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Навчально-методичні матеріали призначені для студентів філологічних спеціальностей вищих навчальних закладів. Курс присвячений розгляду базових тем із загального мовознавства і містить детальний виклад основних положень цього курсу. Основну увагу зосереджено на висвітленні питань місця лінгвістики серед інших наукових дисциплін, її предмету та методів дослідження, а також аспектів сучасних студій у цій галузі знань. Текст поданий англійською мовою, що полегшить усвідомлення та засвоєння ключових термінів і понять студентами факультету іноземної філології.

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CHAPTER 1. The Study of Language

The Nature of Human Language

When we study human language, we are approaching what some might call the "human essence," the distinctive qualities of mind that are, so far as we know, unique to man. Noam Chomsky, Language and Mind

What Is Language?

We live in a world of language. We talk face-to-face and over the telephone, and everyone responds with more talk. The possession of language, perhaps more than any other attribute, distinguishes humans from other animals. To understand our humanity one must understand the nature of language that makes us human. According to the philosophy expressed in the myths and religions of many peoples, it is language that is the source of human life and power.

Interest in language, how it originated, how it works and develops, has existed for centuries. We realize now that language is a product of human society and can exist only in human society, therefore there is no language outside society. Language can be understood properly if it is studied in close connection with the history of this society as language reflects the character, mentality and social activity of the people who use it. As language is the normal form and means of communication, it is determined by the social, economic and cultural history of the people speaking it.

Many scientific researchers are interested in language — philosophers, psychologists, logicians, sociologists, as well as linguists. Many definitions of language have been made by different scholars.

Hegel (1770-1831), the prominent German philosopher, said that "language is the art of theoretical intelligence in its true sense, for it is its outward expression."

B. Croce (1866-1952), an Italian philosopher, said: "Language is an articulated limited sound system organized for the purpose of expression."

F. de Saussure (1857-1913), defined language as a system of signs expressing ideas.

E. Sapir (1884-1939), an outstanding American linguist, considered language to be a purely human and non-instinctive method of communicating ideas, emotions and desires by means of a system of voluntarily produced symbols.

An American linguist,**L. Bloomfield** (1887-1949), stated that language enabled one person to express a reaction to another's stimulus. He considered language in terms of behavioural patterns like walking, eating, etc. According to this approach, this set of patterns can remain unused for a long period of time and then be called into operation by an appropriate stimulus.

Different points of view in defining the integral features of language can be clearly seen in these definitions. They bring out different aspects of language and supplement one another, but they do not give a comprehensive definition. In defining language, everything depends on the investigator's methodological starting-point and the aims with which he sets out. A correct understanding of the essence of language depends upon one's approach to the great fundamental questions of philosophy as a whole. The basis of all schools of philosophy is connected with the relation between thought and existence, spirit and nature. The controversy in linguistics may be traced from ancient times when the first impulse to understand language came from the speculation of philosophers on questions involving language and its origin, and on the nature of language itself.

What We Know About Language

There are many things we do not yet know about the nature of human languages, their structures and use. The science of linguistics is concerned with these questions. The investigations of linguists throughout history and the analysis of spoken languages date back at least to 1600 B.C. in Mesopotamia. We have learned a great deal since that time. A number of facts pertaining to all languages can be stated.

1. Wherever humans exist, language exists. 2. There are no "primitive" languages—all languages are equally complex and equally capable of expressing any idea in the universe. The vocabulary of any language can be expanded to include new words for new concepts. 3. All languages change through time. 4. The relationships between the sounds and meanings of spoken languages and between the gestures and meanings of sign languages are for the most part arbitrary. 5. All human languages utilize a finite set of discrete sounds (or gestures) that are combined to form meaningful elements or words, which themselves form an infinite set of possible sentences. 6. All grammars contain rules for the formation of words and sentences of a similar kind. 7. Every spoken language includes discrete sound segments, like p, n, or a, that can all be defined by a finite set of sound properties or features. Every spoken language has a class of vowels and a class of consonants. 8. Similar grammatical categories (for example, noun, verb) are found in all languages. 9. There are semantic universals, such as "male" or "female," "animate" or "human," found in every language in the world. 10. Every language has a way of referring to past time, negating, forming questions, issuing commands, and so on. 11. Speakers of all languages are capable of producing and comprehending an infinite set of sentences. Syntactic universals reveal that every language has a way of forming sentences such as: Linguistics is an interesting subject. 12. Any normal child, born anywhere in the world, of any racial, geographical, social, or economic heritage, is capable of learning any language to which he or she is exposed. The differences we find among languages cannot be due to biological reasons.

The Origin of Language

All religions and mythologies contain stories of language origin. Philosophers through the ages have argued the question. Scholarly works have been written on the subject. Prizes have been awarded for the "best answer" to this eternally perplexing problem. Theories of divine origin, evolutionary development, and language as a human invention have all been suggested. The difficulties inherent in answering this question are immense.

Anthropologists think that the species has existed for at least one million years, and perhaps for as long as five or six million years. But the earliest deciphered written records are barely six thousand years old, dating from the writings of the Sumerians of 4000 B.C.E. These records appear so late in the history of the development of language that they provide no clue to its origin. For these reasons, scholars in the latter part of the nineteenth century, who were only interested in "hard science," ridiculed, ignored, and even banned discussions of language origin.

In 1886, the Linguistic Society of Paris passed a resolution "outlawing" any papers concerned with this subject. Despite the difficulty of finding scientific evidence, speculations on language origin have provided valuable insights into the nature and development of language, which prompted the learned scholar Otto Jespersen to state that "linguistic science cannot refrain forever from asking about the whence (and about the

whither) of linguistic evolution." A brief look at some of these speculative notions will reveal this.

God's Gift to Mankind?

According to Judeo-Christian beliefs, God gave Adam the power to name all things. Similar beliefs are found throughout the world. According to the Egyptians, the creator of speech was the god Thoth. Babylonians believed the language giver was the god Nabu, and the Hindus attributed our unique language ability to a female god; Brahma was the creator of the universe, but language was given to us by his wife, Sarasvati. Belief in the divine origin of language is closely intertwined with the magical properties that have been associated with language and the spoken word.

Children in all cultures utter "magic" words like *abracadabra* to ward off evil or bring good luck. Despite the childish jingle "*Sticks and stones may break my bones, but names will never hurt me*," name-calling is insulting, cause for legal punishment, and feared. In some cultures, when certain words are used, one is required to counter them by "knocking on wood." In many religions only special languages may be used in prayers and rituals.

The Hindu priests of the fifth century B.C.E. believed that the original pronunciations of Vedic Sanskrit had to be used. This led to important linguistic study, since their language had already changed greatly since the hymns of the Vedas had been written. The first linguist known to us is Panini, who, in the fourth century B.C.E., wrote a detailed grammar of Sanskrit in which the phonological rules revealed the earlier pronunciation for use in religious worship. While myths and customs and superstitions do not tell us very much about language origin, they do tell us about the importance ascribed to language. There is no way to prove or disprove the divine origin of language, just as one cannot argue scientifically for or against the existence of God.

Among the proponents of the divine origin theory a great interest arose in the language used by God, Adam, and Eve. For millennia, "scientific" experiments have reportedly been devised to verify particular theories of the first language. In the fifth century B.C.E. the Greek historian Herodotus reported that the Egyptian pharaoh sought to determine the most primitive "natural" language by experimental methods. The monarch was said to have placed two infants in an isolated mountain hut, to be cared for by a mute servant. The Pharaoh believed that without any linguistic input the children would develop their own language and would thus reveal the original tongue of man.

History is replete with other proposals. In the thirteenth century, the Holy Roman Emperor Frederick II was said to have carried out a similar test, but the children died before they uttered a single word.

Human Invention or the Cries of Nature?

Bow-Wow Theory

Despite all the contrary evidence, the idea that the earliest form of language was imitative, or echoic, was proposed up to the twentieth century. Called the bow-wow theory, it claimed that a dog would be designated by the word bow-wow because of the sounds of his bark. A parallel view states that language at first consisted of emotional ejaculations of pain, fear, surprise, pleasure, anger, and so on. This proposal that the earliest manifestations of language were "cries of nature" was proposed by Jean Jacques Rousseau in the middle of the eighteenth century.

Bow-wow theory is based on the assumption that human language comes from "natural sounds". The assumption is that primitive words could have been imitation of the natural sounds which early men and women heard around them. The proponents of this theory believed that language evolved by imitating the sounds, objects make in the environment. The primitive humans imitated sounds and used it to refer to the object associated with the sound.

A dog barks; his bark sounds like "bow-wow" to a primitive man. So he referred to the dog as "bow-wow". The trouble with this theory is that the same natural noise is, apparently, heard differently by different people. What is "cook-a-doodle-doo" to an Englishman is "cucuricu" to a Ukrainian.

Arbitrariness, as one of the identified features of human language is based on the premise that there is no direct relation between an object and what it is called. However, every natural language has some words with pronunciation that sounds like the natural sound that the object makes. It is common to hear children call cow as 'muu'. In English we have the screeching of a car tyre, the booming sound of gun, splashing of the water. These sounds are linguistically referred to as "onomatopoeic" words (from the Greek *onomatopoeia* "making names").

Critics counter this assumption with an argument that if all objects in the world get their names from the sounds associated to them, how do we obtain names for soundless or some abstract entities like love, hatred, anger, beauty, electrical, technical etc.

Another hypothesis suggests that language arose out of the rhythmical grunts of men working together. Just as with the beliefs in a divine origin of language, these proposals are untestable.

Human Language vs Animal Communication

Most linguists would probably agree that although many animals are able to communicate, they do not actually have 'language' in the sense that humans do. Birds may sing, cats *miaow* and *purr*, dogs *bark* and *growl*, but they are not assumed to be using these sounds in the way we do. Language is therefore a major attribute distinguishing us from the rest of the animal kingdom. Some scientists claim that certain animal species communicate by non-linguistic devices; that bees, for example, convey meaningful messages to one another by odour or by dancing in their hives, or that ants use their antennae in a significant way. It must be pointed out that the marvellous coordination achieved by groups of animals can only be explained by some form of intercommunication.

Human language, as opposed to animal cries, displays infinite variability, both in time and in space. Flexibility and change may be described as the essence of all living languages. Other characteristics of human speech are its abstraction and its great differentiation, that distinguish it from the signal-like actions of animals. But speech constitutes a second signalling system of reality which is peculiarly ours, being the signal of the first signals. Language, an important medium having a close relationship to thinking and an essential *social* function, makes man human and fundamentally distinguishes him from the animals.

The Development of Language in the Species

There is much interest today among biologists as well as linguists in the relationship between the development of language and the evolutionary development of the human species. There are those who view language ability as a difference in degree between

humans and other primates—a continuity view—and those who see the onset of language ability as a qualitative leap—the discontinuity view. There are those on both sides of the "discontinuity" view who believe that language is species-specific.

According to this hypothesis, the development of language is linked to the evolutionary development of the speech production and perception apparatus. This, of course, would be accompanied by changes in the brain and the nervous system toward greater complexity.

One evolutionary step must have resulted in the development of a vocal tract capable of producing the wide variety of sounds utilized by human language, as well as the mechanism for perceiving and distinguishing them. That this step is insufficient to explain the origin of language is evidenced by the existence of mynah birds and parrots, which have the ability to imitate human speech, but not the ability to acquire language.

More importantly, we know from the study of humans who are born deaf and learn sign languages that are used around them that the ability to hear speech sounds is not a necessary condition for the acquisition and use of language. In addition, the lateralization evidence from brain-damaged deaf signers shows that the brain is neurologically equipped to learn language rather than speech.

The ability to produce and hear a wide variety of sounds therefore appears to be neither necessary nor sufficient for the development of language in the human species.

Natural Cries of Emotion Theory or the Pooh-Pooh Theory

To counter the critics' position on the bow-wow concept, another group proposed that the original sounds of language came from natural cries of emotion such as anger, joy and pain. By this, some exclamatory marks or interjection of surprise, fear, pleasure, pain, etc., like Eh!, Ah!, Oh!, Wao!, Hey! are associated with some connotations. The theory on natural cries of emotion is criticized in that the expressive noise people utter in emotional reactions contains sounds that are not normally used in the language. It is linked with *the la-la theory* - the idea that speech emerged from the sounds of inspired playfulness, love, poetic sensibility, and song. This one is lovely, and no more or less likely than any of the others. It is linked with *the sing-song theory*, that language arose from primitive chants accompanying labour.

Yo-Heave-Ho or "Sing-song" Theory

This is a part of 'natural sound' theory that says the source of human language emanates from the sounds made during the exertion of physical effort in doing things. As such a group of early humans might have through co-coordinated efforts evolve language through grunts, groans and swear words which they used when lifting and carrying heavy trees, stones and irons. The most interesting thing about this assumption is that it places the evolution of human language within the society in which language is used. The critics to this concept argue that this does not answer the question to the origin of language, because other primates have grunts and social calls, yet they do not seem to have developed the capacity for speech. Imitative sound can only relate to natural processes producing sounds, so they cannot represent silent phenomena. Furthermore, onomatopoeia is unacceptable as a theory of the origin of language because although it is suitable for description or picturesque representation, it is not for communication. Neither statements nor questions can be expressed by onomatopoeia. These considerations should be enough to show the utter impossibility of a primeval language based on imitation.

The Oral – Gesture Theory or the ta-ta theory

This theory says that language evolved through physical gesture and orally produced sounds, that speech came from the use of tongue and mouth gestures to mimic manual gestures. For example, saying *ta-ta* is like waving goodbye with your tongue. This suggests an extremely specific relationship between physical and oral gestures. This is actually a means of non-verbal communication which is supportive of oral communication. The theory claims that originally a set of physical gestures was developed as a means of communication. Then a set of oral gestures involving the mouth specifically, actually developed, in which other organs of speech were coordinated and recognized in relation to the type of movement to match with the physical gestures. You might consider the shaking of the hand in negation (physical gesture) to represent the movement of the tongue (oral gesture) in a 'no' response. This is a kind of specialized pantomime. But most of the things we talk about do not have characteristic gestures associated with them, much less gestures you can imitate with the tongue and mouth. However, there are some messages that cannot be adequately sent across through physical gesture.

There are no people on earth that use gesture language as a means of communication. It is true that gesture language seems to be a widespread form of speech among primitive peoples, although only a few of them really deserve the name "gesture language". It is equally certain that all these societies also possess a much more highly developed phonetic language, which they use for communication to a much greater extent.

