın-cı	çorap	çorap-çı
	cam	cam-cı	sanat	sanat-çı
	halı	halı-cı	kazak	kazak-çı
	perde	perde-ci	raf	raf-çı

Although those suffixes which agree in voicing of the root final sound are stop-initial or affricate-initial suffixes, not all stop- and affricate-initial suffixes assimilate in voicing. *-ken*, *-sa* are just a few examples which do not assimilate as illustrated in (13).

(13)	af	af-ken	af-sa
	av	av-ken	av-sa

Whether or not a suffix-initial consonant assimilates in voicing is not rule governed, rather it is an idiosyncratic characteristic of a given suffix.

Suffixes with initial consonants other than stops and affricates do not assimilate in voicing. Consider the plural suffix *-ler* as an example. In the words *ağ-lar* and *av-lar*, the voicing of the root-final consonant remains the same. This and the examples in (11) and (12) suggest that voicing assimilation, unlike place of articulation assimilation, is **progressive** (from left to right; going forward). It is the root-final sound that determines the voicing of the alternating suffix-initial consonant.

In Turkish, final devoicing and voicing assimilation processes interact. Remember that final devoicing rule applies syllable-finally. First, final devoicing rule applies to words which have underlyingly voiced stops and affricate in final position. As a result of this rule, voiced stops or affricate become voiceless. Then, as voicing assimilation is progressive, alternating suffix-initial voiced consonant becomes voiceless as illustrated in (14).

(14)	UR	-de	final devoicing	voicing assimilation
	/kʌb/	[kʌbdʌ]	[kʌpdʌ]	[kʌptʌ]
	/kʌnʌd/	[kʌnʌddʌ]	[kʌnʌtdʌ]	[kʌnʌttʌ]

Find examples of suffixes (not discussed above) which alternate (i.e., assimilate in voicing) and show how it interacts with final devoicing rule.



VOWEL HARMONY

Vowel Harmony can be considered a type of assimilation since neighboring vowels become alike to share common properties. Consider the following examples in (15).

(15)	(I)	iş	iş-ler	(II)	kız	kız-lar
		ev	ev-ler		bal	bal-lar
		süt	süt-ler		muz	muz-lar
		köy	köy-ler		tok	tok-lar

In the first group of words, the plural suffix is *-ler* while the same suffix becomes *-lar* in the second group of words. The root-vowels in the first group of words share a property common to all while the root-vowels in II share a different common property. Can you name the property the first group of words share and the property the second group of words share?

The root-vowels in the first group of words are /i, ε, y, œ/. The property these vowels share is that they are all front vowels. Thus, the suffix *-ler*, which also contains a front vowel, is attached. Conversely, the vowels in the second group, /u, a, o, u/, are all non-front vowels. Thus the plural suffix has the form *-lar*, with a non-front vowel.

These examples illustrate that the vowel of the suffix agrees in backness with the vowel of the root. In Turkish, the rule is when a word contains more than one syllable, it is the vowel of the last syllable which determines the backness of the suffix vowel as shown in (16).

- (16)
- | | |
|-------|-----------|
| kalem | kalem-ler |
| selam | selam-lar |
| uslup | uslup-ler |
| otel | otel-ler |
| beton | beton-lar |
| galip | galip-ler |

Vowel harmony is progressive as the vowel of the suffix is determined by the (last) vowel of the root. If a suffix is attached to a root, then it is the last vowel, whether of the root or the suffix, which determines the vowel of the suffix as illustrated in (17). This holds true for all the successive suffixes.

- (17)
- | | |
|---------------|---------------|
| otel-de-ler | otel-ler-den |
| beton-dan-lar | beton-lar-dan |

There are two types of vowel harmony in Turkish; backness harmony and rounding harmony. If the vowel of the suffix is not a high vowel (i.e., ϵ), then it agrees in backness. This is called **backness harmony**. This means that the suffix will have a front vowel with words containing front vowels in the last syllable and back vowel with words containing back vowels in the last syllable. If the vowel of the suffix is a high vowel, then it agrees in both backness and rounding. This is called **rounding harmony**. The suffix *-i*, for example, is a high vowel therefore it will have the forms *-i, -ı, -u, -y* as seen in (18).

- (18)
- | | | | | | | | |
|-----|-------|-------|--------|-----|-------|-------|--------|
| kil | [kɪl] | kil-i | [kɪli] | kıl | [kʊɾ] | kıl-ı | [kʊɾɪ] |
| kel | [kɛl] | keli | [kɛli] | kat | [kʌt] | kat-ı | [kʌtɪ] |
| kül | [kyɫ] | kül-ü | [kyɫy] | kul | [kʊɾ] | kul-u | [kʊɾu] |
| köy | [kœj] | köy-ü | [kœjy] | kol | [koɫ] | kol-u | [koɫu] |

/i, ϵ / are unrounded front vowels, thus *-i* surfaces as [i] which is also an unrounded front vowel. /y, œ / are rounded front vowels, hence *-i* surfaces as [y], a rounded front vowel. *-ı* surfaces as [ɪ], an unrounded non-front vowel, with unrounded non-front vowels /ɪ, Λ /, and as /u/, rounded non-front vowel with rounded non-front vowels /u/ and /o/. This suggests that when a suffix contains a high vowel, then it shares two common properties with the vowel of the word to which it is attached.

The suffixes in Turkish can then be classified into two categories in terms of the vowel they contain. One type of suffixes contains a non-high vowel and agrees in backness only. The second type of suffixes contains a high vowel and agrees both in backness and rounding.

The discussion of vowel harmony is limited to harmony between the vowels of the suffixes and roots. There is also harmony among the vowels within the root, and although similar rules apply within the roots, the details of such cases are not dealt with here due to space limits.

Summary

The phonological rules a language chooses to utilize and/or the way in which the language chooses to apply those rules are language specific preferences. Native speakers of a language have the knowledge of the rules and how and where those rules apply although they may not be able to verbalize the rules. It is evident in every normal speaking and hearing native speaker's speech that they utilize the phonological rules of that language in their speech. In this unit, a sample of phonological rules of Turkish is presented in a way that may be formulated in the speaker's and hearer's mind. The descriptions of the rules, although simplified here, are in accordance with the theoretical framework of phonology.

Some phonological rules of Turkish are stipulated differently than traditional Turkish descriptions. When described as it is done here, the rules can account for all the surface forms without leaving any exceptions, as was the case for final devoicing rule. The rules presented here are merely descriptions and not formal rules as the purpose of this unit is not to discuss the details of phonological theories and formulate phonological rules. But the descriptions are still within the scope of formal rules.

Self-test

1. Which of the following words has surface realization identical to its underlying representation?

- a. balık
- b. aç
- c. tat
- d. dolap
- e. gitmek

2. Which of the following suffixes exhibits **backness harmony**?

- a. seslen-mek
- b. gel-di
- c. acık-mış
- d. okul-mu
- e. koy-dur

3. Examine the following word. Which phonological rule is the word an example of?

'kapısı'

- a. final devoicing rule
- b. voicing assimilation
- c. place of articulation assimilation
- d. backness harmony
- e. rounding harmony

4. Which of the following words exhibits **place of articulation assimilation**?

- a. denge
- b. kantin
- c. stepne
- d. tepme
- e. sonda

5. To which of the following words final devoicing rule has applied?

- a. hayat
- b. çık
- c. top
- d. sayaç
- e. halat

Turkish Alive

Examine the following poem and identify the phonological processes discussed in this unit.

“

RAHATLIK

Sen büyüdüğün vakit çocuğum,
Yine çiçekler açacak dallarda.
Dallarda açan çiçekler gibi,
Yine çocuklar uyuyacak masallarda.

Sen büyüdüğün vakit çocuğum,
Yine uykular havuzda dibe gidecek.
Havuzlarda kaybolan uykular gibi,
Yine çocuklar mektebe gidecek.

Sen büyüdüğün vakit çocuğum,
Yine göklerden mavi gölgeler inecek yere.
Toprağı nurlandıran mavi gölgeler gibi,
Yine çocuklar gülümseyecek, askerlere.

Sen büyüdüğün vakit çocuğum,
Yine meltemler geçecek denizlerden.
Denizlerden geçen meltemler gibi,
Yine çocuklar olacak, rahatlık veren

Fazıl Hüsnü Dağlarca

”

References

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Key to “It is your turn!”



- a) State the final devoicing rule in Turkish.
The final devoicing rule in Turkish states that underlyingly voiced stops and affricate become voiceless in syllable final position.
- b) Determine the underlying representation of the following words: UR
- | | |
|----------------------------|---------|
| a) haç 'cross' | /hʌtʃ/ |
| b) haç 'pilgrimage' | /hʌdʒ/ |
| c) saç 'sheet metal' | /sʌdʒ/ |
| d) saç 'hair' | /sʌtʃ/ |
| e) hayat 'life' | /həjʌt/ |
| e) denk 'equal' | /dɛŋg/ |



- | | |
|-------|-------------------|
| n → m | tenbel /tɛmbɛl/ |
| | binbaşı /bɪmbʌʃɯ/ |
| n → ŋ | hangı /hʌŋgɯ/ |
| | banka /bʌŋkʌ/ |



-den is an alternating suffix.

It surfaces as *-den* and *-ten* (vowels also change but that is not a concern here) depending on the word final sound to which it is attached.

Examples are,

el-den set-ten

If the word to which this suffix is attached is underlyingly voiced, as in *'ağaç'* /ʌ:dʒ/, first final devoicing rule applies, then voicing assimilation rule applies as shown below.

UR	Final devoicing	voicing assimilation
ʌ:dʒ-dʌn	ʌ:tʃ-dʌn	ʌ:tʃ-tʌn

5

Aims

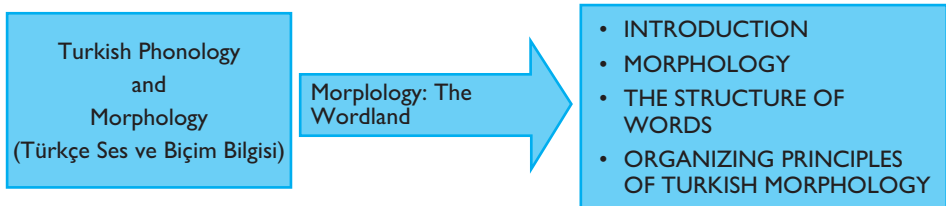
In this unit we will try to seek answers to the following questions:

- 👁 What is morphology?
- 👁 What is a morpheme?
- 👁 How are morphemes classified?
- 👁 How are words structured in Turkish?
- 👁 What is an allomorph?

Key Words

- morphology
- morpheme
- free morpheme
- bound morpheme
- derivational morpheme
- inflectional morpheme
- morpheme ordering
- allomorphy

Contents



Morphology: The Wordland

INTRODUCTION

Morphology is the land of words, and the morpheme, as the building structure of words, the sovereign. The wordland in the human mind is called the lexicon. An understanding of words stored in the lexicon involves an understanding of the rules that govern the formation of words, similarities and differences in the behavior of words, and the function of words.

Why is *karşılıksız* acceptable, but *sevgiliksiz* outrageous? What makes *evdeler* different from *evlerde*? Why is *evdemler* terrible, but *dedemler* perfectly fine? Wonders of the wordland are infinite, and understanding them is just like a process of the mind's awakening from inattention to linguistic organization. In this process, the tools of morphology make it possible to become well-informed about the origins and structure of words as well as the systematicity behind how they are formed and understood by native speakers.

MORPHOLOGY

Morphology is a sub-field of linguistics. It focuses on how words are composed and organized in human language. Therefore, a study of morphology reflects the contents of the mind related to the formal and semantic composition of words. What does this mean? A vivid memory of mine may serve useful here to explain my point. One day, my smart 3 year-old nephew, Gürkan, grabbed a book from my book case and asked me to read it to him. It was a story book written in English, a language which he did not speak, of course. I felt very much up to playing a trick, so I started to read it in English. While reading, I looked at his face from time to time to see his reaction. He was just looking at me and listening very carefully and patiently. I went on and on. When I finished reading three or four pages, his older sister Ecem came into the room. As soon as he saw her, he got up, ran to me, grabbed the book from me, gave it to Ecem and said, '*Abla, al şunu sen oku, teyzem hep yanlış okuyo!*' What is it that Gürkan, or any child for that matter, knows about language to have him react in this way? What kind of formal linguistic knowledge enables him to form, say, the sentence he formed?

First, he has knowledge of the sounds and the sound system of his native language. When he heard a sample of a foreign language spoken to him, he considered it wrong. It was "wrong" because it did not fit in the sound system of his language stored in his mind. He knows what sounds and in what order make

up meaningful words in his language. Second, it can be inferred from his correctly formed sentence that he knows how to use these words in a sentence. For example, he knows that *oku-* is a verb; therefore, he attaches the verbal morpheme *-yor* to it, and only in that order. He also knows that it can be used with a preceding modifier such as *yanlış* in the example. So, Gürkan knows not only the sounds that form a word, but also the structure and use of that word. He knows what other forms can be used within a word; what can be used before and after a word as well as what categories they belong to. He follows all these rules, of course, subconsciously to form meaningful words. In more linguistic terms, this is what constitutes a morphological study: an analysis of word structure and of the rules governing derivation, inflection, and word formation (see Units 6 and 7 for more on this).

That the native speakers of a language, even as young as Gürkan, can deal with the interplay of many linguistic factors comes as no surprise. It is a widely accepted view that a great body of knowledge for such processes is available to them in their mental storage called the lexicon. A native speaker's lexicon includes information similar to the type included in a dictionary. It is common knowledge that a dictionary is composed of a list of words accompanied by information about: the form and meaning of words and phrases, the categorization of words, the usage of words and phrases, and relationships between words and phrases. Similarly, when a word is called in the lexicon, or the so called mental dictionary, to be used in communication, it is retrieved based on this kind of information. Such implicit knowledge enables all native speakers to have clear notions about the word stock of their language.

THE STRUCTURE OF WORDS

Syllable Structure vs Morpheme Structure

There are different ways of analyzing word structure. We will be discussing only two of them in this part. One is through analyzing syllable structure. In this kind of analysis, the focus is on the sounds forming a particular word. Consider the segmentation of the words *bastalandım* and *yaşlandım* as shown in Table 5.1. Note that *C* stands for *consonant* and *V* for *vowel*.

Table 5.1
Syllable Structure

	1 st syllable	2 nd syllable	3 rd syllable	4 th syllable
word 1	has-	-ta	-lan	-dim
bastalandım	CVC	CV	CVC	CVC
word 2	yaş	-lan	-dim	X
yaşlandım	CVC	CVC	CVC	X

As you can see, the word *bastalandım* is composed of five syllables having the CVC-CV-CVC-CVC syllable structure; whereas, *yaşlandım* has only three syllables having the CVC-CVC-CVC structure. It is true that words consist of sound sequences, but sounds and sound structure are the concern of phonology. The unit of analysis in morphology, however, is the morpheme. So, another way of understanding word structure is through analyzing component morphemes. Now consider the morphological divisions in the above examples given in Table 5.2. disregarding their phonological structure.

	1 st morpheme	2 nd morpheme	3 rd morpheme	4 th morpheme
word 1	hasta	-lan	-dı	-m
hastalandım				
word 2	yaş	-lan	-dı	-m
yaşlandım				

Table 5.2
Morpheme Structure

When you compare the syllable and morpheme structure of the given words as they are shown in Tables 5.1 and 5.2, you will see that there may not be a one-to-one correspondence in the number of syllables and morphemes used and in the boundaries which mark these morphemes and syllables. Examine the tables below to view these facts about *hastalandım* and *yaşlandım*.

	morpheme boundaries	number of morphemes	syllable boundaries	number of syllables
hastalandım	[hasta] [lan] [dı] [m]	4	Has # ta # lan # dim	4
yaşlandım	[yaş] [lan] [dı] [m]	4	Yaş # lan # dim	3

Table 5.3
Morpheme and Syllable Boundaries

Even though *hastalandım* has the same number of morphemes and syllables, namely 4, it is clearly seen that there is lack of correspondence between their boundaries. That is, morphemes and syllables in that word are not compatible except for *-lan*, in which morpheme and syllable boundaries overlap. In the rest of the word, one morpheme does not correspond to one syllable and vice versa:

	morphemes	syllables
hasta	1	2: <i>has</i> and <i>ta</i>
lan	1	1
dim	2: <i>-dı</i> and <i>-m</i>	1

Table 5.4
Compatibility between Morphemes and Syllables: hastalandım

In our second example *yaşlandım*, even the number of morphemes and syllables does not match. It has got 4 morphemes, but 3 syllables. Morpheme and syllable boundaries match in the first part, but not in the last part.

	morphemes	syllables
yaş	1	1
lan	1	1
dim	2: <i>-dı</i> and <i>-m</i>	1

Table 5.5
Compatibility between Morphemes and Syllables: yaşlandım

As the above comparison shows, a morpheme does not necessarily have to claim syllable status, neither does a syllable morpheme status. This indicates that simply coding the syllables of a word is not a reliable way to code the morphemes of that word. So, what is a morpheme? What is the criterion to identify a morpheme? **Morphemes** are the smallest meaningful units that construct words in a language. Our examples *hastalandım* and *yaşlandım* are constructed in the following way:

- | | |
|----------------|--------------|
| (1) hasta | (2) yaş |
| hasta-lan | yaş-lan |
| hasta-lan-dı | yaş-lan-dı |
| hasta-lan-dı-m | yaş-lan-dı-m |

First, the morpheme *-lan*¹, which makes verbs from non-verbs, is attached to the bu words *basta* and *yaş*. By this process, we produce two verbs: *bastalanmak* and *yaşlanmak*, which are in turn, marked for tense and person by the morphemes *-DI* and *-m* respectively.

Let's consider another word such as *babama*. In (3) below, you will see its syllable and morpheme structure.

(3) a. ba	-ba	-ma
CV	CV	CV
b. baba	-m	-a
stem	1st morpheme	2nd morpheme

Note that morphemes are **indivisible** units and that they typically have either a **meaning** or a **grammatical function**. What does the first syllable in (3a) mean? What is the second *-ba* and what is *-ma*? Do they have any meanings or functions? Compared with (3a), the content of (3b) is higher in that *baba* has a meaning, and *-m* and *-a* have grammatical functions which marks *possession* and *direction* respectively. Therefore, *baba-*, *m-*, and *-a* are entitled to be morphemes². Let's clarify this with another example. *Gözcüler* consists of three morphemes: *göz+cü+ler*. One minimal or indivisible unit in this word is *göz*, another is *-cü*. Both of them are units of meaning. *Göz* is a lexical item which is used to refer to the organ of seeing. The second morpheme *-cü* is used to form nouns from nouns. It adds to the stem noun the meaning of 'somebody who uses the stem NOUN'. *Gözcü* does not mean *göz* any more, but a person who uses his eyes to guard or watch a place. The third morpheme *-ler*, on the other hand, is a unit of grammatical function. It does not have a lexical meaning, but it is used to signal that the stem noun is plural.

As it is clear from these examples, morphemes might have different meanings, functions, and morphological standing. Even though morpheme and syllable boundaries of a word may sometimes overlap, lack of correspondence between these boundaries is not uncommon. A single morpheme may be composed of more than one syllable just as a single syllable may include more than one morpheme. Moreover, morphemes which do not even figure a separate syllable are also widespread in Turkish.

It is your turn!



Identify the morpheme and syllabus structure of the following. Indicate which one/s has/have identical boundaries.

simitçi *evden* *evlere*
sütçü *evlerden* *evlerime*

Free Morphemes vs Bound Morphemes

In terms of their morphological standing, morphemes in *gözcü* can be classified into two groups. Compare (4a) and (4c) below:

- (4) a. Göz boyadı. b. Gözcü oldu c. *Cü oldu.
 Göz kamaştırdı. Gözlük aldı. *Lük aldı.

In (a) examples, *göz* is used on its own. The fact that it can stand by itself makes it an independent morpheme. Its projection in a sentence does not require

any other morpheme in its immediate environment. Such morphemes are known as **free morphemes**. If a free morpheme has a lexical meaning, it is classified as a **content morpheme**. Nouns, adjectives, adverbs, and verbs are content morphemes. Some free morphemes, such as postpositions, conjunctions, determiners, pronouns, etc., mark grammatical relationships. They are therefore called **functional morphemes**. Contrary to the behavior of *göz*, the ungrammaticality³ of the (c) examples above shows that *-CI* and *-lik* are not independent as they cannot appear in a sentence unless they are fed into other morphemes to form meaningful units as shown in (4b). Since these morphemes never stand alone as free forms, they are classified as **bound morphemes**.

Identify the morpheme structure of *bolar*, *bolart*, *bolarttı*, *bolartlık*, and classify the morphemes as *free* or *bound*?



It is your turn!

2

The attachment process of a bound morpheme to another morpheme is called **affixation** and the attached bound morphemes are **affixes**. Words that are not affixed are called **roots**. Many words in a language, such as nouns, adjectives, verbs and adverbs, contain a root standing. An overwhelming number of roots in Turkish are monosyllabic although more than one syllable in a root is permissible. There are also words which are formed with a number of affixes attached to a free morpheme. They are characterized as morphologically more complex. In the context of complex words, the smallest indivisible free morpheme forms the **stem** of that complex word. For example, *yaş* in the word *yaşlı* is the stem of this word. Stems can be categorized as *simple* when they consist of a single morpheme that can have a root standing as in this example. More *complex* stems can also be formed by a free morpheme followed by another bound morpheme as in *yaş-lı-lar*. In this example *yaş-lı* is the stem to which the plural suffix is attached; whereas, in *yaş-lı*, *yaş* is given this morphological status.

Complex words are formed through three types of affixation in a language: suffixation with suffixes, prefixation with prefixes and infixation with infixes. **Suffixes** are placed after the stem; **prefixes** before the stem; and **infixes** within the stem by way of stem modification. Turkish morphology predominantly allows suffixation as in *sev-gi*, *sev-gi-li*, *sev-gi-li-ler*, etc. Prefixes and infixes can widely be seen in the expansion of foreign words such as, *anti-propoganda* from *propoganda*, *gayri-resmi* from *resmi*; *bakim* from *büküm*, *tacir* from *tüccar*, etc.

Derivational Morphemes vs Inflectional Morphemes

We have seen that in *gözcüler*, *göz* is contrasted with *-cü* and *-ler* in terms of its standing: it is a free morpheme; whereas, the other two are bound morphemes. But *göz* and *-cü* are similar in terms of another criterion. They are both considered to be units of meaning. *Göz* is a lexical item which has a meaning of its own, but *-cü* has the capacity to change this meaning and assign a different one instead. So, both can be classified as content morphemes. The new combination *gözcü* is a noun derived from a noun having a meaning different from that of the stem noun. In other words, the suffix *-cü* has changed the meaning of the stem *göz*. Some suffixes can change both the meaning and the syntactic class of the stem. For example, *satıcı* is a noun derived from a verb by adding the suffix *(y)İcİ⁴*. This process of forming new words by using bound morphemes is called **derivation** and the morphemes which add to or change the meaning of a stem word and/or

the syntactic class of it are called **derivational morphemes**. So, *-CI* is a derivational morpheme which forms nouns from nouns, and *-(y)IcI* is another one which forms nouns from verbs. Both of them change the meaning of the stem. What other derivations are possible in Turkish? Some more examples are given in Table 5.6.

Table 5.6
Examples of Derivational Suffixes

	from nouns	from verbs	from adjectives	from adverbs
nouns	-llk(kitaplık)	-(A)k (kaçak)	-Incl (ikinci)	X
verbs	-IA (avla-)	-AIA (durala-)	-IA (temizle)	-IA (ötele)
adjectives	-slz (anlamsız)	-I (sıkı)	-CA (büyükçe)	X
adverbs	-CA (aylarca)	-(y)A(koşa koşa)	-CA (kolayca)	-Clk (kolaycacak)

In summary, there are four types of stems formed through derivation. **Denominal nominal** stems are nouns that are formed by attaching a derivational suffix to a noun. **Deverbal nominal** stems are nouns that are formed by attaching a derivational suffix to a verb. **Denominal verbal** stems are verbs formed from nouns, and **deverbal verbal** stems are verbs formed from verbs.

But is the lexicon composed of only free lexical morphemes and derivational bound morphemes? Consider the following example consisting of meaningful morphemes.

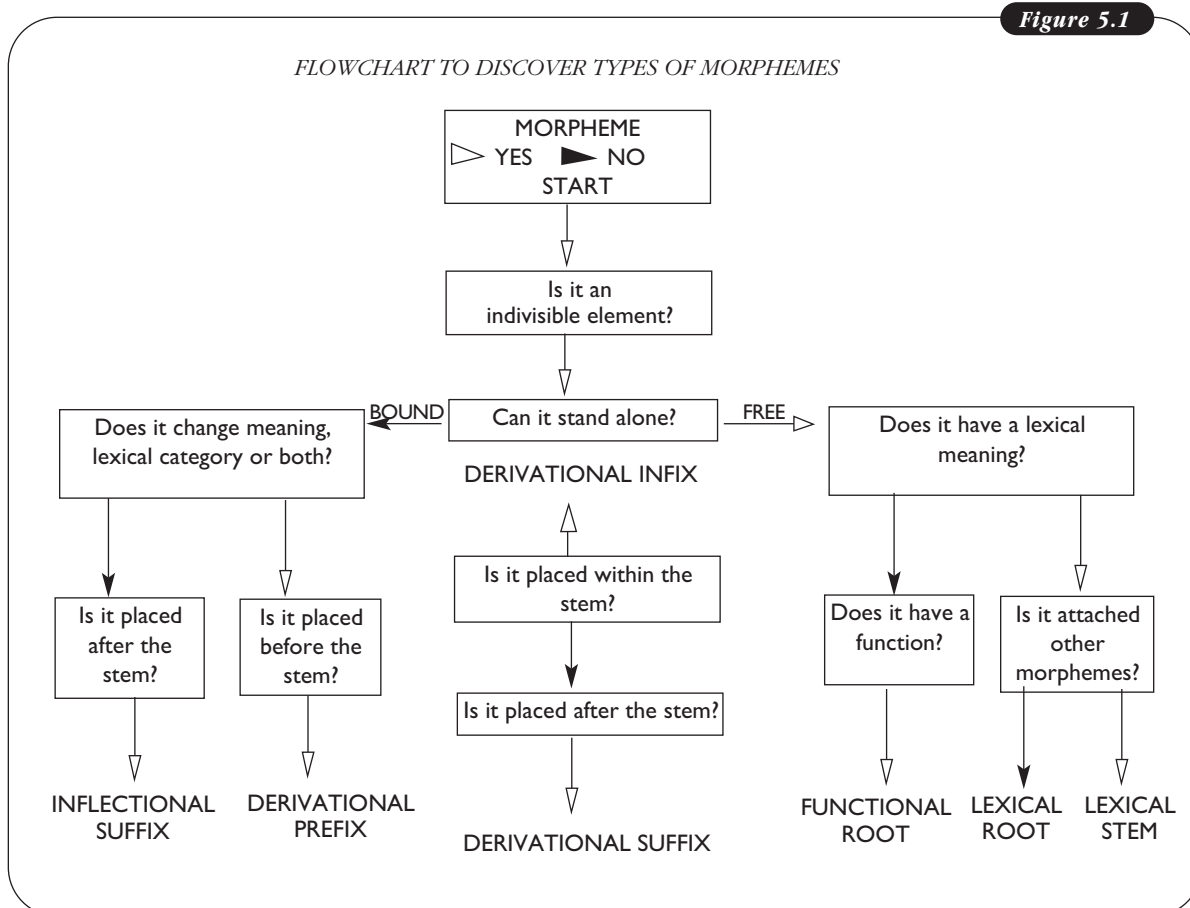
(5) *Bu sınıf öğrenci hep öğretmen kız.

The words in (5) are meaningful alright, but can you understand the message? Evidently, without grammatical marking, it is really difficult to establish the relationships between the words in a sentence. Which of the three nouns in (5) is the subject, and how are the other nouns and the verb related to it? Compare (5) with *Bu sınıfta öğrenciler hep öğretmeni kızdırırlar*. We now modified the sentence to include grammatical inflection. The morphemes added did not create new words, but adapted the already existing ones so they function effectively in the sentence. Such morphemes that mark grammatical relations are called **inflectional morphemes**. They do not change the meaning, nor do they change the syntactic category of the stem. The plural marker *-lAr* in *öğrenciler*, for example, is a morpheme of this type. *Öğrenci* is still an *öğrenci*, and it still is a noun. It is not a new word that can be listed in the lexicon. *-DA* in *sınıfta* has a similar function. It does not change the meaning of the stem, but it establishes a spatial relationship between the relevant elements in a sentence. *-I* marks the direct object, *-(Dr)* sets the temporal structure of the event, and *-lAr* marks person agreement with the subject of the verb. So, number, case, tense, and agreement markers in Turkish are categorized as inflectional morphemes (see Unit 7 for more on this).

Let's now see how different characteristics can combine in a single morpheme. To do this, you are supposed to follow a path in the following chart by answering the questions asked in each box. Follow the white arrow if your answer is YES to a particular question, follow the black one if your answer is NO to it. Your final destination gives you the type of the morpheme you want to discover. For example, *-llk* in *insanlık* is an indivisible unit. That is, we cannot break it into smaller units. Every morpheme is supposed to be indivisible anyway. So, we have to follow the

white arrow. This takes us to the next question: Can it stand alone? The answer to this one is NO, so we follow the black arrow. This means that *-ilk* is a bound morpheme. It does not change the category of the stem because *insan* is a noun with or without *-ilk*. But it changes the meaning of the stem. *Insan* 'human' refers to a human being, but *insanlik* 'humanity' is an abstract noun that refers to the condition of being a human being or the recognition of this status. Finally, it is placed after the stem, so it is a DERIVATIONAL SUFFIX. It is derivational because it changes the meaning of the stem. It is a suffix because it is a bound morpheme and it is placed after the stem. You can do the same to discover the type of any morpheme you need to analyze and identify.

Figure 5.1



Another test to distinguish whether a morpheme is derivational or inflectional is to consider the use of the infinitive marker *-mak*. The claim is that whatever precedes the infinitive suffix *-mak* should be considered as the stem, and therefore anything in it as derivational. What follows that stem is claimed to be inflectional. To illustrate: for *koşuş-tur-du*, the infinitive form is *koşuş-tur-mak*. What precedes *-mak* is *koşuş-tur*, so suffixes in it should be derivational. Another piece of evidence for their derivational nature is that they are not used productively. That is, unlike the obligatory inflectional categories such as *tense* and *person*, these voice morphemes are optionally marked on verbal stems. Therefore, they are considered to be more like derivational than inflectional.

It is your turn!

3



- I. Identify the inflectional and derivational morphemes in *sıraladık* and *saygısızları*
 II. List two other words which contain each morpheme represented below.

-DAŞ *anlamdaş, yaştaş, meslektaş*

-Im *bölüm, onarım, katılım*

-CA *çocukça, insanca, düşmanca*

- a. Write down the meaning of each morpheme.
 b. What is the syntactic category (noun, adjective, adverb, etc.) of the stem and what is the category of the resulting word?
 III. Identify the derivational morpheme/s in the following and write down the function of each.

<i>kitaplık</i>	<i>casusluk</i>	<i>terliklik</i>	<i>bayramlık</i>
<i>insanlık</i>	<i>bediyelik</i>	<i>kadınlık</i>	<i>kalemlik</i>
<i>dolmalık</i>	<i>ayakkabılık</i>	<i>yorgunluk</i>	<i>pislik</i>
<i>iyilik</i>	<i>uzaklık</i>	<i>kışlık</i>	<i>çocukluk</i>

ORGANIZING PRINCIPLES OF TURKISH MORPHOLOGY

Morpheme Ordering

Turkish is an agglutinative language which has a vast array of morphemes with different functions and clear-cut boundaries when combined with each other. Rich combinations of new meanings are possible by expanding stems as in (a) *kalınlaştırılmamışlardanmışmış*. However, caution must be taken that there are some restrictions on the way these morphemes are put together. If they are not used in the right order, either ungrammatical forms such as (b) **kalıntırlaş*, or forms with different meanings such as (c) *kalınlaştırılmamıştanmışmışlar* may be produced. This is because the order of morphemes in a sentence is fixed and each morpheme is used in the position specified for it. The causative *-Dir* is always used after *-IAş* yielding (b) ungrammatical. Person marker is always used in the final position. So (c) is understood as having a plural subject, but (a) as having a plural object.

One reason for a preference for one particular order over the other is the tendency in the languages of the world to use derivational morphemes before inflectional morphemes (Greenberg, 1966: 93). This reflects the conceptual distance between the two elements. Since derivation is a morphological process of lexical innovation, derivational morphemes are semantically closer to the stem words. Therefore, relevant members tend to be used adjacently. This is the reason why the first *-Im* in *kes-im-im* is understood as a derivational morpheme and the second one as a person marker. Compare what happens when conceptually closer members are pushed apart from each other by inserting another inflectional morpheme between them: **kes-ler-im* vs *kes-im-ler*. Clearly, inflection follows derivation⁵ as derivational morphemes are more firmly attached than inflectional ones (Sapir, 1921: 127). But what if more than one inflectional morpheme are used in a word? Do they combine in a predictable order too? Consider the inflections on the following noun.

- (6) a. kitap
 b. kitap-lık
 c. kitap-lık-lar
 d. kitap-lık-lar-ım
 e. kitap-lık-lar-ım-da

In (6), as we already hinted, the derivational morpheme *-lık* is used immediately after the stem leaving the inflectional morphemes *-lar*, *-DA*, and *-(D)ım* to the right of it. However, if all occur simultaneously in one word as in (6e) plural marking comes before person, and the case marker *-DA* is placed in the final position. In verbal inflections, too, a predictable order is followed as shown below.

- (7) a. boya-dı-m c. boya-t-tı-m
 b. boya-ma-dı-m d. boya-t-ma-dı-m

Examples in (7) show that person marker on the verb is always placed in the final position. Morphemes marking voice such as the causative *-t* in (7c, d) precede tense markers. Negation precedes tense and person markers as in (7b, d). So the permissible order is: causative+negation+tense+person.

Explain the ungrammaticality of the following.

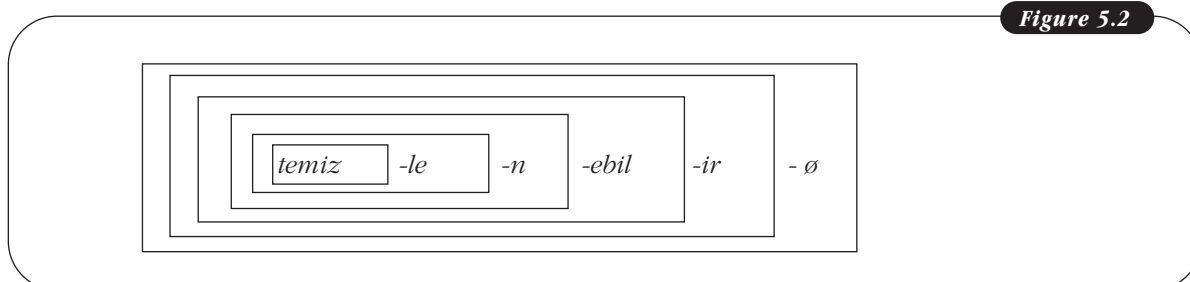
- a. *sevgilersiz
 b. *sevgiliksiz
 c. *evdelerim



It is your turn!

4

It is important to note that the function of a particular morpheme is not relevant to only the immediately preceding morpheme. It applies to the entire derived form to the left of it. For example, The negative morpheme *-ma* in *boyatmadım* negates the meaning of *boyat-* not *t-* or *boya-* distinctly. That is, what inhabits the scope of *-ma* is the entire form to the left of it, not an individual component morpheme of the preceding word. Similarly, in a word like *temizlenebilir*, *-(y)Abil* is relevant to *temizlen*, not only to *-(A)n*; *-(D)r* applies to *temizlenebil*, not only to *-(y) Abil*, and the zero (\emptyset) person implies a third person singular subject for *temizlenebilir*. So, in general, we can say that each suffix takes the preceding stem as the scope of its semantic and syntactic material. This type of relationship can be shown as follows:



The above diagram illustrates that outer layers of words are formed by inflectional morphemes. Inner layers, on the other hand, are formed by derivational morphemes. As a result, the relative order of suffixes can reflect semantic differences since “each added element determines the form of the whole anew.” (Sapir, 1921:127): *simitçilik* vs *simitlikçi*, *doktorlardır* vs *doktordurlar*.

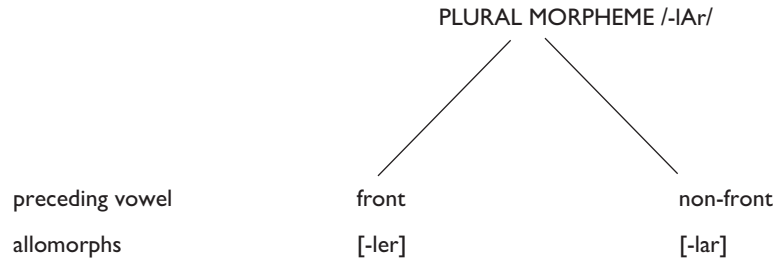
Allomorphy

Just as the phoneme, the abstract unit in phonology, the morpheme is an instance of abstraction in morphology. Thus, the notation, say, *-lar* which is used to represent the plural morpheme in Turkish, is an abstract symbol. The sounds subject to change on the surface structure of a morpheme are customarily capitalized to mark their underlying abstract status. Their actual surface phonetic realizations are specified based on the phonological environment in which the morpheme occurs. Conditioned by its phonological surrounding, two variations are possible for the plural morpheme as shown in (8a) and (8b):

- (8) a. [ler] ev-ler, iş-ler, kütük-ler, söz-ler
 b. [lar] okul-lar, sınıf-lar, kutu-lar, toz-lar

The choice between /e/ and /a/ is determined by the preceding stem vowel. In (8a) all the preceding stem vowels are front; whereas, in (8b) they are non-front. The morpheme manifests itself as *-ler* after the front vowels, but as *-lar* after the non-front. Even though they are two different phonetic representations, they represent the same morpheme and serve the same grammatical function of indicating plurality. Therefore, they are characterized as the variations of the same morpheme which are called **allomorphs**. This means that every morpheme has predictable allomorphs which are in complementary distribution. The position where one allomorph occurs disallows the occurrence of the other counterpart. Thus, *-ler* and *-lar* are in **complementary distribution** in that they cannot appear in the same phonological environment. They mutually exclude each other when certain conditions occur. Compare **evlar*, **işlar*, **kütüklar*, **sözlar* where *-lar* is disallowed; and **okuller*, **sınıfler*, **kutuler*, **otoler* where *-ler* is disallowed. This definition is schematized in Figure 5.3.

Figure 5.3



Other patterns of distribution for some productive allomorphs in Turkish are listed below.

The Morpheme Marking Reported Past *-miş*

The morpheme marking reported past applies to verbs and it has four allomorphs. Conditioned by the rounding harmony, the high suffix vowel /ɨ/ in *-miş* agrees with the stem vowel in backness and rounding. This yields four variations: [-miş], [-miş], [-muş], and [-müş].

