

ENGL 337: SEMANTICS

Handout One

Preliminaries

Semantics in Linguistics

Semantics:

It is the study of meaning communicated through language. It is one of the linguistic levels a semanticist investigates. Other levels of language are important here too. Language consists of sound, form and meaning. Example: colorless green ideas sleep furiously, Chomsky. The word semantics is derived from the Greek *semaino*, meaning, to signify or mean.

The aim of semanticists is to explain and clarify the nature of meaning. Semantics is an attempt to set up a theory of meaning which must account for some basic facts about meaning.

The semanticist is committed to describing a speaker's semantic knowledge since linguistic description is an attempt to reflect that knowledge.

What is meaning?

A phenomenon by which we can say that something (words, signals) etc. stand for something else. These are all called signs. The relationship between these signs is called meaning. So semantics helps us understand each other as we share a particular system and an understanding of that system.

What are words?

Words are symbols (nouns, pronouns, adjectives, verbs, and adverbs) representing objects (concrete or abstract, or imaginary), actions (physical or mental), events and states (past, present, future or hypothetical), qualities (attributes, properties, or features), feelings, emotions, intentions, locations, etc.

Two main types of meaning in general: Speaker Meaning; Word or Sentence meaning.

SPEAKER MEANING is what a speaker means (i.e. intends to convey) when he uses a piece of language.

SENTENCE MEANING (or WORD MEANING) is what a sentence (or word) means, i.e. what it counts as the equivalent of in the language concerned.

Speaker Meaning Characteristics

- Speakers perform what's described as speech acts as opposed to physical or mental acts. These are acts of communication, which serve different communicative functions. They represent what humans do with language, e.g., apologizing, giving advice, making a request, making a promise, warning etc.
- Meaningfulness may not necessarily be equated with informativeness. While it is true that many sentences do carry information in a straightforward way, it is also true that many sentences are used by speakers not to give information at all, but to keep the social wheels turning smoothly.
- Same sentences with different meanings: Speaker meaning is reflected in that the same sentences are used by different speakers on different occasions to mean different things.
- Literal (conventional) vs. non-literal meaning.
A literal meaning occurs when the speaker speaks in a neutral, factually accurate way. A non-literal meaning results when the speaker deliberately describes something in untrue and impossible terms in order to achieve special effects. Hearers recognize non-literal uses as semantically odd, i.e. factually nonsensical like 'eating a horse' (to indicate how hungry a speaker is), but then are motivated to give them some interpretation by an assumption that speakers generally are trying to make sense. The hearer then makes inferences in order to make sense out of a non-literal utterance.
- Speakers as a source of meaning. Information about meaning primarily comes from native speakers of languages. Semanticists may be good at describing meanings, or theorizing about meaning in general, but they have no advantage over any normal speaker of a language in the matter of access to the basic data concerning meaning.

SENTENCE MEANING CHARACTERISTICS

- Meaning may deal with whole classes of words; e.g., proper and common nouns, adjectives, adverbs, prepositions etc.
- Our knowledge of word and sentence meaning allows us to determine whether sentences are the same, contradictory, ambiguous or entail some facts.
- Word meaning: Knowing a language means that a person knows thousands of words which she/he keeps in a mental store linguists call a lexicon, similar to dictionaries. The mental lexicon is a large but finite body of knowledge, part of which must be semantic. This lexicon is not completely static because we are continually learning and forgetting words.
- Sentence meaning: Phrases and sentences also have meaning but it differs from word meaning in productivity and compositionality.
- Productivity - Speakers regularly create sentences that they have never used or heard before, confident that their audience will understand them.

Commenting on the creativity of sentence formation, Chomsky states that a relatively small number of combinatory rules may allow speakers to use a finite set of words to create a very large, perhaps infinite, number of sentences. Rules for sentence formation are recursive, allowing repetitive embedding or coordination of syntactic categories.

- **Compositionality:** This means that the meaning of a sentence or an expression is determined by the meaning of its component parts and the way in which they are combined using combinatorial rules. Therefore, meanings of sentences cannot be listed in a lexicon like the meanings of words: they must be created by rules of combination too. Sentence meaning is compositional.

SEMANTICS AND OTHER FIELDS

SEMANTICS AND SEMIOTICS

Communicating meaning through language is only a part of a larger task of investigating how people understand meaning. Words form a system of signs or symbols where one thing stands for another. This process of creating and interpreting symbols, sometimes called signification, is far wider than language. Scholars like Ferdinand de Saussure have stressed that the study of linguistic meaning is a part of this general study of the use of sign systems, and this general study is called semiotics. Semioticians investigate the types of relationship that may hold between a sign and the object it represents, between a signifier and its signified. Semiotics investigates this relationship distinguishing between icon, index and symbol.

- An **icon** is where there is a similarity between a sign and its signified, as for example between a portrait and its real life subject, or the road sign for falling rocks. There is no real connection between an object and an icon of it other than the likeness, so the mind is required to see the similarity and associate the two itself. A characteristic of the icon is that by observing it, we can derive information about its signified. For instance, if you don't know what a llama looks like, seeing an image of one will teach you a great deal about its appearance.

No other kind of sign gives that kind of information.

- An **index** is where the sign is closely associated with its signified, E.G., smoke is an index of fire. An index has a causal and/or sequential relationship to its signified. An index is a directly perceivable event that can act as a reference to an event that is not directly perceivable, or in other words it is something visible that indicates something out of sight. You may not see a fire, but you do see the smoke and that indicates to you that a fire is burning. Similarly, you cannot see sadness, but you can see the tears that indicate it. The nature of the index has nothing to do with that of the signified, but the connection here is logical and organic -- the two elements are inseparable -- and there is little or no

participation of the mind.

- A **symbol** is where there is only a conventional link between the sign and its signified, as in the use of insignia to denote military ranks. Here, the connection between the sign and its signified is arbitrary, and depends entirely on the observer, or more exactly, what the observer was taught. Symbols are subjective, dictated either by social convention or by habit. Symbols are ideas, and whenever we use one we are only pointing to the idea behind that symbol. The \$ symbol, astrological symbols, road signs, and white or black dresses are all symbols. A symbol can rarely tell us anything more about its signifier than we already know.

Semantics and Pragmatics:

They denote related and complementary fields of study, both concerning the transmission of meaning through language. Pragmatics is the study of the speaker's/hearer's interpretation of language. Interpretation of the sentence meaning depends on speaker's wishes and the situation the participants find themselves in. For example, if a speaker says to a listener, The place is closing, this could have different meanings. It may be used as a simple statement, or as a warning to hurry and get that last purchase (if they're in a department store) or drink (if in a bar). It could also be an invitation or command to leave. Some semanticists would claim that the non-situation-specific meaning is what semantics is concerned with.

Pragmatics is the study of invisible meaning. Identifying what is meant but not said. A key factor in determining meaning here is context defined as "all the elements of a communicative situation: the verbal and non-verbal context, as well as the social context of the relationship between the speaker and hearer, their knowledge, and their attitude." Although both semantics and pragmatics study the meaning of a linguistic form, they are different in relation to context. If context is not considered, the study is in the area of semantics; if it is considered, the study is in the area of pragmatics.

Context comes from looking at what particular utterances mean in certain situations. For example: if someone says to you Marvelous weather you have here in Ramallah, you might interpret it differently on a cloudless sunny day than when the rain is pouring down. Similarly He's dying might mean one thing when said of a terminally ill patient, and another as a comment watching a stand-up comedian failing to get laughs. Or again: It's getting late if said to a friend at a party might be used to mean Let's leave.

Another difference between semantics and pragmatics is to distinguish between sentence meaning and speaker meaning. Semantics is concerned with sentence meaning and pragmatics with speaker meaning. This difference is shown in the use of pronouns. For example, if someone says to a listener Is he awake? The listener has to understand two things, the meaning of he in English; it means something like "male entity referred to by the speaker, not the speaker and not the person spoken to" and the second is how to work out who right now the speaker is referring to by he.

Here, knowing the first is part of semantic knowledge and working out the second is a task for one's pragmatic competence.

Semantics mainly focuses on linguistic knowledge whereas pragmatics investigates the interaction between purely linguistic knowledge and general or encyclopedic knowledge. A semantics/pragmatics division enables semanticists to concentrate on just the linguistic element in utterance comprehension. Pragmatics would then be the field that studies how hearers fill out the semantic structure with contextual information (e.g., work out who the speaker is referring to by pronouns, etc.) and make inferences that go beyond the meaning of what was said to them (e.g. that I'm tired might mean Let's go home.)

Exercises

1. Try to paraphrase (restate in your own words) each of the following uses of the word *mean* as it is employed in the sentences below. Which sentences are more reflective of speaker meaning and which are more reflective of sentence meaning? Briefly explain.

- a I mean to be there tomorrow
- b A stalling car may mean a tune-up
- c *Calligraphy* means beautiful handwriting
- d It wasn't what he said but what he meant
- e What does the German word *Hund* mean?
- f Those clouds mean rain.

2 Which of the following items appear to illustrate sentence meaning and which illustrate speaker meaning?

- a A bachelor is an unmarried man
- b A red light means 'stop'
- c A fine product THEY put out! (THEY is strongly emphasized)
- d The sentences in the following pair appear to be opposite in meaning:
 - 1) The bear killed the man
 - 2) The man killed the bear
- e My feet are killing me

3. We made the point that meaning is compositional. However, compositionality is restricted in compound words. a teacup is a cup used for tea, making the meaning predictable and, therefore, compositional. Divide the list below into two types: one

where the meaning is predictable from the meaning of the two parts and a second type where the meaning is not predictable in this way.

agony aunt; eye candy; houseboat; shopping list; blackmail; firsthand; housewife; software; boyfriend; flea market; human being; speed limit; businessman; foxhound; Mailbox; spin doctor; bus stop; gravy train; monkey business; sunglasses; climate change; greenhouse; mousetrap; sweatshop; daydream; horseshoe; nightmare; taste bud; doormat; hotdog; redhead; video game.

4. Discuss the importance of contextual information in understanding an utterance of the following sentences:

- A. Take another shot.
- B. Isabel is tall.
- C. It's too hot in here.
- D. Everyone has gone home.

Utterances, Sentences, and Propositions

These three terms are used to describe different levels of language.

- **UTTERANCE:**

An **UTTERANCE** is any stretch of talk, by one person, before and after which there is silence on the part of that person. Utterances are physical events that last for short times. An utterance is the most concrete, and it is created by speaking (or writing) a piece of language. If I say Linguistics is my favorite subject, this is one utterance. If another person in the same room also says Linguistics is my favorite subject, then we would be dealing with two utterances.

An utterance can be a sentence or part of a sentence, a sequence of sentences, a single clause, a phrase, or even a single word but it has to be meaningful and belongs to a particular language.

Accent and voice quality are features of utterances.

- **SENTENCE:**

A **SENTENCE** is an abstract string of words put together by the grammatical rules of a language. The same sentence can produce different utterances. For example, if three other persons said Linguistics is my favorite subject, then we have 5 utterances of the same sentence. In other words, sentences are abstracted, or generalized, from actual language use. From the point of view of the speaker, sentences are abstract elements to be made real by uttering them; from the hearer's point of view, they are abstract elements reached by filtering out certain kinds of information from utterances.

A sentence has the same words and same order. Any change in these two results in a new sentence. Example: Harry called up the president, Harry called the president up.

A sentence is a grammatically complete string of words expressing a complete thought, whereas an utterance can be a token of a sentence or parts of a sentence, i.e., incomplete versions of whole sentences.

- **PROPOSITIONS:**

It is another further step of abstraction. A proposition is a description of an event, a situation or a state of affairs shared by different grammatical sentences or different language systems. In uttering a declarative sentence a speaker typically asserts a proposition.

Propositions are more abstract than sentences because the same proposition can be represented by several different statements. Example: I met Alia at a party. It was at a party that I met Alia. It was Alia who I met at a party. They all express the same proposition: meeting Alia at a party. Similarly, the two sentences “Ahmad is Ali’s father, Ahmad is Ali’s male parent” have the same proposition.

In deriving a proposition, it’s possible to delete verb endings, articles and other grammatical elements. Thus, propositions can be communicated by less than full sentences.

Propositions are also thought of as the meanings of sentences. Roughly: for two sentences to have the same meaning is for them to express the same proposition.

Propositions are theoretical entities which are relied on in attempts to explain the concepts of truth and meaning. Truth values can be used to decide whether two sentences express same or different propositions. True propositions correspond to facts, while False propositions do not correspond to facts.

Propositions, unlike sentences, do not belong to any particular language.

A proposition can be a shared element in different sentence types. For example the statement Joan made the cake, the question Did Joan make the cake?, and the command: Joan, make the cake share a propositional element: JOAN MAKE THE CAKE. In this view, these different sentences allow the speaker to do different things with the same proposition: to assert it as a past event; to question it; or to request someone to bring it about.

Do not equate propositions with thoughts; a proposition is an object of thought. Thoughts are private, personal, mental processes, whereas propositions are public. a proposition is not a process, whereas a thought can be.

One way to distinguish between the three concepts in writing is to italicize sentences, place utterances between quotation marks, and capitalize propositions.

EXERCISES

1. Decide whether the following could represent utterances.

(1) 'Hello'

(2) 'Not much'

(3) 'Pxgotmgt'

(4) It’s not enough to answer all questions correctly, but what is more important is to understand what each points stands for..

2. Indicate whether the following questions apply to sentences or utterances?

- (1) Do all (authentic) performances of Macbeth begin by using the same sentence?
- (2) Do all (authentic) performances of Macbeth begin with the same utterance?
- (3) Does it make sense to talk of the time and place of a sentence?
- (4) Does it make sense to talk of the time and place of an utterance?
- (5) Can one talk of a loud sentence?
- (6) Can one talk of a slow utterance

3-1. For each of the following label it as an utterance (U) or sentence (S).

(a) 'The train now arriving at platform one is the 11.15 from Haifa street'.

(b) The pelican ignores the linguist.

3-2. What is wrong with the following?

- (a) John announced Mary's here in his squeakiest voice
- (b) 'Mary thought how nice John was'

4. Do the following pairs of sentences represent the same or different propositions?

(1) Harry took out the garbage

Harry took the garbage out.

(2) John gave Mary a book

Mary was given a book by John.

(3) Isobel loves Jim

Jim loves Isobel.

(4) George danced with Celia

George didn't dance with Celia.

(5) Clara killed Jane

Clara caused Jane to die.

5-1. In the following utterances, is any proposition asserted by the speaker?