From the point of view of practical life, the theory of the priority of gesture language is really absurd, because this would have allowed communication only with people in the immediate neighborhood, necessarily excluding conversation with people at a distance or in the dark. When prehistoric Man became aware that pointing gestures were no longer adequate for intercourse with others of his kind he began to search for more appropriate means of communication. The means at his disposal were sound and gesture; so it is thought that he had to adapt these means of expression for his purposes. Thus sound and gesture came to be used simultaneously in the very earliest stages of speech. But we must recognize that language, even in its most primitive form, was phonetic language supplemented by gestures, mimic and pantomimic movements, which played a subsidiary role.

Glossogenetic Theory

This theory focuses on the biological basis in the formation and development of human language. It is largely connected with some of the physical features of humans that other creatures lack. It emphasizes that at the early stage, our human ancestors made themselves different from other primates by taking an upright posture with the use of two legs for walking and the hands for other things. This theory claims that the effect of this postural change is evident in the physical differences between human skull and that of other primates. In the evolutionary transformation, these physical structures are instrumental for speech production. There are different physiological adaptations of a human when compared to other animals. The human brain is lateralized with localization of functions. The human teeth are upright located while those of other primates are slanting outwards. Other sound production apparatuses that are structured in humans for adaptation for sound production are the lip structure, the shape and chamber of the mouth for resonating sounds, flexible and mobile tongue for modulation of sounds, the larynx for vibration or non-vibration of the vocal cord.

While discussing the question of the beginning of speech and the interrelation between language and society and many other questions, scientists refer to the contemporary speech of infants, the language of primitive groups. By observing how the language of a child develops we can get some idea of how the main characteristics of human speech appeared, for the well-known principle says that ontogeny (the life-history of each individual) repeats phylogeny (the development of the species).

Language and the brain

Language is a cognitive skill. We do not know exactly when our ancestors began to speak (estimates vary from 30,000 – 100,000 years ago), or even what made them do so, but once they started, there was no stopping. From such humble beginnings the 5,000 – 6,000 languages we assume to exist today.

The brain is an extremely complex organ, consisting of several 'layers'. This is where the higher intellectual functions, including language, are located. There are various ways in which the cerebral cortex can be damaged. For instance, it may suffer injury from a blow to the head or through some other type of wound. Alternatively, it may suffer internal damage due to disease or a blockage in a blood vessel, which results in disruption of the blood supply and the death of cortical cells. Areas of damage are generally referred to as lesions.

The study of patients with various types of brain damage has revealed that different parts of the brain are associated with (i.e. control) different functions. In other words, it is possible to localise different functions in the brain as indicated in figure 1.
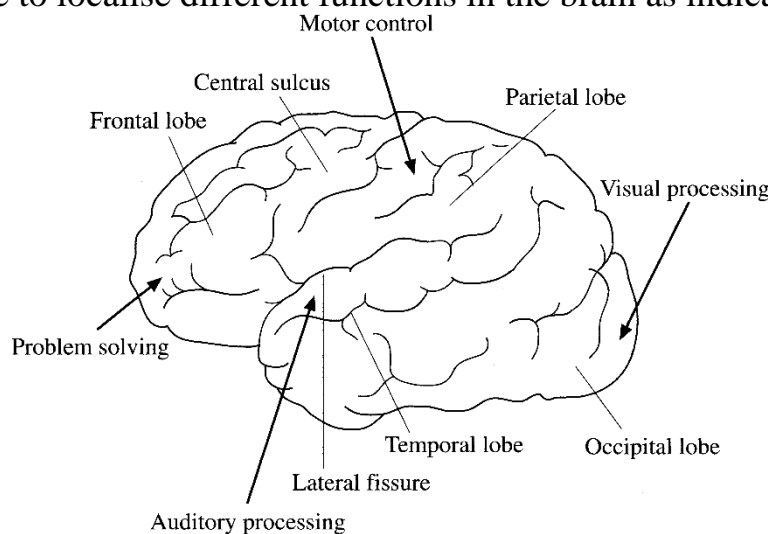
Figure 1 The human cerebral cortex, with the functions of some areas indicated

A language disorder resulting from brain damage is called aphasia, and a notable point is that this sort of brain damage almost always occurs in the left side of the brain (the left hemisphere). Damage to similar areas in the right hemisphere usually gives rise to entirely different deficits that have little to do with language. Aphasics who lose their language completely are said to suffer from global aphasia. While in many cases the brain damage is extensive enough to affect other intellectual functions, sometimes patients retain a good many of the cognitive capacities they had before the injury. In particular, although these patients are unable to produce or understand language, they can often solve intellectual puzzles which donot rely on language.

In 1861 a French neurologist, **Paul Broca**, described a patient who had suffered a stroke and who could say only one word. After the patient's death, P. Broca studied his

brain and discovered a large lesion in the frontal lobe of the left hemisphere, the area BA in figure 2. P. Broca concluded that this was the area of the brain responsible for controlling the production of speech, which has since come to be known as Broca's area.

Figure 2 The human cerebral cortex, with Broca's Area (BA) and Wernicke's Area (WA) indicated

Later research revealed that there is a second group of aphasic patients who have considerable difficulty in understanding language. In many cases, such patients appear to produce language fluently, but close examinat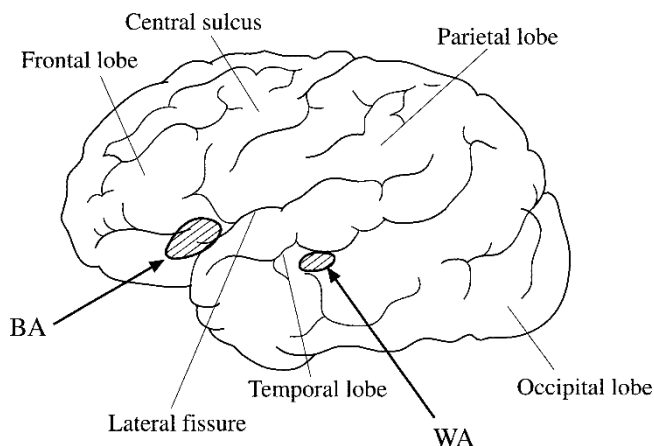ion reveals that they often speak in a garbled fashion. This pattern of deficit is often referred to as Wernicke's aphasia, in acknowledgement of **Carl Wernicke**, a German neurologist who first described it in detail in the 1870s. Wernicke's aphasia is associated with damage to another area of the left hemisphere known as Wernicke's area (WA in figure 2). Thus Wernicke's area is involved in the understanding of the speech.

Aphasia is defined as an acquired impairment in the use of language due to damage to certain parts of the brain
• This damage could be caused by injury, stroke, or seizure
• The language deficits include difficulties in language comprehension and execution

Major Types of Aphasias

All aphasias can be classified into two groups • Non-fluent aphasias – Difficulty producing fluent, articulated, or selfinitiated speech • Fluent aphasias – The inability to understand the language of others and the production of less meaningful speech than normal.

Non-Fluent Aphasias
• Broca's aphasia – This type of aphasia manifests with difficulties initiating well-articulated conversational speech – The language that is produced is slow, labored, and ungrammatical, which means words like a, an, or the and verb tense is left out of their speech – This aphasia is produced by damage to Broca's area of the brain

Most Broca's aphasics have complete understanding of what they should say, but find themselves unable to say it.

Language and thinking

The question of whether language has any influence on the workings of human thought has been puzzling researchers in various fields of studies since the beginning of the 1900s. With the development of interdisciplinary areas that range from neuroscience and robotics to artificial intelligence, cognitive psychology and philosophy of language,

the debate on the interaction between language and thought has recently emerged afresh. Everyday experience suggests that much of our thinking is facilitated by language, which proves the closest relationship between language and thought. The problem of relationship between language and thought is seen in terms of two extremes. First, there is a hypothesis that language and thought are totally separate entities, with one being dependent on the other. At the opposite extreme, there is the hypothesis that language and thought are identical – that it is not possible to engage in any rational thinking without using language.

Within the first position, there are two possibilities: language might be dependent upon thought, or thought might be dependent upon language. The traditional view supports the first of these: people have thoughts, and then they put their thoughts into words. It is the metaphoric view of language as the "dress"or "tool" of thought. The second possibility has been widely held: the way people use language dictates the lines along which they can think. According to the cognitive approach, (native) language has the power to shape the human mind to various degrees, hence the interdependence between language and thought. The latter theory revolves mainly around the Sapir-Whorf hypothesis (Hoijer, 1954), also known as linguistic relativism or determinism (i.e. language and thought are relative or determinant to one another). After a brief period of popularity in the mid-20th century, it lost most of its ground to Noam Chomsky's thesis of universalism (Chomsky and Ronat, 2011), which defines language as learnable on the basis of a preset cognitive software, present in all children's minds.

Characteristics of Human Language

Displacement. This is the ability to use language to talk about times, places and people other than 'here and now'. It also enables us to say things which we know to be false i.e. *to lie*. Bees are said to be able to convey some of this information in their 'dance' which they employ to pass on information about food sources.

Arbitrariness. This means that there is generally no natural, inherent relationship between the signs (i.e. sounds or letters) we produce and their meaning. For this reason, different languages can use different signs to refer to one and the same thing e.g. a *flower* in English is *квітка* in Ukrainian. When language tries to mirror or 'echo' the sounds made by animals and objects this is called **onomatop(o)eia** (*cuckoo, tick-tock*).

Arbitrariness also enables languages to evolve, both in the sense that existing signs can come to mean new things (e.g. *pen* which used to refer to a *quill*), but also that new signs can be introduced for existing things. Animal languages, in contrast, are more likely to have fixed reference, i.e. a certain sign has a specific and fixed meaning.

Productivity. This is an important characteristic of human language allowing us to continuously create new utterances, combining the 'building bricks' of language in ever new ways, whether these be sounds, words or sentences. Human languages are therefore continually evolving.

Cultural transmission. This refers to how languages are acquired by our children. The assumption is that there is no genetic component (although **Noam Chomsky** challenges this with his theory of Universal Grammar) which would enable a child to simply start speaking e.g. English at a certain age, but rather that children need to be exposed to a language (and culture) in order to acquire it. Many animals, however, do seem to pass the ability to communicate on to their offspring genetically, e.g. dogs will bark even if they have never heard another dog.

Duality. Duality (or 'double articulation') refers to two separate layers of language working together to provide us with a pool of sounds which we can combine to communicate with one another. On the one hand, we have a limited number of discrete sounds (e.g. the 44 phonemes in English) which in isolation have no inherent meaning e.g. *b*, *i*, or *n*. On the other hand, we have a virtually unlimited number of distinct meanings which we can create by combining these sounds in certain ways e.g. *bin*, or *nib*. Various other combinations such as *bni* are not meaningful in English, but could possibly be in other languages.

A further feature of human language is **reflexiveness**, which means that we are able to use the language to talk about language – which is typically what linguists do.

Discreteness is also something that is said to distinguish human languages from other forms of animal communication. It means that the sounds of a language differ sufficiently from one another for a (native) speaker to distinguish them and thereby know which sign with which meaning is being used at any one time.

Functions of Language

There is no one common point of view as to the number of the language functions.

The British linguist M. Halliday considers language as having three main functions:

1. *the ideational function* is to organize the speaker's or writer's experience of the real or imaginary world, i.e. language refers to real or imagined persons, things, actions, events, states, etc.;

2. *the interpersonal function* is to indicate, establish, or maintain social relationships between people. It includes forms of address, speech function, modality, etc.;

3. *the textual function* is to create written or spoken texts which cohere within themselves and which fit the particular situation in which they are used.

Thus according to professor **A. E. Levitsky** there are four main functions of the language, namely:

1. *communicative* (as a means of communication);
2. *cognitive* (as a means of thinking and cognition);
3. *emotive* (for expressing feelings and emotions);
4. *metalingual* (as a means of language investigation).

Roman Jakobson defined six functions of language, according to which an effective act of verbal communication can be described.

1. The Referential Function corresponds to the factor of Context and describes a situation, object or mental state. The descriptive statements of the referential function can consist of both definite descriptions and deictic words, e.g. *'The autumn leaves have all fallen now.'*

2. The Poetic Function focuses on 'the message for its own sake' and is the operative function in poetry as well as slogans.

3. The Emotive (alternatively called *Expressive* or *Affective*) *Function* relates to the Addresser (sender) and is best exemplified by interjections and other sound changes that do not alter the denotative meaning of an utterance but add information about the Addresser's (speaker's) internal state, e.g. *'Wow, what a view!'*

4. The Cognitive Function engages the Addressee (receiver) directly and is best illustrated by vocatives and imperatives, e.g. *'Tom! Come inside and eat!'*

5. The Phatic Function is language for the sake of interaction and is therefore associated with the Contact-Channel factor. The Phatic Function can be observed in

greetings and casual discussions of the weather, particularly with strangers. It also provides the keys to open, maintain, verify or close the communication channel: *'Hello?'*, *'Ok?'*, *'Hummm'*, *'Bye'*...

6. The Metalingual (alternatively called *'Metalinguistic' or 'Reflexive') Function* is the use of language to discuss or describe itself.

Other linguists name three main functions:

1. language as a means of communication;
2. language as a means of preservation and transmission of human's experience;
3. language as the main means of thinking.

M. P. Kocherhan distinguishes two main functions – communicative and cognitive, some linguists distinguish only one – communicative.

As we see, linguists' opinions differ, but most linguists consider that the communicative function is dominant as it is connected with intellectual thinking and with the way of communication. Language is a working system of communication in a definite period and in a certain community. It is used as a product of the community's past and the source of its future development.

Language is the most important means of human communication. This definition describes comprehensively the essential substance of language. Now the question arises why language is *the most important* means of human communication. The answer will become clear if we analyze non-linguistic means of communication.

Language and Nonverbal Communication and Non-vocal Communication
Nonverbal Communication

Not all communication is through speech. Gestures, facial expressions, and body movements are all ways of sending messages. We probably rely more on unspoken than spoken cues to understand what others are really thinking and to adjust our behavior accordingly. Non-adequate interpretation of non-verbal components leads to communicative failures.

Kinesics, or body language, is one of the most powerful ways that humans can communicate nonverbally. It is used to portray moods and emotions and to emphasize or contradict what is being said. The study of nonverbal (unspoken) communication is called *kinesics* (Birdwhistell 1970). As with spoken language, the meaning of the gesture depends on the culture. The interpretation of some gestures may vary widely from one society to another; whereas other gestures, such as a smile, seem to have much the same meaning in any culture. Within a society, a given gesture can have different meanings depending on the context: saluting an officer on a military base is a sign of respect; saluting one's parents may be taken as a symbol of disrespect.

The basic assumptions that underlie kinesics are that no body movement or facial expression lacks meaning in the context in which it occurs, and that like other aspects of voluntary human behavior, body movements, postures and facial expressions are patterned.