- | | |
|-------|------------------|
| [miş] | al-mış, siz-mış |
| [miş] | sil-miş, sez-miş |
| [muş] | uyu-muş, soy-muş |
| [müş] | gör-müş, gül-müş |

The Morpheme Marking Definite Past **/-DI/**

The past tense morpheme applies to verbs, and it has eight allomorphs determined by the preceding stem vowel and consonant. The high suffix vowel and the stem are supposed to share the specification for both backness and rounding. In addition, stem consonants and suffix consonants should share the same voicing feature: /d/ is selected after the voiced consonants and /t/ after the voiceless.

[dɪ]	kal-dɪ, kız-dɪ	[tɪ]	sars-tɪ, kırıt-tɪ
[di]	gel-di, giy-di	[ti]	kes-ti, it-ti
[du]	uyu-du, soy-du	[tu]	tut-tu, kop-tu
[d̥ü]	öv-dü, yürü-dü	[t̥ü]	öt-tü, ürk-tü

The Agentive Morpheme **/-CI/**

The agentive morpheme is applied to nouns to form other nouns which mean 'one who makes or sells NOUN'. It has eight allomorphs. Consonant harmony in voicing, and rounding harmony in both backness and rounding derive eight variations.

[cɪ]	kolonya-cɪ	[çɪ]	bıçak-çɪ
[ci]	kilim-ci	[çi]	saat-çi
[cu]	baston-cu	[çu]	koltuk-çu
[c̥ü]	örgü-cü	[ç̥ü]	küp-çü

First Person Agreement Marker **/-(y)Im/**

This morpheme marks the subject of the sentence on predicative nouns and adjectives. It has four allomorphs conditioned by the rounding harmony. The buffer -y is inserted when the stem ends in a vowel.

[ɪm]	uzman-ɪm	[um]	doktor-um
[y-ɪm]	şarkıcı-y-ɪm	[y-um]	futbolcu-y-um
[im]	öğretmen-im	[üm]	özgür-üm
[y-im]	çiftçi-y-im	[y-üm]	sözcü-y-üm

Note that one important feature of the word structure in Turkish is that stems remain invariant when expanded by derivation or inflection. It is always the suffixes that undergo a phonological change. There are few exceptions to this generalization, though: *ben* vs *bana*, *sen* vs *sana*.

Identify each bound morpheme and its meaning in the following. Specify allomorphs if any.

<i>eşele</i>	<i>kesele</i>	<i>çekele</i>	<i>yarala</i>
<i>itele</i>	<i>gecele</i>	<i>ovala</i>	<i>parala</i>
<i>çitele</i>	<i>hecele</i>	<i>deşele</i>	<i>karala</i>



Summary

1. What is morphology?

Morphology is a sub-branch of linguistics. It is interested in providing a proper definition of a word by trying to understand how simple, complex, and novel words are formed. A study of morphology includes an analysis of words into their meaningful components, the rules of composing and expanding words from meaningful elements, and the functions of words in sentences. Morphology is also interested in means of expanding the vocabulary of a language.

2. What is a morpheme?

Morphemes are the building blocks of words. A morpheme is the smallest indivisible unit in a word which has either a meaning or a function. Morphemes are usually mistaken for syllables which may or may not be compatible with them.

3. How are morphemes classified?

Morpheme Types	DERIVATIONAL		INFLECTIONAL	FREE
	Bound	Bound (prefix-infix-suffix)	Bound (suffix)	
	class and/or meaning changing affixes e.g. -llk, -sAl, -Cl		X	nouns, verbs, adjectives, adverbs
	X		suffixes marking grammatical relationships e.g. -lAr, -DI, -mlş	postpositions, pronouns, determiners, conjunctions, etc.
CONTENT MORPHEME				
FUNCTIONAL MORPHEME				

4. How are words structured in Turkish?

The most important designing feature of a word is the fact that the parts of a word combine in a predictable order. Inflectional morphemes are always used in the word final position. This means that derivational suffixes precede inflectional suffixes. However, there may be cases in which more than one inflectional and/or derivational suffix can be used in a given word. Then, there is a predictable order among these too. A switch in the order of these morphemes yields ungrammatical forms or forms with different meanings/functions.

5. What is an allomorph?

An allomorph is a variation of a morpheme. A morpheme is an abstract symbol whose real phonetic shape may change depending on the phonological environment in which it occurs. Each of these various forms of the same morpheme is called an allomorph of it. Even though allomorphs have different phonetic shapes, they share the same meaning and function. However, they do not share the same distribution. Where one occurs, the other does not. Therefore, allomorphs are said to be in complementary distribution.

Self-test

- Which one of the following has two morphemes?
 - kafan
 - vatan
 - zindan
 - tavan
 - sazan
- llk* is not a morpheme in:
 - kitaplık
 - kıtlık
 - tuzluk
 - analık
 - balık
- Which one of the following has an inflectional morpheme?
 - karar
 - asar
 - çeper
 - semer
 - beşer
- Which one of the following has a derivational morpheme?
 - kesim
 - benim
 - isim
 - kilim
 - lime lime
- What does the following indicate about the morpheme *-ki*?

<i>benimki</i>	<i>onunki</i>	<i>sonki</i>
<i>okuldaki</i>	<i>bendeki</i>	<i>gülünki</i>

 - It is an inflectional morpheme.
 - It is a free morpheme.
 - It does not have an allomorph.
 - It is a verbal suffix.
 - It is a lexical morpheme.
- Which one of the following is ungrammatical because a derivational morpheme follows an inflectional morpheme?
 - *evlercil
 - *evdem
 - *söylediristik
 - *keslikim
 - *gellerdi
- Which one of the following displays a similar violation to the one in **evimlerde*?
 - *yaşamdıklar
 - *yaşamyan
 - *yaşamımlar
 - *dağllarım
 - *arabalar maralarba
- How do you characterize *-geç* and *-kaç* in the following?

<i>yüzgeç</i>	<i>kıskaç</i>
<i>yüzgeci</i>	<i>kıskaçı</i>

 - They are inflectional morphemes.
 - They are two allomorphs of *-geç*.
 - They are two allomorphs of *-KAC*.
 - They are two derivational morphemes with different meanings.
 - They are two inflectional morphemes in complementary distribution.
- Which one of the following shows a different function of *-CI*?
 - sütçü
 - sucu
 - yağcı
 - demirci
 - Atatürkçü
- What is the second person singular morpheme in the following data?

<i>geldin</i>	<i>süzdün</i>	<i>kıldın</i>	<i>sövdün</i>
<i>kaldın</i>	<i>uyudun</i>	<i>sildin</i>	<i>kovdun</i>

 - dIn
 - Un
 - n
 - DIn
 - un

Turkish Alive

Read the following article written by Salah Birsal, and then analyze the morphology of the underlined words in the text, i.e. the number of morphemes, their inflectional and derivational nature, the order of morphemes, etc. You might want to refer to a reliable Turkish dictionary to do this task.

“

“Doğru Düşünce İplikleri

Dostumu tanımazsınız.

Ama, dilinden düşürmediği fıkrayı bilirsiniz sanırım.

İsterseniz bir de benden dinleyin:

“Bir gemi batmak üzeredir. Daha doğrusu, geminin teknesi denize gömülmüş de, suyun yüzünde sadece mizan direği kalmış. O da battı, batacak. Direğe sığınmış iki kişiden biri, arkadaşına sorar: “Sen yüzme bilir misin?” Ötekinin verdiği karşılık şu: “Neye sordun?”

Bu, ölüm karşısında bile düşünce çıkırgını işletmesini beceremeyen bir insanın acıklı konuşmasıdır. Dostum bu fıkrayı hem anlatır, hem de katıla katıla güler.

İnsanlar bu türlü öykülerden, nedense cokça hoşlanırlar. Hoşlanırlar ya, sırası gelince, çene kavaflığını, sağa sola koşuşmayı, düşünmekten yeğ tutarlar. Gerçi sonunda, ussuz başlarının cezasını ayakları çekmez değil. Ama gene de, bir sorunun nedenine inmeyi, bir işe yönelmeden önce, işin enini boyunu arşına vurmaya istemezler. Zorlarına gider bu. Konfıçyüs “Eyleme geçmeden, iki kez düşünmek yeter” demiş. İnsanların işlerine bakın, onlarda, uzun boylu düşünüldükten sonra ortaya konmuş iş niteliği şöyle dursun, herhangi bir düşünce belirtisine bile güç raslarsınız.

Hoş, bir düşünce üzerinde, alabildiğine derinleşen, onun önünü, arkasını, yanlarını yoklayan bir insanın, kimi zaman eyleme geçememek, boyuna düşünce alanında kalmak tehlikesiyle karşılaştığı da olur. Nedir, boyuna düşünüp az iş çıkaran, ya da bütün bütüne pırsan kişi, yapacağı şeyi, söyleyeceği sözü tartmadan gerçekleştiren kişiden daha saygıdeğerdir.

Düşünmek kolay değildir.

Düşünmek için geniş ve boş zaman gerekir.

Daha önemlisi, insanın doğru düşünme gücü ve kurallarına varabilmesidir. Ne var ki, düşünme gücü, düşünme kuralları üzerinde insanların anlayışları birbirini tutmadığı gibi, bunlara erişmek te, birtakım rüzgarları gerektirmektedir.

Voltaire, Fransız Ansiklopedisi yazarlarından D’Alembert’e yazdığı bir mektupta şöyle diyor:

“Düşünce sözcüğüne geldiğiniz vakit, -ansiklopedide-doktorların çocuk doğurtmayı bilmedikleri gibi, düşünmenin de üstesinden gelemediklerini belirtmeye çalışmalısınız.”

Burada Voltaire, doktorlara zekat keçisi gözüyle bakmaya pek düşkün olan Moliere’in tutumunu sürdürmekten başka bir şey yapmıyor. Ama bu sözün gerisinde, doğru düşünme gücüne erişen kişilerin ne kadar az olduğu gerçeği de saklıdır.

Peki doğru düşünce nedir?

Bir başka deyişle, doğru düşünmenin kuralları nelerdir? Buna, ilk ağızda, “nesnesine uyan düşüncenin doğru düşünce olacağı” karşılığı verilebilir.

Gelgelelim, bu kez de karşımıza “Bir düşünce, nesnesine nasıl uyar?” sorusu çıkacaktır. Buna verilecek cevap ise bizi yeni sorularla karşılaşırca, konuyu çözümlenmeye değil, sadece çevresini çizmeye, ya da genişletmeye götürecektir.

Görülüyor ki, doğru düşünce kuralları, güzellik gibi, sağduyu gibi elle tutulmaz, gözle görülmez şeyler örneğince, hemencecik açıklanabilecek bir öz taşıyor. Açıklanamayacak şeyleri açıklamakta büyük bir ustalık (buna hokkabazlık da diyebiliriz) gösteren Carnegie’nin bile, buna bir çözüm biçimi bulabileceğini sanmıyorum. Hem, iş bununla da bitmiyor.

Doğru düşünce iplikleri ele geçirilse de, bu düşünmeyi gerçekleştirecek boş zaman, yirminci yüzyıl insanlarının çok güçlükle ulaşabildikleri bir mutluluktur.

Yirminci yüzyıl insanları, işlerini, eğlencelerini, sevgi ve kinlerini, öylesine girintili çıkıntılı bir dişliye kaptırıyorlar ki, kendilerini, hiç mi hiç, ondan kurtaramıyorlar.

Sinema, televizyon, dans, futbol maçı, sanat, bilim ve teknik adını taşıyan alacalı bulacalı üfürükçü musluklarından, bir takım bayıltıcı gül yağları akıtan bu dişli, insanların zaman zaman çanaklarını doldurmaya yarıyor.

Denilebilir ki, şimdilerin insanı, zamanını boş geçirmeme sırtması içinde, şaşkınlıktan şaşkınlığa sürüklenmektedir. Oysa, Amerikan düşünürü John Dewey bir yana, daha ilk çağda, Eflatun, bu boş zamanın gerekliliğine parmak basmıştı.

Dostumun anlattığı fıkraya, dostumun kendisi de gülebilir, başkaları da. Buna bir şey diyemem.

Benim gördüğüm, sağa saldırsalar da, sola saldırsalar da, kişiöğullarının doğru düşünce ipliklerini bir türlü ele geçiremedikleridir. Ama fıkralarının, yakıştırmalarının çoğu, doğru düşünmeyi beceremeyen insanlarla alay etmeye dayanıyor.”

”

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End Notes

- Capital letters which are used in suffixes represent the abstract symbols of the sounds in these morphemes. The real phonetic specification of these abstract symbols are subject to vowel and consonant harmony rules in Turkish. Therefore -*E/-A* of the morpheme *-lan* signals a two-way vowel harmony offering a choice between /e/as in *evlen* or /a/as in *yaşlan* depending on the phonological environment. Similarly, *-I* signals a four-way vowel harmony among /ı/, /i/, /u/ and /ü/ (see Unit 4, Vowel Harmony). Consonants follow a similar pattern. *-D*, for example, can be realized as either /t/ or /d/; *-K* as either /k/ or /g/ and so on (see Unit 4, Voicing Assimilation).
- It should also be noted that every instance of a form does not necessarily claim to be a morpheme. For example, /a/ in *ad*, *sat* and *oda* is not even a morpheme.
- Ungrammaticality will be marked with (*) henceforth.
- A symbol in paranthesis means that it is used conditionally. For example, *-y-* appears in the environment of a preceding vowel: *temizle-y-ici* but *sür-ücü*.
- One exception to this is *-ki* as in *evdekiler*.

Key to “It is your turn!”

It is your turn! 1

	syllable structure	morpheme structure
overlap in boundaries	süt-çü ev-den ev-ler-den	süt-çü ev-den ev-ler-den
no overlap in boundaries	si-mit-çi ev-le-re ev-le-ri-me	simit-çi ev-ler-e ev-ler-im-e

It is your turn! 2

a. bol-ar : *-ar* (derivational morpheme deriving verbs from adjectives)

b. bol-ar-t : *-ar+t* (a+derivational morpheme deriving verbs from verbs)

c. bol-ar-t-tı : *-ar+t+tı+ø* (a+b+inflectional morphemes: tense&3rd person singular)

d. bol-ar-t-tı-k : *-ar+t+tı+k* (a+b+c inflectional morphemes: tense&1st person plural)

bol is the free morpheme in all.

It is your turn! 3

I. sıra-la-dı-k : *-la* derivational making verbs from nouns, *-dı* inflectional marking past time, *-k* inflectional marking 1st person singular

say-gı-sız-lar-ı : *-gı* derivational making nouns from verbs, *-sız* derivational making adjectives from nouns, *-lar* inflectional marking plural number, *-ı* inflectional marking the direct object

II. *yandaş, yurttaş / kesim, yarım / dostça, kadınca*

a. *-DAş* is a derivational morpheme which means ‘one the same as STEM’. So *anlamdaş* means one that has the same meaning, *yaştaş* means one who is at the same age, *meslektaş* means one who has the same job. *-Im* is a derivational morpheme which means ‘the name of the action described by STEM’. *Alım* is the name of the act of buying, *anlatım* and *üretim* are those of telling and producing respectively. *-CA* is a derivational morpheme which means ‘STEMish or STEMly’. So *çocukça* means childish, *insanca* means humanly, and *düşmanca* means unfriendly/bosile.

b. *-DAş* makes nouns from nouns, *-Im* makes nouns from verbs, and *-CA* makes adjectives or adverbs from nouns.

III. The derivational morpheme in the given examples is *-Ilk*. It has got four meanings as represented by the four groups of examples in the data. *-Ilk* makes:

- abstract nouns from nouns: insanlık, casusluk, kadınlık, çocukluk
- abstract nouns from adjectives: uzaklık, yorgunluk, iyilik, pislik
- nouns with narrowed down domains: kışlık, bayramlık, dolmalık, hediyelik
- nouns meaning ‘STEMcase’: kitaplık, ayakkabılık, terliklik, kalemlik

It is your turn! 4

Derivational morphemes almost always precede inflectional morphemes in Turkish. Therefore, (a) is ungrammatical unless the order is changed into *sevgisizler* to put the derivational morpheme *-sız* before the inflectional *-lar*. In (b), the two derivational morphemes *-sız* and *-ilk* are switched. The one that is relevant to the meaning of the root is supposed to be used closer to it. *-sız* is used to negate the meaning of *sevgi*, not the meaning of *sevgilik*. In (c), *-ler* seems to be used as a person agreement marker which is supposed to be used in the final position. When we put *-ler* in the final position, we get *evdeler*, but it is still not acceptable since possessive is supposed to precede case markers. *Evideler* is the correct order.

It is your turn! 5

a. There are two allomorphs attached to the stems in this problem set: *-AlA* and *-lA*. The former is a derivational morpheme which applies to verbs adding the meaning of *iterativity*. The meaning changes from ‘to VERB’ to ‘to VERB iteratively/repeatedly’.

<i>eşmek</i>	‘to dig’	<i>eşlemek</i>	‘to dig repeatedly’
<i>çekmek</i>	‘to pull’	<i>çeklemek</i>	‘to pull repeatedly’
<i>çitmek</i>	‘to seed’	<i>çitlemek</i>	‘to seed repeatedly’
<i>itmek</i>	‘to push’	<i>itelemek</i>	‘to push repeatedly’
<i>ovmak</i>	‘to scrub’	<i>ovalamak</i>	‘to scrub repeatedly’
<i>deşmek</i>	‘to dig’	<i>deşlemek</i>	‘to dig repeatedly’

Evidently, the morpheme /-ALA/ has two allomorphs, [ele] and [-ala], which are in complementary distribution. The former appears in the environment of front vowels, the latter in the environment of back vowels.

The second morpheme in this problem set is -I(A). It is a derivational morpheme which is added to nouns to form verbs meaning 'to NOUN'.

<i>gece</i>	'night'	<i>gecelemek</i>	'to stay overnight'
<i>kese</i>	'body scrub'	<i>keselemek</i>	'to scrub (body)'
<i>hece</i>	'syllable'	<i>hecelemek</i>	'to spell'
<i>kara</i>	'black'	<i>karalamak</i>	'to doodle/to slander'
<i>yara</i>	'wound'	<i>yaralamak</i>	'to wound'
<i>para</i>	'money'	<i>paralamak</i>	'to give money'

As can be seen above, the stem vowels and the suffix vowels agree in backness; therefore /-IA/ has two allomorphs: [-le] after front vowels and [-la] following back vowels.

6

Aims

In this unit we will try to seek answers to the following questions:

- What is derivation?
- What is compounding?
- What is onomatopoeia?
- What is conversion?
- What is borrowing?
- What is coinage?
- What is semantic change?
- What is metaphorical extension?
- What is clipping?
- What is blending?
- What is an acronym?
- What is backformation?
- What is a multiple process?

Key Words

- derivation
- compounding
- onomatopoeia
- conversion
- borrowing
- coinage
- semantic change
- metaphorical extension
- clipping
- blending
- acronyms
- backformation
- multiple process

Contents

Turkish Phonology
and
Morphology
(Türkçe Ses ve Biçim Bilgisi)

Word-Formation
Processes

- INTRODUCTION
- WORD FORMATION
PROCESSES

Word-Formation Processes

INTRODUCTION

During the Selçuklu and Ottoman times in Anatolia, it was considered utterly important to maintain a high standard in craftsmanship. Therefore, as a quality control mechanism, inspectors called *yığıtbaşı* would be appointed by the Ahi Organization (Chamber of Tradesmen) to report the administration malpractice in their district. In addition to being charged depending on the nature of the crime, the guilty would also be subject to large publicity. For example, when charged for fraud, the shoes of a shoe-maker would conventionally be thrown out by the inspecting team on the roof of his shop, and be left there to decay. Whoever saw the shoes on the roof would know that the owner was involved in dishonest conduct. This folk story inspired a new expression *papucu dama atılmak* which since then has been used to refer to someone who has lost prestige (Korkmaz, 1995: 292).

Change, like with everything else, is inevitable in language as well. Turkish spoken in İstanbul today is strikingly different from Turkish spoken five centuries ago. Numbers of new words have been formed by productive word formation processes and added to the word stock of the language while some unproductive ones had dropped out. This chapter is devoted to describing such means of lexical innovation employed in Turkish

In Unit 5, we discussed how words are structured in Turkish. In doing so, we focused on the already existing words and defined the form of these words. But there are also new derivations, new combinations of words, and novel words that are constantly added to the lexicon. For example, the expression in our story *papucu dama atılmak* was new at the time it was created. Similarly, words such as *bilgisayar*, *iletişim*, *gökdelen*, *telefon* are novel as they did not even exist in the century *papucu dama atılmak* was created. Science and technology is constantly changing our understanding of reality. Therefore, we are in constant need of finding new words to pair with these new meanings. Do you remember the property of duality in language? There are two layers of linguistic organization: sound and meaning. When a new meaning emerges, a new sound sequence is necessary to represent this meaning. For example, when the computer was brought into our culture as a new dimension in our lives, we felt that we had a new-born baby to name, so we called it *bilgisayar*. But how do we create new words? Change in language can be of two type: evolution and revolution. Evolution is a

slow process that allows self-change through which novel lexical items can be added to or unproductive ones are dropped out of the lexicon. On the other hand, revolution is a more sudden process the result of which includes a set of reforms changing language systematically. No matter how they appear, such changes provide linguists a useful source displaying the means applied to create new words, or more technically neologisms, in a language.

WORD-FORMATION PROCESSES

Emelce is the title of one of the albums of the famous Turkish pop-singer Emel. Turkish speakers are certainly familiar with the word *Emel* as a proper name, and the morpheme *-CA* as a marker of manner as in *kabaca*, *erkekçe*, *kadınca*, *güzelce*, *sıkça*. However, the combination of *-CA* with a proper noun, except for cases such as *Türkçe*, *Yunanca* was new to them. Yet no one had difficulty in understanding this neologism. It is because language works systematically based on certain linguistic rules. The speakers of a language are sensitive to them; therefore, they always make generalizations based on these rules to create as well as, to understand, neologisms. Emel, and probably her team, must have made a generalization in analogy to the above given manner expressing examples to create the word *Emelce* to mean *Emel's way*, or *Emel's style*. Let's now explore more closely how this system works in word formation, and how the underlying regularity gives a language, as well as the users of that language, the ability to create new words.

Derivation

Turkish has a number of means to form new words, but due to its agglutinative morphology, derivation is one that is used most productively (Özel, 1977: 22). Quite rich instances of derivation in Turkish are listed by Aksan (1987: 27-30). As one example, he notes about 100 derivatives of the stem *sür-*: *sür*, *sürü*, *sürgü*, *sürgülü*, *sürgüsüz*, *sürgüle-*, *sürgülen-*, *sürgület-*, *sürgülettir-*, *sürgüleme-*, *sürgüleyiş-*, *sürgün*, *sürgünlük*, *sürme*, *sürmeli*, *sürmesiz*, *sürmelik*, *sürmecî*, *sürmecilik*, *sürmelemek*, *sürmedan*, *sürücü*, *sürücülü*, *sürücüsüz*, *sürücülük*, *süre*, *sürekli*, *süreksiz*, *süreklilik*, *süreksizlik*, *sürüm*, *sürümlü*, *sürümsüz*, *sürümsüzlük*, *sürüm sürüm*, *süre*, *sürelî*, *süresiz*, *süreğen*, *süreğenleş-*, *süreölçer*, *süreaşımı*, *süreyazar*, *sürerlik*, *süreç*, *sürdür-*, *sürdürme-*, *sürdürüm-*, *sürdürüş*, *sürdürt-*, *sürdürül-*, *sürdürülme*, *sürt*, *sürtük*, *sürtüklük*, *sürtme*, *sürtüş-*, *sürtüşme*, *sürtün-*, *sürtünme*, *sürtünüş*, *sürtüştür-*, *sürtüştürme*, *sürttür*, *sürttürme*, *sürü*, *sürüme*, *sürüyüş*, *sürüt-*, *sürütme*, *sürütül-*, *sürüttür-*, *sürüttürül-*, *sürç*, *sürçme*, *sürçtür-*, *sürçtürme*, *sürükle-*, *sürükleme*, *sürükleyici*, *sürüklen-*, *sürüklenme*, *sürüklet-*, *sürükletme*, *sürükletil-*, *sürükletilme*, *sürül-*, *sürülme*, *sürün-*, *sürünme*, *sürünceme*, *sürünge*, *süründür-*, *süründürme*, *süründürül-*, *süründürülme*, *sürüş*, *sürüştür-*, *sürüştürülme*.

As shown above, as well as in Unit 5, words having new meanings can be formed by adding derivational affixes to the stem. To expand the examples given in the previous chapter, we will re-list the four possibilities of derivation in Table 6.1. Recall that *denominal nominal* stems include nouns formed from nouns, and *deverbal nominal* stems include nouns formed from verbs. Similarly, *denominal verbal* stems include verbs formed from nouns, and *deverbal verbal* stems include verbs made from verbs. Some more examples are:

derived stem	examples	derivational morphemes
denominal nominal	yurttaş, özdeş, emektaş, sesteş aday, yüzey	-DAş -Ay
deverbal nominal	dalga, bilge, bileşke algı, sezgi, sürgü, tutku	-GA -GI
denominal verbal	ada-, toza-, dile-, türe-	-A
deverbal verbal	gülümse-, anımsa- atış-, giriş-, benzeş-, dövüş-	-ImA -(I)ş

Table 6.1
Examples of
Derivation

Derivational affixes in Turkish are predominantly suffixes although a number of prefixes are possible in the words of foreign origin: *bilakis*, *bitaraf*, *hemfikir*, *lamekan*, *naboş* (examples from König, 2001: 74). The productivity of derivational suffixes may vary from very limited to quite extensive depending on the range of words they are used with. The most productive suffixes used to derive nouns and verbs in Turkish were listed by Özel (1977: 21) based on a study that included the frequency counts of the lexical entries derived by these suffixes in the fifth edition of the Turkish Dictionary. The results are shown in Table 6.2.

S	-mak	-lı	-lık	-cı	-la-	-sız	-ma	-ş	-ç	-gın	-an	-gan	-sal	-cık	-daş
N	3900	1700	1600	850	750	700	500	100	110	109	85	80	80	77	45

S = derivational suffixes N = number of lexical entries

Table 6.2
Productivity of
Sample Derivational
Suffixes

Despite the highly productive nature of suffixes, some may die out in time. For example, the suffix *-rAk* was used to derive comparative forms of adjectives in old Turkish, but no longer in standard Turkish. Instead of *aşağırak* we now say *daha aşağı*.

Can you find some words derived by the suffixes given in Table 6.2?



In their attempts to liberate Turkish from foreign elements, language reformists or the neologizers working with the Turkish Language Society revived some old derivational suffixes, or borrowed suffixes of Turkic origin to form pure Turkish words that are used productively today. Some example suffixes used to derive neologisms in this way are: *-mAn* which forms nouns of occupation such as *öğretmen*, *okutman*, *sayman*, *seçmen*, *yazman*; *-tay* which forms administrative terms such as *danışay*, *sayıştay*, *kurultay*, *yargıtay*; *-(A)v* and *-(A)y* which form nouns from verbs such as *görev*, *sınav*, *söylev* and *deney*, *dikey*, *olay* (Lewis, 1967: 221, 226); *-sAl* which forms adjectives such as *dinsel*, *örgütsel*, *kalıtsal*; and *-(D)nI* which forms nouns such as *ayrıntı* (Brendemoen, 1998: 243).

It may be interesting to note that languages do not tend to derive all logically possible words. For example, as the antonym of the adjective *yaşlı* the morphological tools of Turkish can derive a word like **yaşsız*, or an agentive noun from the verb *çalış-* as in **çalışıcı* in analogy to *sürücü* from *sür-*. However, derivation is blocked in these cases. The reason is that Turkish happens to have lexical items already filling the relevant semantic slots in the lexicon which the derivative would otherwise occupy. That is, when there are words like *genç* and *işçi*, the language did not necessitate the creation of additional neologisms to convey the same meaning.

Reduplication

Another means of word formation in Turkish is the process called **reduplication**. It involves copying some part of the underlying stem to various extent. One type is realized by repeating the leftmost syllable of the stem accompanied by the insertion of one of the consonants /p/, /m/, /s/, /r/. This is called **partial reduplication**. Some examples are *ipince* from *ince*, *sımsıkı* from *sıkı*, *masmavi* from *mavi*, and *tertemiz* from *temiz*. This formative process is applied to adjectives and adverbs in Turkish to create augmented meanings such as “increase in size” or “added intensity” in Sapir’s terms (1921: 78). So, contrasted meanings after reduplication in the above examples are *thin* vs *too thin*, *tight* vs *utterly tight*, *blue* vs *all blue*, and *clean* vs *utterly clean* respectively. The reduplicated leftmost portion serves as the modifier of the affected stem.

Augmented meanings can also be created by copying the entire stem yielding **full reduplication**. This process applies to all word classes except conjunctions and post positions (Demircan, 2001: 85): [*bızlı bızlı*] yürüdü (*adverb*), [*mavi mavi*] boncuklar (*adjective*), [*kapı kapı*] dolaştı (*noun*), [*sus sus*] sıra sana gelsin (*verb*), [*kim kim*] gittiniz (*pronoun*), [*Ah ah*]! (*interjection*). Unlike partial reduplication, full reduplication does not exhibit a modifier modified relationship. The words that are paired are of equal status, and they both modify the following form, not each other. Augmentation in these examples emphasizes **continuance** or **repetition** in verbs, **intensity** in modifiers and interjections, and **plurality** in varying degrees of intensity in nouns and pronouns.

Before we conclude our discussion on reduplication, some formal features of this word formation process can be emphasized.

It can be said that the duplicative process is of somewhat **grammatical** significance in Turkish. Manner adverbs are formed from adjectives by full reduplication. For example, *bızlı* in *bızlı tren* cannot be used as an adjective when duplicated: **bızlı bızlı tren*. Yet it is perfectly acceptable when used with a verb as an adverb: *bızlı bızlı yürüdü*. There are also frequency adverbs formed in this way: *zaman zaman*, *sık sık*.

Phonologically, reduplication in Turkish allows sound alternations to form rhyming pairs. One example is consonant alternation: s>f as in *sıkı fıkı*, k>s as in *kaba saba*, s>p as in *sus pus*¹. Another example is the internal vowel alternation <a-u> as in *çar çur*, *bart burt*, *zart zurt*. These words are called **mimetic words** since they are created by imitating the stem. Some mimetic words have matching counterparts including what is called **extenders**. For example, *fır fır*, *bar bar*, *zır zır* can be extended into *fırıl fırıl*, *barıl barıl*, *zırıl zırıl*. The extended forms mark semantically more intensive meanings and this difference is achieved only by adding the extender *-ıl*. There are some infixing extenders as well: *zingir zıngır*, *güldür güldür* which are claimed to be extended from *zır zır* and *gür gür* (Ido, 1999: 67-72).

Another productive phonological process produces forms which are called **doublets with /m/** (Lewis, 1967: 237). /m/ is added initially to the words with initial vowels: *arı mari*, or replaces the initial consonants in words with initial consonants: *sarı mari*. The new meaning added by this way is either that of *vagueness* or *of etcetera/and the like*. (Demircan, 2001: 87; Johanson, 1998: 50). Other examples include *televizyon melevizyon* (tevizyon and the like, televizyon

falan), *haber maber* (haber falan), *ders mers* (ders falan), *sarı marı* (sarı and the like or another color), *otur motur* (otur or do something similar), *hızlı mızlı* (hızlı or whatever), *veya meya* (veya or whatever), *onlar monlar* (onlar and whoever else).

What is the difference between the following sets of reduplication?

<i>gece mece</i>	<i>gece gündüz</i>	<i>eğri meğri</i>	<i>eğri büğrü</i>
<i>sarı marı</i>	<i>sarı sarı</i>	<i>yırtık mırtık</i>	<i>yırtık pırtık</i>
<i>eski meski</i>	<i>eski püskü</i>	<i>kırık mırık</i>	<i>kırık dökük</i>



It is your turn!

2

Semantically, reduplicated words display a number of varying relationships. Some of them are composed of synonymous words: *sorgu sual*, *kılık kıyafet*, *deli divane*, *ses seda*; some are composed of near synonyms: *delik deşik*, *ak pak*, *akıl fikir*, *ar namus*; and some of antonymous words: *ileri geri*, *er geç*, *iyi kötü*, *tath tatsız* (Hatiboğlu, 1971: 58-59).

Morphologically, reduplications may have a complex structure including inflectional or derivational suffixes as shown in bracketed examples: [*Yalana dolana*] *baş vurdu*, [*şeş dosta*] *ayıp olur*, [*çoluk çocuğa*] *rezil olduk*, [*yandan yandan*] *yürüdü*, [*eli yüzü*] *düzgün*, [*uslu uslu*] *oturduk*, [*parasız pulsuz*] *kaldık*, [*sırıtp sırıtp*] *durma*, [*bilmiş bilmiş*] *konusma*, [*düşe kalka*] *mezun olduk*, [*tanıdık bildik*] *yüzler* and so on. Even clauses can be reduplicated as in [*durdu durdu*] *turnayı gözünden vurdu*, [*sormuş sormuş*] *cevap alamamış*, *ava* [*gitse gitse*] *Osman gider*, etc.

What kind of meanings are expressed in the following reduplications?

- | | | |
|--------------------------|-------------------------|-------------------------|
| a. [Otel otel] dolaştık? | c. [güzel güzel] kızlar | e. [Dolaş dolaş] dur! |
| b. [Güzel güzel] kız | d. [güpgüzel] kız | f. [Sürüm sürüm] sürün! |



It is your turn!

3

Compounding

A genuinely Turkish means of creating new lexical items is realized by **compounding** two free morphemes from different or same word classes to express a single meaning. It allows rich combinations of embedded compounds as shown in (1).

- (1)
- el [dokuma]
 - el dokuma [halı]
 - el dokuma halı [tezgahı]
 - el dokuma halı tezgahı [atölyesi]
 - el dokuma halı tezgahı atölyesi [yönetici]si

The word class of the compound is always compatible with the word class of the right most member, as shown in brackets. Moreover, the meaning of the right most element is central to the meaning of the compound. Therefore, the direction of the modification is from the left to the right (Fabb, 2002: 70). For example, in the compounds given in (1), the right most elements are nouns, so the compounds are also characterized as noun (nominal) compounds.

In addition to nominal compounds, there are verbal and adjectival compounds, as well. Let's now examine each more closely.

Nominal Compounds

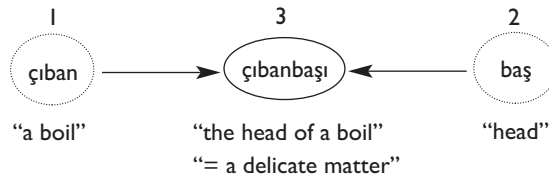
The first type of nominal compound is the one that allows NOUN NOUN pairings. The most common type is formed by a bare noun followed by another noun marked with the third person possessive morpheme: NOUN NOUN+3rd POSS. Some examples are *çocuk sandalyesi*, *fizik dersi*, *okul çantası*, *çalışma masası*. When preceded by *çocuk*, *sandalye* does not stand for any *sandalye*, but the kind that is designed for children. Likewise, *fizik dersi* is a kind of course, *okul çantası* is a kind of bag, and *çalışma masası* is a kind of table. Compounds formed by juxtaposing two bare nouns (NOUN NOUN) or one case marked and one bare noun (NOUN+CASE NOUN) yield similar meanings. Some examples of both types are given in (2a) and (2b) respectively.

- (2)
- a. taş bina ‘a kind of building’
demir köprü ‘a kind of bridge’
kadın polis ‘police-woman’
 - b. şekerden ev ‘a kind of house’
kağıttan uçak ‘a kind of toy plane’

The new meanings are fairly transparent in these compounds. That is, the meaning of the whole derive from the sum of its parts. Such compounds are called **endocentric compounds**. However, some are opaque in their meaning. Both components may lose their individual meanings when combined into a single lexical item. For example, *akbaba* is not a kind of *baba*, nor *hanımeli* is a kind of *el*. In their new forms, they gain meanings distinct from those of their components’ to describe a kind of bird and a kind of plant respectively. These are called **exocentric compounds** (Wardhaugh, 1995: 232). There may even appear abstractions in this way of compounding. Figure 6.1. is adapted from Aksan to illustrate the semantic content of the exocentric compound *çıbanbaşı* in which two concrete characterizations are fused to create an abstract concept.

Figure 6.1

(Aksan, 1998: 101)



It is your turn!

4

Find examples of neologisms including N+N+POSS and N N+POSS compounds.

Nominal compounds can also be formed by ADJECTIVE+NOUN combinations as in: *karaağaç*, *palabıyık*, *atlıkarınca*, *ilkokul*, *kırkayak*. Some neologisms of this type that have been added to the lexicon in the last ten years are *doğalgaz*, *toplulaşıma*, *ortadirek*, *kesin dönüş*, *bayalı ibracat*, *paralı askerlik*, *sırdaş besap* (examples from İmer, 1990: 77).

Though relatively less common, verbs are used to form new nouns: *yapboz*, *yap-işlet-devret*, *çekyat*, *gelgit*, so are clauses: *dedikodu*. Noun yielding frozen forms which consist of nouns followed by verbs (NOUN+VERB) are also possible. They are called *frozen forms* because of the high restrictions on their combinability possibilities: *imambayıldı*, but not **imambayılır* or **kadınbayıldı*; *külbastı*, but not **külbasmaz* or **tülbastı*. They cannot be analyzed, neither can they be used systematically and productively with other parallel forms. Therefore, they are considered to be frozen forms.

Which of the following is/are endocentric and which exocentric? Why?

devetabanı, atlıkarınca, ilköğretim, açığöz



It is your turn!

5

Verbal Compounds

A special case of verbal compound is called noun incorporation which involves compounding of a noun stem or an adjective and a verb. In this process, the nominal element of the verb and the verb itself fuse to form a semantically more complex verb (Bybee, 1985: 105). The ability of a noun to enter into incorporation depends on the relevancy of that noun to the verb. Bybee explains this by referring to Sapir's arguments claiming that activities and objects that are conjoined in experience are expressed by incorporation; whereas, "accidental" activities are expressed by verbs with independent nouns. For example, in *balık tutmak* and *kitap okumak* the incorporated nouns *balık* and *kitap* are considered to be a part of the verb. These nouns build up the meaning of the verbs *tutmak* and *okumak*: *balık tutmak* 'fish catching' as opposed to, say, *el tutmak* 'hand holding', and *kitap okumak* 'book reading' as opposed to, say, *mektup okumak* 'letter reading' or *dergi okumak* 'magazine reading'. These indicate general activities, so the nouns are generic in reference. Other examples include *gazete okumak*, *banyo yapmak*, *alay etmek*, *yemek yemek*, *pişman olmak* (examples from Kornfilt, 1997: 477, 478).

Noun incorporation may sometimes go beyond a simple compositional organization, and display a more idiomatic one (Gerds, 2002: 84). For example, *ateş püskürtmek* does not mean 'to blow out fire', but rather figuratively 'to be(come) furious'.

Find examples of neologisms added to the lexicon that are made up of NV compounds.



It is your turn!

6

Verbal compounds consisting of two verbs (V+V) are also possible. These are called *double-verb constructions* which are composed of a lexical verb and a postverb or a preverb forming a single unit (Csato, 2003: 105-109). They are of two types: subordinative and coordinative. Subordinative constructions can be made up of a converb of the lexical verb followed by a postverb as shown in Table 6.3.

