

Introducing Linguistics

1. What is linguistics?

Linguistics is the scientific study of human language. The subject of linguistics, obviously, is language. Language is a fascinating phenomenon. In every part of our life we find language. Language can be used for several things. For instance, if you want to buy a car, you need to ask about its specifications using LANGUAGE! If you want to rent an apartment, you need to read the contract carefully, unless you want to be double-crossed! And yes, language is the core of that contract! What about jokes? Take this for instance: you are sick, and asked your friend: “ Can you call me a doctor?”, and he replies: “ Okay, you are a doctor!” So, we use language even for amusement.

How many languages you speak? Probably, two! Then, you will be called a **bilingual** (bi=two). But if you speak more than two, then we should refer to you as a **polyglot**. And do not be a shamed if you speak only one, you have a name which is a **monolingual**. But you may feel concerned if you only speak one language, and you want to study linguistics! Well, don't! Being a person majoring in linguistics does not mean that you have to know more than one language. You aren't sure about that? Then, let us take the most important person in modern linguistics -- **Noam Chomsky**. Chomsky speaks only one language, and still he is the pioneering figure in the field. If someone asks about your major, and you say it is linguistics, then expect him or her to ask you about languages you speak. Simply say to him or her: “ Asking a linguist how many languages you speak is like asking a doctor how many diseases you know!” You may have noticed the word “**linguist**”. A linguist is a person who studies linguistics. Linguists are the practitioners of language. Their subject study is the “human essence”, which is language (Chomsky, 1968).

Language is really impressive and exciting. Have you ever imagined how we can produce millions and millions of ‘**novel**’ sentences about nearly everything in life! Well, that was noticed earlier by Wilhelm Von Humboldt who said: Language “ makes infinite use of finite media.” This **open-endedness** of language is really captivating. It seems that there are “two systems in the universe that most impress us with their open-ended complex design -- life and mind” (Pinker, 1994). But what do we study in linguistics?

Language is seen as a **biological endowment**. It is represented in the mind and seen its magical work outside in the world. We, as linguists, believe, or have the premise, that *all languages of the*

world are equal; there are *no primitive languages*, nor prestigious ones. All natural languages are worth studying. All languages are as complex as each other. We cannot say that language X is more complex than language Z. Though languages are **complex**, yet they are **systematic**. Due to languages being systematic, they are, then, **describable**.

I have mentioned that language is a biological endowment, an **innate** property. Why is that? One reason is, as we have mentioned earlier, that language is **creative** in which from the finite set of rules, we produce zillions of sentences. It is this expressive power that makes the language of homo sapiens unique. A further evidence is seen in the work of **De Saussure** -- “the **arbitrariness** of the sign.” Take, for instance, the word ‘dog’. The word itself:

does not look like a dog, walk like a dog, or woof like a dog, but it means “dog” just the same. It does so because every English speaker has undergone an identical act of rote learning in childhood that links the sound to the meaning.

(Pinker, 1994)

Take another example. The fruit ‘peach’ has an object inside which can be referred to as ‘seed’, ‘stone’ and ‘pit’. A further example are the names given to planet Venus. Venus can be referred to as ‘the morning star’ or ‘the evening star’. Therefore, *the pairing between sounds and meanings are conventional*, i.e. arbitrary.

Now let us shed light on the nitty-gritty of linguistics -- language. How do linguists approach language? What levels they do study? Linguists study language in all of its manifestations. They study sounds, structures and meaning. There are different branches under the general term ‘linguistics’, in which every branch studies a language level. First, the sounds level. Sounds are studied by two main branches: they are called **phonetics** and **phonology**. Phonetics is the study of human speech sounds. It studies the “minimal units that makeup a language” (language files11, 2011).

By using the term ‘minimal units’, we are including also sign languages. Phoneticians also study the minimal units (phonetics) of signed languages. Phonetics is the study of the physical properties of speech sounds. Phonetics studies how sounds are produced, transmitted and perceived. Phonetics can be sub-divided into three ‘kinds’ of phonetics. The first is called **articulatory phonetics**. It studies how sounds are made. The second kind is **auditory phonetics**. It studies how sounds are perceived. The third is **acoustic phonetics**. It focuses on “the physics involved” (Davenport and

Hannahs, 2005). On the other hand, phonology studies how these speech sounds pattern to make a sound system. It studies “how sounds can be combined, the relations between them, and how they affect each other” (Davenport and Hannahs, 2005).

The second level of language is the level of structure. This level includes words, phrases and sentences. The words level is studied by morphology. **Morphology** is the study of words. It studies the internal structure of words, and how new words are created. It studies how little tiny ‘things’, linguists call **affixes**, can be attached to words to change its part of speech, and their meaning. The study of morphology can be divided into **inflectional morphology**, and **derivational morphology**. Words are inflected by affixes like, for instance the plural -s, which creates a new **form** of a word, not a new one. Derivational morphology studies how words can be derived or invented.

What about phrases and sentences? They are studied by the field of syntax. **Syntax** studies how words and phrases combine to make larger phrases and sentences. It is concerned in how little linguistic expressions combine to make a larger linguistic expression. It studies the arrangement of those little linguistic expressions inside the larger linguistic expressions. If the arrangement produces a sentence, then this string of expressions is **grammatical**; if it does not produce a sentence, then it is **ungrammatical**. What constitutes the grammaticality issue is the grammatical judgment of the speaker’s intuitive knowledge about language. This intuitive ability is what we refer to as the linguistic competence (will be discussed below). Syntax helps us identify which sentences (combinations) are **well-formed** (grammatical), and which are **ill-formed** (ungrammatical).

The third level of language is meaning. Meaning can be studied through two branches of linguistics: **semantics** and **pragmatics**. Semantics, simply, is the study of meaning. It studies the meaning of words, and the meaning of sentences.

Word meaning is studied by the sub-branch of semantics called **lexical semantics**. It studies word-meaning relationships. For instance, the relation between ‘wide’ and ‘narrow’ is called, in lexical semantics, synonymy; the relation between ‘tulip’ and ‘flower’ is called hyponymy; that is, the meaning of tulip is included in the meaning of flower. On the other hand, **compositional semantics** studies the meaning of sentences. It studies phrasal meanings, and how those meanings are assembled. Of course when we utter a sentence we are uttering to an audience. This audience and their world is called context. **Context** plays a crucial part on how we manage to understand

meaning of sentences like: can you pass me the salt? Is the speaker asking about your ability to pass him or her the salt, or he or she actually wants you to give him or her the salt? **Pragmatics** is the study of meaning in context. Further, pragmatics helps us understand the unsaid. Let us observe this conversation:

A: Are you going to Ali's party?

B: I have to study.

We can understand that 'B' does not want to go to Ali's party, and he is actually saying: no, I'm not going to the party.