Birdwhistell developed a methodology of studying and describing the body motion aspect of human behavior parallel those employed in linguistic analysis. Kinesic behaviour is bound to be just as culture-specific as the corresponding language. Birdwhistell offers an interesting example in support of this statement. He reports that even when the sound is removed from films of the speeches of Mayor of New York Fionello La Gardia, it is

possible to tell whether he is speaking English, Yiddish, or Italian as characteristic body movements are associated with each language.

Haptics. Research has found that touching can create both positive and negative feelings. Your feelings are positive when the touch is perceived to be natural. A person gets the opposite feeling when the touch is perceived to be manipulative or insincere. Touch is experienced in many ways. Handshakes, pats, and kisses are just a few of the ways one can communicate by touching.

Mimics. Facial expressions.

Occulesics. Eye behaviour.

Chronemics. *Time*, or chronemics, can be used very differently with respect to individuals and even cultures. Time perceptions include punctuality, willingness to wait, and interactions. Time use affects lifestyles, daily agendas, speed of speech and movements, how long people are willing to listen, etc.

The way time is used can provide information about people as individuals. There are different perceptions about time usage and its value. Also, cultures differ in their usage of time. For example, in European and American societies, when men are interacting with women, they generally control the time use, talk more than women, and interrupt more than women. In the business world, Americans are expected to arrive to meetings on time and, usually, even early. On the other hand, they arrive late to parties and dances.

Proxemics. Edward Hall defined proxemics in the 1950's and 1960's when he investigated man's use of personal space in contrast with fixed and semi-fixed feature space. A fixed feature is what is fixed in unmovable boundaries. Semi-fixed features involve boundaries that can be moved like furniture.

In *The Silent Language,* Edward Hall (1959) describes cultural variations in the distance between people speaking to one another: head-to-head in some societies, several feet away in others. Such distances signify general ideas about privacy and the 'bubble of personal space' to which a person is entitled. These bubbles also vary according to sex; and adults have no hesitation in violating the private bubble of a child (Thorne and Henley 1975). Such nonverbal messages tend to reinforce social arrangements (Epstein 1986).

Proxemics can be divided in two other ways, dealing with physical and personal territory. Physical territory involves things like desks that are at the front of the room of a classroom instead of the center.

In Latin America the interaction distance is much less than it is in the United States; in Germany it is exactly the contrary, the interaction distance being even greater.

Non-verbal Systems of Communication

Non-verbal systems of communication may be divided into those that are derived from spoken language and those that are independent of it. Writing systems may serve as the source of other systems: 'tree' in the International Morse Code is transmitted by audible or visual signals: e.g.: *tree* _ .._ . . .

The Braille alphabet makes use of raised dots within a 2×3 matrix and is perceived by the sense of touch.

Non-verbal communicative systems can be classified according to the channel or the medium by which signals are conveyed. The drum language is acoustic, whereas sign language or smoke signals use the optical channel.

Whistling as a means of serviceable communication is known to occur in Burma, Mexico, the Canary Islands, the French Pyrenees, Cameroon and New Guinea. The

language of the Mazateco (Mexico) is a tone language, one in which relative variations in pitch are used to distinguish words of different meanings.

Instrumental signalling is more common than whistling with wind instruments, percussions and stringed instruments.

The slit-drums are used to call meeting, to summon tribes' workers in the fields.

Sign language used to the exclusion of spoken language is referred to as primary, and that found in communities of speakers-hearers as regular or occasional substitutes for speech are termed *alternate sign language*. American sign language is known as Ameslan.

In the USA, the hearing-impaired use a combination of two signing systems. One is the manual alphabet, which is made up of signs representing the 26 letters of the English alphabet and the ampersand. It is fingerspelled, using one hand only.

There are a number of sign languages in use in English-speaking countries, most involving some modification of either Ameslan or British sign languages, which, in fact, use the optical channel.

Indian sign language consists of a large repertory of conventionalized gestures performed with one or both hands. The concept of cold or winter was conveyed by clenched hands with forearms crossed in front of the chest.

Unlike the whistle or drum language, sign languages are independent of a speech event.

Non-vocal Communication

One of the most striking things about non-vocal (or animal) communication is the variety of means with which it is carried out. Animals communicate not only with sounds but also with scent, light, ultrasound, visual signs, gestures, colour, and even electricity. From the slime mold to the giant blue whale, all animals appear to have some means of communication. It may be useful to consider some non-vocal modes of communication in the following paragraphs.

Scent. Chemical-based scent communication is used by species as different as molds, insects, and mammals. Chemicals used by animals specifically for communicative purposes are called *pheromones.* A female moth signals its reproductive readiness through the release of a pheromone into the air. Only a few of these molecules need to be scented by a male moth for it to start flying zigzag upwind towards its potential mate. Dogs and other canines leave a urine-based pheromone as an identification mark to stake out their territory, and many non-human primates have specialized scent glands for the same purpose.

Light. Probably the best-known organism in North America which uses light is the firefly or lightning bug. This small flying beetle uses light flashes in varying patterns to signal its identity, sex, and location. Different species of these insects have different and distinguishing light patterns.

Electricity. Certain species of eels in the Amazon River basin communicate their presence and territoriality by means of electrical impulses at various frequencies. Each species signals at a specific frequency range, and the transmitting frequencies, like those of radio and television stations, do not overlap.

Colour. The colour (or colour pattern) of many animals plays an important role in their identification by members of their own species and other animals. The octopus changes colour frequently and this colouring is used for a range of messages that include territorial defense and mating readiness.

Posture. This is a common communicative device among animals. Dogs, for example, lower the front part of their bodies and extend their front legs when they are playful. They lower their whole bodies to the ground when they are submissive. Postural communication is found in both human and non-human primates as well.

Gesture. A gesture may be defined as active posturing. Humans wave their arms in recognition or farewell, dogs wave their tails in excitement, and cats flick their tails when irritated. Many birds perform elaborate gestures of raising and lowering the head or racing back and forth across the water in their mating rituals. Some fish, such as the male stickleback, perform a series of distinct movements in the water as part of their mating ritual.

Facial expressions. These are specific types of communicative gestures. When a male baboon yawns, bares its fangs, and retracts its eyebrows, it is indicating a willingness to fight. A wide and recognizable variety of facial expressions is found among chimpanzees. Experiments have shown that humans can classify the meanings of these expressions quite accurately. For example, when humans draw back the corners of their mouths into a smile, they are generally indicating co-operation. A non-human primate's smile also indicates non-aggressiveness.

Nevertheless, some linguists, such as the Danish philologist **L. Hjelmslev**, do not acknowledge any difference between language and such signals as semaphore signs or the striking of a clock.

There are common features between language and other sign-systems. These common features are the following:

- they serve as a means of expression, conveying ideas or feelings;
- they are of a social character, as they are created by society with a view to serving it;
- they are material in essence though their material form is different (sound-waves, graphic schemes, the Morse code, and so on);
- they all reflect objective reality.

But the differences between language and these sign-systems are more essential. They are as follows:

(1) Language is the total means of expressing ideas and feelings and communicating messages from one individual to others, used by all people in all their spheres of activity.

All other sign-systems are restricted in their usage and limited in their expressive capacity. For instance, music conveys emotions, but it does not name them; it cannot express concepts and judgements, or transmit ideas. It embraces only those people who understand it and is limited to those musical works which have actually been created by composers. Other people can perceive this 'sound system', but they cannot use it actively.

(2) Language conveys not only the essence of the facts, but the speaker's attitude towards them, his estimation of reality and his will. Language is connected not only with logical thinking, but with psychology of people too.

(3) All sign-systems apart from language are artificial, and they are created and changed by convention. They are made not by the people as a whole, but by a relatively small group of representatives of the given specialty. The development of language does not depend upon the will of the members of society. Each generation adopts the language that is given historically, and the development of language may be characterized as a historical process with its own objective laws.

All sign-systems are subsidiary to language. Each of them has its own advantages over language, such as precision, brevity, abstraction, clarity and so on. But none of them can replace language as the universal means of communication of people in all fields of activity, conveying ideas, thoughts, and emotions, and they cannot be called important for those reasons.

Language as a System of Signs

We live in the world of signs and language is one of the sign systems. Scientists have been speaking about the sign character of the language since ancient times. We can come across the sign definition in Port Royal Grammar, in works of linguist-comparatists – **W. Humboldt**, **O. Potebnya**, **F. Fortunatov**, **J. Boduen de Courteney** and others. But in their works the term 'sign' did not get a special linguistic definition. **F. de Saussure** placed the language as the system of signs in one row together with any other sign system: 'language is the system of signs that express ideas and that's why we can compare it with writing, with alphabet for deaf and dumb, with symbolic ceremonies, with forms of politeness, with military signals and so on. In this way we may think about the science that studies a sign's life in the life of society. We may call it *semiology*'. Such science has really appeared, but it was called *semiotics.*

According to **F. de Saussure**, meaning in semiotic systems is expressed by **signs,** which have a particular form, called a signifier, and some meaning that the signifier conveys, called the signified. Thus, in English, the word *table* would have two different signifiers. In speech, it would take the form of a series of **phonemes** pronounced as [teibl]; in writing, it would be spelled with a series of **graphemes,** or letters: t-a-b-l-e. Signifiers, in turn, are associated with the signified. Upon hearing or reading the word *table*, a speaker of English will associate the word with the meaning that it has (its signified).

Semiotic science studies the structure and function of different sign systems. F. de Saussure is considered to be a founder of linguosemiotics.

The basic concept of semiotics is *sign*. Scholars distinguish the following main features of the sign: 1) material character, i. e. sensory perception; 2) its ability to denote something which is beyond it (object, defined by the sign, is called *denotate*); 3) the absence of the causal links with the defined; 4) informative character (ability to convey information and to be used with a communicative purpose); 5) systemic character (a sign receives meaning being an element of a sign system; signs create definite systems and their value is determined by its place in the systems).

The peculiarities of the language as a system of signs depend on the specific character of the language:

• Language appears naturally, develops all the time, becomes more perfect; it is capable of self-regulation when other sign systems are artificial and conventional. Languages are productive. Very often language signs change their meaning under the influence of extra lingual factors.

• The language unlike other sign systems is a universal way of communication. The rest of sign systems are secondary in their relation to the language.

• Language is a polyfunctional system of signs. Besides communicative function, which is typical of other sign systems, it contains representative, cognitive, pragmatic, metalingual, and other functions. The language conveys not only information about some

facts, but also the speaker's attitude to this information. Language is the instrument of thought, the means of cognizing the word.

- Language has a lot of layers. It is a very complicated hierarchical system, which has two ways of organization – *paradigmatic* and *syntagmatic*.

Hierarchic Structure of Language

The systemic approach to language leads to the recognition of the systemic nature of human language. The systemic features are characteristic of the language as a whole and of the elements making up the whole. Language as a system is characterized as an orderly arrangement of cognate elements interrelated in the whole. The structural view on language as a structure does not contradict the principles of the systemic approach to complex objects. The notion *'structure'* implies hierarchic layering of the parts in constituting the integrated whole. It means that language is not a pile of elements, but a perfect constitution of the language units which are integrated in the structural whole.

Language is a structural layering and the structure of language is conventionally segmented into a number of structural levels. The number of language levels is probably determined by the number of the so-called "level units" which bear the distinguishing features of the elements of the level. The levels of language are not independent layers; there are no gaps in the level structure of language because of the integrant properties of the level units: phonemes are the integrants of morphemes; morphemes are the integrants of words, etc.

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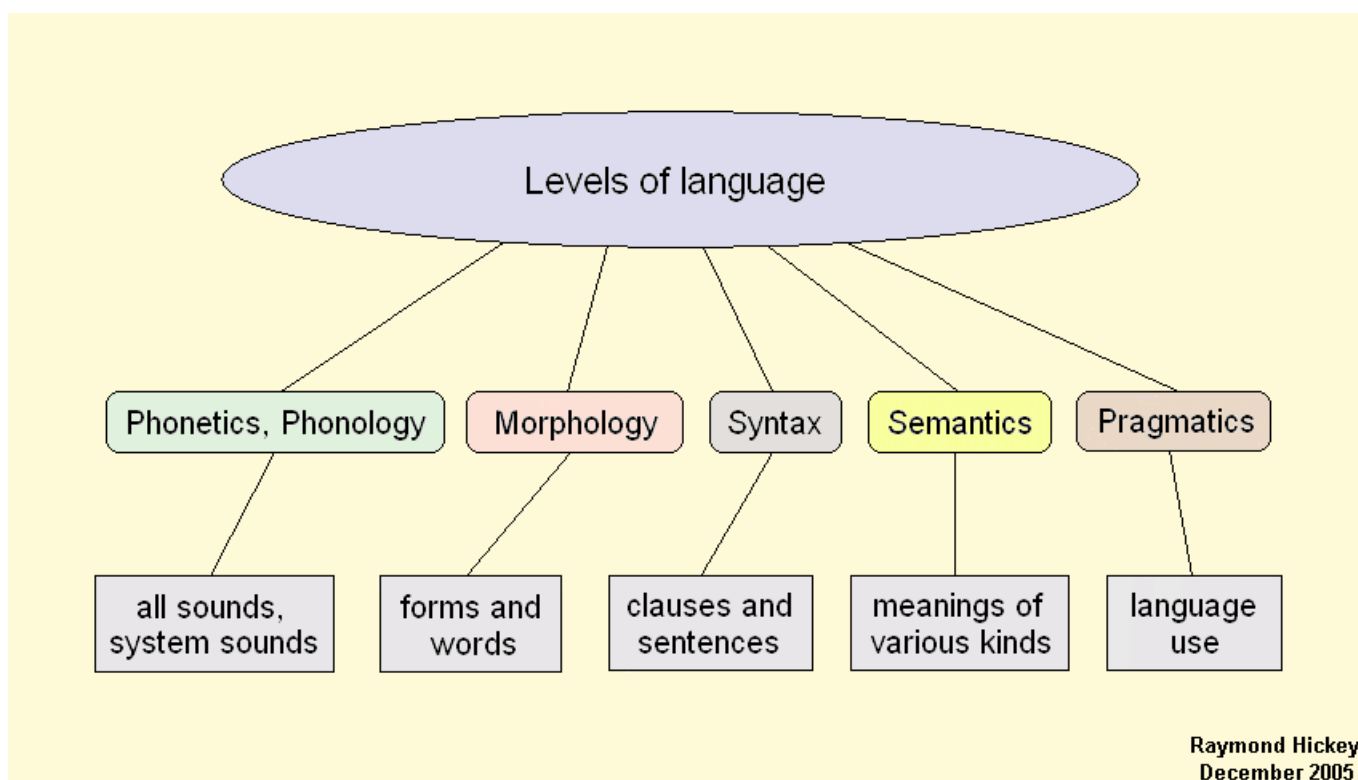
1) **Phonetics, Phonology** This is the level of sounds. One must distinguish here between the set of possible human sounds, which constitutes the area of *phonetics* proper, and the set of system sounds used in a given human language, which constitutes the area of *phonology*. Phonology is concerned with classifying the sounds of language and with saying how the subset used in a particular language is utilised, for instance what distinctions in meaning can be made on the basis of what sounds.