- (a) 'Have you seen my toothbrush?'

- (b) 'Get out of here this minute!'
- (c) 'I'm afraid that I'll have to ask you to leave'.

5-2 Would you say that the members of the following sentence pairs have the same propositional content?

- (a) Go away, will you?

You will go away.

- (b) Pigs might fly

I'm a Dutchman

- (c) He is an idiot

Is he an idiot?

Engl337: Semantics

Handout 2 : REFERENCE (mainly from Kreidler's Introducing Semantics, chapter 7)

Meaning as Reference (Referential Semantics):

According to the linguist Ferdinand de Saussure the meaning of linguistic expressions derives from two sources: the language they are part of, (sense), and the world they describe, (reference).

REFERENCE:

Based on de Saussure's distinction, meaning occurs as a result of the relationship between words and the world; they allow us to identify parts of the world, and make statements about them. Thus if a speaker says He moved the table or She sold her car, the words he, the table, she, and her car allow him to identify, pick out, or refer to specific entities in the world. Thus, reference is the relationship between language expressions and the actual objects they describe or represent in the world. By means of reference, a speaker indicates which objects (things and persons) in the world are being talked about.

By uttering a sentence, we pick out certain individual entities. In the sentences "That dog looks vicious" and "We've just flown back from Paris", the expressions that dog and Paris are used to pick out specific entities. This action of picking out or identifying with words is called referring or denoting, and the entity referred to is called referent or denotatum. Thus one can use the word Paris to refer to or denote the city. The entity referred to, in this case the city, is called the referent or the denotatum.

For some linguists, such as John Lyons, denote and refer differ from each other. For Lyons, denote designates a class of entities, whereas refer is used for the action of the speaker in picking out entities in the world. If I say "A sparrow flew into the room", I am using the two noun phrases a sparrow and the room to refer to two things in the world, while the two nouns sparrow and room denote

certain classes of items. In other words, referring is what speakers do, while denoting is a property of words.

Thus, a referring expression is a piece of language, a noun phrase, that is used in an utterance and is linked to something outside language, some living or dead or imaginary entity or concept or group of entities or concepts. the referent doesn't have to be necessarily physical nor necessarily real. Examples: dog, cats, idea, advice, love, unicorns, witches, The Ghoul, fairy tale characters, the Wizard of Oz etc.

Some general points about reference:

1. Discussion of reference mainly focuses on nominals; names and noun phrases such as Genna, the big boy, girls, etc.

The referring expression is any nominal expression used in an utterance to refer to something or someone, i.e. used with a particular referent in mind. When someone says the noun phrase that cat in a sentence like That cat looks friendly, the noun is a referring expression since it is being used to identify an entity known to both the speaker and the hearer.

Non-referring expressions: By contrast, these are the words which do not identify entities in the world. They include words such as so, very, maybe, if, not, all. These words can never be used to refer. They do of course contribute meaning to the sentences they occur in and thus help sentences denote, but they do not themselves identify entities in the world.

In addition, categories such as verbs, adjectives, and prepositions are also considered non-referring expressions.

Two theories are used to explain how proper names refer; the

Description Theory, and the Causal Theory.

Names are used as labels of persons, places, things etc. Based on context, they also represent the speaker's assumption that the hearer can identify the referent. Some approaches from philosophy deal with names as referring expressions.

One approach is termed the **description theory**. Here a name is taken as a label or shorthand for knowledge about the referent, or in the terminology of philosophers, for one or more definite descriptions. So for Mahmoud Darwish, for example, we might have such descriptions as The composer of the poem "Ibn Hayfa" 'Hayfa's Son' or The Palestinian poet born in Al-Barwa. In this theory understanding a name and identifying the referent are both dependent on associating the name with the right description.

Another approach is known as the **causal theory**. According to this theory, the names are socially inherited, or borrowed. At some point, a name is given to a person for which he becomes known. In the case of a person who achieves prominence, the name might be used by thousands or millions of people who have never met or seen the named person, or know

very much about him. The advantage of this causal theory is that it recognizes that speakers may use names with very little knowledge of the referent. Examples can be found in religious, political, historical figures etc.

So where the causal theory stresses the role of social knowledge in the use of names, the description theory emphasizes the role of identifying knowledge.

2. A referring expression is not a referent; the phrase a carrot can be a referring expression but it is not necessarily a carrot. We have to distinguish between lexemes and what lexemes denote. In some cases, people ignore the distinction between a lexeme and what it represents. What happens in that case? A joke or a riddle.

Examples: Where can you always find sympathy?

Answer: "In a dictionary.

What do you find in Jerusalem?

Answer: 300,000 inhabitants and four syllables.

What is harder to catch the faster you run?

Answer: your breath.

3. There is no natural connection between referring expression and referent. The relationship between them is mostly arbitrary.

4. The existence of a referring expression does not guarantee the existence of a referent in the physical-social world that we inhabit. We can use language to create expressions with fictitious referents such as the skyscrapers of Palestine, the present Emperor of Ramallah, the car used by 90 percent of all businessmen.

5. Two or more referring expressions may have the same referent, but they do not necessarily have the same meaning.

Example: Mahmoud Darwish, a Palestinian poet, the writer of 30 volumes of poetry, the former editor of the periodical *Shu'un Filistiniyya*, the author of *Asafir bila ajniha* or "Wingless Birds," the writer of the Palestinian Declaration of Independence, the author of "Identity Card," the Palestinian poet born in Al-Barwa, etc.

All these and other referring expressions may identify the same individual, but they do not mean the same. Another famous example is provided by Frege, the planet Venus is known sometimes as the Morning Star, and sometimes as the Evening Star. These two terms—and also the planet Venus—name the same entity but they do not have the same meaning.

6. We need to differentiate between Extension and intension

Extension: The extension of a lexeme is the set of entities which it denotes. Take the lexeme bear. It stands for all the types of bears in the world, polar bear, African bear, mountain bear etc. This includes all bears in the present, past or future. The extension of dog includes all kinds of dog such as collies, huskies, dalmatians, bulldogs, etc. that have ever lived or will ever live and every fictitious creature that is accepted as being a dog. The lexeme, A lake, for example, is an extension of all the things that can be denoted by the noun lake.

The extension of bird includes robins, eagles, hawks, parrots, ducks, geese, ostriches and penguins.

The lexeme River Jordan (Jordan River) has a single item in its extension, and North Palestine has a single collection of items as its extension.

Intension: The intension of any lexeme is the set of properties shared by all members of the extension. Thus everything that is denoted by bear must have shared features indicating weight, size, shape, eating habits etc. Similarly, everything indicated by the lexeme lake must be a body of water of a certain size surrounded by land, and everything denoted by island is a body of land surrounded by water.

Extension has to do with reference.

Extension can change while intension remains the same. The extension of the referring expression the capital of Jordan is a single item, the city of Amman. The intension of the same term is ‘city in which the Jordanian government is located.’ If the capital is moved at some future time to another city, Irbid for example, the extension changes but the intension remains the same. Similar examples are Birzeit University if moved to Ramallah; the Mayor of Nablus or the Prime Minister of Palestine always has the same intension but the extension of each of these changes from time to time.

7. We also need to distinguish between primary referring expressions and secondary referring expressions.

A primary referring expression is a noun phrase like a dog, your friend, Fairouz, the flowers in that basket; they refer directly to their referents. Examples of secondary referring expressions are: he, the big ones, ours, that one. These expressions are headed by pronouns and they refer indirectly; their referents can only be determined from primary referring expressions in the context in which they are used.

Reference Has More Specific Points Which Include:

- I. Different kinds of referents.
- II. Ways of using referring expressions.
- III. Deixis.
- IV. Anaphora

I. Different kinds of referents

How do referents differ from each other?

Referents differ from one another in three ways:

unique versus non-unique (Ex: : Nablus, a city;

concrete versus abstract (ex: an apple, an idea; and

countable versus non-countable, mass nouns (ex: a bottle, several bottles, milk.)

I.1 Unique and non-unique referents

- 1. We visited Nablus.
- 2. We visited a city.

Both of the underlined noun phrases are referring expressions. They might have the same referent, but a city can refer to various highly populated areas whereas Nablus always refers to the same place. A referring expression has fixed reference when the referent is a unique

entity or unique set of entities, like Nablus, River Jordan, Japan, Jimmy Carter, the Dead Sea, the Caribbean Islands. Such referents are also considered constant.

A referring expression has a non-unique or variable reference if its referent may be different every time it is used: that dog, my uncle, several people, a lake, a city, the results.

Is it possible for nouns with fixed reference to be used with variable reference?

Yes.

Nouns with fixed reference can be used with variable reference:

Not every city has a Laila Ghannam.

This fellow is an Einstein.

We need a new Palestine.

No Shakespeare wrote this play) We notice here that the name of a person, for example Shakespeare, which has a fixed reference, acquires variable reference when applied to other people. It becomes an abstract reference when referring to the works produced by that person; We're reading Shakespeare.

1.2 Concrete and abstract referents

Lexemes such as dog, door, leaf, stone denote concrete objects, which can be seen or touched; the objects denoted by lexemes like idea, problem, reason, knowledge are abstract; they cannot be perceived directly through the senses.

The same lexeme may have different kinds of denotation. They generally occur in different kinds of utterances and then may have different effects on other lexemes. Consider these contrasts:

the key to the front door -- the key to success

a bright light -- a bright future

Here the lexemes key and bright have literal meanings when they occur in concrete contexts and figurative meanings in abstract contexts.

In some cases, lexemes which typically have concrete denotations can be given abstract ones, and vice versa.

Character, A character is, first, a kind of mark or sign, something that appears on paper or other surfaces, and is therefore concrete; character is also the totality of qualities that define a person or thing, in other words something abstract. Likeness is similarity, the quality of being like something (abstract), such as a picture or other representation—a likeness of someone (concrete).

I.3 Countable and non-countable (mass) referents

Noun phrases in English are either countable or non-countable. Both countable and non-countable noun phrases may be concrete or abstract.

Concrete countable expressions refer to items that are separate from one another, like apples, coins, pens and toothbrushes, which can ordinarily be counted one by one.

Abstract countable phrases have such nouns as idea, problem, suggestion.

Non-countable phrases, if their references are concrete, have three kinds of reference.

Some refer to continuous substances, such as apple sauce, ink, mud and toothpaste, which do not consist of natural discrete parts.

Others name substances that consist of numerous particles not worth counting, like sand and rice.

A few non-countables are like furniture, jewelry, luggage, collections whose parts have quite different names. The specific items included in these collections are indicated by countable nouns— furniture: chair, bed; jewelry: necklace, ring; luggage: trunk, suitcase.

In other instances there are matching nouns: shrubbery and shrub, rain and raindrop, snow and snowflake, including some that have no formal relationship: foliage and leaf.

Then there are abstract non-countables such as advice, information, beauty, which are treated as indivisible.

General Points:

Countable noun phrases show a distinction between singular and plural while non-countable noun phrases do not:

an apple, a coin, a pen, a toothbrush

some apples, some coins, some pens, some toothbrushes

some apple sauce, some mud, some ink, some toothpaste

Non-countable nouns can be counted if there is a unit of measure, for example a container of furniture, Two milks please, two coffees, which can sometimes be implicitly supplied by context.

Many mass nouns can be used to indicate type, for example the mass noun oil used in They manufacture two or three great oils; rice and fish in different rices and fishes, a good tea, several

cheeses, various soups.

Some count nouns can in certain contexts be used as mass nouns, for example the count noun banana in There's banana in this sandwich.

Some nouns regularly occur with both mass and count senses, often in abstract and concrete versions, for example light in There was a lot of light in the room (mass) and There were three lights in the room (count).

Certain animals are named in countable phrases but when considered as food the names appear in non-countable phrases.

(a) chicken, (a) lobster, (a) turkey

In contrast, there are animal names of Anglo-Saxon origin such as cow, calf, pig, sheep, deer—all countable nouns—matched by food names of Norman-French origin: beef, veal, pork, mutton, venison, which are non-countable.

Some nouns name substances when they occur in non-countable phrases and in countable phrases designate items originally made from those substances.

glass, iron, paper, straw -- a glass, an iron, a paper, a straw

There are a few nouns which occur only as plural in form but singular in meaning: scissors, pliers, tweezers; trousers, shorts, jeans, shavings, filings, earnings, savings, etc.

II. Different ways of referring

There are three kinds of referring expressions:

proper names, which have unique reference like River Jordan or Jamal Abdul-Nasser;

pronouns such as she, he, they; and

noun phrases that have nouns with variable reference as the head, preceded by a determiner and possibly followed by one or more complements:

<i>determiner</i>	<i>head</i>	<i>complement</i>	<i>complement</i>
a	cat		
that	broom	in the corner	
your	home		
some	questions	to be answered	
the	plate	that is broken	that you mentioned

expressions with fixed reference, like Pacific Ocean, do not require complements, modifiers or determiners since they are unique.

There are various determiners, including zero—that is, no overt determiner, as in We’re counting money; We’re counting coins. We can recognize several kinds of determiners.

Indefinite determiners (a/an, some, any and zero) do not identify.

The definite determiner the is used when identity can be taken for granted.

The demonstrative determiners this and that (plural these and those) indicate, respectively, that the referent is near or not near the speaker’s location.

Example: We’ll use this table and those chairs (over there).

They also identify present or future events versus past events.

Example:

A: We're going to see 'Opera Aida' tonight. We've been waiting for this performance for a long time.

B: We saw it last month. That was a great performance.

Possessive determiners: Possessive determiners refer to an entity in its relation to another referent, but 'possession' is a term for various kinds of relation: my necktie expresses ownership; my brother, kinship; my friend and my employer, other associations; Shakespeare's Othello expresses authorship; Dalia's picture may refer to a picture of Dalia or to one drawn or photographed by Dalia.

Quantifying determiners: They answer the question 'how much?' or 'how many?'.

Quantifiers express the amount or quantity of the entity denoted by the noun. Cardinal numbers are specific quantifiers: one day, five people, 32 teeth. General quantifiers: some eggs, a little milk, a few problems, much traffic, several accidents. If a countable noun phrase expresses a total, it may be collective (all donkeys) or distributive (every donkey).

Demonstrative, possessive and quantifying determiners can be combined, in which case the possessive word follows the noun: these four books, that idea of yours, several friends of mine.

Demonstrative, possessive and quantifying reference intersects with three other kinds of reference, generic, specific and definite.

II.1 Generic and non-generic reference

Consider the following examples:

1-a A dog makes a fine pet.

1-b Dogs make fine pets.