In other words, language has different levels of manifestations. Take the example of "cat". This 'sign', i.e. the string of graphemes 'cat', has four levels of manifestation, which is also called strata. So, the sign 'cat' has four levels of representation which we will use the following notation to refer to those levels: [cat]_P denotes the phonological structure, [cat]_M denotes the morphological structure, [cat]_L denotes its syntactic structure, and [cat]_S its semantical structure. Then, we can adopt a definition of a sign as follows:

2. What is a linguist's grammar? The grammar that you did not take at school-- Generative grammar:

A linguist's grammar contains all the different levels of language. It includes a theory of sounds, rules, words, and meaning. It tries to explain what governs the rules of natural languages through phonology, morphology, syntax and semantics. It attempts to uncover the universal rules under the design of all world languages, and the specific rules for particular languages. In Generative grammar, it is assumed that there is an innate 'language faculty' containing universal rules applicable to all languages. Those rules (**principles**) have different options for particular languages to choose from. Those options are called '**parameters**'. The child acquires a language through specifying which parameters are the ones applied in his or her particular language, let say Arabic. Therefore, every child has a capacity to acquire language in a very short period of time.

3. The linguistic competence and performance distinction:

Let us ask first where is language? Language can be found in two places: inside the brain and outside in the world. **Linguistic competence** is language inside the brain. Linguistic competence is

the speaker's knowledge of language. It is the knowledge of grammar including sounds, rules and meaning. Competence is the mental representation of language in the mind. Language outside in the world is our performance of language. **Linguistic performance** is the production and perception of language. It is the realization of the mental representation of language outside in the world.

4. Components of the linguistic competence:

The linguistic competence contains of 1) **rules**, and 2) the **lexicon**. The lexicon is the mental dictionary available in the linguistic mental organ. The lexicon is a collection of all words we know; what functions those words serve; what they refer to; how they are pronounced; and how they are related to others. The other component are the rules which are stored inside our mental grammar. Mental grammar “ is a program that can build an unlimited set of sentences out of a finite list of words [lexicon] and rules” (Pinker, 1994).

5. Aims of the linguistic theory:

Language can be viewed as a social phenomenon, and as a cognitive one. Most of linguistic research had an aim to describe languages. Linguists described individual languages; linguists search for what is common to all languages, and they described how languages relate or differ to each other. Describing different languages is very important. One reason for this importance is documenting those linguistic varieties. Describing them helps preserving those languages from death, at least in the books! The second reason for the importance of description, it gives us insights to the cognitive nature of natural languages. We cannot explain language as a cognitive phenomenon before explaining its existence in real world. We cannot describe the abstract (the mental ability of having language), without describing its actual realization in the world. Due to the adequate description of language, Chomsky thought of language as a cognitive entity. He, then, came to propose a framework for linguistic research which was named as generative linguistics.

Chomsky (1986) formulated questions that are seen as a framework for modern linguistics. Those questions are seen as the key questions of the linguistic theory. The questions are:

1. *What constitutes knowledge of language? (competence)*
2. *How is knowledge of language is acquired? (acquisition)*
3. *How is knowledge of language is put to use? (performance, language processing)*

Design Features of Language

1. What is language?

This is an important question for linguists. They need to clearly define their subject of study - LANGUAGE. A linguist called **Charles Hockett** provided a list of characteristics that describe what a language is. Though Hockett's list does not provide us with an answer about the nature of language, but it gives us description of what a language should be. This list of language characteristics is called '**design features of language.**' Some of the list's features describe not only human language, but also other modes of communication. We shall start with these common features between human language and other communication systems (language files11, 2011).

▷ **Common design features that ALL communication systems have (including human language)**

1. Mode of communication:

The first feature is 'mode of communication'. A communication system should be able to send and receive messages. In human languages, speakers use voice to send their messages. But voice is not the only method; they can send messages through gestures such as hands and eyes. This feature is a universal one among different communication systems. **Language modality** will be discussed further in other lectures.

2. Semanticity:

If you asked your friend to buy you a highlighter, you are assuming that he or she knows the meaning of this thing called: highlighter. If he or she knows the meaning, then he or she will buy you the highlighter, unless he or she refuse. But if he or she does not know what a 'highlighter' is, then he or she will be confused. They will wonder why you are saying this word, 'highlighter', and what does it mean? This, not knowing the meaning of 'highlighter', will lead to a communication failure. Therefore, all interlocutors in a successful communication should have meaning.

3. Pragmatic function:

Every communication system should be used for a purpose. Every communicative act must leave a change on the world; greatness of the impact is not the question, but the purpose. For instance, a

religious clerk may address members of his or her religion to raise funding, to gain social power, or even to guide them to the straight path! Thus, communication systems are not trivial, but essential.

▷ **Design features that SOME communication systems have (including human language):**

4. Interchangeability:

Simply, it is our ability to understand each other. When an interlocutor sends a message, the receiver must comprehend it. Then, users of a communication system send messages through language or signs, and the receiver understands it through listening or watching.

5. Cultural Transmission:

Acquiring a language does not depend solely on our innate capacity to know a language, but needs linguistic exposure to know the specifics of his or her language. **Prelinguistic** babies need their mother's talk (motherese) to trigger their ability to acquire a language. For example, an Arab baby will learn Arabic if his or her environment is an Arabic speaking community. But that does not mean that he or she will not acquire any other language. His or her linguistic environment will determine which language and dialect he or she speaks, not the genetics; though we must believe that the capacity to acquire any language is hard-wired inside us, i.e. innate. So, cultural transmission means that there are certain aspects of language that cannot be acquired without communicative interaction.

6. Arbitrariness

As we have mentioned in lecture 1, the relation between words and their meanings are arbitrary. Words only "represent a connection between a group of sounds or signs...and a meaning" (language files 11, 2011). This combination between a form (word) and a meaning is called a **linguistic sign** (language files 11, 2011). Arbitrariness of the linguistic sign was presented in the lectures of Ferdinand De Saussure (1857-1913). It assumes that the pairing between sound and meaning is conventional or arbitrary. In the words of De Saussure: "what linguistic signs link is not the thing

and its name, but the concept and sound image” and “we call the combination of concept and sound image signs” (De Saussure, 1980). Then, a linguistic sign is the combination of a **signifier**, and a **signified**. The signifier is the carrier of meaning (the sound-image), and the signified is meaning itself. The signifier is a word’s phonemic component and the sequence of graphemes (letters). The signified is the mental image of an object, or the ideational component.

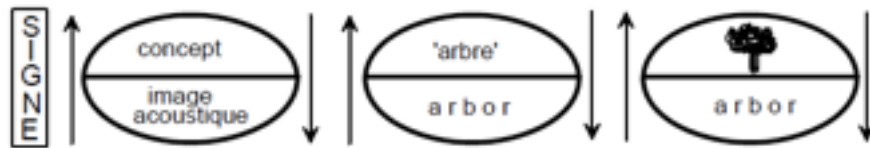


Fig. 1

cf. Lipka (2002: 55)

⊙Evidence for arbitrariness:

As an evidence of the arbitrariness of linguistic sign, recall the ‘peach’ example in lecture 1. We have mentioned that the thing inside the fruit ‘peach’ can be called as: 1) seed, 2) pit, and 3) stone. This gives us an evidence that there is no direct meaning between the form (the sequence of graphemes or phonemes) and the meaning.

