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Course in Linguistics.

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I. Language politics

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1. Recognition of a language

Language is so basic to our existence that life without words is difficult to envision. Because speaking, listening, reading, and writing are such fundamental aspects of our daily lives, they seem to be so ordinary skills. Executed easily and effortlessly, language use guides us through our day. It facilitates our relationships with others and helps us understand words and events and the arts and sciences. However, even the simplest forms of language use are based on complicated processes. Bertrand Russell once remarked, *"No matter how eloquently a dog may bark, he cannot tell you that his parents were poor but honest*". One of the properties attributed to language is that it is a uniquely human behavior. Virtually all human beings spontaneously acquire a language without overt instruction and relatively quickly during childhood, unless they possess handicapping conditions. Researches have not yet isolated any natural form of animal communication that embodies all of the features of language. They have probed the communicative systems of many animals, searching for the linguistic properties that define human language. Although bees, birds, whales, dolphins, and nonhuman primates are capable of fairly sophisticated message exchanges. Human language is characterized by its *hierarchical structure*. By this we mean that the message is divisible into smaller units of analysis.

Language politics is the way language and linguistic differences between peoples (as *nationalities*) are dealt with in the political arena. This could manifest as government recognition, as well as how language is treated in official capacities. Some examples:

Recognition (or not) of a language as an official language. Generally, this means that all official documents affecting a country or region are published in languages that are 'official', but not in those that are not. Evidence in a court of law may also be expected to be in an official language only.

In countries where there is more than one main language, there are often political implications in decisions that are seen to promote one group of speakers over another, and this is often referred to as language politics. An example of a country with this type of language politics is ***Belgium***.

In countries where there is one main language, immigrants seeking full citizenship may be expected to have a degree of fluency in that language ('language politics' then being a reference to the debate over the appropriateness of this). This has been a feature of Australian politics.

At various times minority languages have either been promoted or banned in schools, as politicians have either sought to promote a minority language with a view to strengthening the cultural identity of its speakers, or banning its use (either for teaching, or on occasion an entire ban on its use), with a view to promoting a national identity based on the majority language. An example of recent promotion of a minority language are Welsh or Leonese by the Leonese City Council, an example of official discouragement of a minority language is Breton.

2. Language politics

Language politics also sometimes relates to dialect, where speakers of a particular dialect are perceived as speaking a more culturally 'advanced' or 'correct' form of the language. Politicians may therefore try to use that dialect rather than their own when in the public eye.

Alternatively, at times those speaking the dialect perceived as more 'correct' may try to use another dialect when in the public eye to be seen as a 'man/woman of the people'.

To promote national identity, what are strictly dialects of the same language may be promoted as separate languages to promote a sense of national identity (examples include Danish and Norwegian, and Serbian and Croatian - the latter two also use different scripts for what is linguistically the same language - Cyrillic for Serbian and roman script for Croatian). Whether or not something is a language can also involve language politics, for instance, Macedonian.

The use of 'he' and other words implying the masculine in documents has been a political issue relating to women's rights.

The use of words which are considered by some to have negative implications to describe a group of people e.g. Gypsies (or even more negatively, 'Gypos') instead of Romani, or indeed using the term 'Gypsies' to cover "Traveller peoples" as well as Romanies.

'Political correctness' issues often stem from the use of words. For instance, some may object to the person in charge of an organisation being referred to as 'chairman', on the grounds that it implies a man must be in charge.

Co-existence of competing spelling systems for the same language, associated with different political camps. E.g.

- Debate on traditional and simplified Chinese characters
- Simplification of Russian orthography; proposals for such a reform were viewed as subversive in the late years of the Russian Empire and were implemented by the Bolsheviks in 1918, after which the "old orthography" became associated with the White movement.
- The two spelling systems for the Belarusian language, one of which is associated with the country's political opposition.

Language also in political matters used to parsue, to unify, to organise, to criticise aiming to reach the time of unifying all member of such political party.

The Moldovan Cyrillic alphabet preserved in the Transnistria.

3. Language - complex systems of communication

Language is the ability to acquire and use complex systems of communication, particularly the human ability to do so, and a language is any specific example of such a system. The scientific study of language is called linguistics.

Questions concerning the philosophy of language, such as whether words can represent experience, have been debated since Gorgias and Plato in Ancient Greece. Thinkers such as Rousseau have argued that language originated from emotions while others like Kant have held that it originated from rational and logical thought. 20th-century philosophers such as Wittgenstein argued that philosophy is really the study of language. Major figures in linguistics include Ferdinand de Saussure, Noam Chomsky and William C. Stokoe.

Estimates of the number of languages in the world vary between 5,000 and 7,000. However, any precise estimate depends on a partly arbitrary distinction between ***languages*** and ***dialects***. Natural languages are *spoken* or *signed*, but any language can be encoded into secondary media using auditory, visual, or tactile stimuli – for example, in *graphic writing*, *braille*, or *whistling*. This is because human language is *modality*-independent. Depending on philosophical perspectives regarding the definition of language and meaning, when used as a general concept, "language" may refer to the *cognitive* ability to learn and use systems of complex communication, or to describe the set of rules that makes up these systems, or the set of utterances that can be produced from those rules. All languages rely on the process of semiosis to relate signs to particular meanings. Oral and sign languages contain a phonological system that governs how symbols are used to form sequences known as words or morphemes, and a syntactic system that governs how words and morphemes are combined to form phrases and utterances.

Human language has the properties of productivity, recursivity, and displacement, and relies entirely on social convention and learning. Its complex structure affords a much wider range of expressions than any known system of animal communication. Language is thought to have originated when early hominins started gradually changing their primate communication systems, acquiring the ability to form a theory of other minds and a shared intentionality. This development is sometimes thought to have coincided with an increase in brain volume, and many linguists see the structures of language as having evolved to serve specific communicative and social functions. Language is processed in many different locations in the human brain, but especially in Broca's and Wernicke's areas. Humans acquire language through social interaction in early childhood, and children generally speak fluently when they are approximately three years old. The use of language is deeply entrenched in human culture. Therefore, in addition to its strictly communicative uses, language also has many social and cultural uses, such as signifying group identity, social stratification, as well as social grooming and entertainment.

Languages evolve and diversify over time, and the history of their evolution can be reconstructed by comparing modern languages to determine which traits their ancestral languages must have had in order for the later developmental stages to occur. A group of languages that descend from a common ancestor is known as a language family. The Indo-European family is the most widely spoken and includes English, Spanish, Portuguese, Russian, and Hindi; the Sino-Tibetan family, which includes Mandarin Chinese, Cantonese, and Standard Tibetan; the Afro-Asiatic family, which includes Arabic, Amharic, Somali, and Hebrew; the Bantu languages, which include Swahili, Zulu, Shona, and hundreds of other languages spoken throughout Africa; and the Malayo-Polynesian languages, which include Indonesian, Malay, Tagalog, Malagasy, and hundreds of other languages spoken throughout the Pacific. The languages of the Dravidian family that are spoken mostly in Southern India include Tamil, Telugu, Kannada and Malayalam. Academic consensus holds that between 50% and 90% of languages spoken at the beginning of the twenty-first century will probably have become extinct by the year 2100.

4. Global Language Policy

It has been over fifty years since UNESCO established as a core principle of education that children should receive instruction in their native language in at least the early years of school. Yet, worldwide it is common to see a difference between the language of home, and the language of instruction in school.

Globally we find tremendous language diversity. According to Ethnoloque, the majority of these thousands of languages are endangered, while there is a concentration of first-language speakers into only eight dominant languages.

The history of a large part of the world is the history of being colonized. Colonialism had the dual effect of denigrating and destroying indigenous languages, while establishing proficiency in the foreign colonial language as a gatekeeper to success and status. Modern language policies in the postcolonial world attempt to work around these issues by providing instruction in some of the local languages (e.g. South Africa and India), while at the same time teaching the language of the workplace, higher education, and international communication. In many cases, this language is English.

In other parts of the world, marginalized languages are being reclaimed through community action and advocacy. Heritage or community languages are taught and revitalized in non-formal settings through the efforts of their speakers.

Globalization continues to have a major effect on explicit or implicit languages policies in individual countries. It is becoming more widely accepted that in order to be highly successful in the contemporary world, being proficient in more than one language is a major advantage.

In a globalized world, those who can communicate effectively in more than one language and across cultures, have a great advantage.

Such language proficiency is critical for business, trade, diplomacy, and can help to promote mutual understanding and respect.

For students, learning more than one language can enrich their academic and life experiences and open doors to opportunities.

5. Language Policy around the World

Introduction The term language policy refers to rules set by authorities to govern the acquisition and/or use of languages. Some policy makers and analysts have used the term to apply to a wide variety of administrative levels ranging from international organisations (eg Van Els 2001); to world regions (e.g. Extra & Gorter 2001); countries (Van Els 1990; Lo Bianco 1987), to single educational institutions (Clyne 2001). Recently, the term has been expanded to include what is referred to as ìgrass roots language policyî, that is policy originating in or influenced by the affected members of the speech community (Hornberger 1996; Christ 1997). Most analyses of language policy are concerned with formal, governmentallybacked policies at the national or regional level aimed at language use within a country or region. Language policies fall in one of the following domains:

(1) corpus policy or the specification of the proper form a particular language should take;

((2) status policy or the appropriate ranking of particular languages; and

(3) foreign language policy which is concerned with the role and acquisition of languages based outside a country or region.

While these domains are conceptually distinct, in practice they may overlap. Fishman (2000) describes in detail how corpus and status policy intermingle. Foreign and domestic language policies are blended in situations like the status of French in Canada, the retention of colonial languages in Africa, and the status of trans-border languages in ethnic enclaves such as Swedish in Finland, German in Italy or French in Switzerland.

Corpus Policy

In many countries, a large portion of language policy is concerned with the prescription of the proper form a language should take. Corpus policy can take a variety of forms. In many of the least developed countries and among some aboriginal groups in developed countries, the principal activity in corpus policy is the development of a script for a language and the promotion of literacy among its speakers. Another goal of corpus policy is language purification. In some cases this involves an attempt to return it to a sometimes fictitious primal language, purging the modern language of loan words and expressions imported from other languages. Examples are the purging of Persian and the substitution of Sanskritbased words in Hindi and the reverse in Urdu. Similarly, the deletion of foreign influences in German during the Nazi years and the perpetual struggle of French against Franglish are of the same order. Sometimes purification is more extensive. For instance, under Ataturk, a deliberate attempt was made to simplify and modernise Turkish (Lewis 1999). Older linguistic elements borrowed from Ottoman Turkish, Persian and Arabic were replaced with elements identified with a Turkic past, and the persoarabic script was converted to a roman one. Similarly, in China the development of Putonghua was accompanied by extensive modernisation of vocabulary and morphology. In similar vein, the attempt to create a pannational standard Arabic and to diffuse it throughout the Middle East and North Africa, overlaying the sometimes mutually unintelligible country dialects, has required major innovation in the writing system, grammar, and lexicon of the language. Sometimes corpus policy has been directed to the revival or rejuvenation of a language that historically has become fossilised or marginalised, for instance, the attempt to support the use of Quichua in the Ecuadorian Andes (King 2002). Similar corpus policy may be found in the attempts to spread the use of Celtic languages in Ireland, Scotland, Wales, Cornwall, and Brittany. The success of the Celtic revivals in various countries has depended on the extent to which they are backed by political power, as in Ireland where the Celtic language has become a symbol of nationhood, or in Wales, where a regional government has championed its use.

However, even in countries and regions where there is strong governmental backing, only a minority of the population actually speaks the Celtic language. Another example in which corpus policy fosters the status of marginalised languages is the use of government power to promote canonical languages. For instance, the status of Hebrew has been transformed from a canonical language to the official language of everyday use in Israel. Classical Arabic has been used to enhance religious identity among Muslims. After Indian independence, Sanskrit was made one of the official languages of India and for a brief period of time was even proposed as a medium for the transmission of news on the radio. 23 The converse of the policy of promoting little-used languages is the deliberate removal or downgrading of languages. The systematic suppression of the use of Tibetan in China or the native language among the American Indians are clear examples. In the same vein, but less dramatic, are the efforts by the former Soviet states (Landau & KellnerHeinkele 2001) to replace Russian with their regional language. While most of this policy is directed at language use ñ in government, the press, the media, the educational system ñ it also includes changes in the language itself. These changes include the purging of Russian forms and vocabulary from the regional language, a search for alternative cultural and historical roots ñ in the case of Muslim states emphasising Turkic origins ñ and the creation of neologisms both to replace Russian borrowings and to modernise the traditional language. In most of these regions, shifts to roman scripts had begun even before independence, but recently became more pervasive. In some of the former satellite Baltic and Eastern European states, the Russian language has been stripped of its dominant position in government and the educational system.

Status Policy

The status of languages refers to their relative rankings in society and the domains and extent of their use. More particularly, status policy usually refers to the designation of languages as official and their use in the public sector and the educational system. In recent years, most scholarly analysis of language policy is concerned with status policy, although as Fishman (2000) points out status and corpus policy are often intertwined. The nature of status policy depends substantially on differences in the number and types of languages spoken in a country. Countries with a single dominant language face a different set of policy issues compared with linguistically dyadic or triadic countries ñ those with two or three relatively equal languages. Similarly, countries that are linguistic-mosaics, that is, countries with a large number of important languages, have very different sets of problems from monolingual and dyadic or triadic language countries.

Monolingual Countries

Few countries are truly linguistically homogeneous, but many countries in Western Europe and the Americas perceive themselves as essentially monolingual. In Europe this is especially striking in the face of persistent multilingualism. A recently published Encyclopedia of the Languages of Europe (Price 2001) listed some 300 historical and currently used languages in Europe. Several of the countries in East Asia essentially see 24 themselves as monolingual although each contains important language minorities. In linguistically homogeneous countries, the principal focus of language policy has been on corpus planning, the management of the national language itself, supplemented in some countries ñ notably France, Germany, and Japan ñ by efforts to export the national language abroad. Within ìlinguistically homogeneousî countries language policies that relate to linguistic minorities differ for different varieties of minorities.

Ethno-linguistic Regional Minorities

Long-standing, geographically-concentrated minorities receive the bulk of attention in both governmental and educational language policy, as well as in academic analysis. Examples of such minorities are the Swedish-speaking minority in Finland, the Sami in Finland, Sweden, Norway and Russia, and the Celtic language communities in Ireland, Great Britain, and France. Currently, the dominant paradigm in governmental status policy and in academic analysis is the protection of linguistic minorities against the absorptive effects of the dominant national language. A wide variety of country and language specific case studies is now available

(Dickson & Cumming 1996; Extra & Gorter 2001; Fishman 1999; Fishman 2001; Lambert 1994). Most of them reflect this approach. The use of terms such as ìthreatenedî, ìdyingî, ìendangeredî languages and at the extreme, ìlanguage deathî and ìlinguistic genocideî reflect the nature of such analyses. The intended effect of such an approach is to characterise the aspirations of ethno-linguistic minorities as group and individual rights. These rights are elaborated by law in many monolingual countries, as well as in covenants and resolutions enacted by international bodies: The European Charter for Minority or Regional Languages, a Framework Convention for the Protection of National Minorities, The Oslo Recommendations regarding the Linguistic Rights of National Minorities, The Hague Recommendation Regarding the Education Rights of National Minorities, and the Universal Declaration of Linguistic Rights. For instance, the term ìother languagesî of Europe is a product of an international organisation, the European Union. It refers to ìall languages apart from the eleven official languages that are ignored in public and official activities of the EUî (Extra & Gorter 2001). The effect of official designation of a minority language, whether within a country or internationally, can be of substantial benefit, expanding a minorityís claim to educational and governmental support. Consequently, there is constant pressure to expand the list, drawing the line further 25 down the continuum from language to dialect or giving legal identity to different types of languages. For instance, the deaf community seeks recognition of sign language as a separate minority language. Efforts are also underway to declare some variant language such as Black English as minority languages, and thus subject to special protection. Recently, there has been a movement to imbed the concept of language rights in a larger framework, the promotion of multilingualism for the general population (Skutnabb-Kangas 1995). Policies toward linguistic minorities differ according to their relative size, their degree of geographic concentration, their historical roots, their extracountry linkages, the strength of their ethnic identification, and the political activism of their leadership. The features of official language policy that vary according to these characteristics are:

(a) a language's role in the education system, in particular, the class and school levels in which it is represented and whether it is taught as a subject or used as a medium of instruction;

(b) its role in governmental affairs ñ the legislature, judiciary, administrative services, the military;

(c) its role in the media, particularly that portion controlled by government; and

(d) its use in the workplace.

In academic analyses of minority language policy a number of constructs have been proposed to arrange language minorities along continua of relative vitality. A widely used scale is Joshua Fishmanís (Fishman 2001) Graded Intergenerational Disruption Scale based upon a languageís presence in governmental affairs, education, adult use and intergenerational transfer. The scale also purports both to advise linguistic minorities on how to advance their status and how to promote the use of the language. Territorial linguistic minorities also differ in the extent to which their speakers seek full political autonomy, as do the Tamils of Sri Lanka, and some of the Basques in Spain. For most groups, however, the goal is limited to the use of the minority language in governmental affairs and at various levels of the education system.

For instance, in Spain in three constitutionally-mandated regions Basque, Catalan, and Galician languages are not only taught in schools, but public use of the language is actively promoted, and, since their speakers occupy their own political units within Spain, they can determine their own official language policy within their territory. By way of contrast, in France, the Basque-speaking sections bordering on those in Spain are not officially recognised as separate language groups, they do not comprise a separate political unit, and they cannot determine linguistic policies. In France, the promotion of 26 the Basque language is left to voluntary initiatives. In similar vein, the various Celtic languages represent different kinds of territorially-specific language minorities with varying claims on governmental power.

There are many other territorially-concentrated linguistic minorities elsewhere in Europe such as the Frisians in the Netherlands receiving special treatment. Special accommodation is

also made for territorial linguistic enclaves whose residents are speakers of languages of neighbouring countries. For instance the Swedes in the southwestern corner of Finland, and the Germans in the contiguous border regions of Belgium, Italy, and France are examples of trans-border linguistic minorities. There are a few long-established linguistic minorities that are not geographically concentrated ñ e.g., Romani ñ that typically receive less policy attention.

Aboriginals Like other territorially concentrated linguistic minorities within homogeneous states, culturally distinct autochthonous groups receive a great deal of attention both in language policy and in academic analyses. Often the languages of such groups are in various stages of development. Hence, a primary focus of policy is on alphabetisation and the promotion of literacy and oracy. In most cases, the drive for language rights among aboriginal groups is tied to cultural revival and reinforcement. Linguistic groups whose members are still active speakers of their languages and who are territorially concentrated like the Samis in the Nordic countries and Russia, the Quichua in the Andean highlands of Peru, Bolivia and Ecuador have greater success in achieving special treatment in language policy. More dispersed aboriginal groups like the American Indians ñ although the Navajo have had some success ñ and the aboriginal tribes in Australia who are dispersed through a hundred different regions, have an even greater difficulty in language maintenance, although in the latter case national government policy supports it. An exception are the Maoris in New Zealand who have had great success in cultural and linguistic revival through concentrated political agitation and through the use of Maori in Te Kohanda Re, the pre-school ìlanguage nestî programs.

Immigrants Language policies tend to be less accommodating to the needs of immigrant groups. Technically, many of the international covenants supporting the rights of linguistic minorities apply only to citizens. However, 27 recently this distinction has been blurred. In the early years immediately after World War II during the first major flow of ìguest workersî into Europe, work migrants were expected to go back to their home countries after a brief sojourn. Moreover, at that time the service of their linguistic needs in education were supposed to be provided by their home countries. In addition, immigrant groups tended to be widely dispersed in cities and did not constitute a separate territorial unit. Over the past decades their numbers have grown immensely, particularly Eastern Europeans migrating into Western Europe and citizens of former colonies moving to the colonial homeland. As their numbers have grown, they have not tended to form separate territorial groups, although their concentration in urban areas, their numbers, and their growing political influence have come to require special educational and governmental accommodation. These have typically included the provision of instruction in the home language in primary schools, the translation of government documents and court proceedings into the home language, and, in some countries, support for instruction of new immigrants in the national language of the country.

The United States provides a clear example of this transformation. Over the centuries massive waves of immigrants have been absorbed. Historically, they tended to be widely dispersed into a number of cities, where little islands would be created. Each group, however, was expected in time to merge into the general population, including the learning of English. In recent decades, after a period of very limited immigration, the number of immigrants has increased rapidly. As a result there are now 3 million children in the United States who speak at home a language other than English. They are what are legally referred to as Limited English Proficiency (LEP) children. Three-fourths of the LEP students are Hispanic and instead of dispersing throughout the country they have become a major territorial language minority in Florida and the American southwest, particularly California. The result has been the institution of language rights accorded territorial linguistic minorities elsewhere, including a highly institutionalised system of bilingual education in primary schools, and representation of Spanish in public life and the media. This development has given rise in some states to pressure to enact legislation making English the only official language.

6. Dyadic or Triadic Societies

Dyadic** or **Triadic Societies** Countries that have **two or three primary languages** such as **Canada, Belgium, Switzerland, Sri Lanka and Cyprus, each with its own territorial 28 homeland, have problems of language policy very different from those facing ideologically homogeneous countries. In such countries language policy tends to pervade large sectors of the educational system and public life. As in linguistically homogeneous countries provision may be made for lesser language minorities, but the fabric of the state itself tends to be linguistically consociational involving only the primary languages. Governmental and educational institutions are organised separately in the different language areas, and political power is carefully balanced between the linguistic units. An extreme example is Belgium where, after four governmental crises based on language issues between 1979 and 1990, the country was partitioned into different language regions:

(a) areas that are exclusively monolingual in Dutch, French or German

(b) areas like Brussels that are officially bi-lingual, and

(c) areas that are monolingual but provide some minority language rights.

Switzerland has a longer-established form of consociational linguistic territoriality, but restricts its implementation primarily to educational and governmental affairs. Canada is formally bilingual, but French-speaking Quebec periodically attempts to gain independence from the other, primarily Anglophone-speaking, provinces of Canada. A series of referenda for Quebecís independence have not gained a majority of votes in Quebec, defeated by negative votes from a combination of Anglophones, aborigines, and immigrant communities.

However, in Quebec province itself, the use of French in all governmental affairs, education, and public displays is mandated. In Anglophone Canada an innovative policy was introduced whose intent was to disarm the Quebec separatist drive. All schools outside of Quebec require their students to enrol in immersion classes to make them proficient in French. This widely-watched program has been only modestly successful. In some countries, the relationship between the ethno-linguistic groups is so contentious that the country breaks apart, as in the former Czechoslovakia and Yugoslavia.

In post-independence Pakistan two linguistically different parts were separated by a thousand miles ñ a Bengali-speaking Eastern half and an Urdu, Punjabi and Sindhi speaking western half. After a bitter war Bangladesh became a separate country. A two millennia-old conflict between Tamils and Sinhalese in Sri Lanka is in danger of partitioning the island into two countries, as is the conflict between the Greece- and Turkey -oriented halves of Cyprus. Sometimes in binary societies, one language group dominates the other as in the Sudan where the Arabic-speaking north dominates the lower multilingual, tribal-based south.

Linguistic identity is largely a political matter and languages are flags of allegiance. This means that the instrumental view of language is fundamentally flawed. If anything, it is the pre-theoretical sense that communication is possible or desirable in given contexts or, more technically, the presence of a relatively stable speech community, that makes us postúlate the existence of a common language. So too, it is the unwillingness to communicate or the unavailability of the means to do so that pavés the way for the sense that there are insuperable linguistic barriers to contend with. The immediate upshot of this line of reasoning is that there are no such things as languages, if by 'languages' we mean natural objects that are "out there", waiting to be discovered, described, and catalogued by the linguist. What this means is that there is an urgent need to foreground the issue of the politics of language.

KEY WORDS Linguistic identity, language vs. communication, language loyalty, language and nationalism, politics of language.

STUDY QUESTIONS I

Task 1. Study Questions

1. What is the property attributed to language?
   _____
2. What is human language characterized by?
   _____
3. What is Language politics?
   _____
4. When is a language recognized as an official one?
   _____
5. Where is the Moldovan Cyrillic alphabet still preserved in?
   _____
6. What is the number of estimated languages in the world?
   _____

Task 2. Make up 5 special questions

1. _____
2. _____
3. _____
4. _____
5. _____

Task 3. Make up 10 true/false statements on topic I

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

II. General Linguistics, its Objects and Tasks. The Origin and Development of Linguistics

1. **What is Linguistics?**
2. **Subject Matter and Scope of Linguistics. The Object of Linguistics**
3. **Some definitions of "language"**
4. **A glance at the history of Linguistics - Historical Background**
5. **Branches of Linguistics (Synchronic and Diachronic Linguistics, Theoretical linguistics etc.)**

1. What is Linguistics?

Linguistics is the discipline that describes the structure of language, including its grammar, sound system, and vocabulary. Linguistics is the study of language in its various aspects. As a science, its primary concern is the *structure* of a particular language or of languages in general. By structure we mean the rules for forming acceptable utterances of the language. Linguists take their data what people say and what people find acceptable in language use. They work from actual language examples and individual intuitions about whether such examples are well formed to develop general accounts of the grammar of a language. In this sense, linguistics is *descriptive*, rather than *prescriptive*.

The *goal* of Linguistics is not to ensure that people follow a standard set of rules in speaking, but rather to develop parsimonious models to explain the language that people actually use and appreciate as well formed. Linguists, philosophers, and psychologists have long appreciated that language is a complex system that can be considered at multiple level of analysis. Every human language may be analyzed in terms of its *phonology* (sound system), *morphology* (rules for word formation), *lexicon* (vocabulary), *syntax* (rules for combining words into grammatically acceptable sequences), *semantics* (conventions for deriving the meanings of words and sentences), and *pragmatics* (rules for appropriate social use and interpretation of language in context). Linguists strive to develop descriptions of a language that capture its characteristics at each of these levels. It may be evident that, although using and understanding language is a relatively quick and easy task for most of us, many aspects of our linguistic knowledge are subconscious by nature.

2. Subject Matter and Scope of Linguistics. The Object of Linguistics

The subject matter of linguistics comprises all manifestations of human speech, whether that of savages or civilized nations, or of archaic, classical or decadent periods. In each period the linguist must consider not only correct speech and flowery language, but all other forms of expression as well. That is not all: since he is often unable to observe speech directly, he must consider written texts, for only through them can he reach idioms that are remote in time or space.

The scope of linguistics should be:

a). to describe and trace the history of all observable languages, which amounts to tracing the history of families of languages and reconstructing as far as possible the mother language of each family;

b). to determine the forces that are permanently and universally at work in all languages, and to deduce the general laws to which all specific historical phenomena can be reduced;

*c).*to delimit and define itself.

Linguistics is very closely related to other sciences that sometimes borrow from its data, sometimes supply it with data. *Linguistics* must be carefully distinguished from ethnography and prehistory, where language is used merely to document. It must also be set apart from anthropology, which studies man solely from the viewpoint of his species, for *language is a social fact*. But must linguistics then be combined with sociology? What are the relationships between linguistics and social psychology? Everything in language is basically psychological,

including its material and mechanical manifestations, such as sound changes, and linguistics provides social psychology with valuable data.

The ties between linguistics and the physiology of sound are less difficult to untangle. The relation is unilateral in the sense that the study of languages exacts clarifications from the science of physiology of sounds but furnishes none in return. In any event, the two disciplines cannot be confused.

As for philology, we have already drawn the line: it is distinct from linguistics despite points of contact between the two sciences and mutual services that they render. Anyway it is evident, that linguistic questions interest all who work with texts - historians, philologists, etc. still more obvious is the importance of linguistics to general culture; in the lives of individuals and societies, speech is more important than anything else.

(The Object of Linguistics) What is both the integral and concrete object of linguistics? The question is especially difficult:

Other sciences work with objects that are given in advance and that can then be considered from different viewpoints; but not linguistics. Someone pronounces the French word *"nu"* - *bare*-: a superficial observe would be tempted to call the word a concrete linguistic object; but a more careful examination would reveal successively three or four quite different things, depending on whether the word is considered as a sound, as the expression of an idea, as the equivalent of Latin "*nudum*", etc. Far from it being the object that antedates the viewpoint, it would seem that it is the viewpoint that creates the object; besides, nothing tells us in advance that one way considering the fact in question takes precedence over the others or is in any way superior to them.

Moreover, the linguistic phenomenon always has two related sides, each deriving its values from the other. For example:

1). *Articulated syllables* are acoustical impressions perceived by the ear, but the sounds would not exist without the vocal organs; an "*n*", for example, exists only by the virtue of the relation between the two sides. We simply cannot reduce language to sound or detach sound from oral articulation; reciprocally, we cannot define the movements of the vocal organs without taking into account the acoustical impression.

2). but suppose that sound was a simple thing: would it constitute speech? No, it is only the instrument of thought; by itself, it has no existence. At this point a new and redoubtable relationship arises: a sound, a complex acoustical-vocal unit, combines in turn with an idea to form a complex physiological-psychological unit. But that is still not the complete picture.

3). Speech has both an individual and social side, and we cannot conceive of one without the other. Besides:

4). Speech always implies both an established system and an evolution; at every moment it is an existing institution and a product of the past. To distinguish between the system and its history, between what it is and what it was, seems very simple at first glance; actually the two things are so closely related that we can scarcely keep them apart.

If we fix our attention in only one side of each problem, we run the risk of failing to perceive the dualities, on the other hand, if we study speech from several viewpoints simultaneously, the object of linguistics appears to us as a confused mass of heterogeneous and unrelated things. Either procedure opens the door to several sciences psychology, anthropology, normative grammar, philology, etc. which are distinct from linguistics, but which might claim speech, in view of the faulty method of linguistics, as one of their objects.

But *what is language*? It is not to be confused with human speech, of which it is only a definite part, though certainly an essential one. *It is both a social product of the faculty of speech and a collection of necessary conventions that have been adopted by a social body to permit individuals to exercise that faculty.* Taken as a whole, *speech* is many-sided and heterogeneous; straddling several areas simultaneously – physical, physiological, and psychological – it belongs both to the individual and to the society; we cannot put it into any category of human facts, for we cannot discover its unity.

Language, on the contrary, is a self-contained whole and a principle of classification. As soon as we give language first place among the facts of speech, we introduce a natural order into a mass that lends itself to no other classification. One might object to that principle of classification on the ground that since the use of speech is based on a natural faculty whereas language is something acquired and conventional, language should not take first place but should be subordinated to the natural instinct.

3. Some definitions of ***language***

Definitions of language are not difficult to find. The statements all come from classic works by well-known linguists. According to **Sapir** (1921:8): *"Language is a purely human and non-instinctive method of communicating ideas, emotions and desires by means of voluntarily produced symbols."* This definition suffers from several defects. (**Edward Sapir** (/səˈpɪər/; 1884–1939) was an American anthropologist-linguist, who is widely considered to be one of the most important figures in the early development of the discipline of linguistics.) On the other hand, there are many systems of voluntarily produced symbols that we only count as languages in what we feel to be an extended or metaphorical sense of the word "language". For example, what is now popularly referred to by means of the expression "body language" – which makes use of gestures, postures, eye-gaze, etc. – would seem to satisfy this point of Sapir's definition.

In their *Outline of Linguistic Analysis* Bloch (**Bernard Bloch**, B.A., M.A., Ph.D., (1907, New York City, NY – 1965) was an American linguist. He is one of the post-Bloomfieldian linguists) and Trager (**George Leonard Trager** (March 22, 1906 – August 31, 1992) was an American linguist. He was the president of the Linguistic Society of America in 1960) wrote : *"A language is a system of arbitrary vocal symbols by means of which a social group co-operates".* What is striking about this definition, in contrast with Sapir's, is that it makes no appeal, except indirectly and by implication, to the communicative function of language. Instead, it puts all the emphasis upon its social function; it takes a rather narrow view of the role that language plays in society. What needs to be said at this point is that there is a close connection between language and speech. Logically, the latter presupposes the former: one cannot speak without using language (i.e. without speaking in a particular language), but one can use language without speaking. In all natural languages, speech is historically, and perhaps biologically, prior to writing. This is the view that most linguists take.

In *Essay on Language*, Hall (**Robert Anderson Hall, Jr.** (1911–1997) was an American linguist and specialist in the Romance languages.): tells us that language is "*the institution whereby humans communicate and interact with each other by means of habitually used oral-auditory arbitrary symbols"*. Hall, like Sapir, treats language as a purely human institution. Hall presumably means by language "symbols" the vocal signals that are actually transmitted from sender to receiver in the process of communication and interaction.

The last definition to be quoted strikes a very different note: "*From now on I will consider a language to be a set (finite or infinite) of sentences, each finite in length and constructed out of a finite set of elements."* This definition is taken from Chomsky's *Syntactic Structures* (**Avram Noam Chomsky** (/ˈnoʊm ˈtʃɒmski/; born December 7, 1928) is an American linguist, philosopher, cognitive scientist,historian, logician, social critic, and political activist. Sometimes described as "the father of modern linguistics," Chomsky is also a major figure in analytic philosophy). According to Chomsky, all languages, in either their spoken or their written form, are languages in the sense of his definition: since (a) each natural language has a finite number of sounds in it (and a finite number of letters in its alphabet – on the assumption that it has an alphabetic writing system); and (b), although there may be infinitely many distinct sentences in the language, each sentence can be represented as a finite sequence of these sounds (or letters).

Chomsky's definition of "language" says nothing about the communicative function of either natural or non-natural languages; it says nothing about the symbolic nature of the elements or sequences of them. Its purpose is to focus attention upon the purely structural properties of

languages and to suggest that these properties can be investigated from mathematically precise point of view. It is Chomsky's major contribution to linguistics to have given particular emphasis to what he calls the structure-dependence of the processes whereby sentences are constructed in natural languages and to have formulated a general theory of grammar which is based upon a particular definition of this property. The given definitions of language quoted have taken the view that languages are systems of symbols designed for the purpose of communication.