Table 6.3
Examples of
Subordinative
Postverb
Constructions

lexical verb	converb of the lexical verb	post verb	compound
yap-	yapa-	dur-	yapadur-
yap-	yapıp-	dur-	yapıp dur-
öl-	ölüp-	git-	ölüp git-
gel-	geli-	ver-	geliver-

In these compounds, the first verb is subordinated to the second, and the second verb is the modifier of the first. The *dur- verbs* express lasting actions. The *git- verbs* express actions carried out to completion. The *ver- verbs* express actions done momentarily and easily.

Subordinative constructions can also be made up of a converb of a preverb followed by a lexical verb as shown in Table 6.4.

Table 6.4
Subordinative
Preverb
Constructions

preverb	converb of the preverb	lexical verb	compound
tut-	tutup-	sor-	tutup sor-

In these compounds too, the first verb is subordinated to the second. However, this time the preverb is the modifier of the lexical verb: *sormak* means 'to ask', but *tutup sormak* means 'to ask unexpectedly' (Csato, 2003: 107).

Coordinative constructions consist of elements of equal status. That is, no verb is subordinated to another. Some examples of the above given verbs used coordinatively are *ağladı durdu*, *unuttu gitti*, *tuttu sordu*.

Adjectival Compounds

One type of adjectival compound includes nouns with the third person singular possessive marking followed by an adjective as in *gözü pek*, *bahtı açık*, *alını açık*, *karnı tok*, *sırtı pek*. Another type includes bare adjectives followed by denominal adjectives as in *kısa boylu*, *orta harareetli*; or bare nouns followed by deverbal adjectives as in *vatansever*. Verb-adjective compounds as in *vurdumduymaz*, can also be used to derive new meanings.

Onomatopoeia

Sounds of the nature inspire creation of new words in all languages called **onomatopoeic** words. These words are imitative of natural sounds, so they reflect the meanings that they represent. Verbs, adjectives and adverbs can be created from the so called noises of the nature by several word formation processes such as affixation: *hırıldamak*, *cıvıldamak*, *şırıldamak*; compounding, *çıt kırıldım*, *şıp sevdi*; and reduplication: *hırıl hırıl*, *şırıl şırıl*, *cıvıl cıvıl*.

Conversion

As another tool of word formation, **conversion** allows a functional shift from one word class to another without any other addition or reduction in the word. Recall that derivational morphemes are used to change the word class of a free morpheme. Therefore, it can be thought that zero derivation marked with \emptyset is involved in this kind of word formation since the surface forms of the stem and the neologism are identical. Some examples of conversion found in Turkish can be listed as *acı-*

(verb) vs *acı* (adj), *ekşi-* (verb) vs *ekşi* (adj), *ağrı-* (verb) vs *ağrı* (noun). It seems that some adjectival/nominal stems are identical to semantically similar verbal stems. This may come as a surprise since adjectival and nominal stems are sharply distinguished from verbal stems in Turkish. However, it is argued that these words originally had a distinguishing morpheme *-İg* whose final sound dropped out later yielding identical words of different word classes: *acıg>acı*, *ekşig>ekşi*, *ağrig>ağrı* (Tietze, 2002: 86). Other examples of conversion can be formed by using nouns as adjectives: *pamuk*, *gümüş*, *kömür*; aorist third person singular verbs as nouns: *gelir*, *gider*, *okur*, *çıkır*, *tükenmez*, *çıkamaz* (Atalay, 1946: 135-137; Korkmaz, 1962: 55, 60).

Borrowing

Another way of adding new words to a language is **borrowing** words from other languages through which Turkish is largely expanded. Historically, Turkish borrowed many words from other languages, such as Arabic, Persian and French; but the attempts of language reformists liberated it from most of these foreign elements. Yet, a flood of new borrowings in the last decade, especially from English, could not be avoided. In this new era of globalization, many chain stores of foreign origin mushroomed in the Turkish market with their “attractive” western names. Their local competitors had to have at least names sounding like theirs, and all of a sudden the 40-50 year-old non-English speaking mothers, when communicating with their teenage children, had to deal with the trade names such as *Ice Boys*, *Mavi Jeans*, *Layla*, *Reyna*, *Levis*, *LC Waikiki*, *Club Mediterranean*. They also had to figure out whatever is meant by *French fries*, *fish and chips*, *cheese-cake*, *hamburger*, *fast food*, *piercing*, *tattoo* and so on. These are examples of borrowings that are kept intact. However, some borrowings display sound modifications: *radyo*, *tren*, *kek*, *kart*, *ataç*, *problem*, *otorite*, *fingir bol*. You may have noticed so far that all borrowed words in Turkish are accepted as nouns; therefore, they are allowed to enter into nominal inflections before they enter into verbal inflections: *fakslar*, *faksta*, *fakslı*, but not **faksıyorum*, **fakstım*, or **faksacağım*. Only after having been converted into a verb through noun-to-verb derivation, can a borrowed word accept verbal inflection (Haig, 2003: 62): *faks-la-dı-m*, *faks-la-y-acağ-ım*, *faks-l-ıyor-um*.

A special type of borrowing is called **loan-translation**, or **calque**. This word formation process allows word-for-word translations of new words into another language. For example, *katma değer vergisi* is the Turkish translation of *value added tax*. Other examples are *doğalgaz* ‘natural gas’, *bilgi toplumu* ‘information society’, *uzaktan kumanda* ‘remote control’, *ekran koruyucu* ‘screen saver’, *insan hakları* ‘human rights’, *toplam kalite* ‘total quality’, *kız arkadaş* ‘girl friend’.

Coinage

Sometimes speakers of a language create previously non-existent roots in language. This is called **coinage**. The most common examples are trade names that eventually become common words used to represent a particular product. For example, *sel-pak* is in fact a trade name which is now used to refer to ‘tissue paper’ of any brand in general. Other examples of this kind of generic use are *aygaz* ‘for gas’ and *tursil* for ‘washing powder’.

Semantic Change

Another consideration in regard to word formation is the existence of semantic neologisms which represent semantic change in words. A word's meaning may **broaden** to include more semantic features. For example, the word *alan* in Turkish was used to mean 'a plane area', but now it is also used to refer to 'a professional field'. The word *dal* has a similar etymology. As another type of semantic change, a word's meaning may lose some of its semantic content. For example, the verb *dirilmek* was used to mean both 'to live' and 'to resurrect' in Old Turkish. It seems that its meaning has now been **narrowed** down to the latter only (Aksan, 1998: 134-135). **Reversals** may also occur in which the meaning of a particular word may be reversed from positive to negative called **semantic degradation**, or from negative to positive called **semantic elevation**. For example, *çocuk* was once used to mean *piglet* (Tietze, 2002: 525), but its meaning is elevated from 'non-human' to 'human' to mean *child (son)* in colloquial Turkish. The word *alçak* in old Turkish meant *modest*, but in modern Turkish it has a more negative meaning: *filthy*.

A special case of semantic change is called **eponymy** through which proper nouns are converted into common nouns. For example, the word *çapanoğlu* in *Fazla karıştırma altından çapanoğlu çıkar* or *bunda bir çapanoğlu var* is associated with complex or objectionable, or even disturbing situations or people. During the reign of Selim III, Çapanoğlu Süleyman Bey was in close contact with the Sultan and was consulted by him for suppressing any kind of political or military problem in Anatolia. At that time, economically strong *Çapanoğulları* were prevalent everywhere in Anatolia and the name of this family was communalized to a noun to reflect 'powerful prevalence' (Şenyapılı, 1996: 10-11).

Metaphorical Extension

Another method of word formation is **metaphor**: using an existing word to refer to an object with similar properties of its referent. This process can be considered to be one type of semantic change in that words do not undergo any morphological modification, but rather they adopt new meanings or new uses for the already existing ones. The output is not a completely new word, but a word with a new semantic interpretation. For example, *çeşme* in Turkish is a word of Persian origin. It is derived with the suffix *-a* from the stem *çaşm* which means *eye*. In this expression, the source of water is viewed as the human organ for seeing (Tietze, 2002: 499). Just like teardrops falling down from an eye, water falls down from a tap. The way some humanly characterizations are used to describe nature also constitutes an example of metaphorical extension: *İstanbul [Boğaz]ı, dağın [etek]leri, nehrin karşı [yakası]*. The semantics of these words associated with human body parts is extended to describe geographical locations. These examples show that language is flexible and creative enough to form new metaphorical extensions at will as the need arises.

Clipping

Clipping is a reduction process that shortens a long word. For example, the word *Liba* as a woman's name sounded strange to me once until I found out that it was the short for *Saliba*. Similarly, the popular talk show host *Beyaz* is the short for *Beyazıt*. *Tel çekmek* for *telgraf çekmek*, *oto* for *otomobil*, *kondü* for *gecekondu* are other examples of clipping.

Blending

It is possible to form a new word by using two word formation processes: compounding and clipping. The outcome is a **blend**. For example, the word *Avrasya* was created by first clipping the first part of the word *Avrupa* and then combining it with the word *Asya* into a new blend: *Avr(upa) + Asya > Avrasya*.

Acronyms

Have you ever used the expression *Türkiye Radyo ve Televizyon Kurumu 1* in any context? I suspect your answer would be 'No'. Even if it is a 'Yes', I would assume you use it very rarely since it is not very economic to use such a long expression. Instead, we tend to reduce it to the initial letters of the component words as TRT1, which forms an **acronym** in Turkish. Other examples are *YÖK* for Yüksek Öğretim Kurumu, *TC* for Türkiye Cumhuriyeti, *ODTÜ* for Orta Doğu Teknik Üniversitesi, *DGM* for Devlet Güvenlik Mahkemesi, *ABD* for Amerika Birleşik Devletleri, *KDV* for Katma Değer Vergisi, *KPDS* for Kamu Personeli Dil Sınavı. Turkish speakers do not often remember that these are acronyms, but rather use them as individual words.

A distinction should be made between acronyms and **abbreviations**. The latter is not spelled out as it is shortened; whereas the former is. For example, *Sn* is an abbreviation and it is always pronounced in its long form as *Sayın*, but never as **s(e) n(e)*.

Backformation

This is not a productive word formation process in Turkish. One example I first encountered was in a TV commercial played by Cem Yılmaz. *İletişmek*, the last word of his lines in this commercial struck me as a humorous element first as it was the first time I heard this verb. Then on a personal account, one of my colleagues explained how she witnessed that this word is used in actual sentences such as *biz onunla iyi iletişıyoruz* in actual conversations. The word *iletişim* is claimed to have appeared in Turkish in the early 70s (Nişanyan, 2003: 186). The verb *iletişmek* seems to have appeared in the early 2000s. Then this can be seen as a clear case of backformation which displays an example of a simple word derived from a more complex one: *iletişim > iletiş-*. Normally, we would assume that the direction of derivation is from simple to more complex as has been the case so far: *ilet- > iletiş- > iletişim*. But in fact it is backwards: *iletişim > iletiş-*; therefore, the process is called **backformation**.

Multiple Processes

More than one word formation process may be used to form new words. For example, *düşə kalka bitirdik* involves both derivation and reduplication. Its counterparts without the derivational suffix **düş kalka bitirdik*, and without reduplication **düş bitirdik*, **kalka bitirdik* yield ungrammatical forms. Other examples include:

radar	acronym for radio detecting and ranging/borrowing
transistor	blend (transfer + resistor)/borrowing
kardan adam	compounding/suffixation
programla-	borrowing/derivation with <i>-la</i>
fax	clipping from facsimile/borrowing
teflon	coinage/borrowing
sezeryan	eponymy (the method by which Julius Caesar was born (Tatter, 1986: 27)/borrowing (caesarean section)

Note that this analysis includes the processes involved in both source languages and the borrowing language, which is Turkish in this case. However, we will be more concerned with the processes used in only Turkish in the rest of the course.

It is your turn!



7

I. What word formation processes are involved in *stand-upçı*?

II. Consider the following neologisms.

telsiz

sansürsüz

ön yargısız

indirimsiz

modemsiz

seçimsiz

ön koşulsuz

alt yazısız

- a. What stems does the suffix *-siz* attach to?
- b. Is the suffix *class-changing* or *class-maintaining*?
- c. Give the meaning of the suffix?
- d. What word formation process/es is/are employed to form these neologisms?

Summary

In this chapter we have looked at various ways of forming new words in Turkish. *Derivation* is the richest means of word formation applied. It makes use of affixes by attaching them to stems to form new words. Unlike derivation, *compounding* makes use of two independent words in forming neologisms. The meaning of the neologism is transparent from the meaning of the components sometimes, but rather opaque at other times yielding *endocentric* and *exocentric* compounds respectively. Imitating the sounds of nature, *onomatopoeia*, provides another rich source of word formation creating words descriptive of the nature. *Conversion* allows functional shifts in words of a language. *Borrowing* and *loan translation* occur when two or more languages come into direct or indirect contact through business, science and technology. Words of one language are either borrowed by or translated into another language. Even though not as common as other means, coining new words is another way of expanding the lexicon. A *coinage* is a novel word created without using any of the other word formation methods described in this chapter. It is a word created from scratch without employing any other word or parts of a word already existing in language. *Semantic change* takes place in time when the meaning of a word is broadened, narrowed down or even reversed gradually. As another case of semantic change, *eponymy* allows commonalization of proper nouns. *Metaphorical extension* of a word is its use in describing another thing that is related to or compared with its original referent. Clippings, blendings and acronyms all serve for the same purpose: shortening words; but they differ in terms of what parts of the word they leave out. *Clippings* are simply words that are shortened randomly without paying attention to the morphology of their original forms. *Acronyms* are formed by the initials of words or phrases to produce pronounceable separate words. *Blends* are words that are formed by combining parts of two words. *Backformation* is a process in which morphologically simple words are derived from more complex ones. It should be noted that more than one these word formation processes can be employed in creating a particular word. That is, *multiple processes*, as well, can be applied in word formation.

Self-test

Indicate the word formation process responsible for the creation of the words given in 1-3:

1. *abone platin*
 - a. affixation
 - b. prefixation
 - c. suffixation
 - d. derivation
 - e. compounding
2. *motor* for motorbisiklet
 - a. clipping
 - b. blending
 - c. acronym
 - d. eponymy
 - e. coinage
3. *sindirmek* in *bu yeni fikri sindirmeye çalışıyoruz*
 - a. backformation
 - b. metaphor
 - c. conversion
 - d. incorporation
 - e. reversal
4. Which one of the following includes pronominal reduplication?
 - a. ama çok ama az
 - b. ancak ve ancak
 - c. alış-veriş
 - d. tabii tabii
 - e. seni gerek seni
5. What process is involved in the use of the underlined words?

Su damlıyor.
Damlalar birikiyor.

 - a. conversion
 - b. metaphor
 - c. coinage
 - d. backformation
 - e. calque
6. Which one of the following neologisms include *loan translation*?
 - a. sürgit
 - b. uzay gemisi
 - c. zaplamak
 - d. bankamatik
 - e. telefon

7. Which one of the following is an *acronym*?

- a. jilet
- b. vileda
- c. ütü masası
- d. İTÜ
- e. Dr.

8. Which one of the following neologisms is **NOT** an example of borrowing?

- a. fayda
- b. sistem
- c. bilgi
- d. adalet
- e. paket

9. The following examples display the use of the word *oğlan* in Old Turkish.

<i>oğul</i>	'child'	<i>oğlancık</i>	'baby'
<i>oğlan</i>	'children'	<i>urı oğlan</i>	'son'
		<i>kız oğlan</i>	'daughter'

(Aksan, 1998: 133-134)

Considering the use of the word today, we can say that it is an example of:

- a. semantic change
- b. reversal
- c. metaphor
- d. conversion
- e. back-formation

10. Niccolo Machiaveli's well-known *the Prince* is a book on politics and political actions in the fifteenth and sixteenth centuries. It promotes effectiveness in political conduct at any cost. Nothing should be restricted by considerations of morality. Since then, the word *makyavel* is used to refer to people, not only politicians, who do not hesitate to risk everything for ambition. The creation of the word *makyavel* is an example of:

- a. incorporation
- b. eponymy
- c. coinage
- d. compounding
- e. clipping

Turkish Alive

Read the article by Can Dündar, and do the following tasks:

a. How does the writer feel about language change? What particular word formation process is he reacting to? Why? b. Identify the word formation process/es used to create the underlined words.



“Bir Hot-Chocolate Lütfen ...!”

Geçen hafta Kenan Paşa, bir sahil eğlencesi sırasında anlatılan bir Laz fıkrasına pek gülmüş. Fıkra'yı çoğunuz duymuşsunuzdur: Temel'le Dursun İngiltere'ye gitmişler. Acıkınca bir hamburgerciye dalıp, menüye göz atmışlar. Sosisli sandviç anlamına gelen “Hot dog” yazısını görünce “Bu da ne ola ki” diye sözlüklerine davranmışlar. Temel, “Hot dog, ‘Kızgın köpek’ demekmiş. Yiyelim bakalım. Tatmış oluruz” demiş. Az sonra ikisinin de sosisli sandviçleri gelmiş. Temel önüne gelen parçaya bir göz attıktan sonra Dursun'un kulağına eğilip sormuş; “Ula Dursun, sana neresi geldi köpeğin ...?”

Bu türden bir nahos hadise için İngiltere'lere gitmeye gerek kalmadığını ben geçen hafta Türkiye'de yaşadığım ilginç bir macerada anladım. Belki inanmayacaksınız ama anlatacaklarımın tümü bir gün içinde başıma geldi.

Kısa bir tatile niyetlenip, Antalya'ya bilet aldım ve havaalanına gittim. Havaalanında Türk Hava Yolları, son birkaç aydır artık mutad hale getirdiği üzere rötar yaptı. Ve cümbür cemaat beklemeye koyulduk. Havaalanının “cafe”sinde beklerken, yan masada yetişkin bir adam, yurt dışında eğitim gördüğünü tahmin ettiğim gençten bir kızla dertleşiyordu. Rötardan yakındıklarını duyunca kulak misafiri oldum. Adam “THY son dönemde o kadar çok rötar yapıyor ki, adına Tehirli Hava Yolları demek daha doğru olur” dedi. Yanındaki kız boş gözlerle bakıp, “tehir ne demek” diye sordu. Şaşırdı adam... Sonra kendince en kestirme yolu seçip, aynen şöyle dedi: “Tehir işte canım... yani delay... delay...”. “Haaa” diye güldü kız, “tehir’in İngilizce karşılığını duyunca... Çok da değil, bir kuşak önce babasının konuştuğu dille iletişim kurabilmek için taa Atlas Okyanusu’nu dolaşıp gelmesi gerekmişti. Ama bu durumu hiç yadırgamadılar. Ben, sinir oldum. “Delay...

delay...” diye söylenerek “cafe”ye doğru yürüdüm ve servis yapan kara yağız delikanlıya “Bir sütlü kakao lütfen” dedim. Aynı boş bakış ve o feci soru: “Hot chocolate mı?” Nutkum tutuldu. Yutkunup “evet” diyebildim. Adam “hot chocolate”ımı verdi. Ayak üstü bir Atlas Okyanusu turu da ben yapmış oldum. Sessizce gidip masama oturdum.

Bitmedi. Antalya'ya gidince arkadaşlarla sahilde bir “restaurant”a oturup, öğle yemeği için beklemeye koyulduk. Pos bıyıklı bir garson az sonra tepemizde belirdi. Ben siparişleri verdim. Sonunda da “İki tane patates kızartması” dedim. Gelen soruyu artık herhalde tahmin ediyorsunuzdur: “Pomme-frite... yani... diy mi...?”. Bu kez bütün bunların bir kamera şakası olduğuna kesinkes hükmettim ve arkadaşlarıma hangi kameraya gülümsemem gerektiğini sordum. İnatla reddettiler. Galiba hepsi gerçektir.

Kaldığımız otelin resepsiyonunda İsveçli bir genç kız görevliydi. Pek şeker görünümlüydü, ama küçük bir kusuru vardı: Türkçe bilmiyordu. Biz üç dilde “patates kızartması” demeyi öğrendiğimiz halde küçük hanım çalıştığı ülkenin dilinde bir “merhaba” demeyi öğrenmeye bile üşenmişti. Kendi memleketimizde bir odaya yerleşebilmek için İngilizce meram anlatmak zorunda kaldık. Otelin havuzunda gün boyu katlandığımız Almanca “animasyonlar” da günün mana ve ehemmiyetine uygun düştü.

Bir sömürge toprağında tatil yaptığımı hissettim bir an... Kapıyı bacayı kilitleyip, odama çekildim ve kitap okumaya koyulduk. Ece Ayhan'ın “Yort Savul”u vardı yanımda... İlk çevirdiğim sayfada aynen şöyle diyordu: “Açıl Doğu açıl! Doğu açılın, Doğu açılacak elbette. Ama yeni bir Kadenizli der ki, hem yeni ayana, hem yeni divanilere; Doğu'ya doğru fazla giden, coğrafya yüzünden, Batı'ya düşer. Tersi de geçerlidir bunun...” Yani...? Fazla Batı'ya gidersen, geri Doğu'ya düşersin... “Doğululuk”, Batı'nın dilini kendi dilin sanmaktır. Ağzını açıp, Batı'ya hayran hayran bakarken, dilini yutarsın... Ya da alemin dili seni yutar... Çünkü oralarda sana “köpeğin hep aynı yeri gelir...” Yerken dilini ısırır, dilsiz kalırsın...

Aktüel, 27 Temmuz 1995



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End Note

- 1 “>” indicates a change in the linguistic item. So, s>f translates as /s/ becomes /f/. Similarly, N>V means *noun becomes verb* and so on.

Key to “It is your turn!”



Some examples are: *sormak*, *meraklı*, *sabahlık*, *balıkçı*, *bızla*, *amaçsız*, *sarma*, *gidiş*, *kazanç*, *soygun*, *çağlayan*, *alınan*, *içsel*, *kedicik*, *vatandaş*.



Let's use these in a context to see the difference better.

Gece mece gittik vs gece gündüz gittik.

Sarı marı güller aldık vs sarı sarı güller aldık.

Eski meski kullandık vs eski püskü kullandık.

Eğri meğri kullandık vs eğri büğrü kullandık.

Yırtık mırtık giydik vs yırtık pırtık giydik.

Kırk kırık sattık vs kırık dökük sattık.

Clearly, doublets formed with /m/ convey a less strong meaning in that the designated properties imply the indifference of the speaker. Their counterparts, however, definitely signal intensity.



- augmented quantity,
- augmented/enhanced quality of a girl,
- enhanced quality of each girl,
- enhanced quality of a girl (*b*, *c* and *d* are similar, but *d* is stronger),
- augmented duration/repetition of the verb,
- augmented manner of the verb.



N + N + POSS: Binçaltı, buzdolabı, yayınevi, NN + POSS: çevre kirlenmesi, yakacak yardımı, seçim bölgesi, vergi iadesi, maaş katsayısı, bölge valiliği, muzır yasası, kurumlar sınavı (İmer, 1990: 77)



endocentric : *ilköğretim*

exocentric : *devetabanı*, *atlıkarınca*, *açıkgöz*



Konut üretmek, kaynak sağlamak, kaynak yaratmak, çağ atlamak (İmer, 1990: 77)



- stand-up+çı : borrowing *stand-up*, conversion (verb>noun), derivation with -çı
- Bare nouns *tel*; borrowed nouns *modem*, *sansür*; derived nouns, *seçim*, *indirim*; compound nouns *ön yargı*, *ön koşul*, *alt yazı*.
 - Class changing: NOUN>ADJECTIVE
 - Without
 - telsiz: derivation
modemsiz: borrowing, derivation
sansürsüz: borrowing, derivation
seçimsiz: 2 derivations
ön yargısız: loantranslation, compounding, derivation
ön koşulsuz: loan translation, compounding, 2 derivations
indirimsiz: 3 derivations
alt yazısız: compounding, 2 derivations

7

Aims

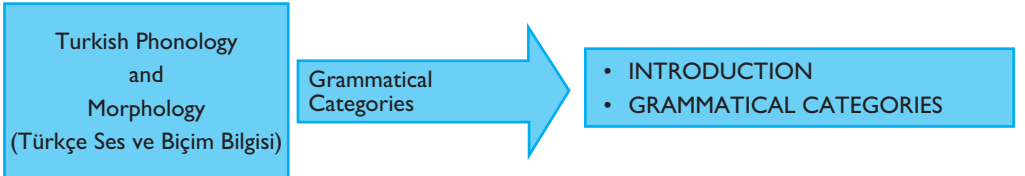
In this unit we will try to seek answers to the following questions:

- How many different categories are there?
- What is nominal categorization?
- What is verbal categorization?

Key Words

- grammatical category
- number
- gender
- case
- tense
- aspect
- mood
- negation
- voice
- agreement

Contents



Grammatical Categories

INTRODUCTION

Upon hearing a group of words such as onur, demet, kıvanç, mutlu, çağdaş, özgür, metin, many readers, will take them as suggesting that they have something in common -say, that they are all nouns. Hearing another group such as mutlu, özgür, metin, uygar, çağdaş, cesur they will say they are adjectives. Mutlu, çağdaş, özgür, metin are used in both groups, but they are categorized as nouns in the first, as adjectives in the second. Why? The different interpretations are based on the common idea of what it means to be in the same category: the things are categorized together on the basis of what they have in common. Everytime we see something, we see it as a member of a category -say a kind of car, a kind of animal, a kind of bird, a kind of sound etc. If we fail to do so, we may equally fail to perceive the reality around us. And whenever we try to do so, we employ categories. Similarly, anytime we produce or understand any linguistic utterance, we employ categories: categories of speech sounds, of words, of phrases, as well as conceptual categories. What kind of knowledge helps a native speaker to make these categorizations?

All natural language utterances are made up of distinct units that are meaningful, and all natural language systems divide those units into a series of syntactic categories. Therefore, no description of grammar would be considered adequate unless it defined a set of distinct syntactic categories in its formal structure. One method of doing this is dividing words into categories based on their grammatical marking. Therefore, a close analysis of grammatical marking would reveal a great deal about the grammatical structure of a language as well as the systematic organization behind grammatical utterances of that language.

GRAMMATICAL CATEGORIES

In Unit 5, we introduced the distinction between inflectional and derivational morphology. The focus was primarily on the distinctive features of the morphemes representing either process. We return now to a more detailed discussion of the grammatical morphemes. Grammatical morphemes express grammatical categories. **Grammatical categories** mark grammatical notions that are associated with particular lexical categories. They can be realized in the form of a word (function words), a bound morpheme (inflectional suffixes) or a zero morpheme (\emptyset). There are two types of grammatical categories: nominal and verbal. **Nominal categories** are

expressed on nouns, and they mark *number, gender, case*. **Verbal categories** are expressed on verbs, and they mark (a) *tense, aspect* and *mood (TAM)*; (b) *polarity*: negative vs positive; (c) *voice*: active, passive, reflexive, reciprocal, causative; and (d) *agreement* in number and person.

Before we proceed, it should be noted that a grammatical category is a linguistic category, not a real world category; and there may not always be a one-to-one correspondence between the two. For example, *tense* is a linguistic category marking the world category of *time*. While the past tense marker *-DI* usually expresses a past time as in *Dün erken kalktım*, the same morpheme expresses future or present in *Geldim, geldim!* as a response to a ringing doorbell. Similarly, the linguistic category plural number marks the world category *more than one*. However, *Ali'ler* does not necessarily mean that there is more than one *Ali*.

Nominal Categories

Number

Number is a grammatical category which indicates whether or not a member of the related word class is **singular** or **plural**. The morpheme *-lar* in Turkish is employed to convey the concept of plurality, and lack of it implies singularity.

Number inflection in Turkish is particularly seen in nouns (*ev/evler*), demonstratives (*bu/bunlar, şu/şunlar, o/onlar*), personal pronouns (*ben/biz, sen/siz, o/onlar*), possessive determiners (*benim/bizim, senin/sizin, onun/onların*), possessive pronouns (*benimki/bizimki, seninki/sizinki, onunki/onlarınki*), reflexive pronouns (*kendim/kendimiz, kendin/kendiniz, kendi/kendileri*). Bare nouns are unspecified in terms of number. They represent a categorial meaning rather than representing a member of that category. For example, *insan* refers to the category *human*, *bir insan* refers to a single member of the category *human* that exists in the universe, and *insanlar* indicates indefinite number of members of the category *human*.

It is your turn!



Look at the number taking word classes given above. Do you think they can enter into double plural marking?

In addition to the inflectional morpheme *-lar*, the idea of number is conveyed by a number of pronouns and adjectives as well.

Singular : *her, her bir, biri, hiç kimse, hiçbiri, bir*

Plural : *bir çok, çok, birkaç, bazı, iki, üç, on*

An interesting property of Turkish number marking is the lack of it in cases where plurality is explicitly marked with other quantifiers such as numbers. The ungrammaticality of **on sorular* shows that Turkish economizes on using markers having similar functions consecutively. Both *on* and *-lar* convey the idea of more than one; therefore, only one, namely the quantifier, is used so as to avoid redundancy.

Non-Plural Functions of -lAr

-lAr With Quantifiers

The plural morpheme otherwise deleted after quantifiers is retained when referring to people or events that are common public knowledge. Some examples include *Kırk Haramiler*, *Üç Silahşörler*, *Çifte Havuzlar*, *Dört Büyükler*, *Beş Hececiler*. In these examples, -lAr is no longer seen as a plural morpheme, but rather as an inseparable part of a proper noun (Korkmaz, 2003: 259). Therefore, the resulting plural noun is interpreted as a group noun.

-lAr With Proper Nouns

Proper nouns are not pluralized unless the same noun is used to refer to two or more different people or entities. However, when attached to a personal proper noun, the plural morpheme refers to family or friends. So, *Beyhan'lar da konsere gidiyor* may mean either there are two people by the name of *Beyhan* and both of them are going to the concert, or *Beyhan* and her family or friends are going to the concert.

In a similar fashion, -lAr may be used on a proper noun to signal common ethnic, regional or religious background as in *Türkler*, *İstanbulullar*, and *Müslümanlar*. The same function may also be extended over to common nouns which represent a category: *etoburlar*, *öğretmeler derneği*, *turunçgiller*.

Alternatively, -lAr on a proper noun may function as a marker of analogy (Gencan, 1966: 103). *Süreyya Ayhanlar'ın Sporumuzu Süreyya Ayhanlar yüceltiyor* does not indicate that there is more than one Süreyya Ayhan. The underlying meaning better translates as *Our sports is excelled by athletes like Süreyya Ayhan*.

Proximity With -lAr

The plural morpheme can be used to convey the idea of *approximately*. In *Sevda'nın evi postanenin yakınında biryerlerde*, *biryerlerde* does not refer to several places. A house cannot be located in more than one place at a time. What it indicates is that the house is somewhere around the post office. Similarly, in *Katil yirmi yaşlarındaymış*, the plural marker on the word *yaş* does not in fact refer to different ages since one cannot be at several ages at the same time. Rather it is given to approximate to the age of the killer. It signals that the given age is only an estimate, not a fact. The killer can be 21 as well as 19.

Augmentative -lAr

-lAr may also be used to intensify the meaning conveyed by otherwise a singular noun. In *İstanbullarda ne işin vardı?* as opposed to *İstanbul'da ne işin vardı?*, or *Mart ayında soğuklar bastırır* as opposed to *Mart ayında soğuk basırır*, the plural marker functions as an augmentative marker that amplifies the effect of the message.

-lAr with Uncountables

Number marking typically applies to countable nouns. It indicates individual plurality. When it is used with an uncountable noun, it refers to individual units or occurrences of that noun. In *Sular şırl şırl akıyor*, the plural morpheme is used to mean 'masses of water'. Similarly, in *çaylar geldi*, the plural is used to pluralize the unit of *çay*, namely 'cups' or 'glasses'. In *yalnızlıklar yaşadım*, however, various

occurrences of this feeling is expressed. Several instances of loneliness has been experienced by the speaker.

-IAr in Frozen Forms

-IAr is also used in cliches as unanalyzed fixed forms: *İyi geceler!*, *Tatlı rüyalar!*, *Sağlıklar!* The singular counterparts yield ungrammatical forms in the sense that they can no longer convey the function of wishing: **İyi gece!*, **Tatlı rüya!*, **Sağlık!*

Gender

There are two types of gender: grammatical gender and natural gender. Languages that have **grammatical gender** mark nouns according to a distinction between masculine, feminine, and neuter. Some languages also mark adjectives, articles, and pronouns in terms of gender. Turkish does not make gender distinctions, at least not grammatically. That is, there is not a separate grammatical category in Turkish particularly used for gender marking except for some suffixes of foreign origin: *müdür/müdire*, *katip/katibe*, *muallim/muallime*, *kral/kraliçe*, *tanrı/tanrıça*. **Natural gender** is a world category and it denotes biological gender. Turkish is somewhat sensitive to natural gender and employs lexical items to mark it in different ways. For example, words *erkek* and *kadın/kız* are used as adjectives to distinguish gender in humans: *kadın polis*, *kız arkadaş*, *erkek arkadaş*, *erkek yolcu*. In animals *dişi* is preferred over *kadın/kız*: **kadın aslan vs dişi aslan*, *erkek aslan*, *dişi kuş*. There are also a number of lexical items that are inherently marked for gender. For example, kinship terms such as *abla* and *ağabey* always have a female and a male referent respectively. Similarly, *damat*, *amca*, *dayı*, *enişte* are inherently marked as male; and *gelin*, *teyze*, *görümce*, *baldız* are always understood as female. There are also inherently marked lexical items used for animals: *dana vs tosun*, *tavuk vs horoz*, *koyun vs koç*.

Case

There are syntactic and semantic definitions of the notion case. Syntactically speaking, the term case is used to refer to the surface inflectional form of a noun which indicates grammatical relations. For example, the form of the word *cam* can be changed by inflection into *camı* or *cama* to show different functions of this word such as subject, direct object and indirect object. Semantically speaking, case shows the semantic relationship between the verb and its arguments (nouns). Compare the syntactic and semantic properties of the word *taş* in *Ali camı taşla kırdı* and *Taş camı kırdı*. Syntactically, it functions as an adverbial in the first sentence, and a subject in the second. However, its semantic relationship with the verb is the same in both sentences. *Taş* is the instrument with which the action performed. Therefore, *taşla* and *taş* are said to be in the *instrumental case*.

In this section, our focus will be on the former. Traditional grammarians of Turkish distinguish five cases which convey the following functions: the nominative case marking the subject: *ev-φ*; the accusative case marking the direct object: *ev-i*, the dative case marking the indirect object: *ev-e*, the locative case marking location: *ev-de*, the ablative case marking point of departure: *ev-den*, and the genitive case marking the possessor in a possessive construction: *ev-in*.

Case assigners in Turkish are verbs, postpositions, and adjectives (Sezer, 1991: 55). For example, transitive verbs assign accusative case to their direct objects.

- (1) a. Serhat'ı kurtardılar.
b. *Serhat kurtardılar.

Other verbs may select other cases for their complements. Compare:

- (2) a. Serhat'a baktılar.
b. *Serhat baktılar.
c. *Serhat'ı baktılar.
- (3) a. Serhat'tan söz ettiler.
b. *Serhat söz ettiler.
c. *Serhat'a söz ettiler.
d. *Serhat'ı söz ettiler.

Bak- and *söz et-* are verbs that mark their objects with the dative and the ablative respectively. Any other case reveals ungrammatical forms as seen in (2b, c) and (3b, c, d).

As mentioned earlier, postpositions and adjectives assign case to their noun complements as well. **çocuk göre* and **yemek meraklı* are ungrammatical because the postposition *göre* and the adjective *meraklı* assign dative case to their arguments as in *çocuğa göre*, *yemeğe meraklı*. Similarly, **çocuğa gibi* and **çocuktan için* are not grammatical because postpositions *gibi* and *için* require nominative case as in *çocuk gibi*, *çocuk için*. Note that different cases may be assigned by postpositions in nominal and pronominal environments: *çocuk için* (nominative), but *benim için* (genitive), *çocuk gibi* (nominative), but *benim gibi* (genitive).

Cases in Turkish

The Nominative Case - Ø

Subjects of independent finite clauses are marked with the nominative case. *Çiçek* in *Çiçek açtı* is the subject of the sentence and is therefore in the nominative case, that is Ø marked. However, not all Ø marked noun phrases can be the subject. Consider *Ağaçlar çiçek açtı*. Neither *ağaçlar* nor *çiçek* has an overt case marker. But which one qualifies for subjecthood? What determines the native speaker's choice of *ağaçlar* as the subject over *çiçek*? In such cases, the position immediately before the verb is interpreted as the position for the object. So, *çiçek* cannot be the subject of this sentence since it is used pre-verbally. This leaves us with *ağaçlar* as the subject.

Which one/s of the following is/are in the nominative case?

taş
taşlar

taşlarım
taşın



The Accusative Case -(y)ı

The accusative case is traditionally defined as the marker of the direct object in a sentence. However, what is peculiar about it is that while all the other case markers are obligatorily assigned by their governing heads, the accusative case marking is optional in some cases (Erguvanlı, 1984: 19). Then what is the underlying motivation for presence or absence of the accusative in a sentence?

Definitizing Function of the Accusative

It is claimed that the presence of the accusative on the object noun phrase reveals a definite reading of the governed noun phrase.

- (3) a. Doktor hasta tedavi ediyor.
b. Doktor hastayı tedavi ediyor.

In (3a) *basta* does not really refer to any specific person who can be identified by the speaker or the hearer. However, if the same noun phrase is attached the accusative case marker as in (3b), it is assigned a definite reading, which reveals that both the speaker and the hearer can identify the patient mentioned. *Hastayın* in that case is used to refer to a particular person whose identity is clear to both participants.

Generic Function of the Accusative

Generic is a reference type which is used to mark a class of objects, animals, or people rather than a specific member of a class. For example, in *aslan kükredi*, *aslan* has a definite reading since it refers to a particular lion in a particular context; but in *aslan kükreder*, it has a generic reading which holds for all lions. This distinction can be made in object noun phrases as well. The same function can be signalled by the accusative case marker when it is combined with the plural *-lar* in modal contexts.

- (4) a. Doktor hastaları tedavi eder.
b. Doktor hastaları tedavi etti.

Even though it is marked with the accusative case marker, *bastalar* in (4a) does not refer to any particular group of people in the same way as *bastaları* does in (4b). In this context, its meaning is equivalent to that of *doktor hasta tedavi eder*. As an abstract label, it only gives an abstract reading of the category patient, and the statement given in this sentence applies to all members of the category. The reason is that the plural marker neutralizes the definitizing function of the accusative case in the present time marking. However, this function of the plural morpheme is blocked by the past tense marker on the verb in (4b). Past tense marking typically restricts the time and the number of possible referents of an argument a verb can apply to. Therefore, the noun phrases with such limited domain of application can no longer be generic applying to all members of a category at all times. In other words, the generic reading is ruled out by the past tense marking on the verb. Then the definite reading of this sentence is that a particular doctor in a particular hospital treated a particular group of patients that can be identified by the participants. When a plural noun is used in this way, accusative case marker is obligatory as evidenced by the ungrammaticality of **doktor bastalar tedavi eder*.

Syntactic Function of the Accusative

Lack of accusative case marking reveals ungrammatical forms in the environment of noun phrases with definite readings as well. Consider:

- (5) a. Doktor Sevgi'yi tedavi etti. b. *Doktor Sevgi tedavi etti.
c. Doktor onu tedavi etti. d. *Doktor o tedavi etti.