Another piece of evidence can be found through observing some cross-linguistic differences. Take, for instance, the meaning of ‘water’. The meaning of water is pronounced and wrote differently across languages (see the table under). This suggests the arbitrary relation between the form and the meaning.

Form	Meaning	Language
ماء	water	Arabic
agua		Spanish
Vand		Danish
acqua		Italian
ura		Basque
पानी		Hindi
Wasser		German
su		Turkish

Form	Meaning	Language
מים		Hebrew

7. Discreteness:

Think of the following sentence: Ali is fast. This sentence is not perceived as one unified sound, rather it is composed of many **discrete units**. First, it is composed of 3 discrete units which are: Ali, is, and fast. Those discrete units (words) are even composed of other discrete units (sounds). It is composed of the following individual sounds: [ʔ] , [l], [i], [I], [z], [f], [æ], [s], and [t]. Languages of the world consist of a set of sounds that vary from 10 to 100 meaningless sounds (language files11, 2011). From those discrete individual meaningless sound units, we can combine them to make meaningful words; those discrete units (words) are combined to make phrases; those large discrete units combine to make sentences. Thus, from a limited set of meaningless discrete units, we produce an infinite number of meaningful combinations. I remind you with the words of Wilhelm Von Humboldt who said: language “makes infinite use of finite media.” So, those communication systems that can combine those discrete units in different combinations have more **expressive power** than those that do not; and now you can guess where language gets its expressive power.

▷ **Design features that are exclusively of the human language design:**

8. Displacement:

Can you talk about your yesterday's lunch? Can you talk about your future planning after graduation? Can you talk about the shape of paradise, even you did not see it? Can you talk about an idea you have in mind? Then, congratulations, you are a homosapien (simply, a human being). Our ability to talk about things, actions, ideas, and events in the past or the future, existing in space or not while communicating is referred to as displacement. Animals cannot discuss the idea of desertification! Monkeys cannot say to us, the homosapiens, that they do not eat only bananas! Therefore, **displacement** is uniquely a human property; displacement is a design feature that is exclusively for the design of the human language.

9. Productivity:

The idea of productivity (sometimes referred to as **creativity**, or **recursion**) is closely related to discreteness. Our ability to construct new linguistic expressions, and understand them is uniquely human. The fact that we can put together the discrete units of language in a systematic, **rule-governed** way is called productivity. Therefore, all rules in all different **strata** are productive. This ability, i.e. productivity, allows us to build and understand novel sentences with different propositions, even if we hear or read it for the first time in our life.

2. What are the benefits of those nine design features?

A communication system that has all of Hockett's nine features is then called a language -- specifically, a **natural language**. We should differentiate between natural languages, and formal languages. A **formal language** is defined as “ a communication system, such as one of the many systems of logical notation or most computer language, that has both semantic and syntactic rules and that encodes ideas with symbols that represent particular meanings, but that could never be the native language of a human” (language files11, 2011). A child cannot acquire a formal language, say C++, naturally as if he or she acquiring the Arabic language, for instance; which suggests that a natural language is the one that “evolved naturally in a human speech community” including the development of its lexicon and grammar through different generations of native speakers (ibid, 2011).

3. Animal Communication:

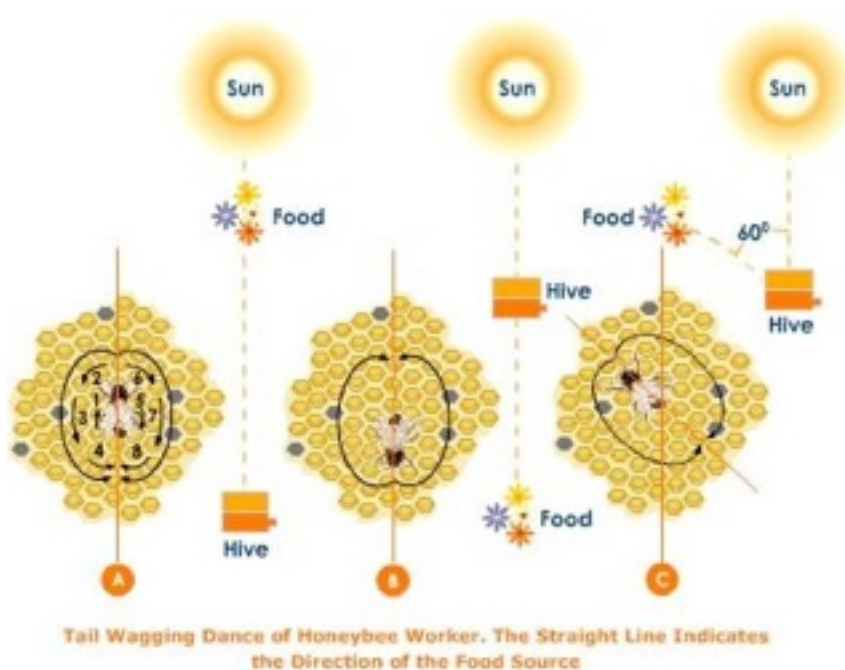
We are certain that animals have a communication system, but what is it? How do they communicate? Referring back to Hockett's design features, we can define an animal communication system as that system which has the properties of: 1) mode of communication, 2) semanticity, 3) pragmatic function, 4) interchangeability, 5) cultural transmission, 6) arbitrariness, and 7) discreteness. Then, an animal's communication system does not have the properties of displacement, and productivity. We now know the designing features of an animal communication system, but how do animals communicate? When dogs bark, they communicate; when birds sing, they communicate; but is it always the case of producing an audible sound we, humans, hear? Well, no. Elephants, for instance, communicate through infrasound which are not audible by humans; this infrasound is low pitched, i.e. less than 20 Hz, which elephants communicate through. This low-pitched sound can travel for miles and miles. On the other hand, bats communicate through high-

pitched sounds (over 20,000 Hz). Though the sound is a high-pitched one, but it cannot travel for very far. Sounds are not the only signal used to communicate. Female rabbits, for instance, “use the white of their tail as a flag to lead their young to the safety of their burrows” (language files11, 2011). Odor can be a signal used in a communication system! Insects use pheromones, a chemical combination, to attract mates! Another type of signals are the electrical signals, which are used by fish to communicate to identify a mate, broadcast territoriality, and regulate schooling behavior (ibid, 2011).

► Example of Animal Communication

Bee communication:

When a honeybee discovers a place for food, it performs a dance to tell other honeybees its place. Their dancing can be through rounding, sickle, and tail-wagging. Their choice of dance, depends on how far is the location of food from the hive. The round dance means that the food location is about 20 feet, i.e. near to the hive. The sickle dance tells the honeybees that it is within 20 to 60 feet. If the honeybee do the tail-wagging dance, then it is trying to tell members of the colony that the food location is far (i.e. more than 60 feet).