2) **Morphology** This is the level of words and endings, to put it in simplified terms. It is what one normally understands by grammar (along with syntax). The term *morphology* refers to the analysis of minimal forms in language which are, however, themselves comprised of sounds and which are used to construct words which have either a grammatical or a lexical function.

Lexicology is concerned with the study of the lexicon from a formal point of view and is thus closely linked to (derivational) morphology.

3) **Syntax** This is the level of sentences. It is concerned with the meanings of words in combination with each other to form phrases or sentences. In particular, it involves differences in meaning arrived at by changes in word order, the addition or subtraction of words from sentences or changes in the form of sentences. It furthermore deals with the relatedness of different sentence types and with the analysis of ambiguous sentences.

Language typology attempts to classify languages according to high-order principles of morphology and syntax and to make sets of generalisations across different languages irrespective of their genetic affiliations, i.e. of what language family they belong to.

4) **Semantics** This is the area of meaning. It might be thought that semantics is covered by the areas of morphology and syntax, but it is quickly seen that this level needs to be studied on its own to have a proper perspective on meaning in language. Here one touches, however, on practically every other level of language as well as there exists lexical, grammatical, sentence and utterance meaning.

5) **Pragmatics** The concern here is with the use of language in specific situations. The meaning of sentences need not be the same in an abstract form and in practical use. In the latter case one speaks of utterance meaning. The area of pragmatics relies strongly for its analyses on the notion of speech act which is concerned with the actual performance of language. This involves the notion of proposition – roughly the content of a sentence – and the intent and effect of an utterance.

The units of each level can be analyzed as to their inner structure, the classes they belong to in the language system (i. e. as to their *paradigmatic relations*) and to the combinations they form in speech (i. e. as to their *syntagmatic relations*). It goes without saying that the structure of various units and the classes they form (paradigmatic relations) are the sphere of *language*, while the combinations the same units form in the process of communication (syntagmatic relations) are the sphere of *speech*.

The distinction between **language** and **speech** is one of the cornerstones of modern linguistics. These notions were first introduced by **Ferdinand de Saussure** (1857–1913) in his book on general linguistics. Most generally these two notions are understood in the following way:

- *language* is the system of units (phonological, lexical and grammatical) used in the process of speaking by all members of a community;
- *speech* is the manifestation of language, or its use by speakers or writers of the given language.

Lnguage and speech are interdependent and interpenetrating. The combinability of every unit depends upon its properties as an element of the system of a language. On the other hand, the properties of every unit develop in the process of speech.

The Modes of Language

Signifiers are transmitted in human language most frequently through two primary modes: *speech* and *writing*. A third mode, signing, is a system of communication used by

individuals who are deaf. Contrary to popular belief, sign languages are not merely gestured equivalents of spoken languages. American Sign Language (ASL), for instance, has its own grammar, and those who use it go through the same stages of language acquisition as speakers of oral languages do. In fact, it is not uncommon for children of deaf parents who are not deaf themselves to learn a sign language as their first language, and a spoken language as a second language.

The fundamental substance out of which expression is built, is the sounds of language. It is therefore, speech is primary and writing is secondary. Spoken language is given primary importance because we do not know any society that does not have a language which is spoken. Writing occupies a secondary position in the history of language. There are many societies in the world with languages but without any writing system i.e., there are many preliterate societies around the world not possessing any writing system. But on the contrary, nobody has ever reported that there are societies having writing systems without a spoken language. Historically speaking, spoken language is prior to written language. As Lyons (1968:38) puts it, writing is essentially a means of representing speech in another medium. The history of writing does not go beyond some six or seven thousand years. But speech goes back even to the origins of human society. All systems of writing are based upon units of spoken language i.e., the symbols in a writing system stand for the sound units of that language. In other words, writing system reflects the sound systems of spoken language in the beginning.

Bloomfield (1933) states that writing is not language, but merely a way of recording language by means of visible marks. Indian traditional grammarians had taken a good amount of pain in describing the details of sounds of language. Both Sanskrit and Tamil traditional grammars show remarkable stage of attainment in the description of the nature of sounds. Lyons (1968 : 20) is of the opinion that Indian linguistic work may be held superior to western traditional grammars: first in phonetics and second in the study of the internal structure of words. As we know well, phonetics deals mainly with the speech sounds of a language. Since the concept of purity was attached with the proper and accurate pronunciation of Vedas, emphasis was laid on the ways and proper training of learners in pronunciation. Faulty and incorrect pronunciation might lead one to misunderstand the Vedas. Therefore one of the aims of grammar is to train learners to have good and standard pronunciation of the words in a language.

Languages of each family share certain common structural properties at all levels among themselves. Classification of language family is mainly based on the sounds and their formation of words. Writing system is not based on the history of family of languages. History of writing for a language may be different from the history and development of that language. Therefore, language is different from the systems of writing. Writing is a secondary visual representation of language and therefore speech (representation of sounds) is the primary form of language. That is why language is characterised as the means to relate sound and meaning.

Language, Society and Culture

Language and society are so closely related that one has no existence without the other. That is why Bloch and Trager (1942) define language as a system of arbitrary vocal symbols by means of which a society co-operates. It is clear from the above definition that language has both form and function. It has been pointed out that the form of language is, its sounds. The sounds of a language have symbolic functions. This is the

reason for the linguists to consider language as a system of vocal symbols. Language is used for the members of social group to co-operate i.e., it is language that is used by the members to exchange information to request, to order, to love, to quarrel etc. We do not mean that the members of a social group do not employ other than language for the purpose of communication. One can use signs, pictures, bodily gestures, etc., as modes of communications. However, language is a significant mode of communications that a society possesses.

Language as a Product of Society

Similarly language is intimately related with the culture of a society. One can attempt to understand the structure of a society through its language also. A change in the social structure may be seen reflected in the language. Language may be looked at from different angles. The one we are describing here is society based. From this angle, language is perceived as a product of society. The structure of vocabulary reflects both the structure and change of a soceity. It is more sensitive to the change of a society. This is the main reason for the Anthropologists to show interest to understand the structure of language. Sensitivity of the structure of vocabulary to the social change was witnessed during the period of industrial revolution. Language is expected to fulfil the demands of new society. The new society demands the language to perform certain new functions. In other words, the domains of language use could be expanded to meet the new needs of the society.

There exists a close connection between language and culture. The word culture is used here in the same sense in which it is used by cultural anthropologists, who assert basically that culture is simply something that everybody has. The term is used differently by different anthropologists, but always refers to some characteristics shared by a community, especially those which might distinguish it from other communities.

Language is transmitted culturally, i. e. learnt. If language is transmitted as a part of culture, it is no less true that culture as a whole is transmitted through language.
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(The) Sapir-Whorf Hypothesis

The subject of the language-culture relationship was prominent in the work of Edward Sapir (1884–1939), a Jewish-German-American anthropologist-linguist and a leader in American structural linguistics. He observed that compared to changes in culture, linguistic changes come about more slowly and evenly, and that language is far more compact and self-contained that culture taken as a whole and therefore is largely free of conscious rationalization on the part of its speakers.

Expanding on Sapir's ideas, Benjamin Lee Whorf (1897–1941), an American linguist, wrote that the background linguistic system of each language is not merely a reproducing instrument for voicing ideas but rather is itself the shaper of ideas. Whorf stated that we dissect nature along lines laid down by our native languages: "We cut nature up, organize it into concepts, and ascribe significances as we do, largely because we are parties to an agreement to organize it in this way – an agreement that holds throughout our speech community and is codified in the patterns of our language" (Whorf 1956). The agreement is, of course, an implicit and unstated one, but its terms are absolutely obligatory; we cannot talk at all except by subscribing to the organization and classification of data which agreement decrees.

Whorf sets fourth a double principle – **the principle of linguistic determinism**: the

way one thinks is determined by the language one speaks, and the principle of **linguistic relativity**: differences among languages must be reflected in the differences in the worldviews of the speakers. If the worldview and behaviour of a people are significantly affected by the structure of the language they speak, and if languages differ in structure, then cross-cultural communication and understanding are likely to be noticeably impaired, if not impossible to achieve.

These principles are referred to as **the Sapir-Worf Hypothesis.**

The relationship between language and culture has been put to methodological use by the proponents of cognitive anthropology, who believe that even the finest structural distinctions in another culture are likely to be encoded in the vocabulary of the corresponding language. No one questions the contribution these ethnoscientists have made to a better understanding of the peoples they have studied, but their insightful research has invariably been limited to particular domains of culture.

Dialect

A dialect is a variety of a language which is spoken in one part of a country (a regional dialect), or by people belonging to a particular social class (a social dialect) (See Sociolect), which to some extent differs in terms of vocabulary, grammar, and/or pronunciation from other forms of the same language. A dialect is often associated with a particular accent. Sometimes a dialect gains status and becomes the standard variety of a country.

The term *dialect* is used to refer to varieties of a particular language that differ in vocabulary, grammar, and pronunciation. In Britain virtually every county has its own distinctive traditional dialect(s) (e. g. Lancashire, Yorkshire, Somerset, etc.). Major cities also have their own popular dialects (such as Cockney in London, Scouse in Liverpool, Geordie in Newcastle, and Glaswegian in Glasgow), which are normally used by people who do not belong to the higher social groups.

In long-settled European countries, *dialect atlases* show the effects of earlier settlement patterns and of contact. One can trace which areas were originally Celtic, or see evidence of the limits of Roman occupation. In a more recently-settled country like the USA, the atlases reveal the differences in original settlement on the Eastern seaboard, showing from what part of England the settlers came and what other linguistic groups they were later mixed with. The US atlases also make it possible to plot the Western movement of pioneers from the Eastern seaboard along the different pioneer trails.

In Great Britain there are five main *groups of dialects*: Northern, Midland, Eastern, Western, and Southern. Each of them in its turn contains several subgroups.

One of the best-known Southern dialects is Cockney English. According to E. Partridge (Partridge 1960), this dialect exists on two levels:

1) that which is spoken by the educated lower middle classes, marked by some deviations in pronunciation but very few in vocabulary and syntax;

2) that which is spoken by the uneducated or semi-literate people, and which is marked by differences in vocabulary, morphology and syntax.

Dialects are now chiefly preserved in rural communities, in the speech of elderly people. Dialect boundaries have become less stable than they used to be. Dialects are said to be undergoing rapid changes under the pressure of Standard English taught at schools, and the speech habits cultivated by radio, television and cinema.

Pidgin

The term "pidgin" is used by linguists as a label for speech varieties that develop when speakers of two or more different languages come into contact with each other and do not know each other's language. Pidgin is a language which develops as a **contact language** when groups of people who speak different languages try to communicate with one another on a regular basis. For example, this might occur where foreign traders have to communicate with the local population or groups of workers from different language backgrounds on plantations or in factories. A pidgin usually has a limited vocabulary and a reduced grammatical structure which may expand when a pidgin is used over a long period and for many purposes. A pidgin is not the native language of any group where pidgins still exist; their use may be confined to the marketplace or some similar domain. Many scholars believe that the word "pidgin" is the word for "business" and was later generalized to mean any language of this type. A pidgin may be what is called a trade language, but not all pidgins are restricted to trade language, nor are all trade languages pidgins. There are numerous theories as to why and how pidgins have come into existence.

In the 19th century, when slaves from Africa were brought over to North America to work on the plantations, they were separated from the people of their own community and mixed with people of various other communities; therefore they were unable to communicate with each other. The strategy behind this was that they wouldn't able to come up with a plot to escape and return to their homeland. Ultimately, in order to communicate with their peers on the plantations and with their bosses, they needed to develop a language in which they could communicate.

Pidgins also developed because of colonization. Prominent languages such as French, Spanish, Portuguese, English, and Dutch were the languages of the colonizers. They traveled and set up ports in coastal towns where shipping and trading routes were accessible.

Sailors have been ascribed a particular role in the genesis of certain pidgins. Some scholars have claimed that jargons called "nautical English" or "maritime French" served as the basis for later pidgins in various parts of the world. Clearly, sailors did at least play an important role in spreading major colonial languages (English, French, Spanish, Portuguese, and Dutch) throughout the world but it is unclear that their jargons formed the basis for resulting pidgins. Pidgins are created for very practical and immediate purposes of communication between people who otherwise would have no common language.

Most of the better-known pidgin languages in the world are based on languages like English, French and Portuguese, and are located on the main shipping and trading routes.

Tok Pisin is probably the most widely spoken pidgin derived from English. It has official status in New Guinea, and is used there on the radio, in newspapers, and in schools. At present, in fact, it is undergoing a considerable **creolization.**

Creole Language

A Creole language is usually one which has developed out of a pidgin but is capable of being used in all everyday situations by speech community for which it is the mother tongue – in other words, a pidgin that has acquired a native speaker.

There are at least 41,7 million Creoles, based on figures in Grimes (1999) and in Smith (1994). They are spoken by indigenous populations in at least fifty countries or territories and by immigrants in many other places; for example, there are up to one million speakers of Haitian Creole in the United States.

In nearly all cases, Creoles are spoken mainly in informal contexts, while a different language – most often the standard form of a European language – is the official language of government, law, and education. Like other languages, Creoles are valued by their speakers in the private domains of family and friendship.

The low status of pidgin and Creoles (popularly regarded as corruptions of the standard rather than "a real language") derives from the low social and ethnic status of its non-white speakers of the corresponding native language. Creoles may be found all over the world, but figure predominantly in tropical and subtropical regions.

Pidgins and Creoles are new languages that develop in language contact situations because of a need for communication among people who do not share a common language. A pidgin continues to be used primarily as a second language for intergroup communication, while a Creole has become the mother tongue of a particular group of speakers. The lexicon of Creole is derived from the various languages originally in contact, with the majority usually coming from one particular language, called the **lexifier**. However, the grammar of Creole is different from that of the lexifier or any of the other contributing languages.

Thus, a Creole language is one that has come into existence, no matter by which of several processes, as a result of the contact with speakers of a different language. It has as much potential for communication and expression as any other native language but it tends to be of low social prestige, or to have a recent past history of being so, with persons who possess it as their only language being correspondingly low in their social hierarchy.