2-a A dog is lying in the middle of the street.

2-b Dogs are lying in the middle of the street.

In sentence 1-a a dog has generic reference; the sentence is not about a particular dog but about the class of dogs as a whole, dogs in general. We can express the same meaning with sentence 1b, which is also a generalization. Neither sentence is an answer to a question ‘Which dog(s)?’, for the question is not relevant.

A dog in sentence 2-a does not have generic reference; it clearly does not refer to the whole class of dogs, and a change to Dogs are lying in the middle of the street (2-b) produces quite a different message.

Generic reference in English can be expressed in several ways.

3-a The dog was man’s first domestic animal.

3-b Dogs were man’s first domestic animal.

We know that these have generic reference because the change from singular to plural, or vice versa, does not make a difference.

II.2 Specific and non-specific reference

4-a We have a dog.

4-b We’d like to have a dog.

5-a I’m sure there are answers to all your questions.

5-b I trust we can find answers to all your questions.

In sentence 4-a, above, a dog refers to a specific dog. The reference is to some particular animal, and we could insert the word certain before dog without changing the meaning. In sentence 4-b a dog would ordinarily be interpreted as non-specific in reference—‘some dog, not any particular one’. Similarly, answers has specific reference in 5-a but not in 5-b. Whether a referring expression has a specific referent or not cannot be determined from the expression itself; it is determined by the larger context.

II.3 Definite and indefinite reference

Demonstrative, possessive, and quantitative determiners identify a referent in a fairly precise way. The definite determiner the occurs in a referring expression when the speaker assumes that the hearer can identify the referent (I’ve got the tickets) or when identification is made part of the referring expression (I’ve got the tickets that you wanted). Indefinite determiners, a(n), some and zero, indicate that the referent is part of a larger entity.

When the referring expression is definite, the speaker assumes that the referent can be identified by the addressee on the basis of:

- The speaker assumes that the hearer can identify the referent from the physical-social context.

6. Take the cups off the table and put them in the cabinet.

- The speaker assumes that the addressee can make the necessary inference to relate a new reference to a previous one.

7. This was the site of the old Jericho Theater. The stage was over here and the lobby was over there.

- The reference is fixed and therefore presumably part of the addressee’s general knowledge, like River Jordan.

A referring expression with fixed reference is always definite.

A referring expression with variable reference may be definite or indefinite.

Some fixed-reference expressions contain the determiner the, others do not; the Argentine=Argentina, The Sudan=Sudan, the Ukraine has become Ukraine.

- The referent is unique in the more limited world of the speaker and addressee.

8. Careful! You might wake the baby.

9. Have you received the reports from the doctor?

When the referring expression is indefinite, the hearer has to make a choice from the extension of the noun, what part of the extension is intended. Frequently in a discourse a topic is introduced as an indefinite referring expression (new information) and subsequent mention of the topic is made with one or more definite referring expressions (given information).

A definite noun phrase presupposes the existence of its referent and an indefinite noun phrase presupposes the existence of more than its referent, a class of referents to which this one belongs.

III. Deixis

Deictic Words: The set of words whose meanings vary according to who uses them, and where and when they are used. The phenomenon of their occurrence is called deixis, meaning pointing. The deictic word takes its meaning from the context or situation (including the speaker, the addressee, the time and the place) or the utterance in which it is used.

10. I was disappointed that you didn't come this afternoon. I hope you'll join us tomorrow.

The meaning of any lexeme depends to some extent on the context in which it occurs, but deictic elements can only be interpreted through their contexts.

English examples of deictic words include

(1) pronouns I, you and we, which ‘point’ to the participants in any speech act; he, she, it and they, when they are used to refer to others in the environment;

(2) locative expressions here and there, which designate space close to the speaker or farther away; this/these and that/those, which respectively indicate entities close to or removed from the speaker; and

(3) temporal expressions: now, then, yesterday, today, tomorrow, last week, next month and so on.

Words which can be deictic are not always so.

Today and tomorrow are deictic in

11. We can’t go today, but tomorrow will be fine. They are not deictic in

12. Today’s costly apartment buildings may be tomorrow’s slums.

Here and there are deictic in

13. James hasn’t been here yet. Is he there with you? They are not deictic in

14. The children were running here and there.

The pronoun you is not deictic when used with the meaning ‘one; any person or persons,’ as in

15. You can lead a horse to water but you can’t make him drink.

They has a generalized, non-deictic reference to people in general, especially those in charge of some endeavor or other, as in

16. They say that an ounce of prevention is worth a pound of cure, and

17. They don’t make good apple sauce the way they used to.

IV. Anaphora

Anaphora is the use of a word referring back to a word used earlier in a text or conversation, to avoid repetition, for example the

pronouns he, she, it, and they. Therefore, anaphora is a kind of secondary reference in which a previous reference is recalled by use of special function words or equivalent lexemes. For example, in

18. Barbara called Jack and Jill. She invited them to a party. they decided to skip it

the choice of she, them, they, and it serves as a link to some referring expression that has occurred recently in the discourse—in this illustration to a referring expression in the previous sentence.

In this example, the speaker uses she to refer to the same person as Barbara, them and they have the same referent as Jack and Jill (or are co-referential with Jack and Jill)—and it is co-referential with a party; Barbara, Jack and Jill, and a party are considered primary referring expressions.

We have to know the referent to decide on the choice of the referring pronoun. But in the majority of English nouns, this is not straightforward. This is noticed in occupational nouns such as secretary, teacher, cashier, doctor, engineer, which don't indicate gender distinction. Anaphoric pronouns would give us such information. Further, those pronouns would also give us the information about the number of some referents such as sheep, for example. If the sheep has plural reference, the anaphoric word is they. And if there is only one animal in question, the anaphoric word may be it or he or she depending on the sex of the sheep and its importance to the person speaking or writing.

English is said to have 'natural' gender, which means principally that we use he, she or it in secondary reference, he referring to males, she to females and it for inanimate entities. But this distinction is not upheld rigidly; she can refer to an inanimate object, it to a baby or an animal, regardless of sex. In other words, it is the referent and, to some extent, the speaker's attitude toward the referent that determines the choice of pronoun, not the noun that would be used in a referring expression.

Note the following examples:

19 There was a strange painting on the wall.

Here the referring expression is indefinite but specific.

20a If we were going to buy a car, we would buy it at Hudson's.

20b If we were going to buy a car, we would buy one at Hudson's.

These two sentences show that if the first referring expression is indefinite and not specific, a following co-referential expression may be definite or indefinite.

21 We didn't buy a new car because they cost too much now.

The speaker here shifts from specific reference to generic reference. Note the vagueness here. Does they mean 'cars' or 'new cars'? Prosody could make one meaning clear.

Referential ambiguity

Misunderstandings occur when a speaker has one referent in mind for a definite expression like George or the papers, and the addressee is thinking of a different George or some other papers. Referential ambiguity is due to the nature of referring expressions, the vagueness that pieces of language necessarily have.

Referential ambiguity occurs when

1. an indefinite referring expression may be specific or not;

22 I wanted to buy a newspaper.

Here a newspaper may refer to a specific newspaper or some newspaper, any newspaper. The ambiguity disappears if we add, on the one hand, but I couldn't find it or, on the other hand, but I couldn't find one.

2. anaphora is unclear because a personal pronoun, he, she, it or they, can be linked to either of two referring expressions:

23 Jack told Ralph that a visitor was waiting for him.

3 the pronoun you is used generically or specifically:

24 If you want to get ahead, you have to work hard.

4 a noun phrase with every can have distributed reference or collected reference:

25 I'm buying a drink for everybody here. (One drink for all or one drink for each?)

ENGL337 SEMANTICS

HANDOUT THREE

SENSE (mainly from John Saeed's Semantics, chapters 2 and 3)

Meaning as Sense (Lexical Semantics)

According to the linguist Ferdinand de Saussure the meaning of linguistic expressions derives from two sources: the language they are part of, (sense), and the world they describe, (reference). Similarly, Frege distinguishes two aspects of our semantic knowledge of an expression: its sense (Frege used the German word Sinn) and its reference (Frege's Bedeutung). In this division, sense is because it allows reference: it is because we understand the expression the President of BZU University that we can use it to refer to a particular individual at any given time. the meaning of an expression will arise both from its sense and its reference.

SENSE:

The meaning relation between the words of a language. The sense of an expression refers to the semantic relationships that exist between this expression and other expressions in the same sentence, or in a relationship with other, related but absent words. For example, if someone says to you:

I saw my mother just now

You know, without any further information, that the speaker saw a woman. There are a couple of ways of viewing this: one is to say that this knowledge follows from the relationship between the uttered word mother and the related, but unspoken word woman, representing links in the vocabulary. Another approach is to claim that the word mother contains a semantic element WOMAN as part of its meaning.

Meaning relationship can apply to individual words, phrases, and sentences. This forms the branch of semantics known as lexical semantics which includes relations such as synonymy, antonymy, hyponymy, meronymy etc. Thus, the aims of lexical semantics have been: (a) to represent the meaning of each word in the language; and (b) to show how the meanings of words in a language are interrelated.

In terms of sense, meaning occurs as a result of the semantic links between elements within the vocabulary system. Thus, although a word refers to an object in the world (reference), it is also linked to other words in the same language (sense),

like a cell in a network. The meaning of chair in English is partly defined by the existence of other words like stool. Similarly, the scope of red is defined by the other terms in the color system: brown, orange, yellow, and so on. The same point can be made of grammatical systems: De Saussure pointed out that plural doesn't mean the same in French, where it is opposed to singular, as it does in Sanskrit or Arabic, languages which, in addition to singular, have dual forms, for exactly two entities. In the French system, plural is "two or more," in the other systems, "three or more".

In some cases, the same word or sentence can have more than one sense. E.g., bank, drill; The chicken is ready to eat; She greeted the girl with a smile.

Mental Representations:

Sense places a new level between words and the world; a level of mental representation. Thus, a noun is said to gain its ability to denote because it is associated with something in the speaker's/hearer's mind. Meaning in this theory is represented through images, concepts, necessary and sufficient conditions, and prototypes.

1. Images:

These are visual mental representation a language user has for entities. The relationship between these images and the real-world entity would then be one of resemblance. The idea of images might work for expressions like Paris or your mother, or even imaginary entities like Batman. But it doesn't work for common nouns such as car and house. The source of difficulty is that different speakers might have different images of the same noun. A common example is of the word triangle: one speaker may have a mental image of a triangle in which all sides are equal, another's might be for a triangle in which two sides have the same length or for a triangle whose three sides are of unequal length. It would be difficult to have one image for all dogs or cars, or images for words such as animal, food, love, justice or democracy. Therefore, we need to introduce a new notion to deal with such words. The new notion is called concept.

2. Concept:

This notion is based on modifying the image theory by saying that the sense

of some words, while mental, is not visual but a more abstract element. This abstract element is the concept. This has the advantage that we can accept that a concept might be able to contain the non-visual features which make a dog a dog, democracy democracy, and so on.

Some concepts might be simple and related to perceptual stimuli - like SUN, WATER, and so on. Others will be complex concepts like MARRIAGE or RETIREMENT which involve whole theories or cultural complexes.

For form, a concept can be lexicalized (shortened to one word). For example, microwave oven becoming microwave. New concepts may be invented with new words corresponding to them. Examples, selfie and smartphone.

As for acquiring concepts, Children may underextend or overextend concepts. Underextending happens when a child uses dog for only their pet, not the one next door. Overextending happens when a child uses daddy for every male adult, or cat for cats, rabbits, and other pets.

Also, children and, sometimes, adults acquire concepts by ostensive definition. This is the idea that they acquire concepts by being directed to examples in the world. So if you are walking with a child and you see a dog, you say That's a dog or Look at the doggie! and the child begins to acquire the concept DOG, which is filled out by subsequent experience of dogs. One point to mention here is that you need to know something about the language that the ostension takes place in.

The problem with the theory of concepts is that the term concept is not well-defined.

3. Necessary and sufficient conditions:

These are sets of conditions used to define concepts. For example, if we have a concept like WOMAN, it must contain the information necessary to decide when something in the world is a woman or not. This information can be organized as a set of characteristics or attributes.

Example: A woman is human, adult, female, etc.

If some conditions must exist for something to be called a woman, then such

conditions are called necessary conditions. However, If we have the set of conditions which is enough to define a woman, then such conditions are called sufficient conditions, that is, we have identified the right amount of information for the concept.

Problems with this theory:

- It assumes that speakers share the same conditions for a concept.
- Sometimes, it is difficult to identify which conditions are necessary and which are sufficient.
- Another argument against necessary and sufficient conditions relates to ignorance. Speakers often use words to refer despite knowing very little, and sometimes nothing, about the identifying characteristics of the referent, i.e., using the word without knowing much about its referent.

4. Prototypes:

Because of problems with necessary and sufficient conditions, the notion of prototypes has been suggested by several linguists. This notion views concepts as represented by central or typical members of a category. So chair is a more central or typical member of the category FURNITURE than lamp, for example. Or sparrow a more typical member of the category BIRD than penguin. Additionally, the prototype theory can be used to explain fuzzy, or uncertain items that are not clearly defined, or the items that belong to two different categories. For example, whale belongs to mammals and to fish but its characteristics make it more typical of fish than mammals.

Some researchers have said that the central prototype is an abstraction which might be a set of characteristic features. We compare real items to these features. The characteristic features of BIRD might describe a kind of average bird, small perhaps, with wings, feathers, the ability to fly, and so on, but of no particular species.

Other researchers have proposed that we organize our categories by exemplars. Our memories of actual typical birds, say sparrows, pigeons and hawks, would make us consider something as bird on the basis of comparison with these memories of real birds.

WORD MEANING

Recall that we all retain a large body of words together with idiosyncratic information about them in a mental store which is called the lexicon. The interest in semantics is with **lexemes** or **semantic words**, i.e., the same semantic word can be represented by several grammatically distinct variants. Thus the verb forms walks, walking, walked are three different **grammatical** words but they are instances of the same lexeme, the verb **walk**. This abstraction from grammatical words to semantic words is practiced in published dictionaries, where lexicographers use abstract entries like **go**, **sleep**, **walk**, and so on for purposes of explaining word meaning.

One approach in semantics is to associate phonological and grammatical words with semantic words or lexemes as we saw in the (walk) example where three grammatical words representing one semantic word. The inverse is possible: several lexemes can be represented by one phonological and grammatical word; foot in the following sentences:

- He scored with his left foot.
- They made camp at the foot of the mountain.
- I ate a foot-long hot dog.