The philosopher and mathematician Rene Descartes asserted the difference between animal and human communication in his “Discourse on Method” saying:

It is a very remarkable fact that there are none [among people] so depraved and stupid, without even expecting idiots, that they cannot arrange different words together, forming of them a statement by which they make known their thoughts; while, on the other hand, there is no other animal, however, perfect and fortunately circumstanced it may be, which can do the same.

According to Descartes, “ Human use of language is not just an immediate response to external, or even internal, emotional stimuli, as are the grunts and gestures of animals” (language files11, 2011).

Animal communication systems can be sorted into three categories:

1. A finite list of calls. (EX: Vervet monkeys)
2. Continuous analog signal. (EX: Bee dance)
3. Random variations on a theme. (EX: Birds song)

In animal communication, therefore, there are no phonology, morphology, and syntax. There is no arbitrary names; and there is no recursive syntax.

Phonetics and Phonology

Phonetics is the science of human speech sounds. It is an observation to the mechanics involved in the production of a speech sound unit. Phonetics studies how sounds are produced, transmitted and perceived. Phonetics has three subfields which are:

- a. **Articulatory phonetics:** Observes the organs involved in speech production. Phoneticians use X-ray photography and cinematography (plus other techniques) to examine the interaction of organs when producing sounds.
- b. **Auditory phonetics:** It studies humans’ perception of sounds; how pronunciation is perceived by listeners. Phoneticians use different methods to examine speech perception. For instance, magnetic resonance imaging (MRI), and computerized tomography (CT) are techniques used in analyzing speech sounds perception.

c. **Acoustics phonetics:** It is the study of the physics of sounds; the physical properties of sounds. Physicists define sounds as wave vibrations. In other words, acoustic phonetics study the characteristics of sounds. To study those characteristics, phoneticians use sound spectrographs. You, the linguist, can do some analysis for sounds through free software available on the internet. Just search for ‘sound analysis tools’, or ‘waveform editor’; for example, the program Praat, which is developed by faculty members from Amsterdam University.

Phonology:

Phonology studies the distribution of sounds in a language. Further, it studies the interaction between sounds. Phonologists try to answer question as: a) How sounds are distributed? B) Which are the predictable sounds and the unpredictable sounds in a language? C) Which sounds affect the identities of words? (language files11, 2011).

Phonology tries to understand how sounds are counted and organized in the mind of the speaker. It tries to determine the possible combinations in a language. Simply, phonology provides an inventory of sounds, and specifies how sounds interact with each other.

2.1: Phonotactic Constraints:

To do a phonological analysis, we rely on its phonetics. Phonotactic constraints are restrictions specifying the possible sounds in a language. For instance, in English any consonant can be in the initial place in a word, except for [ʒ], and [ŋ]. A combination of two consonants also can occur initially in a word. For instance, a word can start with a stop or a fricative, and be followed by a liquid or a glide; for example: [gl] glean, humor [hj], and sweet [sw]. Languages prefer syllables to start with a consonant (c), followed by a vowel (v). But, English can have up to three consonant **cluster** at the beginning of a word, or at its end. Examples of syllable types in English are shown in the table below:

V	a	CV	no
VC	at	CVC	not
VCC	ask	CVCC	ramp
VCCC	asked	CVCCC	ramps
CCV	flew	CCCV	spree
CCVC	flute	CCVC	spleen

CCVCC	flutes	CCCVCC	strength
CCVCCC	crafts	CCCVCCC	strengths

(Adapted from language files11, 2011, p.103)

One important reason for having a **foreign accent**, is applying the phonotactic constraints of one language on another language. A Spanish speaker may say [estudent] for the word *student*. This is because the cluster [st] is not allowed in Spanish; the same goes for the clusters [sk] and [sp].

Moreover, a French speaker will not be able to say *this*, instead he or she will pronounce it as [zis]. The French speaker substitutes the sound [ð] with [z] because the phonemic inventory for the French language does not contain the sound [ð]. This process is called **sound substitution**.

2.2: Phonemes and Allophones:

Think of the words pin, bin, and spin. You may say that the words pin and spin have the same sound. Actually, they are the same and they are different sounds. They are phonetically different. Because, we have the **aspirated** [p^h], and the **unaspirated** [p]. But, does contrasting those two sounds results a change in meaning? Take the word map. It is transcribed as [map]. If we change the unaspirated [p] with the aspirated [p^h] (to be [map^h]), does the meaning change? Well, no. So, [p] and [p^h] are **noncontrastive** in English. They are noncontrastive because the interchange does not result a change in meaning. Therefore, a **phoneme** “is a class of speech sounds identified by a native speaker as the same sound; a mental entity (or category) related to various **allophones** by **phonological rules**” (language files11, 2011, p.700). The allophones of the phoneme /p/ are [p] and [p^h]. Phonemes are written between slashes / /, and allophones are written between brackets []. Then, allophones are different sounds of the same sound, i.e. the phoneme /p/ has the allophones [p], and [p^h]. Allophones represents the various ways a phoneme is pronounced.

The distinction between phonemes, *the abstract entities*, and allophones, *the physical entities*, is what linguists try to draw. So, we pronounce the different allophones, not the phoneme itself. Some linguists think of phonemes as “the form in which we store sounds in our minds” (language files11, 2011, p.111). Alphabetic writing systems tend to be phonemic rather than phonetic.

Morphology and Syntax

1. Morphology:

Morphology is the study of words. It studies the different shapes of words; it studies the internal structural of words.

Recalling that words are arrayed inside our brain as a mental dictionary, this mental dictionary is referred to as the **lexicon**. First, let us define what a word is.

A word is a string of small meaningful symbols. Those meaningful symbols are called morphemes.

Morphemes are the smallest meaningful units in a word. A morpheme can has a meaningful meaning, or a meaningful ‘grammatical function’.

The word “cats” contains two morphemes. The first morpheme, which is “cat”, is a **free morpheme**. The plural “-s” is the second morpheme, which is a **bound morpheme**. A free morpheme can stand alone as a word, but the bound morpheme cannot stand alone as word.

2. Derivation and Inflection:

2.1: Derivational morphology:

Words belong to **lexical categories** (sometimes called parts of speech). Lexical categories can be divided into **1) open lexical category (content words)** , and **2) closed lexical category (function words)**. The open lexical category includes: nouns, verbs, adjectives, and adverbs. They are called open because new words can be added to it. In contrast, the closed lexical category does not accept new members to it. It includes: pronouns, determiners (the, this, a, your etc.), prepositions, and conjunctions (and, or, but).

If you think of the words ‘cat’ and ‘catty’, are they the same words? Well, no. ‘Cat’ has a different **form** from ‘catty’, a different **meaning** from ‘catty’, and a different **lexical category** from ‘catty’.

	Cat	Catty
Form:	/ k æ t /	/ k æ t i /
Meaning:	domesticated feline	spiteful, (fighting) like a domesticated feline
Lexical Category:	Noun	Adjective

But, you may argue that ‘catty’ is derived from ‘cat’, then ‘cat’ is the root of ‘catty’. So, ‘cat’ is the **root** for the derived word ‘catty’. This process is called derivation. A **derivational process** is the one in which one operation or more is applied on a form of a word to make a new word of a different lexical category. Simply, it is about adding little things to the root. Those added pieces are

called ‘affixes’. The form in which an affix is added to is called the base or the stem. So, ‘cat’ is both a root and a stem. And the affix /i/ , spelled <ty> , is an affix , called a derivational affix, attached to the stem.