The Process of Literary Language Formation

Language came into being as the means of communication among members of a community joined together in hunting, getting food, generally producing their means of subsistence. There are three main ages in the development of man: savagery, barbarism and civilization. Describing the lower stage in the development of human society — savagery (the infancy of the human race), we point out that the formation of articulate speech was the main achievement of that period. Then the era of barbarism followed, when more progress was made in production than in all the previous stages put together. The appearance of tribes comes within this period.

Under the tribal system, language was closely connected with the tribe — the highest organizational unit of which the members were aware of their mutual kinship. In fact, tribe and dialect are substantially co-extensive and the tribe is identifiable by its peculiar dialect. Splits in the tribes led to splits in their languages; languages diverged. Over a few generations, the divergence would only be enough to result in what we call a difference in dialect. Where the separation of the tribesmen remained over a much longer period, different languages developed.

The diffusion of language went on slowly where the main occupation of the people was hunting or cattle-breeding. In primitive community system there was no need for a common language to serve as a means of communication for hundreds of thousands of people. True, at that stage of social development tribal alliances were made for military or political purposes.

A great part in the history of language was played by written language that was used as a means of state control. With the appearance of written language, the first literary languages came into being. The formation of a literary language is usually marked by certain standards such as the establishment of schools where they teach correct speech.

The most ancient literary languages are Sumerian (beginning in the 4th millennium B. C.), Assyro-Babylonian (3rd-4th millennium B. C.), and Egyptian (beginning in the 30th century B. C.).

The literary language was available only to a small section of the population and did not exercise a very profound influence on the development of a popular language. At a certain point the literary language reached its apex and stopped developing, while the spoken language was irresistibly pushing forward. Soon there was a real gulf between these two forms of language, and it was then that a new literary language came on to the arena on the basis of the spoken language.

It should be noted that the notions of *literary* and *common language* do not coincide. Literary language is opposed to colloquial, spoken language, while common language is opposed to dialect. The spread of a common language normally implies the existence of a literary language, though the latter may exist without the first. Several dialects can exist of one language with a corresponding literary language for each one; at the same time there may be no common language. The literary language was not standardized until rather late; for example, the final set of orthographic and pronunciation rules for the common language was completed only at the beginning of the 20th century.

The literary language begins at the same time as the written language becomes standardized. Under favourable conditions the literary language may turn into a common language. This entire process marks the formation of a nation. A common language for a whole nation is a national language.

Typology of Languages

Typology of languages (also known as language typology or linguistic typology) is classification of human languages into different types on the basis of shared properties which are not due to common origin or geographical contact.

In a broad sense, the typology of language is a field of linguistics that compares languages in order to identify general patterns of language structure. This is how the representatives of the Prague Linguistic School interpret the typology. In their view, the typology takes into account the general structure of language: avoiding reference to isolated features of similarities and differences, the typology considers all the features of language in their hierarchy. A narrow interpretation of typology is limited to the characteristics of the structure of certain languages or a particular language and even its individual levels.

Linguistic typology (from Greek "typos" - form, pattern and "logos" - word, doctrine) – is a comparative study of the structural and functional properties of languages, regardless of the nature or the genetic relationship between them.

At the present stage of this branch development, several types of typology are distinguished. Depending on the volume of the studied material, there are general and specific typologies.

The general typology studies the most common problems associated with identifying a set of common features that characterize all languages of the world, i.e. common properties, common changes, common processes in languages regardless of their genetic nature (e.g., common features in the structure of phonological systems, common features in text structure, etc.).

Those common features may be identified on morphological, syntactical, and phonological levels.

Morphological level

Investigation of the way in which different languages combine grammatical units (morphemes) within words is the longest-established aspect of typology. In the XIX century, there was an attempt to assign languages to a number of basic morphological types, most commonly three, which divided languages according to the degree to which morphemes are fused together:

1. Analytic or isolating languages, in which each morpheme tends to form a separate word, as in Vietnamese *Com nâúngoàitroìănrâtnhạt* (rice cook out sky eat very tasteless: '*Rice which is cooked in the open air is very tasteless*').
2. Agglutinating languages, in which several morphemes are juxtaposed within a word, as in Turkish *adamlardan* (adam-lar-dan, man-plural-from: 'from the men').
3. Fusional languages, in which morphemes are fused together within a word, as in Latin *servorum* (of slaves), where the ending -orum is a fusion of possession, plural, and masculine.

In practice, few languages are pure types, since many use all three processes, even though one favoured method tends to predominate. English has a tendency towards isolation (as in I will now go out for a walk), but both agglutination (as in clever-ly and high-er) and fusion (as in gave, in which give and past are fused) are also found.

Syntactical level

In the past 50-70 years, basic word order has been the main criterion for classifying languages. In the early 1960s, it was observed that of the possible combinations of subject (S), verb (V), and object (O) within a sentence, only certain ones actually occur, and that these are not all equally likely.

The commonest are those in which the subject comes first (SVO as in English, SOV as in Turkish), less common are those in which the verb comes first (VSO as in Welsh, VOS as in Malagasy), and least common are those in which the object comes first (OVS as in Hixkaryana, spoken in northern Brazil, OSV of which no sure example has yet been found). Many languages have mixed word orders, and not all languages have a firm order, so this classification has its flaws. However, English with its SVO structure, such as *The rabbit (S) gnawed (V) the carrot (O)*, is a language with one of the two commonest word orders, even though some subsidiary orders are possible, such as *Up jumped the rabbit*.

The relative order of verb and object is often considered to be most important from the point of view of typology, since not all languages express overt subjects. The main interest in classifying languages in this way lies in the *implicational* relationships, in that certain other constructions are statistically likely to occur in each type.

A VO language, such as English, is likely to have prepositions rather than postpositions (such as *up the tree* rather than *the tree up*), and auxiliaries before main verbs (such as *Bill may come* rather than *Bill come may*). It is also likely to have relative clauses (beginning with *who/which*, etc.) after the noun they refer to, such as *The burglar who stole the silver escaped* rather than *The who stole the silver burglar escaped*. The general principle behind these observations appears to be a preference for consistency in the position of the *head* (main word) in any construction with regard to its *modifiers* (items attached to it): so a VO language such as English is a *'head first' language* and an OV language such as Turkish is a *'head last' language*.

Phonological level

Phonological typology has received somewhat less attention, though some interesting work has been done on types of vowel system. In addition, a number of studies have proposed implicational hypotheses, such as if a language has fricative consonants, it will also have stop consonants.

With regard to rhythm some linguists divide languages into:

1. Syllable-timed languages, such as French and Japanese, in which the rhythm appears to be fairly even, with each syllable giving the impression of having about the same weight as any other.

2. Stress-timed languages, such as English and Arabic, in which stressed syllables recur at intervals. In recent years, a somewhat 'weak' version of this view has gained ground.

The absolute division has been replaced by a sliding scale, in which there are few pure types, though many which can be placed towards one or the other end of the scale. There is no doubt that English is on the stress-timed end of the scale. Another distinction is sometimes made between tone or tonal languages, such as Mandarin Chinese, and intonation or non-tonal languages, such as English.

In a tone language, the pitch level of any syllable is of critical importance, since words are sometimes distinguished from one another purely by the tone, such as Mandarin *ma* with level tone (*mother*), with rising tone (*hemp*), with a dipping tone (*horse*), and a falling tone (*scold*). In a language such as English, however, sentence intonation plays a crucial role, as in *You saw him!* versus *You saw him?*, where difference in meaing is signaled by the intonation.

As Hymes states, if the task of language classification is taken to be to place languages in terms of their common features and differences, and if we consider the task from the standpoint of similarities, then four classifications are required (Hymes 1981). Languages are classified according to the features descended from a common ancestor *(genetic classification),* features diffused within a common area *(areal classification)*, features manifesting a common structure or structures, irrespective of origin or area *(typological classification),* and features of common use and social role *(functional classification).*

Genealogical classification

This classification of linguistic typology indicates the historical connection between the languages, and it uses the historical and linguistic criteria as a basis. There are also languages that cannot be classified in to any language family group. For example, in Europe, the Basque language is called a language isolate, as it cannot relate to any other language.

Typological classification

Languages are grouped into language types on the basis of formal criteria, according to their similarities in grammatical structure. There are several types: flexile (morphological resources), agglutinative (affixes), and rooted (the root of the word as a morphological resource).

Areal classification

It involves geographic criteria, and covers those languages that are close by and have developed similar characteristics in terms of structure. Under the influence of intensive mutual influences, these kinds of languages are creating language unions such as the Balkan Language Union, encompassing Macedonian, Bulgarian, Serbian, and Albanian, for example.

W. Stewart (1962) classifies multilingual societies according to four variables for each languages concerned:

1) the degree of standardization (whether or not the language has a set of codified norms);

2) the degree of vitality (whether it has a speech/language community of its own);

3) the degree of language tradition (historicity) (whether the language development results in its use by some ethnic or social groups);

4) homogeneity (whether its structure and vocabulary can be deduced from its previous stages of development). Stewart's first typology is represented in Figure 1.

Figure 1. Stewart's Typology of Multilingual Societies

| Variables				Types of languages	Examples
1	2	3	4		
+	+	+	+	standard	Literary English
+	+	+	−	classic	Latin
+	+	+	−	local	Spoken Arabic
+	−	−	−	Creole	Creo
−	−	+	−	pidgin	Neomalanesian
+	−	+	−	artificial	Esperanto
+	−	+	−	marginal	"Home languages"

From the combinations of these variables it is possible to deduce whether the language in question is a standard, a dialect, a creole or a pidgin.

However, the essential drawback of the first model was that it didn't differentiate vernaculars from dialects. W. Stewart (Stewart 1968) reconsidered his first model and substituted the variable "heterogeneity" for "autonomy" (whether the language in question is perceived by its carriers as different from other languages and variants).

Sometimes a form of speech is said to be the "language" of a community because it is the primary mode of interaction (the "vernacular").

Language is subject to change and to regional and social variation. Except perhaps for variations relating to social class, these varieties are usually given rather than deliberately cultivated.

A convenient way of representing the relationship among varieties is in terms of the **family tree model** (See Hudson 1980). It allows one to show how closely a number of varieties (rather languages) spoken at present are related to one other.

English   Hindi

German   Welsh   French.
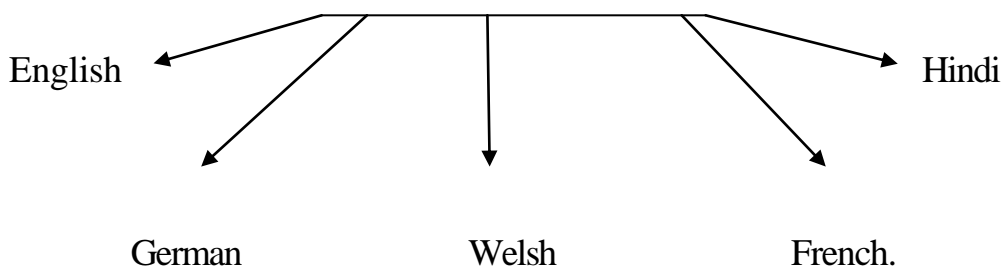
The family tree model enables a very important prediction to be made regarding isoglosses, namely that they should not intersect. For instance, there are two isoglosses in Southern England, which intersect. Isoglosses are geographical areas that exhibit dialectal

features. One isogloss separates the area where *some* is pronounced with the same vowel as *stood,* from the area where it has the open vowel [ʌ] as in Received Pronunciation (RP). The term *Received Pronunciation*, the educated accent of London and southeast England, entered common currency at the end of the nineteenth century.

An alternative to family tree model was developed as early as in the 19ᵗʰ century. It is called the wave theory and is based on the assumption that changes in languages spread outwards from centres of influence to the surrounding areas in much the same way as a stone is dropped into a pool. The wave theory explains why isoglosses intersect by postulating different geographical foci for the spread of different items. The isogloss between two items, like form with and without the [r], shows where the influence of one stops and the other takes over (Bailey 1973). The term 'family' reflects the tree model of language origination in historical linguistics.

The geographical distribution of language throughthe time can be described by the major language groups and major language families in different geographical regions. The study of the origins of languages and their classification into families is traditionally known as ' philology'. *A language family* is a group of related languages that developed from a common historic ancestor, referred to as protolanguage (proto- means 'early' in Greek). The ancestral language is usually not known directly, but it is possible to discover many of its features by applying the comparative method that can demonstrate the family status of many languages. Sometimes a protolanguage can be identified with a historically known language. For various reasons it is not possible to be precise about the number of languages in the world, but mostphilologists agreethat therearebetween 6,000 - 7,000 living languages. These languages are divided into about 100 language families;The major language families can be further divided into groups of languages that are also called families.

Here is a list of the 10 major language families (in terms of the number of speakers of those languagesworldwide and/orthenumber ofsub-families/languagestheycontain.) In each case, the language family is followed by one of its sub-families, followed by an exampleofa language from that sub-family.

I. Afro-Asiatic Language family: *Semitic - Arabic*
II. Altaic Language family: *Turkic -Turkish*
III. Austro-Asiatic Language family: *Mon-Khmer- Khmer*
IV. Austronesian Language family: *Malayo-Polynesian- Tagalog*
V. Dravidian Language family: *Tamil– Kannada*
VI. Indo-European Language family: *Germanic- English*
VII. Niger-CongoLanguage family: *Volta-Congo-Dogon*
VIII. Sino-Tibetan Language family: *Chinese - Mandarin*
IX. Uralic Language family: *Finno-Ugric- Hungarian*
X. Tai-Kadai: *Hlai, Kra, Kam–Sui, Tai, and the Ong Be*

Indo-European Language Family

The Indo-European languages as a whole are divided into ten major branches, in addition to which there are known to have been others which died out without leaving any written records. The major branches and their main representatives are as follows:

I. Indian (the oldest form is Sanskrit). The main representatives of the modern Indian languages include Bengali, Marathi, Hindi, Gipsy and some others.

II. **Iranian**, which is represented by such languages as Avestan or Zend (old form), the so-called Pahlavi (the middle form) and Baluchi, Pushtu, Kurdish, Yagnobi, Ossetic, and some other modern languages.

III. Baltic, which is divided into Lithuanian, spoken by three million people, the old texts of which go back to the 16th century, and Lettish, spoken by 2 million people.

IV. The Slavonic languages, which are divided into three large groups:

(1) Eastern Slavonic where we find three languages: (a) Russian, spoken by more than 122 million people; (b) Ukrainian, spoken by some 40 million people; and (c) Byelorussian (white Russian), spoken by 9 million people.

(2) Southern Slavonic which include: (a) Bulgarian, current mostly in Bulgaria among more than seven million people; (b) Serbo-Croatian, the language of the Serbs and Croats, about 12 million people, whose oldest texts date from the 11th century; (c) Slovenian, spoken by 2 million people, with its oldest texts dating from the 10th century.