4. A glance at the history of Linguistics - Historical Background

The science that has been developed around the facts of language passed through three stages before finding its true and unique object.

First something called "**grammar**" was studied. This study, initiated by the Greeks and continued mainly by the French was based on logic. It lacked a scientific approach and was detached from language itself. Its only aim was to give rules for distinguishing between correct and incorrect forms; it was a normative discipline, far removed from actual observation, and its scope was limited.

Next appeared **philology** - the scientific movement which was started by Frederich August Wolf in 1777 and which continues to this day. Language is not its sole object. The early philologists sought specially to correct, interpret and comment upon written texts. When they dealt with linguistic questions, it was for the express purpose of comparing texts of different periods, determining the language peculiar to each author, or deciphering and explaining inscriptions made in an archaic or obscure language. Doubtless, these investigations broke the ground for historical linguistics. Philological criticism still deficient on one point: it follows the written language too slavishly and neglected the living language.

The third stage began when scholars discovered that languages can be compared with one another. This discovery was the origin of "**comparative philology**". In 1816, in a work entitled *Iber das Conjugationssystem der Sanskritsprache*, Franz Bopp compared Sanskrit with German, Greek, Latin, etc. Bopp was of the first to record their similarities and stated that all these languages belong to a single family. He did realize that the comparison of related languages could become the subject matter of an independent science. To illuminate one language by means of another, to explain the forms of one through the forms of the other, that is what no one had done before him.

Other distinguished linguists soon added to the contribution of Bopp: Jacob Grimm, the founder of Germanic Studies (his *Deutsche Grammatik*, published from 1822 to 1836); Pott, whose etymological studies made a considerable amount of material available to linguists; Kuhn, whose works dealt with both linguistics and comparative mythology; etc.

Finally, among the last representatives of the school, Max Miiller, G.Curtius, and August Schleicher deserve special attention. In different ways, all three did much to advance comparative studies. Max *Miiller* popularized them in his brilliant discussions (*Lessons in the Science of Language*, 1861); but his failing was a certain lack of conscientiousness. *Curtius*, a distinguished philologist known especially for his *Grundziige der griechischen Etymologie* (1879), was one of the first to reconcile comparative philology with classical philology. The latter had watched the progress of the new science suspiciously, and each school had mistrusted the other. *Schleicher* was the first to try to codify the results of piecemeal investigation. His *Compendium der vergleichenden Grammatik der indogermanischen Sprachen* (1861-1862) is more or less a systematization of the science founded by Bopp. His book with its long record of service, recalls better than any other the broad outlines of the comparative school, which is the first chapter in the history of Indo-European linguistics.

But the comparative school, which had the indisputable merit of opening up a new and fruitful field, did not succeed in setting up the true science of linguistics. It failed to seek out the nature of its object of study. Obviously, without this elementary step no science can develop a method. This first mistake of the comparative philologists was also the source of all their other

mistakes. Their method was exclusively comparative, not historical. Of course comparison is required for any historical reconstruction, but by itself is cannot de conclusive.

The exclusively comparative method brought in a set of false notions. Having no basis in reality, these notions simply could not reflect the facts of speech.

Not until around 1870 did scholars begin to seek out the principles that govern the life of languages. Then they began to see that similarities between languages are only one side of the linguistic phenomenon, that comparison is only a means or method of reconstructing the facts. Linguistics proper, which puts comparative studies in their proper place, owes its origin to the study of *the Romance and Germanic languages.* Romance studies, begun by **Friedrich Christian Diez** – his *Grammatik der romanischen Sprachen* dates from 1836-38-were instrumental in bringing linguistics nearer to its true object. They had direct access to Latin, the prototype of the Romance languages, and an abundance of texts allowed them to trace in detail the evolution of the different dialects; these two circumstances narrowed the field of conjecture and provided a remarkably solid frame for all their research. Germanic scholars were in a similar situation. Though they could not study the prototype directly, numerous texts enabled them to trace the history of the language derived from Proto-Germanic through the course of many centuries. The Germanic scholars, coming to closer grips with reality than had the first Indo-European scholars, reached different conclusions. *A first impetus* was given by the American scholar *Whitney*, the author of *Life and Growth of Language* (1875). Shortly afterwards a new school was formed by the neogrammarians whose leaders were all Germans: K. Brugmann and H. Osthoff; the Germanic scholars W. Braune, E. Sievers, H. Paul; the Slavic scholars Leskien, etc. Their contribution was in placing the results of comparative studies in their historical perspective and thus linking the facts in their natural order. Thanks to them, language is no longer looked upon as an organism that develops independently but as a product of the collective mind of linguistic groups. Still, in spite of the services that they rendered, the neogrammarians did not illuminate the whole question, and the fundamental problems of general linguistics still await solution.

(Historical Background) Modern Linguistics necessarily begins with the work of **Ferdinand de Saussure** and his *General course of linguistics* (1916). His systematic structural approach to language has been foundation for virtually all of linguistics since that time. The central continuing notion is that *language is a closed system of structural relations; meanings and grammatical uses of linguistic elements depend on the sets of oppositions created among all the elements within the system.* To take a simple illustrative example, *Slush* is a notion that depends on the existence of terms such as *Rain* and *snow* for its specific meaning and use – it is understood because of its opposition to the other terms. In addition, De Saussure introduced distinctions such as ***synchronic*** (at a single specific time) vs. ***diachronic*** (historical) analyses of language, and *langue* vs. *parole* (cf. competence vs. performance). These latter two influential notions evolved from the structural assumptions on the nature of language. De. Saussure's work had a powerful impact on various structural-linguistic groups that emerged across Europe, including the London School of Linguistics, the Geneva School of Linguistics, the Copenhagen School of Linguistics, and the Prague School of Linguistics (cf. Robins 1989; Sampson 1980).

5. Branches of Linguistics (Synchronic and Diachronic Linguistics, Theoretical linguistics etc.)

The first distinction to be drawn is between **general** and **descriptive** linguistics. This is in itself straightforward enough. The question "What is language?" the central defining question of the whole discipline is mire properly seen as the central question in General linguistics. **General** linguistics and **descriptive** linguistics are by no means unrelated. Each depends, explicitly or implicitly upon the other: general linguistics supplies the concepts and categories in terms of which particular languages are to be analysed; descriptive linguistics, provides the data which confirm or refute the propositions and theories put forward in general linguistics.

Throughout the 19th century, linguists were very much concerned with investigating the details of the historical development of particular languages and with formulating general hypotheses about language-change. The branch of the discipline that deals with these matters is now known as historical linguistics. It is obvious that in historical linguistics, as in non-historical linguistics, one can be interested in language in general or in particular languages. It is convenient to mention at this point the more technical terms "diachronic" and "synchronic". These were first used by Saussure. A diachronic description of a language traces the historical development of the language and records the changes that have taken place in it between successive points in time: "diachronic" is equivalent, therefore, to *"historical".* A synchronic description of a language is non-historical: it presents an account of the language as it is at some particular point in time.

Theoretical linguistics studies language and languages with a view to constructing a theory of their structure and functions and without regard to any practical applications that the investigation of language and languages might have, whereas applied linguistics has its concerns the applications of the concepts and findings of linguistics to a variety of practical tasks, including language teaching. In practice, there is little difference made between the terms "theoretical linguistics" and "general linguistics": it is taken for granted by most of those who use the term "theoretical linguistics" that the *goal of theoretical linguistics is the formulation of a satisfactory theory of the structure of language in general*. As far as applied linguistics is concerned, *it is clear that it draws on both the general and the descriptive branches of the subject.*

"Microlinguistics" and "macrolinguistics" - in *microlinguistics* one adopts the narrower view and in *macrolinguistics* the broader view. At its narrowest microlinguistics *is concerned solely with the structure of language systems, without regards to the way in which languages are acquired, stored in the brain or used in their various functions; without regard to the physiological and psychological mechanisms that are involved in language-behaviour; in short, without regard to anything other than the language – system, considered in itself and for itself (as Saussure put it).* At its broadest, macrolinguistics is *concerned with everything that pertains in any way at all to language and languages.*

Since, many disciplines other than linguistics are concerned with language, it is not surprising that several interdisciplinary areas should have been identified within *macrolinguistics* and given a distinctive name: *sociolinguistics, psycholinguistics, ethnolinguistics, stylistics, etc.* One point that must be emphasized is that the distinction between microlinguistics and macrolinguistics is independent of the distinction between theoretical and applied linguistics.

STUDY QUESTIONS II

Task 1. Answer the questions:

1. What is Linguistics?
2. What is the subject matter of linguistics?
3. What should be the scope of linguistics?
4. What is both the integral and concrete object of linguistics?
5. What is language?

Task 2. Mark the following statements as true or false

1. **Linguistics** is the discipline that describes the structure of language, including its grammar, sound system, and vocabulary. _____
2. **Linguistics** is the study of language in its various aspects. As a science, its primary concern is the grammar of a particular language or of languages in general. _____
3. linguistics is *prescriptive* rather than *descriptive* _____
4. The *goal* of **Linguistics** is to develop parsimonious models to explain the language that people actually use and appreciate as well formed. _____
5. The subject matter of linguistics comprises all manifestations of human speech. _____
6. ***Linguistics*** is not closely related to other sciences that sometimes borrow from its data, sometimes supply it with data. _____
7. The ties between linguistics and the physiology of sound are extremely difficult to untangle. _____
8. Language - It is not to be confused with human speech, of which it is only a definite part, though certainly an essential one. _____
9. speech is many-sided and heterogeneous; straddling several areas simultaneously – physical, physiological, and psychological – it belongs just to the society; _____
10. ***Language,*** on the contrary, is a self-contained whole and a principle of classification. _____
11. The given definitions of language quoted have taken the view that languages are systems of symbols designed for the purpose of communication. _____
12. Franz Bopp introduced distinctions such as ***synchronic*** (at a single specific time) vs. ***diachronic*** (historical) analysis of language, and langue vs. parole (cf. competence vs. performance). _____

Task 3. Fill in the missing words/terms

Linguists, philosophers, and psychologists have long appreciated that language is a complex system that can be considered at multiple level of analysis. Every human language may be analyzed in terms of its_____ (sound system), _____ (rules for word formation), _____ (vocabulary), _____ (rules for combining words into grammatically acceptable sequences), _____ (conventions for deriving the meanings of words and sentences), and _____ (rules for appropriate social use and interpretation of language in context). Linguists strive to develop descriptions of a _____ that capture its characteristics at each of these levels. It may be evident that, although using and understanding language is a relatively quick and easy task for most of us, many aspects of our linguistic knowledge are _____ by nature.

Task 4. Name the three main scopes of linguistics/suggest the beginning of the sentences

The scope of linguistics should be:

a). to _____of all observable languages, which amounts to tracing the history of families of languages and reconstructing as far as possible the mother language of each family;

b). to _____that are permanently and universally at work in all languages, and to deduce the general laws to which all specific historical phenomena can be reduced;

c).to _____ itself.

III. Linguistics of Language and of Speaking. Nature of the Linguistic Sign

1. **Linguistics of Language and Linguistics of Speaking**
2. **Internal and External Elements of Language**
3. **Sign, Signified, Signifier**
4. **Principle I: The Arbitrary Nature of the Sign**

1. Linguistics of Language and Linguistics of Speaking

In setting up the science of language within the overall study of speech, we are to outline the whole linguistics. All other elements of speech – those that constitute speaking - freely subordinate themselves to the first science, and it is by virtue of this subordination that the parts of linguistics find their natural place.

An argument against separating phonation from language might be phonetic changes, the alterations of the sounds which occur in speaking and which exert such a profound influence on the future of language itself. Do we really have the right to pretend that language exists independently of phonetic changes? Yes, for they affect only the material substance of words. If they attack language as a system of signs, it is only indirectly, through subsequent changes of interpretation; there is nothing phonetic in the phenomenon. Determining the causes of phonetic changes may be helpful on this point; but none of this is essential: in the science of language, all we need do is to observe the transformations of sounds and to calculate their effects.

The study of speech is then twofold: its basic part – having as its object language, which is purely social and independent of the individual – is exclusively psychological; its secondary part – which has as its object the individual side of speech, i.e. speaking, including phonation – is psychophysical.

We learn our mother language by listening to others; only after countless experiences is it deposited in our brain. Finally, speaking is what causes language to evolve: impressions gathered from listening to others modify our linguistic habits. Language and speaking are then independent; the former is both the instrument and the product of the latter. But their interdependence does not prevent their being two absolutely distinct things.

Language exists in the form of a sum of impressions deposited in the brain of each member of a community, almost like a dictionary of which identical copies have been distributed to each individual. Language exists in each individual, yet is common to all. Nor is it affected by the will of the depositaries. Its mode of existence is expressed by the formula:

1+1+1+1 … = I (collective pattern)

What part does speaking play in the same community? It is the sum of what people say and includes: (a) individual combinations that depend on the will of speakers, and (b) equally willful phonational acts that are necessary for the execution of these combinations.

Speaking is thus not a collective instrument; its manifestations are individual and momentary. In speaking there is only the sum of particular acts, as in the formula:

(1+1'-}-1", +1" '…)

For all the foregoing reasons, to consider language and speaking from the same viewpoint would be fanciful. Taken as a whole, speech cannot be studied, for it is not homogeneous; but the distinction and subordination proposed here clarify the whole issue.

Such is the first bifurcation that we find in trying to formulate the theory of speech. We must choose between two routes that cannot be followed simultaneously; they must be followed separately.

One might if really necessary apply the term linguistics to each of the two disciplines and speak of linguistics of speaking. But that science must not be confused with linguistics proper, whose sole object is language.

We shall deal only with linguistics of language, and if subsequently use material belonging to speaking to illustrate a point, we shall try never to erase the boundaries that separate the two domains.

2. Internal and External Elements of Language

The definition of language presupposes the exclusion of everything that is outside its organism or system – in a word, of everything known as "external linguistics". But external linguistics deals with many important things – the very ones that we think of when we begin the study of speech.

First and foremost, come all the points where linguistics borders on ethnology, all the relations that link the history of a language and the history of a race or civilization. The close interaction of language and ethnography brings to mind the bonds that join linguistic phenomena proper.

Second come the relations between language and political history. Great historical events like the Roman conquest have an incalculable influence on a host of linguistic facts. Colonization, which is only one form that conquest may take, brings about changes in an idiom by transporting it into different surroundings. All kinds of facts could be cited as substantiating evidence. For instance, Norway adopted Danish when she united politically with Denmark; the Norwegians are trying today to throw off that linguistic influence. The internal politics of states is no less important to the life of languages; certain governments (like the Swiss) allow the coexistence of several idioms; others (like the French) strive for linguistic unity. An advanced state of civilization favors the development of special languages (juridical language, scientific terminology, etc.)

Third point: the relations between language and all sorts of institutions (the Church, the school, etc.). All these institutions in turn are closely tied to the literary development of a language, a general phenomenon that is all the more inseparable from political history. Moreover, the literary language raises the important question of conflicts between it and local dialects; the linguist must also examine the reciprocal relations of book language and the vernacular; for every literary language, being the product of the culture, finally breaks away from its natural sphere, the spoken language.

Finally, everything that relates to the geographical spreading of language and dialectal splitting belongs to external linguistics.

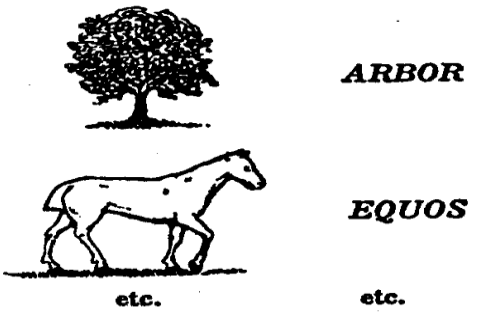
Some have maintained that the foregoing issues simply cannot be separated from the study of language proper. The viewpoint has been prevalent especially since the placing of so much emphasis on "*Realia*" (*Realien* is used in German to refer to all material facts of life, the shape, dimensions, and the like of objects, things, etc.). It seems that we can scarcely give a satisfactory explanation of the technical terms and loan-words that abound in language without considering their development. Common languages are always developing alongside local dialects.

The study of external linguistic phenomena is most fruitful; but to say that we cannot understand the internal linguistic organism without studying external phenomena is wrong. Take as an example the borrowing of foreign words. We observe from the outset that borrowing is not a constant force in the life of a language. In certain isolated valleys there are dialects that have never taken a single artificial term from the outside. Knowledge of the circumstances that contributed to the development of a language, generally speaking, is never indispensable. For certain languages – e.g. Zend and Old Slavic – even the identity of the original speakers is unknown, but lack of such information in no way hinders us in studying these languages internally and learning about the transformations that they have undergone. In any case, separation of the two viewpoints is mandatory, and the more rigidly they are kept apart, the better it will be. The best proof of the need for separating the two viewpoints is that each creates a distinct method. External linguistics can add detail to detail without being caught in the vise of a system. Each writer, for instance, will group as he sees fir facts about the spreading of a language beyond its territory. If he looks for the forces that created a literary language beside local dialects, he can always use simple enumeration. If he arranges the facts solely for the sake of clarity.

In internal linguistics - Language is a system that has its own arrangement. Comparison with chess will bring out the point. In chess, what is external can be separated relatively easily from what is internal. The fact that the game passed from Persia to Europe is external; against that, everything having to do with its system and rules is internal. If we use ivory chessmen instead of wooden ones, the change has no effect on the system, but if we decrease or increase the number of chessmen, this change has a profound effect on the "grammar" of the game. One must always distinguish between what is internal and what is external. In each instance one can determine the nature of the phenomenon by applying this rule*: everything that changes the system in any way is internal.*

3. Sign, Signified, Signifier

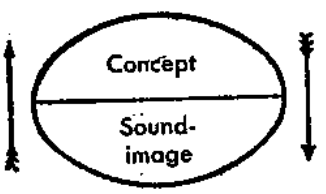
Some people regard language, when reduced to its elements, as a naming-process only— a list of words, each corresponding to the thing that it names. For example:



This conception is open to criticism at several points. It assumes that ready-made ideas exist before words; it does not tell us whether a name is vocal or psychological in nature (*arbor*, for instance, can be considered from either view point); finally, it lets us assume that the linking of a name and a thing is a very simple operation — an assumption that is anything but true. But this rather naive approach can bring us near the truth by showing us that the linguistic unit is a double one formed by the associating of two terms considering the speaking-circuit, that both terms involved in the linguistic sign are psychological and are united in the brain by an associative bond. This point must be emphasized.

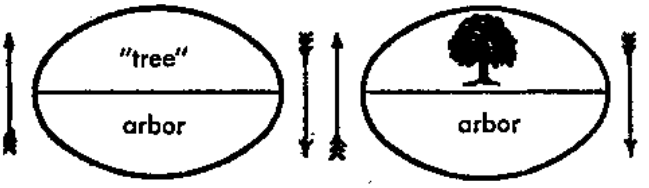
The linguistic sign unites, not a thing and a name, but a concept and a sound-image.[1] The latter is not the material sound, purely physical thing, but the psychological imprint of the sound, the impression that it makes on our senses. The sound-image is sensory, and if we happen to call it "material," it is only in that sense, and by way of opposing it to the other term of the association, the concept, which is generally more abstract.

The psychological character of our sound-images becomes apparent when we observe our own speech. Without moving our lips or tongue, we can talk to ourselves or recite mentally a selection of verse. Because we regard the words of our language as sound-images, we must avoid speaking of the "phonemes" that make up the words. This term, which suggests vocal activity, is applicable to the spoken word only, to the real of the inner image in discourse. We can avoid that misunderstanding by speaking of the *sounds* and *syllables* of a word provided we remember that the names refer to the sound-image. The *linguistic sign* is then *a two-sided psychological entity* that can be represented by the drawing:



The two elements are intimately united, and each recalls the other.

Our definition of the linguistic sign poses an important question of terminology. The combination of *a concept and a sound image a sign*, but in current usage the term generally designates only a sound-image, a word, for example (*arbor*, etc.). One tends to forget that arbor is called a sign only because it carries the concept "tree", with the result that the idea of the sensory part implies the idea of the whole.



Ambiguity would disappear if the three notions involved here were designated by three names, each suggesting and opposing the others. Saussuer proposes to retain the word *sign* [*signe*] to designate the whole and to replace *concept* and *sound-image* respectively by *signified* [*signifié*] and *signifier* [*signifinant*]; the last two terms have the advantage of indicating opposition that separates them from each other and from the whole of which they are parts. As regards sign, this is simply because we do not know of any word to replace it. The linguistic sign, as defined, has two primordial characteristics. (Sausure)

Units and grammatical facts would not be confused if linguistic signs were made up of something besides differences. But language being what it is, we shall find nothing simple in it regardless of our approach; everywhere and always there is the same complex equilibrium of terms that mutually condition each other. Putting it another way, *language is a form and not a substance*. This truth could not be overstressed, for all the mistakes in our terminology, all our incorrect ways of naming things that pertain to language, stem from the involuntary supposition that the linguistic phenomenon must have substance.

4. Principle I: The Arbitrary Nature of the Sign

The bond between the signifier and the signified is arbitrary. Since we mean by sign the whole that results from the associating of the signifier with the signified, we can simply say: *the linguistic sign is arbitrary*. The idea of "sister" is not linked by any inner relationship to the succession of sounds *s-ö-r* which serves as its signifier in French;that it could be represented equally by just any other sequence is proved by differences among languages and by the very existence of different languages: the signified "*ox*" has as its signifier *b-ö-f* on one side of the border and *o-k-s* (Ochs) on the other. No one disputes the principle of the arbitrary nature of the sign, but it is often easier to discover a truth than to assign to it its proper place. Principle I dominates all the linguistics of language; its consequences are numberless. It is true that not all of them are equally obvious at first glance; only after many detours does one discover them, and with them the primordial importance of the principle.

One remark in passing: when semiology becomes organized as a science, the question will arise whether or not it properly includes modes of expression based on completely natural signs, such as pantomime. Supposing that the new science welcomes them, its main concern will still be the whole group of systems grounded on the arbitrariness of the sign. Signs that are wholly arbitrary realize better than the others the ideal of the semiological process; that is why language, the most complex and universal of all systems of expression, is also the most characteristic; in this sense linguistics can become the master-pattern for all branches of semiology although language is only one particular semiological system.

The word *symbol* has been used to designate the linguistic sign, or more specifically, what is here called the signifier. Principle I in particular weighs against the use of this term. One characteristic of the symbol is that it is never wholly arbitrary; it is not empty, for there is the rudiment of a natural bond between the signifier and the signified. The symbol of *justice*, a pair

of scales, could not be replaced by just any other symbol, such as a *chariot*. The word arbitrary also calls for comment. The term should not imply that the choice of the signifier is left entirely to the speaker (we shall see below that the individual does not have the power to change a sign in any way once it has become established in the linguistic community); it is unmotivated, i.e. arbitrary in that it actually has no natural connection with the signified.

Let us consider two objections that might be raised to the establishment of Principle I:

1) ***Onomatopoeia*** might be used to prove that the choice of the signifier is not always arbitrary. But onomatopoeic formations are never organic elements of a linguistic system. Besides, their number is much smaller than is generally supposed. Words like French *fouet* 'whip' or *glas* 'knell' may strike certain ears with suggestive sonority, but to see that they have not always had this property we need only examine their Latin forms (*fouet* is derived from *fägus* 'beech-tree,' *glas* from *classicum* 'sound of a trumpet'). The quality of their present sounds, or rather the quality that is attributed to them, is a fortuitous result of phonetic evolution.

As for authentic onomatopoeic words (e.g. *glug-glug, tick-tock*, etc.), not only are they limited in number, but also they are chosen somewhat arbitrarily, for they are only approximate and more or lest conventional imitations of certain sounds (cf. English *bow-bow* and French *ouaoua*) . In addition, once these words have been introduced into the language, they are to a certain extent subjected to the same evolution — *phonetic, morphological, etc*.— that other words undergo (cf. *pigeon*, ultimately from Vulgar Latin *pīpiō*, derived in turn from an onomatopoeic formation): obvious proof that they lose something of their original character in order to assume that of the linguistic sign in general, which is unmotivated.

2) *Interjections*, closely related to onomatopoeia, can be attacked on the same grounds and come no closer to refuting our thesis. One is tempted to see in them spontaneous expressions of reality dictated, so to speak, by natural forces. But for most interjections we can show that there is no fixed bond between their signified and their signifier. We need only compare two languages on this point to see how much such expressions differ from one language to the next (e.g. the English equivalent of French *aïe!* is *ouch!*). We know, moreover, that many interjections were once words with specific meanings (ci. French *diable!* 'darn!' *mordieu!* 'golly!' from *mort Dieu* 'God's death,' etc.).[2]

Onomatopoeic formations and interjections are of secondary importance, and their symbolic origin is in part open to dispute.

STUDY QUESTIONS III

Task 1. Summarize each point of the topic in 10 sentences

Task 2. Translate point 3 into your mother tongue

Task 3. Work in pairs answer your mate's questions

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Task 4. Make up 5-10 true/false statements on topic

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IV. The Origins of language. Graphic Representation of Language

1. **The Natural-Sound Source. The Oral-Gesture Source**
2. **The origin of language and cognition**
3. **Glossogenetics. Physiological Adaptation**
4. **Interactions and Transactions**
5. **Graphic Representation of Language**
6. **Influence of Writing; Reasons for Its Ascendance over the Spoken Form**
7. **System of Writing**
8. **Reasons for the Discrepancy between Writing and Pronunciation**

How did language begin? Words don't leave artifacts behind—writing began long after language did—so theories of language origins have generally been based on hunches. For centuries there had been so much fruitless speculation over the question of how language began that when the Paris Linguistic Society was founded in 1866, its bylaws included a ban on any discussions of it. The early theories are now referred to by the nicknames given to them by language scholars fed up with unsupportable just-so stories.

1. The Natural-Sound Source. The oral-gesture source

A quite different view of the beginnings of human speech is based on the concept of 'natural sounds'. The suggestion is that primitive words could have been imitations of the natural sounds which early men and women heard around them. When an object flew by, making a CAWCAW sound, the early human imitated the sound and used it to refer to the object associated with the sound. And when another flying object made a CUCKOO sound, that natural sound was adopted to refer to that object. The fact that all modern languages have some words with pronunciations which seem to 'echo' naturally occurring sounds could be used to support this theory. In English, in addition to *cuckoo*, we have *splash, bang, boom, rattle, buzz, hiss, screech,* and forms such as *bow-wow*. In fact, this type of view has been called the "bow-wow theory" of language origin. While it is true that a number of words in any language are onomatopoeic (echoing natural sounds), it is hard to see how most of the soundless, not to mention abstract, entities in our world could have been referred to in a language that simply echoed natural sounds. We might also be rather skeptical about a view that seems to assume that a language is only a set of words which are used as 'names' for entities.

It has also been suggested that the original sounds of language came from natural cries of emotion, such as pain, anger and joy.

One other 'natural sound' proposal has come to be known as the "yo-heave-ho" theory. The sounds of a person involved in physical effort could be the source of our language, especially when that physical effort involved several people and had to be coordinated. So, a group of early humans might develop a set of grunts, groans and swear words which they used when lifting and carrying bits of trees or lifeless mammoths. The appeal of this theory is that it places the development of human language in some social context.

The oral-gesture source

One suggestion regarding the origins of the sounds of language involves a link between physical gesture and orally produced sounds. It does seem reasonable that physical gesture, involving the whole body, could have been a means of indicating a wide range of emotional states and intentions. Indeed, many of our physical gestures, using body, hands and face, are a means of nonverbal communication still used by modern humans, even with development of linguistic skills.

The "oral-gesture" theory, however, proposes an extremely specific connection between physical and oral gesture. It is claimed that originally a set of physical gestures was developed as a means of communication. Then a set of oral gestures, specifically involving the mouth, developed, in which the movements of the tongue, lips and so on were recognized according to

patterns of movement similar to physical gestures. You might think of the movement of the tongue (oral gesture) in a 'goodbye' message as representative of the waving of the hand or arm (physical gesture) for a similar message. This proposal, involving what was called "a specialized pantomime of the tongue and lips" by *Sir Richard Paget* (1930), does seem a bit outlandish now. We can indeed, use mime or specific gestures for a variety of communicative purposes, but it is hard to visualize the actual 'oral' aspect which would mirror many such gestures. Moreover, there is an extremely large number of linguistic messages which would appear to defy transmission via this type of gesturing. As a simple experiment, try to communicate, using only gestures, the following message to another member of your species: *My uncle thinks he's invisible*. Be prepared for a certain amount of misunderstanding.

2. The origin of language and cognition

The origin of language will always continue to be a puzzling question for researchers and linguists. *Ulbaek I. mentions in "The origin of language and cognition"four main theories that dominate this field.* Two kinds of theories have dominated recent discussion of the origin of language (see Pinker & Bloom 1990): a *continuity approach* and its counterpart, a *discontinuity approach* (see Table 3.1). The continuity approach has often labelled itself Darwinian and looked for predecessors of language, typically in animal communication systems. It claims that language is such a big system, that it could not have evolved out of nothing (*de novo*). Just as we cannot conceive of the eye jumping into existence, so we cannot conceive of language as having no precursors.

The opposite position argues that language is unique among the communication systems of the biosphere, and that to claim continuity between, say, bee language and human language is to claim 'evolutionary development from breathing to walking' as pointedly remarked by Chomsky (1972: 68). Language is a task- and species-specific module in the human mind, a 'language organ' (Chomsky 1980a: 76; see also Chomsky 1980b). Chomsky has been one of the few to question a Darwinian explanation of language: 'Darwinian theory is so loose it can incorporate everything', he claimed recently (Horgan 1995: 154).

Beside the Chomskyan position another anti-evolutionary and discontinuity position exists, which could be called *culturalist*. Sociological theories often separate human biological nature from human social nature. The culturalists reject Chomsky's strong innatism, arguing that, basically, humans are unconstrained learning machines who create a culture from which all relevant properties of the human mind (including language) derive. Neither Chomsky nor the culturalists have developed a detailed account of language origins, perhaps partly because their central concerns lie elsewhere. Chomsky has suggested a mutation or plain accident, whereas culturalists have sometimes hinted that a 'leap' from the natural order to the social order must have taken place (e.g. Engelsted 1984)

Table 2.1 Theories of language origin, classified by their assumed evolutionary models and modes of language acquisition

Evolutionary model acquisition mode	*Continuity*	*Discontinuity*
Innate	Bickerton, Pinker, Ulbaek, and others	Chomsky
Learned	'Behaviourism'	Culturalism

As indicated in Table 2.1, some continuity theorists also emphasize learning as a fundamental aspect of human mind and language. The reasons for this are, first, their strong anti-Chomsky an attitude — some of them are learning psychologists — and second, the simple fact that language is undeniably learned. The position of these theorists was

revealed most clearly in *the ape language controversy* in the 70s and early 80s. Their position was supported by experiments in which different kinds of non-spoken languages were taught to various apes, mostly chimpanzees. Researchers emphasized that even though apes do not speak in the wild, they have a mind capable of learning. By means of a sign language, apes can symbolize external (and internal) states of affairs, and can communicate about these things — primarily with the researchers and lab staff, but also with fellow chimpanzees and their own offspring (the controversy is documented in several places, including Linden 1986). In Table 2.1, this position 'Behaviourism' has labelled. This is partly a misnomer because nobody really is a behaviourist these days, but the position shares with behaviourism the emphasis on learning (rather than innate structures) in language acquisition. At the same time, one has to remember the strong anti-evolutionary commitment of classical behaviourism — conditioning is the same universal mechanism throughout the whole animal kingdom, whether Pavlovian or operant.

As can be seen, one cell in Table 2.1 remains for comment. I have not left it till last because it is contradictory to claim both continuity and innateness. These are vague (and relative) terms after all. How continuous does the continuity have to be? Some kind of discontinuity must exist if things are different and not the same. And innateness comes in degrees. Even Chomsky does not claim that language is wholly innate:

to do so would fly in the face of the diversity of the world's living and extinct languages. What Chomsky *has* claimed is that without a strong innate component, language cannot be learned. To my mind his arguments are convincing.

3. Glossogenetics. Physiological adaptation

A quite different level of speculation on the origins of human speech comes under the general heading of glossogenetics. This focuses mainly on the biological basis of the formation and development of human language.

In the evolutionary development there are certain physical features, best thought of as partial adaptations that appear to be relevant for speech. By themselves, such features would not lead to speech production, but they are good clues that a creature possessing such features probably has the capacity for speech.

Physiological adaptation

Human teeth are upright, not slanting outwards like those of apes, and they are roughly even in height. Such characteristics are not needed for eating, but they are extremely helpful in making sounds such as *f, v* and *th.* Human lips have much more intricate muscle interlacing than is found in other primates and their resulting flexibility certainly helps with sounds like *p, b* and *w*. The human mouth is relatively small, can be opened and closed rapidly, and contains a very flexible tongue which can be used to shape a wide variety of sounds.

The human larynx, or the 'voice box' (containing the vocal cords), differs significantly in position from that of monkeys. In the course of human physical development, the assumption of an upright posture moved the head forward and the larynx lower. This created a longer cavity, called the pharynx, above the vocal cords, which can act as a resonator for any sounds produced via the larynx. One unfortunate consequence is that the position of the human larynx makes it much more possible for the human to choke on pieces of food. Monkeys may not be able to use the larynx to produce speech sounds, but they do not suffer from the problem of getting food stuck in the windpipe. There must have been a huge survival advantage in getting this extra vocal power (i.e. a larger range of sound distinctions) to outweigh the potential disadvantage from increased risk of choking.