2.2: Inflectional morphology:

Think of the words ‘cat’ and ‘cats’, are they two different words? Regarding the lexical category, they are both nouns; regarding meaning, they both refer to the animal cat.

	Cat	Cats
Form	/ k æ t /	/ k æ t s /
Meaning	domesticated feline	domesticated feline (plural)
Lexical Category	Noun	Noun

‘Cats’ represent a different grammatical form of the word ‘cat’, and not a new, different word. The creation of different grammatical forms of a word is called **inflection**. Inflection uses stem and affixes to produce new forms of a word, and not entirely new words. In English, inflectional affixes are attached after the stem.

List of Inflectional Affixes in English			
Function	Affix(es)	Attaches to	Example
3rd personal singular present	-s	verbs	He waits there at noon.
Past tense	-ed	Verbs	He waited there yesterday.
Progressive aspect	-ing	Verbs	He is waiting there now
Past participle	-en, -ed	Verbs	He has eaten the cookies. He has tasted the cookies.
Plural	-s	Nouns	The students are in the classroom.
Possessive	-’s , -s’	Nouns	The student’s book. The students’ books.

List of Inflectional Affixes in English			
Function	Affix(es)	Attaches to	Example
Comparative	-er	Adjectives, Adverbs	Ahmed is taller than Ali. Ahmed is faster than Ali.
Superlative	-est	Adjectives, Adverbs	Ahmed is the tallest in class. Ahmed runs fastest of all.

Roots and affixes are called morphemes. A morpheme is the smallest meaningful linguistic unit. A root contains only one affix (e.g. cats), and a stem may contain more than one affix (e.g. cattiness [cat +ty+ness]).

Affixes can be divided into: 1) prefixes, 2) suffixes, 3) infixes, 4) circumfixes, 5) interfixes, and 6) transfixes.

3. Morphological Processes:

3.1. Affixation: Using prefixes and suffixes. e.g. eats, cats, playing

3.2. Compounding: Forming new words by joining two or more independent words. e.g. girlfriend, textbook, air-conditioner, aircraft carrier, lifeguard chair.

3.3. Reduplication: Forming new words by doubling either an entire free morpheme (total reduplication) or part of it (partial reduplication). e.g. bye-bye, ta-ta, (In Taglog: ibu =mother --> ibuibu = mothers)

3.4. Alternations: Made by making morpheme internal modifications. e.g. man --> men, goose --> geese, foot --> feet, feed ---> fed ---> fed, swim --> swam ---> swum

4. Morphological Types of languages:

Languages can be divided into analytic and synthetic languages. Synthetic languages can have several subtypes.

4.1 Analytic languages:

They are so called because they are made up of sequences of free morphemes -- each word consists of a single morpheme, used by itself with meaning and function intact. Purely analytic languages are called isolating language, they do not use affixes to compose words.

An example of an analytic language is Mandarin Chinese.

EX:

[wə mən tan tʃin]

I plural play piano

‘We are playing the piano’

4.2 Synthetic languages:

In a synthetic language, bound morphemes are attached to other morphemes, so a word may be made up of several meaningful elements.

An example of a synthetic language is Hungarian.

[ɔz ember lɑ:tjɔ ɔ kuca:t]

the man-(subject) sees the dog-(object)

‘The man sees the dog’

[ɔ kucɔ lɑ:tjɔ ɔz embert]

the dog sees the man-(object)

‘The dog sees the man’

2. Syntax:

Syntax examines how words and phrases combine to make sentences. In terms of generative grammar, syntax studies all possible sentences. Sentences has syntactic properties justifying how one expression combine with other expressions.

Syntax aims to describe the possible combinations in a language. Those possible combinations are referred to as **grammatical** or **well-formed**. The impossible combinations in a language are referred to as **ungrammatical** or **ill-formed**. To decided whether a certain combination is well-formed or ill-formed, we depend on the native speaker’s **grammatical judgment**. His or her grammatical judgment is a reflection of their mental grammar, and not their understanding of the prescriptive rules of a language.

Prescriptive grammar is a designed set of rules that describe the ‘proper’ or ‘correct’ use of language. Prescriptive grammar is not of interest to the linguistic theory. An example of a

prescriptive rule is like: “do not end a sentence with a preposition”, or “do not start a sentence with and”. **Descriptive grammar** aims at describing the native speaker’s mental knowledge of language. It does not aim to set guidelines and regulations on how to use language socially, but an objective description of our mental grammar. Descriptive grammar is the one linguists are interested in.

Principle of Compositionality:

Syntax and semantics are not independent. Both complement each other. Take the following example:

1. ‘Antar loves ‘Abla.
2. ‘Abla loves ‘Antar.

The two sentences have the same linguistic expressions which are: (Antar, Abla, loves). But, they do not mean the same. In 1, Antar loves Abla, but it is not necessary that Abla loves Antar; the same goes to 2. Then, the way those linguistic expression combine affect their meaning. So, meaning depends on the linguistic expressions, and on the way it is syntactically combined. This is known as the Principle of Compositionality. “This principle of compositionality underlies the design feature of productivity” (language files11, 2011, p.198). Because of this, we can produce an infinite set of sentences from a finite set of lexical items due to different ways we syntactically combine them.

We should notice that syntax and semantics, in addition to them being quite dependent, they are independent. For instance, we can have a sentence that is well-formed but has no meaning at all. Also, we can have a sentence that is ill-formed, but we can deduce its meaning. A famous example of a sentence that is well-formed, but has no meaning is the one constructed by Noam Chomsky:

- *Colorless green ideas sleep furiously.*

The above sentence is syntactically well-formed, but meaning is a bit bizarre.

On the other hand, we can have an ill-formed sentence that has meaning as in the following example:

- **Me bought dog!*

You will not have any problems to figure the meaning, and interpret it as: I bought a dog.

Another area in which syntax is independent from semantics: “the syntactic properties of expressions cannot be predicted or explained on the basis of an expression’s meaning” (ibid, p.199).

If you take the words: ‘eat’ and ‘devour’, they mean approximately the same where they both refer to the activity of consuming food. But when it comes to syntax, they behave differently. Sentences *Ia*, and *Ib* below are both acceptable by the native speaker of English.

1a. Ahmed **ate** an apple.

1b. Ahmed **devoured** an apple.

Both ‘ate’ and ‘devoured’ take an object, but in the case of ‘ate’ it is not necessary. Take the examples 2a and 2b:

2a. Ahmed ate.

2b. *Ahmed devoured.

The verb ‘devour’ **requires** an object, and omitting the object will result **ungrammaticality**. Therefore, the verbs ‘eat’ and ‘devour’ share - almost - the same meaning, but both have different **syntactic properties**.