Each of these uses has a different meaning representing three different lexemes. We can also say that we have three senses of the word *foot*.

Once we have established our lexemes, the lexicon will be a listing of them with a representation of:

1. the lexeme's pronunciation;
2. its grammatical status;
3. its meaning;
4. its meaning relations with other lexemes.

The listing of lexemes shows that some share a number of properties. For example the three lexemes of foot share the same pronunciation and the same syntactic category (noun).

Lexical Relations

The lexicon is organized in terms of groups of words; each group contains the lexemes that belong to a particular activity or area of specialist knowledge, such as the terms

in cooking or sailing; or the vocabulary used by doctors, etc. Each group is called a lexical field.

One effect of lexical fields is that lexical relations are more common between lexemes in the same field. Thus peak¹ “part of a mountain” is a near synonym of *summit*, while peak² “part of a hat” is a near synonym of *visor*.

1. Homonymy

Homonyms are unrelated senses of the same phonological word. Some authors distinguish between homographs, senses of the same written word, and homophones, senses of the same spoken word. Here we will generally just use the term homonym. We can distinguish different types depending on their syntactic behavior, and spelling, for example:

- lexemes of the same syntactic category, and with the same spelling: e.g. *lap* “circuit of a course” and *lap* “part of body when sitting down”;
- of the same category, but with different spelling: e.g. the verbs *ring* and *wring*; (mine, die, dye; brake, break; knight, night; flour, flower; cent, scent;
- of different categories, but with the same spelling: e.g. the verb *bear* and the noun *bear*;
- of different categories, and with different spelling: e.g. *not*, *knot*.

Of course variations in pronunciation mean that not all speakers have the same set of homonyms. Some English speakers for example pronounce the pairs *click* and *clique*, or *talk* and *torque*, in the same way, making these homonyms, which are spelled differently.

2 Polysemy

Homonymy and polysemy deal with multiple senses of the same phonological word, but polysemy occurs if the senses of a word are related. This is important for lexicographers because polysemous senses are listed under the same lexical entry, while homonymous senses are given separate entries. Lexicographers use speakers' intuitions, and the items historical development as criteria of “relatedness”. The example below shows various senses of *hook* which are treated as polysemy and therefore listed under one lexical entry:

hook *n.* 1. a piece of material, usually metal, curved or bent and used to suspend, catch, hold, or pull something. 2. short for fish-hook. 3. a trap or snare. 4. *Chiefly U.S.* something that attracts or is intended to be an attraction. 5. something resembling a hook in design or use. 6.a. a sharp bend or angle in a geological formation, esp. a river. b. a sharply curved spit of land. 7. *Boxing.* a short swinging blow delivered from the side with the elbow bent. 8. *Cricket.* a shot in which the ball is hit square on the leg

side with the bat held horizontally. 9. *Golf*. a shot that causes the ball to swerve sharply from right to left. 10. *Surfing*. the top of a breaking wave, etc.

Two groups of senses of *hooker*, as the example below shows, are treated as unrelated, therefore a case of homonymy, and given two separate entries:

- *hooker*¹ *n.* 1. a commercial fishing boat using hooks and lines instead of nets. 2. a sailing boat of the west of Ireland formerly used for cargo and now for pleasure sailing and racing.

*hooker*² *n.* 1. a person or thing that hooks. 2. *U.S. and Canadian slang*. 2a. a draft of alcoholic drink, esp. of spirits. 2b. a prostitute. 3. *Rugby*. the central forward in the front row of a scrum whose main job is to hook the ball.

3. Synonymy

Synonyms are different phonological words that have the same or very similar meanings. Examples:

couch/sofa boy/lad lawyer/attorney toilet/lavatory large/big

Some parameters may explain The distribution of some synonyms:

-- Speakers' familiarity with different dialects. Some words may have belonged to different dialects and then become synonyms for speakers familiar with these dialects, (Arabic examples), like Irish English *press* and British English *cupboard*.

-- Word origin. The words may originate from different languages, for example *cloth* (from Old English) and *fabric* (from Latin).

-- An important source of synonymy is taboo areas where a range of euphemisms may occur, for example in the English vocabulary for sex, death, and the body. Consider the entry for *die* from Roget's *Thesaurus*:

die: cease living: decess, demise, depart, drop, expire, go, pass away, pass (on), perish, succumb. *Informal*: pop off. *Slang*: check out, croak, kick in, kick off. *Idioms*: bite the dust, breathe one's last, cash in, give up the ghost, go to one's grave, kick the bucket, meet one's end (or Maker), pass on to the Great Beyond, turn up one's toes. (Roget 1995)

These examples show that words may belong to different registers, those styles of language, colloquial, formal, literary, and so on, that belong to different situations. Thus *wife* or *spouse* is more formal than *old lady* or *missus*.

-- Synonyms may also portray positive or negative attitudes of the speaker: for example *naive* or *gullible* seem more critical than *ingenuous*.

-- Restriction on the distribution of synonyms. Take the various words used for the police around the English-speaking world: *police officer*, *cop*, *copper*, and so on. Some distributional constraints on these words are regional, like Irish English *the guards* (from the Irish *garda*), British English *the old Bill*, or American English *the heat*.

Formality is another factor: many of these words are of course slang terms used in colloquial contexts instead of more formal terms like *police officer*. Some expressions reflect Speakers' negative attitude towards the police: *fuzz*, *flatfoot*, *pigs*, or *the slime*. Others like *cop* seem neutral.

4. Opposites (antonymy)

Traditionally, **antonyms** are words which are opposite in meaning.

Types of antonymy:

a. Complementary antonyms

This is a relation between words such that the negative of one implies the positive of the other. The pairs are also sometimes called contradictory, binary, or simple antonyms. In effect, the words form a two-term classification. Examples:

- dead/alive (of e.g. animals)
- pass/fail (a test)
- hit/miss (a target)

b. Gradable antonyms

This is a relationship between opposites where the positive of one term does not necessarily imply the negative of the other, for example *rich/poor*, *fast/slow*, *young/old*, *beautiful/ugly*. This relation is typically associated with adjectives and has the following characteristics:

firstly, there are usually intermediate terms so that between the gradable antonyms *hot* and *cold* we can find:

hot (warm tepid cool) cold

Secondly, the terms are relative, so *a thick pencil* is likely to be thinner than *a thin girl* and so on.

Thirdly, in some pairs one term is more basic and common, so for example of the pair *long/short*, it is more natural to ask of something *How long is it?* than *How short is it?* For other pairs there is no such pattern: *How hot is it?* and *How cold is it?* are equally natural depending on context.

Other examples of gradable antonyms are: *tall/short*, *clever/stupid*, *near/far*, *interesting/boring*.

c. *Reverses*

The characteristic reverse relation is between terms describing movement, where one term describes movement in one direction, and the other the same movement in the opposite direction; for example the terms *push* and *pull* on a swing door, which tell you in which direction to apply force. Other such pairs are *come/go*, *go/return*, *ascend/descend*. When describing motion the following can be called reverses: (go) *up/down*, (go) *in/out*, (turn) *right/left*.

By extension, the term is also applied to any process that can be reversed: so other reverses are *inflate/deflate*, *expand/contract*, *fill/empty*, or *knit/unravel*.

d. *Converses*

These are terms which describe a relation between two entities from alternate viewpoints, as in the pairs:

- own/belong to
- above/below

employer/employee

Thus if we are told *Alan owns this book* then we know automatically *This book belongs to Alan*. Or from *Helen is David's employer* we know *David is Helen's employee*.

e. *Taxonomic sisters*

The term antonymy is sometimes used to describe words which are at the same level in a taxonomy. Taxonomies are hierarchical classification systems; we can take as an example the color adjectives in English, and give a selection at one level of the taxonomy as below:

red orange yellow green blue purple brown

We can say that the words *red* and *blue* are sister-members of the same taxonomy and therefore incompatible with each other. Hence one can say:

His car isn't red, it's blue.

Other taxonomies might include the days of the week: *Sunday*, *Monday*, *Tuesday*, and so on, or any of the taxonomies we use to describe the natural world, like types of dog: *poodle*, *setter*, *bulldog*, and so on. Some taxonomies are closed, like days of the week: we can't easily add another day, without changing the whole system. Others are open, like the flavors of ice cream sold in an ice cream parlor: someone can always come up with a new flavor and extend the taxonomy.

f. *Hyponymy*

Hyponymy is a relation of inclusion. A hyponym includes the meaning of a more general word, for example:

dog and *cat* are hyponyms of *animal*

sister and *mother* are hyponyms of *woman*

The more general term is called the superordinate or hypernym (alternatively hyperonym). Much of the vocabulary is linked by such systems of inclusion, and the resulting semantic networks form the hierarchical taxonomies mentioned above. Some taxonomies reflect the natural world, like

kestrel is a hyponym of *hawk*, and *hawk* a hyponym of *bird*. The relationship is transitive so that *kestrel* is a hyponym of *bird*. From such taxonomies we can see both hyponymy and the taxonomic sisterhood described in the last section: hyponymy is a vertical relationship in a taxonomy, so *saw* is a hyponym of *tool*, while taxonomic sisters are in a horizontal relationship, so *hacksaw* and *jigsaw* are sisters in this taxonomy with other types of saw.

Another lexical relation that seems like a special sub-case of taxonomy is the ADULT–YOUNG relation, as shown in the following examples:

dog puppy; cat kitten.

Cow, calf; duck, duckling; swan, cygnet.

A similar relation holds between MALE–FEMALE pairs:

Tom-queen; bull-cow; boar-sow; drake-duck; cob-pen; (A male swan is called a cob, the female a pen.)

g. Meronymy

Meronymy is a term used to describe a part–whole relationship between lexical items. Thus *cover* and *page* are meronyms of *book*. The whole term, here *book*, is sometimes called the holonym. We can identify this relationship by using sentence frames like *X is part of Y*, or *Y has X*, as in *A page is part of a book*, or *A book has pages*. Meronymy reflects hierarchical classifications in the lexicon somewhat like taxonomies.

vary for example in how necessary the part is to the whole. Some are necessary for normal examples, for example *nose* as a meronym of *face*; others are usual but not obligatory, like *collar* as a meronym of *shirt*; still others are optional like *cellar* for *house*.

Meronymy also differs from hyponymy in transitivity.

Hyponymy is always transitive, as we saw, but meronymy may or may not be. A transitive example is: *nail* as a meronym of *finger*, and *finger* of *hand*. We can see that *nail* is a meronym of *hand*, for we can say *A hand has nails*. A non-transitive example is: *pane* is a meronym of *window* (*A window has a pane*), and *window* of *room* (*A room has a window*); but *pane* is not a meronym of *room*, for we cannot say *A room has a pane*. Or *hole* is a meronym of *button*, and *button* of *shirt*, but not *hole* is a meronym of *shirt* (*A shirt has holes!*).

Other lexical relations **similar to meronymy**:

Member–collection

This is a relationship between the word for a unit and the usual word for a collection of the units. Examples include:

ship–fleet; tree–forest; fish–shoal; book–library; bird–flock; sheep–flock; worshipper–congregation.

Portion–mass

This is the relation between a mass noun and the usual unit of measurement or division. In the example below, the unit, a count noun, is added to the mass noun, making the resulting noun phrase into a count nominal.

drop of liquid grain of salt/sand/wheat; sheet of paper; lump of coal; strand of hair.

h. Derivational Relations

Our lexicon includes derived words when their meaning is unpredictable. Two examples of this type of lexical relation are **causative verbs** and **agentive nouns**.

Causative verbs

(two cases)

In one case, we can notice a relationship between An adjective describing a state as wide in *The road is wide*; a verb describing a beginning or change of state, *widen* as in *The road widened*; a verb describing the cause of this change of state, *widen*, as in *The City Council widened the road*. These three semantic choices can be described as a state, change of state (or inchoative), and causative.

This relationship is marked in the English lexicon in a number of different ways.

No difference in the shape of the word between all three uses as in: *The gates are open*; *The gates open at nine*; *The porters open the gates*. Despite having the same shape, these three words are grammatically distinct: an adjective, an intransitive verb, and a transitive verb, respectively.

Inchoative and causative verbs are morphologically derived from the adjective as in: *The apples are ripe*; *The apples are ripening*; *The sun is ripening the apples*.

Often there are gaps in this relation: for example we can say *The soil is rich* (state) and *The gardener enriched the soil* (causative) but it sounds odd to use an inchoative: *?The soil is enriching*. For a state adjective like *hungry*, there is no colloquial inchoative or causative: we have to say *get hungry* as in *I'm getting hungry*; or *make hungry* as in *All this talk of food is making me hungry*.

In another case of this relation, we can see an adjective describing the state that is a result of the process. This resultative adjective is usually in the form of a past participle. Thus we find examples like: *closed*, *broken*, *tired*, *lifted*. We can see a full set of these relations in: *hot* (state adjective)–*heat* (inchoative verb)–*heat* (causative verb)–*heated* (resultative adjective).

Some verbs are inherently causative and not derived from an adjective. The most famous English example of this in the semantics literature is *kill*, which can be analysed as a causative verb “to cause to die.” So the semantic relationship state–inchoative–causative for this example is: *dead*–*die*–*kill*. There are two senses of the adjective *dead*: *dead*¹: not alive; and *dead*²: affected by a loss of sensation. The lexeme *dead*¹ is in a relationship with the causative verb *kill*; while *dead*² has a morphologically derived causative verb *deaden*.

Agentive nouns

Different types of agentive nouns:

One type is derived from verbs and ends in the written forms *-er* or *-or*. These nouns have the meaning “the entity who/which performs the action of the verb.” Some examples are: *skier, walker, murderer, whaler, toaster, commentator, director, sailor, calculator, escalator*.

Dictionary writers tend to list these forms, for two reasons. The first is that there are some irregularities: for instance, some nouns do not obey the informal rule given above: *footballer*, for example, is not derived from a verb *to football*. In other cases, the nouns may have several senses, some of which are quite far from the associated verb, as in the examples below:

lounger, a piece of furniture for relaxing on.

Undertaker, Mortician

Muffler, *US* a car silencer

Creamer, *US* a jug for cream

Renter, *Slang*. a male prostitute

A second reason is that it is not possible to predict for any given verb which of the strategies for agentive nouns will be followed. Thus, one who depends upon you financially is not a **depender* but a *dependant*; and a person who cooks is a *cook* not a *cooker*.

Other agentive nouns which have to be listed in the lexicon are those for which there is no base verb. This may be because of changes in the language, as for example the noun *meter* “instrument for making measurements” which no longer has an associated verb *mete*.