(3) Western Slavonic, the main representatives of which are: (a) Czech, used by about 10 million people, with texts going back to the 13th century; (b) Slovakian; (c) Polish, spoken by about 35 million people, chiefly in Poland. Polish has a rich literature, the texts of which reach back to the 14th century, related, though not Baltic and Slavonic are very closely as closely as Indo-Aryan and Iranian. There are some ancient divergences between them which make it possible to reconstruct a primitive Balto-Slavonic language. Nevertheless in view of their many close resemblances it is convenient to group them together under the common name of Balto-Slavonic.

V. **Germanic** has three distinct groups:

(1) North Germanic or Scandinavian which includes: (a) Danish, (b) Swedish, (c) Norwegian, (d) Icelandic; the songs of Edda written in Icelandic are important landmarks in world literature;

(2) West Germanic with (a) English, spoken today by about 270 million people in Great Britain and abroad (USA, Australia, Canada), (b) Frisian, spoken in the provinces of the Northern Netherlands, with their oldest literary sources dating from the 14th century, (c) German (spoken by about 83 million people) with two dialects — Low German occupying the lower or northern parts of Germany, and High German which is located in the mountainous regions of the South of Germany — which have many peculiarities of pronunciation, (d) Dutch, spoken by 12 million people, (e) Yiddish, now spoken by Jewish population in Poland, Germany, Rumania, Hungary. It is based upon some middle German dialects or a mixture of dialects blended with Hebrew, Slavonic and other elements;

(3) East Germanic which has left no trace. The only representative of this group is Gothic, whose written records have been preserved in the fragmentary translation of the Bible by the bishop Ulfila. Some Gothic words spoken in the Crimea were collected there in the 16th century.

VI. Italo-Celtic with two large groups:

(1) Italic, the only language of which has survived is Latin; Latin has developed into the various Romance languages which may be listed as follows: (a) French, spoken by 60 million people in France and abroad (chiefly in Belgium, Switzerland, Canada), (b) Provencal, of various kinds, of which the oldest literary document dates from the 11th century, (c) Italian with numerous dialects, spoken by 51 million people in Italy itself and abroad, (d) Spanish, spoken by 156 million in Spain, the Fillipine Islands, Central and

Northern America (except Brazil), (e) Portuguese, (f) Rumanian, (g) Moldavian, (h) Rhaeto-Romanic, spoken in three dialects in the Swiss canton, in Tyrol and Italy.

(2) Celtic, with its Gaelic sub-group, including Irish, which possessed one of the richest literatures in the Middle Ages from the 7th century, Scottish and the Briton subgroup with Breton, spoken by a million people in Britanny and Welsh, spoken in Wales.

VII. Greek, with numerous dialects, such as Ionic-Attic, Achaean, Aeolic, Doric, etc. The literature begins with Homer's poems the *Iliad* and the *Odyssey,* dating from the 8th century B. C. Modern Greek is spoken in continental Greece, on the islands of the Ionian and Aegean Seas.

VIII. Armenian, spoken by three and a half million people in Armenia and in many settlements of Armenians in Iran, Turkey, etc. Literary Armenian is supposed to go back to the 5th century. Old Armenian, or Grabar, differs greatly from Modern Armenian or Ashharabar.

IX. Albanian, spoken now by approximately two million people in Albania. The earliest records of Albanian date from the 17th century A. D. Its vocabulary consists of a large number of words borrowed from Latin, Greek, Turkish, Slavonic, and Italian.

X. 'Tocharian', as it is called, which is preserved in fragmentary manuscripts in Chinese Turkestan, dating from the 6th to the 10th centuries A. D. It is divided into two dialects.

XI. Hittite, which survives in cuneiform tablets in Anatolia, the site of the capital of the ancient Hittite kingdom. Some think that the Hittites or Hethites of the Bible (the Khatti mentioned in Egyptian records) may have been the Indo-Europeans. The interpretation of this language and its close relation to Indo-European was announced by BedrichHrozny in December, 1915. The time covered by these records is from the 19th to the 12th century B. C., the bulk of them dating from near the end of this period. It is the oldest recorded Indo-European language. Its discovery has raised many new and interesting problems.

In addition to the major languages listed above, there existed in antiquity a considerable number of other Indo-European languages, which are known only from scanty remains in the form of inscriptions, proper names and occasional glosses. They are:

XII. Thracian, a satem-language, which once extended over a very wide area, from Macedonia to southern Russia.

XIII. Phrygian, also a satem-language, introduced into Asia Minor about the 12th century B. C. and possibly closely related to Thracian.

XIV. Illyrian, with its South Italian offshoot Messapian.

XV. Osco-Umbrian, Italic dialects closely related to Latin, and commonly grouped with it under the common name Italic.

XVI. Venetic of North-East Italy, a centum language of the West Indo-European group.

XVII. To complete the list, we should mention certain ancient languages of Asia Minor which together with Hittite form a special group. The Hittite cuneiform texts mention two such languages, Luwian and Palaean, and a little text material, particularly of Luwian, is to be found in them.

Others families are Finno-Ugric or Uralic, Hamito-Semitic, Altaic, Sino-Tibetan, African and American groups.

Finno-Ugric or Uralic languages are spoken by several million people distributed discontinuously over an area extending from Norway in the west to the Ob River region in Siberia and the Danube River in Europe. In this vast territory, the Finno-Ugric people enclaves surrounded by speakers of Germanic, Slavic, Romanian, and Turkic languages.

The Ugric division of Finno-Ugric languages is composed of Hungarian and the the Ob-Ugric languages Mansi (Vogul) and Khanty (Ostyak). The Finnic division of Finno-Ugric languages is composed of five groups. The Baltic-Finnic group consists of Finnish, Estonian Karelian (including Olonets), Ludic,Veps, Ingrian, Livonian, Votic. ThePermic group consists of Komi (Zyryan), Permyak, and Udmurt (Votyak).

Afroasiatic (Afro-Asiatic), also known as Afrasian and traditionally as **Hamito-Semitic** (Chamito-Semitic), is a large language family of several hundred related languages and dialects. It comprises about 300 or so living languages and dialects. It includes languages spoken predominantly in the Middle East and North Africa. Afroasiatic languages have 350+ million native speakers, the fourth largest number of any language family. The most widely spoken Afroasiatic language Arabic

Altaic is a Language family of central Eurasia. These languages are spoken in a wide arc stretching from northeast Asia though Central Asia to Anatolia and eastern Europe. The group is named after the Altai mountain range in Central Asia.

The **Sino-Tibetan** languages, in a few sources also known as Tibeto-Burman or Trans-Himalayan, are a family of more than 400 languages spoken in East, Southeast, South Asia. The family is second only to the Indo-European languages in terms of the number of native speakers. Many Sino-Tibetan languages are spoken by small communities in remote mountain areas and as such are poorly documented.

Characteristic Features of Germanic Languages

English is a language of the Germanic branch of the Indo-European (IE) family of languages, which is the major linguistic family of the world.

The various IE languages are usually divided into two groups – eastern and western. English belongs to the western group. The chief languages of the western group are:

1. Celtic, including the ancient tongue of the Gauls, the modern non-English languages of Wales, Ireland, the Highlands of Scotland, and the Isle of Man, and the language of Brittany in northwestern France;
2. Germanic;
3. Greek, including the ancient and modern Greek languages and dialects;
4. Italic, consisting of Latin with its modern descendants – the Romance languages, the chief of which are French, Spanish, Italian, Portuguese, and Rumanian.

Germanic (or Teutonic) languages are divided into three groups: *North Germanic*, or *Scandinavian*, *East Germanic*, and *West Germanic*. The group of East Germanic languages has no living languages at present. The only well-known language of this group is Gothic, which was spoken by the Germanic tribes of Goths.

The North Germanic, or Scandinavian, group includes Norwegian, Swedish, Danish, Icelandic, Faroese and local dialects of Scandinavia.

To the West Germanic group of languages belong German, Dutch, Flemish (spoken in Flanders, a province of Belgium), Frisian (spoken in Friesland), Yiddish and English.

In spite of the fact that the languages of the IE family are so different today that it seems hardly possible that they grew from the single source – the so-called Proto-Indo-

European languages, still these languages have a few common features to prove their relationship, namely:

- the binary division of syntactic structures into subject and predicate;
- the existence of the grammatical categories of nouns, adjectives, adverbs, verbs, numerals, etc.;
- morphological composition of words and similar ways of word-formation;
- cognate roots of base-words, i. e. lexical similarity.

The Germanic group of languages has its own individual characteristics:

- the development of a weak verb conjugation along with the strong conjugation;
- the twofold declension of the adjective (as strong and weak);
- a fixed stress accent;
- a regular shifting of consonants.

It should be borne in mind that when people speak of linguistic families they do not use the term 'family' in the genetic sense of the word. The fact that people speak the same, or related, languages does not mean that there is a link of race or blood.

CHAPTER 2. The History of Linguistics

Learning any subject should consider Historiography, i.e. a trend of investigation, devoted to the history of a science. As far as Linguistics is concerned, Historiography of linguistic theories deals with reestablishing the most important facts of the linguistic past and explaining the reasons for the changes of direction and emphasis.

Foundations in antiquity

The earliest known linguistic traditions arose in antiquity, in societies with established traditions of writing. In most cases these traditions arose in response to language change and the resulting impact on religious and legal domains.

Babylonian tradition

The earliest linguistic texts – written in cuneiform on clay tablets – date almost four thousand years before the present. In the early centuries of the second millennium BC, in southern Mesopotamia there arose a grammatical tradition that lasted for more than 2,500 years. The linguistic texts were lists of nouns in Sumerian, the language of religious and legal texts. Sumerian was being replaced in everyday speech by a very different (and unrelated) language, Akkadian (Afro-asiatic); but it remained however a prestigious language, and continued to be used in religious and legal contexts. It therefore had to be taught as a foreign language and information about Sumerian was recorded in writing.

Over the centuries the lists became standardized, and the Sumerian words were provided with Akkadian translations. From this, grammatical analysis evolved in the sixth and fifth centuries BC; different forms of the same word, especially of verbs, were listed in a way that represented grammatical paradigms and matched them between the two languages.

Hindu tradition

Certainly the most interesting non-Western grammatical tradition — and the most original and independent — is that of India, which dates back at least two and one-half millennia. Language change also stimulated the *Hindu tradition*. The study of Sanskrit grammar originally had the practical aim of keeping the sacred Vedic texts and their commentaries pure and intact. The Vedas, the oldest of the Sanskrit memorized religious

texts, date from 1200 BC. Sanskrit, the sacred language, was changing, but ritual required exact verbal performance. Rules of grammar were set out for learning and understanding the archaic language. The best known grammarian is **Pānini** (500 BC) whose grammar of Sanskrit, called literally 'eight books', covered phonetics (including difference between words pronounced in isolation and in connected speech) and morphology. His grammar was expressed largely in a form of rules or definitions (sutras), sometimes of a high degree of abstraction. In addition to Pānini, **Kātyāyana's** rules of interpretation (300 BC) and **Patañjali's** commentary (150 BC) are important in this tradition. **Bhartrhari** wrote Vakyapadiya, in which states that the sentence is not understood as a sequence of words put together, but the full meaning of each word is only understood in the context of the other words around it. In morphology they distinguished 4 classes of words: name, verb, preposition, article; 7 cases, verbal categories: tense, mood, person and analyzed morphological structure of the word. In phonology they analyzed sounds according to their articulation.

Greek linguistics

There were 2 periods in the grammatical tradition of Ancient Greece: Philosophical period (V – III c BC) and Alexandrian period (III c BC – IV c AD).Linguistic thought in ancient Greece is mainly linked to such people as **Socrates**, **Plato**, **Aristotle**, **Dionysius** and groups like the Stoics. It is characterized by a history of opposing ideas, such as:

- naturevsconvention
- analogyvsanomaly

The Greek grammatical tradition, which also owes its origin to language change, was developed originally by schoolmasters, though it is known only from later writings of philosophers. Homer's works (850 BC) were basic in early Greek education, but the Greek of the fifth to the third centuries BC had changed so much that explanations of Homer's language were important in the school curriculum. Observations taken from earlier school grammar are found in works of Plato, Aristotle, and the Stoics. Themes important in the ancient Greek tradition have persisted throughout the history of linguistics, such as the origin of language, parts of speech (grammatical categories), and the relation between language and thought and the relation between the two aspects of word-signs – whether form and meaning are connected by nature or purely by convention.

These two different philosophical points of view may be called the *natural* school and the *conventional* school. Idealistic philosophers of ancient Greece like **Pythagoras** (about 571–491 BC) and **Plato** (427–347 BC) belonged to the natural school and held that language had come into being out of 'inherent necessity' or 'nature', which **Plato** called 'spirit', Plato (427–347 BC) discussed the origin of words, and particularly the question of whether the relationship between things and the words which name them is natural and necessary, or merely the result of human convention. This dialogue gives us the first glimpse of a century-long controversy between the various idealistic and materialistic trends in ancient Greece. For example, the **Stoics** argued over the question of whether language had its origin in primitive natural cries which gradually became associated with specific material objects, or in more or less conscious attempts to imitate the sounds made by objects. The Stoics held that language originated in nature, distinguished active and passive, transitive and intransitive verbs.

Plato made a first attempt in singling out 2 parts of speech: noun and verb, while **Democritus** (about 460–370 BC) was the first who talked about ambiguity, synonymy and

homonymy and Aristotle (384–322 BC) favored convention over nature and distinguished noun, verb, pronoun, conjunction, he believed that language had arisen by 'convention' or 'agreement' and that words are mere symbols. They considered that no name existed by nature but only by becoming a symbol. Their way of explaining the meaning of a word through arbitrary selection and acceptance was more materialistic because it showed people agreeing on name-giving conventions instead of appealing to an idealistic spirit.

This dispute regarding the origin of language and meanings paved the way for the development of divergences between the views of the 'analogists', who looked on language as possessing an essential regularity as a result of the symmetries that convention can provide (language correlates with the system of knowledge and correctly reflects the processes of thinking), and the views of the 'anomalists', who pointed to language's lack of regularity (there is no unity in language and there is little connection between word, thought and object).

In Alexandrian period the Alexandrians, who were analogists working largely on literary criticism and text philology, completed the development of the classical Greek grammatical tradition.**Dionysius**, in the 2nd century BC, produced the first systematic grammar of Western tradition; it dealt only with word morphology. He pointed out the category of time (present, past, future) the category of state (active and passive) and the category of person. **Dionysius** was the founder of scientific grammar. His typically Alexandrian literary goal is suggested by the headings in his work: pronunciation, poetic figurative language, difficult words, true and inner meanings of words, exposition of form-classes, literary criticism. **Dionysius** defined a sentence as a unit of sense or thought, but it is difficult to be sure of his precise meaning.The study of sentence syntax was to wait for**Apollonius Dyscolus**, of the 2nd century.