We know that proper nouns and pronouns are definite by definition. Their referents can be identified by both the speaker and the hearer. Therefore, *Sevgi* and the pronoun that replaces it in (5a, c) are inherently definite. So, they do not really need a case marker to gain this status. Why are they case marked then? As mentioned elsewhere, in case of more than one definite bare noun in a sentence; accusative, as an object marker, is used to distinguish their syntactic functions. The accusative case marked noun is the direct object, the nominative noun is the subject of the sentence.

What about the syntactic function of common nouns? They too are obligatorily marked with the accusative case when they are not used in the preverbal position.

- (6) a. *İşadamı gazeteye ilan verdi.*
b. **İşadamı ilan gazeteye verdi.*

The ungrammaticality of (6b) indicates that object noun phrases with no overt case marking are restricted to the position immediately before the verb. If they have to be used, for any pragmatic reason, in any other position, they must be marked with the accusative so as not to be taken as the subject of the sentence. Therefore, *işadamı ilanı gazeteye verdi* is perfectly grammatical since the subject and the object of the sentence can clearly be distinguished by case marking.

Function of Completeness

In addition to its syntactic and semantic functions discussed above, the accusative case, when used with noun phrases expressing location, interestingly expresses a complete coverage of the object affected by the verb. For example, *merdiveni çıktı* as opposed to *merdivene çıktı* indicates that the subject of the sentence climbed all the way up to the top of the stairs/ladder. However, *merdivene çıktı* suggests that the subject has just stepped on the stairs/ladder. Other examples include:

- (7) a. *Yolu yürüdü.* *Pastayı yedi.* *Cellat askerin başını vurdu.*
b. *Yoldan yürüdü.* *Pastadan yedi.* *Cellat askeri başından vurdu.*

The accusative case marked noun phrases in (7a) are affected by the action of the verb on a larger scale than the ones in (7b). The subject has walked all the way down the road, s/he has eaten the entire cake, and s/he cut off the head.

What is the function of the accusative in the following?

Etem dondurmayı sevmez ama bu dondurmayı yedi ve çok sevdi.



The Dative Case -(y)A

The **indirect objects** of ditransitive verbs in Turkish are obligatorily marked with the dative case.

- (8) *Kitabı Zeynep-e verdim.*
Zeynep-e tuzu uzattım.
Evi Zeynep-e sattım.
Zeynep-e eşyalarını götürdüm.

In all of the examples in (8), the possession of the objects *kitap*, *tuz*, *ev*, and *eşyalar* is **transferred** to *Zeynep*, which in turn makes it the indirect object of

these verbs. Transference may sometimes be metaphorical with verbs such as *oku-*, *söyle-*, *öğret-*, *göster-*, *sor-*, *yolla-*, etc. (Berk, 1999: 35). In *Zeynep'e kitap okudum*, there is not an object being transferred from the subject to the indirect object. Transference here is more of an abstract one.

The idea of transference of the possession assumes [+animate] and mostly [+human] indirect objects. **Kitabı eve verdim* is ungrammatical unless [-animate] *ev* is used to refer to the people at home. Instead of this function, the dative case with such noun phrases marks a directional relationship between the verbs and their inanimate arguments as shown in:

- (9) Kitabı ev-e götürdüm.
 Kitapı Ankara-y-a yolladım.
 Kitapı masa-y-a bıraktım/koydum.
 Eşyaları otel-e götürdüm.

The dative case marked noun phrases in (9) are directional arguments of the verbs, and they have the semantic function of **goal**. They can be replaced by a [+animate] noun such as *Zeynep* retaining the same function: *Kitabı Zeynep'e götürdüm*.

Dative case morphology conveys the meaning of **direction to** with intransitive verbs as well: *Masa-y-a düştü*, *Sinop-a gittik*, *Salon-a döndük*.

As mentioned earlier, among the case assigners in Turkish, a certain sub-group of verbs, adjectives, and postpositions selects the dative case to assign to their objects. Some examples of such verbs are *X-e ilgi duymak*, *X-e gücenmek*, *X-e yakışmak*; those of adjectives are *X-e hayran*, *X-e düşkün*, *X-e meraklı*; and those of postpositions are *X-e kadar*, *X-e rağmen*, *X-e göre*.

Non-Local Functions of -(y)A

When the dative case is used without showing directionality, it conveys the following functions.

- (10) Bütün para Demet-e kaldı.
 Annem-e hediye aldım.
 Herkes o-n-a çalışıyor.
 (11) Sınav-a hazırlanıyor.
 Bilgi almay-a gidiyoruz.
 (12) Kitapları kaç-a aldın?
 20 milyona.

In (10) *Demet*, *anne* and *o* are the people who are affected by the actions denoted in a beneficial manner. It is for this reason that they are said to have the **benefactive** role. In (11) dative cased noun phrases indicate a **purpose**, and in (12) the dative functions as an **indicator of price**.

It is your turn!



4

Which one of the following has a benefactive function?

Parayı masaya bıraktı.

Parayı kardeşine bıraktı.

The Locative Case -DA

The locative case is typically used to mark the locational relationship between a verb and its argument. It marks the spatial, temporal, and abstract location at which the verb is located. **Spatial location** shows location in place, and **temporal location** shows location in time. Finally, abstract location shows abstract placement in abstract nouns and adjectives indicating shape, size, color and age (Lewis, 1967: 37).

SPATIAL	TEMPORAL	ABSTRACT	
evde	saat altıda	sarı renkte	güzellikte
arabada	Haziranda	daire şeklinde	doktorlukta
koltukta	iki yılda	bu uzunlukta	inançta
Avrupa'da	arada sırada	2 yaşında	sevgide

When these noun phrases are replaced by a [+human] noun, they indicate possession as in *Kitap Semra'da*. This differs from the genitive *kitap Semra'nın* in that it implies temporary possession of the book as opposed to permanent ownership signalled by the genitive.

As mentioned earlier, among the case assigners in Turkish, a certain sub-group of verbs and adjectives selects the locative case to assign to their objects. Some examples of such verbs are *X-te konuşlanmak*, *X-te konaklamak*, *X-te tabi kurmak*; and those of adjectives are *X-te saklı*, *X-te gömülü*, *X-te asılı*.

The Ablative Case -DAn

The function of this case is similar to that of the dative case. Both are typically categorized as directional cases. The difference lies in the fact that ablative nouns have the semantic function of **source**; whereas, dative nouns have the semantic function of **goal**.

- (13) Sınıftan çıktık.
Hemen uçaktan idi.
Havuzdan bir türlü çıkamadı.

The ablative case morphology in (13) indicates that *sınıf*, *uçak*, and *havuz* are places from which the actions *to get out of* and *to get off* proceed. Action may proceed from an animate source as well as in *İki saat önce bizden ayrıldı* and *Kitabı benden aldı*. But compare:

- (14) a. Ormandan geçtik.
b. Suyu şışeden içtik.
c. Eve pencereden girdik.

In (14) the semantics of the verbs used does not allow a meaning referring to a point of departure or source. Ablative in these examples expresses a **place** in (14a, c) or a **channel** in (14b) **through which** an action is performed.

By using the ablative case marker, it is also possible to express a point through which something is affected (Lewis, 1967: 38). In *Başından yaralandı* the speaker indicates that the person got wounded in the head.

Non-Local Functions of -DAn

When used nonlocally, the ablative case marker has other semantic functions. Consider:

- (15) Telaştan unuttum.
 (16) camdan ayakkabı

As seen in (15) -DAn can be used to mark a causal relationship between the verb and its arguments. The speaker marks the noun phrase with -DAn to express the **reason** of the meaning denoted by the verb: *I have forgotten because I was in a hurry*. Similar to this function, -DAn is also used on noun phrases to denote the **material from which** something is made. In (16) *glass* is the material from which the shoes are made, not vice versa. We know this from the case marker used on the noun.

-DAn has **partitive** semantics as well. *Öğrencilerden beşi* indicates that the ablative case marked noun represents the whole and the adjacent noun is a part of it: there are more than five students, but we are interested in only five of these students. This meaning is conveyed by -DAn attached to the noun representing the whole. Other examples include *yumurtalardan hiçbir, çocuklardan bazıları, öğretmenlerden birkaçı*.

The **price** for which a product is bought can be expressed by the ablative marker: *Kitapları kaçtan aldın?, İkişer milyondan*.

As mentioned earlier, among the case assigners in Turkish, a certain sub-group of verbs, adjectives, and postpositions selects the ablative case to assign to their objects. Some examples of such verbs are *X-ten nefret etmek, X-ten hoşlanmak, X-ten bahsetmek*; those of adjectives are *X-ten uzun, X-ten pahalı, X-ten meraklı* (comparative forms of all adjectives); and those of postpositions are *X-ten beri, X-ten dolayı, X-ten başka*.

It is your turn!

5



Compare *Kitapları kaçtan aldın?* with *Kitapları kaçta aldın?* Do they convey the same idea or can you sense a difference between the two?

The Genitive Case -(n)In

Unlike other case markers which establish a relationship between the verb and its arguments, the genitive case relates two nouns to each other. One noun is the possessor and the other is the possessed in a possessive construction. The former is typically marked with the genitive marker and the latter is with the possessive marker which agrees with the possessor in person and number: *Çocuğ-un yeleğ-i*. This type of relationship makes the possessor definite. Absence of genitive case on the first noun, as in *çocuk yeleği*, attributes an indefinite reading to the noun phrase: 'a child vest'. It is also possible to form **headless genitives** by using -ki: *çocuğunki*. -Ki represents the underlying head noun which can be identifiable from the preceding context.

Functions of -(n)In

Like other cases, the genitive case can express several different functions or meanings other than its typical function of true ownership. Compare the following examples:

subjective genitive	çocuğun ağlaması
objective genitive	camın kırılması
genitive of origin	Can Dündar'ın yazıları
descriptive genitive	başarıların çocuğu
partitive genitive	sınıfın çalışkanı
appositive genitive	Türk Sineması'nın Sultanı

(adapted from: Wardhaugh, 1995:11)

The **subjective genitive** marks the subject of a subordinate clause. This inflection gives a specific reading to the referent of the noun: *Çocuk ağlaması* vs. *çocuğun ağlaması*. With genitive marking, the underlying meaning in the example is that there is a specific child and s/he has cried or will cry. In any case, the relationship between the genitive and its head is similar to the relationship between a verb and its subject. In *camın kırılması*, however, the underlying meaning is that somebody will break/has broken the window. *Cam* is the object of the verb *kırıl*, not the subject. Therefore, this type of function is called the **objective genitive**. The **genitive of origin** marks the source from which something originates: *Yazılar* are generated by *Can Dündar*. In *başarıların çocuğu*, *başarı* characterizes or **describes** the child as *başarılı çocuk*. **Partitive genitives** express a part-whole relationship. There is a class, this boy/girl is the most hard-working member of this class. *Evin odaları* and *trenin vagonları* display a similar relationship. **Appositive genitives** always imply the non-genitive noun. They in fact act as an equal (=). In everybody's mind *Türk Sineması'nın sultanı* implies *Türkan Şoray*. In other words, they are equivalent of each other: *Sultan*=*Türkan Şoray*. Similarly, *Cumhuriyetin kurucusu* implies *Atatürk*.

As mentioned earlier, among the case assigners in Turkish, a certain sub-group of verbs and postpositions selects the genitive case to assign to their objects. Some examples of such verbs are *X-in onayını almak*, *X-in onurunu kurtarmak*, *X-in şerefini korumak*; and those of postpositions are *kadar*, *gibi*, *ile* when used with pronouns as in *benim kadar*, *senin gibi* and *onunla*.

Finally, genitive constructions are claimed to express **superlativity** when they are used with headless adjectives (Johanson, 1998: 50) as in *peynirin iyisi*, *kitabın ucuzu*, *otelin temiz*.

What meaning relationships appear to be expressed in the following genitives?

<i>kardeşimin bakıcısı,</i>	<i>ağacın dalları</i>
<i>Sezen Aksu'nun son kasedi</i>	<i>çocuğun bisikleti</i>
<i>Osmanlı'nın son sultanı</i>	<i>anasının kızı</i>
<i>avukatın itirazı</i>	



6

Verbal and Nominal Categories

Agreement

Agreement shows a grammatical relationship between two elements in a sentence which requires concordance in different features. For example, the subject of a sentence is supposed to be compatible with the person marked on the verb. The reason why **ben geldin* is not grammatical is that the person marker on the verb does not agree with the person that the subject indicates. The subject is the first person, but the person on the verb is the second person. This violates the obligatory person agreement rule; therefore, the sentence is ungrammatical.

Agreement in person is not enough as shown by the ungrammaticality of **ben geldik*. In this sentence the category person marked by the subject and the verb is compatible: the first person. What is incompatible, however, is the category number. The subject is singular, whereas the marker on the verb is plural. Clearly, grammatical forms require agreement in both person and number categories.

There are two types of agreement in Turkish: verbal agreement and nominal agreement. Verbal agreement is seen on the verbs of main clauses, predicative nouns, and predicative adjectives (see Unit 11 for more). Observe the first person agreement in the examples below. Agreement markers are italicised.

Biz çocuğu gördü- <i>k</i> .	person and number agreement on a predicate verb
Biz çalışkan- <i>ız</i> .	person and number agreement on a predicate adjective
Biz öğretmen- <i>iz</i> .	person and number agreement on a predicate noun

As shown below, nominal agreement is marked on the nouns of possessive constructions, on the verbs of noun clauses, and on the verbs of relative clauses.

bizim çocuğ-u- <i>muz</i>	agreement in a possessive construction
bizim gördüğ-ü- <i>müz</i> çocuk	agreement in a relative clause
bizim çocuğu gördüğ-ü- <i>müz</i>	agreement in a noun clause
bizim çocuğu görme- <i>miz</i>	agreement in a noun clause
bizim çocuğu göreceğ-i- <i>miz</i>	agreement in a noun clause

Surely, the first person is not the only person category in Turkish. Table 7.1 displays all person categories and their variations in different verbal and nominal forms.

Table 7.1

Person Agreement Markers in Turkish

	verbal paradigm for -(I)yor, -mİş, -(I/A)r, (y)AcAK	verbal paradigm for -DI and -sA	verbal paradigm for -A	verbal paradigm for imperative	verbal paradigm for copula	nominal paradigm
1 st singular	-Im	-m	-(y) AyIm	X	-(y) Im	-(I) m
2 nd singular	-sIn	-n	-(y) AsIn	-φ	-sIn	-(I) n
3 rd singular	-φ	-φ	-(y) A	-sIn	-φ / -DIr	-(s) I (n)
1 st plural	-Iz	-k	-(y) AlIm	X	-(y) Iz	-(I) mIz
2 nd plural	-sInIz	-nIz	-(y) AsInIz	-(y) In (Iz)	-sInIz	-(I) nIz
3 rd plural	-IAr	-IAr	-(y) AlAr (-sInIAr)	-sInIAr	-IAr	-IArI (n)

Despite this rich system, Turkish allows some violations of agreement to produce socially marked forms. Consider the following examples.

- (17) a. Müdür Bey ne arzu ederler?
 b. Sayın rektör geldiler mi?
 c. Bu satırların yazarı bu görüşü benimsememektedir.
 d. Nuran Hanım, sizinle daha önce karşılaşmamış mıydık?

In (17a, b) third person plural person agreement *-lar* is used for second and third person singular *-sin* and \emptyset respectively. These forms are used as a sign of **respect**. It is also possible to use third person singular \emptyset to refer to first person singular as seen in (17c). This is the style often adopted by writers to refer to themselves in **formal** written language. The second person plural *siz* for the second person singular *sen* shown in (17d) is a widely used **politeness** pattern. Conversely, the first person plural for the first person singular *ben* signals **modesty**: *Biz öyle gördük, Boynumuz kıldan ince, Bugün nasılsınız?* (Lewis, 1967: 247).

I. Why is *Sayın Vali açılışı eşleriyle birlikte sereflendirdiler* ambiguous?

II. Look at the following data and try to specify the morpheme order in nominals in Turkish.

<i>sokak</i>	<i>sokaklar</i>	<i>sokakları</i>	<i>annemler</i>
<i>sokakta</i>	<i>sokaklarda</i>	<i>sokaklarında</i>	<i>annemlerde</i>
<i>sokağı</i>	<i>sokakları</i>	<i>sokaklarını</i>	<i>annemleri</i>
<i>sokaktan</i>	<i>sokaklardan</i>	<i>sokaklarından</i>	<i>annemlerden</i>
<i>sokağın</i>	<i>sokakların</i>	<i>sokakları</i>	<i>annemlerin</i>
<i>sokağa</i>	<i>sokaklara</i>	<i>sokaklarına</i>	<i>annemlere</i>



Verbal Categories

Negation

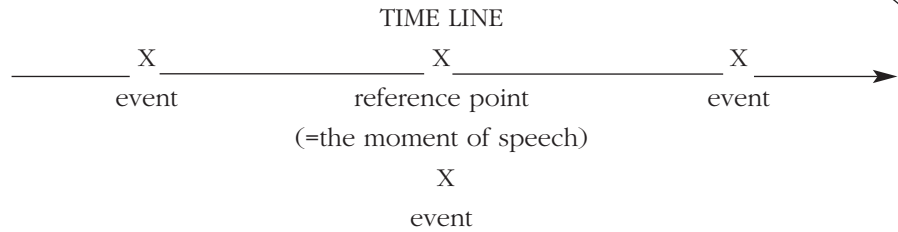
Standard negation is marked on the verb using the negative morpheme *-mA* as in *gelmedi*. The alternative negative marker *değil* is used with adjectival and nominal predicates as in *Olca mutlu değil, Olca öğretmen değil*. It can also occur with a preceding clause, but this type of use is more marked since it is restricted to *-mİş*, *-(D)yor*, and *-(y)AcAK* clauses only: *gelmiş değilsin, geliyor değilsin, gelecek değilsin*, but **geldi değilsin, *gelir değilsin, *gelmeli değilsin*. Notice that the person agreement marker is obligatorily used with *değil* in these sentences to avoid otherwise ungrammatical forms: **geliyorsun değil, *geleceksin değil, *gelmişsin değil*. However, this constraint becomes optional when *değil* is used with a preceding clause negated with *-mA*. Double negatives formed in this way allow both person marked preceding clauses as in *gelmeyeceksin değil* and/or person marked *değil* as in *gelmeyecek değilsin*. Double negatives with *değil* also allow the past and present tense markers in their preceding clauses: *gelmedi değilsin, gelmez değilsin* as well as *gelmedin değil, gelmezsin değil* (Erguvanlı-Taylan, 1986: 159-177).

It is also possible to convey negative meaning with derivational markers as in *Olca mutsuz*. Negative derivational markers create contradictory meanings that are mutually exclusive. This kind of negation is not verbal since the use of it is restricted to non-verbal categories.

Tense, Aspect, Mood (TAM)

Tense and aspect communicate information about time. In order to understand the meaning of a noun, we do not have to consider time, but messages conveyed by verbs are understood based on various information about time. This information can be hidden in the lexical meaning of a verb. For example, some verbs inherently do not last long, i. e. *sıçra-*, *kır-*, *hapşır-*, but some do, i. e. *oku- yüz- uyu-*. Some verbs focus on the beginning or the finishing of an event, i. e. *başla-*, *bit-*, *son ver*, some on the ongoing nature of it, i. e. *sür-*, *ol-*, *dur-*, yet, some others emphasize a change in state of affairs, i. e. *büyü-*, *soğu-*, *yeşer-*. This type of intrinsic information

about the internal temporal structure of a verb is called **lexical aspect**. However, regardless of this lexical make-up of a verb, the time frame expressed by it can be manipulated by using tense and aspect markers in a language. **Tense** is a grammatical category that locates the event in time. Time, as we know it, indicates a temporal dimension, and it is linear. When we speak, we choose a point in time from which events are viewed. This point in time is our **reference point** and tense is used to locate events in time with respect to that point. Most characteristically, the moment of speech is chosen to be the reference point. An event may take place anterior to the reference point, it can include the reference point, or it can be posterior to the reference point as shown below:

Figure 7.1

This way of viewing events gives us three tense distinctions: past, present, and future. However, this terminology may sometimes be misleading since past markers may be used in non-past situations and present markers in several others. Some examples from Turkish are given in Table 7.2.

Table 7.2
Overlap in Time Reference

	past meaning	present meaning	future meaning
past marker		Vaktiniz var mıydı?	Haydi, ben gittim!
present marker	Çocuk başını kaldırır ve yaşlı adam bakar.		Yarın gelirim.
progressive marker	Annesi sabahlara kadar ders çalıştığını söylüyor		Yarın gidiyoruz.

As can be seen in the above table, only primary meanings of these markers coincide with their labels. Therefore, it is important to keep in mind that the label used to represent a tense category is not necessarily associated with only this meaning. Therefore, some grammarians prefer using a two-way distinction *as past vs non-past* instead of the more traditional three-way distinction *past vs present vs future*.

Another feature to note about tense is that it is a **deictic** category. The interpretation of tense is relative to the time of utterance. An event that took place in 1923 is viewed as *past* today because our reference point for this interpretation is 2004. We are looking at this event from the year 2004. 1923 is anterior to 2004; therefore, an event in it is past. However, the same event was viewed as present in 1923, or even future in 1922. So, tense is determined on the basis of the reference time. When this time changes, the temporal interpretation of the event also changes.

Aspect, on the other hand, is not a deictic category. It does not locate events on a time frame; therefore, it does not select a reference point to describe events. Rather, it conveys information about the nature of the event. That is, the way in which the event occurs in time: Is it continuous? Is it a one-time event; and therefore, semelfactive? Does it involve multiple repetitions of a series of sub-events; and therefore, iterative? Is the event completed (perfective), or left open (imperfective)? etc. This kind of characterization does not affect the time of the clause.

Do we always talk about facts? Past, present, or future facts expressed by continuous, semalfative, iterative, perfective, or imperfective verbs? Not quite so. We also express our intentions, predictions, suggestions, hunches, hopes, demands, wishes, etc. **Modality** is the term used to refer to these meanings, namely the actuality of an event. This gives us two classes of mood: *knowledge-based* and *action-based* also called *epistemic* and *deontic* respectively (Palmer, 1984: 153). **Mood** is the inflectional category that marks modality in a language. **Epistemic modality** indicates the degree of commitment on the part of the speaker to the actuality of the event marked by the verb. In other words, it is used to indicate different levels of certainty or possibility about the truth value of an event. This information can be conveyed based on *direct sensory evidence* (visual/auditory), or *indirect evidence* (reportative/inferential). For example, *Osman basta* indicates a fact; and therefore, signals 100% certainty of the speaker (factive), but *Osman basta olabilir* is non-factive since it indicates a possibility about which the speaker is less certain. **Deontic modality** conveys the kind of *need* (external/internal) which forces the speaker to perform an action. The following meanings are categorized as deontic: orders, obligations, suggestions, requests, permission, volition (wanting, willingness, intention, wishing, promising, threatening). The modal category *ability* is neither epistemic, nor deontic since it does not express a choice of behavior.

It is difficult to draw lines between tense, aspect, and mood as they are inherently correlated. For example, the past is characterized as *known fact* as it already took place; whereas, the future is unknown and potential as it is yet to come. This conclusion implies a correlation between tense and mood: one between future tense and non-factive mood, and one between non-future tense and factive mood. For example, *gelecek* is non-factive in terms of mood, future in terms of tense; however, *geldi* is factive, and past. An event that holds at the moment of speech is present and therefore has not been completed. This signals a correlation between present tense and imperfective aspect. This correlation implies the reverse between past tense and perfective aspect. For example, *geliyor* conveys the present tense marker and it is aspectually incompleted, but *geldi* is in the past tense and aspectually perfective.

There are languages in which each one of these temporal, aspectual, and modal meanings are distinguished by separate morphemes. However, in Turkish these meanings can be combined in a single morpheme -just as number and person marking is communicated by a single morpheme as in *-k* which marks both 1st person and plural number. This may lead to ambiguities in some cases. But, as we shall see shortly, contextual information and/or other lexical markers, i.e. adverbials, can be used as a filter to distinguish the message targetted by the speaker.

Tense, Aspect, and Mood Markers in Turkish

Turkish employs eleven morphemes to express temporal, aspectual and modal meanings. They are categorized into two groups.

- GROUP I : -DI, -mİş, -(I)yor, -(y)AcAK, -(I/A)r, -sA, -A, -mAİ
 GROUP II : -(y)DI, -(y)mİş, -(y)sA

Group I morphemes can combine with group II morphemes, and always in that order, to form more complex forms. Possible combinations in the third person singular are displayed in Table 7.3.

Table 7.3
Combinability of
Verbs in the 3rd
Person Singular

	-(y)DI (past copula)	-(y)mış (evidential copula)	-(y)sA (conditional copula)
-DI	geldiydi	X	geldiyse
-mİş	gelmişti	gelmişmiş	gelmişse
-(I)yor	geliyordu	geliyormuş	geliyorsa
-(y)AcAK	gelecekti	gelecekmiş	gelecekse
-(I/A)r	gelirdi	gelirmiş	gelirse
-sA	gelseydi	gelseymiş	X
-A	geleydi	geleymiş	X
-mAII	gelmeliydi	gelmeliymiş	gelmeliyse

It is your turn!

8



Look at the following and make a generalization about the minimal conditions necessary to generate grammatical verbal stems in Turkish.

*git-im

*git-im-idi

*git-idi-m

*git-im-di

Let's now have a closer look at the semantic features of these morphemes.

-DI

1. *-DI* marks **definite past** as a tense marker in the context of definite time adverbials. In sentences such as *Dün eve döndü*k, *İki yıl önce tanıştı*k, *Buraya geçen yıl geldi*k, the events that are expressed by the verbs took place anterior to the reference point. Therefore, they are characterized as *past*.

2. *-DI* has aspectual meanings, as well. Two of them are *perfective* and *perfect* (Kornfilt, 1997: 340-355). **Perfective** aspect focuses on completedness, whereas **perfect** on the present result of a past situation. A sentence such as *saçlarım ıslandı* may be ambiguous between the two aspectual meanings. In a context such as *saçlarım ıslandı ama şimdi kurudu* the event 'to get wet' is viewed as completed. Therefore, the aspectual meaning assigned to it is perfective. Compare this with *Saçlarım ıslandı ve hala da ıslak*. Now, the meaning foregrounds the **current relevance**, *being wet*, of the past situation, *getting wet*. Therefore, the aspect is interpreted as perfect. Similar examples are:

(18) Gürkan ellerini yıkadı.

implication: they are clean now, so he can eat.

Gürkan Türkçe ödevini bitirdi.

implication: it is ready now to be turned in.

Pantolonuma çay döküldü.

implication: it is wet now, so I have to change it.

The *perfect* interpretation of *-DI* in (18) can be cancelled by providing additional contexts. Consider the following:

(19) Gürkan önce ellerini yıkadı sonra da yüzünü.

Gürkan Türkçe ödevini bitirdi ama daha diğerleri var.

Pantolonuma çay döküldü, bir de yırtıldı.

The same morpheme in (19) is interpreted as perfective. In a context where a series of successive events are described, the focus in each of them will be on their completedness rather than their present result.

When used with appropriate adverbials, *-DI* marks **recent past**: *Ekmekler yeni/benüz geldi*. Lack of time adverbial in this context may lead to different aspectual interpretations.

The so called **experiential perfect**, as well, is grammaticalized by *-DI*. This type of aspect “indicates that a given situation has held at least once during some time in the past leading up to the present.” (Comrie, 1976: 58). This meaning is reinforced by indefinite time adverbials such as *hiç*, *hayatında*, *ömründe*. Some examples are *ömrümde et yemedim*, *hiç 50 kilo olmadım*, *bir kere bile yalan söylemedim*. In each of these examples, the speaker makes a remark about whether or not the situation described, i.e. eating meat, weighing 50kgs, lying, has ever held in his/her personal experience.

It is important to note that the aspectual meanings of the morpheme *-DI* do not exclude its past meaning. All of the verbs above have past reference with respect to time.

3. In terms of its epistemic modality, *-DI* signals **direct evidence** on the part of the speaker about the actuality of the event. Therefore, there is no less than 100% certainty in the meaning expressed. Since the events are directly witnessed by the speaker, they are **factive**. For example, in *gitti* ‘he left’, the speaker’s choice of *-DI* among other morphemes signals an embedded meaning of ‘I know’. So, a better translation would be ‘he left for sure’ or ‘I am sure he left.’

The function of direct evidence or direct experience is a good linguistic motivation to use *-DI* in **narratives**: stories or accounts of events. For example, “... *Ben işte böyle korkudan titrerken birden omuzuma bir el dokundu. Döndüm. Babamdı.*”

Although they may not have been experienced by the speaker, **historical facts** are expressed by *-DI* as well. School children always recite sentences like *Atatürk 1881’de doğdu, 1938’de öldü* without witnessing these events. The reason is that historical events are conventional and known to everybody. So, having personal experience is irrelevant in this context.

4. In copular sentences¹, past is expressed by *-(y)DI* instead of *-DI*: *doktordu*, *başlaydı*, *açıkıldı*, *karaydı*, *babamdı*.

Sometimes, both *-(y)DI* and *-DI* are used with present or future reference to denote **politeness**. *Zamanınız var mıydı?* is more polite than *Zamanınız var mı?* Similarly, *Birkaç soru sormak istedim* is more polite than *birkaç soru sormak istiyorum*.

In terms of epistemic modality, *-(y)DI* marks **uncertainty** with present reference. Observe the difference between *Senin adın Ecem mi?*, a pure question used to seek information, and *Senin adın Ecem miydi?* a question used to check memory retention. The underlying meanings for each are *I don’t know, so tell me*, and *I forgot, so remind me* respectively. Here are more examples to show this contrast:

Table 7.4
-(y)DI vs Other
Morphemes

	other	-(y)DI
'don't-know-tell-me' meaning	Bu telefon nasıl açılıyor? Nasıl konuşacak? Öğrenci misin? Öğrencisin, değil mi?	
'forgot-remind-me' meaning		Bu telefon nasıl açılıyordu? Nasıl konuşacaktı? Öğrenci miydin? Öğrenciydin, değil mi?

5. Surprisingly enough, *-DI* is used with **future/present reference** as well. Consider *Hadi ben gittim!* used when the speaker is about to leave a place, or *Geldi m, geldi m!* used when the speaker is about to open the door whose bell is ringing. The event *to go* will take place posterior to the moment of speech. On the other hand, *to come* is taking place at the same time the speech is made. Therefore, *-DI* is characterized to have future and present reference in these contexts.

It is your turn!



9

What aspectual meaning/s can be expressed by the following?

Annem geldi.

-miş

1. *-miş*, as well as its copular form *-(y)mış*, stands in opposition to *-DI* in its modal functions. These two morphemes are contrasted with respect to the kind of evidential modality they mark. As mentioned before, *-DI* marks *witnessed past*. This kind of meaning is attested by direct sensory evidence. However, in the context of *-miş* **indirect evidence** is suggested. The meaning involved is second-hand; and therefore, a **hearsay**. Observe the difference between *Zeynep kitabı okumuş* and *Zeynep kitabı okudu*. Even though both have past reference, in the first example, the speaker is reporting a hearsay. S/he cannot have witnessed the process of *reading* and the end state of *finishing*. This kind of externality marked by *-miş* is also observed in sentences such as *uyumuşum, çok yemişim, yorulmuşum*. However, in the second example, the choice of *-DI* clearly states that both the process and the end state have been eye-witnessed by the speaker.

It should be noted that a hearsay can be expressed by *-DI* in the context of prepared minds. If prior events lead to an **expected result**, the speaker selects *-DI* instead of *-miş* even though direct experience is not at play (Slobin & Aksu, 1982: 196). For example, not long ago there was a public discussion on the new law of civil rights. After a long lasting media coverage, the law finally passed. When something like this happens, native speakers tend to report the news by using *-DI* as this is an expected event. Therefore, *Yeni medeni kanun geçti* is more natural in this context. However, despite the preceding process that provides familiarity, the speaker may not be ready for such a change, or he may not wish for it. In this context, the passing of the new law is interpreted as an unexpected event by the speaker. Then he would be conditioned to use *-miş* instead of *-DI*: *Biliyor musun, yeni medeni kanun geçmişti*. This gives us another function of *-miş*: **surprise** in the context of unprepared minds. Similarly, *Aaaa, Demet de gelmişti!* entails that Demet's coming is unexpected; and therefore, surprising for the speaker.

-mİş has another evidential function through which it marks **inferential** meaning. *Zeynep kitabı okumuş* can be interpreted as an inference if the speaker utters it based on situational evidence. For example, s/he might see Zeynep's book whose pages are color marked with underlined sentences and notes from cover to cover. Based on this evidence s/he can say, 'Mmm, *Zeynep kitabı okumuş*.' Or Zeynep can be heard in a talk making arguments based on the book whose content is familiar to him/her. This is evidence enough to infer that *Zeynep has read the book*. As the speaker has not eye-witnessed the process of reading, but only the end-state of it, s/he chooses *-mİş* to mark this kind of (indirect) evidential information. Notice that *Zeynep kitabı okudu* is ruled out in this context since *-DI* requires direct evidence; and therefore, factive, not evidential. Similarly, *Zeynep kitabı okumuş* is ruled out if uttered upon seeing Zeynep reading the book. The reason is that *-mİş* requires inference based on indirect experience, i.e. observation, not on direct experience.

It should be noted that there may be an overlap between the modal and aspectual functions of *-mİş*. As mentioned earlier, an inference is made based on a result state. Therefore, it would not be wrong to assume that an inference has also got current relevance. For example, *Zeynep kitabı okumuş* may entail that *she knows about the book and she can talk about it*. This interpretation has current relevance; and therefore, is assigned the aspectual meaning of perfect. So, we can say that there is a semantic similarity between perfect and inferential as both categories present events via their results (Comrie, 1976: 110). However, the same sentence may also be used as an answer to the question *Zeynep ne yapmış?* In this context, not the result, but the event itself and its realization is prioritized. Therefore, the aspectual meaning is perfective.

By the same token, the inferential meaning of *-mİş* can be associated with past reference since an inference is made based on the result of a past event.

2. *-mİş* is used in **narratives** centering around unreal events, i.e. myths, tales, dreams, etc. This can be associated with the hearsay/reportative function of *-mİş* that marks events external to the personal experience of the speaker. Here's an extract from a children's story: ...*Bir padişahın bir oğlu vamuş. Günün birinde canı sıkılmış, düşünmüş yollara... Yolda giderken bir dervişe rastlamış. Derviş şehzadeye, 'Şehzadesin, güzelsin, bu yollarda ne gezersin?' demiş. Şehzade de derdini anlatmış...* All the events marked with *-mİş* in this extract express a situation outside the personal experience of the speaker. This coincides with the semantics of *-mİş*, and thus, determines the speaker's preference for it over other morphemes.

In what context/s can the following sentences be used?

Zeynep'i sinek ısırması vs Zeynep'i sinek ısırdu.



It is your turn!

10

-(l)r/-(A)r

The so called **aorist** has a complex morphology; and therefore, deserves a full account. Monosyllabic stems, except for those ending in /l/ or /r/ take the low vowel suffix *-(A)r*: *koş-ar*, *sev-er*. (Exceptions are also possible: *gir-er*, *sor-ar*, etc.) But polysyllabic stems, as well as monosyllabic ones ending in /l/ or /r/, and those with derived stems take the high vowel suffix *-(I)r*: *yen-ir* (a monosyllabic, but derived stem), *aktar-ır* (a polysyllabic stem), *gör-ür* (a monosyllabic stem with a final /r/).

The negative of the aorist displays a rather peculiar morphology, as well. The consonant of the morpheme, which is /r/, becomes /z/ when combined with the negative morpheme *-mA*. Then this /z/ is dropped when used with the first person singular subject; and it is changed into /y/ when used with the first person plural. See below for examples.

Table 7.5
Morphology of the Aorist

	positive	negative
1st singular	ara-r-ım	ara-ma-[dropped]-m
2nd singular	ara-r-sın	ara-ma-z-sın
3rd singular	ara-r-ø	ara-ma-z-ø
1st plural	ara-r-ız	ara-ma-y-ız
2nd plural	ara-r-sınız	ara-ma-z-sınız
3rd plural	ara-r-lar	ara-ma-z-lar

Let's now turn to the functions of *-(A)r/-(I)r*.

1. *-(A)r/-(I)r* is used to mark the aspectual meaning of **habitual**. Comrie (1976: 27-28) defines habituality as “a situation which is characteristic of an extended period of time.” This definition makes an emphasis on typicality. Consider the examples:

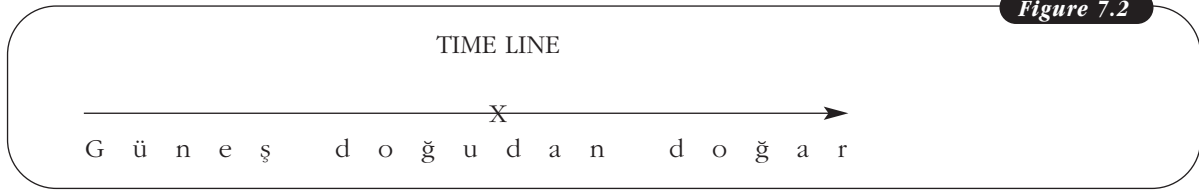
- (20) Balık yemem.
 Saat 12'den önce yatmam.
 Yedi saat uyurum.
 Babam kendine çok dikkat eder.
 Bizim eve çok misafir gelir.

All the sentences in (20) reflect regularly repeated behavior that is characterized as typical of the subject.

2. Closely related to this function, *-(A)r/-(I)r* is also used to mark **generic meanings**. This is not surprising as both generic and habitual make emphasis on the characterization of an entity (Yavaş, 1980: 103). When we say *balıklar yüzer* ‘fish swim’, we express an inherent characteristic of the fish. Similarly, *balık yemem* ‘I don't eat fish’ can be taken as a permanent property which characterizes the subject. In other words, not eating fish is seen as the distinctive feature of the entity. Other examples of generic statements are *zırafaların uzun boyunları olur*, *aslan kükrer*, *tavuk gıdaklar*, *insan düşünür*, *bebekler sevgi ister*.

The generic interpretation in these statements may be due to the timeless nature (Menges, 1968: 128) of the Turkish aorist. **Timeless** means omnitemporal. If something is viewed as omnitemporal, its truth value holds for all times. Scientific facts can be put in this category as well. Consider *güneş doğudan doğar*, *beş kere beş yirmibeş eder*, *bütün canlılar yaşlanır*, *ay dünyanın etrafında döner*, *ısınan hava yükselir*, *zıt kutuplar birbirini çeker*. The truth value of these statements is constant. They represent facts which hold irrespective of time. They are true for the past, present, and future. This meaning, which is illustrated in Figure 7.2, is conveyed by *-(A)r/-(I)r* in Turkish.

Figure 7.2



3. $-(A)r/-(D)r$ has modal functions as well. One such function is **prediction**. See (21) below.

- (21) a. Osman sebze sever, öyleyse fasulye de yer.
 b. *Osman karar verdi, öyleyse fasulye yer.