ENGL 337: SEMANTICS

Handout Four : Predication

PREDICATORS

The PREDICATOR of a simple declarative sentence is the non-referring expression which makes the most specific contribution to the meaning of the sentence. This non-referring expression can be a word or a group of words.

Examples:

- (1) My dog bit the postman.
- (2) Cairo is in Africa
- (3) Jerusalem is between Ramallah and Hebron.
- (4) Jane has been waiting for the downtown bus.

The predicates in these sentences are bite, in, between, and wait for.

Note that the predicates can be adjectives (red, asleep, hungry), verbs (write, stink, place), prepositions (in, between, behind) and nouns (crook, genius).

Conjunctions (and, but, or), and articles (the, a) cannot serve as predicates in sentences.

The semantic analysis of declarative sentences shows that referring and non-referring expressions play two different roles: non-referring as predicates and referring as arguments.

Examples:

Sami is Palestinian
argument: Sami

predicate: Palestinian

Sami called his brother.
brother

predicate: call arguments: Sami, his

Sami took his brother to the shop.
Sami, his brother, the shop

predicator: take arguments:

PREDICATE:

A PREDICATE is any word **(or sequence of words)** which **(in a given single sense)** can function as the predicator of a sentence.

Examples: hungry, in, crook, asleep, hit, show, bottle, are all predicates, whereas and, or, but, not, are not predicates.

Notice 2 paranthesized conditions in the definition of predicate,

(or sequence of words), applying to expressions such as wait for, in front of, i.e., longer than one word, but analysable as single predicates.

(in a given single sense), i.e., a predicate has only one sense. In this case, we differentiate a predicate from a word. A 'word' can be ambiguous, especially when it has different senses. Each sense is a predicate. Therefore, a 'predicate' cannot be ambiguous.

The context in which we use a word will make clear what sense (predicate) we have in mind. To indicate that in writing, we can use subscripts on words to distinguish between different predicates.

Example The word bank has two senses, i.e., two predicates, bank₁ and bank₂;

Man has three predicates: man₁ (noun) = human being, man₂ (noun) = male adult human being, and man₃ (transitive verb).

'Predicate' and 'predicator' are different terms. 'Predicate' identifies elements in the language system, independently of sentences. Therefore, we can have a list of the predicates of English, as included in a dictionary.

'Predicator' identifies the semantic role played by a particular word (or group of words) in a particular sentence. In this way, it is similar to the grammatical term 'subject': one can talk of the subject of a particular sentence, but not of a list of 'the

subjects of English'. Similarly, one can talk of the 'predicator' in a particular sentence, but not list 'the predicators of English'. A simple sentence only has one predicator, although it may contain more than one predicate.

Example A tall, slim person delivered an influential speech.

This sentence has one predicator, deliver, but it contains the predicates tall, slim, person, influential, and speech. Notice that all can function as predicators in other sentences, e.g., John is tall, He is slim, etc.

Degree of predicates: one-place, two-place etc.

The DEGREE of a predicate is a number that indicates the number of arguments the predicate normally takes in simple sentences.

Examples: Asleep, a predicate of degree one, a one-place predicate. Love (verb), a predicate of degree two, a two-place predicate.

A predicate that takes one argument is a one-place predicate, two arguments = two-place predicate etc.

Examples: She left, leave is a one-place predicate; She closed the door, close is two-place predicate; They gave my friend a present, give is a three-place predicate.

In addition to verbs as predicates, we can also have prepositions, adjectives, and nouns as predicates.

Examples: Cairo is in Africa, Cairo is dusty, Cairo is a large city.

LOGICAL NOTATION AND SIMPLE PROPOSITIONS

Remember that a proposition is A declarative sentence that is either true (denoted by T) or false (denoted by F) as will be shown in truth tables, later.

Examples:

All cows are brown.

There is life on Mars.

$3 + 3 = 7$.

Not a Proposition

Clean up your room. (imperative)

Who was your best friend in childhood? (question)

Simple propositions have just one predicator which we write in CAPITAL LETTERS. The arguments of the predicator we represent by single lower-case letters, putting one of these letters before the predicator (like the subject of an English sentence) and the others (if there are others) after the predicator, usually in the preferred English word order. Anything that is not a predicator or a referring expression is simply omitted from logical notation.

Examples:

Fatima left,	f LEAVE.
Mariam is a student,	m STUDENT.
Hani loves cats,	h LOVE c.
Laila introduced Hisham to Aameena,	l INTRODUCE h a.
Hani is a son of Samir,	h SON s.
Mary is looking for Jack,	m LOOK-FOR j.
Jamila is looking after grandmother,	j LOOK-AFTER g.
Bill is shorter than Jim,	b SHORTER j.
<i>Clark Kent is Superman,</i>	ck = s.
<i>Dr Jekyll was Mr Hyde,</i>	dj = mh.

Note the following:

Every SIMPLE proposition is representable by a single PREDICATOR, drawn from the predicates in the language, and a number of ARGUMENTS, drawn from the names in the language.

This means that no formula for a simple proposition can have TWO (or more) predicates, and it cannot have anything which is neither a predicate nor a name.

Example **j LOVE m** is a well-formed formula for a simple proposition

j m is not a well-formed formula, because it contains no predicate

j IDOLIZE ADORE m is not a well-formed formula for a simple proposition, because it contains two predicates

j and h LOVE m is not a well-formed formula for a simple proposition because it contains something ('and') which is neither a predicate nor a name.

The last two examples show that two expressions refer to the same entity. Such sentences are called equative sentences. Note the use of = sign between the two expressions in the formula. The predicate in these sentences is known as identity predicate.

ENGL337 SEMANTICS

HANDOUT 5 SEMANTIC LOGIC AND TRUTHS

SENTENCE RELATION AND TRUTH (COMPLEX PROPOSITIONS)

Logic and Truth

Researchers use logic to prove the truth of statements in a search for the principles of valid argument and inference **PAYING SPECIAL ATTENTION TO** the semantic relations that may hold between sentences of a language.

Rules of Logic

In creating propositions, propositional variables such as p, q, r, etc. are used. These variables appear in constructing the following rules:

Modus ponens:

a type of argument in three steps, like the following:

1. a. If Gina went to school this morning (p), then she is in class, now (q).
- b. Gina went to school this morning (antecedent).
- _____
- c. Gina is in class, now (consequent or conclusion).

If steps a and b (called the premises) are true then step c (the conclusion) is also guaranteed to be true. Statement b is antecedent and c is consequent. Here we follow the tradition of separating the premises from the conclusion by a horizontal line.

According to this rule, if p is true, then q must be true. Here, truth is affirmed by affirming; the consequent is affirmed by affirming the antecedent.

Modus Tollens:

denying by denying; denying the consequent is achieved by denying the antecedent. In other words, not q leads to not p.

2. a. If Gina went to school this morning (p), then she is in class, now (q).
- b. Gina is not in class, now (antecedent, not q).
- c. Gina didn't go to school this morning (consequent or conclusion, not p).

Hypothetical syllogism:

Reasoning in a chain; the result of chaining several conditions together. The consequent of one becomes the antecedent of another and so on. Note that both the premises and the conclusion are conditionals. We are not asserting whether p, q, or r is true; we are asserting the truth of hypothetical relations. If p is true, then q would follow, and if q is true, then r would follow. From that, we can assert that if p is true, then r must also be true. This is referred to as a transitive relation.

3. a. If Gina is in the bakery, then she is buying bread (p q).
- b. If Gina is buying bread, then she is buying French toast (q r, antecedent).
- c. If Gina is in the bakery, then she is buying French toast (p r, consequent).

Disjunctive syllogism:

also called disjunctive elimination, the way of affirming by denying.

5. a. Gina is at school or she is in the bakery (p or q).
- b. Gina isn't at school (not p, antecedent).
- c. Gina is in the bakery (q, consequent).

Here, the truth of q is affirmed by negating or denying p.

Logical Operators (Logical words) and their linguistic effects on truth value

We can use connectives or logical operators to create compound propositions using propositional variables, such as p, q, r, s etc. as mentioned before. A logical operator is either a unary operator, meaning it is applied to only a single proposition; or a binary operator, meaning it is applied to two propositions.

Semanticists call a sentence's being true or false its **truth-value**, and the facts that would have to obtain in reality to make a sentence true or false, its **truth conditions**.

Negation, neg. $\neg$ The negation operator is a unary operator which, when applied to a proposition p, changes the truth value of p. That is, the negation of a proposition p, denoted by $\neg p$, is the proposition that is false when p is true and true when p is false. For example, if p is the statement (I understand this), then its negation would be (I do not understand this) or (It is not the case that I understand this.) In this case, the truth value of a proposition is reversed. A further example is:

- 6. a. Your car is stolen.
- b. Your car is not stolen, or, It's not the case that your car is stolen.

To show that this relationship works for any statement, logicians use a schema called **logical form** as shown in 7.a and 7.b:

- 7. a. p
- b. $\neg p$
- c. $\neg$ yc STEAL (in logical notation)
- d. Ahmad didn't borrow the book. $\neg$ a BORROW b

Truth table: 8.

P	$\neg p$
---	----------

T	F
F	T

This table shows that when p is true (T), $\neg p$ is false (F); when p is false (F), $\neg p$ is true (T). This is then a succinct way of describing the truth effect of negation.

And: $\wedge$ logical conjunction.

The joining of propositions by the logical connective $\wedge$ is called conjunction. The conjunction operator is the binary operator which, when applied to two propositions p and q, yields the proposition (p and q), denoted $p \wedge q$. The conjunction $p \wedge q$ of p and q is the proposition that is true when both p and q are true and false otherwise.

It is one of the connectives which are especially important to logicians because they have a predictable effect on the truth conditions of compound statements. For example, the truth-value of a compound formed by using and to join two statements is predictable from the truth of the constituent statements. Example:

9. a. My car has suddenly stopped.
- b. The mechanic is on the way.
- c. My car has suddenly stopped and The mechanic is on the way.

If 9. a and b above are true, then the compound c is also true. If however either of a or b is false then the compound will be false. This is shown in the following truth table: 10

P	q	$p \wedge q$
T	T	T
T	F	F
F	T	F
F	F	F

This table tells us that only when both statements connected by $\wedge$ are true will the compound be true. So 10c above will be false if my car has suddenly stopped but the mechanic is not on the way, and also false if the mechanic is on the way but to a false claim: my car has not suddenly stopped. Most obviously of all, 10c is false if there is no car stoppage and no mechanic on the way.

Or: disjunction (inclusive and exclusive)

joining of propositions by the logical connective $\vee$, corresponding to English *or*.

Inclusive or:

The disjunction operator is the binary operator which, when applied to two propositions p and q , yields the proposition $(p \text{ or } q)$, denoted $p \vee q$. The disjunction $p \vee q$ of p and q is the proposition that is true when either p is true, q is true, or both are true, and is false otherwise.

Example:

11 I'll see you today or I'll see you tomorrow.

Truth table: 12

P	q	$p \vee q$
T	T	T
T	F	T
F	T	T
F	F	F

A compound created with $\vee$ is true if one or both of the constituent sentences is true. Sentence 11 is true if either I'll see you today or I'll see you tomorrow is true, or both. It is only false if both are false.

Exclusive or Operator, XOR: $\vee$.

The exclusive or is the binary operator which, when applied to two propositions p and q yields the proposition $(p \text{ xor } q)$, denoted $p \vee q$, which is true if exactly one of p or q is true, but not both. It is false if both are true or if both are false.

Many times in our every day language we use (or) in the exclusive sense. In logic, however, we always mean the inclusive or when we simply use

)or) as a connective in a proposition. If we mean the exclusive or it must be specified. For example, in a restaurant a menu may say there is a choice of soup or salad with a meal. In logic this would mean that a customer may choose both a soup and salad with their meal. The logical implication of this statement, however, is probably not what is intended. To create a sentence that logically states the intent the menu could say that there is a choice of either soup or salad (but not both). The phrase (either . . . or . . .) normally indicates the exclusive or.

Example:

13 you will pay the fine or you will go to jail.

Truth table: 14

P	Q	$p \vee q$
T	T	F
T	F	T
F	T	T
F	F	F

From the table, we can see that the compound is true if only one of the conditions is true.

If...then (the material implication operator): $\rightarrow$

, Example:

15 if it rains then I'll go to the movies.

Truth table: 16

P	Q	$P \rightarrow q$
T	T	T
T	F	F
F	T	T
F	F	T

As 16 shows, the expression $p \rightarrow q$ is only false when p (the **antecedent**) is true and q (the **consequent**) is false.

The f-clause in 4.29 is the antecedent and the then-clause is the consequent. This conditional sentence can only be false if it rains and I don't go to the movies, that is $\underline{p} = T$, $\underline{q} = F$. We can describe this relation by saying that $\underline{p}$ is a **sufficient condition** for $\underline{q}$ (rain will cause me to go) but not a **necessary condition** (other things might make me go; it might snow!).

This relation is a little hard to grasp and the reason is because we try to match it with our ordinary use of conditional sentences in English. However, conditionals in real languages often have more to them than this truth-conditional connective shows. For example, there is often an assumption of a causal connection between the antecedent clause (the f-clause) and the consequent (the then-clause). The logical connective, however, doesn't work like that: as 16 shows, if the antecedent is false, the compound is true, whatever the truth-value of the consequent.

More Examples

17 If Ali is present, Hashem is a liar.

18 If Sally swims well, she will teach her brother swimming.

19 Hashem is a liar if Ali is present.

If-and-only-if Operator: the bi-conditional symbolized by $\equiv$ or $\leftrightarrow$

Example:

20 we'll meet if and only if we are forced to.

Truth table: 21

P	q	$P \equiv q$
T	T	T
T	F	F
F	T	F
F	F	T

As 21 shows, a statement $\underline{p} \equiv \underline{q}$ is true when $\underline{p}$ and $\underline{q}$ have the same truth-value. The name "bi-conditional" reflects the fact that the $\underline{p} \equiv \underline{q}$ is equivalent to the compound conditional expression $(\underline{p} \rightarrow \underline{q}) \wedge (\underline{q} \rightarrow \underline{p})$, which can be paraphrased as "if $\underline{p}$ then $\underline{q}$ and if $\underline{q}$ then $\underline{p}$."

If we reverse the English clause order and identify the condition if and only if we are forced to as p, and the consequent We'll leave as q, then we can say that p is a **necessary condition** for q, that is, p is the only possible cause for q.