The human brain is lateralized, that is, it has specialized functions in each of the two hemispheres. Those functions which are analytic, such as tool-using and language, are largely confined to the left hemisphere of the brain for most humans. It may be that there is an evolutionary connection between the tool-using and language-using abilities of humans, and that both are related to the development of the human brain. Most of the other theories of the origin

of speech have humans producing single noises or gestures to indicate objects in their environment. This activity may indeed have been a crucial stage in the development of language, but what it lacks is any 'manipulative' element. All languages, including sign language, require the organizing and combining of sounds or signs in specific constructions. This does seem to require a specialization of some part of the brain.

In terms of linguistic structure, the human may have first developed the naming ability, producing a specific noise (e.g. bEEr) for a specific object. The crucial additional step which was then accomplished was to bring another specific noise (e.g. gOOd) into combination with the first to build a complex message (e.g. bEEr gOOd)….several thousand years later, they are able to say: *This beer is good…*

4. Interactions and transactions

In developing speech, humans have obviously incorporated versions of naturally occurring sounds such as *cuckoo* and *bow-wow*. They have also incorporated cries of emotional reaction, such as *Wow*, *Ugh* and *Oops*, and accompany much of their speech with physical gestures such as pointing and raising of the hand in the shape of a fist, with middle finger pointing up. All this noise-making and gesturing, however, seems to be characteristic of only one of the major functions of language use, which we may describe as the interactional function. It has to do with how humans use language to interact with each other, socially or emotionally; how they indicate friendliness, co-operation or hostility, or annoyance, pain, or pleasure.

But there is another major function of language, the transactional function, whereby humans use their linguistic abilities to communicate knowledge, skills and information.

The transactional function must have developed, in part, for the transfer of knowledge from one generation to the next. This transfer function of language remains fairly restricted in time and space as long as it can only be realized in speech. By its nature, speech is transient. The desire for a more permanent record of what was known must have been the primary motivation for the development of markings and inscriptions and, eventually, of written language.

5. Graphic Representation of Language - Need for studying the Subject

The concrete object of linguistic science is the social product deposited in the brain of each individual, i.e. Language. But the product differs with linguistic groups: we have to work with languages. The linguist is obliged to acquaint himself with the greatest possible number of languages in order to determine what is universal in them by observing and comparing them.

But we generally learn about languages only through writing. Even in studying our native language, we constantly make use of written texts. The necessity of using written evidence increases when dealing with remote idioms, and all the more when studying idioms that no longer exist. We would have direct texts at our disposal in every instance only if people had always done what is now being done in Paris and Vienna. There, samples of all languages are being recorded. Even so, recorded specimens could be made available to others only through writing.

Writing, though unrelated to its inner system, is used continually to represent language. We cannot simply disregard it. We must be acquainted with its usefulness, shortcomings, and dangers.

6. Influence of Writing; Reasons for Its Ascendance over the Spoken Form

Language and writing are two distinct systems of signs; the second exists for the sole purpose of representing the first. The linguistic object is not both the written and the spoken forms of words; the spoken forms alone constitute the object. But the spoken word is so intimately bound to its written image that the latter manages to usurp the main role. People attach even more importance to the written image of a vocal sign than to the sign itself. A similar mistake would be in thinking that more can be learned about someone by looking at his photograph than by viewing him directly.

This illusion, which has always existed, is reflected in many of the notions that are currently bandied about on the subject of language. Take the, notion that an idiom changes more rapidly when writing does not exist. Nothing could be further from the truth. Writing may retard the process of change under certain conditions, but its absence in no way jeopardizes the preservation of language. The oldest written texts of Lithuanian, which is still spoken in eastern Prussia and in a part of Russia, date from 1540; but the language of even that late period offers a more faithful picture of Proto-Indo-European than does Latin of 300 B.C. This one example is enough to show the extent to which languages are independent of writing.

Certain very slight linguistic facts have been preserved without the help of any notation. During the whole Old High German period, people wrote *toten, fuolen, stozen;* near the end of the 12th century the forms *toten*, *fuelen* appeared, but *stozen* subsided. How did the difference originate? Wherever the umlaut occurred, there was a *y* in the following syllable. Proto-Germanic had **daupyan*, **folyan*, but **stautan*. At the very beginning of the literary period (about 800) they became so weak that no trace of it appears in writing for three centuries; still, a slight trace had remained in the spoken form; that is how it miraculously reappeared as an umlaut around 1180! Without the help of writing, a slight difference in pronunciation was accurately transmitted.

Thus language does have a definite and stable oral tradition that is independent of writing, but the influence of the written form prevents our seeing this. The first linguists confused language and writing, just as the humanists had done before them. Even *Bopp* failed to distinguish clearly between letters and sounds. His works give the impression that a language and its alphabet are inseparable. His immediate successors fell into the same trap; the transcription *A* (for the fricative *b*) caused Grimm to think not only that *th* was a double sound but also that it was an aspirated occlusive, and he accordingly assigned it a specific place in his law of consonantal mutation or *Lautverschiebung*. Still today intelligent men confuse language and writing. To take but one example, Gaston Deschamps credited Berthelot with "preserving French from ruin" because he had opposed spelling reform. But how is the influence of writing to be explained?

1). First, the graphic form of words strikes us as being something, permanent and stable, better suited than sound to account for the unity of language throughout time. Though it creates a purely fictitious unity, the superficial bond of writing is much easier to grasp than the only true bond, the bond of sound.

2). Most people pay more attention to visual impressions simply because these are sharper and more lasting than aural impressions; that is why they show a preference for the former. The graphic form manages to force itself upon them at the expense of sound.

3). The literary language adds to the underserved importance of writing. It has its dictionaries and grammars; in school, children are taught from and by means of books; language is apparently governed by a code; the code itself consists of a written set of strict rules of usage, orthography; and that is why writing acquires primary importance. The result is that people forget that they learn to speak before they learn to write, and the natural sequence is reversed.

4). Finally, when there is a disagreement between language and orthography, settlement of the dispute is difficult for everyone except the linguist; and since he is given no voice in the matter, the written form almost inevitably wins out, for any solution supported by it is easier; thus writing assumes underserved importance.

7. System of Writing

There are only two systems of writing

1) In an ideographic system each word is represented by a single sign that is unrelated to the sounds of the word itself. Each written sign stands for a whole word and, consequently, for the idea expressed by the word. The classic example of an ideographic system of writing is Chinese.

2) The system commonly known as "phonetic" tries to reproduce the succession of sounds that make up a word. Phonetic systems are sometimes syllabic, sometimes alphabetic, i.e., based on the irreducible elements used in speaking.

Moreover, ideographic systems freely become mixtures when certain ideograms lose their original value and become symbols of isolated sounds.

The statement that the written word tends to replace the spoken one in our minds is true of both systems of writing, but the tendency is stronger in the ideographic system. To a Chinese, an ideogram and a spoken word are both symbols of an idea; to him writing is a second language, and if two words that have the same sound are used in conversation, he may resort to writing in order to express his thought. But in Chinese the mental substitution of the written word for the spoken word does not have the annoying consequences that it has in a phonetic system, for the substitution is absolute; the same graphic symbol can stand for words from different Chinese dialects.

When first devised a phonetic alphabet – unless borrowed and already marked by inconsistencies – gives a fairly rational representation of language. With respect to logic, Greek is especially noteworthy. But the harmonious relation between writing and pronunciation does not last. Why? This question must be examined.

8. Reasons for the Discrepancy between Writing and Pronunciation

Of the numerous causes of lack of agreement between writing and pronunciation, we shall recall only the more important ones.

First language is constantly evolving, whereas writing tends to remain stable. The result is that a point is reached where writing no longer corresponds to what it is supposed to record. A transcription that is accurate at a particular moment will be absurd a century later. For a time people may change their graphic symbols to conform with changes in pronunciation, then relinquish the effort. This happened in French in the case of *oi*:

Pronunciation	Written Forms
Eleventh Century *1 rei, lei*	*rei, lei*
Thirteenth Century ……. *2 roi, loi*	*roi, lai*
Fourteenth Century ……. *3 roe, log*	*roi, hri*
Nineteenth Century ……. *4 rwa, lwa*	*roi, loi*

Up until period 2 changes in pronunciation were recorded; each step in the history of the language was matched by a corresponding step in the history of writing. But after the 14th century the written form of the words remained unchanged while the evolution of the language continued; from that moment the discrepancy between the language and its orthography increased progressively. Finally, the practice of joining discordant terms had its repercussion on the graphic system itself: the combination acquired a value that was unrelated to either *o* or *i*.

Such examples could be multiplied indefinitely. For instance, why should the French write *mais* "but" and *fait* "fact" when the words are pronounced *me* and *fe*? Why does *c* often have the value of *8*? The answer is that French has retained outmoded spellings.

Spelling always lags behind pronunciation. The *l* in French is today changing to *y*; speakers say *eveyer, mouyer*, just as they say *essuyer* "wipe", *nettoyer* "clean"; but the written forms of these words are still *eveiller* "awaken", *mouiller* "soak".

Another reason for discrepancy between spelling and pronunciation is this: if an alphabet is borrowed from another language, its resources may not be appropriate for their new function; expedients will have to be found (e.g. the use of two letters to designate a single sound). Take the voiceless dental fricative *p/f* of the Germanic languages. Since Latin had no sign for this sound, *th* was used. The Merovingian king Chilperic tried to add a specific symbol for this sound to the Latin alphabet, but this attempt was unsuccessful and *th* won acceptance. During the Middle Ages English had a closed *e* (e.g. *sed*) and an open *e* (e.g. *led*); since the alphabet failed to provide distinct symbols for the two sounds, the spelling *seed* and *lead* were devised. French uses the double symbol *ch* to stand for hushing *e*, etc.

The influence of etymology also helps to widen the gap between spelling and pronunciation. It has been especially strong during certain periods (e.g. the Renaissance). Even a false etymology often forces itself into the spelling of a word: *d* was inserted in French *poinds* „weight" as if the words were derived from Latin *pondus*; *poinds* actually comes from *pensum*. Whether the application of the principle is correct matters little; the fallacy is in spelling words according to their etymology.

Other reasons for the discrepancy are not so obvious; some absurdities cannot be excused even on etymological grounds. Why was *thun* used instead of *tun* in German? The *h* was said to represent the aspiration that followed the initial consonant; but it would have to be inserted wherever aspiration occurs, and many similar words were never written with *h* (*Tugend Tisch*, etc).

{Cf. English *island*, derived from *ig* „island"and *land* „land" but influenced by *isle*, and *doubt*, derived from Old French *douter* but later changed to conform with Latin *dubitare*.}

STUDY QUESTIONS IV

Task 1. Study the questions

1. What is the basic idea behind the "yo-heave-ho" theory?
2. What specific type of claim us made by the "oral-gesture" theory?
3. What specific features of human teeth and lips make them useful in the production of speech sounds?
4. What exactly happened with the larynx and why was it a disadvantage?
5. What are the two major functions of language, and how do they differ?

Task 2. Make up 5 special questions

1. _____
2. _____
3. _____
4. _____
5. _____

Task 3. Make up 10 true/false statements on topic

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

V. The development of writing. The properties of language

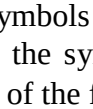
1. ***Pictograms and Ideograms***
2. ***Logograms***
3. ***Rebus Writing***
4. ***Syllabic Writing***
5. ***Alphabetic Writing. Written English***
6. ***The properties of language - Communicative Versus Informative***
7. ***Unique Properties (Displacement, Arbitrariness, Productivity, Cultural transmission, Discreteness, Duality***
8. ***Other Properties***

Writing which is based on some type of alphabetic script can only be traced back to inscriptions dated around *3,000* years ago.

Much of the evidence used in the reconstruction of ancient writing systems comes from inscriptions on stone or tablets found in the rubble of ruined cities. If those ancients were using other elaborate scripts on wood, leather or other perishable materials, we have lost them. But those inscriptions we do have allow us to trace the development of one writing tradition going back a few thousand years with which the human has sought to create a more permanent record of what was thought and said.

1. Pictograms and ideograms

Cave drawings may serve to record some event (e.g. Humans 3, Buffaloes I), but they are not usually thought of as any type of specifically linguistic message. They are normally considered as part of a tradition of pictorial art. When some of the 'pictures' came to represent particular images in a consistent way, we can begin to describe the product as a form of picture-writing, of pictograms. Thus, a form such as ☼ might come to be used for the *sun*. An essential part of this use of a representative symbol is that everyone should use similar forms to convey roughly similar meaning. A conventional relationship must exist between the symbol and its interpretation. In time, this picture might take on a more fixed symbolic form, such as Θ, and come to be used for 'heat' and 'daytime', as well as for 'sun'. This type of symbol is considered to be part of a system of idea-writing, or **ideograms**. The distinction between pictograms and ideograms is essentially a difference in the relationship between the symbol and the entity it represents. The more 'picture-like' forms are pictograms, the more abstract, derived forms are ideograms. A key property of both pictograms and ideograms is that they do not represent words or sounds in a particular language. Modern pictograms, such as those represented in the accompanying illustration, are language-independent.

It is generally thought that there are pictographic or ideographic origins for a large number of symbols which turn up in later writing systems. For example, in Egyptian hieroglyphics, the symbol  is used to refer to a house and derives from the diagrammatic representation of the floor-plan of a house. In Chinese writing, the character  is used for a river, and has its origins in the pictorial representation of a stream flowing between two banks. However, it should be noted that neither the Egyptian nor the Chinese written symbols are in fact pictures of a house or a river. There is an abstraction away from the form of the real-world entity in producing the symbol.

When the relationship between the symbol and the entity or idea becomes sufficiently abstract, we can be more confident that the symbol is being used to represent words in a language. In Egyptian writing, the ideogram for water was  . Much later, the derived symbol ~ came to be used for actual word meaning "water". When symbols come to be used to represent words in a language, they are described as examples of word-writing, or '**logograms'**.

2. Logograms

A good example of logographic writing is that used by the Sumerians, in the southern part of modern Iraq, between 5.000 and 6.000 years ago. Because of the particular shapes used in their symbols, these inscriptions are more generally described as **cuneiform** writing. The term 'cuneiform' means 'wedge-shaped' and the inscriptions used by the Sumerians were produced by pressing a wedge-shaped implement into soft clay tablets, resulting in forms like  .

The form of this symbol really gives no clue to what type of entity is being referred to. The relationship between the written form and the object it represents has become arbitrary, and we have a clear example of word-writing, or a **logogram**. The form above can be compared with a typical pictographic representation of the dame fishy entity:  We can also compare the ideogram for sun, presented earlier as  , with the logogram used to refer to the same entity found in cuneiform writing:  .

So, by the time of the Sumerians, we have evidence that a writing system which was word-based had come into existence. In fact, it is Sumerian cuneiform inscriptions which are normally referred to when the expression "the earliest known writing system" is used.

A modern writing system which is based, to a certain extent, on the use of logograms can be found in China. Many Chinese written symbols, or **characters**, are used as representations of the meaning of words and not of the sounds of the spoken language. One of the advantages of such a system is that two speakers of very different dialects of Chinese, who might have great difficulty understanding each other's spoken forms, can both read the dame written text. Chinese writing, with the longest continuous history of use as a writing system (i.e. 3.000 years), clearly has many other advantages for its users. One major disadvantage is that an extremely large number of different written symbols exists within this writing system, although basic literacy is possible with knowledge of only 2.000 characters. Remembering large numbers of different word-symbols, however, does seem to present a substantial memory load, and the history of most other writing systems illustrates a development away from logographic writing. To accomplish this, some principled method is required to go from symbols which represent words (i.e. a logographic system) to a set of symbols which represent sounds (i.e. phonographic system).

3. Rebus writing

One way of using existing symbols to represent the sounds of language is via a process known as Rebus writing. In this process, the symbol for one entity is taken over as the symbol for the sound of the spoken word used to refer to that entity. That symbol then comes to be used whenever that sound occurs in any words. We can imagine how the pictogram  could have developed into the logogram  . This logogram is pronounced as *eye*, and with the Rebus principle at work, you should be able to refer to yourself as  ("I"), to one of your friends as ("Cross-eye"), combine this form with the logogram for '*deaf*' and produce "*defy*", with the logogram for 'boat' and produce "bow-tie", and so on. Take another, non-English, example, in which the ideogram  becomes the logogram  , for the word pronounced *ba* (meaning 'boat'). We can then produce a symbol for the word pronounced *baba* (meaning 'father') which would be  . One symbol can thus be used in many different ways, with a range of meanings. What this process accomplishes is a sizeable reduction in the number of symbols needed in a writing system.

4. Syllabic writing

In the last example, the symbol which is used for the pronunciation of parts of a word represents a combination *(ba)* of a consonant *(b)* and a vowel *(a)*. This combination is one type of syllable. When a writing system employs a set of symbols which represent the pronunciations of syllables, it is described as syllabic writing.

There are no purely syllabic writing systems in use today, but modern Japanese can be written with a set of single symbols which represent spoken syllables and is consequently often

described as having a (partially) syllabic writing system, or a syllabary. In the nineteenth century, an American Indian named Sequoyah invented a syllabic writing system which was used by the Cherokee Indians to produce written messages from the spoken language. In these Cherokee examples,  *(ho)*,  *(sa)* and  *(ge)*, note that the symbols do not correspond to single consonants of vowels, but to syllables.

Both the Egyptian and the Sumerian writing systems evolved to the point where some of the earlier logographic symbols were used to represent spoken syllables. However, the full use of a syllabic writing system does not appear until that used by the Phoenicians, inhabiting what is modern Lebanon, between 3.000 and 4.000 years ago. It is clear that many of the symbols which they used were taken from earlier Egyptian writing. The Egyptian form  , meaning 'house', was adopted, in a slightly reoriented form, as  . After being used logographically for the word pronounced *beth* (still meaning 'house') it came to represent syllables beginning with a *b* sound. Similarly, the Egyptian form  , meaning 'water', turns up as  , and is used for syllables beginning with an *m* sound. So, a word which might be pronounced *muba* could be written as  , and the pronunciation *bima* as  . Note that the direction of writing is from right to left. By about I000 BC, the Phoenicians had stopped using logograms and had a fully developed syllabic writing system.

5. Alphabetic writing. Written English

If you have a set of symbols being used to represent syllables beginning with, for example, a *b* sound or an *m* sound, then you are actually very close to a situation in which the symbols can be used to represent single sound types in a language. This is, in effect, the basis of alphabetic writing. An alphabet is essentially a set of written symbols which each represent a single type of sound. The situation described above is generally what seems to have occurred in the origins of the writing systems of Semitic languages such as Arabic and Hebrew. The alphabets of these languages, even in their modern versions, largely consist of consonant symbols. This early form of alphabetic script, originating in the writing systems of the Phoenicians, is the general source of most other alphabets to be found in the world. A modified version can be traced to the East into Indian and South-East Asian writing systems and to the West through Greek.

Significantly, the early Greeks took the alphabetizing process a stage further by also using separate symbols to represent the vowel sounds as distinct entities, and so a remodeled alphabet was created to include these. This change produced a distinct symbol for the vowel *a (alpha)* to go with existing symbols for consonants such as *b (beta)*. In fact, for some writers on the origins of the modern alphabet, it is the Greeks who should be given credit for taking the inherently syllabic system from the Phoenicians, and creating a writing system in which the single-symbol to single-sound correspondence was fully realized.

From the Greeks, this revised alphabet passed to the rest of Western Europe via the Romans and, of course, it underwent several modifications to fit the requirements of the spoken languages encountered. Another line of development took the same Greek writing system into Eastern Europe where Slavic languages were spoken. The modified version, called the Cyrillic alphabet (after St Cyril, a ninth century Christian missionary), is the basis of the writing system used in Russia today.

The actual form of a number of the letters in modern European alphabets can be traced from their origins in Egyptian hieroglyphics. (*copy the symbols from the blackboard*)

Egyptian	***Phoenician***	***Early Greek***	***Roman***
			B
			M
			S
			K

Written English -

If indeed the origins of the alphabetic writing system were based of a correspondence between single symbol and single sound type, then one might reasonable ask why there is such a frequent mismatch between the forms of written English and the sounds of spoken English.

The answer to that question must be sought in a number of historical influences on the form of written English. The spelling of written English was very largely fixed in the form that was used when printing was introduced into fifteenth-century England. At that time, a number of conventions regarding the written representation of words derived from forms used in writing other languages, notably Latin and French. Moreover, many of the early printers were native Dutch speakers and could not make consistently accurate decisions about English pronunciations. Perhaps more important is the fact that, since the fifteenth century, the pronunciation of spoken English has undergone substantial changes. Thus, even if there had been a good, written-letter to speech-sound correspondence at that time, and the printers gad got it right, there would still be major discrepancies for the present-day speakers of English. If one adds in the fact that a large number of older written English words were actually 'recreated' by sixteenth-century spelling reformers to bring their written forms more into line with what were supposed, sometimes erroneously, to be their Latin origins (e.g. *dette* became *debt*, *iland* became *island*), then the sources of the mismatch begin to become clear. How one goes about describing the sound of English words in a consistent way, when the written forms provide such unreliable clues.

6. The properties of language - Communicative versus informative

In order to describe those properties, we should first distinguish what are specifically **communicative** signals from those which may be unintentionally informative signals. A person listening to you may become informed about you via a number of signals which you have not intentionally sent. She may note that you have a cold (you sneezed), that you aren't at ease (you shifted around in your seat), that you are untidy (un-brushed hair, rumpled clothing), that you are disorganized (non-matching socks), and that you are from some other part of the country (you have a strange accent). However, when you use language to tell this person, "I would like to apply for the vacant position of senior brain surgeon at the hospital", you are normally considered to be intentionally communicating something. By the same token, the *blackbird* is not normally taken to be communicating anything by having *black feathers*, perching on a branch and eating a worm, but is considered to be sending a communicative signal with the loud squawking to be heard when a cat appears on the scene. So, when we consider the distinctions between human language and animal communication, we are considering both in terms of their potential as a means of intentional communication.

7. Unique properties

There have been a number of attempts to determine the defining properties of human language, and different lists of features can be found. We shall take six of these features and describe how they are manifested in human language. We shall also try to describe in what ways these features are uniquely a part of human language and unlikely to be found in the communication systems of other creatures. We should remain aware; however, that our view of how other creatures communicate is essentially an outsider's view and may be inaccurate. It is possible that your pet has quite complex communication with other members of its species and frequently comments on how hard it is to get points across to the large clumsy bipeds who act as if they know it all. Bearing that caveat in mind, we can now consider some of the properties which the bipeds believe are unique to their linguistic system.

a. Displacement

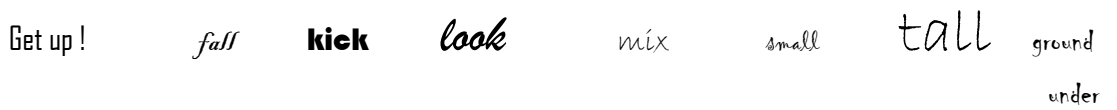
When your pet cat comes home after spending a night in the back alleys and stands at your feet calling *meow*, you are likely to understand this message as relating to that immediate time and place. If you ask the cat where it was the night before and what it was up to, you may

get the same *meow* response. It seems that animal communication is almost exclusively designed for this moment, here and now. It cannot effectively be used to relate events which are far removed in time and place. When your dog says *GRRR*, it is likely to, mean *GRRR, right now*, because it does not appear capable of communicating *GRRR, last night, over in the park*. Now, human language users are perfectly capable of producing messages equivalent to *GRRR, last night, over in the park*, and going on to say *In fact, I'll be going back tomorrow for some more*. They can refer to past and future time, and to other locations. This property of human language is called displacement. It allows the users of language to talk about things and events not present in the immediate environment. Animal communication is generally considered to lack this property.

The factors involved in the property of displacement, as it is manifested in human language, are much more comprehensive than the communication of a single location. It enables us to talk about things and places whose existence we cannot even be sure of. We can refer to mythical creatures, demons, fairies, angels, Santa Claus, and recently invented characters such as Superman. It is the property of displacement that allows the human, unlike any other creature, to create fiction and to describe possible future worlds.

b. Arbitrariness

It is generally the case that there is no 'natural' connection between a linguistic form and its meaning. You cannot at the Arabic word [redacted], and from its shape, for example, determine that it has a natural meaning, any more than you can with its English translation form *dog*. The linguistic form has no natural of 'iconic' relationship with that four-legged barking object out in the world. Recognizing this general fact about language leads us to conclude that a property of linguistic signs is their arbitrary relationship with the objects they are used to indicate. The forms of human language demonstrate a property called arbitrariness: they do not, in any way, 'fit' the objects they denote. Of course, you can play a game with words to make them 'fit', in some sense, the property or activity they indicate, as in these examples from a child's game:



However, such a game only emphasizes how arbitrary the connection normally is between the linguistic form and its meaning.

There are, of course, some words in language which have sounds which seem to 'echo' the sounds of objects of activities. English examples might be *cuckoo, CRACH, slurp, squelch* or *whirr*, which are onomatopoeic, and which we have already noted as part of the 'natural sounds' theory of language origin. In most languages, however, these onomatopoeic words are relatively rare, and the vast majority of linguistic expressions are in fact arbitrary.

As far as mating is concerned, the human seems to behave as if it is always open season, and the range and frequent novelty of linguistic expressions used in connection with that activity may provide evidence for another property of human language, normally described as 'productivity'.

c. Productivity

It is a feature of all languages that novel utterances are continually being created. A child learning language is especially active in forming and producing utterances which he or she has never heard before. With adults, new situations arise or new objects have to be described, so the language-users manipulate their linguistic resources to produce new expressions and new sentences. This property of human language has been termed productivity (or '*creativity'*, or '*open-endedness'*). It is an aspect of language which is linked to the fact that the potential number of utterances in any human language is infinite.

Non-human signaling, on the other hand, appears to have little flexibility. Cicadas have four signals to choose from and vervet monkeys have about thirty-six vocal calls (including the

noises for vomiting and sneezing). Nor does it seem possible for animals to produce 'new' signals to communicate novel experiences or events.

The problem seems to be that animal signals have a feature called fixed reference. Each signal is fixed as relating to a particular object or occasion.

d. Cultural transmission

While you may inherit brown eyes and dark hair from your parents, you do not inherit their language. You acquire a language in a culture with other speakers and not from parental genes. An infant born to Korean parents (who have never left Korea and speak only Korean), which is adopted and brought up from birth by English speakers in the United States, may have physical characteristics inherited from its natural parents, but it will inevitably speak English. A kitten, given comparable early experiences, will produce *meow* regardless.

This process whereby language is passed on from one generation to the next is described as cultural transmission. While it has been argued that humans are born with an innate predisposition to acquire language, it is clear that they are not born with the ability to produce utterances in a specific language, such as English. The general pattern of animal communication is that the signals used are instinctive and not learned.

e. Discreteness

The sounds used in language are meaningfully distinct. For example, the difference between a *b* sound and a *p* sound is not actually very great, but when these sounds are part of a language like English, they are used in such a way that the occurrence of one rather than the other is meaningful. The fact that the pronunciation of the forms *pack* and *back* leads to a distinction in meaning can only be due to the difference between the *p* and *b* sounds in English. This property of language is described as discreteness. Each sound in the language is treated as discrete. It is possible, in fact, to produce a range of sounds in a continuous stream which are all generally like the *p* and *b* sounds. These physically different sounds could be conceived of as the spoken counterpart of a written set such as:

However, that continuous stream will only be interpreted as being either a *p* sound, or a *b* sound (or, possibly, as a non-sound) in the language. We have a very discrete view of the sounds of our language and wherever a pronunciation falls within the physically possible range of sounds, it will be interpreted as a linguistically specific and meaningfully distinct sound.

f. Duality

Language is organized at two levels of layers simultaneously. This property is called duality, of 'double articulation'. In terms of speech production, we have the physical level at which we can produce individual sounds, like *n*, *b*, and i. As individual sounds, none of these discrete forms has any intrinsic meaning. When we produce those sounds in a particular combination, as in *bin*, we have another level producing a meaning which is different from the meaning of the combination in *nib*. So, at one level, we have distinct sounds, and, at another level, we have distinct meanings. This duality of levels is, in fact, one of the most economical features of human language, since with a limited set of distinct sounds we are capable of producing a very large number of sound combinations (e.g. words) which are distinct in meaning.

8. Other Properties

These six properties of *displacement, arbitrariness, productivity, cultural transmission, discreteness* and *duality* may be taken as the core features of human language. Human language does of course have many other properties, but these are not uniquely human characteristics.

The use of the vocal-auditory channel, for example, is certainly a feature of human speech. Human linguistic communication is typically generated via the vocal organs and perceived via the ears. Linguistic communication, however, can also be transmitted without sound, via writing or via the sign languages of the deaf. Moreover, many other species (e.g. dolphins) use the vocal-auditory channel. Thus, this property is not a defining feature of human language.

Similar points can be made about ***reciprocity*** (any speaker/sender of a linguistic signal can also be a listener/receiver); ***specialization*** (linguistic signals do not normally serve any other type of purpose, such as breathing or feeding); ***non-directionality*** (linguistic signals can be picked up by anyone within hearing, even unseen); and ***rapid fade*** (linguistic signals are produced and disappear quickly). Most of these are properties of the spoken language, but not of the written language. They are also not present in many animal communication systems which characteristically use the visual mode or involve frequent repetition of the same signal. Such properties are best treated as ways of describing human language, but not as a means of distinguishing it from other systems of communication.

STUDY QUESTIONS V

Task 1. Study questions

1. Where will you find the writing system with the longest history of continuous use?
2. What is the name given to the writing system used in Russia?
3. Which modern language uses a partially syllabic writing system?
4. What are the disadvantages of a logographic writing system?
5. What is the process known as rebus writing?
6. Can you briefly explain what the term ‘arbitrariness’ means as it is used to describe a property of human language?
7. Which term is used to describe the ability of human language-users to discuss topics which are remote in space and time?
8. Is the fact that linguistic signals do not normally serve any other type of purpose, such as feeding, a good reason to consider this unique property of human language?
9. What is the term used to describe the fact that, in a language, we can have different meanings for the three words *tack, act* and *cat*, yet in each case, use the same basic set of sounds?
10. What kind of evidence supports the idea that language is culturally transmitted?

Task 2. Translate point 8 from ST into TT

VI. First and Second Language Acquisition

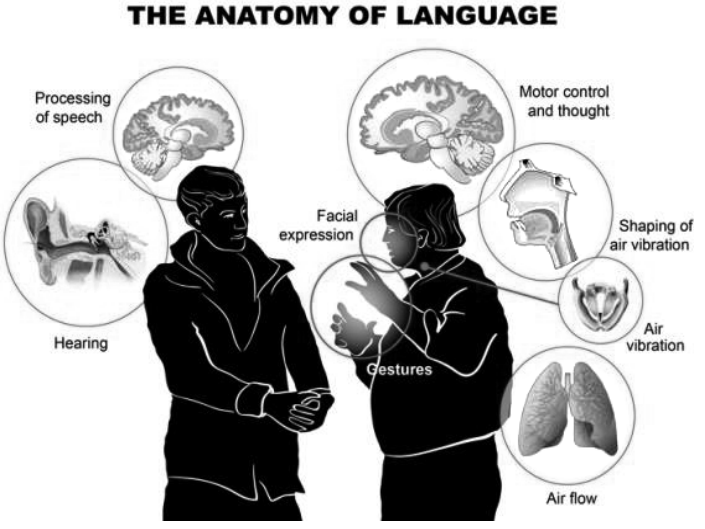
1. **Language and the brain**
2. **Speech and language brain regions**
3. **First Language Acquisition**
4. **Stages of Language Acquisition in Children**
5. **Second Language Acquisition**
6. **Natural Order of Strategies of Second Language Development**

1. Language and the brain

Language is a significant part of what makes us human, along with other cognitive skills such as mathematical and spatial reasoning, musical and drawing ability, the capacity to form social relationships, and the like.

Language processing refers to the way human beings use words to communicate ideas and feelings, and how such communications are processed and understood. Thus it is how the brain creates and understands language. Most recent theories consider that this process is carried out entirely by and inside the brain.

This is considered one of the most characteristic abilities of the human species - perhaps the most characteristic. However very little is known about it and there is huge scope for research on it. Language is brain stuff--not tongue, lip, ear, or hand stuff. The language organ is the mind. More specifically, the language faculty seems to be located in certain areas of the left hemispheric cortex in healthiest adults. A special branch of linguistics, called neurolinguistics, studies the physical structure of the brain as it relates to language production and comprehension. Much of the language function is processed in several association areas, and there are two well-identified areas that are considered vital for human communication: Wernicke's area and Broca's area. These areas are usually located in the dominant hemisphere (the left hemisphere in 97% of people) and are considered the most important areas for language processing. This is why language is considered a localized and lateralized function : The anatomy of language



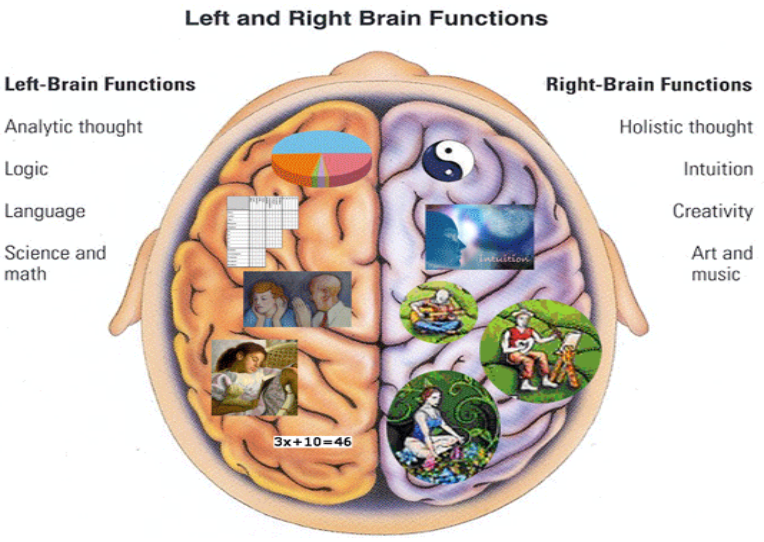
2. Speech and language brain regions

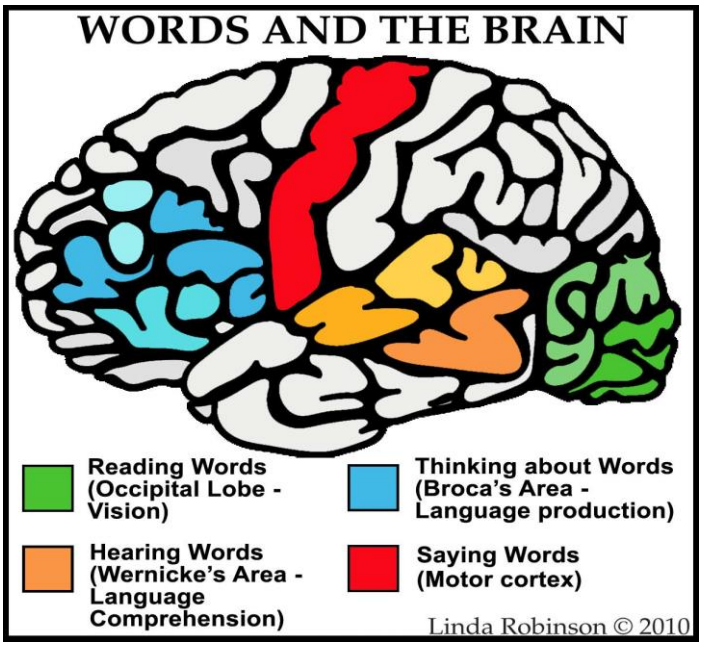
The visual cortex is the part of the cerebral cortex that is responsible for processing visual information.