Based on prior knowledge about the subject, i.e. his likes and dislikes, the speaker in (21a) makes a prediction about his potential behavior. From the ungrammaticality of (21b), it is clear that, epistemically, this form does not denote strong certainty. A decision implies strong certainty; therefore, it cannot be used with $-(A)r/-(D)r$ which has contradictory semantics. Compare, however, *ben üniversite sınavını kazanırım*, *ben bu masayı kaldırıyorum*, *ben bu işi kotarıyorum*. In these examples the speaker and the subject is identical. This leads us to a different interpretation. Here the speaker makes a prediction about his/her ability to accomplish something (Yavaş, 1980: 105). This signals **self-assurance**, which denotes stronger certainty.

In addition to these epistemic meanings, $-(A)r/-(D)r$ also has some deontic meanings. One of them is **volition** on the part of the speaker: *Sana onbeşten veririm*, *evimi size veririm*, *yüzde beşine razı olurum*. In all of these examples, the speaker signals willingness about the realization of the verb. Notice that for this kind of interpretation, the speaker and the subject must be identical. This function is similar to **promising**: *Söz, gelirken oyuncaklarımı da getiririm*; *Söz, ağzımı açmam*. These examples have future reference as well.

$-(A)r/-(D)r$ is used in **offers /invitations/requests**. This is a function which is closely related to volition. Some examples are: *Biraz daha alır mısınız?*, *Bize gelir misin?*, *Biraz sessiz olur musun?*

4. $-(A)r/-(D)r$ is used in **narratives**. Especially, in third person narration and story telling, the choice of $-(A)r/-(D)r$ over other possible markers brings more immediacy to the text because past meanings remain alive in the present. Look at the following extracts.

- (22) "...İhanet de o vakit başlar zaten. Kendini sevmeye başlamasıyla.
 'Kendimi sevdiğimi anladım,' der ölüm sorgusunda, 've hayatı...'
 Kendisi hesabına ve dışarıdaki hayat adına içerideki dünyaya
 ihanetin bedelini de bilir..." (Kırca, 1997: 24)

"...Oğlan az uyur, çok uyur. Bir de bakar ki, kız yok. Ne oldu diye gezinirken, orada bir kuyu bulur. Kuyunun içine bakar ki, dibinde bir gürültü, çalgı çağanak artık deme gitsin. Derken, kuyunun içinden bir kuş çıkar. Kuş, oğlanı görünce, 'Ey yiğit, sen burada ne arıyorsun?' diye sorar..." (Kunos, 1991: 128)

The same effect is created in **demonstrations**. Consider the example below and see how the speaker provides a description of a process accompanied by a visual demonstration:

- (23) Önce kağıdımızı ikiye katlarız. Böylece ortasını buluruz.
Sonra da tekrar açıp, bu kek her iki kenarı ortaya gelecek
şekilde iki taraftan katlarız...

It is your turn!

11



What is the function of -(A)r/-(I)r in the following?

Yaşar Kemal İnce Memed'te köy insanını anlatır.

-(I)yor

1. *-(I)yor* has several aspectual functions. One such function is to mark the **progressive** aspect in Turkish. When events are viewed as non-complete or in progress, they are marked with *-(I)yor*: *Ne yapıyor sun?*, *Kitap okuyorum*. Note that this function has present reference.

Like the aorist, *-(I)yor* has the aspectual meaning of **habitual**. Therefore, the examples given in (20) can be marked with *-(I)yor* as well: *Balık yemi yorum*, *Saat 12'den önce yatm yorum*, *Yedi saat uyuyorum*, *Babam kendine çok dikkat ediy or*, *Bizim eve çok misafir geli y or*. Even though both *-(A)r/-(I)r* and *-(I)yor* mark habituality, the latter lacks the typicality function of the former mentioned above. It merely serves as a marker which signals a certain regular behavior of the subject. It does not make a reference to any property associated with the subject (Yavaş, 1980: 101). Other examples are: *Kardeşim bankada çalış y or*, *Ben müzik dinlemeyi seui y or um*, *Hiç devamsızlık yapm y or um*. Note that, as a semantic feature of habituality, the actuality of the events in these examples applies to past, present, and most probably future as well. In other words, a sentence such as *müzik dinlemeyi seui y or um* entails *I did, do, and most probably will like listening to music.*

-(I)yor marks the so called the **perfect of persistant situation** (Comrie, 1976) in Turkish. As Comrie puts it (p. 60), it is used to “describe a situation that started in the past, but continues (persists) into the present.” Some examples are: *on yıldır buradan alış veriş ediy or um*, *geçen yıldan beri dans dersleri alıyorum*, *onunla kısa bir süreden beri tanış y or u z*, *ne zamandan beri bu işi yapı y or sun?*

-(I)yor marks **iterativity** when used with verbs otherwise **semalfactive**. For example, *öksürmek* is a one time verb; and thus, semalfactive. When we say *Sevim öksürdü*, we mean she caughed only once. However, this interpretation is cancelled if *-DI* is replaced by *-(I)yor*. *Sevim öksün y or* is iterative as it now denotes a series of repeated coughs, not a single one. Other examples are: *Zeynep başına vurdu* vs *Zeynep başına vunu y or*, *Hakan topu tekmeledi* vs *Hakan topu tekme li y or*, *Can hapşırıldı* vs *Can hapşını y or*.

2. *-(I)yor* is also used with future reference to mark **scheduled future events**: *Yarın eve dönüy or um*, *Pazartesi bütün faturalarımı ödüy or um*, *okul iki yıl sonra bitiy or*. Notice that this meaning is cancelled in the absence of the time adverbials.

3. *-(I)yor* has **past interpretation**, as well: *Rapor son rakamları veri y or*, *araştırmalar bunu göster i y or*, *gazeteler öyle yaz y or*. This type of usage is restricted to the verbs of communication (Quirk et. al., 1985: 181). Even though past reference is acceptable in these contexts, *-(I)yor* is chosen to mark the currently operative nature of the situation. Therefore, a sentence such as *rapor son rakamları*

veniyor suggest that even though it was written in the past, it still reveals this information. Likewise, the suggestion in the next two examples is that research studies and newspapers still speak to us about these events.

4. *-(I)yor* is used in **narratives, commentaries, and demonstrations**. Like the aorist, the choice of *-(I)yor* provides immediacy and generates excitement. Therefore, it increases the dramatic effect of the events narrated. Consider the language samples used in a commentary, narrative, and demonstration in (23 a, b, and c) respectively.

- (23) a. Hakan topu Rüştü'ye **atıyor**, ama maalesef top Rüştü'ye **gelmiyor**.
 b. Kırmızı Başlıklı Kız içeriye **giriyor** ve karşısında hain kurdu buluyor.
 c. Önce soğanımızı **kavuruyoruz**, sonra biraz da su ilave ederek **pişiriyoruz**.

Think of a context in which the following sentence cannot be acceptable.

On yıldır buradan alışveriş ediyorum.



-(y)AcAK

1. *-(y)AcAK* is the **future** marker in Turkish. *Koşacak*, *geleceğiz*, *verecek*sin, *sonacak*lar all indicate that the events described by the verbs will take place posterior to the moment of speech.

2. When combined with relevant adverbials, *-(y)AcAK* marks the **prospective aspect** in Turkish. Sentences such as *Otobüs şimdi hareket edecek* (=it has not departed yet, but will soon), *annem hemen gelecek* (=she is not here now, but soon will be) make a reference to a present state related to a future event. This meaning is symmetrical with the **retrospective** function of perfect. Retrospective links a present state to a past situation; whereas, prospective links a present state to a subsequent situation (Comrie, 1976: 64).

3. Recall that *-(I)yor* and *-(A)r/-(I)r* are also used to mark **futurity**. However, the three morphemes differ in some respects. *-(I)yor* and *-(y)AcAK* are contrasted on the basis of whether or not the event is scheduled; and therefore, more definite. For non-scheduled, less definite events, the choice is between *-(y)AcAK* and *-(A)r/-(I)r* (Yavaş, 1980: 84). This shows that *-(y)AcAK* can be used for both planned and unplanned events; whereas, *-(I)yor* and *-(A)r/-(I)r* are restricted to only planned and unplanned events respectively.

- (24) a. Sınav tarihleri belli oldu. *Edebiyat sınavı Salı günü **olur**.
 b. Sınav tarihleri belli oldu. Edebiyat sınavı Salı günü **olacak**.
 c. Sınav tarihleri belli oldu. Edebiyat sınavı Salı günü **oluyor**.

As evidenced by the ungrammaticality of (24a), *-(A)r/-(I)r* is disallowed in the context of a definite scheduled event. Let's now see which of these morphemes can cooccur with an unscheduled; and therefore, less definite event. Consider the following examples. Notice that an adverbial of a weak possibility, *sanırım*, is included as a semantic test. Our assumption is that *sanırım* and markers which denote definiteness will be in complimentary distribution as they display a conflict in their semantics.

- (25) a. Sağlığın bozuluyor, sanırım sigarayı bırak**ı**rsın.
 b. ?Sağlığın bozuluyor, sanırım sigarayı bırak**aca**kırsın.
 c. *Sağlığın bozuluyor, sanırım sigarayı bırak**ıy**orsun.

The acceptability of (25a) shows that *-(A)/r/-(D)r* can cooccur with *sanırım*; and thus, less strong. However, (25b) is marginal and (25c) is ungrammatical due to the semantic conflict between *sanırım*, and that of *-(D)yor* and *-(y)AcAK*. The fact that *-(D)yor* is ruled out but *-(y)AcAK* may be kept in the environment of adverbials that mark weak possibility shows that *-(D)yor* is stronger than *-(y)AcAK*.

4. *-(y)AcAK* can be used to make **assumptions** based on prior knowledge about a situation: *eve gitme, annem şimdi alışverişte olacak; doktoru ara, odasında olacak; paspası kaldır, anabtar altında olacak.*

It is your turn!



Is the following sentence acceptable as a definite future event?

Sağlığım bozuluyor, mutlaka sigarayı bırakıyorsun.

Mood Markers in Turkish

-sA

-sA, as well as its copular form *-(y)sA*, is a mood marker, which denotes **conditional** meanings: *bilse* *n* (remote condition/wish), *bilse* *ydin* (unfulfilled condition/counterfactual wish) vs *bilse* *ymiş* (reported condition/wish), *okusa* *ydın* (past conditional) (see Unit 12 for more).

-(y)A

-(y)A is the **optative** mood marker, which is the expression of speaker's wish. *yapa* *yım* (let me do it), *yapa* *lım* (let's do it). It is used much less commonly in other persons: *yapa* *sın*, *yapa*, *yapa* *sınız*, *yapa* *lar*.

-mAlI

-mAlI marks the modal functions of **obligation/necessity**, and **assumption**. *Aliye omah* may convey necessity in a context where she is the only person without whom a situation will be incomplete. So, the speaker implies that there must be Aliye there, otherwise they will fail. It may also be interpreted as an assumption in a context where, for example, the speaker has reason to believe that Aliye will be at his/her door ringing the bell at the time of the utterance. Therefore, s/he makes an assumption based on this information.

-(y)Abil

-(y)Abil is the modal category that marks **ability** and **possibility**. A statement such as *okuyabilirim* may be ambiguous between the two functions. Depending on the context, it may either mean 'I am capable of reading', or 'I may read.'

Imperative

Imperative is a modal category which denotes **commands**. It can be negated and inflected for two of the voice categories (reflexive and causative) in Turkish. Some examples of second person singular imperative are: *tara*, *taran*, *tarat*, *tarama*, *taranma*, *taratma*.

Turkish allows special forms of imperative which are expressed in the second and third person plural as well: *tarayın(ız)/tarasınlar*, *taranın(ız)/taransınlar*, *taratın(ız)/taratsınlar*.

The category imperative does not always suggest an order. For example, *Bak, ne yaptın!* is simply an **exclamation** used as an expression of annoyance or discomfort. Also, the negative imperative may be used as a **warning** in the context

of appropriate adverbials: *Sakın ona söyleme!*, *Asla bir daha taksiye binme!*, *Hele yalan hiç söyleme!*

Make table which displays the temporal, aspectual, and modal meanings marked in Turkish.



It is your turn!

14

Voice

Voice is another grammatical category which is marked on verbs. It signifies the nature of the participation of a participant in the process, event or action described by the verb. There are three types of participants: the subject (the first participant), the direct object (the second participant), and the indirect object (the third participant). Subjects are typically agents, direct objects represent the affected party of the action, and indirect objects represent the entity that receives the direct object. By looking at the voice morphology of a verb we can answer the following questions:

Is it important to identify the first participant? (active)

Is it more important to express the second participant? (passive)

Are the first and second participants identical? (reflexive)

Is the first participant a single subject or a group of subjects doing something together, or to one another? (reciprocal)

Are there intermediaries that perform the verb for the subject? (causative)

The voice morphology used to encode this kind of information in Turkish can be shown as: active *döv*, the passive *döv-ül*, the reflexive *döv-ün*, the reciprocal *döv-üş*, and the causative *döv-dür*.

Active

All the verbs that are not marked for voice, and that require a subject are categorized as active verbs. They can be transitive *iç-* or intransitive *uyu-*.

(26) a. Tam beş bardak su içtim.

b. Bebek uyuyor.

The active voice used in (26a, b) does not carry voice morphology, and indicates that the subjects are the performers of the verbs.

Passive -Il or -(I)n

Passive in Turkish is formed by attaching the morpheme *-Il* to verbs ending in consonants except /l/, and its alternate *-(I)n* to the verbs ending in /l/ or a vowel: *yar-* vs *yar-ıl*; *sat-* vs *sat-ıl*; *sev-* vs *sev-il*; *but*, *kal-* vs *kal-ın*, *al-* vs *al-ın*, and *ata-* vs *ata-n*, *tara-* vs *tara-n*. Notice that the vowel in *-(I)n* is deleted in the environment of a syllable final stem vowel.

Passivization is a process of suppressing the subject. In this process an active transitive verb with a direct object, becomes a passive intransitive verb with a subject only. Therefore, passive morphology is said to decrease the **valency** of a verb. By valency we refer to the argument structure of a verb; namely the number of noun phrases of that verb. For example, in *Aslan kükredi*, the verb *kükre* has only one argument: *aslan*; whereas in *Aslan avını yakaladı*, *yakala-* has two arguments: *aslan* and *av*.

Compare the active sentence *Suzan camı kırdı* and its passive version *Cam kırıldı*. How is the passive form generated? Can we say the passive morpheme *-Il*

is attached to the stem first as in **Suzan camı kırıldı*, and then the subject is suppressed as in **Camı kırıldı?* Maybe, but so far our derivation has generated an ungrammatical form. How can we reach the grammatical *Cam kırıldı*? It is claimed that a subjectless verb with passive morphology cannot assign accusative case to its arguments (Sezer, 1991: 44). So, our derivation in fact generated the grammatical *Cam kırıldı* since the passive morphology absorbed accusative case. Even though the passive morphology blocks accusative case assignment, it tolerates other cases: *Uçaktan korkulmaz*, *Burada motosiklete binilmez*. The caseless counterparts of these examples are ungrammatical: **Uçak korkulmaz*, **Burada motosiklet binilmez*.

Passive voice allows double passives in Turkish. This process has an emphatic function which intensifies the passive meaning of the verb. It also serves as a means to disambiguate the passive forms made with *-(D)İn* from the reflexive having a similar form (Lewis, 1967: 150; Özkaragöz, 1986: 78): *aran-* vs *arandı-*, *beslen-* vs *beslenil-*.

Types of Passive

There are two types of passive in Turkish: personal and impersonal. The distinction between the two is made based on whether the verb is transitive or intransitive. Study the following examples

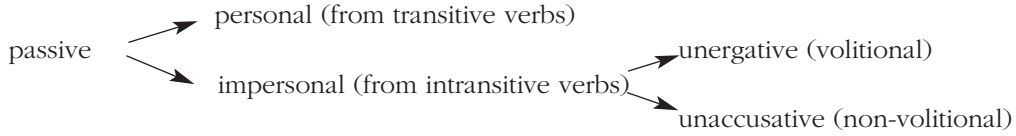
- (27) a. Bütün sınıf kütüphaneyi kullandı.
b. Kütüphane kullanıldı.
(28) a. Bütün sınıf kütüphaneye gitti.
b. Kütüphaneye gidildi.

Kullan- is a transitive verb and takes a direct object, whereas *git-* is an intransitive verb and does not require a direct object. To form **personal passives**, the direct object of a transitive verb becomes the subject of a passive verb as in (27b). However, intransitive verbs are objectless, so they lack a direct object to go to the subject position of the passive. Therefore, they form **impersonal passives** without an overt subject as in (28b). The fact that *kütüphane* in this example is not the subject is evident from its lacking subject properties: nominative case and agreement (Kornfilt, 1997: 324). It is even possible to form impersonal passives that do not contain a noun phrase of any kind: *erken yatılır*, *hızlı yürünmez*, *çok konuşulmaz*.

Impersonal passives are of two type: unergatives and unaccusatives. Unergative and unaccusative verbs can be distinguished by easily observed semantic facts. Intransitive verbs that denote volitional acts are categorized as **unergative**, and those that denote non-volitional acts as **unaccusative** (Biktimir, 1986: 56). For example, *takıl-*, *boğul-*, *düş-*, *bat-*, *çürü-* are unaccusatives; *çalış-*, *koş-*, *oyna-*, *kaç-*, *dans et-* are unergatives. Since they are intransitive, both groups of verbs have only one argument: surface subject. But in unaccusatives this surface subject is in fact serves as the underlying object of the verb. For example, in *Ecem düştü*, *Ecem* is the syntactic subject, but semantically it is the person that is affected by the action denoted by the verb.

To recapulate, examine the following sketch.

Figure 7.3



Restrictions on Impersonal Passives

It seems that animacy of a noun phrase plays a crucial role in passivization. **Animacy** is a semantic category that specifies whether a noun refers to a non-living thing (inanimate) or a living thing (animate: human vs non-human). It is argued that only verbs that can take human subjects can form impersonal passives. (Biktimir, 1986: 59; Knecht, 1985: 67). This generalization is supported by the native speaker judgement of the following as ungrammatical: **Burada kışın buzlanılır*, **Bu yolda bep arızalanılır*, **Bu tencerede fokurdanır*. *Buzlan-*, *arızalan-* and *fokurda-* are verbs that take non-human subjects; therefore, they are not allowed to appear in passive constructions. Verbs with human subjects, on the other hand, form grammatical impersonal passives: *Burada çalışıldı*, *dans edildi*, *konusuldu*, *yemek yendi*. But there are also intransitive verbs that are true of both human and non-human subjects. The passive reading of such verbs always yields underlying human subjects. For example, even though a non-human subject such as *bitkiler* is logically possible in *Hastalanınca sararılır*, it is always assumed that there is a human subject in it. Similarly, upon hearing a sentence such as *Burada koşuldu*, a native speaker would never assume that a dog ran there.

Another restriction reveals a difference between the behavior of unaccusative and unergative passives in different tense contexts. It is claimed that unaccusative passives are restricted to the aorist tense (the present tense), whereas unergatives can appear with other tenses along with the aorist (Sezer, 1991: 64). Compare:

- (29) a. Kaygan zeminde düşülür.
 b. *Kaygan zeminde düşüldü.
 (30) a. Burada koşulur.
 b. Burada koşuldu.

As the ungrammaticality of (29b) shows, unaccusative passives disallow specific readings of the verb; therefore, they must be used in the aorist tense.

Another formal restriction on impersonal passives is that they disallow agentive phrases. In personal passives, the suppressed subject may optionally be expressed by an agentive phrase, which is typically formed with the postposition *tarafından*, or with the suffix *-CA* in more formal contexts.

- (31) a. Bahçıvan çiçekleri suladı.
 b. Çiçekler sulandı.
 c. Çiçekler bahçıvan tarafından sulandı.
 d. Çiçekler bahçıvanca sulandı.

(31d) is strange because *-CA* requires a more formal context such as *Park ve bahçelerin belediyece sulanmasına valilikçe onay verildi*.

Let's now look at the following examples of impersonal passives with agentive phrases. The resulting ungrammaticality can be considered as another indication of their property of being impersonal (Knecht, 1985: 40): **Kütüphaneye öğrenciler tarafından gidildi*, **Başarıya öğrenciler tarafından susandı*, **Evden çocuklar tarafından fazla uzaklaşmadı*, **Çocuklar tarafından erken yatılır*, **Sporcular tarafından bergün koşulur*.

Another restriction is on the person agreement used in impersonal passives. The ungrammaticality of **benden kaçıldım*, **benden kaçıldın*, **benden kaçıldık*, **benden kaçıldınız*, and **benden kaçıldılar*, but the grammaticality of *benden kaçıldı*, *okula gidildi*, *burada dans edildi* show that only third person singular verb is allowed in impersonal passives.

Reflexive *-(I)n*

Reflexive morphology indicates that the verb is performed by the subject and for/to the subject again. That is, the first and the second participants refer to the same person. Therefore, like the passive, the reflexive morpheme decreases the valency of the verb. The non-reflexive form may include the reflexive pronoun *kendi* to signal the reflexive meaning.

- (32) a. Leyla kendini yıkadı.
b. Leyla yıkandı.

If the sentences in (32) are claimed to be identical in meaning, then we should conclude that the reflexive pronoun *kendi* and the reflexive morpheme *-(I)n* have identical functions. If this is the case, then we can even say that the reflexive morpheme in (32b) represents the reflexive pronoun in (32a) functioning as the direct object of the sentence. If this claim, too, is true, two identical forms representing the direct object should be disallowed in the same context. Let's use them together to test our assumption: **Leyla kendini yıkandı*. As we correctly assumed, used in the same context, the two forms yield an ungrammatical sentence. Therefore, the reflexive pronoun and the reflexive suffix cannot co-occur in the same environment; they are mutually exclusive.

After this quick summary of the semantics of the reflexive morphology, let's underline one formal feature of it before we go any further. It is important to notice that the reflexive and the passive morphemes are **homonymous**. That is, both meanings are manifested by morphemes that look and sound alike: *-(I)n*. But do not forget that this surface form has two distinct functions. Therefore, *yıkandı* is ambiguous between passive and reflexive readings. It may express a meaning like *somebody washed himself/herself* as well as *somebody was washed by someone else*.

Reciprocal *-(I)ş*

In reciprocals, subject and direct object are combined into a single compound subject, thus valency is reduced from transitive to intransitive. The reciprocal morphology always assumes a plural reading, and marks either mutual or collective participation in the situation described by the verb. That is, both the subject and the object of the non-reciprocal verb act as the subject of the reciprocal verb.

- (33) a. Sedat Tolga'yı buldu.
b. Sedat'la Tolga buluştular.

In (33a) there are two participants: a singular subject and a singular object; but in (33b) there is only one participant: a plural subject.

There are two types of participation: mutual and collective. If the reciprocal morpheme is used with a transitive verb, it conveys a reading of **mutual** participation: *anlaş-, boğuş-, kapış-*. If, however, it is used with an intransitive verb, it conveys a reading of **collective** participation: *güliş-, kaçış-, ağlaş-, uçuş-*. In mutual participation the direction of the action works both ways; from one participant to the other. In collective participation, action is performed in a group without necessarily being performed in the same circle each time. For example, *Aliye'yle Suna itiştiler* indicates that both participants acted upon each other in the same manner. However, *Aliye'yle Suna kaçıştılar* lacks a cyclical interpretation of the action performed. Rather, it indicates a jointly performed action in different directions.

It is also possible to use a reciprocal pronoun with verbs of mutual action as in (34a), but not with those of collective action as marked ungrammatical in (34b).

- (34) a. *Aliye'yle Suna birbirleriyle iyi anlaşıyorlar.*
 b. **Aliye'yle Suna birbirleriyle kaçışıyorlar.*

Note that the noun phrases used with a reciprocal verb are obligatorily in the committative form made with the postposition *ile* as in (34a). Other forms are not allowed: **Aliye Sunayı anlaşıyor*, **Aliye'yle Suna birbirlerini anlaşıyorlar*.

Causative -Dlr, -(l)t, -(l)r, -Ar

All causative verbs are transitive. The causative situation always implies one more participant than the non-causative equivalent. Therefore, the valency of a causative verb is greater than that of a non-causative. In addition to the subject, a second or even a third party can be included in the sentence by using the causative morphemes: *aldı*=one participant, *al-dır*=two participants, and *al-dır-t*=three participants.

There is a three-way valency distinction: intransitive, monotransitive, and ditransitive. Turkish allows causatives of all three types as displayed in Table 7.5.

	INTRANSITIVE	MONOTRANSITIVE	DITRANSITIVE
NON-CAUSATIVE	Nurdan öldü.	Ben kitabı okudum.	Ben anahtarı kutuya koydum.
CAUSATIVE	Nurdan'ı öldürdüler.	Bana kitabı okuttular.	Bana anahtarı kutuya koydurdular.

Table 7.6
 Valency Distinctions
 in Turkish Causative

When added to the intransitive verb *öl-*, the causative suffix introduces a new participant (the causee) other than the subject (the causer). So, in the causative of an intransitive verb, the causer appears as the subject, *onlar* in the example; and the causee as the direct object, *Nurdan* in the example. In causatives of monotransitive verbs, the causer is the subject of the causative verb, *onlar* in the example; and the causee is the indirect object, *bana* in the example. The direct object of the non-causative verb remains as the direct object of the causative. A ditransitive verb is made causative in the same way as a transitive verb is made causative. Note that the subject of a non-causative verb is the direct object of the intransitive causative verb, but the indirect object of the monotransitive or ditransitive causative verb.

Semantics of causation exhibits a number of different functions. Comrie (1985: 332-334) suggests three types of relations between the causer and the effect brought about: causation proper (*cause/make*), causation permissive (*allow/let*), and *causation assistive (help)*. Some examples are:

- | | |
|--------------------------|-----------------------|
| (35) a. Causation proper | Onu doyurdum. |
| b. Causation permissive | Sakın kapıyı açtırma! |
| c. Causation assistive | Ona ders çalıştırdım. |

With the proper meaning, the causer brings about a situation which might not have come about without him/her. With the permissive, the causer has the power to prevent the verb from happening, or allow it to happen. In the assistive, the verb may or may not have come about without the causer, but s/he helps bring it about as shown above. Using this criteria, the underlying messages signalled in the examples in (35) can be listed as:

- (a) I caused him/her to eat.
- (b) You have the power not to let him open the door. So, don't let him!
- (c) I helped him with his lessons.

In addition to marking the natural participants of a verb, one more causative marker can be added to the causative verb to include an element of force. Compare (a) *ye-dir-t-tir* and (b) *ye-dir-t*. Despite the extra causative morpheme in (a), there is no difference in the valency structure of (a) and (b). Both mean that 'Have someone have someone else eat something'. However, the former sounds more forceful than the latter (Demircan, 2002: 84).

It is your turn!

15



a. What is the function of causative in the following?

Paramızı haraççılara yediriyoruz.

b. What is the order of verbal categories in *dayanıştırdılar*? (example from Lewis, 1967: 152)

Summary

1. How many different categories are there?

There are two grammatical categories: nominal and verbal. It is important to note that even though there are grammatical markers that typically apply to a particular category, there may be overlaps between categories. For example, number features can be seen both on nouns and verbs, but the one used on nouns is considered to be number marking, and the one on verbs agreement marking. Likewise, agreement is seen both on nouns and verbs.

2. What is nominal categorization?

Nominal categorization is the process that is inflected on nouns. Types of nominal categorization are number (singular vs plural), gender (feminine vs masculine vs neuter), and case (nominative, accusative, dative, locative, ablative, genitive). Note that Turkish does not have a grammatical category of gender, but, though not very productively, it employs several foreign suffixes and lexical derivations marking natural gender in humans and animals. Also note that the order of the morphemes in a nominal is: number+possessive+case

3. What is verbal categorization?

Verbal categorization includes grammatical marking on verbs. It marks, tense (present, past, future), aspect (completive vs incompletive), negation, voice (active, passive, reflexive, reciprocal and causative), and agreement (number, person) categories. Note that some of these morphemes do not like each other and they almost never occur in the same environment since they compete for the same slot in a stem. However, the commonly employed order of morphemes in a verbal stem is: voice+TAM+agreement. When there are more than one voice marking, the order is reflexive/reciprocal+causative+passive. Note also that modal and aspectual marking tend to precede tense marking.

Self-test

1. Plural morpheme is not used with numeral quantifiers in Turkish. Then why is *iki evleri var* grammatical?
 - a. *-lar* marks agreement in this example.
 - b. The noun is in the accusative case.
 - c. *-lar* functions as the genitive marker.
 - d. This sentence is subjectless.
 - e. Both (c) and (d)
2. Which one of the following is ambiguous?
 - a. Ankara'ya sabahdan gittik.
 - b. Ankara'ya senden önce gittik.
 - c. Ankara'ya Eskişehir'den gittik.
 - d. Ankara'ya bayramdan bayrama gideriz.
 - e. Ankara'ya en kısa yoldan gittik.
3. Which one of the following has a nominal plural?
 - a. solardı
 - b. soldular
 - c. gözlere
 - d. uygular
 - e. gözlerler
4. Which one has a reflexive morpheme?
 - a. budandı
 - b. okundu
 - c. çiğnendi
 - d. giyindi
 - e. uğrandı
5. What effect is created when causative is attached to intransitive verbs such as *kop-*, *kuru-*, *dol-*, and *kayna-* as in *kopar-*, *kurut-*, *doldur-* and *kaynat-*?
 - a. They become impersonal.
 - b. They become transitive.
 - c. Their valency decreases.
 - d. They become definite.
 - e. They cannot be attached causative.
6. Which one of the following has a reciprocal meaning?
 - a. Son yıllarda çıkışa geçti.
 - b. Suna kardeşine sataştı.
 - c. Gizli buluşma herkes tarafından öğrenildi.
 - d. Değerler git gide yozlaşıyor.
 - e. Kaset satışları yavaşladı.
7. Which one of the underlined verbs is *inferential*?
 - a. Etem gitmiş. Işıkları yanmıyor.
 - b. Etem gitmiş. Halası söyledi.
 - c. Etem gitti. Biliyorum.
 - d. Etem gider. Hep öyle yapar.
 - e. Etem gitti ama gelecek
8. Why is the following sentence ungrammatical?
**Burada öğrenciler tarafından çalışılır.*
 - a. An intransitive verb cannot be passivized.
 - b. Agentive phrases are not allowed in impersonal passives.
 - c. Agents are suppressed in passive construction.
 - d. Unaccusative verbs do not co-occur with agents.
 - e. Personal passives absorb agent phrases.
9. Which one of the following is ambiguous between passive and active readings?
 - a. Duvar yıkıldı.
 - b. Eteğim tele takıldı.
 - c. Gözlerin süzölmüş.
 - d. Çocuk annesine atıldı.
 - e. Sütü süzmüş.
10. Which one of the following includes a violation of agreement?
 - a. *Sabaha beri çalışıyorum.
 - b. *Gömleğini çalınmış.
 - c. *Mustafa çağırıldılar.
 - d. *Meral kendini tarandı.
 - e. *Sen annenle mi gittiniz?

Turkish Alive

“(1) Türk yöneticisinin kapısı daima açıktır: Sekreter girer, geleni haber verir. (2) Ziyaretçi gelir, odacı çay getirir, imza için ya da bir şey sormak onayını almak için asrları gelir. (3) Dolayısıyla, yönetici bir yandan imza atar, imza atarken telefonla konuşur, geleni başı ile selamlar, eli ile buyur eder. (4) Yöneticinin bir dakikası boş değildir ama yine de günlük işlerini bitiremez ve çantası ile eve iş götürür ve evde dahi dosya inceler. (5) Tek kelime ile yöneticinin hiç vakti yoktur. (6) Çünkü gelen zarfları dahi açan, her evrakın havalesini bizzat yapan, her evraka imza atan yönetici çoktur. (7) Nitekim ‘imza atma’ konusunda ilginç bir öykü anlatılır;

(8) Bakanlık civarında , bir çöpçü ortalığı süpürürken rüzgar çıkar ve süpürülen kağıtların bir kısmı havada uçmaya başlar. (9) Bu sırada bakanın penceresi açıktır. (10) Uçuşan kağıtlardan birkaçı bakanın masasının üzerine konar. (11) Çöpçüde bir telaş başlar. (12) Ne yapısın? Koşup bakanlığa, özel kalem müdürünün odasına girer ve durumu anlatır. (13) Özel kalem müdürü de bakanın kapısını çalar ve kendisine konuyu anlatmak ister. (14) “Efendim, pencereden kağıtlar...” demeye kalmadan, bakan “ben onları çoktan imzaladım” der. (Bülent Ecevit, Milliyet, 7.3.1986)

(15) Bu örnek olay bir fıkra olsa da, gerçekten Türk kamu yönetiminde bir üst kademe yöneticisi günde ortalama 740 imza atmaktadır. (16) Ancak 740 imza atan bir yöneticinin başarılı olması mümkün değildir. (17) Zira bu kişi, her gün kendi sağlığından ve aile yaşamından çalarak çalışmaktadır.

(18) TOPLAM KALİTE YÖNETİMİNDE BAŞARININ İLK ADIMI BAŞTA ÜST YÖNETİM OLMAK ÜZERE, TÜM ÇALIŞANLARDA KALİTE BİLİNCİNİN OLUŞTURULMASINDAN GEÇMEKTEDİR.”

(Samsun Emniyet Müdürlüğü, Toplam Kalite Yönetimi Çalışmalarından, 2002)

EXERCISES:

Find the following in the given text.

- one objective genitive _____
one subjective genitive _____
one partitive genitive _____
one true genitive _____
- three examples of possessive marked noun phrases without their possessors.
a. _____
b. _____
c. _____
- two personal passive constructions
a. _____
b. _____
- one verb having collective reciprocal _____
- four ablatives:
a. three with ‘partitive’ function _____
b. one with ‘action through’ meaning _____
- one example of:
verbal agreement with a predicate verb _____
verbal agreement with a predicative adjective _____
verbal agreement with a predicative noun _____
nominal agreement in a possessive construction _____
nominal agreement in a subordinate clause _____
- Which one/s of the following datives mark/s temporal location?
evde in (4), *civarında* and *bavada* in (8), *günde* in (15).
- We have seen that accusative case marking is optional. Is it possible to use it with the underlined word in (15)? Why?/Why not?
- Compare the temporal and aspectual meanings of -(A)r/(I)r in the first and second paragraphs.
- What TAM markers are used in the last paragraph? Compare their functions with the ones we discussed in Unit 7.

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End Note

- ¹ Copular sentences are the sentences that have a verb (copula) which links a subject to a complement. One such verb is *-(y)DI*. Some examples are: *Etem öğrenci-y-di*, *Etem çalışkan-dı*, *Etem ablasından sonra-y-dı*, *Etem yardım etmek isteyen-di*, *Etem iş arayan-dı* (see Unit 11 for more on this).

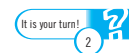
Key to “It is your turn!”



The following is the doubly marked forms of the given word classes.

nouns	demonstrative	personal	possessive	possessive	reflexive	verbs
		pronouns	determiners	pronouns	pronouns	
* evler	* bunlarlar	bizler	? bizimler	bizimkiler	* kendimizler	* geldikler
	* şunlarlar	sizler	? sizinler	sizinkiler	* kendinizler	* geldinizler
	* onlarlar	* onlarlar	* onlarınlar	onlarınkiler	* knedileriler	* gldilerler

When we attach *-Ar* to the already plural forms, we get the above combinations. Only first and second person plural pronouns are allowed to take the second marking for number. The inflections with the question mark can take the plural morpheme though the function of it is slightly different. After you study the part on the category agreement, come back to this question again, and try to explain the difference.



Taş, taşlar, and *taşlarım* are nominative. Yes, there are markers on *taşlar* and *taşlarım*, but they are not case

markers. *-lar* is the plural morpheme, *-(Im)* is the person agreement marker (see agreement). *Taşın* is ambiguous: In a phrase like *taşın ağırlığı* it is case marked (genitive), but in *senin taşın* it is in the nominative carrying person agreement.

3 Recall that in modal contexts accusative case may be used generically. So there is in fact no difference between *dondurma sevmez* and *dondurmayı sevmez*. The object is used as an abstract category noun. But in *bu dondurmayı sevdi*, it has a definite reading because of the time limitation marked by the verb.

4 *Kardeşine* has a benefactive reading. *Masa* is inanimate, so we cannot consider it as the entity that can benefit from the action. The dative case in *masaya* in fact indicates directionality.

5 They are often used interchangeably, but there is a slight difference between the two. *Kaça* is more about the total price; whereas, *kaçtan* inquires the price for per item. This function of ablative seems to be related to its partitive semantics focusing on parts of a whole.

6 *Kardeşimin bakıcısı* (objective genitive), *Sezen Aksu'nun son kasedi* (genitive of origin), *Osmanlının son sultanı* (appositive genitive), *avukatın itirazı* (subjective genitive), *ağacın dalları* (partitive/part-whole genitive), *çocuğun bisikleti* (genitive), *anasının kızı* (descriptive genitive).

7 I. We have seen that *-lar* is typically used to express the quantity of 'more than one'. We also said that in formal contexts it is used to show respect. Ambiguity of the given sentence can be explained by referring to these two functions.

- The mayor has more than one wife.
- The mayor has only one wife, but the speaker uses the plural form out of respect.

II. The morpheme order in nominals in Turkish is noun+number+possessive+case. However, *Anne-m-ler* (noun+possessive+number) seems to violate this generalization. This is the only case in Turkish that switches the position of the possessive and number suffixes. It may be that *-lar* does not convey its true function of plurality. It functions more like a derivational morpheme meaning family (*-gil* in some registers). If it really has a derivational function, then it can precede all other inflectional morphemes. Notice that if we want to pluralize the noun we have to say *anne-ler-im* (noun+number+possessive)

8 Let's first try to understand what makes the given examples ungrammatical.

- * *git-im* stem+person agr.
- * *git-idi-m* stem+Type II verb+person agr.
- * *git-im-idi* stem+person agr.+Type II verb
- * *git-im-di* stem+person agr.+Type I verb

These combinations of verbal categories are not good enough to form the minimal verbal stem in Turkish. We have seen that verbs are marked for TAM, voice and agreement categories. Which ones are obligatory and in what order? We know that voice is not an obligatory category. It seems that only agreement, and combinations of Type II verbs and agreement are not good enough. The last example having a Type I verb is not good either, at least in that order. But if we change it to *git-ti-m*, the result is grammatical. So, stem+Type I verb+person agreement is the minimal condition.

9 It can be *perfective* in a context such as: *Kim geldi? Annem geldi*. But *perfect* in a context such as *Annem geldi*. *Now that she is here we can start cooking*.

10 *Zeynep'i sinek ısırması* can be uttered upon seeing a rash on her body (indirect evidence: inferential). It can also be said after being reported that Zeynep was bitten by a mosquito (indirect evidence: hearsay). *Zeynep'i sinek ısırdı* can be uttered upon seeing a mosquito biting Zeynep (direct evidence).

11 Past in present.

12 If the speaker has stopped shopping in that store.

13 No because *-(D)yor* is associated with scheduled events. But this one is not scheduled.



14

Overlap in TAM in Turkish

	tense	aspect	mood
-DI	past (future) (present)	perfective (perfect of recent past, experiential perfect) perfect	factive direct evidence
-mİş	past	perfect perfective	factive evidential indirect evidence (inferential&hearsay)
-(A)r/-(I)r	timeless (future) (past)	habitual	epistemic (prediction) deontic (volition, promise, request, suggestion)
-(I)yor	present (future) (past)	progressive perfect of persistent situation iterative	factive
-(y)AcAK	future	prospective	non-factive assumption



15

- a. The speaker certainly does not cause this to happen.
It sounds like a complaint. The underlying meaning is that why do we let this happen? Let's do something to prevent it. Let's not let this go on! So it is causative permissive.
- b. daya-n-ış-tır-ıl-dı-lar (stem+reflexive+reciprocal+causative+passive+tense+agreement)

8

Aims

In this unit we will try to seek answers to the following questions:

- 👁️ What is the classification of words in Turkish?
- 👁️ What is the difference between prototypical and non-prototypical membership?
- 👁️ How are prototypes determined?
- 👁️ What is open classes and closed classes?