Syntactic properties:

The reason why we have well-formed and ill-formed sentences is due to the syntactic properties of the linguistic expressions that determine their behavior. Essentially, there are two kinds of syntactic properties. *The first is to do with **word order**, and the second is the **co-occurrence of expressions in a sentence**.*

1. Word order:

Word order is the most obvious aspect of syntactic well-formedness. In English, sentences follow the word pattern of SVO (subject - verb - object), which almost 35% of the world’s languages have this word order. The word order SOV is even more common than the SVO where 44% of languages (e.g. Turkish and Korean) follow this pattern. About 19% of languages, including Arabic and Irish, have the VSO word order. Other patterns like VOS, OVS and OSV, are quite rare. An example sentence from Malagasy, a VOS Austronesian language spoken in Madagascar, is shown below:

- *Manasa lamba amin’ny savony ny lehilahy.*

- *washes clothes with the soap the man.*

- ‘*The man washes the clothes with the soap.*’

Describing languages as only having a single word pattern is misleading. A language can have different word order depending on the context. For instance, the word order VSO can be shown in English, as in the example:

- *Is Ahmed a student?*

And the OSV word order can be shown in English. Sentences having this pattern are called **topicalized sentences**. An example is shown below:

- *Ahmed: I know you don't like apples, Ali, so I made you a pecan pie instead of an apple pie.*

Ali: Oh, apples, I like. It's pears that I can't stand.

However, merely getting expressions in the right order in a sentence does not guarantee syntactic well-formedness.

2. Co-occurrence:

Expressions we choose may allow or even require that a certain other expressions co-occur with it in a sentence. We shall explore the co-occurrence relations between expressions in the following section.

2.1: Arguments

Expressions have co-occurrence requirements. Recall the example of the verbs 'ate' and 'devoured'. The verb 'devoured' requires another expression to occur with it. This other expression is called the argument.

The example:

- *Ahmed devoured an apple.*

The expression 'devoured' (refer to it as X), needs the co-occurrence of other expressions which are 'Ahmed' and 'an apple' (refer to them as Y). Then, Y is an **argument** of X. So, 'Ahmed' and 'an apple' are both arguments of the verb 'devoured'. Non-subject arguments are called **complements**. Thus, 'an apple' is a complement of the verb 'devoured'. Arguments are not necessarily noun phrases. The following examples shows different types of complements:

- *Ahmed told Khaled he's leaving. (Khaled and he's leaving are complements of told)*

- *Ahmed put the book on the desk. (the book and on the desk are complements of put)*

- *Ahmed persuaded Khaled to go on vocation. (Khaled and to go on vocation are complements of persuaded)*

It is not only verbs that require arguments, but other expressions do need arguments, as shown in the following examples:

- 1a. *Ahmed came to the party with Ali.*
- 1b. **Ahmed came to the party with.*
[*Ali is an argument of with*]
- 2a. *Ahmed is fond of parties.*
- 2b. *Ahmed is fond of.*
[*of parties is an argument of fond*]
- 3a. *Ahmed invited Khaled and Ali to the party.*
- 3b. **Ahmed invited Khaled and to the party.*
- 3c. **Ahmed invited and Ali to the party.*
[*Khaled and Ali are arguments of and*]

2.2: Adjuncts:

The occurrence of arguments in a sentence is essential, but there other expressions that occur optionally. Those **optional** expressions are called **Adjuncts**. Plus they are optional, you can add as many as you want.

Consider the following example:

- 1a. *Ahmed likes dogs.*
- 1b. *Ahmed like small dogs.*
- 1c. *Ahmed likes small fluffy dogs.*
- 1d. *Ahmed likes small fluffy brown dogs.*

The underlined adjuncts (they are attributive adjectives) do not have to occur in the sentence, and if we omit the adjuncts, the sentence will still be grammatical (see 1a).

Distinguishing arguments and adjuncts:

Arguments	Adjuncts
<p>Obligatory: Ahmed seemed happy. *Ahmed seemed.</p>	<p>Optional: The cat was sleeping on the table. The cat was sleeping. The fluffy cat was sleeping. The cat was sleeping.</p>

Arguments	Adjuncts
<p>Cannot have more than required: Ahmed seemed cute. *Ahmed seemed cute happy. Ahmed seemed cute. *Ahmed Ali seemed cute.</p>	<p>Can have as many as you like: The cat was sleeping. The gray cat was sleeping. The fluffy gray cat was sleeping. Ahmed left. Ahmed left yesterday. Ahmed left yesterday around 3P.M.</p>
<p>Cannot be freely ordered with respect to one another: Ahmed put the book on the table. *Ahmed put on the table the book. Ahmed persuaded Ali to study linguistics. *Ahmed persuaded to study linguistics Ali.</p>	<p>Can be freely ordered with respect to one another: The fluffy gray cat was sleeping. The gray fluffy cat was sleeping. Ahmed left yesterday around 3P.M. Ahmed left around 3P.M. yesterday.</p>

2.3: Agreement:

Agreement is concerned with *the grammatical form of their arguments*. We will discuss how inflectional morphology influences an expression's co-occurrence requirements.

The inflectional form of an expression can convey information about: 1) **number**, 2) **person**, 3) **gender**, and other grammatical features. For example, In English, demonstratives show agreement patterns: they have to agree with nouns in number, as the example below shows:

- a. *This girl came.*
- b. **This girls came.*
- c. **These girl came.*
- d. *These girls came.*

English distinguishes only **singular** and **plural** number for nouns, but other languages can have different kinds of grammatical number. Arabic distinguishes morphologically number into singular (one), **dual** (two) and plural (more than two). A language spoken in Northern Canada called Inuktitut, distinguishes between singular, dual and plural. An example shows it below:

iglue: a house

igluk: two houses

iglut: three or more houses

Some languages do not mark grammatical number on nouns at all, for example Korean. In the following example, 'chaka' can refer to one car or more than one.

*kile **chaka** dallinta.*

road car run

*'There is **one car** running on the road.'*

*'There are **(multiple) cars** running on the road.'*

Other types of agreement observed in languages. For example, in Italian and some other languages, certain verbal forms have to agree with the subject in gender.

a. ***Lei** è andata a Palermo.*

She be-3sing. go-participial.fem.sing. to Palermo.

'She went to Palermo'

b. ***Lui** è andato a Palermo.*

He be-3sing. go-participial.masc.sing. to Palermo.

'He went to Palermo'

Therefore, the following will be considered ungrammatical because the form 'andata' requires a feminine singular subject, while the form 'andato' requires a masculine singular subject.

a. ***Lei** è andato a Palermo.

b. ***Lui** è andata a Palermo.

Syntactic Constituent:

It is certain groups of expressions within a larger phrase forming a syntactic unit. The syntactic constituents of a phrasal expression are the smaller expressions out of which the phrase was constructed. The syntactic constituents of a sentence is important to be identified because they reveal the syntactic structure of the sentence.

Syntactic Constituency Tests:

i. Answers to questions:

Construct a question based on the string of words you are testing. If it can answer the formed question, then it forms a constituent.