The auditory cortex in the cerebral cortex processes auditory information and as part of the sensory system for hearing, performs both basic and higher hearing functions.

Wernicke's area is an area in the cerebral cortex related to speech and is involved in both spoken and written language. This area was named after Carl Wernicke, a German neurologist who discovered that the area is related to how words and syllables are pronounced.

Broca's area is an area in the frontal lobe of the brain that is related to the production of speech. The area is named after Pierre Paul Broca who noticed an impaired ability to produce speech in two patients who had sustained injury to the region.





Wernicke's area is classically located in the posterior section of the superior temporal gyrus of the dominant hemisphere, with some branches extending around the posterior section of the lateral sulcus, in the parietal lobe.

Broca's area is usually formed by the pars triangularis and the pars opercularis of the inferior frontal gyrus . Broca's area is involved mostly in the production of speech. Given its proximity to the motor cortex, neurons from Broca's area send signals to the larynx, tongue and mouth motor areas, which in turn send the signals to the corresponding muscles, thus allowing the creation of sounds.

Language is a significant part of what makes us human, along with other cognitive skills such as mathematical and spatial reasoning, musical and drawing ability, the capacity to form

social relationships, and the like. As with these other cognitive skills, linguistic behavior is open to investigation using the familiar tools of observation and experimentation.

It is wrong, however, to exaggerate the similarity between language and other cognitive skills, because language stands apart in several ways. For one thing, the use of language is universal—all normally developing children learn to speak at least one language, and many learn more than one. By contrast, not everyone becomes proficient at complex mathematical reasoning, few people learn to paint well, and many people cannot carry a tune. Because everyone is capable of learning to speak and understand language, it may seem to be simple. But just the opposite is true—language is one of the most complex of all human cognitive abilities

Many people assume the physical basis of language lies in the lips, the tongue, or the ear. But deaf and mute people can also possess language fully. People who have no capacity to use their vocal cords may still be able to comprehend language and use its written forms. And human sign language, which is based on visible gesture rather than the creation of sound waves, is an infinitely creative system just like spoken forms of language. But the basis of sign language is not in the hand, just as spoken language is not based in the lips or tongue. There are many examples of aphasics who lose both the ability to write as well as to express themselves using sign-language, yet they never lose manual dexterity in other tasks, such as sipping with a straw or tying their shoes.

The language development at the children

Many of the most complex aspects of language are mastered by three- and four-year-old children. It is astonishing for most parents to watch the process unfold. What many parents don't realize is that all children follow roughly the same path in language development. And all children reach essentially many of the same conclusions about language, despite differences in experience. All preschool children, for example, have mastered several complex aspects of the syntax and semantics of the language they are learning. This suggests that certain aspects of syntax and semantics are not taught to children.

Further underscoring this conclusion is the finding, from experimental studies with children, that knowledge about some aspects of syntax and semantics sometimes develops in the absence of corresponding evidence from the environment.

Children are able to tell when sentences are false, as well as when they are true. This means that children use their knowledge of language structure in comprehending sentences, even if it means ignoring their wishes and the beliefs they have formed about the world around them.

Theoretical frameworks of language development

The ***nativist*** theory, proposed by Noam Chomsky, argues that language is a unique human accomplishment.

The ***empiricist*** theory suggests, contra Chomsky, that there is enough information in the linguistic input children receive and therefore, there is no need to assume an innate language acquisition device exists.

Interactionist perspective, consisting of social-interactionist theories of language development.

The ***behaviorist*** theory proposed by B. F. Skinner suggested that language is learned through operant conditioning, namely, by imitation of stimuli and by reinforcement of correct responses.

3. First Language Acquisition

Language acquisition is the process by which humans acquire the capacity to perceive and comprehend language, as well as to produce and use words and sentences to communicate. Language acquisition is one of the quintessential human traits, because nonhumans do not communicate by using language. Every language is complex. Before the age of 5, the child knows most of the intricate system of grammar.

Theories of Language Acquisition

In a broader sense, various theories and approaches have been emerged over the years to study and analyze the process of language acquisition. There are four main theories of language acquisition:

- **Imitation, Nativism** or **Behaviorism** – based on the empiricist or behavioral approach
- **Innateness or Mentalism** – based on the rationalistic or mentalist approach
- **Cognition** – based on the cognitive-psychological approach
- **Motherese** or **Input** – based on the maternal approach to language acquisition

Imitation

Language has long been thought of a process of imitation, and reinforcement.

- Imitation theory based on the empiricist or behavioral approach.
- Main Figure: B. F. Skinner
- Children start out as clean slates and language learning is process of getting linguistic habits printed on these slates.
- Language Acquisition is a process of experience.
- Language is a "conditioned behavior" : the stimulus response process
- Stimulus Response Feedback Reinforcement

Innateness

- ✓ Children are born with an innate propensity for language acquisition, and that this ability makes the task of learning a first language easier than it would otherwise be.
- ✓ The human brain is ready naturally for language in the sense when children are exposed to speech, certain general principles for discovering or structuring language automatically begin to operate.
- ✓ Main Figure: Bloomfield & Noam Chomsky

Cognition

- ✓ Language Acquisition must be viewed within the context of a child's intellectual development.
- ✓ Before children can use linguistic structures, they need first to have developed the conceptual ability to make relative judgments.
- ✓ Main Figure: Jean Piaget
- ✓ Focuses on exploring the links between the stages of cognitive development and language skill.

The links have been clearly shown for the earliest period of language learning (up to 19 months), relating to the development of what Piaget called "sensory motor" intelligence, in which children construct a mental picture of a word of objects that have independent

Input

- ✓ It is based on the maternal approach to language acquisition.
- ✓ Parents do not talk to their children in the same way as they talk to other adults and seem to be capable of adapting their language to give the child maximum opportunity to interact and learn.
- ✓ Main Figure: C. A. Ferguson
- ✓ The utterance of the parents is considerably and subconsciously simplified especially with respect to grammar and meaning of sentences are shorter.

4. Stages of Language Acquisition in Children

In nearly all cases, children's language development follows a predictable sequence. However, there is a great deal of variation in the age at which children reach a given milestone. Furthermore, each child's development is usually characterized by gradual acquisition of particular abilities: thus "correct" use of English verbal inflection will emerge over a period of a year or more, starting from a stage where verbal inflections are always left out, and ending in a stage where they are nearly always used correctly.

Jean Piaget was a Swiss psychologist who studied the development of cognitive processes from infancy through adulthood. Piaget often spoke about the relationship between cognitive development and language skills, but he was never exclusively focused on childhood language development. Piaget's theories have been extremely influential on psychologists studying early childhood.

The Sensorimotor Stage

According to Piaget's theory, all children develop cognitive abilities such as language in four stages. In the sensorimotor stage, which lasts until the child is around 2 years old, the emphasis is on movement and physical reactions. Small babies don't realize they can control their own bodies, so much of their play is initially based on figuring out how to perform basic motor activities like opening the fingers or waving the legs followed by more complex tasks like crawling and finally walking. At this early stage in cognitive development, Piaget saw language skills as basically physical. The baby experiments with what her mouth can do just as she experiments with what her hands can do. In the process she learns how to imitate some of the sounds she hears her parents making and in what context those sounds should be made.

The Preoperational Stage

The preoperational stage begins at around 2 years and lasts until the child is 6 or 7. The defining feature of this stage, in Piaget's view, is egocentricity. The child seems to talk constantly, but much of what he says does not need to be said out loud. For instance, the child might describe what he is doing even though others can easily see what he is doing. He shows no awareness of the possibility that others have a viewpoint of their own. Piaget sees little distinction at this stage of development between talking with others and thinking aloud.

The Concrete Operational Stage

The concrete operational stage begins around age 7 and lasts until at least age 11 or 12. At this stage, the child is capable of using logic and of solving problems in the form of stories as long as the story deals only with facts rather than abstract ideas. Language at this stage is used to refer to specific and concrete facts, not mental concepts. Piaget believed that some people remain in this stage for the remainder of their lives, even though a child in this stage has not yet reached full cognitive maturity.

The Formal Operational Stage

The formal operational stage begins at age 11 or 12 at the earliest. At this stage, the child can start to use abstract reason and to make a mental distinction between her self and an idea she is considering. Children who have reached this stage can use language to express and debate abstract theoretical concepts such as those found in mathematics, philosophy or logic. Piaget believed that these four stages of cognitive and linguistic development were universal and that no children ever skipped over one of the four steps.

There are also many different ways to characterize the developmental sequence. On the production side, one way to name the stages is as follows, focusing primarily on the unfolding of lexical and syntactic knowledge:

Stage	***Typical age***	***Description***
Babbling	***6-8 months***	***Repetitive CV patterns***

One-word stage (better one-morpheme or one-unit) or holophrastic stage	***9-18 months***	***Single open-class words or word stems***
Two-word stage	***18-24 months***	***"mini-sentences" with simple semantic relations***
Telegraphic stage or early multiword stage (better multi-morpheme)	***24-30 months***	***"Telegraphic" sentence structures oflexical rather than functional orgrammatical morphemes***
Later multiword stage	***30+ months***	***Grammatical or functional structures emerge***

At birth, the infant vocal tract is in some ways more like that of an ape than that of an adult human. Compare the diagram of the infant vocal tract shown on the left to diagrams of adult human and ape.

In particular, the tip of the velum reaches or overlaps with the tip of the epiglottis. As the infant grows, the tract gradually reshapes itself in the adult pattern.

During the first two months of life, infant vocalizations are mainly expressions of discomfort (crying and fussing), along with sounds produced as a by-product of reflexive or vegetative actions such as coughing, sucking, swallowing and burping. There are some non-reflexive, non-distress sounds produced with a lowered velum and a closed or nearly closed mouth, giving the impression of a syllabic nasal or a nasalized vowel.

During the period from about 2-4 months, infants begin making "comfort sounds", typically in response to pleasurable interaction with a caregiver. The earliest comfort sounds may be grunts or sighs, with later versions being more vowel-like "coos". The vocal tract is held in a fixed position. Initially comfort sounds are brief and produced in isolation, but later appear in series separated by glottal stops. Laughter appears around 4 months.

During the period from 4-7 months, infants typically engage in "vocal play", manipulating pitch (to produce "squeals" and "growls"), loudness (producing "yells"), and also manipulating tract closures to produce friction noises, nasal murmurs, "raspberries" and "snorts".

At about seven months, "canonical babbling" appears: infants start to make extended sounds that are chopped up rhythmically by oral articulations into syllable-like sequences, opening and closing their jaws, lips and tongue. The range of sounds produced are heard as stop-like and glide-like. Fricatives, affricates and liquids are more rarely heard, and clusters are even rarer. Vowels tend to be low and open, at least in the beginning.

Repeated sequences are often produced, such as [bababa] or [nanana], as well as "variegated" sequences in which the characteristics of the consonant-like articulations are varied. The variegated sequences are initially rare and become more common later on.

Both vocal play and babbling are produced more often in interactions with caregivers, but infants will also produce them when they are alone.

No other animal does anything like babbling. It has often been hypothesized that vocal play and babbling have the function of "practicing" speech-like gestures, helping the infant to gain control of the motor systems involved, and to learn the acoustical consequences of different gestures.

One word (holophrastic) stage

At about ten months, infants start to utter recognizable words. Some word-like vocalizations that do not correlate well with words in the local language may consistently be used by particular infants to express particular emotional states: one infant is reported to have used [aæji] to express pleasure, and another is said to have used [məməmə] to express "distress or discomfort". For the most part, recognizable words are used in a context that seems to involve naming: "duck" while the child hits a toy duck off the edge of the bath; "sweep" while

the child sweeps with a broom; "car" while the child looks out of the living room window at cars moving on the street below; "papa" when the child hears the doorbell.

Young children often use words in ways that are too narrow or too broad: "bottle" used only for plastic bottles; "teddy" used only for a particular bear; "dog" used for lambs, cats, and cows as well as dogs; "kick" used for pushing and for wing-flapping as well as for kicking. These *under-extensions* and *over-extensions* develop and change over time in an individual child's usage.

Perception vs. production

Clever experiments have shown that most infants can give evidence (for instance, by gaze direction) of understanding some words at the age of 4-9 months, often even before babbling begins. In fact, the development of phonological abilities begins even earlier. Newborns can distinguish speech from non-speech, and can also distinguish among speech sounds (e.g. [t] vs. [d] or [t] vs. [k]); within a couple of months of birth, infants can distinguish speech in their native language from speech in other languages.

Early linguistic interaction with mothers, fathers and other caregivers is almost certainly important in establishing and consolidating these early abilities, long before the child is giving any indication of language abilities.

Rate of vocabulary development

In the beginning, infants add active vocabulary somewhat gradually. Here are measures of active vocabulary development in two studies. The Nelson study was based on diaries kept by mothers of all of their children's utterances, while the Fenson study is based on asking mothers to check words on a list to indicate which they think their child produces.

Milestone	Nelson 1973(18 children)	Fenson 1993 (1,789 children)
10 words	15 months (range 13-19)	13 months(range 8-16)
50 words	20 months(range 14-24)	17 months (range 10-24)
Vocabulary at 24 months	186 words(range 28-436)	310 words (range 41-668)

There is often a spurt of vocabulary acquisition during the second year. Early words are acquired at a rate of 1-3 per week (as measured by production diaries); in many cases the rate may suddenly increase to 8-10 new words per week, after 40 or so words have been learned. However, some children show a steadier rate of acquisition during these early stages. The rate of vocabulary acquisition definitely does accelerate in the third year and beyond: a plausible estimate would be an average of 10 words a day during pre-school and elementary school years.

Perception vs. production again

Benedict (1979) asked mothers to keep a diary indicating not only what words children produced, but what words they gave evidence of understanding. Her results indicate that at the time when children were producing 10 words, they were estimated to understand 60 words; and there was an average gap of five months between the time when a child understood 50 words and the time when (s)he produced 50 words.

All of these methods (maternal diaries and checklists) probably tend to underestimate the number of words about young children actually know something, although they also may overestimate the number of words to which they attribute adult-like meanings.

Combining words: the emergence of syntax

During the second year, word combinations begin to appear. Novel combinations (where we can be sure that the result is not being treated as a single word) appear sporadically as early as 14 months. At 18 months, 11% of parents say that their child is often combining words, and

46% say that (s)he is sometimes combining words. By 25 months, almost all children are sometimes combining words, but about 20% are still not doing so "often."

Early multi-unit utterances

In some cases, early multiple-unit utterances can be seen as concatenations of individual naming actions that might just as well have occurred alone: "mommy" and "hat" might be combined as "mommy hat"; "shirt" and "wet" might be combined as "shirt wet". However, these combinations tend to occur in an order that is appropriate for the language being learned:

1. *Doggy bark*
2. *Ken water (for "Ken is drinking water")*
3. *Hit doggy*

Some combinations with certain closed-class morphemes begin to occur as well: "my turn", "in there", etc. However, these are the closed-class words such as pronouns and prepositions that have semantic content in their own right that is not too different from that of open-class words. The more purely grammatical morphemes - verbal inflections and verbal auxiliaries, nominal determiners, complementizers etc. - are typically absent.

Since the earliest multi-unit utterances are almost always two morphemes long -- two being the first number after one! - this period is sometimes called the "two-word stage". Quite soon, however, children begin sometimes producing utterances with more than two elements, and it is not clear that the period in which most utterances have either one or two lexical elements should really be treated as a separate stage.

In the early multi-word stage, children who are asked to repeat sentences may simply leave out the determiners, modals and verbal auxiliaries, verbal inflections, etc., and often pronouns as well. The same pattern can be seen in their own spontaneous utterances:

1. "I can see a cow" repeated as "See cow" (Eve at 25 months)
2. "The doggy will bite" repeated as "Doggy bite" (Adam at 28 months)
3. Kathryn no like celery (Kathryn at 22 months)
4. Baby doll ride truck (Allison at 22 months)
5. Pig say oink (Claire at 25 months)
6. Want lady get chocolate (Daniel at 23 months)
7. "Where does Daddy go?" repeated as "Daddy go?" (Daniel at 23 months)
8. "Car going?" to mean "Where is the car going?" (Jem at 21 months)

The pattern of leaving out most grammatical/functional morphemes is called "telegraphic", and so people also sometimes refer to the early multi-word stage as the "telegraphic stage".

Acquisition of grammatical elements and the corresponding structures

At about the age of two, children first begin to use grammatical elements. In English, this includes finite auxiliaries ("is", "was"), verbal tense and agreement affixes ("-ed" and '-s'), nominative pronouns ("I", "she"), complementizers ("that", "where"), and determiners ("the", "a"). The process is usually a somewhat gradual one, in which the more telegraphic patterns alternate with adult or adult-like forms, sometimes in adjacent utterances:

1. She's gone. Her gone school. (Domenico at 24 months)
2. He's kicking a beach ball. Her climbing up the ladder there. (Jem at 24 months).
3. I teasing Mummy. I'm teasing Mummy. (Holly at 24 months)
4. I having this. I'm having 'nana. (Olivia at 27 months).
5. I'm having this little one. Me'll have that. (Betty at 30 months).
6. Mummy haven't finished yet, has she? (Olivia at 36 months).

Over a year to a year and a half, sentences get longer, grammatical elements are less often omitted and less often inserted incorrectly, and multiple-clause sentences become commoner.

Perception vs. production again

Several studies have shown that children who regularly omit grammatical elements in their speech, nevertheless expect these elements in what they hear from adults, in the sense that their sentence comprehension suffers if the grammatical elements are missing or absent.

Progress backwards

Often morphological inflections include a regular case ("walk/walked", "open/opened") and some irregular or exceptional cases ("go/went", "throw/threw", "hold/held"). In the beginning, such words will be used in their root form. As inflections first start being added, both regular and irregular patterns are found. At a certain point, it is common for children to over-generalize the regular case, producing forms like "bringed", "goed"; "foots", "mouses", etc. At this stage, the child's speech may actually become less correct by adult standards than it was earlier, because of over-regularization.

This over-regularization, like most other aspects of children's developing grammar, is typically resistant to correction:

CHILD: My teacher holded the baby rabbits and we patted them.
ADULT: Did you say your teacher held the baby rabbits.
CHILD: Yes.
ADULT: What did you say she did?
CHILD: She holded the baby rabbits and we patted them.
ADULT: Did you say she held them tightly?
CHILD: No, she holded them loosely.

Cooing

- Few weeks: cooing and gurgling, playing with sounds. Their abilities are constrained by physiological limitations
- they seem to be discovering phonemes at this point.
- Producing sequences of vowel-like sounds- high vowels [i] and [u].
- 4 months- sounds similar to velar consonants [k] & [g]
- 5 months: distinguish between [a] and [i] and the syllables [ba] and [ga], so their perception skills are good.

Babbling

- Different vowel and consonants *ba-ba-ba* and *ga-ga-ga*
- 9-10 months intonation patterns and combination of *ba-ba-ba-da-da*
- Nasal sounds also appear ma-ma-ma
- 10-11-- use of vocalization to express emotions
- Late stage- complex syllable combination (*ma-da-ga-ba*)
- Even deaf children babble
- The most common cross-linguistic sounds and patterns babbled the most, but later on they babble less common sounds

The word stage (holophrastic

- Single terms are uttered for everyday objects ‘milk’, ‘cookie’, ‘cat’
- Produce utterance such as ‘Sara bed’ but not yet capable of producing a phrase.

Two-word stage

- ✓ Vocabulary moves beyond 50 words
- ✓ By 2 years old produce utterances ‘baby chair’, ‘mommy eat’
- ✓ Interpretation depends on context
- ✓ Adults behave as if communication is taking place.

Telegraphic stage

- By 2 years & a half, they produce multiple-word speech.
- Developing sentence building capacity. E.g. ‘*this shoe all wet*’, ‘*cat drink milk*’, ‘*daddy go bye-bye*’
- Vocabulary continues to grow

- Better pronunciation

The acquisition process

- The child does not acquire the language by imitating adults- trying out constructions and testing them.
- CHILD: my teacher ***holded*** the baby rabbit and we patted them
  MOTHER: did you say your teacher ***held*** the baby rabbit?
  CHILD: yes. she ***holded*** the baby rabbit and we patted them
  MOTHER: Did you say she ***held*** them tightly?
  CHILD: no, she ***holded*** them loosely

Developing Morphology

- By 2-and-a-half years old- use of some inflectional morphemes to indicate the grammatical function of nouns and verbs.
- The first inflection to appear is *–ing* after it comes the *–s* for plural.
- Overgeneralization: the child applies –s to words like 'foots' 'mans' and later 'feets' 'mens'
- The use of possessive 's' appears 'mommy's bag'
- Forms of verb to be appear 'is' and 'are'
- The –ed for past tense appears and it is also overgeneralized as in 'goed' or holded'
- Finally –s marker for 3rd person singular preset tense appear with full verbs first then with auxiliaries (does-has)

Developing syntax

- A child was asked to say *the owl who eats candy runs fast* and she said *the owl eat candy and he run fast.*
- The development of two syntactic structures- three stages
  - Forming questions
  - Forming negatives

Forming questions

- 1st stage:
  - Insert *where* and *who* to the beginning of an expression with rising intonation

  E.g. *sit chair? Where horse go?*
- 2nd stage:
  - More complex expression

  E.g. *why you smiling? You want eat?*
- 3rd stage:
  - Inversion of subject and verb

  E.g. *will you help me? What did I do?*

Forming negative

- Stage 1:
  - Putting *not* and *no* at the beginning

  e.g. *not teddy bear, no sit here*
- Stage 2:
  - *Don't* and *can't* appear but still use no and not before VERBS

  e.g. *he no bite you, I don't want it*
- Stage 3:
  - *didn't* and *won't* appear

  e.g. *I didn't caught it, she won't go*

Developing Semantics

- During the two-word stage children use their limited vocabulary to refer to a large number of unrelated objects.

- Overextension: overextend the meaning of a word on the basis of similarities of shape, sound, and size.
  e.g. use ball to refer to an apple, and egg, a grape and a ball.
- This is followed by a gradual process of narrowing down.
- Antonymous relations are acquired late
- The distinction between more/less, before/after seem to be later acquisition.

5. Second Language Acquisition

'One language sets you in a corridor for life.
Two languages open every door along the way'
(Frank Smith)

You might have experience of learning another language which is not your mother tongue. Can you remember why you needed to learn that? What did you think, or feel when you learned it? Well, lots of linguists also started to feel curious about things related to learning another language, and that was the point when Second Language Acquisition (SLA) appeared.

What is Second Language Acquisition (SLA)?

Though it sounds very simple, you need to look at this term carefully. Also, it is really important to differentiate between SLA, First Language Acquisition and Foreign Language Acquisition.

First language acquisition (= Child language acquisition)
The field that studies cases of mother tongue acquisition.

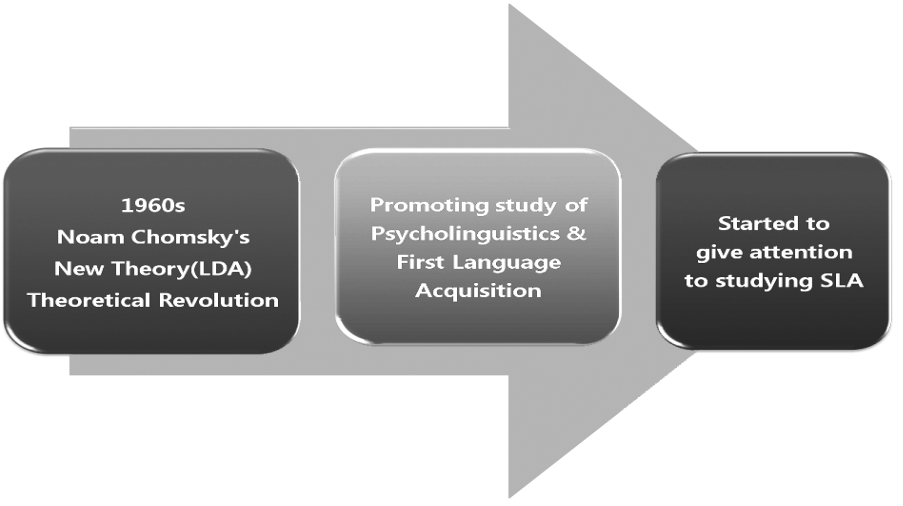
Second language Acquisition The field that studies language(s) that you learned after acquiring your mother tongue, including third and fourth languages.

These two notions and terms are completely contrast with each other.

Foreign Language Acquisition The field that studies languages that you acquired inside certain educational environments on purpose. e.g. an English student who learns French as a module in the classroom or a Japanese student who learns English in the UK for taking a TOEFL test.

This doesn't mean that they are in the opposite position, but just different terms. In broad sense, foreign language acquisition can be included in the second language acquisition.

When was SLA first studied?



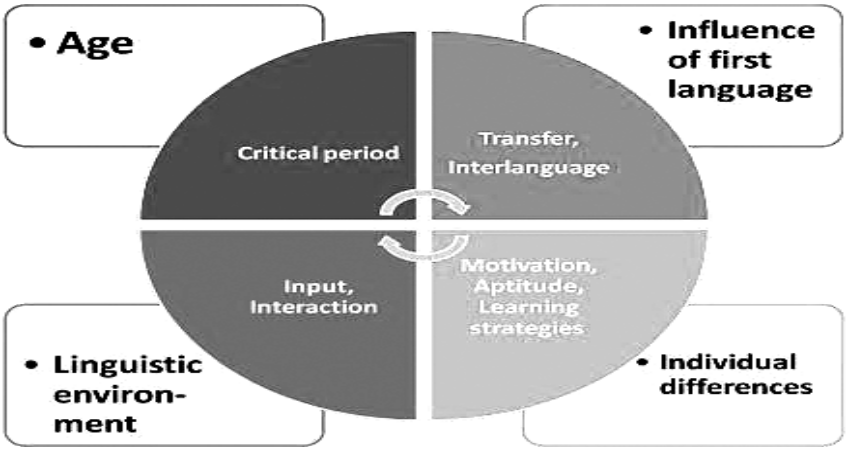
In 1957, Noam Chomsky's new publication brought theoretical revolution to the linguistic field. The idea of a 'language acquisition device ' promoted the study of psycholinguistics, and a bunch of study results also stimulated the study of First Language Acquisition. Soon, scholars also started to give attention to studying second language acquisition. Thus, SLA has not been studied for long compared to other areas of linguistics.

Why should we study SLA?

1. It is really important to acquire a second language as the world is becoming more and more globalized, and as a result, demand for studying about SLA is also increasing.
2. SLA is quite a new field of linguistics, so it needs to be researched more and more.
3. By studying SLA, it could be possible to develop new, more proficient teaching methods which can be taught to students who learn a second language. "Much of what we now know about the way people learn languages has been discovered only in the last twenty years, and many teaching methods are much older than that."

Key points

There are some key aspects mainly considered in SLA researches, and each includes sub-categories.



How do we study SLA? & What is a case study?

"A case study is a detailed study of a learner's acquisition of a L2. It is typically longitudinal, involving the collection of samples of the learner's speech or writing over a period of time, sometimes years." [2]

- In second language learning, language plays an institutional and social role in the community. It functions as a recognized means of communication among members who speak some other language as their native tongue.
- In foreign language learning, language plays no major role in the community and is primarily learned in the classroom.
- The distinction between second and foreign language learning is what is learned and how it is learned.

What is the Study of Second Language Acquisition?

It is the study of:

- *how second languages are learned;*
- *how learners create a new language system with limited exposure to a second language;*
- *why most second language learners do not achieve the same degree of proficiency in a second language as they do in their native language; and*
- *why some learners appear to achieve native-like proficiency in more than one language.*

How Do Learners Acquire a Second Language?

- Learners acquire a second language by making use of existing knowledge of the native language, general learning strategies, or universal properties of language to internalize knowledge of the second language.
- These processes serve as a means by which the learner constructs an interlanguage (a transitional system reflecting the learner's current L_2 knowledge).

- Communication strategies are employed by the learner to make use of existing knowledge to cope with communication difficulties.

The Language Learner

- Individual differences affect L_2 acquisition. These may include: (1) the rate of development and (2) their ultimate level of achievement.
- Learners differ with regard to variables relating to cognitive, affective and social aspects of a human being.
- Fixed factors such as age and language learning aptitude are beyond external control. Variable factors such as motivation are influenced by external factors such as social setting and by the actual course of L_2 development.
- Cognitive style refers to the way people perceive, conceptualize, organize and recall information.
- Field dependent learners operate holistically. They like to work with others. Field independent learners are analytic and prefer to work alone.

Learner Strategies

Learner strategies are defined as deliberate behaviors or actions that learners use to make language learning more successful, self-directed and enjoyable.

- Cognitive strategies relate new concepts to prior knowledge.
- Metacognitive strategies are those which help with organizing a personal timetable to facilitate an effective study of the L_2.
- Social strategies include looking for opportunities to converse with native speakers.

6. Natural Order of Strategies of Second Language Development

Chesterfield & Chesterfield (1985) identified a natural order of strategies in the development of a second language.

1) repetition (imitating a word or structure);
2) memorization (recalling songs, rhymes or sequences by rote);
3) formulaic expressions (words or phrases that function as units i.e. greetings);
4) verbal attention getters (language that initiates interaction);
5) answering in unison (responding with others);
6) talking to self (engaging in internal monologue);
7) elaboration (information beyond what is necessary);
8) anticipatory answers (completing another's phrase or statement);
9) monitoring (self-correcting errors);
10) appeal for assistance (asking someone for help);
11) request for clarification (asking the speaker to explain or repeat); and
12) role-playing (interacting with another by taking on roles).

Components of Communicative Competence

- Canale and Swain (1983) identified four components of communicative competence:
  1) grammatical competence
  2) sociolinguistic competence
  3) discourse competence
  4) strategic competence
- Grammatical competence means understanding the skills and knowledge necessary to speak and write accurately. Grammatical competence includes:

  1) vocabulary
  2) word formation

3) meaning
4) sentence formation
5) pronunciation
6) spelling

- Sociolinguistic competence involves knowing how to produce and understand the language in different sociolinguistic contexts, taking into consideration such factors as:
  1) the status of the participants
  2) the purpose of the interaction; and
  3) the norms or conventions of the interaction.
- Discourse competence involves the ability to combine and connect utterances (spoken) and sentences (written) into a meaningful whole. Discourse ranges from a simple spoken conversation to long written texts.
- Strategic competence involves the manipulation of language in order to meet communicative goals. It involves both verbal and non-verbal behaviors. Speakers employ this competence for two main reasons:

1) to compensate for breakdowns in communication such as when the speaker forgets or does not know a term and is forced to paraphrase or gesture to get the idea across; and

2) to enhance the effectiveness of communication such as when a speaker raises or lowers the voice for effect.

Competence Vs. Performance

- According to Chomsky (1965), competence consists of mental representations of linguistic rules that constitute the speaker-hearer's internal grammar.
- This internal grammar is implicit rather than explicit. It is evident in the intuitions, which the speaker-hearer has about the grammaticality of sentences.
- Performance consists of the use of this grammar in the comprehension and production of the language.
- Communicative competence is that aspect of the language user's competence that enables them to convey and interpret messages and to negotiate meanings interpersonally within specific contexts.
- Language is a form of communication that occurs in social interaction. It is used for a purpose such as persuading, commanding, and establishing social relationships. No longer is the focus on specific knowledge of grammatical form. Instead, the competent speaker is recognized as one who knows when, where, and how to use language appropriately.

The Role of the Native Language in Second Language Acquisition

- "language transfer."
- It has been assumed that in a second language learning situation learners rely extensively on their native language.
- According to Lado (1957) individuals tend to transfer forms and meanings, the distribution of the forms and meanings of their native language and culture to the foreign language and culture.
- This transfer is productive when the learner attempts to speak the language.
- This transfer is receptive when the learner attempts to grasp and understand the language and culture as practiced by native speakers.
- Lado's work and much of the work of that time (1950's) was based on the need to produce pedagogically relevant materials. A contrastive analysis of the native language and the target language was conducted in order to determine similarities and differences in the languages.