Key Words

- word classes
- prototypes vs non-prototypes
- semantic criteria
- grammatical criteria
- open classes
- closed classes

Contents

Turkish Phonology
and
Morphology
(Türkçe Ses ve Biçim Bilgisi)

Word Classes

- INTRODUCTION
- CLASSIFYING WORDS
- CRITERIA FOR CLASSIFYING WORDS
- WORD CLASSES
- OPEN CLASSES IN TURKISH
- CLOSED CLASSES IN TURKISH

Word Classes

INTRODUCTION

“There is a story among the Creeks that the birds once challenged the four-footed animals to a ball game. All the creatures with teeth were to be on one side, and all those with feathers were to be on the opposing team. When the designated day came, the animals separated into the two groups, but Bat came late. At first, he joined the animals with teeth, but they said: “No you have wings, you belong with the birds!” He went to the birds and they said: “No, you have teeth, you belong with the animals!” and drove him away, teasing him about his small size. He went back to the animals with teeth and begged to play with them. Finally, they agreed, saying: “You’re too small to help us, but since you have teeth, we’ll let you join our team.” The ballgame began, and soon it became clear that the birds were winning. They could catch the ball in the air where the four-footed animals couldn’t reach it. Suddenly, when all seemed lost, Bat swooped into the air and stole the ball from Crane. Again and again. Bat caught the ball, winning the game for the four-footed animals. His whole team agreed that even though he was small, he would always be classed with the animals having teeth.” (Martin, 1991: 8)

Word classes are a necessary part of any description of a language. Children learning their language classify words as well as grammarians who write a description of language. This is because in order to use a word in a sentence, one should have knowledge of its part of speech or lexical category. A word stock such as *ve, uçak, kaldık, ve, senden, annem, evde, oturduk, yaşadık, acımasız, soluksuz, evli, ancak, uçuk, apansız, hep, oldukça* is nothing more than a haphazard collection with no organization at all. But look at this one:

uçak	kaldık	senden	acımasız	hep	ancak
annem	oturduk		soluksuz	oldukça	ve
evde	yaşadık		evli		
			uçuk		
			apansız		

By sorting the terms in this way, it is possible to see something about how the systems which organize language structure work. Deciding on the categories, and words which belong inside them is a very important part of analyzing a grammar. But how can we do it? The bat in our story was finally classed with the animals

with teeth. But it was difficult. Recall that it was not admitted first because it had wings. Apparently, having wings does not satisfy class membership for animals with teeth. Birds did not want him either because he had teeth. Apparently, being a bird blocks having teeth. It is difficult to draw borderlines between classes, isn't it? Do we have the same problem in linguistic classification? We know that adverbs modify adjectives. Çok, as an adverb, modifies iyi in çok iyi insan. Çabucak is an adverb as well, but why is *çabucak iyi insan ungrammatical?

CLASSIFYING WORDS

An important aspect of morphology is the classification of words into word classes, also known as lexical categories, or parts of speech. Among several attempts to classify parts of speech in Turkish, we will adopt the one illustrated in (1). Each bracketed word is specified as an example of the word class listed on the right.

- | | | |
|-----|---|--------------|
| (1) | | |
| a. | Suzan okulu [bit]irdi ve öğretmen [ol]du. | VERB |
| b. | [Uğur] [araba]yı park etti. | NOUN |
| c. | [Yeni] öğretmen çok [iyi]. | ADJECTIVE |
| d. | [Genellikle] [çok] hareketlidirler. | ADVERB |
| e. | Annem [için] bu iş buraya [kadar]. | POSTPOSITION |
| f. | Geldi [ve] hemen yattı. | CONJUNCTION |
| g. | [Ben]i görmedi. | PRONOUN |
| h. | [Hişşt] bebek uyuyor! | INTERJECTION |

But what is a word class? A word class is made up of words sharing the common properties which characterize that class. However, as widely acknowledged in the literature (Aksan, 2000: 95; Banguoğlu, 1995: 153; Csato and Johanson, 1998: 208, Deny, 1941: 193-198; Dilaçar, 1971: 98; Ergin, 1998: 217; Korkmaz, 2003:249, Kornfilt, 1997: 93), membership is not restricted to a single class and that many words may belong to more than one. For example, *büyük* is an adjective in *büyük adam*, a noun in *büyükler gelmedi*, and an adverb in *büyük konuştu*. Similarly, to take a commonly cited example, *ara* can occur as any one of the four different parts of speech: a noun in *onunla aramız iyi değil*, an adjective in *ara sokak*, a postposition in *direkler arası*, and an adverb in *su ara ara akıyor* (Dilaçar, 1971: 98). From these examples, it appears that there may not always be clear-cut boundaries between word classes. It seems that words form a network with intersecting categories. So how can we describe an intricate network in a step by step fashion? Should we give up on classifying words altogether? What measures can be taken to ease this task?

It is necessary to understand that we cannot classify a given word by considering it in isolation. We also need to understand how it is used in a particular instance. It is also important to make a distinction between **prototypical** and **non-prototypical** members of a word class. For a given category, we may find two groups of examples: one sharing a number of central grammatical properties, and the other exhibiting some but not all of these properties. The core members having the full set of properties will be regarded as the prototypical examples. For example, *gibi* is a noun in *senin gibiler*, but how noun a noun is it? It certainly has the property of carrying the plural marker, which is typical of the category noun. However, the fact that it cannot preserve its nouniness in phrases like *çalışkan gibi* and *gördüğün gibi* makes it non-prototypical. In these examples it loses its nominal

function. Conversely, a more prototypical noun such as *kadın* would hold onto its nouniness in the same context: *çalışkan kadın, gördüğün kadın*. Because *gibi* acts like a noun in one context but not in another, it is considered less of a noun than *kadın*. This implies that grammatical likeness is not an all-or-nothing matter, but a matter of degree. Therefore, we may not always be able to give a definition of a category with the necessary conditions for category membership. Instead, we can begin with the definitions of the prototype. The central and most straightforward instances form a basis from which we can work progressively to the peripheral -the extensions beyond the prototype.

Which one/s of the following belong/s to both of the classes specified on the left? Construct example sentences illustrating the two uses.

- | | |
|-------------------------|---------------------------------|
| a. noun and verb | : say-, soy-, sür-, boya-, sav- |
| b. verb and adjective | : ak-, geç-, ekşi-, kal-, sar- |
| c. adjective and adverb | : güzel, çok, kalın, kısa |
| d. adjective and noun | : yardımsever, köşesiz |



But how can we characterize prototypes? What makes a noun a prototypical noun, or a verb a prototypical verb?

CRITERIA FOR CLASSIFYING WORDS

Semantic Criteria

One claim is that words can be classified by looking at their **meaning**. In this view nouns are considered to denote persons, *anne*; places, *okul*; and things, *masa*. Adjectives denote properties of nouns: *iyi* in *iyi anne*; *büyük* in *büyük okul*; *uzun* in *uzun masa*. Adverbs modify the meaning of verbs, adjectives and other adverbs in terms of time, place/direction, manner etc.: *dün*, *ileriye*, *hızlıca*. Pronouns replace nouns, therefore they denote persons, places and things: *ben*, *sen*, *o*, *beni*, *bana*, *orası*, *burası*. Postpositions mark relationships between their nouns and other words in the rest of the sentence they are used: *için*, *ile*, *göre*, *kadar*. Conjunctions join words phrases and clauses: *ve*, *veya*, *ama*. Finally, interjections convey feelings or emotions: *eh*, *ey*, *haydi*, *ya*.

From the above criteria, we learn that, for example, adjectives are the modifiers of nouns. Therefore, if *demir* and *büyük* function as modifiers of the noun *kapı* in *demir kapı* and *büyük kapı*, they must belong to the same category. Then why is the expansion of the phrase into *daha büyük kapı* acceptable but the same type of expansion into **daha demir kapı* is not? What about the grammatical *çok büyük kapı* and the ungrammatical **çok demir kapı*? By the same criteria, if nouns denote persons, places and things, what do *boşluk*, *yokluk* and *kimseler* denote in *boşluğa baktı*, *yokluğuna alışamadım* and *kimseler yolunu kaybetmedi*?

Both *büyük* and *demir* in the above examples function as modifiers, but their combinatory possibilities do not seem to be compatible. This is a restriction on their distributional property which cannot be explained by the semantic criteria. Likewise, the words *boşluk*, *yokluk* and *kimseler* cannot be categorized as nouns by the semantic criteria since they do not refer to anything. However, we know that they are nouns. But how? Maybe it is necessary to look at other criteria for a more objective and reliable classification.

Grammatical Criteria

Considerable use is also made of the, so called, **grammatical criteria** in classifying words. **Morphological properties** coupled with **distributional properties** of words provide a clearer demonstration of class membership. Morphological properties concern the morphological structure of words, i.e. the inflectional and derivational morphemes that they can take. For example, words that take the same derivational morpheme are classified as belonging to the same word class. *-lık* is productively used to create nouns in Turkish. This indicates that *boşluk* and *yokluk* given above belong to the category noun as well as *fedakarlık*, *sabtekarlık*, *uzunluk*. Similarly, words that take the same inflectional suffixes are considered to belong to the same word class. For example, the inflectional categories that signal nounhood are *number* and *case*. So, words that can carry this information are said to have prototypical characteristics for nounhood. Examine the following.

(2)

- | | | | |
|--------------|-------------|---------------|--------------|
| a. çocuk-lar | b. çocuk-ta | c. *kadar-lar | d. *kadar-da |
| ked-i-ler | ked-i-de | *yürü-ler | *yürü-de |
| çay-lar | çay-da | *hızlıca-lar | *hızlıca-da |

The (2a) and (2b) examples can take number and case marking respectively, whereas the same combination is not permissible with the (2c) and (2d) examples. Therefore, words in (2a) and (2b) belong to the same class, but not the words in (2c) and (2d). Inflectional morphemes are useful in word classification, but they can only be used with words that undergo inflection.

The distributional criteria, however, has a wider range of application. It concerns syntactic positions of words and the syntactic functions associated with them¹. By this criteria, we can explain how a word like *kimse* is categorized as a pronoun: it can be used in the same position as a noun is used, and pronouns replace nouns by definition.

(3)

- | | |
|-------------|------------|
| _____yoktu | |
| a. İlknur, | e. yavaşça |
| b. çocuk | f. oku |
| c. yokluk | g. şşşt |
| d. kimseler | h. diye |

The words given in (3a, b, c, d) can be used in the given syntactic slot in (3) before the verb *gelmedi* to function as the subject, but not the ones in (3e, f, g, h). This means that the first group of examples belong to the same word class.

This was to show you how semantic and grammatical tests can be used to identify at least the most prototypical members of a word class. They may also enable us to make generalizations about the deviations from the prototype, and thus discover the subclasses of each word class.

WORD CLASSES

As has been amply demonstrated in the EFL classrooms, word knowledge makes a considerable contribution to linguistic performance. Most second language learners find it difficult to communicate in the target language not because they

lack grammatical mastery, but merely because there is a discrepancy between their thoughts and the means with which they express these thoughts. Words are considered to be the bodies of the thought, and a lack of word knowledge results in a lack of expression of thought. Even in using their native language, most speakers experience times of being speechless. This indicates a difficulty in choosing the right words to express what we mean in the way that we mean it. Words have the power to create the intended impression on the receiver. However, not all words have the same semantic and syntactic/functional importance.

Open Classes vs Closed Classes

It is assumed that all languages make a distinction between open and closed parts-of-speech classes. This distinction is made based on the difference between words in their semantic and functional importance. The **open classes** (also known as content words) include nouns, verbs, adjectives, and adverbs; the **closed classes** include the rest: pronouns, postpositions, conjunctions, and interjections (also known as function words). The communicative value of content words is much higher because they are meaningful. Therefore, they are considered to be lexical items. Closed class words, on the other hand, do not contribute to the meaning of a sentence, but determine the syntax of it. In other words, the meaning of these words can only be explained by referring to the relationship they establish between the members of a sentence. So, we can say that open classes are more important semantically, but closed classes are so functionally. Aitchison suggested an analogy which equates open classes with *bricks* as building materials of a sentence, and closed classes with *mortar* as relating sentence items to one another (Aitchison, 2003: 102).

Open classes have unlimited membership. That is, they have a very large number of members. The closed classes, however, have relatively few members. It is possible to make a quick list of, say, the pronouns or conjunctions used in a language, but it might be a daunting job to make a list of all the nouns, verbs, adjectives and adverbs used in that language.

The reason why open classes are called so is that they are open to new membership. Whenever languages are in need of new words to label the emerging concepts, they create or borrow words falling into this category. But it is less likely, though not impossible, to add new members to the closed classes, for example novel postpositions, or conjunctions, or pronouns.

There are also inflectional differences between the two classes. Members of open classes undergo various grammatical inflections, so they have variable forms: *uyu, uyur, uyuyor, uyuyacak, uyumalı*. Closed classes, except for the pronouns, have invariant forms since they do not take up any grammatical inflections.

- a. Pick out from the following list those words that belong to a closed class: *sen, yesen, geçen, içten, benden, hem, hemen*.
- b. Give a part-of-speech classification of the words in the following: *Dostluk hakkında sohbetler pek boşta gidiyordu*.



OPEN CLASSES IN TURKISH

Nouns

Can you imagine a language without nouns? I remember a student proposing this to me once. She was frustrated with the terminology used in one of her courses and was complaining about it to me. Her suggestion was not to use those technical terms at all. This is exactly like a language without nouns. How can you say something about, say *a tree*, without using the label *ağaç* invented to refer to a tree? How economic is it to express this meaning by saying *you know that tall plant in our garden with a long trunk made of wood which usually has leaves and branches, and which can live for many years?* Even this definition is not free of nouns. Nouns are used as the means of labelling the world around us, and labelling can be said to be the substantial purpose of the existence of language. Therefore, nouns constitute one of the major word classes in a language.

In terms of their form, nouns in Turkish can be **bare**, **derived**, and **compound**. Bare nouns have a root standing without any derivational morphemes attached to them as in *kuzu*, *lale*, *baba*. Derived nouns are formed by affixation as in *oyuncak*, *bozgun*. Compound nouns are made up of two words merged in one as in *hanımeli*.

In terms of their semantics, nouns are classified as **countable** vs **uncountable** (or **mass**). *Kalem*, *kitap*, *masa* are countable nouns since they can be individuated and counted one by one. Nouns such as *süt*, *yoğurt*, *su* are uncountable because they cannot be individuated, thus cannot be counted. It is important to note, however, that uncountable nouns may have count and mass interpretations. Consider:

(4)

- a. Bana bir ekmek verdi.
- b. Bana biraz daha ekmek verdi.

In (4a) the noun *ekmek* is interpreted as a unit so it is countable. In (4b), however, it is interpreted as a substance, therefore it cannot be counted. The difference between the two can also be shown by the choice of *Wh-* words to go along with them. (4a) can be an answer to the question *How many?* whereas (4b) to the question *How much?* As we know, the former is used with countable nouns, and the latter with uncountable nouns.

It is your turn!

3



Do the underlined noun phrases have count or mass interpretation?

- a. *Bu hafta hep köfte yedik.*
- b. *Dört köfte bir çocuk için çok değil mi?*

Nouns can also be classified as *abstract* vs *concrete*. **Concrete nouns** denote the physical entities that can be perceived through our senses. They may refer to common members of a category such as *kadın*, *erkek*, *kedi*, *masa*, *sandalye*, known as **common nouns**; or to a particular person, place, or thing such as *Hakan*, *Otel Anadolu*, *Kaşıklı Elması*, known as **proper nouns**. **Abstract nouns**, on the other hand, refer to a quality, state or action as in *iyilik*, *açlık*, *yalan*.

As mentioned elsewhere, Turkish allows overlaps between word classes, so adjectives, adverbs and postpositions can be used as nouns as in:

(5)

- | | |
|----------------------------------|--------------|
| a. [Büyükler] geldi. | adjective |
| b. [İleriye] git biraz! | adverb |
| c. Senin [gibilere] güven olmaz. | postposition |

Verbs are used as nouns as well. Through a process called **nominalization**, verbs can be subordinated. The resulting clauses in turn are used in positions that are characteristically filled by subject and object noun phrases as illustrated by the bracketed parts in (6).

(6)

- a. [Onun birinci olduğ]unu herkes biliyor.
- b. [Birinci olmak] bir hayaldi.
- c. [Onun sınavda birinci olması] sürpriz bir sonuçtu.

But which of these noun types is the most prototypical? Let's apply our tests for nounhood. The members that pass both the semantic and grammatical tests would be categorized as the most central members, whereas the others as peripheral since they can be used as nouns only when certain conditions are met.

Criteria for Nounhood

Semantic Criteria

The most central members of nouns denote persons or concrete objects. In terms of function, they head noun phrases which characteristically function as the subject or object in a sentence.

Morphological Criteria

As far as the inflectional properties are concerned, prototypical nouns enter into inflectional contrasts of *number*, singular vs plural; and *case* nominative vs accusative, dative, locative, ablative, and genitive.

In terms of derivational morphology nouns are most productively derived by morphemes such as *-CAğIz* and *-CI* from nouns, *-Ik* from nouns and adjectives; and *-(y)AcAK*, *-ç*, *-DIK*, *-gA*, *-gAn*, *-GI*, *-(y)IcI*, *-(y)Iş*, *-mA*, *-mAca*, *-mAk*, *-mIş*, *-(I/A)r*, from verbs. Some examples include *çocukcağIz*, *simitçi*, *eşitlik*, *yiyecek*, *gönenç*, *tanıdık*, *bilge*, *ergen*, *saygı*, *sürücü*, *çıkış*, *sarma*, *gülmece*, *yüzmek*, *dolmuş*, *yazar*. It should be noted that some derivations display **semantic fusion** where the stem and the suffix melt in each other so much that we do not even consider the derived word as consisting of two distinct morphemes. For example, try to see the difference between *yüzmek* and *çakmak*. The former is simply a deverbal noun, that is a noun derived from a verb. It somewhat maintains its verbal features in that we interpret it as the act of swimming. We remain conscious about the fact that this word is composed of two morphemes. The latter, however, exhibits semantic fusion. The derived form does not in any way remind the verbal features of the stem. That is, we do not think of it as the act of sparking, but rather an instrument by which we light something. Other examples of semantic fusion are *dolmuş*, *kıyma*, *döner*, *dikiş*, *tokmak*, *yaşmak*, *giyecek*.

Distributional Criteria

The most prototypical distributional features of nouns in Turkish is their ability to appear with the determiners, especially the indefinite article *bir* as in *bir adam*. Determiners are the words that restrict the meaning of the noun in different ways. They include articles, demonstratives, possessives, quantifiers and numerals: *bütün, bu, şu, o, benim, senin, onun, her, her bir, daha, az, iki, üç* and so on. All prototypical nouns can be used with determiners.

Another property of nouns is that they can be modified by adjectives as in *iyi adam*. Finally, nouns can combine with both an adjective and a determiner as in *iyi bir adam*.

Based on what we have said so far, distributional criteria for nounhood include three tests: positions with a preceding determiner and/or adjective: Determiner _____, Adjective _____, or Determiner+Adjective _____. If a word can be used in these **slots blank** in a sentence, it has more noun features than others that cannot.

Let's now test which noun types are the most prototypical. Consider the behavior of the noun *Atatürkçülük* in the following.

(7)

- | | | |
|---------------------|-------------------------|------------------|
| a. *Atatürkçülükler | b. *bir Atatürkçülük | c. Atatürkçülüğü |
| d. iyi Atatürkçülük | e. iyi bir Atatürkçülük | |

This abstract noun displays some prototypical features of nounhood. Firstly, its derivational structure reflects that it is a noun made from a noun by the suffix *-lik*. Secondly, its inflectional structure shows that it can take the accusative case marker as in (7c). Most probably it can take the others too: *Atatürkçülükte, Atatürkçülükten, Atatürkçülüğe, Atatürkçülüğün*. (7d) and (7e) show that it can be modified as well. But the ungrammaticality of (7a) and (7b) shows its nonprototypical features. It cannot be pluralized, nor can it be used with *bir* without a modifier.

It is your turn!



Which of the following nouns is/are the most typical? Why?

masa
saygısızlık
belediyecilik

Verbs

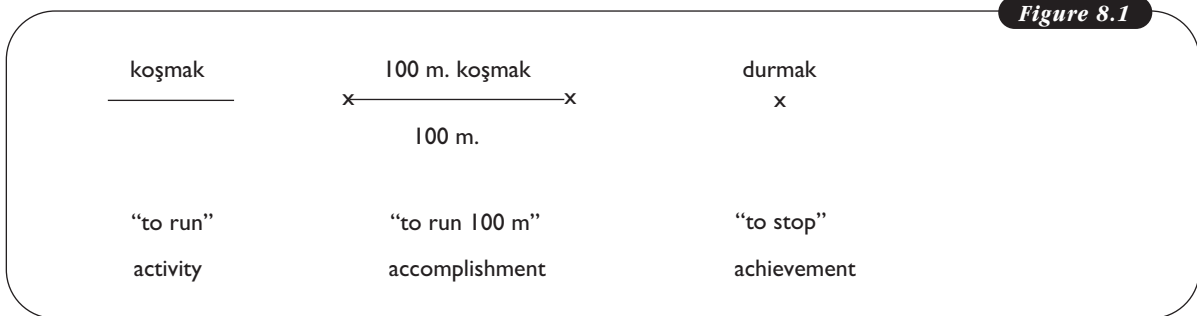
We have seen that a language cannot be without nouns. Can it be without verbs? This question is equally absurd. Think what exactly we do when we say something using language. We talk about things and what happens to them. The former is expressed by nouns and the latter by verbs. This description is almost like the definition of a sentence. There is always a subject in a sentence which is expressed by a noun phrase. The rest of the sentence is about what happens to this subject, and this information is predicated by verbs in a language. Then, nouns and verbs can be defined as the skeleton of a language.

How are verbs formed in Turkish? In terms of their form, verbs are classified into three groups: bare verbs, derived verbs, and compound verbs. **Bare verbs** are predominantly mono syllabic with no derivational suffixes attached to them. Some examples are *aç-, ürk-, üre-, tut-, kork-, uyar*. **Derived verbs** are composed of a stem, either nominal or verbal, and a derivational morpheme as in *artır-, çoğalt-, kirala-, tepele*. **Compound verbs** consist of a noun followed by an auxiliary as in *yardım et-, mümkün kıl-, yok ol-, naz yap-, iş buyur-*.

Verbs can be classified in terms of their semantic structure as well. This kind of categorization focuses on the internal structure of the lexical meaning of a verb. Vendler (1967: 97-121) suggested four categories: **activities**, **accomplishments**, **achievements**, and **states**. As we mentioned earlier, verbs typically express rapid changes and they denote what people do. Depending on the nature of the action, doing something may involve an ongoing process in time. That is, some verbs denote actions that last a period of time. *Activity verbs* such as *koşmak*, *yürümek*, *yemek yemek*, *araba kullanmak* can be listed in this category along with *accomplishment verbs* such as *deney yapmak*, *100m. koşmak*, *büyümek*. Besides the similarity in their procedural nature, activity and accomplishment verbs differ in their reference to an end point in the activity expressed. Accomplishments have a climax prior to which the action indicated by the verb is not fulfilled, whereas activities do not have such a terminal point. For example, *koşmak* as an activity verb denotes an action which does not require an end point for its completion. When the runner terminates the act of running at some point in the process, it can be said that s/he did perform the act of running. However, this does not hold for accomplishment verbs. For example, *100 metre koşmak* cannot be said to have been performed if the runner stops the act of running at a point in the process. In order for a runner to say *100 metre koştum*, it is necessary for him/her to have run till the end point of *100 metre*. Similarly, to be able to use the verb *büyümek* to denote an accomplishment requires reaching the specified point in time that is considered to be the end point of the process *büyümek*. A child, for example, cannot be considered to have grown up before that point.

Achievement verbs are similar to accomplishment verbs as they have a terminal point. However, the two categories differ in their procedural nature. Achievements do not indicate a process in time. They denote instantaneous actions such as *bulmak*, *durmak*, *başlamak*, *doğmak*, *ölmek*, *farketmek*. For example, an action represented by the verb *durmak* can be defined as *durmak* only at the time when the act of stopping is performed, neither before, nor after it. It takes place at a definite time, and therefore does not last a period of time. Figure 8.1. is given to illustrate these distinctions.

Figure 8.1



Note that not all verbs are dynamic, and not all verbs indicate a change of state. Some verbs may denote not what people do, but what people are, how they feel, where they are, what they believe, what they know, etc. Such verbs indicate persistent situations lasting a period of time. These are called *stative verbs*. They are non-agentive as they do not have agent subjects. Neither do they involve actions performed deliberately. Some examples are *istemek*, *sevmek*, *nefret etmek*, *bilmek*, *inanmak*. Table 8.1 is given to show the intersections between the formal and semantic characteristics of verbs.

Table 8.1
Verb Types

	activities	accomplishments	achievements	states
bare	koş-, yüz-, sür-	büyü-	çarp-	bil-, sev-, ol-, um
derived	koştur-, yüzdür-	iyileş-	başla-	yaşa-
compound	araba kullan-	deney yap-	gaza bas-	sevdalı ol-

It is your turn!

5



What is the semantic classification of the verb *bayıl-* in:

- a. *Çorbaya bayıldım.*
b. *Kadın bayıldı.*

Criteria for Verbhood

Semantic Criteria

As mentioned earlier, prototypical verbs are those denoting rapid changes in the universe. They are characteristically events and actions.

Morphological Criteria

The most salient signal for verbhood is probably the infinitive morpheme *-mAk* which can be attached to all verbs: *gelmek*, *uyumak*, *olmak*, *bilmek*, *oturadurmak*. Compare the ungrammaticality in the following when it is used with a noun **anımak*, an adjective **güzelmek*, an adverb **bızlıcamak*, a postposition **içinmek*, a pronoun **benmek*, and a conjunction **vemek*. Inflectional contrasts, too, provide another distinctive property of verbs. They manifest themselves as tense, aspect, mood, voice, agreement, and negation markers on verbs. The ungrammaticality of **kırmızıyor*, **yumuşakıştı*, **bızlıcam* and **fakatmalı* shows that morphemes marking aspect, voice, agreement, and mood are disallowed in non-verbal contexts. Only after converting these forms into verbs can the verbal suffixes be used with them: *kırmızılaşıyor*, *yumuşaklaştı*, *bızlandım*, *fakatlamamalı*.

Prototypical verbs are tensed and all verbs have tensed forms. In terms of their derivational structure, verbs from nouns and adjectives are derived with the morphemes such as *-Al*, (*azal-*), *-dA* (*ışılda-*), *-lA* (*avla-*), *-sA* (*susa-*) as well as deverbal verbal stems with morphemes such as *-mA* (*görüŝme*), *-Ar* (*kopar-*), *-n* (*diŝlen*), *-(y)İŝ* (*giriŝ*), *-t* (*titret*). The very productive suffix *-(y) IçI* is also attached to verbs to form nouns as in *sürücü*, *azmettirici*, *bağlayıcı*, *besleyici*, *betimleyici*, *binici*, *arabulucu*, *büyüleyici*, *candandırıcı*, *ferahlatıcı*, *caydırıcı*. So, these morphemes may be representative of verbhood.

Distributional Criteria

Tensed verbs function as the head of predicates/clauses (see Unit 11 for more). Therefore, they are the most central/governing unit in the predicate so they restrict other elements in the predicate/clause.

(8)

- a. Onu buldu.
*Onu gitti.
*Kardeşim doktor söyledi.

The verb *bul-* in (8) allows a direct object noun phrase, but *-git* does not. So, the test for transitivity is Direct Object Noun ____, and the one for intransitivity is ____:

(9)

a. Noun ____

Elmayı yedi.

Sevgi'yi gördü.

Mektubu yazdı.

b. ____

Gitti.

Oturdu.

Uyudu.

The verb *ol-* in (10) allows a noun phrase (doktor) or an adjective (iyi) as its subject complement, but *söyle-* does not. This means that some verbs can be tested using the configuration Adjective/Noun ____.

(10)

Kardeşim doktor oldu.

Kardeşim iyi oldu.

(11) Adjective ____

a. Başarılı oldu.

b. Hasta görünüyor.

c. Hastadır.

Noun ____

d. Doktor oldu.

e. Doktordur.

f. Doktormuş.

Such restrictions lead to verbal subcategories which are formed according to the different sentence structures that verbs permit. The subcategories these tests have generated so far are transitive verbs in (9a), intransitive verbs in (9b), and copular verbs in (10&11).

Explain the ungrammaticality of the following.

A : *O çocuk ne yapıyor?*

B : **Yiyor.*



It is your turn!

6

Adjectives

Adjectives are like the cream of a cake. Even if you do not put cream in a cake it is still a cake, but a naked one. When you dress it with soft and rich cream, it becomes more tasty. Nouns without adjectives are naked just like a cake without cream. Yes, they look more plain, but they are still nouns. This is what makes adjectives modifiers, and therefore optional elements in a noun phrase. Compare *öğrenci* and *çalışkan öğrenci*. *Öğrenci* is a noun phrase with or without the adjective *çalışkan*. So, why do we even bother to use adjectives? They restrict the possible referents of a noun in the real world. *Öğrenci* alone can refer to any one of, say 25 students in a classroom, but *çalışkan öğrenci* could have only one referent having the property the adjective denotes.

Adjectives can be used either attributively or predicatively (see Unit 11 for more).

(12)

a. [Büyük oda] [benim].

b. [Benim odam] [büyük].

Büyük in (12a) is an **attributive adjective** because it is used within a noun phrase to modify that noun. However in (12b) it is a **predicative adjective**, since it is used in the verb phrase as the complement of the subject.

What is the semantics of adjectives used in Turkish? Some adjectives may denote properties that can have varying degrees, and therefore they have gradable

opposites. For example, the height of a door can come in different sizes; therefore a 200cm-door is taller than a 150 cm-door. What this means is that it is possible to denote different degrees of size in different contexts. Such adjectives are *called gradable adjectives* and they have gradable opposites. On the scale of size bigger or smaller sizes are possible ranging from very big to very small. Some antonymous pairs include *iyi:kötü*, *eski:yeni*, *güzel:çirkin*, *güçlü:zayıf*. Gradations are possible through degree adverbs or comparatives: *çok iyi:çok kötü*; *oldukça eski:oldukça yeni*, *daha güzel:daha çirkin*, *biraz güçlü:biraz zayıf*. In these pairs the negative of an adjective does not imply absence of the property designated. So, to say that something is not ugly does not necessarily mean that it is beautiful. In addition, some adjectives, however, go beyond binary antonyms and form scales of more values such as *sıcak:soğuk*, a pair which allows the intermediate qualities of *ılık*, *kaynar*, and *serin*.

It is important to note that the positive counterpart in an antonymous pair is considered more basic. That is, the positive value is considered to be the default or given value. But how do we know this? Let's look at the way we form questions using these adjectives.

(13)

- | | |
|--------------------|----------------------|
| a. Ne kadar uzun? | b. *Ne kadar kısa? |
| Ne kadar büyük? | *Ne kadar küçük? |
| Büylüğü ne kadar? | *Küçüklüğü ne kadar? |
| Uzunluğu ne kadar? | *Kısalığı ne kadar? |
| Ağırlığı ne kadar? | *Hafifliği ne kadar? |

The (a) examples in (13) show that when we want to question a gradable property, we always use the value of the positive end of the scale. The (b) examples cannot be used as a neutral, answer seeking question, but rather a more specific marked question. The implication in them is that the negative value was mentioned previously in the conversation, and the question is asked to test the size of this negative value. Therefore, a possible answer for the (b) questions always involve the negative value; whereas, both are possible with the (a) questions.

(14)

- | | |
|-------------------|-------------------|
| a. Ne kadar uzun? | b. Ne kadar kısa? |
| Çok uzun. | Çok kısa. |
| Çok kısa. | *Çok uzun. |

As an answer to (14a), both values can be used since it is an unmarked, neutral question asking the length/height of something. However, (14b) disallows *çok uzun* because the question is not asking just about the length/height, but about the short length/height. This shows that the positive value of gradable antonym is considered to be the basic one.

Not all adjectives are gradable, though. That is, there are adjectives that cannot designate more or less of the value that they denote. These adjectives are labeled as **non-gradable adjectives**. Some examples are *evli:bekar*, *öli:sağ*, *kadın:erkek*. Since they cannot be graded, they cannot combine with degree adverbs: **daha evli:***daha bekar*, **biraz öli:***biraz sağ*, **oldukça erkek:***oldukça kadın*. These adjectives designate only one quality and absence of it implies the antonym of that adjective. If someone is married, he is not single, and he cannot be less or more married.

It is clear that adjectives function as modifiers of nouns, but nouns can be used as modifiers as well. It is possible to say *demir kapı* as well as *büyük kapı*. In the former the noun *demir* is used as an adjective, in the latter the adjective is *büyük*. Even though they function in the same way, there are significant differences between the two. Earlier we mentioned that adjectives can be used with degree adverbs, but no noun can be used with a degree adverb: *çok büyük kapı* is OK, but **çok demir kapı* is not. Adjectives can combine with other adjectives as in *büyük kalın kapı*, but nouns cannot as in **demir kalın kapı*. Usually in a noun phrase adjectives precede nouns. Finally, nouns cannot be coordinated with other adjectives. *Büyük ama dik kapı* is acceptable, but **demir ama dik kapı* is not. Coordination is a syntactic process that combine the two elements of the same type. The ungrammaticality of the last example shows that *demir* and *büyük* are not considered to be of the same nature. Apparently *büyük* is more of an adjective than *demir* which holds on to its nouniness. Since there are restrictions on the way nouns are used as modifiers, they are regarded as peripheral members, and therefore the modifier function is more characteristically filled by adjectives.

Verbs, too, can be used as adjectives. This process is called **adjectivalization**, the undergoers of which have characteristics of both verbs and adjectives. Some examples are shown in brackets: [*ağlayan*] bebek, [*sevdiğimiz*] ev, [*kırılmış*] vazo, [*katlanılmaz*] dert, [*gömülü*] hazine, [*akacak*] kan. In these examples we see the attributive use of the adjectivalized verbs. Let's now see if they can be used predicatively.

(15)

- | | |
|-------------------|----------------------|
| a. *bebek ağlayan | d. *dert katlanılmaz |
| b. *ev sevdiğimiz | e. hazine gömülü |
| c. vazo kırılmış | f. *kan akacak |

The ungrammaticality of (15a, b, d, and f) may be due to their less fully adjectivalization. Therefore, unlike most prototypical adjectives, they are not flexible enough to be used predicatively.

The following morphemes are used to produce adjectivalized verbs? Do they display any semantic similarity?

- a. *kırık, yanık, bitmiş, boyanmış, traşlı*
 b. *kırılabilir, yapılabilir, bükülebilir.*

Quantifying modifiers such as *biraz, az, çok, birtakım*; numerals such as *bir, iki, üç, dört*; and ordinals such as *birinci, ikinci, üçüncü* are also classified as adjectives. There are also compound adjectives such as *açık sözlü, boş boğaz, olağanüstü*. One last type of adjective is the the modifier reading of genitive constructions. As we mentioned in Unit 7, an expression like *başarıların çocuğu* means *başarılı çocuk*. Is it gradable? **Çok başarıların çocuğu, *oldukça başarıların çocuğu*. Can it be a predicative or attributive? *Başarıların çocuğu Ahmet*, but not **başarıların çocuğu bir öğrenci*. So it can have a definite noun as its head in its attributive use. Similarly, it can predicate a definite subject as in *Ahmet başarıların çocuğu, O başarıların çocuğu. Bu öğrenci başarıların çocuğu*. But which one/s of these adjective types are the most prototypical?



It is your turn!

7

Criteria for Adjectivehood

Semantic Criteria

The most typical members of the category adjective are used to denote properties that can be possessed in varying degrees. The most salient properties are known as size, shape, color, age, taste, smell, texture, evaluation. Examples for each are *büyük oda*, *kare oda*, *mavi oda*, *eski oda*, *acı biber*, *burcu koku*, *kalın kumaş*, *güzel oda* respectively.

Morphological Criteria

Adjectives are not marked inflectionally in Turkish. A special case of degree specification in gradable adjectives is expressed analytically, not inflectionally, by means of degree adverbs *daha* and *en* as in *daha güzel*, *en güzel*. In comparative constructions *daha* can in fact be used optionally: *benden daha uzun* and *benden uzun* are both acceptable. Other degree adverbs are *oldukça*, *pek*, *fazla*, *fazlasıyla*, *o kadar*, *ne*.

It is your turn!

8



Does *mi* in *güzel mi güzel* mark comparison?

In terms of derivational morphology, however, the category is marked by a number of derivational morphemes such as *-lı* (*sakallı*), *-cıl* (*insancıl*), *-imsi* (*acımsı*), *-imtrak* (*sarımtırak*), *-sal* (*bilimsel*). These are some examples deriving adjectives from nouns. There are also morphemes that derive adjectives from verbs such as *-ğan* (*alınan*), *-gin* (*pişkin*).

Another special case about adjectives is the derivation called *reduplication* (See Unit 6 for more). The first syllable of an adjective can be doubled and then one of the consonants *p*, *m*, *s*, or *r* is either added to it or is used to replace the last consonant of it. This is done to intensify the meaning of the adjective: *apaçık*, *bembeyaz*, *upuzun*, *yusyuvarlak* (see Unit 6 for more).

Distributional Criteria

Adjectives function as the head of an adjective phrase such as *güzel in oldukça güzel*. Adjective phrases can be used as pre-head modifiers (16a), as predicative complements (16b), and rarely as post-head modifiers (16c).

(16)

- | | |
|-----------------------|------------|
| a. sinirli kız | |
| b. kız sinirli | c. Radyo 1 |
| sinirli oldu | Kanal D |
| onu sinirli buluyorum | Kat 1 |

The prototypical adjective occur in all of these positions, but peripheral members are restricted to only one or two of them, and excluded from the rest. So, the distributional test for the core members of the category is ____ (bir) Noun as exemplified in *iyi (bir) çocuk*, *güzel (bir) ev*, *sakin (bir) şehir*. This is the so called attributive position of adjectives. Another position for adjectives is the position preceding the copular verbs such as *ol-* and *görün-*: ____V_{copular}. Some examples are *çocuk iyi*, *ev güzel*, *şehir sakın*, *güzel oldu*, *güzel görünüyor*. Adjectives may also follow degree adverbs as in *çok tatlı*, *biraz acı*, *hafif sıcak*,

orta şekerli, inanılmaz zor, daha açık, en sağlam. The configuration for this test is Degree Adv. ____.

It is important to note that morphological and distributional tests for objecthood may not be reliable. As we shall see shortly, they work for testing adverbhood as well.