More Examples

22 Jackie is married to Fred if and only if Fred is married to Jackie.

23 Laila is Samir's sister if and only if Samir is Laila's brother.

Distinctions of Truths

Three distinctions:

1. A priori truth vs. a posteriori truth

A priori truth: This kind of truth has been the focus of much investigation. This is the truth that is known before or without experience.

Examples:

24 My father is my father.

25 Either he's still alive or he's dead.

26 She was assassinated last week but fortunately she's still alive.

27 Bob is taller than Jane and Jane is taller than Jim. Truth value of Bob is taller than Jim.

28 All bachelors are unmarried.

Such sentences (24-28) are either true or false without having to refer to the facts of the world. Sentence 26 is false because of contradiction.

a posteriori truth: truth which can only be known on the basis of empirical testing and experience.

Examples:

29 Her father is an engineer.

30 All crows are black.

31 Most Palestinians smoke.

The distinction between these two truths is based on knowledge, epistemology.

2. Necessary truths vs. contingent truths

Necessary truths: This is the truth that cannot be denied or made false without forcing a contradiction.

Examples:

32 *Two and two make four.*

33 All men are male.

34 Dogs are animals.

A sentence like 25 is also **necessarily true** and a contradiction like 26 is **necessarily false**.

contingent truths: Such truths can be contradicted, depending on the facts of the world.

35 I had milk with my breakfast.

36 The dog is on the table.

37 It's raining in Ramallah right now.

The distinction here is based on what the world is like.

3. **Analytic vs. Synthetic truth**

Analytic statements are those where the truth follows from the meaning relations within the sentence, regardless of any relationship with the world. In such statements, predicates are contained in the subject.

Examples:

38 All bachelors are unmarried.

39 My father is my father.

40 All dogs are animals.

41 Triangles have 3 sides.

42 My mother's daughter is my sister.

Synthetically true statements are true because they accord with the facts of the world. They are true by experience that is not contained in the subject.

Examples:

43 My father is a sailor.

44 The dog is sick.

45 The triangle is white.

The distinction between analytic and synthetic truths is based on language.

Further examples of sentences that are analytic or necessarily true together with their logical forms:

46 a. Either Gina will invent a new pad or Gina won't invent a new pad.

Logical Form: Either p or not-p

b. If Gina is an inventor and Becky is a swimmer then Gina is an inventor.

Logical Form: If p and q then p

c. All teams who win are teams.

Logical Form: All X's that Y are X's.

d. If Gina beat Becky then Becky lose to Gina.

Sentences like 46 a-c above have been important in the development of logic. This is because their truth can be predicted from their logical form.

Each formula will be true for any clause as long as each clause is the same.

Sentence c is also necessarily true as shown by its logical form. This form will be true whatever subject and predicate we insert for X and Y, for example:

47 All birds that fly are birds.

The truth of sentence 46d depends on the meaning of individual words like beat and lose, and not any logical form because if we replace the verbs with other verbs, we cannot predict that the resulting sentence will also be analytically true for example:

48 If Gina attacks Becky then Becky beats Gina.

This sentence might be true, or not: we cannot tell just from the sentence. Sentence 46d is necessarily true because of the semantic relationship in English between the verbs beat and lose. This kind of necessary truth has not traditionally been a concern of logicians, because its effects cannot easily be reduced to general rules: it relies on the very varied and individual lexical relations between single items.

ENGL337 SEMANTICS

Handout 6

ENTAILMENT AND PRESUPPOSITION

Entailment

Entailment is the principle that under certain conditions the truth of one statement ensures the truth of a second statement. This is expressed by the claim that there are fixed truth relations between sentences which hold regardless of the empirical (contingent) truth of the sentences. Consider the relationship between sentences 49a and b below, where a is said to entail b:

- 49 a. The criminal killed the president.
 b. The president died.

Without reasoning, We immediately know that 49a leads to b because of our knowledge of English. A truth-based definition of entailment is given in 50:

50 Entailment defined by truth: A sentence p entails a sentence q when the truth of the first p guarantees the truth of the second q, and the falsity of the second q guarantees the falsity of the first p.

We can see how this would work for our examples:

51 **Step 1:** If p (The criminal killed the president) is true, then q (The president died) is automatically true..

Step 2: If q is false, then p is also false.

Step 3: Then p entails q.

Note if p is false then we can't say anything about q; it can be either true or false. Also, if q is true, p could be true or false.

Sources of entailment:

Lexical: the relationship of entailment between 49a and b derives from the lexical relationship between kill and die. (a case of hyponymy where the meaning of kill contains die).

Or 52 below entails sentence 53:

52 I bought a dog today.

53 I bought an animal today.

This is entailment by inclusion.

syntactic: for example, active and passive versions of the same sentence will entail one another. Sentence 54 below entails 55, and vice versa:

54 The Pharos built this tomb.

55 This tomb was built by Pharos.

This type of entailment is referred to as **paraphrase which is defined as** sentences that have the same set of entailments, or **mutually entail** each other; p entails q and q entails p.

In sentences 56 and 57 below, we have entailment through synonymy:

56 Alice owns this book.

57 This book belongs to Alice.

No entailment occurs through contradiction.

58 Mr. Jones stole my car.

59 Mr. Jones did not steal my car.

To check for entailment, we can use the negation test.

Follow these steps:

1 – Take any proposition p.

2 – Assume any proposition q to be entailed by p.

3 – Make q negative.

4 – Conjoin p with not-q using and.

If the result is a contradiction or nonsense, then p entails q. But if the result is fully plausible, then p doesn't entail q.

Apply this test to the following propositions:

60 a All trees are green. (p)

 b. My tree is green. (q)

61 a. All trees are green. (p)

 b. My tree is burnt. (q)

Presupposition

It refers to the hidden or implicit assumption in a sentence.

In the following examples the a sentence is said to presuppose the b sentence:

62 a. He's stopped turning into a nerd every exam.

 b. He used to turn into a nerd every exam.

63 a. Her husband is a fool.

 b. She has a husband.

64 a. I don't regret leaving my town.

 b. I left my town.

65 a. The Prime Minister of Palestine is in Ramallah today.

 b. Palestine has a prime minister.

66 a. I do regret leaving my town.

- b. I left my town.

These sentences presuppose the existence of something (especially by the use of a name or definite description), or the occurrence of an event, and make claims that can either be true or false.

In terms of truth relation, presupposition is defined as follows:

67 **Step 1:** If p (the presupposing sentence) is true then q (the presupposed sentence) is true.

Step 2: If p is false, then q is still true.

Step 3: If q is true, p could be either true or false.

This definition shows us an important difference between entailment and presupposition. If we negate an entailing sentence, then the entailment fails; but negating a presupposing sentence allows the presupposition to survive. Take for example the entailment pair in 68:

- 68 a. I saw my father today.
 b. I saw someone today.

If we negate 68a (I didn't see my father today), then it no longer entails (saw someone today). This sentence no longer automatically follows from the preceding sentence: again it might be true, we just don't know. Compare this with the presupposition pair:

- 69 a. The mayor of Ramallah is in town.
 b. There is a mayor of Ramallah.

If we negate 69a to form (The mayor of Ramallah isn't in town), the resulting sentence still has the presupposition (There is a mayor of Ramallah).

Approaches to Presupposition

We can identify two possible types of approach to presupposition, arising from different ways of viewing language.

The first approach represents the semantic view, i.e., sentence based. In this approach, sentences are viewed as external objects: we don't worry too much about the process of producing them, or the individuality of the speaker or writer and their audience. Meaning is seen as an attribute of sentences rather than something constructed by the participants. Semantics then consists of relating a sentence-object to other sentence-objects and to the world. This is the same approach used in identifying truth values and truth conditions.

The second approach represents the interactional view, i.e., pragmatic-based. It views sentences as the utterances of individuals engaged in a communication act.

This approach views presupposition as one aspect of a speaker's strategy of organizing information for maximum clarity for the listener. The speaker highlights a particular element of a sentence depending on his and listener's knowledge as shown in 70a and b:

70. a. Ali's BROTHER is smart. (Ali has a brother).
 b. Ali's brother is SMART. (X (someone) is smart)

Presupposition triggers

Triggers refer to the words and constructions that produce presuppositions. Some of these triggers derive from syntactic structure such as the following:

the cleft construction in 71 and **the pseudo-cleft** in 72 share the presupposition in 73, and some forms of subordinate clauses, **time adverbial clauses** in 74, and **comparative clauses** in 75:

- 71 It was his behavior with children that bothered me.
72 What bothered me was his behavior with children.
73 Something bothered me.
74 a. I was riding motorcycles before you learned to walk.

- b. You learned to walk.
- 75 a. He's even more supportive than you are.
- b. You are supportive.

Lexical triggers: These are the presuppositions which are produced by the presence of certain words especially verbs.

Factive verbs: These are the verbs which presuppose the factual truth of their complement clause such as regret and realize. Compare sentences 76 and 77 below: only the sentence with the factive realize presupposes 78. There is no such presupposition with the non-factive verb think.

- 76 Clive realized that Alice was absent.
- 77 Clive thought that Alice was absent.
- 78 Alice was absent.

Similarly compare 79-81:

- 79 Sheila regretted eating the banana.
- 80 Sheila considered eating the banana.
- 81 Sheila ate the banana.

In addition, we have factive predicates:

She was glad that he decided to study medicine.

He was aware that she was writing a new novel.

Judgment verbs: Some verbs of judgment produce presuppositions. Compare 82-84 below:

- 82 John accused me of telling her.
- 83 John blamed me for telling her.
- 84 I told her.

Here the verb, blame, produces the presupposition in 84, while accuse, does not.

Aspectual verbs: Examples: *start*, *begin*, *stop as in 85-86* where the a sentences presuppose the b sentences:

- 85 a. Judy started smoking cigars.
 b. Judy used not to smoke cigars.
- 86 a. Michelle stopped seeing horror movies.
 b. Michelle used to see horror movies.

Presuppositions and context

Presupposition is sensitive to context. While a given sentence always produces the same set of entailments, this is not true of presuppositions. Levinson (1983) gives as an example the type of presupposition usually triggered by time adverbial clauses, for instance 87a presupposing 87b below:

- 87 a. She cried before she finished her thesis.
 b. She finished her thesis.

However, if we change the verb, as in 88a below, the presupposition 88b is no longer produced:

- 88 a. She died before she finished her thesis.
 b. She finished her thesis.

Why is this? It is argued that in 88 the presupposition is blocked or canceled by our general knowledge of the world: quite simply we know that dead people do not normally complete unfinished theses. This characteristic is sometimes known as **defeasibility**, that is the canceling of presuppositions.

Another example of context sensitivity, pointed out by Strawson (1950), occurs with sentences like 89 and 90 below:

- 89 It was Harry who Alice loved.
- 90 It was Alice who loved Harry.

These sentences seem to describe the same essential situation of Alice loving Harry; or, to put it another way, we might say that they embody the same proposition. The difference between them is that they belong to different **conversational contexts**: whether the participants have been discussing Harry or Alice. As Strawson points out, they seem to give rise to different presuppositions, with 89 producing 91 and 90 producing 92:

91 Alice loved someone.

92 Someone loved Harry.

The same phenomenon is found with **intonation** in English, where stressing different parts of the sentence can produce different presuppositions. Using capitals to show the position of this stress, we can produce the presupposition in 91 above with 93 below, and 92 above with 94 below:

93 Alice loved HARRY.

94 ALICE loved Harry.

Another contextual feature is traditionally called the **projection problem**. Sometimes the presupposition produced by a simple clause does not survive when the clause is incorporated into a complex sentence. Levinson (1983: 191ff) gives the example of conditional clauses. Sentence 95a contains the factive verb regret and would normally produce the presupposition in 95b:

95 a. John will regret doing linguistics.

 b. John is doing/will do linguistics.

However, in the context of a conditional clause like 96 below, the presupposition 95b disappears:

96 If John does linguistics, he'll regret it.

The context here is the syntactic one provided by the adjoined clause.

ENGL337 SEMANTICS

Handout 7

PARTICIPANTS

Situation Participants and Thematic Roles

AGENT: the initiator of some action, capable of acting with volition, e.g.

6.2 David cooked the rashers.

6.3 The fox jumped out of the ditch.

PATIENT: the entity undergoing the effect of some action, often undergoing some change in state, e.g.

6.4 Enda cut back these bushes.

6.5 The sun melted the ice.

THEME: the entity which is moved by an action, or whose location is described, e.g.

6.6 Roberto passed the ball wide.

6.7 The book is in the library.

EXPERIENCER: the entity which is aware of the action or state described by the predicate but which is not in control of the action or state, e.g.:

6.8 Kevin felt ill.

6.9 Mary saw the smoke.

BENEFICIARY: the entity for whose benefit the action was performed, e.g.

6.11 Robert filled in the form for his grandmother.

6.12 They baked me a cake.

INSTRUMENT: the means by which an action is performed or something comes about, e.g.

6.13 She cleaned the wound with an antiseptic wipe.

6.14 They signed the treaty with the same pen.

LOCATION: the place in which something is situated or takes place, e.g.

6.15 The monster was hiding under the bed.

6.16 The band played in a marquee.

GOAL: the entity toward which something moves, either literally as in 6.17 or metaphorically as in 6.18:

6.17 Sheila handed her license **to the policeman**.

6.18 Pat told the joke **to his friends**.

SOURCE: the entity from which something moves, either literally as in 6.19 or metaphorically as in 6.20:

6.19 The plane came back from Kinshasa.

6.20 We got the idea from a French magazine.

STIMULUS: the entity causing an effect (usually psychological) in the EXPERIENCER, e.g.

6.21 John didn't like the cool breeze.

6.22 The noise frightened the passengers.

ACTOR: ACTOR expresses the participant which performs, effects, instigates, or controls the situation denoted by the predicate. So every AGENT is an ACTOR, but not the other way round: in 6.28 below the car is an ACTOR but not an AGENT. The contrast between 6.26 and 6.27 below identifies John as an AGENT in 6.26 but not 6.27:

6.26 John took the book from Bill in order to read it.

6.27 John received the book from Bill in order to read it.

6.28 **The car** ran over the hedgehog.

FORCE: an inanimate entity that causes something, for example :

6.34 1. **The wind** flattened the crops.

2. The sea wall was weakened by **the waves**.

RECIPIENT: a type of GOAL involved in actions describing changes of possession, such as:

6.35 1. He sold **me** this wreck.