In Conclusion The Learner/The Teacher

The learner needs:

- expectations of success;
- the confidence to take risks and make mistakes;
- a willingness to share and engage;
- the confidence to ask for help; and
- an acceptance of the need to readjust.

The teacher needs:

- respect for and interest in the learner's language, culture, thought and intentions;
- the ability to recognize growth points, strengths and potential;
- the appreciation that mistakes are necessary to learning;
- the confidence to maintain breadth, richness and variety, and to match these to the learner's interests and direction;
- to stimulate and challenge; and
- a sensitive awareness of when to intervene and when to leave alone.

STUDY QUESTIONS VI

Task 1. Study Questions

1.Can you describe two noticeable features of caretaker speech?

2. What ratio of words understood to words produced would you expect an average twenty-four-month-old child to have and which 'stage' would that child already have reached?

3. In a normal child acquisition schedule. What would be the order of regular appearance of the following inflections: -ed; -ing; - 's; -s (plural)?

4. The following two sentences were produced by children of different ages. Which would you expect from the older chilod and on which features did you base your answer?

a) I not hurt him *b) No the sun shining?*

5. What is the term used to describe the process whereby a child uses one word like *ball* to refer to an apple, an egg, a grape and a ball?

6. What are the four obvious barriers to adult L2 acquisition?

7. What do you think "the Joseph Conrad phenomenon" refers to?

8. What happens when an interlanguage fossilizes?

9. Why might 'foreigner talk' be beneficial?

10. What are the three components of communicative competence?

Task 2. Make up 10 true/false statements on topic

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

_____

_____

VII. Morphology – Basic Concepts in Morphology. Building Words

1. **What is Morphology?**
2. **Morphemes**
   2.1 Free and bound Morphemes
   2.2 Derivational versus inflectional
3. **Morphological description**
4. **Morphs and Allomorphs**
5. **Other Languages.**
6. **Word-formation Processes**
   Coinage. Borrowing. Compounding. Blending. Clipping. Backformation. Conversion
   Acronyms. Derivation. Prefixes and suffixes. Infixes
7. **Multiple Processes**

1. What is Morphology?

Morphology – the internal structure of words

The term *morphology* is Greek and is a makeup of *morph-* meaning 'shape, form', and *-ology* which means 'the study of something'. The term is used not only in linguistics but also in biology as the scientific study of forms and structure of animals and plants, and in geology as the study of formation and evolution of rocks and land forms. We are going to stick to morphology in linguistics, as the scientific study of forms and structure of words in a language. Morphology as a sub-discipline of linguistics was named for the first time in 1859 by the German linguist August Schleicher who used the term for the study of the form of words. Today morphology forms a core part of linguistics.

What is a word?

If morphology is the study of the internal structure of words, we need to define the word *word* before we can continue. That might sound easy - surely we all know what a word is. In texts they are particularly easy to spot since they are divided by white spaces. But how do we identify words in speech? A reliable definition of *words* is that they are the smallest independent units of language. They are independent in that they do not depend on other words which means that they can be separated from other units and can change position. Consider the sentence:

The man looked at the horses.

The plural ending *–s* in *horses* is dependent on the noun *horse* to receive meaning and can therefore not be a word. *Horses* however, is a word, as it can occur in other positions in the sentence or stand on its own:

The horses looked at the man. - What is the man looking at? - Horses.

Words are thus both independent since they can be separated from other words and move around in sentences, and the smallest units of language since they are the only units of language for which this is possible.

Morphemes - the building blocks of morphology

Although words are the smallest *independent* units of language, they have an internal structure and are built up by even smaller pieces. There are simple words that don't have an internal structure and only consist of one piece, like *work.* There is no way we can divide work (wo-rk?) into smaller parts that carry meaning or function. Complex words however, do have an internal structure and consist of two or more pieces. Consider *worker,* where the ending *–er* is added to the root *work* to make it into a noun meaning *someone who works.* These pieces are called morphemes and are the smallest *meaning-bearing* units of language.

We said that words are independent forms, and a simple word only consisting of one single morpheme is therefore a free morpheme, that is, it is a word itself. Examples are *house, work, high, us and to.* Morphemes that must be attached to another morpheme to receive meaning are bound morphemes. If we break the word *unkindness* into its three morphemes *un-, kind* and *-*

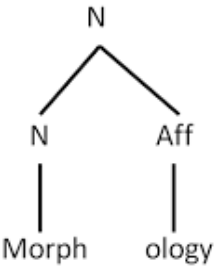
ness, we get two examples of bound morphemes: un- and -ness, as they require the root *kind* to make up a word. These are also called affixes as they are attached to the stem. The affix un- that go to the front of a word is a prefix and -ness that goes to the end is a suffix.

There are also infixes and circumfixes, although they are not very common in English. A circumfix is a morpheme that attaches to the front *and* the back of a word.

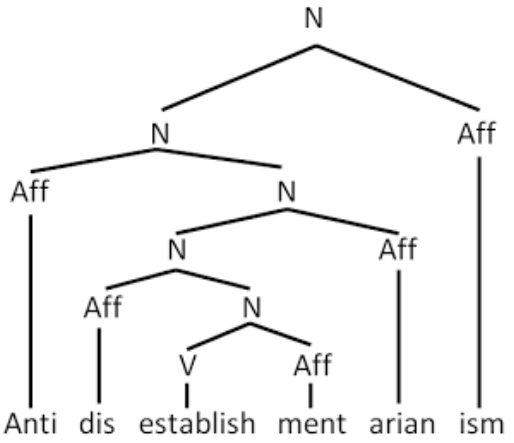
Drawing Morphology Trees

In order to show the internal structure of a word, we draw morphology trees - how to draw a simple morphology tree and a complex morphology tree:

Simple morphology tree



Complex morphology Tree



The purposes of studying morphology

The internal structure of words and the segmentation into different kinds of morphemes is essential to the two basic purposes or morphology*: 1. the creation of new words* and *2. the modification of existing words.*

Morphology.

In many languages, what appears to single forms actually turn out to contain a large number of 'word-like' elements. For example, in Swahili (spoken throughout East Africa), the form *nitakupenda* conveys what, in English, would have to be represented as something like *I will love you*. Now, is the Swahili form a single word? It is a 'word', and then it seems to consist of a number of elements which, in English, turn up as separate 'words'. A very rough correspondence can be presented in the following way:

Ni -ta -ku -penda
'I will love you'

It seems as if this Swahili 'word' is rather different from what we think of as an English 'word''. Yet, there clearly is some similarity between the languages, in that similar elements of the whole message can be found in both. Perhaps a better way of looking at

linguistic forms is different languages would be to use this notion of 'elements' in the message, rather than to depend on identifying 'words'. The type of exercise we have just performed is an example of investigating forms in language, generally known as morphology. This term, which literally means *'the study of forms'*, was originally used in biology, but, since the middle of the nineteenth century, has also been used to describe that type of investigation which analyzed all those basic 'elements' in the form of a linguistic message are more technically known as morphemes.

2. Morphemes

We do not actually have to go to other languages such as Swahili to discover that 'word-forms' may consist of a number of elements. We can recognize that English word-forms such *as talks*, *talker*, *talked* and *talking* must consist of one element *talk*, and a number of other elements such as *–s*, *-er*, *-ed*, *-ing*. All these elements are described as morphemes. The definition of a morpheme is *"a minimal unit of meaning or grammatical function".* E.g. we would say that the word *reopened* in the sentence *The police reopened the investigation* consists of three morphemes. One minimal unit of meaning is *open*, another minimal unit of meaning is *re- (meaning 'again'),* and a minimal unit of grammatical function is *–ed (indicating past tense).* The word *tourists* also contains three morphemes: There is *tour*, *-ist (meaning 'person who does something'),* and *–s (indicating plural).*

2.1 Free and bound Morphemes

From these two examples, we can make a broad distinction between two types of morphemes. There are free morphemes, that is, morphemes which *can stand by themselves as single words, e.g. open* and *tour*. There are also bound morphemes, that is, *those which cannot normally stand alone, but which are typically attached to another form, e.g. re-, ist, -ed, -s. (You will recognize this last set as a group of what we have already described (in previous lecture)).* So, all affixes in English are bound morphemes. The free morphemes can be generally considered as a set of separate English word-forms. When they are used with bound morphemes, the basic word-form involves is technically known as the stem. For example:

undressed			carelessness		
Un-	*dress*	*-ed*	*care*	*-less*	*-ness*
Prefix	stem	suffix	stem	suffix	suffix
(bound)	*(free)*	*(bound)*	*(free)*	*(bound)*	*(bound)*

It should be noted that this type of description is partial simplification of the morphological facts of English. There are a number of English words in which the element which seems to be the 'stem' is not, in fact, a free morpheme. In words like *receive, reduce, repeat*, we can recognize the bound morpheme *re-*, but the elements *–ceive*, *-duce* and *–peat* are clearly not free morphemes. There is still some disagreement over the proper characterization of these elements and you may encounter a variety of technical terms used to describe them. It may help to work with a simple distinction between those forms like *–ceive* and *–duce* as 'bound stem' and other forms like *dress* and *care* as 'free stems'.

a. Free morphemes.

What we have described as free morphemes fall into two categories. The first category is that set of ordinary nouns, adjectives as which we think of as the words which carry the 'content' of messages we convey. These free morphemes are called lexical morphemes and some examples are: *boy*, *man*, *house*, *tiger*, *sad*, *long*, *yellow*, *sincere*, *open*, *look*, *follow*, and *break.* We can add new lexical morphemes to the language rather easily, so they are treated as an 'open' class of words.

The other group of free morphemes is called functional morphemes. Examples are: *and*, *but*, *when*, *because*, *on*, *near*, *above*, *in*, *the*, *that*, *it.* This set consists largely of the functional words in the language such as conjunctions, prepositions, articles and pronouns. Because we

almost never add new functional morphemes to the language, they are described as a 'closed' class of words.

b. *Bound morphemes.*

The set of affixes which fall into the 'bound' category can also be divided into two types, the derivational morphemes. These are used to make new words in the language and are often used to make words of a different grammatical category from the stem. Thus, the addition of the derivational morpheme *–ness* changes the adjectives *careful* or *careless* via the derivational morphemes *–ful* or *–less*. A list of derivational morphemes will include suffixes such as the *–ish* in *foolish*, the *–ly* in *badly* and *-ment* in *payment*. It will also include prefixes such as *re-, pre-, ex-, dis-, co-, un- a*nd many more.

The second set of bound morphemes contains what are called inflectional morphemes. These are not used to produce new words in the English language, but rather to indicate aspects of the grammatical function of a word. Inflectional morphemes are used to show if a word is plural or singular, if it is past tense or not, and if it is comparative or possessive form. *English has only eight inflectional morphemes*, illustrated in the following:

Let me tell you about Jim's two sisters.
One likes to have fun and is always laughing.
The other liked to study and has always taken things seriously.
One is the loudest person in the house and the other is quieter than a mouse.

From these examples we can see that two of the inflections, -'s (possessive) and –s (plural) are attached to nouns. There are four attached to verbs, -s (3rd person present singular), -ing (present participle), -ed (past tense) and –en (past participle). There are two inflections, -est (superlative) and –er (comparative) attached to adjectives. Note that, in English, all inflectional morphemes listed here are suffixes.

Noun +	-'s, -s
Verb +	-s, -ing, -ed, -en
Adjective +	-est, -er

There is some variation in the form of these inflectional morphemes, with for example, the possessive sometimes occurring as –'s *(those boys' bags)* and the past participle as –ed (*they have finished*).

2.2 Derivational versus inflectional

The difference between derivational and inflectional morphemes is worth emphasizing. An inflectional morpheme never changes the grammatical category of a word. For example, both *old* and *older* are adjectives. The –er inflection (from Old English *–ra*) simply creates a different version of the adjective. However, a derivational morpheme can change the grammatical category of a word. The verb *teach* becomes the noun *teacher* if we add the derivational morpheme –er (from Old English *–ere*). So, the suffix form –er can be an inflectional morpheme as part of an adjective and also a distinct derivational morpheme as part of a noun. Just because they (-er) look the same does not mean they do the same kind of work. In both cases, they are bound morphemes.

3. Morphological description.

Armed with all these terms for the different types of morphemes, you can now take most sentences of English apart and list the 'elements'. As an example: *The girl's wildness shocked the teachers*, contains the following

The	*girl*	*'s*	*wild*	*ness*	*shock*	*ed*
(functional)	(lexical)	(inflectional)	(lexical)	(derivational)	(lexical)	(inflectional)

the	*Teach*	*er*	*s*
(functional)	(lexical)	(derivational)	(inflectional)

As a useful way to remember the different categories of morphemes, the following chart can be used:

Morphemes			
free		bound	
lexical	functional	derivational	inflectional

4. Morphs and Allomorphs

The solution to other problems remains controversial. One way to treat differences in inflectional morphemes is by proposing variation in morphological realization rules. In order to do this, we draw an analogy with some processes already noted in phonology. If we consider 'phones' as the actual phonetic realization of 'phonemes', then we can propose morphs as the actual forms used to realize morphemes. Thus, form *cat* is a single morph realizing a lexical morpheme. The form *cats* consists of two morphs, realizing a lexical morpheme and an inflectional morpheme ('plural'). Just as we noted that there were 'allophones' of a particular phoneme, then we can recognize allomorphs of a particular of a particular morpheme.

Take the morpheme 'plural'. Note that it can be attached to a number of lexical morphemes to produce structures like 'cat + plural', 'sheep + plural', and 'man + plural'. Now, the actual forms of the morphs which result from the single morpheme 'plural' turn out to be different. Yet they are all allomorphs of the one morpheme. It has been suggested, for example, that one allomorph of 'plural' is a zero-morph, and the plural form of *sheep* is actually 'sheep +0 '. Otherwise, those so-called 'irregular' forms of plural and past tenses in English are described as having individual morphological realization rules. Thus, 'man + plural' or 'go + past', as analyses at the morpheme-level, are realized as *men* and *went* at the morph-level.

5. Other Languages

This type of analytical approach is not without its critics, particularly when applied to other languages. Yet, the absence of a comprehensive analytic system should not discourage us from exploring and describing some of the morphological features of other languages. Some patterns appear to be describable in terms of the basic categories we listed earlier. Different patterns occur in other languages. Let's look at some sample data, adapted from examples originally presented in Gleason (1955), and try to work out with morphological features can be identified. The first form Kanuri, a language spoken in Nigeria.

Kanuri:

('Excellent') karate - nemkarite ('excellence'); ('big') kura – nemkura ('bigness'); ('Small') gana –nemgana ('smallness')

From this set, we can propose that the prefix nem- is a derivational morpheme which can be used to derive nouns from adjectives. Discovering a regular morphological feature of this type will enable us to make certain predictions when we encounter other forms in the language. Here are some examples from Ganda, a language spoken in Uganda:

Ganda: ('doctor') omusawo –abasawo ('doctors'); ('woman') omukazi -abakazi ('women'); ('girl ') omuwala –abawala ('girls')

From this small sample, we can observe that there is an inflectional prefix omu-, used with singular nouns, and a different inflectional prefix aba-, used with the plural of those nouns. If you are told that *abalenzi* is a Ganda plural, meaning 'boys', you should be able to determine the singular form, meaning 'boy'. It is of course, *omulenzi*. The following data from Ilocano, a language of the Philippines, will serve to illustrate a quite different method for marking plurals:

Ilocano: ('head') ulo -uluo ('heads'); ('road') dalan -daldalan ('roads'); ('life') biag -bibiag ('lives')

In these examples, there seems to be repetition of the first part of the singular form. When the first part is bi- in the singular, the plural begins with this form repeated, bibi-. The process

involved here is technically known as reduplication and several languages use this repetition device as a means of inflectional marking.

It may have occurred to you as we were exploring all these features of morphology that the discussion often seemed to be connected to what was traditionally called 'grammar'. That would have been an accurate observation and we shall continue the exploration in the following chapter.

6. Word-formation processes

In some respects, the study of the processes whereby new words come into being in a language like English seems relatively straightforward. This apparent simplicity, however, masks a number of controversial issues, some of which we shall consider in the following lecture. Despite the disagreements among scholars in this area, there do seem to be some regular processes involved, and in the following sections we shall cover the technical terms used to describe those processes and identify examples currently in use which are the result of those processes.

It should be remembered that these processes have been at work in the language for some time and many words in daily use today were, at one time, considered barbaric misuses of the language. It is difficult now to understand the views expressed in the early nineteenth century over the "tasteless innovation" of a word like *handbook*, of the horror expressed by a London newspaper in 1909 over the use of the newly coined word *aviation*. Yet many terms of recent currency cause similar outcries. Rather than act as if the language is being debased, we might prefer to view the constant evolution of new terms and new uses of old terms as a reassuring sign of vitality and creativeness in the way a language is shaped by the needs of its users. Let us consider the ways.

Coinage

One of the least common processes of word-formation in English is coinage, that is, the invention of totally new terms. The most typical sources are invented trade names for one company's product which become general terms (without initial capital letters) for any version of that product. Older examples are *aspirin*, *nylon* and *zipper*; more recent examples are *kleenex*, *tefton* and *xerox*. It may be that there is an obscure technical origin (e.g. *te*(tra)-*fl*(our)-*on*) for such invented terms, but after their first coinage, they tend to become everyday words in the language.

Borrowing

One of the most common sources of new words in English is the process simply labeled borrowing, that is, the taking over of words from other languages. Throughout its history, the English language has adopted a vast number of loan-words from other languages, including *alcohol* (Arabic), *boss* (Dutch), *croissant* (French), *lilac* (Persian), *piano* (Italian), *pretzel* (German), *robot* (Czech), *tycoon* (Japanese), *yogurt* (Turkish) and *zebra* (Bantu). Other languages, of course, borrow terms from English, as can be observed in the Japanese use of *suupaamaaketto* ('supermarket') and *rajio* ('radio'), or Hungarians talking about *sport*, *klub* and *futbal*, or the French discussing problems of *le stress*, over a glass of *le whisky*, during *le weekend*.

A special type of borrowing is descried as loan-translation, or calque. In this process, there is a direct translation of the elements of a word into the borrowing language. An interesting example is the French term *un gratteciel*, which literally translates as a 'scrape-sky', or the German *Wolkenkratzer* ('cloud scraper'), both of which were used for what, in English, is normally referred to as a s *skyscraper*. The English word *superman* is thought to be a loan-translation of the German *Ubermensch*, and the term *loan-word* itself is believed to have come from the German *Lehnwort*. Nowadays, some Spanish speakers eat *perros calientes* (literally 'dogs hot'), or *hot dogs*. The American concept of 'boyfriend' was a borrowing, with sound

modification, into Japanese as *bouifurendo*, but as a calque into Chinese as 'male friend' or *nan pengyu*.

Compounding

In some of those examples we have just considered, there is a joining of two separate words to produce a single form. Thus, *Lehn* and *Wort* are combined to produce *Lehnwort* in German. This combining process, technically known as compounding, is very common in languages like German and English, but much less common in languages like French and Spanish. Obvious English examples would be *bookcase*, *fingerprint*, *sunburn*, *wallpaper*, *doorknob*, *textbook*, *wastebasket* and *waterbed*.

This very productive source of new terms has been well documented in English and German, but can also be found in totally unrelated languages, such as Hmong, in South East Asia, which combines *hwj* ('pot') and *kais* ('spout') to produce *kwjkais* ('kettle'). The forms pajkws ('flower' +'corn'='popcorn') and *hnabloojtes* ('bag'+'cover'+'hand'='glove') are recent creations.

Blending

This combining of two separate forms to produce a single new term is also present in the process called blending. However, blending is typically accomplished by taking only the beginning of one word and joining it to the end of the other word. In some parts of the United States, There's a product which is used like *gasoline*, but is made from *alcohol*, so the 'blended' term for referring to this product is *gasohol*. If you wish to refer to the combined effects of *smoke* and *fog*, there's the term *smog*.

Clipping

The element of reduction which is noticeable in blending is even more apparent in the process described as clipping. This occurs when a word of more than one syllable (*facsimile*) is reduced to a shorter form (*fax*), often in casual speech. The term *gasoline* is still in use, but occurs much less frequently than *gas*, the clipped form. Common examples are *ad* ('advertisement'), *bra* ('brassiere'), *cab* ('cabriolet'), *condo* ('condominium'), *fan* ('fanatic'), *flu*, *perm*, *phone*, *plane*, *pram*, *pub* and *sitcom* ('situation comedy'). English speakers also like to clip each other's names, as in *Al, Ed, Liz, Mike, Ron, Sam, Sue* and *Tom*.

There must be something about educational environments that encourages clipping because just about every word gets reduced, as in *chem*, *exam*, *gym*, *lab*, *math*, *phys-ed*, *poly-scu*, *prof* and *typo*.

Backformation

A very specialized type of reduction process is known as backformation. Typically, a word of one type (usually a noun) is reduced to form another word of a different type (usually a verb). A good example of backformation is the process whereby the noun *television* first came into use and then the verb televise was created from it. Other examples of word created by this process are: *donate* (from 'donation'), *opt* (from 'option'), *emote* (from 'emotion'), *enthuse* (from 'enthusiasm'), *liaise* (from 'liaison') and *babysit* (from 'babysitter'). Indeed, if you *backform* anything, you have used a backformation.

A particular type of backformation, favored in Australian and British English, produces forms technically known as hypocorisms. First, a longer word is reduced to a single syllable, then *–y* or *– ie* is added to the end. Perhaps the most familiar versions of this process are the words *movie* ('moving pictures') and *telly* ('television'). It has also produced *Aussie* ('Australian'), *barbie* ('barbecue'), *bookie* ('bookmaker'), *brekky* ('breakfast') and *hankie* ('handkerchief'). You can probably guess what *Chrissy pressies* are.

Conversion

A change in the function of a word, as, for example, when a noun comes to be used as a verb (without any reduction), is generally known as conversion. Other labels of this very common process are 'category change' and 'functional shift'. A number of nouns, such as *paper*, *butter*, *bottle*, *vacation*, can, via the process of conversion, come to be used as verbs, as in the following sentences: *He's papering the bedroom walls; Have you buttered the toast*?; *We bottled*

the home-brew last night; They're vacationing in France. These conversions are readily accepted, but some examples, such as the noun *impact* being used as a verb, seem to *impact* some people's sensibilities rather negatively.

The conversion process is particularly productive in modern English, with new uses occurring frequently. The conversion can involve verbs becoming nouns, with *guess, must* and *spy* as the sources of *a guess, a must and a spy*. Phrasal verbs (*to print out, to take over*) also become nouns (*a printout, a takeover*). One complex verb combination (*want to be*) has become a very useful noun as in *He isn't in the group, he's just a wannabe*.

It is worth noting that some converted forms shift substantially in meaning when they change category. The verb *to doctor* often has a negative sense, not normally associated with the source noun *a doctor*. A similar kind of reanalysis of meaning is taking place with respect to the noun *total* and the verb *run around*, which do not have negative meaning. However, after conversion, if you *total* your car (=verb), and your insurance company gives you *the runaround* (=noun), then you will have a double sense of the negative.

Acronyms

Some new words, known as acronyms, are formed from the initial letters of a set of other words. These can remain essentially 'alphabetisms' such as *CD* ('compact disk') or *VCR* ('video cassette recorder') where the pronunciation consists of the set of letters. More typically, acronyms are pronounced as single words, as in *NATO*, *NASA* or *UNESCO*. These examples have kept their capital letters, but many acronyms lose their capitals to become everyday terms such as *laser* ('light amplification by stimulated emission of radiation'), *radar* ('radio detecting and ranging'), *scuba* ('self-contained underwater breathing apparatus') and *zip* ('zone improvement plan') code.

Name for organizations are often designed to have their acronym represent an appropriate term, as in 'mothers against drunk driving' (*MADD*) and 'women against rape' (*WAR*). Some new acronyms come into general use so quickly that many speakers do not think of their component meaning.

Derivation

In our list so far, we have not dealt with what is by far the most common word-formation process to be found in the production of new English words. This process is called derivation, and it is accomplished by means of a large number of small 'bits' of the English language which are not usually given separate listings in dictionaries. These small 'bits' are called affixes and a few examples are the elements *un-*, *mis-*, *pre-*, *-ful*, *-less*, *-ish*, *-ism*, *-ness* which appear in words like *unhappy*, *misrepresent*, *prejudge*, *joyful*, *careless*, *boyish*, *terrorism* and *sadness*.

Prefixes and suffixes

In the preceding group of words, it should be obvious that some affixes have to be added to the beginning of a word (*e.g. un-*). These are called prefixes. The other affix forms are added to the end of the word (*t.g. –ish*) and are called suffixes. All English words formed by this derivational process use either prefixes or suffixes, or both. Thus, *mislead* has a prefix, *disrespectful* has both a prefix and a suffix, and *foolishness* has two suffixes.

Infixes

There is a third type of affix, not normally to be found in English, but fairly common in some other languages. This is called an infix and, as the term suggests, it is an affix which is incorporated inside another word. It is possible to see the general principle at work in certain expressions, occasionally used in fortuitous or aggravating circumstances by emotionally aroused English speakers: *Hallebloodylujah!*, *Absogoddamlutely!* In the movie *Wish You Were Here*, the main character expresses her aggravation (at another character's trying to contact her) by screaming

Tell him I've gone to Singabloodypore!

7. Multiple processes

Although we have concentrated on each of these word-formation processes in isolation, it is possible to trace the operation of more than one process at work in the creation of a particular word. For example, the term *deli* seems to have become a common American English expression via a process of first 'borrowing' *delicatessen* (from German) and then 'clipping' that borrowed form. If you hear someone complain that *problems with the project have snowballed*, the final term can be noted as an example of 'compounding', whereby *snow* and *ball* have been combined to form the noun *snowball*, which has then undergone 'conversion' to be used as a verb. Forms which begin as 'acronyms' can also undergo other processes, as in the use of *lase* as a verb, the result of 'backformation' from *laser*. In the expression, *waspish attitudes*, the form *WASP* ('white Anglo-Saxon Protestant') has lost its capital letters and gained a suffix (*-ish*) in the 'derivation' process.

An acronym that never seems to have had capital letters comes from 'young urban professional', plus the *–ie* suffix, as in hypocorism, to produce the word *yuppie* (first recorded in 1984). The formation of this new word, however, was helped by a quite different process, known simply as analogy, whereby words are formed to be similar in some way to existing words. *Yuppie* was made possible as a new word by the earlier existence of *hippie* and the other short-lived analogy *yippie*. The term *yippie* also had an acronym basis ('youth international party'), but was generally used for students protesting the Vietnam war in the United States. One joke has it that *yippies* just grew up to be *yuppies*. And the process continues. Another analogy, with the word *yap* ('making shrill noises'), has recently helped label some of those noisy young professionals as *yappies*.

Many such forms, can of course, have a very brief life-span. Perhaps the generally accepted test of the 'arrival' of recently formed words in a language is their published appearance in a dictionary. However, even this may not occur without protests from some, as Noah Webster found when his first dictionary, published in 1806, was criticized for citing words like *advocate* and *test* as verbs, and for including such 'vulgar' words as *advisory* and *presidential*. It would seem that Noah had a keener sense than his critics of which new word-forms in the language were going to last.

STUDY QUESTIONS VIII

Task 1. Study Questions and tasks

1. Which of the following expressions is an example of 'calque'? How would you describe the others?

a. luna de miel (Spanish) – honeymoon (English)
b. mishin (Japanese) – machine (English)
c. trening (Hungarian) – training (English)

2. The term *vaseline* was originally created as a trade name for a product, but has become an ordinary English word. What is the technical term used to describe this process?

3. Identify the affixes used in the words *unfaithful, carelessness, refillable* and *disagree*, and decide whether they are prefixes or suffixes.

4. Can you identify the word-formation processes involved in producing the italicized forms in these sentences?

   a. *Laura parties* every Saturday night.
   b. Tom was worried that he might have *AIDS*
   c. Zee described the new toy as *fantabulous*.
   d. Eliza exclaimed, "*Absobloominglutely*!"

5.More than one process was involved in the creation of each of the forms indicated below. Can you identify them?

   a. I just got a new *car-phone.*

b. Shiel wants to be a *footballer*.
c. The negotiators *blueprinted* a new peace proposal.
d. Another *carjacking* has just been reported.

6. List the 'bound' morphemes to be found in these words:
Misleads, previewer, shortened, unhappier, fearlessly.

7.What are the functional morphemes in the following sentence: *The old man sat on a chair and told them tales of woe.*

8. What are the inflectional morphemes in the following phrases:
a). the singer's song b). it's raining c). the newest style d). the cow jumped over the moon

9. What would we list as allomorphs of the morpheme 'plural' from this set of English words: *dogs, oxen, deer, judges, curricula?*

VIII. Syntax - Basic Concepts in Syntax

1. **What is syntax?**
2. **Generative Grammar**
   - ***1.1 Some Properties of Grammar***
   - ***1.2 Deep and surface structure***
   - ***1.3 Structural Ambiguity***
3. **Different Approaches**
4. **Symbols Used in Syntactic Description**
5. **Labeled Tree Diagrams**
6. **Phrase structure Rules**
7. **Back to recursion**
8. **Transformational Rules**

1. What is syntax?

If we concentrate on the structure and ordering of components within a sentence, we are studying what is technically known as the syntax of a language. Syntax is all about the structure of sentences, and what determines which words go where. Studying syntax allows us to define descriptive rules about how language works. It is the aim of syntacticians to find out the factors involved in grammar, more specifically in regards to certain languages. Ultimately, it is believed that there are such rules that apply to all languages, which is why it is important to study as many different languages as possible.

The word 'syntax' came originally from Greek and literally meant 'a setting out together' or 'arrangement'. An accurate analysis of the sequence or the ordering 'arrangement' of elements in the linear structure of the sentence is a major goal of syntactic description, more recent work in syntax has taken a rather different approach in accounting for the 'arrangements' we observe in the structure of the sentences. Syntax also notes the differences between written and spoken language, as spontaneous speech will often ignore standard structural rules. Syntax is basically the structure of sentences. Sentences have to follow certain structural rules in order to make sense.

Phrases

Sentences are made up of smaller phrases. There are several difference types of phrase that can be used in a sentence, but the two phrases which *must* be used in a sentence for it to make sense are a noun phrase and a verb phrase.

In a phrase, we *must* have a word that is called the head. This is the core of the phrase, without that the phrase cannot exist. So in a phrase like 'the dog' or 'ran far away', in the first phrase 'dog' is the head because it is the main part of the phrase, and in the second phrase 'ran' is the head because it is essential for the phrase to exist. We can have 'dog ran', which isn't grammatical, but this still makes sense since we can understand that the dog ran. But we can't have 'the far away', this makes no sense to us!

Modifiers

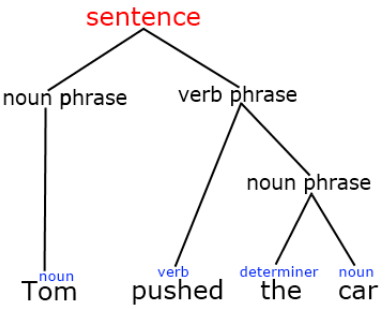
So '*the'* and '*far away'* have to be given a name to distinguish them from the head. We call these modifiers. They modify the head and give it specific meaning. The determiner 'the' modifies the 'dog' because it lets us know which *dog* we are referring to. The phrase 'far away' modifies the verb 'ran' by letting us know the extent to which the dog ran.

Noun Phrase

A noun phrase is usually the person or thing that is performing the verb in the sentence. It may also be the person or thing that the verb is being done to in a sentence. The person doing the verb in a sentence is known as the subject. For example, in the sentence 'Tom pushed the car', 'Tom' is the subject of the sentence as he is pushing the car. 'The car' is the object in the sentence as the car is the object that the verb is being done to. Both of these are noun phrases. A noun phrase has to be made up of a noun, such as a name or a tangible object. Sometimes, a

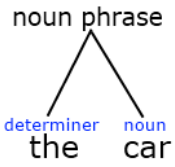
determiner is needed in a noun phrase, for example '*a* cat', '*the* dog'. 'A' and 'The' are called determiners because they tell us which person or thing is involved in the sentence.

Syntax Trees

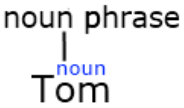


Let us start with this noun phrase. We know a noun phrase is made up of a determiner and a noun. First, we must label what parts of speech each of these are.

Let us draw two lines to join them together, creating a noun phrase!

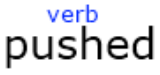


If we look at a proper noun, we find it is a little bit different. A proper noun does not need a determiner, so we can go straight to making it another noun phrase!

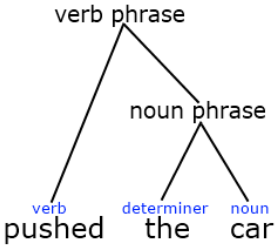


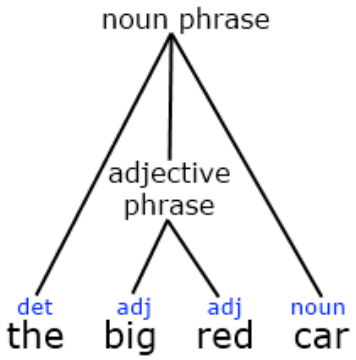
Verb Phrases

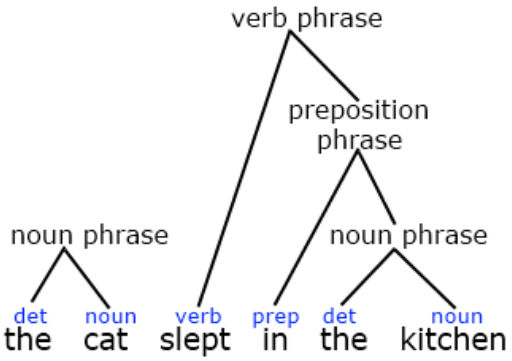
A basic *verb phrase* can be made up of one word, not every sentence has a basic verb phrase. For now let's look at the basic verb phrase.