Ex: The cat was sleeping on the desk. Is the string of word “on the desk” form a constituent?

Test: Where was the cat sleeping? On the desk. (Then, it forms a constituent)

ii. Clefting:

To construct a cleft sentence, it takes the form of “it was X that Y”.

Ex: The cat was sleeping on the desk. Does “the cat” forms a constituent?

Test: It was the cat that was sleeping on the desk. (Then, yes ‘the cat’ forms a constituent)

Syntactic Categories:

A syntactic category consists of a set of expressions that have very similar syntactic properties; that is, they have approximately the same word order and co-occurrence requirements.

i.Syntactic Categories in English:

Syntactic Category	Relevant Properties	Example
S (sentence)	can occur in Ahmed thinks that _____	Ahmed is short
NP (noun phrase)	has the same distribution as a personal pronoun or a proper name	she, the cat under the bed
N (noun)	needs a determiner to its left to form an NP	cat, cute dog
Det (determiner)	occurs to the left of the noun to form an NP	the, every, this
Adj (adjective)	occurs between a determiner and a noun; can be a noun adjunct, that is, combines with a noun to its right which results in an expression that is also of category N	cute, gray, fluffy
VP (verb phrase)	consists minimally of a verb and all its complements; combines with an NP to its left which results in a sentence	slept, liked

Syntactic Category	Relevant Properties	Example
TV (transitive verb)	needs an NP complement to form a VP	liked, devoured
DTV (ditransitive verb)	needs two NP complements to form a VP	gave, sent
SV (sentential complement verb)	needs a sentential complement to form a VP	believed, said
Adv (adverb)	can be a VP adjunct, that is, combines with a VP to its left which results in an expression that is also of category VP	fast, quickly. tomorrow
P (preposition)	combines with an NP to form a PP	at, for, with
PP (prepositional phrase)	can be a VP or an adjunct; consists of a preposition and its NP complements	a the table, for Ahmed, under the bed

Phrase Structure Rules:

They are a recipe for syntactically combining expressions of certain syntactic categories. Along with the lexicon, phrase structure rules are a part of a descriptive grammar of some language. Phrase structure rules have the general form $X \rightarrow Y_1..Y_n$ where X is a syntactic category and $Y_1..Y_n$ is a sequence of syntactic categories. The categories to the right of the arrow $Y_1..Y_n$ correspond to the immediate syntactic constituents of the expressions whose category is X .

Examples of phrase structure rules are:

$S \rightarrow NP VP$: Ahmed slept.

$NP \rightarrow Det N$: The boy

$N \rightarrow Adj N$: Young girl

$VP \rightarrow TV NP$: Devoured the apple

$VP \rightarrow DTV NP NP$: Give Ahmed the ball

$VP \rightarrow SV S$: Ahmed said the exam is easy

Week 6: Semantic and Pragmatics

1. Semantics:

Semantics is the study of the linguistic meaning. It studies the meaning of morphemes, words, phrases and sentences. It can be divided into: 1) lexical semantics, and 2) compositional semantics. Lexical semantics deals with the meanings of words and other lexical expressions, including the

meaning relationships among them. Compositional semantics is concerned with phrasal meanings and how phrasal meanings are assembled.

Two Aspects of Linguistic Meaning: Sense and Reference

You can think of the **sense** of an expression as some kind of mental representation of its meaning, or perhaps some kind of concept. By virtue of knowing the sense of some expression, you also know its relationship to the world, or its **reference**. The particular entities in the world to which some expression refers are called **referents**. The collection of all the referents of an expression is its reference. The notion of sense underlies the intuition that there is a mental component to linguistic meaning. The notion of reference in turn relates this mental representation to the outside world.

Meaning Relationships:

1. **Hyponymy:** We say that a word X is a hyponym of word Y if the set that is the reference of X is always included in the set that is the reference of Y. When some set of X is included in a set Y, we say that X is a subset of Y.

Ex:

Poodle is a hyponym of Dog; conversely, Dog is hypernym of Poodle

2. **Synonymy:** Two words are synonyms if they have exactly the same reference.

Ex: couch/sofa , quick/rapid

3. **Antonymy:** It is oppositeness of meaning. Antonyms are of four types:

3.1. Complementary Antonyms: married/unmarried , alive/dead , win/lose

3.2. Gradable Antonyms: wet/dry , easy/hard , love/hate

3.3. Reversers (related to movement): right/left , inside/outside , ascent/descent , put together/take apart

3.4. Converses (related to opposing point of views): lend/borrow , send/receive , employer/employee

Compositional Semantics: Propositions and Truth Values

In the sentence: China is the most populous country in the world, we are making a claim. We are making an assertion about certain entities in the world. The claim expressed by a sentence is called a **proposition**.

The defining characteristic of a proposition is that it can be true or false. The ability to be true or false is the ability to have a **truth value**. The sentence: Saudi Arabia is the most populous country in the world, expresses a false proposition.

To understand a proposition, we must be able to determine its reference. The conditions that would have to hold in the world in order to some proposition to be true are called **truth conditions**.

Thus, to know the truth value of a proposition, it is necessary to understand its truth conditions.

Relationships between Propositions:

Consider the sentences:

1a. All dogs park.

1b. Ahmed's dog park.

If the proposition expressed in 1a is true, the proposition in 1b has to be true. The truth of 1a guarantees the truth of 1b. In this case, we say that the proposition expressed by 'All dogs park' **entails** the proposition expressed by 'Ahmed's dog park'. This is called **entailment**.

The sentences 2a and 2b have the same relationship in 1a and 1b.

2a. Ahmed has a car.

2b. Ahmed has a Honda Accord.

2. Pragmatics:

Pragmatics is the study of meaning in context. It enables us to understand utterances as in the following example:

Omar: Are you going to Ahmed's wedding tonight?

Hamza: I'm traveling to Al-Maddinah tonight.

In the previous example, Omar was questioning Hamza whether he will go to Ahmed's wedding. Hamza did not answer with a direct answer, an answer with yes or no. Instead, he simply answered with a reason not allowing him to come to the wedding. If we did not consider context in the previous dialogue, we will say that Hamza's answer is irrelevant. Thus, pragmatics studies the meaning of utterances in context, and semantics studies the meaning of sentences without reference to context.

Sentence Vs Utterance:

When we write, we write strings of words. Those strings of words are called sentences. A **sentence** is a phrasal expression that expresses some complete idea. For instance the following is a sentence: Al-Hilal is the greatest football team in Saudi Arabia. This sentence expresses an idea; it has 9 words; it has a certain syntactic structure. But if you read it, it will be called an utterance. If someone else reads the same sentence you read, it will be considered another utterance not like yours. So, we have two utterances of one sentence.

An **utterance** is not an abstraction. It is an event, something that happens. We talk about the time of an utterance, the place of an utterance, the volume of an utterance, the speaker of an utterance, and so on. This is the context that makes the utterance a physical event.