Roman tradition

Roman linguistics continued studying the themes of interest to Greek linguistics, and like the other ancient traditions was prompted by changes in the spoken language. The primary interest was in morphology, particularly parts-of-speech and the forms of nouns and verbs; syntax was largely ignored. Notable among Roman linguists was **Varro** (116–27 BC), who produced a multi-volume grammar of Latin, of which only about a quarter has survived. He established a distinction between derivation and inflection, observed differences between Latin and Greek, argued for the use of both principles of analogy and anomaly in analyzing language, worked on Latin grammar: etymology, morphology, and syntax.

Priscian produced texts used for teaching grammar, wrote a book on grammar which formed foundation of medieval linguistic philosophy, defined the word as the minimum unit of the sentence, defined syllable as the smallest part of articulate speech with the properties: the name of the letters, its written shape, and phonetic value.

Later grammars of **Donatus** (4th c AD) and **Priscian** (6th c AD) were highly influential in the Middle Ages.

Arabic and Hebrew traditions

The Arabic tradition,focused on morphology, was also characterized by accurate phonetic descriptions. Its beginnings are generally considered to be in the seventh century AD.The Arabic grammatical traditionhad roots in the Greek grammatical traditions, especially followingAristotle. For Arabic grammarians, the Arabic language was sacred and they were concerned with explaining why Arabic was perfect. For example, the

system of inflectional endings was believed to be proof of the symmetry and logicalness of the language. **Sībawayhi** (died 804) (a Persian) wrote the first grammar 'Al Kitab'. The book describes inflection of nouns and verbs, derivation, phonetic processes. **Al-Firuzabadi**wrote a 100-volumed dictionary 'Camus'.

The Arabic tradition served in turn as a major influence on the Hebrew tradition, which began slightly later, in about the ninth century. The Hebrew grammatical tradition reached its peak in the thirteenth century and had a strong impact on European linguistics.

Middle Ages and Renaissancein Europe

During the Middle Ages (500–1400 AD) in Europe Latin was held in high esteem as the language of the public sphere, as the primary written language. It was the only language studied in Europe.Gradually interest in the vernacular languages increased among scholars, and traditions of writing them began to emerge. Pedagogic grammars of Latin for native speakers of other languages began appearing. In about 1000 an abbot in Britain wrote a grammar of Latin for Anglo-Saxon speaking children. Descriptive grammars of the vernaculars were also written; these generally presented the languages in the mould of Latin.

Scholasticism had 2 streams: *realism* and *nominalism*. The main ideas of *realism* are: God created language, but some names are created by people; general concepts are not a reflection of objects of the material world in people's mind, but the real spiritual essence that constitute the substance of things. The main representative is **Thomas Aquinas**.

The main idea of *nominalism* is general concepts are just the names and characters generated by the human mind, which don't exist separately and reflect the basic features of the main existing things. The main representative is **Roger Bacon** (1214–1294) who considered grammar to be fundamentally the same in all languages, differences being incidental and shallow.

The Greek view of grammar was rather narrow and fragmented; the Roman view was largely technical. In the 13-th century the *speculative* medieval grammarians, the *modistae* or the *modists,* who were so called because they tried to explain grammar in terms of *modes of significance* (*modisignificandi*), dealt with language as a *speculum*, 'mirror' of reality, inquired into the fundamentals underlying language and grammar. The aim of the grammarians was to explore how a word (an element of language) matched things apprehended by the mind and how it signified reality. Since a word cannot signify the nature of reality directly, it must stand for the thing signified in one of its modes or properties. They wondered whether grammarians or philosophers discovered grammar, whether grammar was the same for all languages, what the fundamental topic of grammar was.

In the fourteenth century, teaching grammars began to compete with the *scholastic* commentaries, and theModistic approach (the Modism) faded. In the sixteenth century Philosophical grammar began with **Julius Caesar Scaliger's** (1484–1558) *De causis linguae latinae* (1540). For Scaliger, grammar was a part of philosophy, including the causation or creation of language from nature.

It is customary to think of the ***Renaissance*** as a time of great flowering. There is no doubt that linguistic and philological developments of this period are interesting and significant.From the fifteenth century, colonization brought Europeans into contact with a wide variety of languages in Africa, the Americas, Asia, and the Pacific. Information about them was gathered by explorers, colonial administrators, travellers, missionaries,

and others, and was subsequently disseminated within Europe in the form of word lists, grammars, and texts.

Scholars compiled word lists in many languages and used them in language comparisons. That certain languages were related to one another became gradually appreciated, and over the centuries this came to be established on increasingly firmer footing as techniques were developed and honed. Ultimately this led to the establishment of what is now known as the *comparative method*.

By the late sixteenth century the notion emerged that most European languages formed a family of related languages, all of which could be traced back to a single ancient language that over time split into 'daughter' languages that were not mutually intelligible. The main impetus for the development of comparative philology came toward the end of the 18th century, when it was discovered that Sanskrit bore a number of striking resemblances to Greek and Latin. An English orientalist, **Sir William Jones** (1746–1794), though he was not the first to observe these resemblances, is generally given the credit for bringing them to the attention of the scholarly world and putting forward the hypothesis, in 1786, that all three languages must have 'sprung from some common source, which perhaps no longer exists'. By this time, a number of texts and glossaries of the older Germanic languages (Gothic, Old High German, and Old Norse) had been published, and Jones realized that Germanic as well as Old Persian and perhaps Celtic had evolved from the same 'common source'.

In the seventeenth century the pedagogical practice was combined with the revival of scholastic logical grammar in the *Port Royal Grammar* (**Anton Arnauld** and **Claud Lancelot** 1660). Following René Descartes (1596–1650), with human understanding taken to be the same for all people, scholars held the basic forms of thought to be the basis of every grammar; they believed in language universals. The principal concern was the manifestation of universal semantic concepts in individual languages. Language expresses the nature/structure of thought and rational principles explain the basic mechanisms/functions of language(s). They tried to identify common properties of all existing languages. As grammar is universal it is possible to create a new language that would avoid logical errors.

In the seventeenth century, language studies came to be based on new theories of cognition and the philosophy of language, in particular on **John Locke's** (1632–1704) *Essay Concerning Human Understanding* (1690).

Meletii Smotryckii wrote 'Slavic grammar', it is divided into 4 chapters: orthography, etymology, syntax, prosody. **Pamwo Berynda** described foreign and bookish words in 'Old Slavic Lexicon'. **Piotr Stojeński** wrote 'Polish grammar'.**Franciscus Junius**(1591 – 1677) was a pioneer of Germanic philology. As a collector of ancient manuscripts, he published the first modern editions of a number of important texts. In his later life, Junius devoted himself to the study of the Old Germanic languages.

As early as the middle of the 18th century, the great Russian scientist **M. V. Lomonosov** (1711-1765) started on a comparative and historical study of languages. He understood which languages constituted the Slavonic group and established close ties between Baltic and Slavonic languages, assuming a common origin between them. It is interesting to point out that Lomonosov proved the existence of genetic ties between Baltic and Slavonic languages by comparing not only words, but also grammatical forms.

In 1757 **M. Lomonosov** wrote his *Russian Grammar* that reformed the Russian literary language. The basis of this new literary language was the old Russian literary language enriched by the addition of words from European and Church Slavonic languages. The mixture of these two languages is clear from the vocabulary of the first six-volume academic *Slavonic and Russian Dictionary* (1789-1794).

Lomonosov distinguished between 'related' and 'non-related' languages. In his notes for his *Russian Grammar*, an interesting diagram was found containing the numerals "one" to "ten" in related languages — Russian, Greek, Latin and German, on the one hand, and in non-related languages — Finnish, Mexican, Chinese, on the other. In drawing up this chart Lomonosov undoubtedly had in mind the original, 'related', unity of Indo-European languages which he counterposed to 'non-related' languages. The numerals used by Lomonosov are quite reliable from an etymological point of view.There is an important concept of comparative linguistics in Lomonosov's book, e.g., he claimed that all related languages had a common source, and the process of their development took thousands of years.

Modern linguistics. The Development of the Historical Comparative Method of Linguistics

Modern linguistics emerged in the late nineteenth and early twentieth centuries with the shift of focus from historical concerns of changes in languages over time to the idea that a language can be viewed as a self-contained and structured system situated at a particular point in time. This forms the basis for structuralist linguistics that developed in the post-FirstWorld War period.

The Swiss linguist Ferdinand de Saussure (1857–1913) is widely acknowledged as the key figure in this refocusing of interest, and as the founding father of modern linguistics. Saussure began his career in the Indo-European historical-comparative tradition, within which he made a seminal contribution. Saussure published little himself, but his students in Geneva reconstructed his ideas from their lecture notes, and published them posthumously in 1916 as *Cours de linguistique générale* [Course in general linguistics]. His work has proved a rich field for subsequent investigators, and has inspired numerous interpretations and reinterpretations. His influence extended beyond linguistics, into neighbouring disciplines including anthropology and semiotics (the field of study that investigates signs and sign systems generally). Saussure championed the idea that language is a system of arbitrary signs, and his conceptualisation of the sign (see Figure 1.1, p.6) has been highly influential.

Phonetics and phonology were dominant in early modern linguistics. The International Phonetic Association (IPA) was established in 1886 by a group of European phoneticians. The British phonetician Henry Sweet (1845–1912) was one of the leading figures in phonetics in the second half of the nineteenth century. He and the Polish linguist Baudouin de Courtenay (1845–1929) were independently instrumental in development of the notion of the phoneme or distinctive sound, foreshadowed centuries previously by the author of *The first grammatical treatise* (see above). It was de Courtenay who drew the terminological distinction between phoneme and phone

Russian linguistics in the early 19th century is linked with the name of **A. Ch. Vostokov** (1781-1864), who tried to show the various points of contact between related languages. Vostokov's famous paper *Some Considerations on Slavonic* was published in 1820 under the auspieces of the Moscow Society of Russian Philology

Lovers. In this article Vostokov set out the chronology of specimens of Old Church manuscripts, and showed their difference from Old Russian. **AlexandrVostokov** distinguished 3 periods of Old Slavic and Russian, divided vocabulary into primary and secondary (borrowed).

A great contribution to comparative linguistics in Russia was made by **F. I. Buslaev**(1818-1897), professor at the Moscow University, where he lectured on comparative grammar. But his lectures on the history of the Russian language were more interesting and valuable, as they were based on independent investigations of specimens of old Russian written language and folklore.

Fiodor Buslaev discussed the problems of comparative linguistics in connection with the history of Russia in his first book *On Teaching the Native Language* (1844), the methodological significance of which lies in the fact that F.Buslaev emphasized, for the first time in Russian linguistics, the close relations between the history of the Russian language and the history of the Russian people who used it. F.Buslaev wrote: 'Language expresses the life of the people. The language we speak now is the result of historical movement and of many changes over many thousands of years; language may be defined only in a genetic way, which necessitates historical research'. He studied Russian dialects very thoroughly but his weakness in this field was that he considered that the phonetics of these dialects reflected the phonetic processes of the recorded Indo-European languages. This fault may be explained by his ignorance of the prolonged historical formation of individual Indo-European languages.

It is generally agreed that the most outstanding achievement of linguistic scholarship in the 19th century was the development of the comparative method, which comprised a set of principles whereby languages could be systematically compared with respect to their sound systems, grammatical structure, and vocabulary and shown to be 'genealogically' related.

With **Friedrich von Schlegel** (1772–1829), 'comparative grammar' became a continuing focus of historical linguistic studies. Grammatical structure was his main criterion of family relatedness; two languages were considered related only when their 'inner structure' or 'comparative grammar' presents distinct resemblances. He considered that there was a sharp dividing-line between flexional and non-flexional languages. But his brother **August Schlegel** (1768 -1845) divided languages into three groups: languages without any grammatical structure, i.e. where grammatical relations are expressed by the word-order; languages which use affixes, and languages with inflexions.

One important figure in the development of comparative linguistics as a science is a German scholar, a Professor of Oriental literature and general philology **Franz Bopp,** he published *'Comparative Grammar of Sanskrit, Zend, Greek, Latin, Lithuanian, Old Slavic, Gothic, and German'*. Sanskrit, supposed to be a more primitive language than Greek or Latin, became from then on the mainspring of linguistic research.In this work he attempted to describe the original grammatical structure of the languages, trace their phonetic laws, and investigate the origin of their grammatical forms. He considered that Indo-European languages appeared as a result of *agglutination* (combining elements in order to create new grammatical forms). Bopp's main contribution was his systematic comparison of the inflectional endings of all the Indo-European languages.He was dominated by one great idea, which he thought could be applied everywhere: the idea that every verb-form contains the concepts 'to be' or 'to do', and that in all verbal endings one may expect to

find elements with this meaning. Nowadays we cannot agree completely with this idea, but his essay is regarded as the beginning of comparative grammar.

The Danish linguist **Rasmus Rask** (1787–1832) stressed the importance of comparing grammatical, applying etymological principles to the genetic classification of languages. R. Rask said that there were a number of systematic correspondences between the sounds of Germanic and the sounds of Greek, Latin, and Sanskrit in related words, he also relied on basic vocabulary. '*Investigation of the Origin of the Old Norse or Icelandic Language*' may be called a comparative Indo-European Grammar. In this book R. Rask clearly demonstrated the significance of laws of sounds as a proof of linguistic kinship, although he added that they were especially convincing when supported by grammatical similarities. R. Rask introduced the idea that the comparison not only of inflectional systems, but also of phonetic characteristics, constituted a scientific approach to the examination of linguistic relationships; in other words, when properly examined, phonetics could provide clues as well as grammar. Thus in R. Rask we find the whole kernel from which modern linguistic comparative methods have been developed.

R. Rask examined all the languages bordering geographically to discover whether they were related, and where he found a relationship he followed it up. He was the first to recognize the relationship between the languages now called Germanic. The scheme of genetic relations between these languages which R. Rask drew up was quite correct.R. Rask hit upon the two sound shifts in the history of the Germanic languages. He discovered the set of sound correspondences which later became known as *Grimm's law*.

Grimm's law was a major milestone in the history of Indo-European and thus also in historical linguistics. **Jakob Grimm** [1785–1863] recognized the importance of sound correspondences as evidence of family relationships, saying his law had 'important consequences for the history of the language and the validity of etymology'. *Grimm's law* treats a series of changes in certain consonants from Proto-Indo-European to Proto-Germanic.