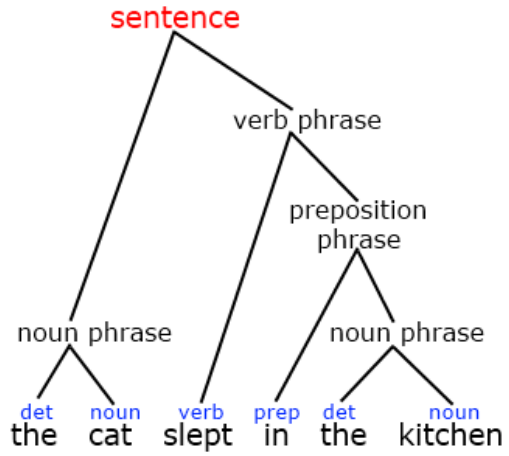
Next, we can label it as a verb phrase. This is connected to the noun phrase 'The Car', so we connect them and write the label above.

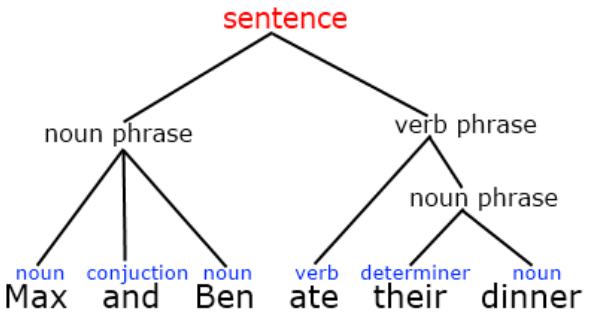


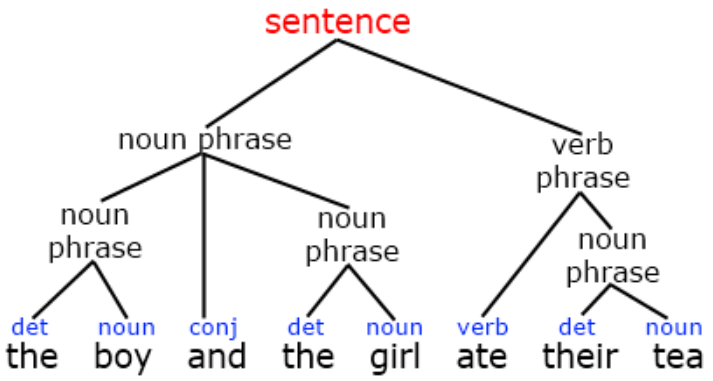




We need to link all of this together. In this sentence, we must join up all of the phrases to make a tree that says 'Sentence' at the top.







2. Generative Grammar

Since the 1950s, particularly developing from the work of the American linguist Noam Chomsky, there have been attempts to produce a particular type of grammar which would have a very explicit system of rules specifying what combinations of basic elements would result in well-formed sentences. This explicit system of rules, it was proposed, would have much in common with the types of rules in mathematics. Indeed, a definitive early statement in Chomsky's first major work betrays this essentially mathematical view in language: *"I will consider a language to be a set (finite or infinite) of sentences"* (Chomsky, 1957:13).

This mathematical point of view helps to explain the meaning of the term generative, which is used to describe this type of grammar. If you have an algebraic expression like $3x+2y$, and you can give x and y the value of any whole number, then that simple algebraic expression can generate an endless set of values, by following the simple rules of arithmetic. These results will follow directly from applying the explicit rules. The endless set of such results is 'generated' by the operation of the explicitly formalized rules. If the sentences of a language can be seen as a

comparable set, then there must be a set of explicit rules which yield those sentences. Such set of explicit rules is a generative grammar.

2.1 Some Properties of Grammar.

A grammar of this type must have a number of properties, which can be described in the following terms. The grammar will generate all the well-formed syntactic structures (e.g. *sentences*) of the language and fail to generate any ill-formed structures. This is the 'all and only' criterion (i.e. *all* the grammatical sentences and *only* the grammatical sentences).

The grammar will have a finite (i.e. limited) number of rules, but will be capable of generating an infinite number of well-formed structures. In this way, the productivity of language (i.e. the creation of totally novel, yet grammatical, sentences) would be captured within grammar.

The rules of this grammar will also need the crucial property of recursion, that is, the capacity to be applied more than once in generating a structure. For example, whatever rule yields the component *that chased the cat* in the sentence *This is the dog that chased the cat*, will have to be applied again to get *that killed the rat* and any other similar structure which could continue the sentence: *This is the dog that chased the cat that killed the rat…*

There is, in principle, no end to the recursion which would yield ever-longer version of this sentence, and the grammar must provide for this fact.

Basically, the grammar will have to capture the fact that a sentence can have another sentence inside it, or a phrase can have another phrase of the same type inside it. (Recursion is not only to be found in description of sentence structure). This grammar should also be capable of revealing the basis of two other phenomena: first, how some superficially distinct sentences are closely related, and second, how some superficially similar sentences are in fact distinct.

2.2. Deep and surface structure.

Two superficially distinct sentences structures would be, for example, *Charlie broke the window* and *the window was broken by Charlie*. In traditional terminology, the first is an active sentence and the second is passive. The distinction between them, it can be claimed, is a difference in their surface structure, that is, the syntactic form they take as actual English sentences. However, this difference in superficial for disguises the fact that the two sentences are very closely related, even identical, at some less 'superficial' level. This other 'underlying level', where the basic components shared by the two sentences would be represented, has been called their deep structure. The deep structure is an abstract level of structural organization in which all the elements determining structural interpretation are represented. So, the grammar must be capable of showing how a single underlying abstract representation can become different surface structures.

2.3. Structural Ambiguity

On the second point noted above, let us say that we had two distinct deep structures expressing, on the one hand, the fact that *'Annie had an umbrella and she whacked a man with it'*; and, on the other hand, that *'Annie whacked a man and the man happened to be carrying an umbrella'*. Now, these two different concepts can, in fact, be expressed in the same surface structure form: *Annie whacked a man with an umbrella.* This sentence is structurally ambiguous - Structural Ambiguity. It has two different underlying interpretations which would be represented differently in the deep structure.

Phrases can also be structurally ambiguous, as when you come across an expression like *old men and women*. The underlying interpretation can be either: *old men plus old women* or *old men plus women* (no age specified).

The grammar will have to be capable of showing the structural distinction between these underlying representations.

3. Different Approaches

We have considered some of the requirements which would have to be met by a complete syntactic description of a language. However, this area of linguistic investigation is notorious for giving rise to very different approaches to producing that description. For some, the only relevant issue are syntactic ones, that is, how to describe structure, independently of 'meaning' considerations. For others, the 'meaning component' is primary. In some later version of generative grammar, the level of deep structure is essentially taken over by a meaning or semantic interpretation which is assigned a structural or syntactic form in its surface realization.

Unfortunately, almost everything involved in the analysis of generative grammar remains controversial. There continue to be many different approaches among those who claim to analyze language in terms of generative grammar, and many more among those who are critical of the whole system. Rather than explore controversies, let us look at some of the really basic features of the original analytic approach and see how it is all supposed to work. First, we need to get the symbols straightened out.

4. Symbols Used in Syntactic Description

Symbols such as: 'S (=sentence), 'N' (noun), 'Art' (=article) and so on. We need to introduce three more symbols which are commonly used. The first of these is in the form of an arrow →, and it can be interpreted as 'consists of'. It will typically occur in the following format:

NP → Art N

This is simply a shorthand way of saying that a noun phrase (e.g. *the book*) consists of an article *(the)* and a noun (*book*). The second symbol used is in the form of parentheses, or round brackets ( ). Whatever occurs inside these brackets will be treated as an optional constituent. You can describe an object as *the book*, or as *the green book*. We can say that both *the book* and *the green book* are examples of the category, noun phrase. You can include an adjective, but it is not obligatory. We can capture this aspect of English syntax in the following way:

NP → Art (Adj) N

This shorthand motion expresses the idea that a noun phrase consists of an obligatory article and an obligatory noun, but may also include an adjective in a specific position. The adjective is optional. The third symbol used is in the form of braces, or curly brackets – { }. These indicate that only one of the elements enclosed within the brackets must be selected. They are used when there is a choice from two or more constituents. E.g. *the woman* (ArtN), or *she* (pronoun), or *Cathy* (proper noun). We can, of course write three single rules, as shown on the left below, but it is more succinct to write one rule, as shown on the right below, which incorporates exactly the same information:

NP→ ArtN
NP → pronoun NP→ {ArtN/pronoun/proper noun}
NP→ proper noun

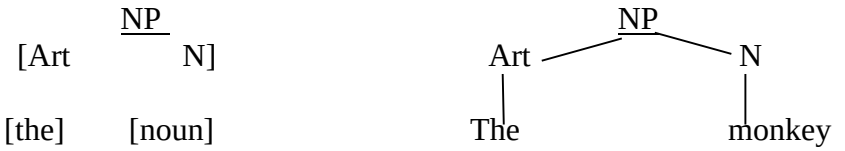
It is important to remember that, although there are three constituents in these curly brackets, only one of them can be selected on any occasion.

A list of symbols and abbreviations commonly found in syntactic description:

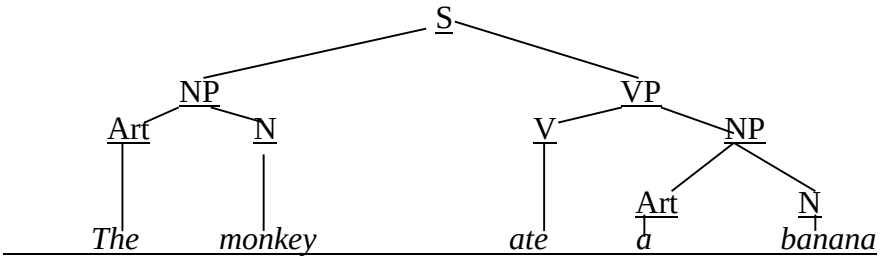
S sentence N noun Pro pronoun PN proper noun
V verb Adj adjective Art article Adv adverb
Prep preposition NP noun phrase VP verb phrase PP prepositional phrase
* = 'ungrammatical sequence'
→ = 'consists of'
( ) = 'optional constituent'
{ } = 'one and only one of these constituents must be selected'.

5. Labeled Tree Diagrams

To bring out the hierarchical organization of the labeled and bracketed constituents shown on the left below, we can show the same information in the form of a tree diagram, as on the right below:



This type of tree-diagram representation contains all the grammatical information found in the other analyses, but also shows more explicitly the fact that there are different levels in the analysis. That is there is a level of analysis at which a constituent such as NP is represented and a different, lower level at which a constituent such as N is represented. Here's how a whole sentence would look in a tree diagram:



If you start at the top of this tree diagram, you are starting with a sentence (S) and then dividing the sentence into two constituents (NP and VP). In turn, the NP constituent is divided into two constituents (Art and N). Finally, one word is selected which fits the label Art (the), and another which fits N (monkey).

6. Phrase structure Rules

We can view this tree-diagram format in two different ways. In one way, we can simply treat it as a static representation of the structure of the sentence at the bottom of the diagram. We could propose that, for every single sentence in English, a tree diagram of this type could be drawn. The alternative view is to treat the diagram as a 'dynamic' format, in the sense that it represents a way of 'generating' not only that one sentence, but a very large number of sentences with similar structures. This alternative view is very appealing since it should enable us to generate a large number of sentences with only a small number of rules. These 'rules' are usually called phrase structure rules, and they present the information of the tree diagram in an alternative format. So, instead of the diagram form on the left below, we can use the notation shown on the right below:

The rule is then read as: "a sentence consists of a noun phrase followed by a verb phrase". In addition to rules of this type which generate structures, we can also have lexical rules which indicate the words to be used for constituents such as N. for example: N → {boy, girl, dog…}.

This means that N is rewritten as *boy, or girl, or dog.* We can create a set of extremely simple (and necessarily incomplete) phrase structure rules which can be used to generate a large number of English sentences:

S→NP VP NP → {Art (Adj) V/PN} VP → V NP (PP) (Adv)
P → Prep NP N→ {boy, girl, dog}
V→ {saw, followed, helped} PN→ {George, Mary}
Prep → {with, near} Art → {a, the}
Adv → {yesterday, recently} Adj → {small, crazy}

These rules will generate the grammatical sentences shown below as (1) to (7), but will not yield the ungrammatical sentences shown as (8) to (10):

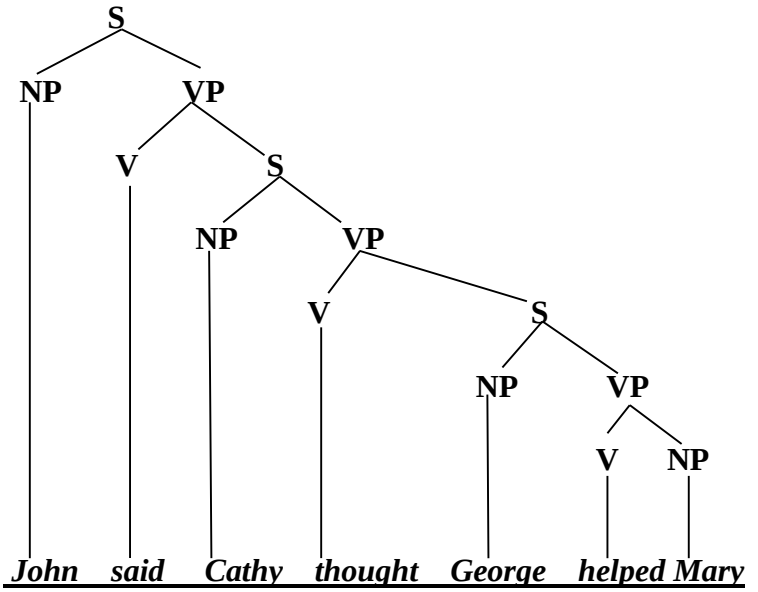
1. The girl followed the boy.
2. A boy helped the dog.
3. The dog saw a girl.
4. Mary helped George recently.
5. George saw a dog yesterday.
6. A small dog followed Mary.
7. The small boy saw George with a crazy dog recently.
8. *Boy the Mary saw.
9. * Helped a girl.
10. *Small dog with girl.

This small set of rules is a good start on creating a phrase structure grammar of English, but we still have not incorporated recursion.

7. Back to recursion

The phrase structure rules, as presented, have no recursive elements. Each time we rewrote a symbol from the left, we did not include that symbol on the right side of any arrow. We have to be able to repeat some symbols on the right side of the arrow. That is the essence of recursion. We need, for example, to have sentences included within other sentences. We know that *Mary helped George* is a sentence. We also know that *Cathy thought Mary helped George* is a sentence. And, being tediously recursive, we know that *John said Cathy thought Mary helped George* is a sentence.

In order to capture these structures in our rules, we need to add V→ {*said, thought*} and PN → {*Cathy, John*} to our lexical rules. We also need to add a crucial recursive rule that says: VP → V S. With these minor additions, we can now represent the structure of a more complex sentence.



In principle, there is no end to the recursion of sentence structures of this type in the English language and our rule (VP → V S) represents that fact.

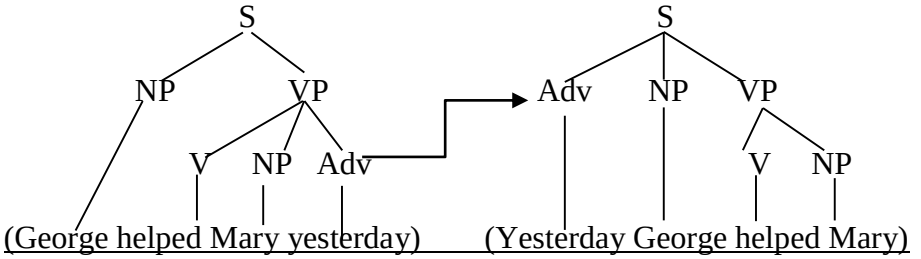
8. Transformational Rules

One other feature of our phrase structure rules is that they will generate all sentences with fairly fixed word order to the constituents. For example, adverbs will always come at the end of

their sentences if we follow the rules we have just illustrated. That is fine for generating the first sentences below, but how would we get the second sentences?

(i) George helped Mary yesterday.
(ii) Yesterday George helped Mary.

We can think of the *yesterday* element as having been 'moved' to the beginning of the sentence in (ii). In order to do this, we need a set of rules which will change or move constituents in the structures derived from the phrase structure rules. These are called transformational rules. Essentially what they do is take a 'branch' of the 'tree' away from one part of the tree diagram, and attach it to a different part. Here is an example of a movement transformation:



We would, of course, specify which constituents can be moved, from where and to where.

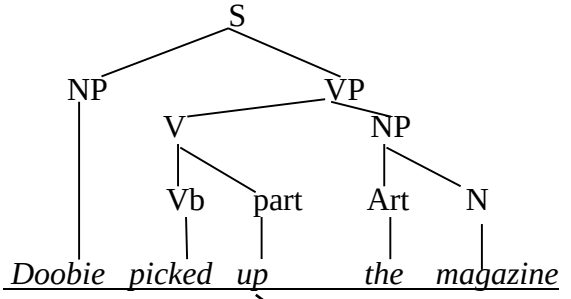
One of the best arguments for having transformational rules involves what seems to be the movement of a very small element in English sentence structure. We recognize that the following two sentences have a great deal in common:

(i) Doobie picked up the magazine.
(ii) Doobie picked the magazine up.

These sentences contain a verb-particle construction (verb = pick; particle = up) which can be symbolized as : V → Vb part. It is clear that the particle can be separated from the verb and 'moved' to the end of the sentence. A constituent structure analysis, as described, would have some difficulty accommodating this type of structure. A phrase structure analysis would have to create two distinct tree diagrams. Yet, we intuitively recognize that these two sentences must come from a single underlying source.

Let us propose a single tree diagram source which produces a string of elements like: *NP Verb Particle NP*. Under circumstances like these, let us then propose the optional transformation called 'Particle Movement',

Phrase Structure Tree



Particle Movement: *Doobie picked the magazine up*

which takes that structural description and yields the structural change to: *NP Verb NP Particle.*

By using this simple transformational rule, we have provided the means for explicitly relating the two structures in sentences (i) and (ii) above as 'surface' variations of a single

underlying structure. It may not seem much, but this type of transformational analysis solved a number of tricky problems for previous syntactic descriptions.

There is, of course, much more involved in generative syntax and other methods of syntactic description. However, having explored some of the basic issues in the syntactic description of language, we must move on, as historically the generative linguists had to do, to come to terms with the place of 'meaning' in linguistic description. We recognize that the following two sentences have a great. This leads us, in the following lecture, to a consideration of the role of semantics.

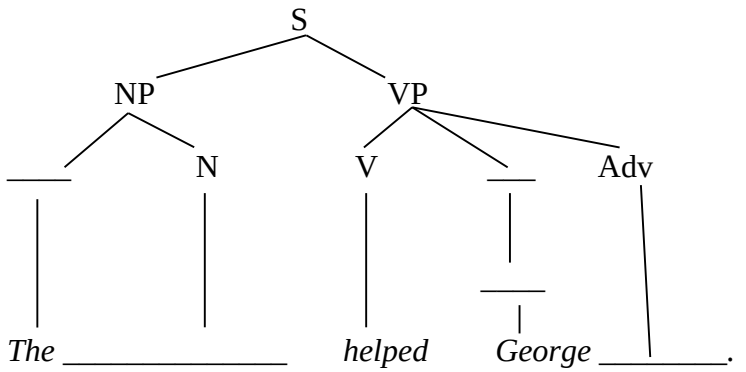
STUDY QUESTIONS IX

Task 1. Study Questions

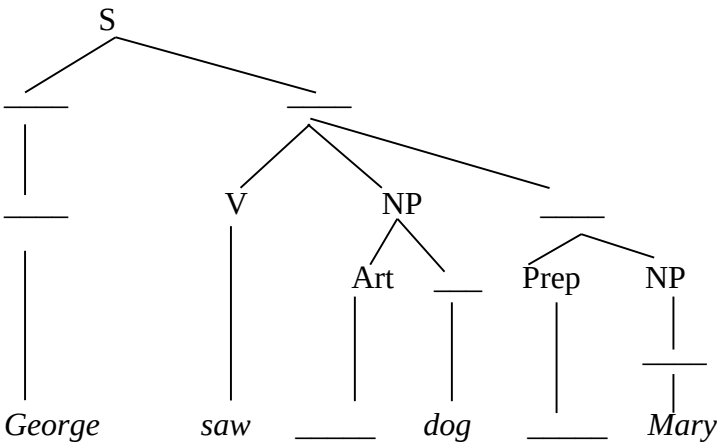
1. In what ways are these expressions 'ambiguous'?
   - *a) An American history teacher.*
   - *b) Flying planes can be dangerous.*
   - *c) The parents of the bride and the groom were waiting.*
2. Can you provide four. 'superficially distinct' sentences which would each have the same 'underlying' structure as one of the following sentences?
   - *a. Lara was arrested by the police.*
   - *b. She took her coat off.*
   - *c. Someone stole my bicycle.*
   - *d. I told him to turn down the volume.*
3. Which of the following expressions would be generated by this phrase structure rule: **NP⟶ Art (Adj) N?** *a) a radio b) the rusty car c) a new student d) the screwdriver*
4. Which of the following structures can be changed via the Particle Movement transformation?
   - *a) He put down his glass.*
   - *b) She threw away her dress.*
   - *c) He pulled off his shirt.*
   - *d) They jumped in the pool.*

5. Using the phrase structure rules presented in this topic, you should be able to complete these labeled tree diagrams.

a.)



b.)



IX. Semantics

1. **Conceptual Versus Associative Meaning**
2. **Semantic features**
3. **Semantic Roles**
   - ***3.1. Agent, theme, instrument***
   - ***3.2. Experiencer, location, source, goal***
4. **Lexical Relations**
   - ***4.1. Synonymy***
   - ***4.2. Antonymy***
   - ***4.3. Hyponymy***
   - ***4.4. Prototypes***
5. **Homophony, homonymy and polysemy**
6. **Metonymy**
7. **Collocation**

Semantics is the study of the meaning of words, phrases and sentences. In semantic analysis, there is always and attempt to focus on what the words conventionally mean, rather than on what a speaker might want the word to mean on a particular occasion. This technical approach to meaning emphasizes the objective and the general. It avoids the subjective and the local. Linguistic semantics deals with the conventional meaning conveyed by the use of words and sentences of a language.

1. Conceptual Versus Associative Meaning

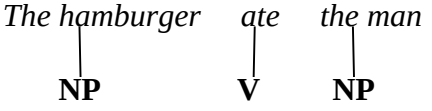
When linguists investigate the meaning of words in a language, they are normally interested in characterizing the conceptual meaning and less concerned with the associative or stylistic meaning of words. Conceptual meaning covers those basic, essential components of meaning which are conveyed by the literal use of a word. Some of the basic components of a word like *needle* in English might include 'thin, sharp, steel, instrument'. These components would be part of the conceptual meaning of *needle*. However, you may have 'associations' or 'connotations', attached to a word like *needle* which lead you to think of 'painful' whenever you encounter the word. This 'association' is not treated as part of the conceptual meaning of *needle*. In a similar way, you may associate the expression *low-calorie*, when used to describe a product, with 'good for you', but we would not want to include this association within the basic conceptual meaning of the expression. Poets and advertisers are, of course, very interested in using terms in such a way that their associative meanings are evoked, and some linguists do investigate this aspect of language use. However, in this lecture we shall be more interested in characterizing what constitutes the conceptual meaning of terms.

2. Semantic features

So, how would a semantic approach help us to understand something about the nature of language? One way it might be helpful would be as a means of accounting for the 'oddness' we experience when we read English sentences such as the following:

The hamburger ate the man.
My cat studied linguistics.
A table was listening to some music.

Notice that the oddness of these sentences does not derive from their syntactic structure. According to some basic syntactic rules for forming English sentences (such as those presented in the previous lecture), we have well-structured sentences:



This sentence is syntactically good, but semantically odd. Since the sentence *The man ate the hamburger* is perfectly acceptable, what is the source of the oddness we experience? One answer may relate to the components of the conceptual meaning of the noun *hamburger* which differ significantly from those of the noun *man*, especially when those nouns are used as subjects of the verb *ate*. The kinds of nouns which can be subjects of the verb *ate* must denote entities which are capable of 'eating'. The noun *hamburger* does not have this property (and *man* does), hence the oddness of the first sentence above.

We can, in fact, make this observation more generally applicable by trying to determine the crucial component of meaning which a noun must have in order to be used as the subject of the verb *ate*. Such a component may be as general as 'animate being'. We can then take this component and use it to describe part of the meaning of words as either plus (+) or minus (-) the feature. So, the feature becomes + *animate* (= denotes an animate being) or –*animate* (= does not denote an animate being).

This procedure is a way of analyzing meaning in terms of semantic features. Features such as *+animate, -animate; +human, -human; +mail, -male*, for example, can be treated as the basic features involved in differentiating the meanings of each word in the language from every other word. If you were asked to give the crucial distinguishing features of the meaning of this set of English words *(table, cow, girl, woman, boy, man)*, you could do so by means of the following diagram:

	Table	***cow***	***girl***	***woman***	***boy***	***man***
Animate	-	+	+	+	+	+
Human	-	-	+	+	+	+
Male	-	-	-	-	+	+
Adult	-	+	-	+	-	+

From a feature analysis like this , you can say that at least part of the basic meaning of the word *boy* in English involves the components *(+human, +male, - adult*). You can also characterize that feature which is crucially required in a noun in order for it to appear as the subject of a verb, supplementing the syntactic analysis with semantic features:

The _____ *is reading a book*
N (+*human*)

This approach then gives us the ability to predict what nouns would make the above sentence semantically odd. Examples would be *table,* or *tree,* or *dog,* because they all have the feature (-*human*).

The approach which has just been outlined is not without problems. For many words in a language it may not be so easy to come up with neat components of meaning. If you try to think of which components or features you would use to distinguish the nouns *advice, threat* and *warning,* for example, you will have some idea of the scope of the problem. Part of the problem seems to be that the approach involves a view of words in a language as some sort of 'containers', carrying meaning-components.

3. Semantic Roles

Instead of thinking of the words as 'containers' of meaning, we can look at the 'roles' they fulfill within the situation described by a sentence. If the situation is a simple event, such as *The boy kicked the ball*, then the verb describes an action (*kick*). The noun phrases describe the roles of entities, such as people and things, involved in the action. We can identify a small number of Semantic Roles for these noun phrases.

3.1 ***Agent, theme, instrument***

In the sentence above, one role is taken *by the boy* as 'the entity that performs the action', technically known as the agent. Another role is taken by the *ball*, as 'the entity' that is involved in or affected by the action', technically known as the theme. The theme can also be an entity (*the ball*) that is simply being described , as in *The ball was red.* Identifying entities denoted by noun phrases as the agent or the theme is a way of recognizing the semantic roles of those noun phrases in a sentence.

Although agents are typically human, they can also be non-human forces (*the wind blew the ball away*), machines (the *car ran over the ball*), or creatures (*the dog caught the ball*). If an agent uses another entity in performing an action, that other entity fills the role of instrument. In *writing with a pen* or *eating with a spoon*, the noun phrases *a pen* and *a spoon* have the semantic role of instrument.

The theme can also be human. Indeed, the same physical entity can appear in two different semantic roles, as in *The boy kicked himself*. Here *the boy* is agent and *himself* is theme.

3.2. Experiencer, location, source, goal.

When a noun phrase designated an entity as the person who has a feeling, a perception or a state, it fills the role of experiencer. If you see, know or enjoy something, you do not really have to perform any action (hence you are not an agent). You are in the role of experiencer. If someone asks, *Did you hear that noise?* the experiencer is *you* and the theme is *that noise*.

A number of other semantic roles designate where an entity is in the description of the event. Where an entity is (*on the table*, *in the room*) fills the role of location. Where an entity moves from is the source and where it moves to is the goal. When we talk about transferring money *from savings to checking*, the source is *savings* and the goal is *checking*. All these semantic roles are illustrated in the following scenario.

1.Mary saw a mosquito on the wall.
EXPERIENCER THEME LOCATION

2.She borrowed a magazine from George
AGENT THEME SOURCE

and she hit the bug with the magazine.
AGENT THEME INSTRUMENT

3.She handed the magazine back to George.
AGENT THEME GOAL

4. "Gee thanks," said George.
AGENT

4. Lexical Relations

Not only can words be treated as 'containers' or as fulfilling 'roles', they can also have 'relationships'. In everyday talk, we frequently give the meanings of words in terms of their relationships. If you were asked to give the meaning of the word *conceal*, you might simply reply "it's the same as hide", or give the meaning of *shallow* as "the opposite of deep" , or the meaning of *daffodil* as "it's a kind of flower". In doing so, you are characterizing the meaning of a word not in terms of its component features, but in terms of its relationship to other words.

This procedure has also been used in the semantic description of languages and is treated as the analysis of lexical relations. The types of lexical relations which are usually analyzed are defined and exemplified in the following sections.

4.1. Synonymy

Synonyms are two or more forms with very closely related meanings, which are often, but not always, intersubstitutable in sentences. Examples of synonyms are the pairs *broad – wide, hide – conceal, almost – nearly, cab – taxi, liberty – freedom, answer – reply.*

It should be noted that the idea of 'sameness of meaning' used in discussing synonymy is not necessarily 'total sameness'. There are many occasions when one word is appropriate in a sentence, but its synonym would be odd. For example, whereas the word *answer* fits in this sentence *: Cathy had only one answer correct on the test*, its near–synonym, *reply*, would sound odd. Synonymous forms may also differ in terms of formality. The sentence *My father purchased a large automobile* seems much more serious that the following casual version, with four synonymous replacements: *My dad bought a big car.*

4.2. Antonymy.

Two forms with opposite meanings are called antonyms, and commonly used examples are the pairs *quick – slow, big – small, long – short, rich – poor, happy – sad, hot – cold, old – young, male – female, true – false, alive – dead.*

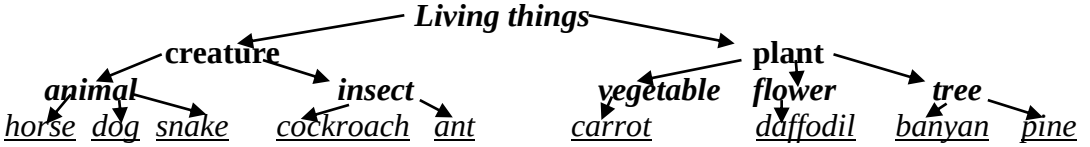
Antonyms are usually divided into two main types, those which are "gradable", and those which are 'non-gradable'. Gradable antonyms, such as the pair *big – small*, can be used in comparative contractions like *bigger than – smaller than*. Also, the negative of one member of the gradable pair does not necessarily imply the other. For example, if you say *that dog is not old*, you do not have to mean *that dog is young*. With non-gradable antonyms, also called 'complementary pairs', comparative constructions are not normally used (the expressions *deader* or *more dead* sound strange), and the negative of one member does imply the other. For example, *that person is not dead* does indeed mean *that person is alive*. So, the pair *male – female* and *true – false* must also be non-gradable antonyms, whereas the others in the list above are gradable.

Although it works for the small number of non-gradable antonyms in a language, it is important to avoid describing most antonym pairs as one word meaning the negative of another. Consider the opposites *tie – untie*. The word *untie* doesn't mean '*not tie'*. It actually means 'do the reverse of tie'. Such pairs are called reversives. Other common examples are *enter – exit, pack – unpack, lengthen – shorten, raise – lower* and *dress – undress.*

4.3. Hyponymy

When the meaning of one form is included in the meaning of another, the relationship is described as hyponymy, and some typical examples pairs are *daffodil – flower, dog – animal, poodle – dog, carrot – vegetable*. The concept of 'inclusion' involved here is the idea that if any object is a *daffodil*, then it is necessarily a *flower*, so the meaning of *flower* is 'included' in the meaning of *daffodil*. Or, *daffodil* is a hyponym of *flower*.

When we consider hyponymous relations, we are essentially looking at the meaning of words in some type of hierarchical relationship. You could, in fact, represent the relationships between a set of words such as *animal, ant, asp, banyan, carrot, cockroach, creature, daffodil, dog, flower, horse, insect, living things, pine, plant, snake, tree* and *vegetable* as a hierarchical diagram in the following way:



From this diagram, we can say that "*horse* is a hyponym of *animal*" or that '*ant* is a hyponym of *insect'*. We can also say that two or more terms which share the same superordinate (higher–up) term are co-hyponyms. So, *horse* and *dog* are *co-hyponyms*, and the superordinate term is *animal*.

The relation of hyponymy captures the idea of 'is a kind of', as when you give the meaning of a word by saying "an *asp* is a kind of *snake*". It is often the case that the only thing some people know about the meaning of a word in their language is that it is a hyponym of another term. That is, you may know nothing more about the meaning of *asp* other than that it is a kind of *snake*.

It is worth emphasizing that it is not only words for 'things' that are hyponyms. Terms for actions, such as *cut, punch, shoot* and *stab*, can all be found as co-hyponyms of the superordinate term *injure*.

4.4. Prototypes

While the words *canary, dove, duck, flamingo, parrot, pelican, robin, swallow* and *thrush* are all equally co-hyponyms of the superordinate *bird*, they are not all considered to be equally good exemplars of the category 'bird'. For many American English speakers, the best exemplar, or the prototype, of 'bird' is the *robin*. The concept of a prototype helps explain the meaning of certain words, like *bird*, not in terms of component features (e.g. 'has feathers', 'has wings'), but in terms of resemblance to the clearest exemplar. Thus, even native speakers of English might wonder if *ostrich* and *penguin* should be hyponyms of *bird* (technically, they are), but have no trouble deciding about *sparrow* or *pigeon*. The last two are much closer to the prototype.