Types of Context:

1. **Linguistic context:** It has to do with what preceded a particular utterance in a discourse. It refers to what others have said earlier in the conversation. The linguistic context of an utterance tells what speakers are talking about. The linguistic context is made up of all of the sentences that have been uttered in a discourse leading up to the utterance in question.
2. **Situational Context:** An utterance's situational context gives information about the situation in which it is uttered. Situational context allows us to refer to things in the world around us even if they have not been mentioned before in the discourse. For example, if a goat enters your house, and you said to your mother: "It smells." Your mother will know that you are talking about the goat not her! Another example is if you saw the Hilal and Nassar match at night, and then after you went out you see the referee at a restaurant immediately after the match. The next day, you meet your friend and say to him: "Hey, I saw the referee at Abu-Hoilah restaurant." Your friend will know which referee you mean.
3. **Social Context:** It includes information about the relationship between the people who are speaking and what their roles are. Social context is what makes it okay for your teacher to give you an assignment, and not acceptable from your brother. Or if your dad says to you: "Can you bring your brothers from school", which actually means 'you must get your brothers from school' because it comes from your father, not anyone else.

Felicity: Appropriateness Relative to Context

In addition to using context to figure out meaning, speakers also use context to figure out whether an utterance is appropriate in any given setting. By considering appropriateness, we say that an utterance is felicitous or infelicitous. An utterance that is felicitous is one that is situationally appropriate, one that is appropriate in any given setting.

An utterance that is infelicitous is marked by a pound sign (#).

Ex:

(1) A: *What do you do for a living?*

B: *I'm a linguistics instructor at Yanbu University College. (felicitous)*

(2) A: *What do you do for a living?*

B: *#I have a job. (infelicitous)*

Speech Acts:

People use language to accomplish certain kinds of acts, broadly known as speech acts, and distinct from physical acts like drinking a glass of water, or mental acts like thinking about drinking a glass of water. Speech acts include asking for a glass of water, promising to drink a glass of water, threatening to drink a glass of water, ordering someone to drink a glass of water, and so on.

It's common to divide speech acts into two categories: **direct and indirect**.

There are three basic types of direct speech acts, and they correspond to three special syntactic types that seem to occur in most of the world's languages. Examples are given in English, French and Buang (a Malayo-Polynesian language of Papua New Guinea.)

Speech Act	Sentence Type	Function	Examples
Assertion	Declarative	Conveys information; is true or false	English: "Jenny got an A on the test." French: "Les filles ont pris des photos." (The girls took photos) Buang: "Biak eko nos." (Biak took the food)
Question	Interrogative	Elicits information	English: "Did Jenny get an A on the test?" French: "Les filles ont-elles pris des photos?" (Did the girls take photos?) Buang: "Biak eko nos me?" (Did Biak take the food?)

Speech Act	Sentence Type	Function	Examples
Orders and Requests	Imperative	Causes others to behave in certain ways	English: “Get an A on the test!” French: “Prenez des photos!” (Take some photos!) Buang: “Goko nos!” (Take the food!)

If the function that is performed by the utterance is not direct, then this speech act is an indirect speech act. Take the following examples:

(1) Questions

A. Direct:

- a. *Did Ali marry Sarah?*
- b. *I ask you whether or not Ali married Sarah.*

B. Indirect:

- a. *I don't know if Ali married Sarah.*
- b. *I would like to know if Ali married Sarah.*
- c. *Do you know whether Ali married Sarah?*

(2) Requests

A. Direct:

- a. *(Please) Take out the garbage.*
- b. *I request that you take out the garbage.*

B. Indirect:

- a. *The garbage hasn't been taken out yet.*
- b. *I would like for you to take out the garbage.*
- c. *Could you take out the garbage?*
- d. *Would you mind taking out the garbage?*

Performative Verbs:

One subtype of direct speech acts exists in English and in many other languages, and allows us to expand the kinds of direct speech acts we can make beyond the three basic types that have their own special syntax. These are the direct speech acts that use **performative verbs** to accomplish their ends. Performative verbs can also be used with the three basic speech act types as exemplified in (f) - (h), associated with making statements, requests and commands respectively:

(f) I **assert** that Jenny got an A on the test.

(g) I **ask** you who took the photos.

(h) I **order** you to close the window.

To these can be added performative verbs that allow us to directly convey promises, threats, warnings, etc.

(i) I **advise** you to keep up the payments on your car.

(j) I **warn** you not to step across this line.

(k) I **promise** you that I will pay the money back by the end of the month.

(l) I **bet** you a dollar that it'll rain on the parade.

In the last sentence, the utterance of the sentence actually accomplishes the act of betting (possibly along with setting aside the money for the bet), and as such, it belongs to the class of **ceremonial utterances** that accomplish other kinds of changes in the world:

(m) I now **pronounce** you husband and wife.

(n) I **name** this ship Sojourner.

(o) I **dub** thee Sir Galahad.

It is clear that not all uses of verbs that can be performative are actually performative in particular utterances. For example, if we change the person or the tense in any of the last seven sentences, they are no longer performative:

(i2) He **advises** you to keep up the payments on your car.

(n2) I **named** this ship Sojourner.

In both these cases, the utterance simply reports, and does not accomplish the act of advising or of naming.

Conversational Implicatures:

The work of H.P. Grice takes pragmatics farther than the study of speech acts. Grice's aim was to understand how "speaker's meaning" -- what someone uses an utterance to mean -- arises from "sentence meaning" -- the literal (form and) meaning of an utterance. Grice proposed that many aspects of "speaker's meaning" result from the assumption that the participants in a conversation are **cooperating** in an attempt to reach mutual goals -- or at least are pretending to do so!

He called this the **Cooperative Principle**. It has four sub-parts or **maxims** that cooperative conversationalists ought in principle to respect:

(1) **The maxim of quality.** Speakers' contributions ought to be true.

(2) **The maxim of quantity.** Speakers' contributions should be as informative as required; not saying either too little or too much.

(3) **The maxim of relevance.** Contributions should relate to the purposes of the exchange.

(4) **The maxim of manner.** Contributions should be perspicuous -- in particular, they should be orderly and brief, avoiding obscurity and ambiguity.

Grice was not acting as a prescriptivist when he enunciated these maxims, even though they sound like prescriptions for how to communicate. Rather, he was using observations of the difference between "what is said" and "what is meant" to show that people actually do follow these maxims in conversation. We can see how this works in considering the maxim of quantity at work in the following made-up exchange between parent and child:

Parent:

Did you finish your homework?

Child:

I finished my algebra.

Parent:

Well, get busy and finish your English, too!

The child did not say that her English homework is not done, nor did she imply it in a legalistic sense. Nevertheless the parent is likely to draw this conclusion. The implicit line of argument is something like this: the child would have simply said 'yes', without mentioning any particular subjects, if that answer were true; the fact that she referred to algebra, and did not mention other subjects, suggests ("**implicates**") that the unmentioned subjects are not done.

Very often, particular non-literal meanings are conveyed by appearing to "violate" or "flout" these maxims. If you were to hear someone described as having "one good leg", you would be justified in assuming the person's other leg was bad, even though nothing had been said about it at all.