Adverbs

Adverbs are just like adjectives in that they can be described as the cream of a cake. The difference is that they modify verbs, adjectives and other adverbs. Without an adverb, a verb may look naked, but it retains its verb status. Therefore, like adjectives, adverbs are optional elements too (see Unit 11 for exceptions). They add a descriptive value to whatever they modify. It is important to note the difference between an adverb and an adverbial. Adverb is the grammatically distinct word class used only as modifiers of verbs, adjectives, and adverbs. Adverbials, on the other hand, are words that function as adverbs. Adverbials include adverbs as well. In *çabucak ayrıldı*, *çabucak* is an adverb, but in *dün ayrıldı*, *dün* is an adverbial because it is in fact a noun functioning as time adverbial. But *yazın*, *kışın*, *gündüzün* are adverbs that are solely used to describe the time of the verb (see Unit 11 for more).

In terms of their formal structure adverbs are of two type. **Bare adverbs** consist of a single word. Majority of them denote manner and time: *asla*, *artık*, *daha*. **Derived adverbs** are formed with derivational morphemes from nouns and verbs. Morphemes such as *-İyİn* (*geceleyin*), *-İn* (*ilkin*), *-CA* (*bence*, *delice*, *insanca*), *-DA* (*aşamdan*), *-İA* (*hayretle*), *-cAk* (*çabucak*), *-cAcİk* (*çabucacık*), *-sİzİn* (*ansızın*) derive adverbs from nouns and adjectives. Morphemes such as *-(y)A*, *-(y)İp*, *-(y)ArAk*, *-(y)İncA*, *-(y)AlI* derive adverbs from verbs as in *abarta abarta*, *kapıyı çarpıp*, *kapıyı çarparak*, *kapıyı çarpınca*, *buraya geleli*. There are also morphemes that can attach to nominalized and adjectivalized verbs to form adverbs. Some examples are *bakmaksızın* (*-mAksİzİn*), *dönmesiyle* (*-mAsİylA*), *ağladıkça* (*-DİkçA*).

Reduplication is another way of marking adverbial meanings in Turkish: *ağır ağır*, *derin derin*, *mavi mavi*, *buram buram*, *damla damla* (see Unit 6 for more).

Criteria for Adverbhood

Semantic Criteria

Adverbs characteristically modify verbs, adjectives, and other adverbs in terms of time, place, direction, quality, manner, and degree. Core members express manner or degree, less central members express time and place (Huddleston, 1988: 120).

Morphological Criteria

Adverbs lack inflectional morphology. Like adjectives they enter into comparative and superlative contrasts, but they do so not by inflectional morphology, but by juxtaposition of degree adverbs such as *daha* and *en*.

Derivational morphology deriving adverbs is more productively applied. Many adverbs, particularly manner adverbs, are derived from adjectives or nouns by the derivational suffix *-CA*: *bızlıca*, *güzelce*, *askerce*, *çocukça*. But it is neither a necessary nor a sufficient condition for adverb status. For example, reduplicated

adjectives do not include *-CA*, but they function as adverbs as in: *çabuk çabuk*, *kısıt kısıt*, *uzun uzun*. Similarly, *güzelce* and *canice* include *-CA*, but they can be used as adjectives as well: *güzelce bir kız*, *canice bir plan*. But certain derivational morphemes derive adverbs and only adverbs such as *-A* added to reduplicated verbs as in *seve seve*, *koşa koşa*. The morpheme *-LA* added to nouns derives adverbs as well: *hevesle*, *iştahla*, *merakla*.

It is your turn!



Can you think of other adverbs that prototypically function as adverbs?

Distributional Criteria

Adverbs function as modifiers of verbs as in *akıllıca konuştu*, adjectives as in *çok akıllı*, and adverbs as in *çok akıllıca konuştu*. They are also used as connectors between clauses and as modifiers of the entire clause: *böylece*, *sonuç olarak*, *bundan dolayı*, *açıkçası*, *ne yazık ki*, *maalesef*, *şüphesiz*. The distributional tests for all these positions are shown in the following in this given order.

(17)

a. ___ V	b. ___ Adj.	c. ___ Adv.	d. S ___ S	e. ___ S
Çabuk döndü.	çok çabuk	çok çabuk	Soru sordum;	Maalesef geldi
İyi uyudu.	pek iyi	pek iyi	böylece, merakımı	Ne yazık ki unuttum.
Hızlı koştu.	hala hızlı	hala hızlı	giderdim.	Gerçekten üzüldüm.

This test may not be reliable in that (17a) and (17b) may generate -instead of adverbs- a verb phrase consisting of a noun and a verb, and an adjective phrase consisting of two adjectives. Recall that some noun phrases are used before verbs in the given slot in (17a) as in *kitabı bitirdi*, and that two adjectives can be used one after the other in the given slot in (17b) as *kalın mavi* in *kalın mavi kitap*; or adverbs as in *daha mavi* (17c) and (17d) work better, but they only generate degree adverbs and sentence adverbs without accounting for the other two types. Another problem with the distributional criteria is that most adverbs retain considerable word order flexibility. This means that they do not have a fixed position within the sentence so they can satisfy a distributional test.

Since adverbs are a very flexible class allowing many overlaps between other word classes, and since this flexibility makes it harder to develop an objective test for them, a larger class called **particles** are proposed. They include some adverbs, some conjunctions, and postpositions.

CLOSED CLASSES IN TURKISH

Postpositions

Postpositions form phrasal constituents with nouns or noun phrases. That is, they are not used on their own. They always follow their noun complements as the head of a postpositional phrase:

(18) [NOUN POSTPOSITION]

anneme göre
annem için

Postpositions are relevant to morphology in that they govern morphological case categories. That is, they assign case to their noun complements. Some postpositions assign nominative case as in *Osman gibi*, *Salih için*, *kedi kadar*; whereas some assign dative and ablative case as in *ona göre*, *akşama kadar*, *buna rağmen*, *sana dair*, *öğretmene karşı*, *dünden beri*, *senden yana*, *yarından itibaren*, *akşamdan önce*, *dersten sonra*. Postpositions are invarient in their form with no inflectional contrasts, but they enter into different inflectional relations with their noun complements. Sometimes they behave differently with nouns and pronouns. For example, *gibi*, as well as *kadar* and *için*, assigns nominative case to its noun complements, genitive to its pronoun complements in all persons except third person plural:

	<i>gibi</i>		<i>kadar</i>		<i>için</i>	
	nouns	pronouns	nouns	pronouns	nouns	pronouns
nominative	Ragıp gibi	onlar gibi	Ragıp	onlar	Ragıp için	onlar için
			kadar	kadar		
		benim		benim		benim
		gibi		kadar		için
		senin gibi		senin		senin için
	X	onun gibi	X	kadar	X	onun için
genitive	*Ragıp'ın	bizim gibi	*Ragıp'ın	onun	*Ragıp'ın	bizim için
	gibi	sizin gibi	kadar	kadar	için	sizin için
				bizim		
				kadar		
				sizin		
				kadar		

Table 8.2

Postpositions with
nominals and
pronominals

Considering the semantics of postpositions, which one/s of the following is/are used to express more than one meaning? And what are the meanings expressed?

*gibi**kadar**rağmen**karşı**beri**önce*

Most of the postpositions can be used adverbially too, but their postpositional function appears when they are used with noun complements (Huddleston, 1988: 125, Lewis, 1967: 90). For example, *aşağıda* is an adverbial in *aşağıda kaldım*, but a postposition in *derenin aşağısında kaldım*.

Limited number of postpositions can be modified by degree adverbs such as *tam*, *pek*, *çok*, *pek çok*, *biraz*. Some examples are *okulun tam önünde*, *akşamdan çok sonra*, *dersten biraz önce*, *toplantının tam ortasında*, *tam anneme göre*, *tam kardeşim için*, but not **tam annem sayesinde*, **tam vali tarafından*, **tam olaya rağmen*.

Postpositions have a variety of functions. First they head postpositional phrases. Then these postpositional phrases may have different functions in a clause as shown below (see Unit 11 for more).



It is your turn!

10

(18)

- | | |
|---------------------------------------|----------------------------------|
| a. [Kutunun içine] koydu. | complement in a verb phrase |
| b. [Öğleden önce] bitirdi | modifier in a verb phrase |
| c. [Bana göre] bu çok yanlış. | peripheral dependent in a clause |
| d. Saklanılacak yer [sandık gibiydi]. | predicative |
| e. [Çocuk gibi] kadın. | modifier in a noun phrase |
| f. [Annesi gibi] zeki. | modifier in an adjective phrase |
| g. [Annesi gibi] çabuk yaptı. | modifier in an adverb phrase |

Post positions can take subordinate clauses as their complements as well: *gitmek için, gelmesine rağmen, istedikleri gibi, söyledikleri üzere, kalmalarına ilişkin.*

Pronouns

Pronouns are used to replace nouns. So, everywhere we see a noun in a sentence, it is possible to see a pronoun. For example, nouns are used as the subject and /or the object in a sentence, so can be pronouns:

(20)

- | | | |
|------------------|--------------------|--------------------|
| a. Coşkun geldi. | b. Coşkunu gördüm. | c. Coşkuna baktım. |
| O geldi. | Onu gördüm. | Ona baktım. |

The difference, however, is that nouns can be used **referentially**; whereas, pronouns are used **anaphorically**. What this means is that nouns are used independently, but pronouns are always bound to another word or phrase (antecedent) used earlier in the discourse, and they are used to refer back to that antecedent. Without knowing the antecedent, it is impossible to identify the referent of a pronoun. In *Ben dün bir kitap aldım, bugün de onu okudum bir kitap* is the antecedent of the pronoun *o*, so the pronoun is bound to *bir kitap* and is used to refer back to it. The subject of the sentence is *ben*, it is a pronoun also, but what is the antecedent of that pronoun? There is in fact no antecedent in the text to bind *ben*. Then, how do we understand the referent of it? In every conversation situation it is given that there are at least two participants: the speaker and the hearer. That is, the speaker is the given participant in every context, so is the hearer. The former is characteristically marked as the first person and the latter as the second person. There may be a third party who is not existant in the context, that party is referred to by the third person marker. This means that there are three types of involvement in a conversation and they may be either singular or plural. This gives us our table of personal pronouns: *ben, sen, o, biz, siz, onlar*.

Do pronouns have permanent referents? That is, whenever we use a noun such as *masa*, it has the same referent: an object that prototypically have four legs and a square top. But does *o* used in the above example always refer to *bir kitap*? Of course not, it may refer to a *cat* in *dün bir yavru kedi bulmuştuk, bugün onu kaybettik*. Similarly, *ben* refers to whoever uses it: in one context, for example, it may be someone called *Seval*, in another it may be *Seval's mother*. Likewise, *here* refers to where the speaker stands: in a classroom context with the teacher saying *come here* it refers to where the teacher is standing in that classroom. More examples can be given, but this should suffice to illustrate that *pronouns* do not have permanent referents. They are deictic words that take their referents from the context.

Another difference between nouns and pronouns is that nouns are the members of the open classes whereas pronouns are those of closed classes. What does this mean? Nouns are open to new derivations, but pronouns are very restricted in this respect. Only few derivations are possible: *benlik, senlik, senli benli, bensiz, sensiz, buncacık* (Korkmaz, 2003: 399).

Types of Pronouns

Various subclasses of pronouns are distinguished in Turkish: personal, reflexive, reciprocal, demonstrative, indefinite, interrogative, and genitive.

Personal pronouns, as mentioned earlier, are used to refer to the speaker, the person spoken to, and other person/s absent from the context. The equivalent of personal pronouns is expressed by person markers on the verb too.

Reflexive pronouns are coreferential with the subject. They are formed with the pronoun *kendi* inflected in different persons: *kendim, kendin, kendisi, kendimiz, kendiniz, kendileri*.

Reciprocal pronouns are coreferential with the subject also, but they reflect mutual participants. The reciprocal pronoun in Turkish *birbiri* is formed with *birbir* followed by the possessive marker. It is always plural, therefore cannot be inflected for the singular persons: *birbirimiz, birbiriniz, birbirleri*.

Demonstrative pronouns are items which specify the spatial location of an object with respect to the location of the speaker and the hearer. Like the category person, demonstrative is a deictic category too. That is, demonstrative pronouns *bu, şu, o, bunlar, şunlar, onlar* take their referents from the context. They express varying degrees of proximity *bu* being the nearest, *şu* farther and *o* the farthest from the speaker and the hearer. They can also be used as adjectives: *bu kitap, o çocuk*. Their adverbial form is *bura-, şura-, ora-; böyle, şöyle, öyle*.

Another subclass of pronouns is composed of those pronouns called *the indefinite pronouns*. They are non-deictic in that they do not have any specific referents. *Kimse, herkes, falan, filan, şey* are some examples in Turkish. The second person pronoun *sen* can be used in this way too: *Önce sebzeleri yıkıyorsun, sonra kaynatıyorsun*. In this example the speaker is not necessarily referring to the hearer, but using it more **generically** to refer to anyone who is interested in cooking this particular dish. Other pronouns are formed by adding the possessive marker to some indefinite adjectives, adverbs and other pronouns: *başkası, bazı, bazıları, biri, birisi, biriniz, çoğu, gerisi, hepsi, kimi, öbürü, öteki, tümü*, etc. Some indefinite pronouns are formed as compounds as in *birçoğu, birkaçı, her biri, hiç biri, hiç kimse, bir şey, her şey, her kim* (Korkmaz, 2003: 433). Finally, *possessive pronouns* are formed by adding *ki* to the genitive of personal pronouns: *benim-ki, senin-ki, onun-ki, bizim-ki, sizin-ki, onların-ki*.

Interrogative pronouns represent persons, places, things in questions: *kim, ne, hangi*; and the relative pronoun *ki* is used to replace the head noun in the relative clause: *İstanbul ki, yedi tepe üstünde kurulu, bayır bacadan geçilmiyor*.

It should be noted that all pronouns, like nouns, can be inflected for case. Some examples are illustrated in Table 8.3 in the singular and plural.

Table 8.3
Personal Pronouns

	nominative	accusative	dative	locative	ablative	genitive
singular						
1 st	ben	beni	bana	bende	benden	benim
2 nd	sen	seni	sana	sende	senden	senin
3 rd	o	onu	ona	onda	ondan	onun
plural						
1 st	biz	bizi	bize	bizde	bizden	bizim
2 nd	siz	sizi	siz	sizde	sizden	sizin
3 rd	onlar	onları	onlara	onlarda	onlardan	onların

It is your turn!

11

Can you make tables showing the declensions of *reflexive*, *reciprocal*, *possessive*, *demonstrative*, and *interrogative* pronouns?

Conjunctions

Conjunctions are of two types: coordinating and subordinating. In this section, the focus will be on coordination as subordination will be dealt with in Unit 12.

Coordinating conjunctions are the words that are used to mark coordination between words, phrases, and clauses. There are three major coordinators: *ve*, *veya*, *ancak*. More recently, though, the noun *artı* has been added to this list. It has, in informal Turkish, taken on a coordinative function to the extent that it can now freely replace *ve*. *Ve*, as well as its new alternate *artı*, has an additive function which can also be expressed by *ile* and *de*: *çocuk ve annesi*, *çocuk ile annesi*, *annesi de*, *çocuk artı annesi*, *artı annesi*. *Ve* also marks the order of events when used to combine predicates: *kalktı ve lambayı söndürdü* means s/he first got up and then turned off the light. Sometimes, relations other than coordination may be implied by *ve* as in *cüzdanı çalındı ve tepesi attı*. The implication is that *tepesi attı* is the consequence of *cüzdanı çalındı*. But this meaning cannot be ascribed to only *ve* since it can be conveyed in the absence of it by juxtaposition as well: *cüzdanı çalındı, tepesi attı*. *Veya* offers alternatives, and *ancak* marks contrastive relations.

Before we discuss the semantics of how coordination works, it is important to note that Turkish allows simple juxtaposition of words, phrases and clauses to signal coordination:

(21)

- Elma, portakal aldık.
- Bodrum'da bir yazlık, Ankara'da bir kışlık aldık.
- Neşe odaya girdi, elektrikler söndü.

The coordinated constructions in (21) are simply put one after the other without any explicit marking of coordination. But semantically they are interpreted as though *and* were there (Lewis, 1967: 206). Juxtaposition may also be used to intensify the meaning: *yürüdü, yürüdü, yürüdü*.

But what are prototypical features of explicit coordinators? There are two types of logical relation in coordination: **conjunction** and **disjunction**. (Tarski, 1994). The former is marked by *ve* the latter by *veya*

(22)

- Ayağa kalktı ve soru bombardımanına başladı.
- Evde yoklar veya duymadılar.

(22a) displays an example of conjunction. In this kind of relation, the meaning of the sentence is true only if the components of it are true. That is, *ayağa kalktı ve soru bombardımanına başladı* is true only if *s/he actually stood up and s/he actually started asking questions*. (22b) is an example of disjunction. It is true only one of its components is true. That is, *evde yoklar veya duymadılar* is true if either one of *evde yoklar* and *duymadılar* is true, but false if both are false.

There are two types of disjunction: **exclusive** and **inclusive** (Levinson, 1983: 138). If it is exclusive, it forces a choice on the part of the hearer between the alternatives. In *kahve veya çay ikram edebilirim*, the speaker does not expect the hearer to have them both. One choice excludes the other. Therefore, if we want to block this interpretation we say *kahve ve/veya çay ikram edebilirim* or *kahve veya çay veya ikisini de ikram edebilirim*. In *evde yoklar veya duymadılar*, there is no such exclusive interpretation. Both alternatives are possible, so it is an example of inclusive disjunction.

Coordination of smaller units may have equivalent conjunctive or disjunctive underlying clauses: For example in *O çok [genç] ve [güzel]di* two adjective phrases are coordinated, but its underlying meaning has a clausal interpretation: *[o çok gençti] ve [o çok güzeldi]*. Similarly, *Ali'ye veya Ayşe'ye söyledi* means *Ali'ye söyledi veya Ayşe'ye söyledi*. But this may not be allowed in all contexts. Compare:

(23)

- a. Bir öğretmen [genç] ve [güzel]di.
- b. [Bir öğretmen güzeldi] ve [bir öğretmen gençti].

Phrasal coordination in (23a) does not imply the clausal coordination in (23b). The determiner *bir* seems to have a separate noun phrase each time it is repeated. Therefore, in (23b) it sounds like there are more than one teacher being talked about.

Other conjunctions are shown in (24) as bracketed forms.

(24)

- a. Geçen yıl altını kazandı [ancak] bu yıl gümüşle yetindi.
- b. [Hem] Suat [hem de] Meral kazayı gördüler.
- c. [Ya] annem [ya da] babam beni karşılayacak.
- d. [Ne] geldiler [ne de] gördüler.

Ancak expresses contrast, so most naturally it has a discriminating function. In (24a), the contrastive standing of what happened last year and this year is marked by the coordinator. *Fakat* and *ama* are used in the same way. In some cases, they may be used concessively: *Erken kalktım ama/fakat/ancak derse yetişemedim*. The conjunction marks the oddity of the second event despite the first.

Hem ... hem de and *ya ... ya da* correlate with *ve* and *veya* respectively. They emphasize a coordinative relation. The difference is that *ya ... ya da* is exclusive. It leaves out one of the two possibilities. So, what (24c) means is that either my mom or my dad will come, not both. Similarly, *ne ... ne* is a correlative coordinator as well. But it marks negative correlation. (24d) means they did not come and they did not see.

Double coordination is not allowed in Turkish: **Ne Ayşe'yi tanıyorlar ama ne de biliyorlar*.

Is *Ali'yi gördüm ama ne Ayşe ne de Fatma görmedi* an example of double coordination? Is it ungrammatical?



It is your turn!

12

Which one of these coordinators are more prototypical? Huddleston (1988: 195-196) suggests the following criteria. **Reducibility** to one element is a prototypical feature of coordination. *Ali ve Ayşe öğretmen* can be reduced to *Ali öğretmen*. However, this may not be possible in sentences having inherent plural meanings or agreement: *Ali ile Ayşe kardeşler* cannot be reduced to **Ali kardeşler*.

Coordination allows **a change in order** without distorting the semantic content: *Ayşe genç ve güzel* vs *Ayşe güzel ve genç*. But the order may not be reversible in anaphoric constructions: *erken gel de patronla görüş* vs **patronla görüş de erken gel*. For many clichés only one order is possible, *peynir ekmek*, *yukarı aşağı*, *gece gündüz*, *baylar bayanlar*, *kadın erkek*.

Likeness of class and function is another property of coordinated elements: **Ali ve çocukça ağladı* is ungrammatical since a noun and an adverb, members of two different words classes, are coordinated. But sometimes this does not yield ungrammatical forms as long as the *coordinated* elements share the same function: *Hemen ya da yemekten sonra yapabiliriz*. So, likeness of function may sometimes be a sufficient condition for coordination.

It is your turn!

13



Which one of the following is better? Why?

- a. *Onun yalan söylediği ve cehaleti herkesçe biliniyor.*
- b. *Onun yalacılığı ve cehaleti herkesçe biliniyor.*

Open endedness is the ability to allow infinite number of elements to coordinate. *Ve* and *veya* are the most prototypical in that sense: *Ankara, İstanbul, İzmir, Aydın ve/veya Eskişehir*. *Ama* and *hem...hem de*, *ya ya da*, *ne ... ne de* are restricted to two: **Ankara, İstanbul, İzmir, Aydın ama Eskişehir*; **hem Ankara, İstanbul, İzmir, Aydın hem de Eskişehir*; **ya Ankara, İstanbul, İzmir, Aydın ya da Eskişehir*; **ne Ankara, İstanbul, İzmir, Aydın ne de Eskişehir*.

Ve and *veya* are similar in their range of positions too. They coordinate at any place, but there are some restrictions for the others. For example, *hem ... hem de* cannot combine clauses: **Hem Ali onu sevdi, hem de Ahmet sevdi*. *Ama* cannot coordinate noun phrases unless they stand in a contrastive relation: **[Ali'yi] ama [Ayşe'yi] gördüm* is not grammatical, but *[kalemlerimin hepsini] ama [kiplerimin birini] buldum* is grammatical since *ama* marks a contrast in quantification. *[Kitaplarımı değil] ama [kalemlerimi] buldum* is also grammatical because it displays a contrast in polarity.

Interjections

This category is one of the reflections of human character of language. It includes words expressing a range of different **emotional reactions**: *sadness (of)*, *surprise (ya)*, *happiness (yaşa)*, *excitement (oley)*, *regret (tüh, tövbe)*, *longing (ah)*, *fear (bi)*, *praise (aferin)*, *disappointment (aşk olsun)* etc. They are also used as **attention gatherers**: *hey*, *şşşt*, *huu*, etc. By changing intonation, the same interjection may be used to express different feelings. For example, *aman* may express fear in *Aman Allahım*, request in *Aman öyle demeyin*, warning in *Aman dikkatli sürün*, and surprise in *aman ne pahalı*. To **intensify** the meaning expressed, they can be juxtaposed one after the other: *tüh tüh*, *vah vah*, *of of*, *ah ah*. Interjections do not have a fixed position in a sentence, therefore they can be used sentence initially, medially or finally. They can take case markers and be used as nouns: *ahımı alma*, *ne ablar çektim*, *vahlar kar etmedi*.

Summary

1. What is the classification of words in Turkish?

Classifying words is not a black-and-white issue, and it is not always easy to account for the grey spots. This difficulty in drawing clear-cut boundaries between classes is acknowledged in the literature too resulting in different approaches to word classification. Generally, an eight-part-of-speech classification is recognized and we adopt the one given below:

- | | |
|--|--------------|
| a. Suzan okulu [bit]irdi ve öğretmen [ol]du. | VERB |
| b. [Uğur] [arabayı] park etti. | NOUN |
| c. [Yeni] öğretmen çok [iyi]. | ADJECTIVE |
| d. [Genellikle] [çok] hareketlidirler. | ADVERB |
| e. Annem [için] bu iş buraya [kadar]. | POSTPOSITION |
| f. Geldi [ve] hemen yattı. | CONJUNCTION |
| g. [Ben]i görmedi. | PRONOUN |
| h. [Hiç]t bebek uyuyor! | INTERJECTION |

2. What is the difference between prototypical and non-prototypical membership?

How can you classify *penguins*? Are they birds or fish? They can be classified as birds since they have wings, but they can also be classified as fish as they can swim. Penguins may be an example of peripheral membership. They can neither be fully birds nor fish. But a robin is considered to be a typical member bearing all the necessary features of the category bird. Similarly, in linguistic categorization too, there may be central members of a word class as well as more peripheral members overlapping between classes. Core members are the prototypes or prototypical members of a category, whereas peripheral members are the non-prototypes or non-prototypical members of that category.

3. How are prototypes determined?

They are determined by considering the central features of a category. In language, these features include semantic and grammatical facts. There are tests to determine the relevant features of a candidate for membership for a particular category. They are of two types: semantic and grammatical. Semantic criteria define semantic composition of a member. Grammatical criteria include morphological and distributional tests. Morphological tests measure the inflectional and derivational properties of a candidate. Distributional tests reveal the combinatory possibilities of the candidates and the positions where they occur in a sentence.

4. What is *open classes* and *closed classes*?

Not all words have the same semantic and functional value. Open classes include nouns, verbs, adjectives, and adverbs. These are also called content words. As the label implies, they are rich in their content. That is, they are words with lexicalized meanings. Closed classes include function words such as pronouns, conjunctions, postpositions, and interjections. These words mark relationships between words, so they are important in terms of their function. Open classes are so called because they are open to new membership, whereas closed classes are more restricted in this respect.

Self-test

1. Which one of the following belongsto a different part-of-speech (word class)?
 - a. Sağlam yapılı, dik duruşlu bir gençti.
 - b. Dik bir dereye indiler.
 - c. Sesi dik ve küstahtı.
 - d. Hiç bir şey söylemeden dik dik baktı.
 - e. Bütün dik açılar 90 derecedir.
2. Which one includes an interjection used as a noun?
 - a. sarılar
 - b. yürüyüşler
 - c. sırtı pekler
 - d. ahular
 - e. ahlr
3. How do we know that *büyü-* is a verb?
 - a. It cannot take number marking.
 - b. It cannot be used with a determiner.
 - c. It can take case markers.
 - d. It can take aspect markers.
 - e. It can assign case to its arguments.
4. Which one is a countable noun?
 - a. pilav
 - b. prinç
 - c. bulgur
 - d. irmik
 - e. ilmek
5. Which one can belong to more than one word class?
 - a. evsiz
 - b. sızlanmalar
 - c. gittikleri
 - d. sadelik
 - e. insafsızlık
6. Which one is an activity verb?
 - a. Dün cüzdanım kayboldu.
 - b. Annem hep şarkı söyler.
 - c. Babam oldukça sinirlidir.
 - d. Anahtar kapıda midir?
 - e. Klasik müzik sever.
7. Which one is an ungradable pair?
 - a. uzak: yakın
 - b. ölümlü: ölümsüz
 - c. cimri: cömert
 - d. tehlikeli: güvenli
 - e. hatasız: hatalı
8. Which one is a postpositional phrase?
 - a. kalem benim.
 - b. çocuklar içeri!
 - c. babam, işte!
 - d. buna göre
 - e. bu ne görkem!
9. Which one is **NOT** used deictically?
 - a. Sen ne zaman gittin?
 - b. Biz çoktan uyumuştuk bile.
 - c. İnsan bu kadar geç yatar mı?
 - d. Bu insanlar burada toplanmış ne yapıyorlar?
 - e. Ben böyle şey duymadım.
10. Which coordinator has an additive fuction?
 - a. Neşe odaya girdi ve oturdu.
 - b. Bodrum'da bir yazlık ve Ankara'da bir kışlık aldık.
 - c. Evde yoklar veya duymadılar.
 - d. Çoğu Ankara'lı veya İstanbul'luydular.
 - e. Uçakla değil trenle gidiyoruz.

Turkish Alive

The following extract is from Gaarder's *Sofi'nin Dünyası* (Gülây Kutsal, Trans. 1994: 97-99)



“Niçin bütün atlar aynıdır Sofi? Belki de hiç aynı olmadıklarını düşünüyorsundur. Ama yine de bütün atlarda ortak olan bir şey vardır; bir atı diğer şeylerden ayırmakta güçlük çekmememizi sağlayacak bir ortaklık vardır. Bir tek at “değişir” elbette. Yaşlanır, topallamaya başlar, zamanla hastalanır ve ölür. Ancak “at biçiminin” kendisi mutlak ve değişmezdir.

Dolayısıyla Platon'a göre mutlak ve değişmez olan şey fiziksel bir “hammadde” değildir. Mutlak ve değişmez olan şey, tüm şeylerin ona benzeyerek oluştuğu bir takım tinsel ya da soyut örnek resimlerdir.

Ne demek istediğimi anlıyorsan bu paragrafı atlayabilirsin. Ben yine de vurgulayayım: Elinde bir takım legolar var ve bunlardan bir at yapıyorsun. Sonra legoları birbirinden ayırıp bir torbaya koyuyorsun. Torbayı şöyle bir sallamakla ortaya yeniden bir at çıkmasını bekleyemezsin. Lego parçaları kendi başlarına yeniden bir at oluşturabilirler mi? Hayır, atı tekrar sen yapmak zorunda kalırsın Sofi. Ve atı yeniden yapabilmeni sağlayan şey, kafadaki bir atın nasıl olduğunu gösteren resimdir. Legolarla yaptığın ilk at, daha sonra yapacağın atlara bir örnek oluşturmuştur.

Senin uzaydan gelmiş olduğunu ve o zamana dek tek bir fırın görmemiş olduğunu varsayalım. Bir anda içinden güzel kokular gelen bir fırın ve fırının vitrininde birbirinin tıpatıp aynı 50 çörek görüyorsun. Her halde kafanı kaşıyıp bu çöreklerin nasıl böyle birbirinin aynı olduğunu kendine sorardın. Tabii çörek adamların bir tanesinin kolu kesik olabilir, bir başkası başının bir parçasını yitirmiş olabilir, ya da bir başkasının karnında tepecik oluşmuş olabilir. Ancak bir süre düşündükten sonra tüm çörek adamların *ortak bir bileşeni* olduğunu anlardın. Hiçbiri tamamen mükemmel olmasa da hepsinin *ortak bir kökenden* geldiğini tahmin ederdin. Tüm çöreklerin tek ve aynı bir biçimden oluştuğunu anlardın. Daha da ötesi Sofi, bu biçimi *görmek* için içinde güçlü bir istek duyardın. Çünkü kalıbın kendisi, tüm bu yarım yamalak kopyalardan çok daha mükemmel ve bir bakıma çok daha güzel olmalı, diye düşünürdün.

Platon “duyular dünyasının” arkasında bir başka gerçeklik olması gerektiğine inanıyordu. Bu gerçekliğe *idealar dünyası* adını veriyordu. Bu dünyada, doğada gördüğümüz olayların arkasındaki mutlak ve değişmez “örnek resimler” bulunur. Bu ilginç anlayışa *Platon'un idea öğretisi* diyoruz.”



EXERCISES:

1. What does this text remind you about prototypes?
2. Analyze the underlined words in the above text. State what word class they belong to. How do you know that they belong to that particular word class? Also state whether they are prototypical examples of the word class you think they represent? You should also account for other similar examples in the text. You may include examples of your own to support your answer.

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End Note

- ¹ *Distribution* is in fact a syntactic property, but since syntax and morphology are interrelated, we will take up some aspects of syntax in this chapter as well.

Key to “It is your turn!”



- a. soy: Kabuğunu soymadan yeme! (verb)/Aynı *soydan* geliyoruz. (noun)
boya: Saçımı boyadım. (verb)/*Boyalarımı* kaybettim. (noun)
sav: Başımdan bir türlü *sav*madım onu. (verb)/Ortaya çeşitli *sav*lar sürüldü. (noun)
- b. ak: Sular *ak*mıyor.(verb)/*Ak* çarşafıya sarıldı. (adjective)
geç: Evin önünden *geç*tik. (verb)/*Geç* evliliklerin uzun sürdüğü söyleniyor. (adjective)
ekşi: Yoğurt *ekş*imiş.(verb)/*Ekşi* yoğurt sevmem. (adjective)
- c. güzel: *güzel* kız (adjective)/*Güzel* yazdı. (adverb)
çok : *çok* çocuk (adjective)/*çok* güzel (adverb)
kalın: *kalın* kitap (adjective)/Dilimleri *kalın* kesti. (adverb)
kısa: *kısa* gezi (adjective)/Gezi *kısa* sürdü. (adverb)
- d. yardımsever: *yardımsever* bir insan (adjective)/*yardımseverler* derneği (noun)



- a. *sen* (pronoun) *bem* (conjunction) *benden* (pronoun)
- b. Dostluk: noun/sohbetler: noun/hoşa git-: verb/hakkında: postposition/ pek: adverb



In (a) *köfte* is used as a substance, so it is uncountable; whereas in (b) the topic is four pieces of meatballs. Its countability is also marked explicitly with the numeral *dört*.



Prototypical nounhood include:	MASA	SAYGISIZLIK	BELEDİYEÇİLİK
a. concreteness	concrete	abstract	abstract
b. number	masalar	saygısızlıklar	*belediyeçilikler
c. case	masada	saygısızlıkta	belediyeçilikte
d. determiner	bir masa	bir saygısızlık	bir belediyeçilik
e. adjective	iyi masa	büyük saygısızlık	iyi belediyeçilik
f. adjective+determiner	iyi bir masa	büyük bir saygısızlık	iyi bir belediyeçilik

Since *masa* satisfies all the tests for nounhood, it is the most prototypical one. *Belediyeçilik* seems to be the most peripheral since it fails one of the tests: (b).



In (a) the verb *bayıl-* is used as a state of perception. It is not something done deliberately, so it is not an activity. It does not require an end point, so it is not an accomplishment verb. Neither is it an achievement for the same reason. (b) is an achievement because it occurs at a single moment.



Ye- is a transitive verb, so it cannot be used without a noun phrase unless it is given earlier in the discourse.



- They express completed result. For example, *kırık* is the resultant state of *breaking*.
- They express potentiality. For example, if an object is *kırılabilir*, it has the potential of *breaking*.



No, it does not. It functions as an intensifier to augment the quality *beautiful*. To mark comparison, we need to use *daha* or *gibi*: *beden daha güzel* or *benim gibi güzel*.



Two more examples are: *-sız* (*üzülmeksizin*), *-Dir* (*günlerdir*). These words seem to be idiosyncratically adverb.



The semantics of *kadar* allows three different uses: *benim kadar uzun* (comparison), *ağşama kadar* (temporal), and *eve kadar* (direction). When it is used to mark comparison it assigns nominative case to its nouns, but genitive to its pronoun complements. When it is used to mark a temporal or directional relation, it marks its complement with dative.



Reflexive						
	nominative	accusative	dative	locative	ablative	genitive
1 st	kendim	kendimi	kendime	kendimde	kendimden	kendimin
2 nd	kendin	kendini	kendine	kendinde	kendinden	kendinin
3 rd	kendi	kendini	kendine	kendinde	kendinden	kendinin
1 st	kendimiz	kendimizi	kendimize	kendimizde	kendimizden	kendimizin
2 nd	kendiniz	kendinizi	kendinize	kendinizde	kendinizden	kendinizin
3 rd	kendileri	kendilerini	kendilerine	kendilerinde	kendilerinden	kendilerinin
Reciprocal						
	nominative	accusative	dative	locative	ablative	genitive
1 st	X	X	X	X	X	X
2 nd	X	X	X	X	X	X
3 rd	X	X	X	X	X	X
1 st	birbirimiz	birbirimizi	birbirimize	birbirimizde	birbirimizden	birbirimizin
2 nd	birbiriniz	birbirinizi	birbirinize	birbirinizde	birbirinizden	birbirinizin
3 rd	birbirleri	birbirlerini	birbirlerine	birbirlerinde	birbirlerinden	birbirlerinin
Possessive						
	nominative	accusative	dative	locative	ablative	genitive
1 st	benimki	benimkini	benimkine	benimkinde	benimkinden	benimkinin
2 nd	seninki	seninkini	seninkine	seninkinde	seninkinden	seninkinin
3 rd	onunki	onunkini	onunkine	onunkinde	onunkinden	onunkinin
1 st	bizimki	bizimkini	bizimkine	bizimkinde	bizimkinden	bizimkinin
2 nd	sizinki	sizinkinin	sizinkine	sizinkinde	sizinkinden	sizinkinin
3 rd	onlarınki	onlarınkini	onlarınkine	onlarınkinde	onlarınkinden	onlarınkinin
Demonstrative						
	nominative	accusative	dative	locative	ablative	genitive
bu	bu	bunu	buna	bunda	bundan	bunun
şu	şu	şunu	şuna	şunda	şundan	şunun
o	o	onu	ona	onda	ondan	onun
bunlar	bunlar	bunları	bunlara	bunlarda	bunlardan	bunların
şunlar	şunlar	şunları	şunlara	şunlarda	şunlardan	şunların
onlar	onlar	onları	onlara	onlarda	onlardan	onların
böyle	böyle	böylesi	böylesine	böylesinde	böylesinden	böylesinin
şöyle	şöyle	şöylesi	şöylesine	şöylesinde	şöylesinden	şöylesinin
öyle	öyle	öylesi	öylesine	öylesinde	öylesinden	öylesinin
Interrogative						
	nominative	accusative	dative	locative	ablative	genitive
ne	ne	neyi	neye	nede	neden	neyin
neler	neler	neleri	nelere	nelerde	nelerden	nelerin
kim	kim	kimi	kime	kimde	kimden	kimin



No, it is not ungrammatical, neither is it an example of double coordination. There are two layers of coordination here: *ne* coordinates *Ayşe* to *Fatma*, *ama* coordinates [*ne Ayşe ne Fatma*] to *Ali*.



(a) is odd because it violates the likeness of class in coordination. It is not totally ungrammatical, but as you may all agree, (b) is much better since the coordinated elements in it belong to the same class and share the same function.

Key to "self-test"

Unit 1

1. d forming a minimal pair.
refer to 'Phonetics and Phonology' section.

2. c Language is the conversion of sounds.
refer to 'Introduction'

3. b The writing system of languages are not sufficient.
refer to 'Sound vs Letter' section.

4. a May be different from its surface realization.
refer to 'Phonetics and Phonology' section.

5. d The underlying representation is indicated by square brackets.
refer to 'Phonetics and Phonology' section.

Unit 2

1. b Which of the following describes the initial sound of the Turkish word 'civa'?
The right answer is, (b) voiced palato-alveolar affricate
refer to Table 2.1

2. c To which of the symbol does voiceless glottal fricative correspond?
The right answer is, (c) h

3. b Which set of the following sounds contains all voiced sounds?
The right answer is, (b) b, d, g, r, l

4. a Which set of the following sounds is stops?
The right answer is, (a) t, k, p

5. e Which set of the following sounds is alveolar?
The right answer is, (e) n, l, t, z, s

Unit 3

1. c The right answer is (c), mid front rounded.

2. b The right answer is (b), ortak as /o/ is a mid back rounded vowel.

3. a The right answer is (a), i.

4. b The right answer is (b), tuRʋ

5. e The right answer is (e), high front rounded.