2. He left his fortune **to the church**.

Grammatical Relations and Thematic Roles

In English, there is a tendency for subjects to be AGENTS, direct objects to be PATIENTS and THEMES, and INSTRUMENTS to occur as prepositional phrases. This need not always be the case as shown in two situations:

First, where roles are omitted (to be discussed below),
Secondly, where the speaker chooses to alter the usual matching between roles and grammatical relations, a choice often marked by an accompanying change of verbal voice.

Thematic role omission in 6.47-49 below:

6.47 Ursula broke the ice with a pickaxe.

6.48 The pickaxe broke the ice.

6.49 The ice broke.

In 6.47 Ursula is the AGENT and subject, the ice is PATIENT and direct object, and the pickaxe, the INSTRUMENT, is in a prepositional phrase. In 6.48 the AGENT is omitted and now the INSTRUMENT is subject; and finally in 6.49 with no AGENT or INSTRUMENT expressed, the PATIENT becomes subject. The verb break, unlike raise, allows all three thematic roles to occupy subject position. Several writers have suggested that this process of different roles occupying the subject position is a hierarchical process, not only in English but across many languages. The observation is that when speakers are constructing a sentence, they tend to place an AGENT into subject position, the next preference being for a RECIPIENT or BENEFICIARY, then THEME/PATIENT, then other roles. From our English examples, it seems that INSTRUMENT is then preferred to LOCATION. This is sometimes described as an **implicational hierarchy** shown in 6.50:

6.50 AGENT > RECIPIENT/BENEFICIARY > THEME/PATIENT > INSTRUMENT > LOCATION

It's not common to find examples with LOCATION as subject. Here are a couple of examples:

6.51 A. This cottage sleeps five adults.

B. The table seats eight.

but the other positions on the hierarchy occur regularly, as we can see from the following examples:

6.52 AGENT subjects:

The thief stole the wallet.

Fred jumped out of the plane.

6.53 EXPERIENCER subjects:

I forgot the address.

Your cat is hungry.

6.54 RECIPIENT subjects:

She received a demand for unpaid tax.

The building suffered a direct hit.

6.55 PATIENT subjects:

The bowl cracked.

Una died.

6.56 THEME subjects:

Joan fell off the yacht.

The arrow flew through the air.

6.57 INSTRUMENT subjects:

The key opened the lock.

The scalpel made a very clean cut.

Verbs and Thematic Role Grids

The lexical information for verbs includes not only how many arguments a verb requires (i.e. whether it is intransitive, transitive, etc.) but also what thematic roles its arguments may hold.

In the generative grammar literature, this listing of thematic roles is often called a thematic role grid, or theta-grid. 2 A simple example might be:

6.58 **put** V: <AGENT, THEME, LOCATION>

This entry tells us that put is a three-argument, or ditransitive, verb and spells out the thematic roles the three arguments may carry. This is shown in sentence 6.59:

6.59 John_{AGENT} put the book_{THEME} on the shelf_{LOCATION}

Not all nominals in a sentence are arguments of a verb and thus specified in verbal theta-grids in the lexicon. Consider the role of argument played by the prepositional phrase in the bathroom in 6.60 below and its status as a non-argument in 6.61:

6.60 [S Roland [VP put [NP the book] [PP in the bathroom]]]

6.61 [S Roland [VP read [NP the book]] [PP in the bathroom]]

The square brackets in 6.60-1 reflect the fact that while in the bathroom is an argument of the verb put, explaining why it cannot be omitted:

6.62 *Roland put the book.

it is not an argument of the verb read, on the other hand, which can form a sentence without it:

6.63 Roland read the book.

In grammatical terms, in the bathroom is an argument in 6.60, and an adjunct in 6.61. As well as not being required by the verb, adjuncts are seen as less structurally attached to the verb.

Another way of making this distinction is to distinguish between participant roles and non-participant roles. The former correspond to our arguments: they are needed by the predication, the latter are optional adjuncts which give extra information about the context, typically information about the time, location, purpose, or result of the event. Of course only participant roles will be relevant to verbal thematic grids.

Listing thematic grids reveals that verbs form classes which share the same grids. For example English has a class of TRANSFER, or GIVING, verbs which in one subclass includes the verbs give, lend, supply, pay, donate, contribute. These verbs encode a view of the transfer from the perspective of the AGENT. They have the thematic grid in 6.66; 6.67 is an example:

6.66 V: <AGENT. THEME. RECIPIENT>

6.67 Barbara (AG) loaned the money(TH) to Michael (RE.)

Another subclass of these TRANSFER verbs encodes the transfer from the perspective of the RECIPIENT. These verbs include receive, accept, borrow, buy, purchase, rent, hire. Their thematic grid is in 6.68, with an example in 6.69, paralleling 6.67 above:

6.68 V: <RECIPIENT THEME, SOURCE>

6.69 Michael (RE) borrowed the money (TH) from Barbara (SO.)

Causation

We can see the importance of causation to thematic role selection if we look at the English causative-inchoative verb alternation. In this alternation the same verb can occur in an intransitive form where the one argument is an entity undergoing a change of state, as in 6.90a below, or a transitive form which adds a causer role as in 6.90b:

6.90 a. The water boiled.

b. Helen boiled the water.

This pattern allows the speaker to either select or omit a causing entity. In terms of thematic roles such verbs allow the cause to be an AGENT as in 6.90b above, a non-volitional cause (or FORCE) as in 6.91b below, or an instrument as in 6.92b:

6.91 a. The ice melted.

b. The sun melted the ice.

6.92 a. The door opened.

b. The key opened the door.

This type of alternation is very common across the languages of the world. In English not all change of state intransitives allow a corresponding causative transitive, as 6.93 below shows, nor all causative transitives an intransitive inchoative, as shown by 6.94:

6.93 a. The fruit trees blossomed.

b. ?The early spring blossomed the fruit trees.

6.94 a. The buyers demolished the house.

b. ?The house demolished.

In English, when the same form of the verb occurs in both alternants, as in 6.91b and 6.92b, they are referred to as lexical causatives.

In English we can compare the inchoative in 6.97a with the causatives in 6.97b-d:

- 6.97 a. The car stopped.
- b. I stopped the car.
- c. I made the car stop.
- d. I had the car stopped.

The lexical causative in b implies, depending on context, that the speaker stopped the car in the normal way that this is done, perhaps by as a driver braking or by some other direct action. The versions in c and d are often termed periphrastic causatives because they employ two verbs in a complex clause construction. The version with make in c suggests that the speaker caused the car to stop in an unusual way or perhaps had to overcome resistance, while d with have implies the presence of other implicit actors in the event.

Voice

In grammar, the **voice** of a verb describes the relationship between the action (or state) that the verb expresses and the participants identified by its arguments (subject, object, etc.). When the subject is the agent or doer of the action, the verb is in the active voice. When the subject is the patient, target or undergoer of the action, the verb is said to be in the passive voice.

Passive voice

The grammatical category of voice affords speakers some flexibility in viewing thematic roles. Many languages allow an opposition between active voice and passive voice. We can compare for example the English sentences in 6.98 below:

- 6.98 a. Billy groomed the horses.
- b. The horses were groomed by Billy.

In the active sentence 6.98a Billy, the AGENT, is subject and the horses, the PATIENT, is object. The passive version 6.98b, however, has the PATIENT as subject and the AGENT occurring in a prepositional phrase, the structure often associated with INSTRUMENT. This is a typical active-passive voice alternation: the passive sentence has a verb in a different form - the past participle with the auxiliary verb be - and it allows the speaker a different perspective on the situation described. This passive sentence (6.98b) allows the speaker to describe the situation from the point of view of the PATIENT rather than that of the AGENT. In some cases passive constructions are used to obscure the identity of an AGENT, as in 6.99 below:

- 6.99 The horses were groomed.

Here the AGENT is so far backgrounded that it becomes merely an implied participant. Many writers describe this foregrounding of the PATIENT and backgrounding of the AGENT in terms of promoting the PATIENT and demoting the AGENT in terms of discourse or topic prominence, or as reflecting the speaker's greater empathy with the PATIENT rather than the AGENT. There are other lexical and syntactic strategies that alter perspective in this way. For example in 6.100 below the alternation relies in part on the lexical relation between in front of and behind; while in 6.101 it is accomplished by pseudo-cleft in a and cleft in b:

6.100 a. The house stood in front of the cliff.

b. The cliff stood behind the house.

6.101 a. What Joan bought was a Ferrari.

b. It was Joan who bought the Ferrari.

In 6.101 above the same situation is described but in a the speaker is interested in Joan's purchase, while in b she is interested in the Ferrari's purchaser. This kind of choice of perspective presumably depends on a speaker's judgments of conversational salience. We can use the terms Figure and Ground to describe this kind of linguistic perspective: if we call the situation described a scene, then the entity that the speaker chooses to foreground is the figure, and the background is the ground. So in 6.100a above the house is the figure and the cliff the ground, and vice versa in 6.100b.

Passive constructions allow the foregrounding of roles other than PATIENT. In 6.102-4 we see English examples of THEME, PERCEPT, and RECIPIENT roles occurring as the subject of passives:

6.102 This money was donated to the school. (THEME)

6.103 The UFO was seen by just two people. (PERCEPT)

6.104 He was given a camera by his grandmother. (RECIPIENT)

SPEECH ACTS

We use language for many purposes. We tell others what we know or think we know, we express our feelings, ask questions, make requests, protest, criticize, insult, apologize, promise, thank, say hello and goodbye. Language seems to have as many different functions as there are occasions for using language, but for all the apparent diversity the basic uses of language are rather limited. In the following pages, we recognize some of these utterances or **speech acts**, classified according to their general purpose. The description here will apply to written discourse, and therefore to writer and reader, as much as to spoken discourse. Nevertheless, we use the term speaker to include writer and the term addressee to include reader as well as hearer.

When a speaker makes an utterance containing a referring expression, he carries out a certain act, an act of referring. Referring is a linguistic act, but it is possible to carry out all sorts of other acts using language. The language uses given above are examples of such acts. Acts like these are aspects of utterance meaning and not of sentence meaning. For example, take the sentence *There's a piece of fish on the table. What could it be uttered to express?* Complaint? Request to do something? Warning? Blaming?

Analysis of speech acts

In every speech act we can distinguish three things, following J. L. Austin.

What is said, the utterance, can be called the **locution**. What the speaker intends to communicate to the addressee is the **illocution**. The message that the addressee gets, his interpretation of what the speaker says, is the **perlocution**. If communication is successful, the illocution and the perlocution are alike or nearly alike.

Such communication is guided by four rules, which Grice called maxims: the maxims of quantity, relevance, manner and quality.

The maxim of quantity requires the speaker to give as much information as the addressee needs but no more or no less. The addressee, being aware of this maxim, assumes that the speaker is not withholding information and is not saying more than necessary.

The maxim of relevance requires us, as speakers, to make our utterances relative to the discourse going on and the contexts in which they occur. Correspondingly, as addressees we expect that what we hear has such relevance.

The maxim of manner is to be orderly and clear and to avoid ambiguity.

The maxim of quality is to say only what one believes to be true. Questions and requests cannot be either true or false, so this maxim applies only to the giving of information.

These maxims are an expansion of Grice's cooperative principle which refers to the assumption that conversational partners normally attempt to be informative, truthful, relevant, and clear. This is considered key to successful communication as being cooperative requires the speaker to be as helpful to the hearer as possible. The fact that speakers are assumed to follow this principle is used by hearers in making inferences from the utterances they hear.

Participants in a conversation do not always literally and explicitly say everything. They suggest and imply things with their utterances. This is referred to as conversational implicature. conversational implicature is an indirect or implicit speech act: what is meant by a speaker's utterance that is not part of what is explicitly said. This is opposite of explicature, which is an explicitly communicated assumption. For example, I asked my wife "Do any of John's daughters speak a foreign language?" She replied 'Mary speaks French'. The implicature is that Mary is John's daughter.

Another example, a speaker knows that all students attended the lecture. He is asked "Did many students show up for today's class?" He replied "Some of them did." The implicature is that not all students showed up.

Sometimes, speakers violate these maxims. Examples:

"A: Did you finish your paper?"

B: First, I did the outline, then I checked the references, and then I fixed the topic sentence, I corrected some typos, yes, I finished the paper."

This is a violation of the quantity maxim.

"A: Do you know what time it is?"

B: Yes."

This is also a violation of the maxim of quantity.

"A: Did you get the groceries?"

B: I met your friend, Mo."

This is a violation of relevance.

“A: Mo is unemployed, would you recommend him for a job?”

B: Oh, well! Mo dresses nicely and I believe his neighbor would. I saw them together yesterday.

Both maxims of relevance and quantity are violated.

Grice distinguished between violating the maxims and flouting them. If a speaker deliberately lies, expecting the addressee to believe what he says, he is violating the maxim of quality. If he exaggerates, expecting the addressee to recognize the exaggeration, he is flouting the maxim. “Dozens of people came to the party,” said when only a few people attended, is either an outright lie or an instance of hyperbole, depending on what the speaker intends the addressee to understand, which in turn depends on the speaker’s knowledge of the addressee.

Flouting a maxim occurs when speakers do not intentionally follow the maxims in order to convey a meaning different from what is literally said. The hearer infers the message on the basis of the information the speaker or context provides. This is the case with the job recommendation exchange above. Speaker B is not only violating the quantity and relevance maxims but also flouting them. He doesn’t want to recommend Mo for a job but didn’t literally say that. The speaker sometimes flouts a maxim for the purpose of producing a negative effect as is the case with sarcasm and irony.

An utterance has a purpose. In order to achieve that purpose—to be appropriate to that purpose—several conditions are necessary: the lexical content of the utterance must be appropriate, the social situation in which it occurs must be appropriate, the speaker must be sincere in what he says, and the hearer(s) accept the utterance as having that purpose.

Kinds of Speech Acts

1. Assertive utterances

In the assertive function speakers and writers use language to tell what they know or believe; assertive language is concerned with facts.

The purpose is to inform.

I voted for my neighbor in the last election.

Most plastics are made from soy beans.

The municipality building is one KM from downtown.

This is language concerned with knowledge, with cognition. It deals with data, what exists or existed, what is happening or has happened—

or not. So assertive utterances are either true or false, and generally they can be verified or falsified.

The above sentences are indirect assertives.

Direct assertive utterances start with *I* or *we* and an assertive verb:

I say that I voted for my neighbor in the last election.

We declare that most plastics are made from soy beans.

I can now announce that the municipality building is 1 Km from downtown.

Reported assertive utterances also include assertive verbs: Dave *announced that he is voting for my neighbor ...*, and so on.