Given the category label *furniture*, we quicker to recognize *chair* as an exemplar than *bench* or *stool*. Given *clothing*, people recognize *shirts* quicker than *shoes*, and given *vegetable*, they accept *carrot* before *potato* or *tomato*. It is obvious that there is some general pattern to the categorization process involved in prototypes and that it determines our interpretation of word meaning. However, this is one area where individual experience results in variation in interpretation as when people disagree about whether *tomato* is a fruit or a vegetable.

5. Homophony, homonymy and polysemy

There are three other, less well-known terms which are often used to describe relationships among words in a language. The first of these is homonymy. When two or more different (written) forms have the same pronunciation, they are described as homophones. Some examples are *bare – bear, meat – meet, flour – flower, pail – pale, sew – so.*

The term homonymy is used when one form (written and spoken) has two or more unrelated meanings. Examples of homonyms are the pairs *bank* (of the river) – *bank* (financial institution), *bat* (flying creature) – *bat* (used in sports), etc. The temptation is to think that the two types of *bank* must be related in meaning. They are not. Homonyms are words which have quite separate meanings, but which have accidentally come to have the same form.

Relatedness of meaning accompanying identical form is technically known as polysemy, which can be defined as one form (written or spoken) having multiple meanings which are all related by extension. Examples are the word *head*, used to refer to the object on the top of your body, on top of a glass of beer, on top of a company or department; or *foot* (of person, of bed, of mountain), or *run* (person does, water does, colors do).

This distinction between homonymy and polysemy is not always clear cut. However, one indication of the distinction can be found in the typical dictionary entry for words. If a word has multiple meanings (*polysemic*), then there will be a single entry, with a numbered list of the different meanings of the word. If two words are treated as homonyms, they will typically have two separate entries. You could check in your dictionary and probably find that the different meanings of words like *head, get, run, face* and *foot* are treated as examples of polysemy, whereas *mail, bank, sole* and *mole* are treated as examples of homonymy.

Of course, one form can be distinguished via homonymy, then shown to have various uses via polysemy. The words *date* (= oblong, fleshy fruit) and *date* (= point of time) are homonyms. But the 'point in time' kind of *date* is polysemous in terms of a particular day and month (= on a letter), an arranged meeting time (= an appointment), a social meeting (= with someone of the opposite sex) and even a person (= that someone of the opposite sex). The question *How about a date*? could have many interpretations.

These last three lexical relations are, of course, the basis of a lot of word-play, particularly used for humorous effect. In the nursery rhyme, *Mary had a little lamb,* we think of a small animal, but in the comic version of *Mary had a little lamb, some rice and vegetables,* we tend to think, instead, of a small amount of meat. The polysemy of *lamb* allows the two interpretations. *Pillsbury Flour Company* once took advantage of homophony to promote a brand of flour with the slogan *Everybody kneads it*. If you are asked the following riddle: *What's black and white and red all over?,* you may initially be confused by the answer: *a newspaper*. The trick depends on the homophony of *red* and *read*. And if you have come across this riddle: *Why are trees often mistaken for dogs?,* then you will have encountered the use of homonymy in the answer: *Because of their bark.*

6. Metonymy

The relatedness of meaning found in polysemy is essentially based on similarity. The *head* of a company is similar to the *head* of a person on top of (and controlling) the body. There is another type of relationship between words, based simply on a close connection in everyday experience. That close connection can be based on a container – contents relation (*bottle – coke; can – juice*), a whole-part relation (*car – wheels; house – roof*) or a representative – symbol relationship (*king-crown; the President – the white House*). These are examples of metonymy.

It is our familiarity with metonymy that makes *He drank the whole bottle* easy to understand, although it sounds absurd literally (i.e. he drank the liquid, not the glass object). Many examples of metonymy are highly conventionalized and easy to interpret. However, many others depend on an ability to infer what the speaker has in mind. The metonymy in *Get your butt over here* is easier to understand if you are used to male talk in the United states, *the strings are too quiet* if you're familiar with orchestra music, and *I prefer cable,* if you have a choice in how you receive television programs (in the USA). Making sense of such expressions often depends on context, background knowledge and inference. These are all topics in the following lecture.

7. Collocation

One other distinct aspect of our knowledge of words has nothing to do with any of the factors considered so far. We know which words tend to occur with other words. If you ask a thousand people what they think of when you say *hammer,* more than a half will say *nail*. If you say *table* they'll mostly say *chair* and for *butter – bread,* for *needle – thread* and so on. One way we seem to organize our knowledge of words is simply in terms of collocation, or frequently occurring together. Some collocations are joined pairs of words such as *salt* and *pepper* or *husband* and *wife*. However, *salt* will also make some people say *water* because of the common collocation *salt water*. It may be that part of knowing a language is knowing not only what words mean, but what their typical collocations are. Thus, part of your knowledge of *fresh* is as it occurs in the phrase *fresh air,* or *knife* as in *knife and fork* or *enough* as in *enough already*. Okay, that's enough already!

STUDY QUESTIONS IX

Task 1. Study Questions

1. What is the basic lexical relation between the following pairs of words?

   a). shallow deep *b). mature ripe* *c). suite sweet*
   d). table furniture *e). single married* *f). move run*

2. How would you describe the oddness of the following sentences, using semantic features?

   a). The television drank the water. *b). His dog writes poetry.*

3. Identify the semantic roles of all the noun phrases in this sentence: *With his new golf club, Fred whacked the ball from the woods to the grassy area near the river and he felt good.*

4. Which of the following opposites are gradable, non-gradable, or reversive?

   a) absent present *b) high low* *c) fill empty*
   e) fail pass *e) fair unfair* *f) appear disappear*

5. Which of the following examples are best described as polysemy or as metonymy?

   *a) Computer **chips** are an important new technology.*
   *b) The bookstore has some new **titles** in linguistics.*
   *c) Yes, I love those. I ate a whole **box** on Sunday!*
   *d) I had to park on the **shoulder** of the road.*
   *e) The **pen** is mightier than the **sword**.*

X. Pragmatics

1. **Invisible meaning**
2. **Context**
3. **Deixis**
4. **Reference**
5. **Anaphora**
6. **Presupposition**
7. **Speech acts**

A: I have a fourteen-year-old son
B: Well that's all right
A: I also have a dog
B: Oh I'm sorry

In the previous lecture, we concentrated on meaning in language as a product of the meaning of words. There are, however, other aspects of meaning which are not derived solely from the meaning of the words used in phrases and sentences. In making sense of the quote above, it may help to know that A is trying to rent an apartment from B. when we read or hear pieces of language, we normally try to understand not only what the words mean, but what the writer or speaker of those words intended to convey. The study of 'intended speaker meaning' is called pragmatics.

1. Invisible meaning

In many ways, pragmatics is the study of 'invisible' meaning, or how we recognize what is meant even it isn't actually said (or written). In order for that to happen, speakers (and writers) must be able to depend on a lot of shared assumptions and expectations. The investigation of those assumptions and expectations provides us with some insights into how more gets communicated than is said.

Driving by a parking lot, you may see a large sign like the one in the picture. Now, you know what each of these words means, and you know what the sign as a whole means. However, you don't normally think that the sign is advertising a place where you can park your 'heated attendant'.

Alternatively, it may indicate a place where parking will be carried out by attendants who have been heated. The words may allow these interpretations, but you would normally understand that you can park in this place, that it's a heated area, and that there will be an attendant to look after the car. So, how do you decide that the sign means this? Well, you use the meanings of the words, in combination, and the context in which they occur, and you try to arrive at what the writer of the sign intended his message to convey. The notion of the speaker's or writer's intended meaning is a crucial element.

Heated
Attendant
Parking

2. Context

In our discussion of the example, we have emphasized the influence of context. There are, of course, different kinds of context to be considered. One kind is best described as linguistic context, also known as co-text. The co-text of a word is the set of other words used in the same phrase sentence. This surrounding co-text has a strong effect on what we think the word means. We have already noted that the word bank is a homonym, a form with more than one meaning. How do we usually know which meaning is intended in a particular sentence? We usually do so on the basic of the linguistic context.

More generally, we know what words mean on the basis of another type of context, best described as physical context. If you see the word BANK on the wall of a building in a city, the 'physical' location will influence your interpretation. Our understanding of much of what we read and hear is tied to the physical context, particularly the time and place, in which we encounter linguistic expressions.

3. Deixis

There are some words in the language that cannot be interpreted at all unless the physical context, especially the physical context of the speaker, is known. These are words like *here, there, this, that, now, then, yesterday,* as well as most pronouns, such as *I, you, him, her, them*. Some sentences of English are virtually impossible to understand if we don't know who is speaking, about whom, where and when. For example: *You'll have to bring that back tomorrow, because they aren't here now.*

Our context, this sentence is extremely vague. It contains a large number of expressions (*you, that, tomorrow, they, here, now*) which depend for their interpretation on the immediate physical context in which they were uttered. Such expressions are very obvious examples of bits of language which we can only understand in terms of speaker's intended meaning. These are technically known as deictic expressions, from the Greek word Deixis (pronounced 'day-icksis'), which means 'pointing' via language.

Any expression used to point to a person (*me, you, him, them*) is an example of person *Deixis*. Words used to point to a location (*here, there, yonder*) are examples of place *Deixis*, and those used to point to a time (*now, then, tonight, last week*) are examples of time *Deixis*.

All these deictic expressions have to be interpreted in terms of what person, place or time the speaker has in mind. There is a board distinction between what is marked as close to the speaker (*this, here, now*) and what is marked as distant (*that, there, then*). It is also possible to mark whether movement is happening towards the speaker's location (*come*) or away from the speaker's location (*go*). If you're looking for someone and she appears, moving towards you, you tend to say *Here she comes*! If, however, she is moving away from you in the distance, you're more likely to say *There she goes*!

People can actually use *Deixis* to have some fun. The bar owner who puts up a big sign that reads *Free Beer Tomorrow* (to get you return to his bar) can always claim that you are one day too early for the drink.

4. Reference

In discussing deixis, we assumed that the use of words to refer to people and things was a simple matter. However, words themselves don't refer to anything. People refer. We have to define reference as an act by which a speaker (or writer) uses language to enable a listener (or reader) to identify something.

We often assume that the words we use to identify things are in some direct relationship to those things. It's not as simple as that. We may not actually know someone's name, but that doesn't prevent us from referring to the person. One man who always went by fast and loud on his motorcycle in my neighborhood was locally referred to as *Mr. Kawasaki*. A brand name for a motorcycle can obviously be used for a person.

Similarly, in a restaurant, one waiter can ask another *Where's the fresh salad sitting?* and receive the reply *He's sitting by the door*. These examples make it clear that we can use names associated with things (*salad*) to refer to people and names referred to things. The key process here is called inference. An inference is any additional information used by the listener to connect what is said to what must be meant.

5. Anaphora

When we establish a referent (*Can I borrow you book?)* and subsequently refer to the same object (*Yeah, it's on the table*), we have a particular kind of referential relationship

between *book* and *it*. The second (and any subsequent) referring expression is an example of anaphora and the first mention is called the antecedent. This, *book* is the antecedent and it is the anaphoric expression.

Anaphora can be defined as subsequent reference to an already introduced entity. Mostly we use anaphora in texts to maintain reference. As with other type of reference, the connection between referent and anaphora may not always be direct. Consider the following complaint: *I was waiting for the bus, but he just drove by without stopping.* Notice that the antecedent is *bus* and the anaphoric expression is *he*. We would normally expect it to be used for a *bus*. Obviously there is an inference involved here: if someone is talking about a bus in motion, assume that there is a driver. That assumed driver is the inference referent for *he*. The term 'inference' has been used here to describe what the listener (or reader) does. When we talk about an assumption made by the speaker (or writer), we usually talk about a 'presupposition'.

6. Presupposition

When a speaker uses referring expressions like *this, her or Shakespeare*, in normal circumstances, she is working with an assumption that the hearer knows which referent is intended. In a more general way, speakers continually design their linguistic messages on the basic of assumptions about what their hearers already know. These assumptions may be mistaken, of course, but they underlie much of what we say in the everyday use of language. What a speaker assumes is true or is known by the hearer can be described as a presupposition.

If someone tells you *Your brother is waiting outside for you*, there is an obvious presupposition that you have a brother. If you are asked *Why did you arrive late?*, there is a presupposition that you did not arrive late.

One of the tests used to check for the presuppositions underlying sentences involves negating a sentence with a particular presupposition and considering whether the presupposition remains true. Take the sentence *My car is a wreck*. Now take the negative version of this sentence: *My car is not a wreck*. Notice that, although these two sentences have opposite meanings, the underlying presupposition, *I have a car*, remains true in both. This is called the *constancy under negation* test for presupposition. If someone says *I used to regret marrying him, but I don't regret marrying him now*, the presupposition (*I married him*) remains constant even though the verb *regret* changes from being affirmative to being negative.

7. Speech acts

We have been considering some ways in which we interpret the meanings of sentences in terms of what the speaker of those sentences intended to convey. What we have yet explored is the fact that we also usually know how speakers intend us to 'take' (or, interpret the function of) what they say. In very general terms, we can usually recognize the type of 'act' performed by a speaker in uttering a sentence. The use of the term speech act covers 'actions' such as 'requesting', 'commanding', 'questioning' and 'informing'. It is typically the case that we use the following linguistic forms with the following 'functions'. (The forms would be described in the syntactic analysis of a language, and the functions as what people use language for).

Forms	Functions	
Did you eat the food?	Interrogative	Question
Eat the food (please).	Imperative	Command (request)
You ate the food.	Declarative	Statement

When a form li such as *Did he…? Are they…?* Or *Can you….?* is used to ask a question, it is described as a direct speech act. Example: *Can you ride a bicycle?*

Now compare this utterance with *Can you pass the salt?* And *Can you ride the bicycle?* In the first example, you would not usually understand the utterance as a question about your ability to do something. In fact, you would not treat this as a question at all. You would treat it as a request and perform the action requested. Yet, this request has been presented in the syntactic

form usually associated with a question. Such an example is described as an indirect speech act. Whenever one of the forms in the set above is used to perform a function other than the one listed beside it (on the same line), the result is an indirect speech act.

Perhaps the crucial distinction in the use of these two types of speech acts is based on the fact that indirect commands or requests are simply considered more gentle or more polite in our society than direct commands. Exactly why they are considered more polite is based on some complex social assumptions.

STUDY QUESTIONS X

Task 1. Study questions

1. What are the deictic expressions in the following utterance?
   I'm busy now so you can't do that here. Come back tomorrow.

2. What is one obvious presupposition of a speaker who says:
   a) *Where did he buy the beer?*
   b) *Your watch is broken.*
   c) *We regret buying that car.*

3. What are the anaphoric expressions in:
   Dr. Dang gave Mary some medicine after she asked him for it.

4. What kind of inference is involved in interpreting these utterances:
   a) *Professor: Bring your Plato to class tomorrow.*
   b) *Nurse: The broken leg in room 5 wants to talk to the doctor.*

5. Someone stands between you and the TV set you were watching, so you decide to say one of the following. Identify which would be direct and which indirect speech acts.
   a) *Move!*
   b) *You're in the way.*
   c) *Could you sit down!*
   d) *Please get out of the way.*

XI. *The sound Patterns of Language. Phonetics and Phonology.*

1.Phonetics. The tasks of phonetics. Consonants. Vowels

2. **Phonology - Phonemes. Phones and allophones. Minimal Pairs and Sets**
3. **Phonotactics**
4. **Syllables and clusters**
5. **Co-articulation effects - *Assimilation, Elision***

1. Phonetics. The tasks of phonetics. Consonants. Vowels

Phonetics is the science of human speech sounds. It has three subfields or branches. There are three types of the study of the sounds of language

The oldest branch, and also the one which is the most relevant in foreign language teaching, is *articulatory* phonetics. This examines the articulatory (vocal) organs and their role in the production of speech sounds. *Articulatory Phonetics* is the study of how the vocal tracts produce the sounds.

The second branch is *acoustic* phonetics. This deals with the physical properties of speech sounds as they travel through the air in the form of sound waves. *Acoustic Phonetics is* the study of the physical properties of sounds.

The third branch is called *auditory* phonetics, which examines the way in which human beings perceive speech sounds through the medium of the ear. *Auditory Phonetics* is the study of the way listeners perceive sounds.

The *orthography* (spelling) of words is misleading, especially in English. One sound can be represented by several different combinations of letters. For example, all of the following words contain the same vowel sound: h*e*, bel*ie*ve, L*ee*, C*ae*sar, k*ey*, am*oe*ba, loudl*y*, mach*i*ne, p*eo*ple, and s*ea*.

The production of any speech sound involves the movement of air. Air is pushed through the lungs, larynx (vocal folds) and vocal tract (the oral and nasal cavities.) Sounds produced by using air from the lungs are called pulmonic sounds. If the air is pushed out, it is called egressive. If the air is sucked in, it is called ingressive. Sounds produced by ingressive airstreams are ejectives, implosives, and clicks. These sounds are common among African and American Indian languages. The majority of languages in the world use pulmonic egressive airstream mechanisms, and I will present only these types of sounds in this lesson.

The main task of phonetic science is twofold; it is to provide a notation and description for each speech sound. By notation we mean a system of transcription symbols whereby we can make an accurate and unambiguous record of what goes on in speech. This is necessary because conventional letters cannot do this job properly. The correspondence between letters and sounds is indirect. In English, for example, there are 26 basic letters but considerably more speech sounds that we can distinguish. The transcription system which contains symbols for the hundred or so speech sounds that can be distinguished in human language is a special kind of alphabet, known as the International Phonetic Alphabet (= IPA). The discrepancy between spelling and sounds led to the formation of the International Phonetics Alphabet (IPA.) The symbols used in this alphabet can be used to represent all sounds of all human languages. In this system each phonetic symbol stands for one and only one speech sound. Sometimes supplementary marks (diacritics) are added to the symbols,

e.g. the raised letter h indicates aspiration of the initial sound [t] in the word $[t^{h}u{:}...]$ *tool.*

Some speakers of English pronounce the words *which* and *witch* differently, but if you pronounce both words identically, just use w for both words. Some linguists in the United States traditionally use different symbols than the IPA symbols. These are listed below.

Phonetic transcriptions are enclosed in square brackets: [ ]. They are detailed, and called narrow transcriptions. The degree of detail (narrowness) depends on the analyst's purposes.

The other main aim of phonetics is the description (characterisation) of speech sounds. This is done in terms of phonetic features. In order to understand these features, we have to get acquainted with the articulatory organs.

a. wind-pipe = trachea
b. larynx, with the glottis
c. food-pipe = oesophagus
d. lower lip
e. lower teeth
f. upper lip
g. upper teeth
h. alveolar ridge
i. palate = hard palate
j. velum = soft palate
k. uvula
l. pharynx
m. oral cavity
n. nasal cavity
o. tongue

One characteristic feature of speech sounds is, for instance, the presence or absence of vocal cord vibration during the production of the sound. The air coming from the lungs by way of the wind-pipe (a) arrives at the larynx (b). This is where the vocal cords are situated, forming an opening between them called the glottis. When the vocal cords are together and the air stream passing through between them makes them vibrate, the sound produced will be voiced (or [+voice]), e.g. [b, d, g, v, D, z, Z]. When the vocal cords are apart and so the air stream passes through freely, without causing vibration of the vocal cords, the sound produced will be voiceless (or [–voice]), e.g. [p, t, k, f, T, s, S].

Another feature of speech sounds is, for example, the presence or absence of nasality. The air, leaving the glottis, arrives at a cavity called the pharynx (P), from which it can go on to two further cavities: the nose and the mouth, i.e. the nasal cavity (N) and the oral cavity (O), respectively. These two are separated from each other by the roof of the mouth. The roof has several parts. Just behind the upper front teeth (g) is the alveolar ridge (h), then comes the hard palate or palate (i), followed by the soft palate or velum (j). When the back of the velum, i.e. the uvula (k) is raised, the passage through the nose is cut off and the air can only escape through the mouth. Sounds produced in this way are oral [–nasal], e.g. [b, d, g]. If, however, the back of the velum is lowered, the air can escape through the nose and the mouth. Sounds produced this way are nasal [+nasal], e.g. [m, n, N].

Consonants

The consonants which occur in the world's languages can be described in terms of place and manner of articulation. Here we shall concentrate on the most important English consonants only. We distinguish ***eight classes*** of these consonants according to place of articulation. According to manner of articulation we distinguish ***six classes***.

Consonants are produced as air from the lungs is pushed through the *glottis* (the opening between the vocal cords) and out the mouth. They are classified according to voicing, aspiration, nasal/oral sounds, places of articulation and manners of articulation. ***Voicing*** is whether the vocal folds vibrate or not. The sound /s/ is called voiceless because there is no vibration, and the sound /z/ is called voiced because the vocal folds do vibrate (you can feel on your neck if there is vibration.) Only three sounds in English have *aspiration*, the sounds /b/, /p/ and /t/. An extra puff of air is pushed out when these sounds begin a word or stressed syllable. Hold a piece of paper

close to your mouth when saying the words pin and spin. You should notice extra air when you say pin. Aspiration is indicated in writing with a superscript <u>*h,*</u> as in /p^{h}/. *Nasal* sounds are produced when the *velum* (the soft palate located in the back of the roof of the mouth) is lowered and air is passed through the nose and mouth. *Oral* sounds are produced when the velum is raised and air passes only through the mouth.

Places of Articulation

Bilabial: lips together

Labiodental: lower lip against front teeth

Interdental: tongue between teeth

Alveolar: tongue near alveolar ridge on roof of mouth (in between teeth and hard palate)

Palatal: tongue on hard palate

Velar: tongue near velum

Glottal: space between vocal folds

The following sound is not found in the English language, although it is common in languages such as French and Arabic:

Uvular: raise back of tongue to uvula (the appendage hanging down from the velum)

Manners of Articulation

Stop: obstruct airstream completely

Fricative: partial obstruction with friction

Affricate: stop airstream, then release

Liquids: partial obstruction, no friction

Glides: little or no obstruction, must occur with a vowel

You should practice saying the sounds of the English alphabet to see if you can identify the places of articulation in the mouth. The sounds are described by voicing, place and then manner of articulation, so the sound /j/ would be called a voiced palatal glide and the sound /s/ would be called a voiceless alveolar fricative.

(complete the chart with a correspondent symbol)

English Consonants

		Bilabials	Labio-dentals	Dentals	Alveolars	Palato-alveolars	Palatals	Velars	Glottals
Obstruents	Plosives								
	Fricatives								
	Affricates								
Sonorants	Nasals								
	Liquids								
	Glides								

Vowels

Vowels are produced by a continuous airstream and all are voiced (at least in English - Japanese does have voiceless vowels, however). They are classified according to height of the tongue, part of tongue involved, and position of the lips. The tongue can be high, mid, or low; and the part of the tongue used can be front, central or back. Only four vowels are produced with rounded lips and only four vowels are considered tense instead of lax. The sound /a/ would be written as a low back lax unrounded vowel. Many languages also have vowels called diphthongs, a sequence of two sounds, <u>*vowel + glide*</u>. Examples in English include *oy* in boy and *ow* in <u>*cow*</u>. In addition, vowels can be nasalized when they occur before nasal consonants.

A diacritic mark [~] is placed over the vowel to show this. The vowel sounds in *bee* and *bean* are considered different because the sound in *bean* is nasalized.

Vowels can be represented with regard to the horizontal and vertical tongue position within the oral cavity. If you raise the front of your tongue as close to the hard palate as you can without actually reaching it, you produce a close (high) front vowel: [i]. If you lower the front of your tongue as far from the hard palate as possible, you get an open (low) front vowel: [a]. Now if you divide the distance between the tongue positions for [i] and [a] into three equal parts, you get the half-close front [e], and the half-open front [E]. If you do the same movements with the back of your tongue, you will get the close back vowel [u], the half-close back [o], the half-open back [ç], and the open back [A]. The 8 vowels so obtained are called cardinal vowels. They do not necessarily occur in every language, they should rather be regarded as theoretical vowels or orientation points which indicate the limits within which the tongue can move in the human mouth to produce vowels, and with reference to which all vowels of all languages can be accommodated. They are called simple because the particular tongue position characterising the vowel in each case is steady throughout producing the vowel. The vowels in the triangle of the chart are *central* vowels, those on the left of the triangle are *front*, those on the right of the triangle are *back vowels*. The encircled vowels are produced with *lip-rounding:* they are round vowels. The vowels whose symbols have a colon (:) attached to them are *long vowels.*

In English there are diphthongs as well. A diphthong is a complex vowel during the production of which one tongue position is changed into another but no new syllable is formed. For instance, the vowels in the words *height, hate, house, hose,* i.e. [aI, eI, AU, ˊU], are *diphthongs*.

It needs to be emphasized that there are far more distinguishable speech sounds (both consonants and vowels) in English than the ones we have presented in (2) and (4), but we have only concentrated on the most important ones.

Consonants and vowels together can be called segments. Since phonetics primarily deals with these, the major part of phonetics is segmental phonetics. But phonetics has to deal with other aspects of human speech as well, viz. aspects characterising larger units than segments. This kind of phonetics is called suprasegmental phonetics. The suprasegmental aspects of speech include intonation (the meaningful melody of utterances) and stress (the extra prominence of a syllable over the other syllables in a word or phrase).

Major Class Features
[+ Consonantal] consonants
[- Consonantal] vowels
[+Sonorant] nasals, liquids, glides, vowels
[- Sonorant] stops, fricatives, affricates (obstruents)
[+ Approximant] glides [j, w]
[- Approximant] everything else

Voice Features
[+ Voice] voiced
[- Voice] voiceless
[+ Spread Glottis] aspirated [p^h, t^h, k^h]
[- Spread Glottis] unaspirated
[+ Constricted Glottis] ejectives, implosives
[- Constricted Glottis] everything else

Manner Features
[+ Continuant] fricatives [f, v, s, z, š, ž, θ, ð]
[- Continuant] stops [p, b, t, d, k, g, ʔ]
[+ Nasal] nasal consonants [m, n, ŋ]

[- Nasal] all oral consonants
[+ Lateral] [l]
[- Lateral] [r]
[+ Delayed Release] affricates [č, ǰ]
[- Delayed Release] stops [p, b, t, d, k, g, ʔ]
[+ Strident] "noisy" fricatives [f, v, s, z, š, ž]
[- Strident] [?, ð, h]

Place Features

[Labial] involves lips [f, v, p, b, w]
[Coronal] alveolar ridge to palate [θ, ð, s, z, t, d, š, ž, n, r, l]
[+ Anterior] interdentals and true alveolars
[- Anterior] retroflex and palatals [š, ž, č, ǰ, j]
[Dorsal] from velum back [k, g, ŋ]
[Glottal] in larynx [h, ʔ]

Vowels

Height [± high] [± low]
Backness [± back]
Lip Rounding [± round]
Tenseness [± tense]

2. Phonology - Phonemes. Phones and allophones. Minimal Pairs and Sets

While phonetics deals with the articulatory, acoustic and auditory aspects of actual speech sounds, phonology ignores all non-distinctive detail and limits its attention strictly to the really distinctive speech sounds, i.e. the basic sounds or phonemes, which form systems in a particular language. The key notion of phonology is that of contrast.

Whereas phonetics is the study of sounds and is concerned with the production, audition and perception of speech sounds (called phones), phonology describes the way sounds function within a given language and operates at the level of sound systems and abstract sound units. Knowing the sounds of a language is only a small part of phonology.

Phonology is essentially the description of the systems and patterns of speech sounds in a language. It is, in effect, based on a theory of what every speaker of a language unconsciously knows about the sound patterns of that language. Because of this theoretical status, phonology is concerned with the abstract or mental aspect of the sounds. Phonology is about the underlying design, the blueprint of the sound type that serves as the constant basis of all the variations in different physical articulations of that sound type in different contexts.

Thus, when we think of the [t] sound in the words *tar, star, writer* and *eighth* as being "the same", we actually mean that, in the phonology of English, they would be represented in the same way. In actual speech, these [t] sounds are all very different.

However, all those articulation differences in [t] sounds are less important than the distinction between the [t] sounds in general and the [k] sounds, or the [f] sounds, or the [b] sounds, because there are meaningful consequences related to the use of one rather than the others. These sounds must be distinct meaningful sounds, regardless of which individual vocal tract is being used to pronounce them, because they are what make the words *tar, car, far* and *bar* meaningfully distinct. Considered from this point of view, we can see that phonology us concerned with the abstract set of sounds in a language which allows us to distinguish meaning in the actual physical sounds we say and hear.

This importance is shown by the fact that you can change one word into another by simply changing one sound. Consider the differences between the words *time* and *dime*. The words are identical except for the first sound. [t] and [d] can therefore distinguish words, and are called contrasting sounds. They are distinctive sounds in English, and all distinctive sounds are classified as phonemes.

a. Phonemes.

Each one of these meaning-distinguishing sounds in a language is described as a phoneme. When we considered the basis of alphabetic writing, we were actually working with the concept of the phonemes as the single sound type which came to be represented by a single symbol. It is in this sense that the phoneme /t/ is described as a sound type, of which all the different spoken versions of [t] are tokens. Note that slash marks are conventionally used to indicate a phoneme, /t/, and abstract segment, as opposed to the square brackets, as in [t], used for each phonetic, or physically produced, segment.

An essential property of a phoneme is that it functions contrastively. We know that there are two phonemes /f/ and /v/ in English because they are the only basis of the contrast in meaning between the forms *fat* and *vat*, or *fine* and *vine*. This contrastive property is the basis operational test for determining the phonemes which exist in a language. If we substitute one sound for another in a word and there is a change of meaning, then the two sounds represent different phonemes. The consonant and vowel can now be seen as essentially a mapping out of the phonemes of English.

The terms which were used in creating that chart can be considered "features" which distinguish each phoneme from the next. If the features is present, we mark it with a plus (+) sign; if it's not present, we use a minus (-) sign. Thus, /p/ can be characterized as [-voice, +bilabial, +stop] and /k/ as [-voice, +velar, +stop]. Because these two sounds share some features, they are sometimes described as members of a natural class sounds. The prediction would be that sounds which have features in common would behave phonologically in some similar ways. A sound which does not share those features would be expected to behave differently.

For example, /v/ has the features [+voice, +labiodental, +fricative] and so cannot be in the same "natural class" as /p/ and /k/. Although other factors will be involved, thus feature – analysis could lead us to suspect that there may be a good phonological reason why words beginning with /pl-/ and /k-/ are common in English, but words beginning /vl-/ are not. Could it be that there are some definite sets of features required in a sound in order for it to occur word – initially before /l/? If so, then we will be on our way to producing a phonological account of permissible sound sequence in the language.

b. Phones and allophones.

While *phoneme* is the abstract unit or sound-type ("in the mind"), there are many different versions of that sound-type regularly produced in actual speech ("in the mouth"). We can describe those different versions as phones. *Phones* are phonetic units and will appear in square brackets. When we have a set of phones, all of which are versions of one *phoneme*, we refer to them as allophones of the *phoneme*.

For example, the [t] sound in the word *tar* is normally pronounced with a stronger puff of air than is present in the [t] sound of the word *star*. If you put the back of your hand in front of your mouth as you say *tar*, then *star*, you should have some physical evidence of the aspiration (the puff of air) accompanying the [t] sound in the initial position of *tar* (but not in *star*). This aspirated version is represented more precisely as [th]. That's one phone. We noted that the [t] sound between vowels in a word like *writer* often becomes a "flap", which we represented as [D]. That's another *phone*. In the pronunciation of a word like *eighth*, the influence of the final dental [0] sound causes a dental articulation of the [t] sound. This would be represented more precisely as [t̪]. That's yet another phone. There are other variations of this sound which, like [th], [D], and [t̪], can be represented differently in a detailed, or narrow, phonetic transcription. Because these variations form a set of phones, they would typically be referred to as allophones of the phoneme /t/.

The crucial distinction between phonemes and allophones is that substituting one phoneme for another will result in a word with a different meaning (as well as a different pronunciation), but substituting allophones only results in a different (and perhaps odd) pronunciation of the same word.

Let's take another brief example. In English, there is a difference in pronunciation of the /i/ sound in words like *seed* and *seen*. In the second word, the effect of the nasal consonant /n/ makes the /i/ sound nasalized. This nasalization can be represented by a diacritic [ ], called 'tilde', over the symbol [i] in narrow phonetic transcription. So, there are at least two phones, [i] and [i], used in English to realize single phoneme. They are allophones of /i/ in English.

It is possible, of course, for two languages to have the same pair of phonetic segment, but to treat them differently. In English, the effect of nasalization on a vowel is treated as allophonic variation because the nasalized version is not meaningfully contrastive. In French, however, the pronunciation [mɜ] is used for one word *mets*, meaning "dish", and [mɜ] for a different word *main*, meaning "hand". Also, [so] for *seau*, meaning "pail", contrasts with [so] for *son,* meaning 'sound'. Clearly, in these cases, the distinction is phonemic.

c. Minimal Pairs and Sets.

Phonemic distinctions in a language can be tested via pairs and sets of words. When two words such as *pat* and *bat* are identical in form except for a contrast in one phoneme, occurring in the same position, the two words are described as a minimal pair. More accurately, they would be classified as a minimal pair in the phonology of English. (Arabic does not have this contrast between the two sounds). Other examples of English minimal pairs are *fan – van, bet – bat, site – side.* Such pairs have been used frequently in tests of English as a second language to determine non-native speakers' ability to understand the contrast in meaning resulting from the minimal sound contrast. When a group of words can be differentiated, each one from the others, by changing one phoneme (always in the same position), then we have a minimal set. Thus, a minimal set based on the vowel phonemes of English would include *feat, fit, fat, fate, fought, foot* , and one based on consonants could have *big, pig, rig, fig, dig, wig.*

Minimal Pairs

Minimal pairs are words with different meanings that have the same sounds except for one. These contrasting sounds can either be consonants or vowels. The words *pin* and *bin* are minimal pairs because they are exactly the same except for the first sound. The words *read* and *rude* are also exactly the same except for the vowel sound. The examples from above, *time* and *dime,* are also minimal pairs. In effect, words with one contrastive sound are minimal pairs. Another feature of minimal pairs is overlapping distribution. Sounds that occur in phonetic environments that are identical are said to be in overlapping distribution. The sounds of [ɪn] from *pin* and *bin* are in overlapping distribution because they occur in both words. The same is true for three and through. The sounds of [θr] is in overlapping distribution because they occur in both words as well.