Unit 4

1. b The right answers is (b), aç

2. a The right answers is (a), seslenmek

3. e The right answers is (e), rounding harmony

4. a The right answers is (a), denge

5. d The right answers is (d), sayaç

Unit 5

1. a If incorrect, reread the Structure of Words.
2. e If incorrect, reread the Structure of Words.
3. b If incorrect, reread Derivational Morphemes vs Inflectional Morphemes.
4. a If incorrect, reread Derivational Morphemes vs Inflectional Morphemes.
5. c If incorrect, reread Allomorphy.
6. a If incorrect, reread Morpheme Ordering.
7. c If incorrect, reread Morpheme Ordering.
8. c If incorrect, reread Allomorphy and Endnote 1.
9. e If incorrect, reread Derivational Morphemes vs Inflectional Morphemes.
10. c If incorrect, reread the Structure of Words.

Unit 6

1. e If incorrect, reread Compounding.
2. a If incorrect, reread Clipping.
3. b If incorrect, reread Metaphorical Extension.
4. e If incorrect, reread Reduplication.
5. a If incorrect, reread Conversion.
6. b If incorrect, reread Borrowing.
7. d If incorrect, reread Acronyms.
8. c If incorrect, reread Borrowing.
9. a If incorrect, reread Semantic Change.
10. b If incorrect, reread Conversion.

Unit 7

1. a If incorrect, reread Agreement.
2. c If incorrect, reread the Ablative Case.
3. c If incorrect, reread Number and Agreement.
4. d If incorrect, reread Reflexive and Passive.
5. b If incorrect, reread Causative.
6. c If incorrect, reread Reciprocal.
7. a If incorrect, reread -mİş
8. b If incorrect, reread Passive.
9. a If incorrect, reread Passive.
10. e If incorrect, reread Agreement.

Unit 8

1. d If incorrect, reread Adjectives and Adverbs.
2. e If incorrect, reread Interjections and Nouns.
3. d If incorrect, reread Verbs.
4. e If incorrect, reread Nouns.
5. a If incorrect, reread Nouns.
6. b If incorrect, reread Verbs.
7. b If incorrect, reread Adjectives.
8. d If incorrect, reread Postpositions.
9. c If incorrect, reread Pronouns and Nouns.
10. b If incorrect, reread Conjunctions.

Glossary

A

A superordinate (or a hypernym): It is a word that is general enough to include some words with a more specific meaning, known as hyponyms.

Ablative: A type of case which typically marks “direction from” by the suffix -DAn: evden, arabadan.

Acceptability: Comprehensibility of a grammatical unit in terms of making sense out of it, though it may not be grammatical.

Accomplishment: A process verb that has an end point to be reached for its completion: daire çizmek, börek yapmak, iyileşmek.

Accusative: A type of case which typically marks the direct object by the suffix -(y)I: evi, arabayı.

Achievement: A verb expressing an instantaneous change which occurs at a single moment: kazanmak, vurmak, devirmek, başlamak, doğmak, ölmek.

Acronym: A word which is formed as the short for a set of other words by combining only the initial letters of these words: RTÜK from Radyo Televizyon Üst Kurulu, CMUK from Ceza Muhakemeleri Usulü Kanunu.

Act: The type of a Noun Clause that denotes the act itself rather than the actual happening. Acts cannot be confirmed or falsified.

Active voice: A verb that is not marked for voice and that requires a subject: iç-, uyu-.

Activity: A process verb that does not require reaching an end point for the action to have been performed: yazmak, içmek, sürmek, yürümek, yüzmek.

Adjectival compound: A compound whose central element is an adjective: gözü pek, uzun boylu, vurdumduymaz.

Adjectivalization: A grammatical process that creates adjectives or expressions similar to adjectives: meraklı, temizlenebilir, çıkmaz, kırık, kırılmış.

Adjective: A word which modifies a noun: sıcak in sıcak su, faydalı in faydalı kitap.

Adjunct: An optional element in a phrase or clause that functions as a modifier. For example, adjectives, relative clauses, adverbs of manner, time, etc. are adjuncts. Note that they can be deleted and the phrase is still complete. (Also see modifier).

Adverb: A modifier of a verb, adjective, or other adverbs: hızlı in hızlı koşmak, çok in çok hızlı.

Adverbial: Any word, group of words, or clause that functions like an adverb. For example, geçen yıl is a NP; but it is an adverbial.

Adverbialization: A grammatical process that creates adverbs or expressions similar to adverbs: hızla, hızlıca, hızlı olmak için.

Affix: A bound morpheme which can be attached to a stem as a prefix, suffix, or infix: -den in evden, na- in nahoş.

Affixation: A process through which a bound morpheme is attached to a stem either to form a new word or to inflect the stem: evci, evler.

Affricate: A combination of a stop and a fricative.

Agreement (subject-verb agreement): The compatibility between the verbal suffixes and subjects in terms of person and number marking.

Agreement: A grammatical category marked on a word to indicate this word's grammatical relationship to another. For example, a verb has to agree with its subject in person and number in Turkish: -m on the verb in ben geldim indicates a first person and singular subject which agrees with the syntactic subject ben having the same person and number characterization.

Allomorph: A variant of a morpheme: the -ak of bardak and the -ek of benek are allomorphs of the “diminutive” morpheme -Ak.

Allophone: Variation of a phoneme that does not change the meaning of a word.

Alveolar: Sound produced at the alveolar ridge.

Anaphora: The act of referring to an entity that precede the pronoun.

Antonyms: A word with an opposite meaning to another word: kısa as the antonym of uzun, büyük as the antonym of küçük.

Approximant: Approximation of two articulators but without a turbulent airstream.

Arbitrary PRO: The subject of a -mEK clause that refers to all people or any human being. For example, [PRO iyi uyunmak] sağlık için gereklidir.

Argument: A noun phrase that occurs in a verb phrase as part of the predication: the verb öpmek in bebeği öptü has one argument, the direct object bebek. Sometimes subjects are treated arguments as well.

Aspect: A grammatical category which is inflected on verbs. It is indicated by verbal suffixes. It describes the way in which the event occurs. This information can be con-

veyed by the lexical make-up of the verb as in zıpla- (punctual) as opposed to yeşer- (process). It can also be conveyed by grammatical markers as in otur-du (perfective conveyed by -DI), otur-uyor (imperfective conveyed by -(I)yor). Aspect is non-deictic.

Assimilation: One sound acquiring some property or properties of the neighboring sound.

Attributive adjective: An adjective that modifies a noun in a noun phrase: kolay in kolay iş, or dikkatli in dikkatli sürücü.

B

Backformation: A word formation process through which a morphologically simple word is formed from a more complex one: iletişim-< iletişim.

Backness harmony: Vowels within a word agreeing in backness.

Backness: Position of the highest tongue body in the vocal tract.

Bilabial: Sound produced with two lips.

Binary antonym: Binary antonyms are terms that have opposite meanings at two distinct points. There is no grading in between.

Binary branching tree: A tree diagram that has two branches at each node.

Blending: A word formation process that combines parts of two words to form a single word with a new meaning: Avrasya from Avrupa and Asya.

Borrowing: A process through which words in one language are taken and used in another language, and a word obtained in this way: eşya from Arabic, amaç from Persian, mantı from Chinese, bravo from Italian, enstrüman from French.

Bound morpheme: A morpheme that cannot stand by itself. Affixes are bound morphemes: -GAÇ in süzgeç or kışkaç, -DİK and -(I)m in sevdiğim, -na in natamam.

Bracketing: A way of representing the information found in a tree diagram by using brackets. For instance, [S [NP kız kardeşim] [VP çok kitap okur]] is an example of bracketing.

Broadening: A widening seen on a word to have a larger semantic field: alan now referring to a “research field” in addition to its earlier meaning referring to an “area of land” only.

C

Calque: See loan translation.

Case assigner: A word, usually a verb, an adjective, or a postposition, that assigns a grammatical role to another word by case markers. For example, the verb hoşlanmak the adjective uzak and the postposition beri are all ablative case assigners: senden hoşlandım, gözden uzak, yıllardan beri.

Case: A grammatical category associated with nouns that marks their grammatical relationship to other elements in a sentence: nominative: kuş, accusative: kuşu, dative: kuşa, locative: kuşta, ablative: kuştan, genitive: kuşun.

Cataphora: The act of referring to an entity that follows the pronoun.

Causative: A verb which indicates a condition which is caused by someone or something: öldürmek is causative since it implies a causer, but ölmek is not in the absence of a causer.

Clause: A grammatical unit with subject and predicate structure (NP VP).

Clipping: A process through which words are shortened: kuru for kuru fasulye, or konu for gecekonu.

Closed class: A group of morphemes whose class membership is relatively limited and that does not readily allow new members: affixes, conjunctions, pronouns, etc.

Coherence: The devices used to make a text the meaningful and unified.

Cohesion: The linguistic devices that are used to link sentences in a discourse.

Coinage: A word formation process through which a new word is made up without using any of the familiar methods of word formation.

Collocation: A sequence of two or more words that co-occur

Competence: Abstract and unconscious knowledge of the rules of one's native language (see also performance).

Complement: A part of a phrase that completes the meaning of a head. For example, objects in verb phrases are complements. A complement is the obligatory element, i.e. it cannot be omitted.

Complementary distribution: A pattern of distribution which does not allow two or more sound/morphemes to occur in the same position. For example, -ler does not occur in the environment where -lar occurs or vice versa: taşlar, but not *taşler.

Compounding: A word formation process through which two free morphemes are combined to form a single word with a new meaning: demirperde, kuşkonmaz, akbaba.

Concessive adverbial: A phrase or clause containing an expression that seems surprising or unexpected, as in the adverbial clause in the following sentence: [Ayşe çok yorgun olmasına rağmen] uzun uzun dans etti.

Conjunct: An adverbial that is used to link sentences.

Conjunction: A word that is used to join words, phrases, or clauses: ve, ancak, ama.

Conjunctions: Adverbial used to connect sentences in a discourse.

Connotation: Apart from its literal meaning, connotation involves some kind of emotional associations of the word. Denotation and connotation are related like the two sides of the same coin.

Constituent structure: The systematic way in which the words of a sentence group together into phrases and clauses.

Constituent: A word or any natural grouping of words that behaves as a syntactic unit with respect to grammatical rules.

Context: the situation within which a speech act or communicative act exists or happens, and this context can help explain the meaning in the speech or communicative act.

Control: When the covert subject (PRO) of a -mEk clause is the same as the subject or the object of the matrix clause, PRO is said to be controlled by that subject or object. For example, Ali [PRO sinemaya gitmek] istedi is a subject control structure; while annesi [PRO bebeği yemeyi] zorladı is an object control structure.

Converse antonyms: Converse antonyms are terms that are determined by the opposite relations.

Conversion: A process through which a word is used to signal a grammatical function different from its usual: boya used as both a noun and a verb.

Co-operative principle: The assumption that participants in a conversation normally attempt to be informative, truthful, relevant, and clear.

Copula: A verb that links the subject to its complement. For example, to be in English, and -ImEk in Turkish, such as in: Ali öğretmen idi.

Co-referential: When two or more NPs refer to the same real world entity, they are said to be co-referential.

Correctness: A traditional way of describing grammar that claims that there are correct or incorrect ways of speaking.

Co-text: The linguistic context that includes clues such as grammar that help explain meaning.

Covert subject: A subject that is not explicitly expressed but that can be recovered from the sentence or discourse. For example, PRO and pro.

D

Dative: A type of case which typically marks “direction towards” by the suffix -(y)A: eve, arabaya.

Daughter: The branches of a node in a tree diagram.

Definite: A noun or a pronoun whose referent can be identified by the hearer: kitabı (definite) as opposed to bir kitap (indefinite).

Deictic expressions: A word (such as *this, that, these, those, now, then*) that points to the time, place, or situation in which the speaker is speaking.

Deictic: A term associated with words or expressions that take their referents from the context. Deictic words are related to a time, person(s) and place. For example, burası and orası refer to a place in relation to the speaker. Similarly, ben takes its referent in relation to the speaker, but sen in relation to the hearer. Şimdi refers to a time whenever it is uttered: it may refer to 5 pm if it is uttered at 5pm, but it may very well refer to 10 am when uttered at 10 am.

Deixis: The aspect of pragmatics that covers words or expressions whose reference is based on the circumstances of the utterance.

Demonstrative: A word that marks the location of something in terms of its proximity to the speaker, i.e. near or distant: bu (near the speaker), şu (distant from the speaker), o (more distant), etc.

Denominal: A word that is formed from a noun: yurttaş from yurt, sesteş from ses, dilemek from dil, adamak from ad.

Denotation: It is the literal meaning of words provided in a dictionary.

Denotation: The meaning of a word, phrase or clause that relates it to the real life entity or event. For example the denotation of the word ev relates it to a building in which people live.

Deontic modality: See Mood.

Derivation: A word formation process through which new words are formed by adding affixes to words or morphemes: the word bulmaca is derived by adding the suffix -mAcA to the verb bul-.

Derivational morpheme: An affix that changes the meaning and/or the category a word: -mAcA in bulmaca, -Uz in üçüz, -(D)t in geçit, -(A)v in türev, -lA in dışla.

Descriptive grammar: A grammar that describes how the language is actually spoken or written by native speakers rather than dictating what the rules should be.

Determiner: A small class of function words (articles, demonstratives, quantifiers, and genitives) that precede the head noun in a NP.

Deverbal: A word that is formed from a verb: dalga from dalmak, sezgi from sezmek, anımsamak from anmak, atışmak from atmak.

Diphthong: Vowel in which there is a change in quality during a single syllable.

Direct evidence: Information that is directly witnessed by the speaker. Demet gel-di implies that the speaker has first-hand information about Demet's coming.

Direct object: The object of a verb that is assigned accusative case or remains caseless in Turkish, such as yemek yedim or yemeğimi yedim.

Discourse markers: Words that are used to show how a discourse is constructed.

Discourse: A self sufficient linguistics unit from single utterance to an extended verbal expression in speech or writing

Discourse: Any stretch of speech or writing that is longer than the sentence.

Discourse: Discourse analysis is the study of how sentences in spoken and written language form larger meaningful units such as paragraphs, conversations, interviews, etc.

Disjunct: An adverbial that expresses the speaker's comment and point of view.

Disjunction: A type of logical relation. If "p and q" are joined by disjunction, the result is "p or q". A coordination like "p or q" is true only one of the components is true, but false if both are false: yumurtalar veya bardaklar kırıldı is true if either yumurtalar or bardaklar have been broken, but false if neither is broken.

Ditransitive: A verb which requires a direct object and an indirect object: koymak, vermek.

E

Ellipsis: The act of deleting some phrases that can be understood from discourse content.

Embedding Principle: In every language a clause can be subordinated under another clause. In all languages, there are noun clauses, relative clauses, etc. This is known as Embedding Principle.

Embedding: The occurrence of one clause in another clause is known as embedding.

Endocentric compound: A compound the meaning of which can be inferred from the meanings of the component words: akciğer, göz kapağı, geçiş ücreti.

Entailment: Entailment is a term that denotes that the meaning of a proposition is conveyed in the meaning of another proposition.

Epistemic modality: See Mood.

Eponymy: A word formation process through which a proper noun has come to be used as a common noun. For example, röntgen as the name of the person who invented X-rays is used to refer to X-ray.

Euphemism: It is a term that is used instead of a word that is associated with a taboo or something that may be offensive. Antonym: Antonyms are words that have opposite meanings.

Exocentric compound: A compound which denotes a meaning that is different from the meaning of its components: aslanagzı, devetabanı, imambayıldı.

Exophora: The act of referring to an entity that is in the extra linguistic environment.

Experiential perfect: A subclass of aspect which indicates that an event has taken place at least once. This meaning is conveyed by -DI accompanied by hiç in Ben böyle bir toplantıda hiç bulunma-dım.

F

Face saving act: An act that avoids a loss of dignity or prestige or face.

Face threatening act: An act that violates expectations regarding self-image

Face: In pragmatics, this term refers to someone's self image.

Fact: A noun clause that expresses an event that can be observed. This event can be true or false. We can question or argue against this fact.

Factive: A modal meaning that marks actuality: Demet gel-di (factive: event taken place), Demet gel-ir (non-factive: event has not taken place).

Felicity conditions: The conditions that allow us to determine under what circumstances it is appropriate to perform a certain speech act.

Final devoicing rule: A rule which states that voiced stops and affricates become voiceless either in syllable or word-final position.

Flap: Sound produced by a single tap.

Free morpheme: A morpheme that can stand by itself: anne, sağlık, ve, ile.

Fricative: Sound produced with partial obstruction so that there is friction.

G

Generic: A reference type which refers to a group rather than the specific members of that group: *Kitap* (generic) in *kitap faydalıdır* as opposed to *kitabı* (definite) in *kitabı faydalı buldum* or *bir kitap* (indefinite) in *bir kitap buldum*.

Genitive: A type of case which marks the “possessor” by the suffix *-(n)In*: *evin*, *arabanın*.

Genre: Types of discourse.

Glottal: Sound produced at the glottis.

Gradable adjective: An adjective that characterizes a property in varying degrees. Therefore, the negative of a gradable adjective does not necessarily yield its opposite: *sıcak*; *sıcak değil* may imply not only the opposite *soğuk*, but also *ılık* or *serin*.

Gradable antonym: Gradable antonyms denote two opposite ends of a gradable or scalar dimension.

Grammatical category: A category which marks a particular grammatical inflection that is associated with a particular word class: case and number as grammatical categories associated with nouns.

Grammatical relation: The way a constituent of a sentence functions within a sentence. The most common grammatical relations are subject and object.

Grammaticality: A syntactic unit, i.e. a phrase, clause or sentence that obeys the rules of grammar in a language and used or interpreted as such by native speakers.

H

Head parameter: The variation across languages related to the direction of the head in a phrase. The head can be at initial position, as in English, for the journey, where for is the head of PP. In Turkish the head is at final position, as in *her şey için*, where *çin* is the head of PP.

Head: The central element in a phrase. For example, the head of a NP is a noun.

Hearsay: A type of modal meaning which indicates indirect (second-hand) evidence. It is also called reportative. For example, *Demet gel-miş* implies that the speaker has heard that Demet has come; not that the event has not been witnessed by the speaker.

Height: Height of the tongue body in the vocal tract.

Hypernym (also known as superordinate): It is a word which is general and it includes the meaning of words with more specific meanings.

Hyponym: A word whose meaning is included in the meaning of another word. For example, *car*, *ship*, *bicycle*, etc. are vehicles and each is a hyponym of the word *vehicle*.

I

Idiosyncratic property: Property that is not predictable.

Illocutionary force: In speech-act theory, a speaker's *intention* in delivering an utterance.

Immediate constituent: The highest constituents of a syntactic unit. For example, *S/Æ NP VP*; NP and VP are immediate constituents of S.

Impersonal passive: A passive construction made from an intransitive verb: *gidilir*, *ağlanır*, *düşülür*, *boğulunur*.

Implicature: A result of a listener making an inference as the most likely meaning an utterance may have in a given context.

Indefinite pronoun: A pronoun that denotes someone or something with an unidentifiable referent: *herşey*, *biri*, *bir şey*, *herkes*.

Indirect evidence: Information that enables the speaker to make a deduction about the actuality of an event (also see *Hearsay* and *Inferential*).

Indirect speech act: What is meant by a speaker's utterance that is not part of what is explicitly said.

Inferential: A modal meaning which indicates indirect sensory (visual or auditory) evidence: *Demet gel-miş* upon seeing Demet's shoes on the mat (visual evidence) or upon hearing her talk in another room (auditory evidence). Note that the event has not been experienced directly by the speaker.

Infinitive: The form of a verb that is not inflected for tense.

Inflix: A sound or group of sounds used within a word to change the meaning or function of that word: *hakim* from *hüküm*, *tacir* from *tüccar*.

Inflectional morpheme: An affix that marks the grammatical class of word as noun, verb, adjective etc.: the “plural” *-lar* of *kitaplar* as a noun marker, the past tense *-DI* of *geldi* as a verb marker.

Innate: A quality that is pre-determined by the genetic nature of an organism, equipped from birth rather than acquired through experience.

Intensifier: An adverbial that intensifies the meaning of the syntactic unit that it modifies.

Interjection: A closed class consisting of words expressing emotional states such as pain (Ayl!), devastation (Yazık!), delight (Yaşasın!).

Interrogative pronoun: A pronoun which is used to form questions: ne, kim, nerede, neden, nasıl, kimin.

Intransitive verb: A verb that cannot take an object.

IPA: International Phonetic Alphabet used in linguistics to represent sounds of the languages of the world.

Iterative: The type of aspectual meaning which signals that the event described by the verb has multiple cycles: kahkaha atmak (more than one burst of laugh), hıçkırık tutmak (more than one hiccup), kıkırdamak (more than one giggle).

L

Labio-dental: Sound produced with lower lip and upper teeth.

Language Acquisition Device (LAD): The innate mental apparatus for acquiring language.

Letter: Arbitrary symbols used to represent sounds.

Lexical aspect: The type of aspectual meaning that is not marked by a grammatical marker, but signaled, instead, by the lexical content of the verb. For example, hışırmak is a verb that lasts only a second. But this property is hidden in the meaning of the verb. It is not marked by a grammatical morpheme as in yapar. In this example, the aspectual meaning of habituality is marked by -(A)r/-(I)r. (also see Aspect)

Lexicon: An inventory of words in a language; or mental dictionary of a native speaker.

Loan translation/calque: A literal translation of a word or expression from one language into another: serbest vuruş from free kick, insan kaynakları from human resources.

Locative: A type of case which marks "location" by the suffix -dA: evde, arabada.

Locutionary act: In speech-act theory, the act of making a meaningful utterance.

M

Main clause: The clause to which subordinate clauses are embedded (same as a matrix clause).

Marked: An item which is less basic, less frequent, but more precise: doberman is more marked than köpek. A doberman is always a dog, but not vice versa.

Matrix clause: The clause that is highest in a sentence and to which other clauses are subordinated. (same as a main clause).

Metaphorical extension: An extension in the meaning of a word to refer to a referent with a comparable meaning: as with baş in soğan başı, or delmek in sözleri yürekleri deldi.

Minimal pair: A pair of words differing only in one sound.

Modifier: An element that modifies a head. (See also adjunct).

Monotransitive: A verb that takes a direct object: sevmek, görmek, yemek.

Mood: A grammatical category which is inflected on verbs. It is indicated by verbal suffixes. It describes the speaker's opinion about the actuality of an event (epistemic modality), or the internal or external compulsion on the part of the speaker to perform an act (deontic modality). Some examples are: Gürkan çok çalış-malı (deontic/obligation), Gürkan çok çalış-mış (epistemic/hearsay), Gürkan çalış-abilir (epistemic/possibility), Gürkan çalış-sın (deontic/imperative).

Morpheme: The smallest indivisible meaningful unit of a word. A morpheme cannot be broken into smaller elements without changing or distorting the meaning. For example, sil is a morpheme in Turkish. If the initial sound is removed it becomes il which has a different meaning. Words may consist of one morpheme or more. Sil is a word composed of one morpheme, whereas silgiler of three: the stem sil, the noun forming suffix -gi, and the plural suffix -ler.

Morphology: The study of morphemes as the building structures of words, allomorphs as different forms of morphemes, and the ways in which they combine to form words.

N

Narrowing: A process during which a word loses some aspects of its meaning. For example erik was used to refer to peaches, apricots and pears in Old Turkish. It is now narrowed down to prunes only.

Nasal: Sound produced with a total obstruction in the oral tract with a lowered velum.

Neutral vowel: Vowel produced when the tongue is at rest position (schwa is a neutral vowel).

Node: The labeled points in a tree diagram. For example, the following diagram illustrates NP, Adj. and N nodes.

Nominal category: A grammatical category that is associated with nouns: case and number.

Nominal compound: A compound whose central element is a noun: takım kaptanı, sokak başı, kırkayak, külhanbeyi.

Nominal: Associated with the category noun.

Nominalization: A grammatical process that creates nouns or expressions similar to nouns: yönelme, geldiğini, gelmen, gelmek, geliş.

Nominative case: A type of case which marks the subject by the zero morpheme Δ : ev, araba.

Noun incorporation: Fusion of the object noun phrase with the verb: el çırpmak, gitar çalmak, balık tutmak, söz vermek.

Noun Phrase (NP): A phrase that has a noun as its central constituent.

Noun: A word that heads a noun phrase which functions as either the subject or object of a verb or a complement of a postposition or an adjective. Nouns can be preceded by adjectives and determiners: kız, güzel kız, bir kız, güzel bir kız.

Number: A nominal grammatical category which marks the distinction between plural and singular.

O

Oblique: A Noun Phrase which has a case other than nominative and accusative.

Onomatopoeia: Echoing natural sound using speech sounds: mööö, meee, cik cik, miyav, şırıl şırıl, vıcık vıcık.

Open class: A group of morphemes whose class membership is so flexible that new members are readily welcome: verbs, adjectives, nouns, adverbs.

Optative: A type of modal meaning which marks the speaker's wish: Annemi ara-ya-yım.

Orthography The way words are spelled.

P

Palatal: Sound produced at the hard palate.

Palato-alveolar: Sound produced at the back of the alveolar ridge.

Parameters: Variations or dissimilarities across languages. For example, some languages allow verbs to be at sentence final position, while in other languages verbs take place at sentence-initial position. This is a parameter.

Paraphrase: It is a term that is used to refer to propositions that entail each other.

Passive: The rearrangement of a sentence which allows the direct object of a transitive verb to be the subject of that verb: the change of öğrenci soruyu cevaplandırdı to soru öğrenci tarafından cevaplandırıldı.

Perfect of persistent situation: A type of aspectual meaning which marks events that started in the past but continue up to the present: Anadolu Üniversitesi'nde çalışıyor-um.

Perfect: A subclass of aspect which marks current relevance. For example, -DI in Yemek ol-du as a call for dinner to mean 'the process of cooking is completed, so we can eat it now'.

Perfective: A subclass of aspect which marks completion. Yemek ol-du ama daha salata hazır değil entails that the process of cooking is completed.

Performance: A native speaker's actual use of language in producing sentences. (see also competence).

Performative verb: A verb--such as *promise*, *invite*, *apologize*, and *forbid*--that explicitly conveys the kind of speech act being performed.

Perlocutionary force: In speech-act theory, a speaker's *intention* in delivering an utterance.

Personal passive: A passive made from a transitive verb: arabalar yıkandı from arabaları yıkadılar, duvar örüldü from duvarı ördüler.

Personal pronoun: One of the pronouns that represents the grammatical category of person: ben, sen, o, biz siz, onlar.

Phoneme: A sound that can change the meaning of a word.

Phonetics: Study of sounds.

Phonology: Study of how speech is organized.

Phrase Structure Rules: Rules formed by generalizing the structure of phrases.

Phrase: A syntactic unit with a head, a word that is the central element.

Polarity: A grammatical category that marks the state of being positive or negative on a verb: Etem geldi (polarity: positive), Etem gel-me-di (polarity: negative).

Polysemy: Polysemy is one word with several but related meanings.

Possessive adjective: An adjective used before a noun that marks ownership or possession: benim, senin, onun, bizim, sizin, onların.

Possessive pronoun: A pronoun used in a verb phrase to mark ownership or possession: benimki, seninki, onunki, bizimki, sizinki, onlarınki.

Postposition: A word used after a noun to mark various grammatical relationships with that noun: beri, sonra, üzerinde, için, dek, değin, rağmen.

Pragmatic competence: The ability to comprehend and produce a communicative act.

Pragmatics: Study of speech and its meaning in context.

Predicate: The verb phrase of a sentence which excludes the subject as shown in brackets: çocuk [güldü], küçük çocuk [durmadan güldü], sınıfın yaramaz çocuğu [derste durmadan güldü]. Predicates express the action carried by the subject, description of the subject, or what happened to the subject.

Predicative: Associated with a verb phrase: a predicative adjective used in a verb phrase as in çocuk [yaramazdı], a predicative noun used in a verb phrase as in kardeşi [doktordu].

Prefix: An affix that is attached to the beginning of a stem: gayri- in gayrimişru, anti- in antipropaganda, inter- in interdisipliner.

Prescriptive grammar: A grammar which prescribes or dictates how language should be used, and what the rules are.

Presupposition trigger: A presupposition trigger is a linguistic item that activates presupposition in an utterance.

Presupposition: A presupposition is background belief, relating to an utterance.

Presupposition: Presupposition is the part of an utterance that is implicitly assumed to be true and taken for granted. (semantics unit)

Principles: Similarities across human languages. For example, every human language has rules, and every language must obey structure. Thus, structure-dependency is a principle of Universal Grammar. Principles can never be violated in any human language. (See also Embedding Principle).

Pro: The null subject of a clause where the verb has person and number agreement, such as [pro okula gitti].

Process: A verb that denotes an event that takes place in an extended period of time

Pronoun: A word that can replace a noun: o, onu, onlar, onları, etc.

Proposition: Proposition is the meaning of a statement that can be true or false.

Prospective: A type of aspectual meaning that links a present state to a future point: Artık tatil planlarına başlayacağız (we haven't yet, but we will soon).

Prototype: A typical member of a category or class. For example, serçe, but not akbaba or devekuşu, is considered to be typical by many people even though all qualify as members of the category bird.

R

Reciprocal pronoun: A pronoun that is coreferential with the plural subject of a reciprocal verb: biribiri in birbirleriyle dövüştüler.

Reciprocal: A verbal category marked with the morpheme -(I)ş to show that more than one person acting as the subject of the verb are doing something to one another, or doing something collectively: dövüştüler, üşüştüler, çekıştiler.

Recursion: The repetition of structures such as replacing one clause into another.

Reduplication: A word formation through which new expressions are formed by repeating a syllable, a word, or even a clause: bembeyaz, hırl hırl, aramış taramış.

Reference point: The point in time from which events are viewed. Conventionally, the moment of speech is taken as the reference point.

Reference: The use of linguistic expressions such as pronouns to point out a previously mentioned entity or an entity within the situational context.

Referent: The entity or the event that a NP or a Noun Clause refers to.

Reflexive pronoun: A pronoun that is coreferential with the subject of a reflexive verb: kendi in kendini yıkadı.

Reflexive: A verbal category marked with the morpheme -(I)n to express action done to or for the subject by the subject: yıkanmak, sanınmak, sürünmek.

Relative clause: A clause that is used to modify the head of a Noun Phrase.

Relative pronoun: A pronoun that is used to replace the head noun in a relative clause: ki in Ecem, ki asla yalan söylemez, olayın böyle gerçekleştiğini söylüyor.

Relativize: The process of turning an underlying clause into a relative clause.

Restrictive Relative clause: A clause that gives information about the head noun and restricts its possible referent. Thus, the denotation of the noun is identifiable.

Retrospective: A type of aspectual meaning which links a present state to a past event: Cüzdanımı unut-muş-um (I cannot pay because I forgot to take my wallet).

Reversal: A process through which the meaning of a word is reversed from positive to negative or vice versa: felaket from "disaster" to "excellent".

Root: A free morpheme that bears neither a derivational nor an inflectional morpheme: sap, ben, bol, sağ, sol.

Rounding harmony: Vowels within a word agreeing in rounding as well as backness.

Rounding: Lip position in vowel production.

S

Schema (sing); Schemata (pl): The background knowledge that is necessary to understand a discourse.

Semalfactive: The type of aspectual meaning which implies a one-cycle/one-time event: öksürmek, varmak (also see Iterative to compare).

Semantic change: A process in which a word's meaning has changed through broadening, narrowing, semantic elevation or semantic degradation.

Semantic degradation: A change in meaning from positive to negative: felaket meaning "excellent" besides "disaster".

Semantic elevation: A change in meaning from negative to positive: çocuk now meaning "child" but once meaning "piglet".

Sister: The branches in a tree diagram of the same node. Sisters are at the equal level in a tree diagram. Sisters are always in a special relationship, such as modifier-head; complement- head relationship.

Sound: Air coming out of the lungs.

Speech act: A speech act is an utterance that serves a function in communication such as an apology, warning or congratulations.

State: A verb which denotes a condition under no change or very slow change. Such verbs are non-dynamic and long-lasting: sahip olmak, bilmek, inanmak, içermek, farklı olmak, sevmek, istemek.

Stem: A morpheme that bears a derivational or an inflectional morpheme: sap in sapla, bol in bolluk, sağ in sağa, sol in soldan.

Stop: Sound produced with total obstruction in the oral tract and raised velum.

Subject complement: A phrase in the predicate of a copular verb that completes the meaning of the subject. For example, Ali [doktor oldu], where doktor completes the subject and it has the same denotation with it.

Subordinate clause: Any clause that cannot stand alone and that must be embedded under a main clause.

Substitution: The use of linguistic expressions that can take place of another linguistic expression.

Suffix: An affix that is attached to the end of a stem: -mAII in gelmeli, -ArAk in gelerek, -mA and -(y)AcAK in gelmeyecek.

Surface realization: How a sound surfaces in speech.

Syntax: The subfield of linguistics that investigates the sentence structure.

Systematic regularity: Property that is predictable.

T

Tense: A grammatical category that is marked on verbs. It is indicated by verbal suffixes. It describes the meaning expressed by the verb in terms of time such as past or non-past. For example, Dünya güneşin etrafında dön-er is non-past, but adamın başı dön-er ve düş-er taken from a narrative is past. Tense is deictic.

Text: A written discourse

Transitive verb: Any verb that takes a direct object.

Tree diagram: A representation of internal structure of sentences. In tree diagrams, linguists use branches that show the constituent structure. The following is an example of a tree diagram:

Turn-taking: The manner and order in which the roles of the speaker and the listener interchange.

U

Ultimate constituent: The smallest constituents of a syntactic unit.

Unaccusative: A type of impersonal passive made from intransitive verbs that denote involuntary acts: takılmak, boğulmak, batmak, düşmek.

Underlying representation: Representation at the phonological component of grammar; what is in the mind.

Underlying sentence: The level of sentence structure which shows the basic form from which a syntactic unit is derived. For example, the underlying sentence of the relative clause dün aldığım çiçek is dün çiçek aldım.

Unergative: A type of impersonal passive made from intransitive verbs that denote volitional acts: kaçmak, koşmak, oynamak.

Universal grammar: A grammar which tries to explain the rules that underlie every human language. (See also principles and parameters). It also refers to the genetically endowed information that consists of principles and parameters that enable the child to deduce a grammar from the input s/he receives.

Unmarked: An item which is more basic, more frequent and therefore more salient. For example, singular is less marked than plural since the latter is more complex as it is formed based on the former by adding an extra morpheme.

V

Valency: The number of noun phrases required by a verb to complete a sentence: Koşmak has a valency of one as in Serap koştu, but vermek has a valency of three as in Serap paketi annesine verdi.

Velar: Sound produced at the velum (soft palate)

Verb: A word that typically denotes rapid changes: koşmak, yürümek, dökmek, devirmek. A verb functions as the head of a predicate and bears inflections for the categories tense, aspect, mood, person, and number.

Verbal category: A grammatical category that is associated with verbs: tense, aspect, mood, person agreement, number agreement.

Verbal compound: A compound whose central element is a verb: resim yapmak, durup kalmak, un elemek, söyleyivermek.

Verbal: Associated with the category verb.

Vocal tract: The air passage above the larynx.

Voice: A category that expresses the relationship between a verb and the noun phrases associated with it: active, passive, reciprocal, reflexive, causative.

Voiced consonants: Consonants produced with vocal cord vibration.

Voiceless consonants: Consonants produced without vocal cord vibration.

Voicing: Presence or absence of vocal cord vibration

Volition: A modal meaning which marks willingness. This meaning is conveyed by -(A)/-(I)r in Ben seninle gel-ir-im. It implies that the speaker is willing to be a partner in the event.

Vowel harmony: Vowels within a word sharing similar properties.

W

Word class: A group of words which are similar in their semantic, morphological and syntactic behavior. The most common word classes are: noun, verb, adverb, adjective, pronoun, postposition, conjunction, interjection.

Dizin

A

Acronyms 78, 89, 91
Agreement 96, 98, 107, 108, 109, 122, 124, 127
Allomorphy 60, 70
Allophone 2, 6, 9
Allophones of Turkish consonants 14, 24
Allophones of Turkish vowels 32, 40
Aspect 96, 98, 109, 110, 111, 112, 113, 114, 119, 127
Assimilation 46, 51, 52, 53

B

Back Vowels 32, 36, 37, 39
Backformation 78, 89, 91
Backness 32, 34, 35, 36, 37, 38, 39, 42
Backness Harmony 46, 54
Blending 78, 89, 91
Borrowing 78, 87, 89, 90, 91
Bound Morpheme 60, 64, 65, 66, 67, 71

C

Case 98, 100, 101, 102, 103, 104, 105, 106, 107, 122, 127
Central Vowels 32, 35
Clipping 78, 88, 89, 91
Closed Classes 134, 139, 150, 153, 157
Coinage 78, 87, 89, 91
Compounding 78, 83, 84, 85, 86, 89, 91
Consonants 14, 15, 16, 17, 18, 19, 20, 22, 23, 24, 25, 27
Conversion 78, 86, 87, 91

D

Derivation 78, 79, 80, 81, 83, 86, 87, 89, 91
Derivational Morpheme 60, 65, 66, 68, 69

F

Final Devoicing 46, 48, 49, 50, 53, 55
Free Morpheme 60, 64, 65
Front Vowels 32, 36

G

Gender 96, 98, 100, 127
Grammatical Criteria 134
Grammatical Category 96, 98, 100, 110, 121, 127

H

Height 32, 34, 35, 36, 37, 38, 39, 42
High Vowels 32, 35, 36

I

Inflectional Morpheme 60, 65, 66, 68, 69, 72

L

Low Vowels 32, 35

M

Manner Of Articulation 14, 18, 20, 22, 23, 27
Metaphorical Extension 78, 88, 91
Mid Vowels 32, 35, 37
Mood 96, 98, 109, 111, 120
Morpheme 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72
Morpheme Ordering 60, 68
Morphology 60, 61, 62, 65, 68, 70, 72
Multiple Process 78, 89, 91

N

Nasal Sounds 14, 15, 16, 20
Nasal Tract 14, 15, 16, 17
Negation 96, 109, 127
Number 96, 98, 99, 102, 106, 108, 111, 121, 126, 127

O

Onomatopoeia 78, 86, 91
Open Classes 134, 139, 140, 153, 157
Oral Sounds 14, 15, 16
Oral Tract 14, 15, 20, 23

P

Phoneme 2, 5, 6, 9
Phonetics 2, 3, 7, 9
Phonology 2, 3, 4, 9, 46, 47, 49, 55
Place Of Articulation Assimilation 46, 51, 52, 53
Places Of Articulation 14, 19, 20, 22
Prototypes Vs Non-Prototypes 134

R

Rounded Vowels 32, 36, 39
Rounding 32, 36, 37, 38, 39, 42
Rounding Harmony 46, 54

S

Semantic Change 78, 88, 91
Semantic Criteria 134, 137, 141, 144, 148, 149, 157
Sound 2, 3, 4, 5, 6, 7, 8, 9
Sound vs. Letter 2, 7
Surface Realization 2, 4, 5, 6

T

Tense 96, 98, 102, 109, 110, 111, 123, 127

U

Underlying Representation 2, 4, 6

Unrounded Vowels 32, 36, 39

V

Vocal Tract 14, 15, 16, 17, 18, 19, 20, 22, 27

Voice 96, 98, 120, 121, 127

Voicing 14, 18, 23, 27

Voicing Assimilation 46, 51, 52, 53

Vowel Harmony 46, 53, 54

Vowels 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42

W

Word Classes 134, 135, 136, 138, 140, 150?