Assertive verbs are, in English, followed by a full clause. They include *allege*, *announce*, *agree*, *report*, *remind*, *predict*, *protest*. They are independent of time or aspect and are neutral with respect to who is involved in what is reported.

Focus on information: announce, disclose, express, indicate, mention, proclaim, relate, report

Focus on truth-value of utterance:

Affirm, allege, assert, certify, concede, guarantee, swear, attest, bet, claim, contend, maintain

Focus on speaker's commitment or involvement in what is reported:

Confide, deny, profess, protest

Focus on manner of communicating:

Emphasize, hint, imply, intimate, stress,

Focus on the nature of the message:

dictate [a spoken message, written by another person], narrate, recount, [the utterance is a unified series of events], preach, [the utterance has moral or ethical content]

Focus on aspect:

predict [the utterance is about possible future events], recall, [the utterance is about previous events],

2 Performative utterances

I declare this meeting adjourned.

I warn you not to come any closer.

I admit that I took 50\$ from the coffee money.

Speech acts that actually describe the act they perform are called PERFORMATIVE. They PERFORM some act and SIMULTANEOUSLY DESCRIBE that act.

Example 'I promise to repay you tomorrow' is performative because in saying it the speaker actually does what the utterance describes, i.e. he promises to repay the hearer the next day. That is, the utterance both describes and is a promise.

By contrast, the utterance 'John promised to repay me tomorrow', although it describes a promise, is not itself a promise. So this utterance does not simultaneously do what it describes, and is therefore not a performative.

More examples of performative utterances include bids, blessings, firings, baptisms, arrests, marrying, declaring a mistrial with the verbs *bet*, *declare*, *baptize*, *name*, *nominate*, *pronounce*.

There are limitations on what can be a performative utterance. First, the subject of the sentence must be *I* or *we*; "He declares this meeting adjourned" is not a performative utterance, as the term is used here. However, we need to distinguish between explicit and implicit performatives. "I declare this meeting adjourned" is an explicit performative; "This meeting is adjourned," if spoken by the same person, is an implicit one. Second, the verb must be in the present tense. And, perhaps most important, the speaker must be recognized as having the authority to make the statement and the circumstances must be appropriate. "I pronounce you man and

wife” and “I declare this a mistrial” are valid only if spoken by an appropriate person in socially determined situations.

I admit, I inform, I advise, I claim, etc. are all verbs which describe speech acts. We classify them as performative verbs. for example, ‘I sentence you to be hanged by the neck’ is a performative utterance.

Punish is not a performative verb because, for example, ‘I punish you’ is not a performative utterance.

Not all performative utterances have the pattern of 1st person singular subjects and present tense verbs. There are exceptions to this pattern as shown in the following examples:

You are hereby forbidden to leave this room; performative, but with a 2nd person subject.

All passengers on flight number forty-seven are requested to proceed to gate ten; performative but with 3rd person plural subject.

We thank you for the compliment you have paid us; performative but with 1st person plural subject.

3 **Constative Utterances**

A CONSTATIVE utterance is one which makes an ASSERTION (i.e. it is often the utterance of a declarative sentence) but is NOT performative.

Example ‘I’m trying to get this box open with a screwdriver’ is a constative utterance, because it makes an assertion about a particular state of affairs, but is not performative, i.e. the utterance does not simultaneously describe and perform the same act.

4 **Verdictive utterances**

I accuse you of putting on airs.

I congratulate you for performing so well.

The Mayor blamed the media for not accurately reporting his accomplishments.

The first and second sentences are verdictive utterances. The third sentence is the report of a verdictive utterance.

Verdictives are speech acts in which the speaker makes an assessment or judgement about the acts of another, usually the addressee. These include ranking, assessing, appraising, condoning. Verdictive verbs include *accuse*, *charge*, *excuse*, *thank* in the explicit frame *I _____ you of/for _____-ing*.

Since these utterances present the speaker's assessment of the addressee's previous action(s) or of what has befallen the addressee, they are retrospective.

The action is viewed positively:

commend...for, compliment...on, congratulate...for, honor...for, praise...for

The action is beneficial to the speaker:

thank...for, grateful to...for

The action is viewed negatively:

accuse...of, charge...with, blame...for [presupposes truth of performance],
admonish...for, criticize...for, scold...for,

5. Expressive utterances

I acknowledge that I didn't do what I should have done.

We admit that we were mistaken.

I apologize for having disturbed you.

Whereas a verdictive utterance is about what the addressee has previously done, an expressive utterance springs from the previous actions—or failure to act—of the speaker, or perhaps the present result of those actions or failures. Expressive utterances are thus retrospective and speaker-involved.

The most common expressive verbs (in this sense of 'expressive') are: acknowledge, admit, confess, deny, apologize.

6. Directive utterances

Directive utterances are those in which the speaker tries to get the addressee to perform some act or refrain from performing an act.

Thus a directive utterance has the pronoun *you* as actor, whether that word is actually present in the utterance or not:

(You) wait here.

Turn to page 164.

Don't (any of you) miss this opportunity to save.

A directive utterance is prospective; one cannot tell other people to do something in the past.

Three kinds of directive utterances can be recognized: commands, requests and suggestions. A **command** is effective only if the speaker has some degree of control over the actions of the addressee.

I (hereby) order you to appear in court next Monday at 10 a.m.

You must appear in court next Monday at 10 a.m.

I'm telling you not to waste your time on that.

Don't waste your time on that.

A **request** is an expression of what the speaker wants the addressee to do or refrain from doing. A request does not assume the speaker's control over the person addressed.

I appeal to you to help as much as you can.

We beg you to stay out of the way.

The receptionist asked the people in the waiting room not to smoke there.

Suggestions are the utterances we make to other persons to give our opinions as to what they should or should not do.

I advise you to be prompt; I warn you not to be late.

We suggest you (should) pay more attention to what you're doing.

Positive expressions:

advise counsel recommend

Negative expressions:

caution warn

7. Commissives

Speech acts that commit a speaker to a course of action are called **commissive utterances**. These include promises, pledges, threats and vows.

Commissive verbs are illustrated by *agree, ask, offer, refuse, swear*, all with following infinitives. They are prospective and concerned with the speaker's commitment to future action.

I promise to be on time.

We volunteer to put up the decorations for the dance.

A commissive predicate is one that can be used to commit oneself (or refuse to commit oneself) to some future action. The subject of the sentence is therefore most likely to be *I* or *we*.

Further, the verb must be in the present tense and there is some addressee, whether the utterance shows it or not, since the speaker must be making a commitment to somebody.

Commissive predicates can be classified this way:

Response to directive

positive response:

agree consent

[*agree* is more common]

negative response:

refuse decline

[*refuse* is stronger, *decline* more formal, more polite]

Self-motivated (not response to directive)

benefactive:

offer volunteer

[*volunteer* suggests a more formal commitment]

malefactive:

threaten

Focus on speech act

pledge promise swear

[*promise* is unmarked; a pledge is a solemn promise made in public; to swear is to take a semi-religious oath]

8. Phatic utterances

No one is likely to think that questions like “How are you?,” “How’re you doing?” are really meant to get information. We don’t assume that statements such as “I’m glad to meet you” or “So nice to see you again” are necessarily expressions of deep feeling on the part of the speaker. The purpose of utterances like these, **phatic utterances**, is to establish rapport between members of the same society. Phatic language has a less obvious function than the types discussed above but it is no less important. Phatic utterances include greetings, farewells, polite formulas such as “Thank you,” “You’re welcome,”

“Excuse me” when these are not really verdictive or expressive. They also include all sorts of comments on the weather, asking about one’s health, and whatever is usual, and therefore expected, in a particular society. Stereotyped phrases are common for conveying good wishes to someone starting to eat a meal, beginning a voyage, undertaking a new venture, or celebrating a personal or social holiday.

9. Perlocutionary Act

The PERLOCUTIONARY ACT (or the PERLOCUTION) carried out by a speaker making an utterance is the act of causing a certain effect on the hearer and others. Example If I say ‘There’s a hornet in your left ear’, it may well cause you to panic, scream and scratch wildly at your ear. Causing these emotions and actions of yours is the perlocution of my utterance, or the perlocutionary act I perform by making that utterance.

Another example is:

Neighbor to recently bereaved widow: ‘I was so sorry to hear about your loss’

Possible effect: Awareness of her grief floods back into hearer’s mind and she begins to weep. Another possible effect: Hearer, expecting the utterance, gives a prepared reply: ‘Thank you. It was a shock, but I must get used to it.’

10 The ILLOCUTIONARY ACT

The ILLOCUTIONARY ACT (or the ILLOCUTION) carried out by a speaker making an utterance is the act viewed in terms of the utterance’s significance within a conventional system of social interaction. One way to think about the illocutionary act is that it reflects the intention of the speaker in making the utterance in the first place. Illocutions are acts defined by social conventions, acts such as accosting, accusing,

admitting, apologizing, challenging, complaining, condoling, congratulating, declining, deploring, giving permission, giving way, greeting, leavetaking, mocking, naming, offering, praising, promising, proposing marriage, protesting, recommending, surrendering, thanking, toasting.

Example Saying: 'I'm very grateful to you for all you have done for me' performs the illocutionary act of thanking, which appears to be the speaker's intention in making the utterance.

By means of illocutionary acts, speakers manipulate, negotiate, and interact with other speakers. Here is an example involving a social encounter in which illocutions are exchanged.

speaker A: 'Hello' (greeting)

speaker B: 'Hello' (greeting)

speaker A: 'You took the last biscuit' (accusation)

speaker B: 'No, I didn't' (denial)

Generally speaking, the illocutionary act inherent in an utterance is intended by the speaker, is under his full control, and if it is evident, it is so as the utterance is made, whereas the perlocutionary act performed through an utterance is not always intended by the speaker, is not under his full control, and is usually not evident until after the utterance is made.

It is much more usual to talk of a speaker 'trying' to carry out a perlocutionary act (e.g. trying to amuse, or shock, or annoy someone) than it is to talk of a speaker 'trying' to carry out an illocutionary act (e.g. trying to apologize, or to offer someone something, or to complain about something).

In the latter case, but not the former, there is the strong implication that one is being actually prevented from speaking. Because of these differences, it is possible in very many cases to classify acts as either illocutionary or perlocutionary.

Examples The act of addressing someone is illocutionary because it is something that

a speaker can decide for himself to do, and be sure of doing it when he decides to do it. The hearer (the addressee) in a speech situation cannot decide whether to be addressed or not (although he may ignore the fact that he is being addressed, or possibly not realize that he is being addressed).

The act of persuading someone of something, on the other hand, is perlocutionary, because the speaker cannot be sure of persuading the hearer, no matter how hard he tries. The hearer can decide whether to be persuaded or not.

Felicity Conditions

The question we now pose is: by what system do speakers know when such social moves are appropriate? That is, in what circumstances are illocutions used? The notion of felicity condition needs to be introduced in order to give a plausible answer to this question.

The FELICITY CONDITIONS of an illocutionary act are conditions that must be fulfilled in the situation in which the act is carried out if the act is to be said to be carried out properly, or felicitously.

Examples One of the felicity conditions for the illocutionary act of ordering is that the speaker must be superior to, or in authority over, the hearer. Thus, if a servant says to the Queen 'Open the window', there is a certain incongruity, or anomalousness, or

infelicity in the act (of ordering) carried out, but if the Queen says 'Open the window' to the servant, there is no infelicity.

A felicity condition for the illocutionary act of accusing is that the deed or property attributed to the accused is wrong in some way. Thus one can felicitously accuse someone of theft or murder, but normally only infelicitously of, say, being a nice guy, or of helping an old lady to cross the road.

Felicity conditions are conditions that must be satisfied by the world if an illocutionary act is felicitous (or 'appropriate'). For example, the utterance 'There is a cat on the table' is felicitous only if in the world at the time of the utterance there actually is a table with a cat on it.

All types of sentence, declarative, interrogative, and imperative, can be uttered to carry out illocutionary acts that may be felicitous or infelicitous.

Sincerity Conditions: a subtype of felicity condition.

A SINCERITY CONDITION on an illocutionary act is a condition that must be fulfilled if the act is said to be carried out SINCERELY, but failure to meet such a condition does not prevent the carrying out of the act altogether.

Example A sincerity condition on apologizing is that the apologizer believes that the thing apologized for is wrong in some way. Thus, if John enters a room at a certain time, believing that to do so is wrong in some way (e.g. impolite, tactless, sacrilegious) and he says 'I'm sorry to come in here at this moment', then he has apologized, and apologized sincerely. But if he says the same thing in the same circumstances, except that he does not believe that what he has done is wrong in any way, then he has still apologized, but insincerely.

DIRECT AND INDIRECT ILLOCUTIONS

The DIRECT ILLOCUTION of an utterance is the illocution most directly indicated by a LITERAL reading of the grammatical form and vocabulary of the sentence uttered. The INDIRECT ILLOCUTION of an utterance is any further illocution the utterance may have.

Example The direct illocution of 'Can you pass the salt?' is an enquiry about the hearer's ability to pass the salt. The indirect illocution is a request that the hearer pass the salt.

The difference between direct and indirect illocutions is seen through the fact that a pedantic or deliberately unhelpful reply can be given to an utterance which has both kinds of illocutions. For example, in reply to 'I must ask you to leave' one might say, thwarting the intentions of the first speaker: 'Must you?'

The question facing us is:

By what rules can a language user work out the indirect illocution of an utterance from its direct illocution? For example, if you ask me if I can pass the salt, how do I know that you are requesting me to pass the salt rather than enquiring about my physical ability to pass it?

The notion of felicity condition is crucial in answering this question.

The question 'Can you pass the salt?' overtly draws attention to one of the felicity conditions of the act of requesting; the speaker must believe that the hearer is

physically able to do the thing that he (the hearer) is requested to do. It is as if the speaker goes about getting the salt passed to him by carefully ensuring that the necessary preconditions for having his request granted are fulfilled.

Illocutionary acts are classified into different categories, depending on the type of interaction between speaker and hearer that they bring about. Two classes of illocutionary acts are directives and commissives (covered earlier).

11-12. Phonic Act and Propositional Act

The PHONIC ACT involved in an utterance is the physical act of making certain vocal sounds.

The PROPOSITIONAL ACT involved in an utterance consists in the mental acts of REFERRING (to certain objects or people in the world) and of PREDICATING (i.e. coupling predicates to referring expressions).

For example if A parrot says 'Fire', we have a phonic act but not a propositional act because a parrot doesn't understand the meaning of what it says.