3. Phonotactics

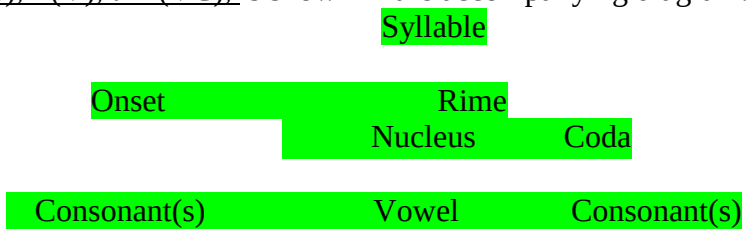
This type of exercise involving minimal sets also allows us to see that there are indeed definite patterns to the types of sound combinations permitted in a language. In English, the minimal set we have just listed does not include forms such as *lig* or *vig*. These are not English words, but they can be viewed as possible English words. That is, your phonological knowledge of the pattern of sounds in English words would allow you to treat these forms as acceptable if, at some future time, they came into use. They represent "accidental" gaps in the vocabulary of English.

It is, however, no accident that forms such as [fsIg] or [rnIg] do not exist or unlikely ever to exist. They have been formed without obeying some constraints on the sequence or position of English phonemes. Such constraints are called the Phonotactics of a language and are obviously part of every speaker's phonological knowledge. Because these constraints operate on units larger than the single segment, or phoneme, we have to consider the basic structure of the larger phonological unit called the syllable.

4. Syllables and clusters

A syllable must contain a vowel (or vowel-like) sound. The most common type of syllable in language also has a consonant before the vowel, often represented as CV. Technically, the basic elements of the syllable are the onset (one or more consonants) and the rime. The rime (also written as "rhyme") consists of the vowel, which is treated as the nucleus, plus any following consonant(s), treated as the coda.

Thus, syllables like *me*, *to* or *no* has an onset and a nucleus, but no coda. They are known as "open" syllables. When a coda is present, as in the syllables *up*, *cup*, *at* or *hat*, they are called "closed" syllables. The basic structure of the kind of syllables found in English words like *green* (CCVC), *eggs* (VCC), and (VCC), *ham* (CVC), *I* (V), *do* (CV), *not* (CVC), *like* (CVC), *them* (CVC), *Sam* (CVC), *I* (V), *am* (VC), is shown in the accompanying diagram.



Both the onset and the coda can consist of more than one consonant, also known as a consonant cluster. The combination *st* is a consonant cluster (CC) as onset in the word *stop*, and as coda in the word *post*. There are many CC onset combinations permitted in English Phonotactics, as in *black*, *bread*, *trick*, *twin*, *flat* and *throw*, with approximants (/w/, /r/, /l/) frequently appearing in second position. (Note that *throw* begins with only two consonants, /0 r/, once again showing that spelling is not a good guide in phonology).

English actually can have larger onset clusters, as in stress and splat, consisting of three consonants (CCC). The phonotactics of these larger onset consonants in English is not difficult to describe. The first consonant must always be /s/, followed by one of the voiceless stops (/p/, /t/, /k/) and then one of the approximants (/r/,m /l/, /w/), as in *splash, spring, strong, scream* and *square*. Does the description also cover the second syllable in the pronunciation of exclaim? How about /ɜk-skleym/? Remember that it is the onset of the syllable that is being described, not the beginning of the word.

It is quite unusual for languages to have consonant clusters of this type. Indeed, the syllable structure of many languages (e.g. Hawaiian or Japanese) is predominantly CV. It is also noticeable in English that large consonant clusters are frequently reduced in casual conversational speech, particularly if they occur in the middle of a word. This is just one example of what is often discussed in terms of 'co-articulation effects'.

5. Co-articulation effects – Assimilation, Elision

Mostly our talk is fast and spontaneous, and it requires our articulators to move from one sound to the next without stopping. The process of making one sound almost at the same time as the next is called co-articulation. There are two well-known co-articulation effects, called 'assimilation' and 'elision'.

a. ***Assimilation***

When two phonemes occur in sequence and some aspect of one phoneme is taken or 'copied' by the other, the process is known as assimilation. In terms of the physical production of speech, one might assume that this regular process is occasioned by ease of articulation in everyday talk. In isolation, you would probably pronounce /I/ and / é / without any nasal quality at all. However, in saying words like *pin* and *pan*, the anticipation of forming the final nasal consonant will make it 'easier' to go into the nasalized articulation in advance and consequently the vowel sounds in these words will be, in precise transcription, [I] and [e]. This is a very regular feature of English speakers' pronunciation. So regular, in fact, that a phonological rule can be stated in the following way: 'Any vowel becomes nasal whenever it immediately precedes a nasal.'

This type of assimilation process occurs in a variety of different contexts. It is particularly noticeable in ordinary conversational speech. By itself, you may pronounce the word *can* as [k en], but , if you tell someone *I can go*, the influence of the following velar [g] will almost certainly make the preceding nasal sound come out as [n] (a velar) rather than [n] (an alveolar). The most commonly observed 'conversational' version of the phrase is [ayk ngo]. Notice that the vowel in *can* has also changed to schwa [e] from the isolated-word version [e]. In many words spoken carefully, the vowel receives stress, but in the course of ordinary talk, that vowel may no longer receive any stress and reduce to schwa. For example, you may pronounce *and* as [end] in isolation, but in the casual use of the phrase *you and me*, you almost certainly say [n], as in [yu nmi].

b. *Elision*

Note that in the last example, in the environment of proceeding and following nasals, the [d] sound of *and* has simply disappeared. The [d] sound is also commonly 'omitted' in the pronunciation of a word like *friendship*, [frensIp]. This 'omission' of a sound segment which would be present in the deliberate pronunciation of a word in isolation is technically described as elision. In consonant clusters, especially in coda position, /t/ is a common casualty in this process, as in the typical pronunciation [espeks] for *aspects*, or in [himesbi] for *he must be*. You can, of course, slowly and deliberately pronounce the phrase *we asked him*, but the process of elision in casual speech is likely to produce [wi estIm]. Vowels also disappear, as in [vri] for *every*, [IntrIst] for *interest*, [k ebnIt] for *cabinet*, and [spowz] for *suppose*.

These two processes of assimilation and elision occur in everyone's speech and should not be treated as a form of sloppiness or laziness in speaking. In fact, consistently avoiding the regular patterns of assimilation and elision used in a language would result in extremely artificial-sounding talk. The point of investigating phonological processes (only a very small number of which have been explored here) is not to arrive at a set of rules about how a language should be pronounced, but to try to come to an understanding of the regularities and patterns which underlie the actual use of sounds in language.

STUDY QUESTIONS XI

Task 1. Answer the following questions

1. Which English words are pronounced as transcribed here? /maIs, SIp, D´, huˇ, eItT, bQk, bçˇt, b´Ut, AUt, dZçI, «eTn´»grQfIk, INk´n»si:v´b´l/.
2. Which of the following words end with voiceless consonants and which end with voiced ones? *touch, pig, maze, lip, lathe, sit, use (!)*
3. Which English simple vowels are produced with lip-rounding?
4. How many syllables are there in the word *rain*? Why?
5. Which is more similar to /m/: /p/ or /b/? Why?
6. What are allophones?
7. Is nasality a distinctive feature of English vowels? And of English consonants?

Task 2. Fulfill the tasks below

1. Pronounce the initial sounds of the following words and then determine the place and manner of articulation of each: *foot, tooth, box, chips, think, cup.*
2. Characterise English simple vowels (and also a few English diphthongs) in terms of horizontal and vertical tongue position.
3. Compare the ways in which the letter *a* is pronounced in *map, many, ago, village* and the ways in which the sound [I] is written in *sit, busy, village, women.*

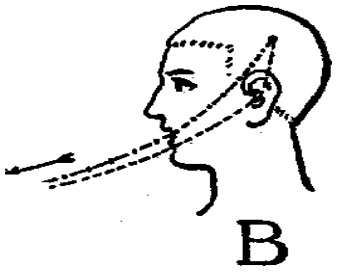
4. Transcribe the pronunciation of the English word *pill, lip, help, ten* phonetically and phonemically.
5. Transcribe phonemically: *sun, son, dam, damn, colour, collar, monkey, donkey, heat, hot, not, knot, gone, gun, ram, lamb, very, bury, birth, worth, sword, board, head, though, rough*. Which of them are minimal pairs?
6. Try to write a rule for the elision (omission) of /t/ in words and phrases like *postman* and *must be*.
7. Make sure you know the following terms: phonetics, articulatory phonetics, acoustic phonetics, auditory phonetics, speech sound (phone), transcription symbol, narrow transcription, wind-pipe (trachea), larynx, glottis, vocal cords, alveolar ridge, palate, velum, roof of the mouth, pharynx, oral cavity, nasal cavity, tongue, voiced, voiceless, oral, nasal, consonant, vowel, bilabial, dental, alveolar, palate-alveolar, palatal, velar, glottal, plosive (stop), fricative (spirant), affricate, liquid, glide, cardinal vowels, front vowels, central vowels, back vowels, rounded, diphthong, stress, intonation, syllable, phoneme, allophone, complementary distribution, aspiration, emic approach, etic approach, distinctive features, assimilation, elision.

XII. Place of Language in the Facts of Speech. LINGUISTIC VALUE

1. **Place of Language in the Facts of Speech (audition, phonation)**
2. **Place of Language in Human Facts: Semiology**
3. **Language as Organized Thought Coupled with Sound**
4. **Linguistic Value from a Conceptual Viewpoint**
5. **Linguistic Value from a Material Viewpoint**

1. Place of Language in the Facts of Speech

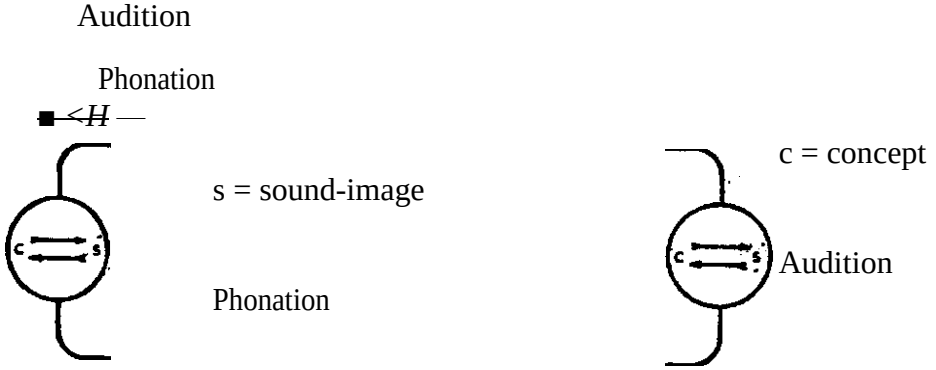
In order to separate from the whole of speech the part that belongs to language, we must examine the individual act from which the speaking-circuit can be reconstructed. The act requires the presence of at least two persons; that is the minimum number necessary to complete the circuit. Suppose that two people, *A and B*, are conversing with each other:



A

Suppose that the opening of the circuit is in A's brain, where mental facts (concepts) are associated with representations of the linguistic sounds (sound-images) that are used for their expressions. A given concept unlocks a corresponding sound-image in the brain; this purely *psychological* phenomenon is followed in turn by a *physiological* process: the brain transmits and impulse corresponding to the image to the organs used in producing sounds. Then the sound waves travel from the mouth of A to the ear of B: purely *physical* process.

Next, the circuit continues in B, but the order is reserved: from the ear to the brain, the physiological transmission of the sound-image; in the brain, the psychological association of the image with the corresponding concept. If B then speaks, the new act will follow – from his brain to A's – exactly the same course as the first act and pass through the same successive phases, which is diagramed as follows:



The preceding analysis does not purport to be complete. We might also single out the pure acoustical sensation, the identification of that sensation with the latent sound-image, the muscular image of phonation, etc. indeed we shall not fail to note that the word-image stands

apart from the sound itself and that it is just as psychological as the concept which is associated with it.

The circuit can be further divided into:

a) An outer part that includes the vibrations of the sounds which travel from the mouth to the ear, and an inner part that includes everything else;

b) A psychological and non-psychological part, the second including the physiological productions of the vocal organs as well as the physical facts that are outside the individual;

c) An active and passive part: everything that goes from the associative center of the speaker to the ear of the listener is active, and everything that goes from the ear of the listener to his associative center is passive;

d) Finally, everything that is active in the psychological part of the circuit is executive (c--+s), and everything that is passive is receptive (s--*c).

We should also add the associative and coordinating faculty plays the dominant role in the organization of language as a system. But to understand clearly the role of the associative and coordinating faculty, we must leave the, individual act, which is only the embryo of speech, and approach the social fact.

Among all the individuals that are linked together by speech, some sort of average will be set up: all will reproduce – not exactly of course, but approximately – the same signs united with the same concepts.

How does the social crystallization of language come about? Which parts of the circuit are involved? For all parts probably do not participate equally in it.

The non-psychological part can be rejected from the outset. When we hear people speaking a language that we do not know, we perceive the sounds but remain outside the social fact because we do not understand them.

Neither is the psychological part of the circuit wholly responsible: the executive side is missing, for execution is never – carried out by the collectivity. Execution is always individual, and the individual is always its matter: executive side – *speaking.*

Through the functioning of the receptive and coordinating faculties, impressions that are perceptibly the same for all are made on the minds of speakers. How can that social product be pictured in such a way that language will stand apart from everything else? If we could embrace the sum of word-images stored in the minds of all individuals, we could identify the social bond that constitutes language. It is a storehouse filled by the members of a given community through their active use of speaking, a grammatical system that has a potential existence in each brain, or, more specifically, in the brains of a group of individuals. For language is not complete in any speaker; it exists perfectly only within a collectivity.

In separating language from speaking we are at the same time separating:

(1) what is social from what is individual; and

(2) what is essential from what is accessory and more or less accidental.

Language is not a function of the speaker; it is a product that is passively assimilated by the individual. It never requires premeditation, and reflection enters in only for the purpose of classification.

Speaking on the contrary, is an individual act. It is willful and intellectual. Within the act, we should distinguish between:

(1) the combinations by which the speaker uses the language code for expressing his own thought; and

(2) the psychophysical mechanism that allows him to exteriorize those combinations.

Note: defined things, rather than words; these definitions are not endangered by certain ambiguous words that do not have identical meaning in different languages. For instance, German *Sprache* means both “language and speech”; R*ede* almost corresponds to “speaking” but adds the special connotation of “discourse”. Latin *sermo* designates both “speech” and “speaking”, while lingua means “language”, etc. No word corresponds exactly to any of the

notions specified above; that is why all definitions of words are made in vain; starting from words in defining things is a bad procedure.

To summarize, these are the characteristics of language:

1). Language is a well-defined object in the heterogeneous mass of speech facts. It can be localized in the limited segment of the speaking – circuit where an auditory image becomes associated with a concept. It is the social side of speech, outside the individual who can never create nor modify it by himself; it exists only by virtue of a sort of contract signed by the members of a community. Moreover, the individual must always serve an apprenticeship in order to learn the functioning of language; a child assimilates it only gradually. It is such a distinct thing that a man deprived of the use of speaking retains it provided that he understands the vocal signs that he hears.

2). Language, unlike speaking, is something that we can study separately. Although dead languages are no longer spoken, we can easily assimilate their linguistic organisms. We can dispense with the other elements of speech; indeed, the science of language is possible only if the other elements are excluded.

3). Whereas speech is heterogeneous, language, as defined, is homogeneous. It is a system of signs in which the only essential thing is the union of meanings and sound-images, and in which both parts of the sign are psychological.

4). Language is concrete, no less so than speaking; and this is a help in our study of it. Linguistic signs, though basically psychological, are not abstractions; associations which bear the stamp of collective approval – and which added together constitute language – are realities that have their seat in the brain. Besides, linguistic signs are tangible; it is possible to reduce them to conventional written symbols, whereas it would be impossible to provide detailed photographs of acts of speaking; the pronunciation of even the smallest word represents an infinite number of muscular movements that could be identified and put into graphic form only with great difficulty. In language, on the contrary, there is only the sound-image, and the latter can be translated into a fixed visual image. For if we disregard the vast number of movements necessary for the realization of sound-images in speaking, we see that each sound-image is nothing more than the sum of a limited number of elements or phonemes that can in turn be called up by a corresponding number of written symbol. The very possibility of putting the thing that relate to language into graphic form allows dictionaries and grammars to represent it accurately, for language is storehouse of sound-images, and writing is the tangible form of those images.

2. Place of Language in Human Facts: Semiology

The foregoing characteristics of language "reveal an even more important characteristic. Language, once its boundaries have been marked off within the speech data, can be classified among human phenomena, whereas speech cannot. We have seen that language is a social institution; but several features set it apart from other political, legal, etc. institutions.

We must call in a new type of facts in order to illuminate the special nature of language.

Language is a system of signs that expresses ideas, and is therefore comparable to a system of writing, the alphabet of deaf-mutes, symbolic rites, polite formulas, military signals, etc. but it is the most important of all these systems.

A science that studies the life of signs within society is conceivable; it would be a part of social psychology and consequently of general psychology; called *Semiology* (Greek *semefon* "sign"). *Semiology* (*semiology* – should not be confused with *semantics* which studies changes in meaning, etc. details later) would show what constitutes signs, what laws govern them. Since the science does not yet exist, no one can say what it would be; but it has a right to existence, a place staked out in advance. Linguistics is only a part of the general science of *semiology*; the laws discovered by semiology will be applicable to linguistics, and the latter will circumscribe a well-defined area within the mass of anthropological facts.

To determine the exact place of semiology is the task of the psychologist! The task of the linguist is to find out what makes language a special system within the mass of semiological data. This issue will be taken up later.

Why has semiology not yet been recognized as an independent science with its own object like all the other sciences? Linguists have been going around in circles: language, better than anything else, offers a basis for understanding the semiological problem; but language must , to put it correctly, be studied in itself; heretofore language has almost always studied in connection with something else, from other viewpoints.

There is first of all the superficial notion of the general public people see nothing more than a name – giving system in language, thereby prohibiting any research into its true nature.

Then there is the viewpoint of the psychologist, who studies the sign-mechanism in the individual; this is the easiest method, but it does not lead beyond individual execution and does not reach the sign, which is social.

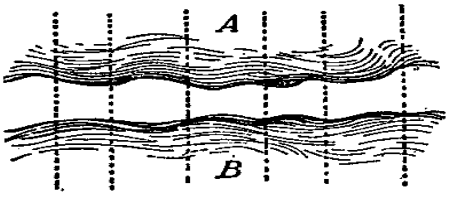
Or even when signs are studied from social viewpoint, only the traits attach language to the other social institutions – those that are more or less voluntary – are emphasized; as a result, the goal is by – passed and the specific characteristics of semiological system in general and of language in particular are completely ignored. For the distinguishing characteristic of the sign – but the one that is least apparent at first sight – is that in some way it always eludes the individual or social will.

In short, the characteristic that distinguishes semiological system from all other institutions shows up clearly only in language where it manifests itself in the things which are studied least, and the necessity or specific value of a semiological science is therefore not clearly recognized. But the language problem is mainly semiological, and all developments derive their significance from that important fact. If we are to discover the true nature of language we must learn what it has in common with all other semiological systems; linguistic forces that seem very important at first glance (e.g. the role of the vocal apparatus) will receive only secondary consideration if they serve only to set language apart from the other systems. This procedure will do more than to clarify the linguistic problem. By studying rites, customs, etc. as signs, we shall throw new lights on the facts and point up the need for including them in a science of semiology and explaining them by its laws.

3. Language as Organized Thought Coupled with Sound

To prove that language is only a system of pure values, it is enough to consider the two elements involved in its functioning: ideas and sounds.

Psychologically our thought — apart from its expression in words — is only a shapeless and indistinct mass. Philosophers and linguists have always agreed in recognizing that without the help of signs we would be unable to make a clear-cut, consistent distinction between two ideas. Without language, thought is a vague uncharted nebula. There are no pre-existing ideas, and nothing is distinct before the appearance of language. Against the floating realm of thought, would sounds by them selves yield predelimited entities? No more so than ideas. *Phonic substance is neither more fixed nor more rigid than thought; it is not a mold into which thought must of necessity fit but a plastic substance divided in turn into distinct parts to furnish the signifiers needed by thought*. The linguistic fact can therefore be pictured in its totality — i.e. language — as a series of contiguous subdivisions marked off on both the indefinite plane of jumbled ideas (A) and the equally vague plane of sounds (B). The following diagram gives an idea of it:



The characteristic role of language with respect to thought is not to create a material phonic means for expressing ideas but to serve as a link between thought and sound, under conditions that of necessity bring about the reciprocal delimitations of units. Thought, chaotic by nature, has to become ordered in the process of its decomposition. Neither are thoughts given material form nor are sounds transformed into mental entities; the somewhat mysterious fact is rather that "thought-sound" implies division, and that language works out its units while taking shape between two shapeless masses. Visualize the air in contact with a sheet of water; if the atmospheric pressure changes, the surface of the water will be broken up into a series of divisions, waves; the waves resemble the union or coupling of thought with phonic substance. Language *might be called the domain of articulations*, using the word as it was defined earlier. Each linguistic term is a member, an ***articulus*** in which an idea is fixed in a sound and a sound becomes the sign of an idea.

Language can also be compared with a sheet of paper: thought is the front and the sound the back; one cannot cut the front with out cutting the back at the same time; likewise in language, one can neither divide sound from thought nor thought from sound; the division could be accomplished only abstractedly, and the result would be either pure psychology or pure phonology.

Linguistics then works in the borderland where the elements of sound and thought combine; their combination produces a form, not a substance.

These views give a better understanding of what was said before about the arbitrariness of signs. Not only are the two domains that are linked by the linguistic fact shapeless and confused, but the choice of a given slice of sound to name a given idea is completely arbitrary. If this were not true, the notion of value would be compromised, for it would include an externally imposed element. But actually values remain entirely relative and that is why the bond between the sound and the idea is radically arbitrary.

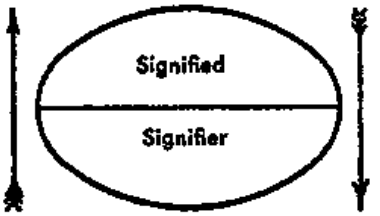
The arbitrary nature of the sign explains in turn why the social fact alone can create a linguistic system. The community is necessary if values that owe their existence solely to usage and general acceptance are to be set up; by himself the individual is incapable of fixing a single value. In addition, the idea of value, as defined, shows that to consider a term as simply the union of a certain sound with a certain concept is grossly misleading. To define it in this way would isolate the term from its system; it would mean assuming that one can start from the terms and construct the system by adding them together when, on the contrary, it is from the interdependent whole that one must start and through analysis obtain its elements. To develop this thesis, we shall study value successively from the viewpoint of the signified or concept, the signifier , and the complete sign .

Being unable to seize the concrete entities or units of language directly, we shall work with words. While the word does not conform exactly to the definition of the linguistic unit it at least bears a rough resemblance to the unit and has the advantage of being concrete; consequently, we shall use words as specimens equivalent to real terms in a synchronic system, and the principles that we evolve with respect to words will be valid for entities in general.

4. Linguistic Value from a Conceptual Viewpoint

When we speak of the value of a word, we generally think first of its property of standing for an idea, and this is in fact one side of linguistic value. But if this is true, how does *value* differ from *signification*? Might the two words be synonyms? Not, although it is easy to confuse them, since the confusion results not so much from their similarity as from the subtlety of the distinction that they mark. From a conceptual viewpoint, value *is doubtless one element in signification, and it is difficult to see how signification can be de pendent upon value and still be distinct from it*. But we must clear up the issue or risk reducing language to a simple naming-process. Let us first take signification as it is generally understood and as it was pictured earlier. As the arrows in the drawing show, it is only the counterpart of the sound-image. Everything that

occurs concerns only the sound-image and the concept when we look upon the word as independent and self-contained.



But here is the paradox: on the one hand the concept seems to be the counterpart of the sound-image, and on the other hand the sign itself is in turn the counterpart of the other signs of language.

Language *is a system of interdependent terms in which the value of each term results solely from the simultaneous presence of the others,* as in the diagram*:*

How, then, can value be confused with signification, i.e. the counterpart of the sound-image? It seems impossible to liken the relations represented here by horizontal arrows to those represented above by vertical arrows. Putting it another way — and again taking up the example of the sheet of paper that is cut in two - it is clear that the observable relation between the different pieces A, B, C, D, etc. is distinct from the relation between the front and back of the same piece as in A/A', B/B', etc.To resolve the issue, let us observe from the outset that even outside language all values are apparently governed by the same paradoxical principle. They are always composed:

(1) of a *dissimilar* thing that can be exchanged for the thing of x which the value is to be determined; and

(2) of *similar* things that can be compared with the thing of which the value is to be determined.

Both factors are necessary for the existence of a value. To determine what a five-franc piece is worth one must therefore know:

(1) that it can be exchanged for a fixed quantity of a different thing, e.g. *bread*; and

(2) that it can be compared with a similar value of the same system, e.g. *a one-franc piece*, or with coins of another system (*a dollar*, etc.).

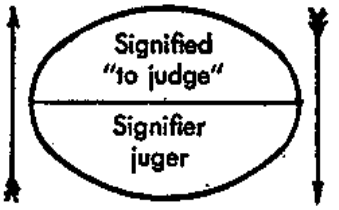
In the same way a word can be exchanged for something dissimilar, an idea; besides, it can be compared with something of the same nature, another word. Its value is therefore not fixed so long as one simply states that it can be "exchanged" for a given concept, i.e. that it has this or that signification: one must also compare it with similar values, with other words that stand in opposition to it. Its content is really fixed only by the concurrence of everything that exists outside it. Being part of a system, it is endowed not only with a signification but also and especially with a value, and this is something quite different. A few examples will show clearly that this is true. Modern French *mouton* can have the same signification as English *sheep* but not the same value, and this for several reasons, particularly because in speaking of a piece of meat ready to be served on the table, English uses *mutton* and not *sheep*. The difference in value between *sheep* and *mouton* is due to the fact that sheep has beside it a second term while the French word does not.

Within the same language, all words used to express related ideas limit each other reciprocally; synonyms like French *redouter* 'dread,' *craindre* 'fear,' and *avoir peur* 'be afraid'

have value only , through their opposition: if *redouter* did not exist, all its content would go to its competitors. Conversely, some words are enriched through contact with others: e.g. the new element introduced in *décrépit* (un vieillard *décrépit*) results from the coexistence of *décrépi* (un mur *décrépi*). The value of just any term is accordingly determined by its environment; it is impossible to fix even the value of the word signifying "sun" without first considering its surroundings: in some languages it is not possible to say "sit in the sun." Everything said about words applies to any term of language, e.g. to grammatical entities. The value of a French plural does not coincide with that of a Sanskrit plural even though their signification is usually identical; Sanskrit has three numbers instead of two (my eyes, my ears, my arms, my legs, etc. are dual);[4] it would be wrong to attribute the same value to the plural in Sanskrit and in French; its value clearly depends on what is outside and around it.

If words stood for pre-existing concepts, they would all have exact equivalents in meaning from one language to the next: but this is not true. French uses *louer* (*une maison*) 'let (a house)' in differently to mean both "pay for" and "receive payment for," whereas German uses two words, *mieten* and *vermieten*; there is obviously no exact correspondence of values. The German verbs *schätzen* and *urteilen* share a number of significations, but that correspondence does not hold at several points.

Inflection offers some particularly striking examples. Distinctions of time, which are so familiar to us, are unknown in certain languages. Hebrew does not recognize even the fundamental (The use of the comparative form for two and the superlative for more than two in English (e.g. may the better boxer win: the best boxer in the world) is probably a remnant of the old distinction between the dual and the plural number) distinctions between the past, present, and future. Proto-Germanic has no special form for the future; to say that the future is expressed by the present is wrong, for the value of the present is not the same in Germanic as in languages that have a future along with the present. The Slavic languages regularly single out two aspects of the verb: the perfective represents action as a point, complete in its totality; the imperfective represents it as taking place, and on the line of time. The categories are difficult for a Frenchman to understand, for they are unknown in French; if they were predetermined, this would not be true. Instead of preexisting ideas then, we find in a the foregoing examples values emanating from the system. When they are said to correspond to concepts, it is understood that the concepts are purely differential and defined not by their positive content but negatively by their relations with other terms of the system. Their most precise characteristic is in being what the others are not. Now the real interpretation of the diagram of the signal becomes apparent. Thus



means that in French the concept "to judge" is linked to the sound-image *juger*; in short, it symbolizes signification. But it is quite clear that initially the concept is nothing, that is only a value determined b its relations with other similar values, and that without them the signification would not exist. If we state simply that a word signifies something when we have in mind the associating of a sound-image with a concept, we are making a statement that may suggest what actually happens, but by no means are we expressing the linguistic fact in its essence and fullness.

5. Linguistic Value from a Material Viewpoint

The conceptual side of value is made up solely of relations and differences with respect to the other terms of language, and the same can be said of its material side. The important thing in

the word is not the sound alone but the phonic differences that make it possible to distinguish this word from all others, for differences carry signification.

This may seem surprising, but how indeed could the reverse be possible? Since one vocal image is no better suited than the next for what it is commissioned to express, it is evident, even *a priori*, that a segment of language can never in the final analysis be based on anything except its noncoincidence with the rest. *Arbitrary* and *differential* are two correlative qualities. The alternation of linguistic signs clearly illustrates this. It is precisely because the terms *a* and *b* as such are radically incapable of reaching the level of consciousness—one is always conscious of only the *a/b* difference—that each term is free to change according to laws that are unrelated to its signifying function. No positive sign characterizes the genitive plural in Czech *žen* (see p. 86); still the two forms *žena*: *žen* Len function as well as the earlier forms *žena*: *жень*; *žen* has value only because it is different.

Here is another example that shows even more clearly the systematic role of phonic differences: in Greek, *éphēn* is an imperfect and *éstēn* an aorist although both words are formed in the same way; the first belongs to the system of the present indicative of *phēmī* 'I say,' whereas there is no present **stēmi*; now it is precisely the relation *phēmī*: *éphēn* that corresponds to the relation between the present and the imperfect (cf. *déiknūmi*: *edéiknūn*, etc.). Signs function, then, not through their intrinsic value but through their relative position.

In addition, it is impossible for sound alone, a material element, to belong to language. It is only a secondary thing, substance to be put to use. All our conventional values have the characteristic of not being confused with the tangible element which supports them. For instance, it is not the metal in a piece of money that fixes its value. A coin nominally worth five francs may contain less than half its worth of silver. Its value will vary according to the amount stamped upon it and according to its use inside or outside a political boundary. This is even more true of the linguistic signifier, which is not phonic but incorporeal—constituted not by its material substance but by the differences that separate its sound-image from all others.

The foregoing principle is so basic that it applies to all the material elements of language, including phonemes. Every language forms its words on the basis of a system of sonorous elements, each element being a clearly delimited unit and one of a fixed number of units. Phonemes are characterized not; as one might think, by their own positive quality but simply by the fact that they are distinct. Phonemes are above all else opposing, relative, and negative entities.

Proof of this is the latitude that speakers have between points of convergence in the pronunciation of distinct sounds. In French, for instance, general use of a dorsal *r* does not prevent many speakers from using a tongue-tip trill; language is not in the least disturbed by it; language requires only that the sound be different and not as one might imagine, that it have an invariable quality. I can even pronounce the French *r* like German *ch* in *Bach*, doch, etc., but in German I could not use *r* instead of *ch*, for German gives recognition to both elements and must keep them apart. Similarly, in Russian there is no latitude for *t* in the direction of *t'* (palatalized *t*), for the result would be the confusing of two sounds differentiated by the language (cf. *govorit'* 'speak' and goverit 'he speaks'), but more freedom may be taken with respect to *th* (aspirated *t*) since this sound does not figure in the Russian system of phonemes.

Since an identical state of affairs is observable in writing another system of signs, we shall use writing to draw some comparisons that will clarify the whole issue. In fact:

1) The signs used in writing are arbitrary; there is no connection, for example, between the letter *t* and the sound that it designates.

2) The value of letters is purely negative and differential. The same person can write *t*, for instance, in different ways:

The only requirement is that the sign for *t* not be confused in his script with the signs used for *1*, *d*, etc.

3) Values in writing function only through reciprocal opposition within a fixed system that consists of a set number of letters. This third characteristic, though not identical to the second, is closely related to it, for both depend on the first. Since the graphic sign is arbitrary, its form matters little or rather matters only within the limitations imposed by the system.

4) The means by which the sign is produced is completely unimportant, for it does not affect the system (this also follows from characteristic 1). Whether I make the letters in white or black, raised or engraved, with pen or chisel—all this is of no importance with respect to their signification.

STUDY QUESTIONS XII

Task 1. Study Questions

1. What transmits and impulse corresponding to the image to the organs used in producing sounds?

   _____

2. Where do the sound waves travel from and to?

   _____

3. What can the circuit be further divided into?

   _____

4. How does the social crystallization of language come about? Which parts of the circuit are involved?

   _____

5. What can Language be compared with?

   _____

6. How does *value* differ from *signification*?

   _____

Task 2. Make up 5 special questions

1. _____
2. _____
3. _____
4. _____
5. _____

Task 3. Make up 10 true/false statements on topic XII

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

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