In order to account for these correspondences, he postulated a cyclical 'soundshift' (*Lautverschiebung*) in the prehistory of Germanic, in which the original 'aspirates' became voiced unaspirated stops (*bh* became *b*, etc.), the original voiced unaspirated stops became voiceless (*b* became *p*, etc.), and the original voiceless (unaspirated) stops became "aspirates" (*p* became *f*). Grimm's term, 'aspirate', it will be noted, covered such phonetically distinct categories as aspirated stops (*bh, ph*), produced with an accompanying audible puff of breath, and fricatives (*f*), produced with audible friction as a result of incomplete closure in the vocal tract.

In 1877 **Karl Verner** added to *Grimm's Law* a supplementary law that has become known by his name. He explained certain irregularities in the Grimm series with reference to the position of accent in the Indo-European word.

August Schleicher (1821–1868) was a German linguist. His great work was '*A Compendium of the Comparative Grammar of the Indo-European Languages*', in which he attempted to reconstruct the Proto-Indo-European languages. To show how Indo-European might have looked, he created a short tale, Schleicher's fable, to exemplify the reconstructed vocabulary. A. Schleicher suggested that languages are living organisms, subject to the laws of natural selection.He invented a system of language classification that resembled a botanical taxonomy, tracing groups of related languages and arranging them in a genealogical tree. Political and social pressures on the spread of one language at the

expense of another were not entertained. Although no longer influential, as an early attempt to incorporate the study of language within the biological sciences, *a family-tree theory* was far in advance of its time.

Schleicher classified languages,his scheme of classification runs as follows:

Class I — *isolating or root languages*:
R (= root)—Chinese
Rr (= root + auxiliary word) — Burmese

Class II — *agglutinative languages:*
Synthetic type
Rs (= root + suffix) — Turkish and Finnish
Ri (= root + infix)
pR (= prefix + root) — the Bantu languages
Analytic type
Rs (or pR) + r — Tibetan

Class III — *flexional languages*:
Synthetic type
Rx (pure inner flexion) — Semitic languages
pRx (Rx s) (inner and outer flexion) — Indo-European languages
Analytic type
pRx (Rx s) + r — Romance languages, English

The most important point about *Schleicher's theory* is its dualism, manifesting itself in two periods of linguistic development, a prehistoric period of progress, evolution or construction with the richness and fullness of forms, and an historic period of decay or destruction.*Schleicher's theory* says that an originally isolating language, consisting of formless roots, passed through an agglutinative stage to the third and highest stage, found in flexional languages. During the agglutinative stage, the main part of the word was unchanged, while formal elements could be added as prefixes or suffixes. According to A. Schleicher, this period in the life of a language is characterized by the perfection and wealth of forms. The third stage was flexion, the root being subject to change to express modifications of the meaning, especially for grammatical purposes. So, three types of languages have developed out of one another, with isolating languages as the starting point. The grammatical forms of the modern languages have become shorter, fewer, simpler, more abstract and more regular.

His model, *the family-tree theory*, was a major development in the study of Indo-European languages. A. Schleicher believed that '*growth*' (through agglutination) took place only in the prehistoric phase when languages were still young and capable of word-formation, during the period of '*language formation*', only changes of 'decay' by sound change and analogy took place in the later historical period, after the growth process was assumed to have ceased entirely, during the period of *'language history'*.


August Schleicher examined the ways in which languages are related to one another in distinct language families. A. Schleicher was the first to propose *a family-tree structure* which can be used to

reveal the common ancestors of related languages. *A family-tree theory* is a theory that describes language change in terms of genetically related languages developing in successive splits from a common parent language, such as Indo-European. Of particular interest was Schleicher's application of Darwinian concepts of evolution to his theory. *Tree theory* states that languages split up in other languages, each of them in turn split up in others, and so on, like the branches of a tree. For example, a well-known out-dated theory about Indo-European is that, within the PIE language, two main groups of dialects known as centum and satem were formed, a model represented by a clean break-up from the parent language.

The centum and satem isogloss is one of the oldest known phonological differences of IE languages, and is still used by many to classify PIE in two main dialectal groups – postulating the existence of proto-Centum and proto-Satem languages. Tree diagrams remain the most used model for understanding the Indo-European language reconstruction, since it was proposed by **A. Schleicher** (Compendium, 1866). The problem with its simplicity is that the branching of the different groups is portrayed as a series of clean breaks with no connection between branches after they have split, as if each dialectal group marched away from the rest. Such sharp splits are possible, but assuming that all splits within Proto-Indo-European were like this is not very plausible.

The main fault of his theory was that he did not take into account other causes for linguistic divergence than geographical distance from the parent language, and it was not born out by the linguistic facts. Later research has shown that the Slavonic languages bear a striking resemblance to Indo-Iranian, so much so that they were classified into another languages group, while Italic and Celtic have more in common with Germanic than Slavonic. Another weak point of Schleicher's theory is that he assumed the Indo-European parent language to be monolithic, without any variety of dialect. At the same time, the process of the formation of language families is oversimplified in this theory, because he left out of account the fact that side by side with the process of language differentiation, there was a process of language integration too. Schleicher's faults are typical of many books on comparative linguistics in the second half of the 19th century.

Schleicher's theory was so unsatisfactory even to his contemporaries that they tried for a long time to correct its shortcomings and to put forward other theories, among which the *'wave theory'* should be mentioned. The founder of this theory, **Johannes Schmidt** (1843-1901) argued in his book *'The Relationships of the Indo-European Languages'*(1872) that new languages and dialects started and spread like waves when you throw a stone into the water.
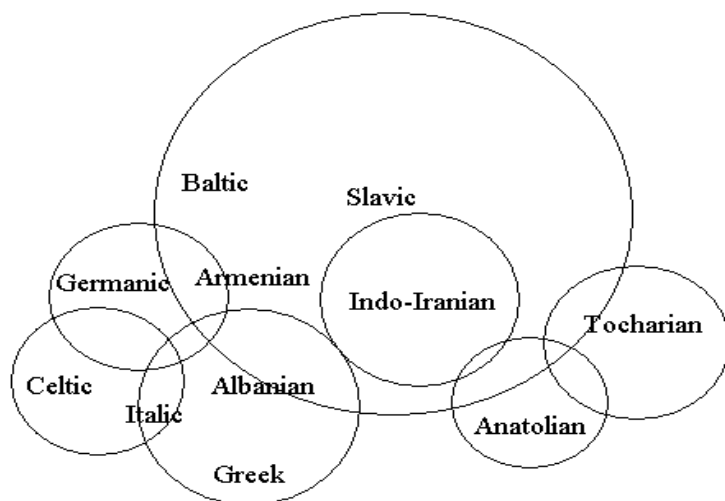
Johannes Schmidt was a German linguist. He developed the theory that was intended to deal with changes due to contact among languages and dialects. According to this theory, new features of a language spread from a central point in continuously weakening concentric circles. This should lead to convergence among dissimilar languages. J. Schmidt was right to

assume that the relationship between Indo-European languages could not be portrayed by means of a family tree. He clearly demonstrated the primitive and abstract nature of Schleicher's view of the process of formation of language families and the relations between them, but he himself failed to examine the systematic process of the changes in the original language.Today it is recognized that both the family tree and the wave model are necessary to explain change and that they complement one another.

Friedrich Wilhelm Christian Karl Ferdinand von Humboldt (1767–1835) was a Prussian philosopher and the founder of the Humboldt University of Berlin, which was named after him in 1949 (and also after his younger brother, Alexander von Humboldt, a naturalist).He is especially remembered as a linguist who made important contributions to the philosophy of language and to the theory and practice of education. He is the first European linguist who identified human language as a rule-governed system, rather than just a collection of words and phrases paired with meanings. This idea is one of the foundations of **Noam Chomsky's**.

According to **W. Humboldt**, language appeared due to the strong desire of people to communicate, language is a source of great creativity, it is the means of expression, reflection of reality and the means of cognition of the unknown things. Language of people is their spirit and people's spirit is their language. Language is not a finished thing but an activity, it is not a dead product but a process, it is the energy of a nation. He considered the changeability and stability of language, distinguished language and speech. Language is written in dictionaries and speech is the activation of a language. Language has outer and inner forms. The outer form is sounds and grammar, the inner form is the unity of ways and means with the help of which extralinguistic content is expressed by sounds, the way with the help of which categories of cognition are realized in language.

He is also known as the inventor of a classification scheme for linguistic typology, distinguishing between *isolating (root)*, *inflecting*, *agglutinating* and *incorporating* languages. Each language has its own worldview. Thinking depends on language and is predetermined by language. Differences among languages are not only in the structure but also in different worldviews.

Heymann or **Hermann Steinthal** (1823–1899) studied philology and philosophy at the University of Berlin. He was influenced by Wilhelm von Humboldt established the new science of comparative ('folk') psychology. He founded ethnic psychology. H. Steinthal pointed out the special role of language in ethnic psychology. It is the science which studies national spirit reflected in a language lifestyle, habits, traditions, behaviour and songs. He supported the sound imitation hypothesis of language origin and the view of pre-historic and historic periods in the life of language. His views influenced the early work of O. O. Potebnya. H. Steinthal advanced an onomatopoeic theory of the origin of language and laid the foundations of cultural anthropology.

German scientist **Wilhelm Wundt**(1832-1920) in the nineteenth century prepared the ground for a classification of theories of the origin of language. He distinguished between theories of invention and imitation, miraculous and evolutionary theories. Since his time, the problem of the chronological sequence of the two forms of language, phonetic and gestural, have occupied a special place in theories of origin of language.

Olexander Potebnya was a Ukrainian-Russian philosopher and linguist, a professor of linguistics at the University of Khariv. He is well known as a specialist in the evolution of Russian phonetics. He constructed a theory of language and consciousness. His main

work was 'Language and Thought', O. Potebnya viewed the history of a language as the history of its dialects and used the concept of phonetic law, although he often tried to find a psychological basis for the concept. He recognized the existence of a proto-Rus language, made many discoveries in Ukrainian historical phonetics. He was the first to propose the theory that diphthongs were a transitional stage between Old Ukrainian and Modern Ukrainian. As an etymologist, O. Potebnja paid much attention to semantic development and the history of words. In the 1870s O. Potebnya concentrated on the study of the historical syntax of the Slavic languages.

Neogrammarians

In the second half of the 19th century the development of European Linguistics entered a new stage of its development. Since the 70s of the 19th century the leading linguistic trend became a school of German scholars under the title '**Neogrammarians**' the most outstanding representatives of which were **August Leskin** (1840-1916), **Herman Osthoff** (1847-1909), **Karl Brugman** (1849-1919), **Herman Paul** (1846-1921), **Berthold Delbruck** (1842-1922).

Theoretical views of Neogrammarians were formulated in the book by **H. Osthoff** and **K. Brugmann** 'Morphological Studies in the Sphere of Indo-European Languages' and especially in the preface to it under the title 'Manifesto of Neogrammarianism'. The authors came to the conclusion that it was necessary to leave 'the workshop the atmosphere of which is stuffy and full of vaguehypothethese, and go out into fresh air of sensible reality and contemporaneity'. Their main ideas were: language is an individual and psychologic notion and is to be studied with the help of a historic approach (diachronically). The main principles of Neogrammarians are as follows:

• Historical linguistics must be explanatory. It should not simply note and describe changes; it should also find their causes.

• The only verifiable causes are to be sought in the activity of speaking subjects, who transport the language while using it.

• Instead of comparing distant language states, Linguistics will take as its object the passage from one state to the state that follows.

The main book that has generalized neogrammarian ideas was by **Herman Paul** 'Principles of Language History'. The whole science about language H. Paul divided into descriptive grammar and historical grammar. H. Paul's book is distinguished not only by its attention to general theoretical questions, but also its aspiration for covering various aspects of language developing. There is a detailed discussion of questions concerning historical changes in syntax, word-formation and especially in semantics.

Neogrammariansput forward the thesis that all changes in the sound system of a language as it developed through time were subject to the operation of regular sound laws. Though the thesis that sound laws were absolutely regular in their operation was at first regarded as most controversial, by the end of the 19th century it was quite generally accepted and had become the cornerstone of the comparative method. Using the principle of regular sound change, scholars were able to reconstruct common forms from which the later forms found in particular languages could be derived.

Analogy has been mentioned in connection with its inhibition of the regular operation of sound laws in particular word forms. This was how the Neogrammarians thought of it. When a child learns to speak he tends to regularize the anomalous, or

irregular, forms by analogy with the more regular and productive patterns of formation in the language; e.g., he will tend to say 'comed' rather than 'came'.

In general, Neogrammarians considered 3 factors which influence the language development: sound laws, analogy and borrowings.

The most prominent scholar in Russia, following neogrammarian traditions was academician **Ph. Fortunatov** (1848-1914). The main result of F. Fortunatov's activities was the creation of *The Moscow School of Linguistics or The Moscow Fortunatov School* in 1876-1902.The Moscow linguistic school developed a strict formal method of comparative-historical analysis, made a number of important discoveries in the comparative morphology of Indo-European languages, and developed a comparative semantics.This school has made a valuable contribution to the understanding of unity and integrity of Linguistics according to the very nature of language as an integral subject of science, having predetermined the direction of finding more complicated methods and patterns of linguistic analysis.

F. Fortunatov's conception of a word form served the basis for elaborating morphemic analysis, though he didn't use the notion of a morpheme, etc.F. Fortunatov formulated the idea of the internal and external development of language. Linguists of the school made a distinction between real meanings, which refer to the thing, and formal meanings, which refer to language itself. They introduced a new concept that stated that the form of a word is divisible into a basic property and formal properties.

F. Fortunatov's doctrine about the form of a word group and the ways of connection among its members laid the foundation of syntax, the theoretical basis of which was worked out by F. Fortunatov's disciples A. Shakhmatov, A. Peshkovsky.

F. Fortunatov put forward his own morphological classification of languages based on the form and structure of a word. To his mind, all the languages of the world may be classified into the following five classes or types:

(1)   Flexional languages, in which the form of words is built with affixes and ablaut (inner flexion). TheIndo-European languages are typical of this class.

(2)   Flexional-agglutinative languages, which combine the characteristics of flexional and agglutinative languages. This class includes the Semitic languages.

(3)   Agglutinative languages, where affixes with one particular meaning are stuck on to an unchangeable root. Many language families come into this category.

(4)   The absence of conjugation and any word-form is the characteristic feature of isolating languages, where the grammatical meaning is conveyed by the word order and combination of words.

(5)   According to Fortunatov, polysynthetic languages, such as some American Indian languages, belong to the agglutinative category as far as the building of separate words is concerned, but since in these languages the words are coalesced into a word-sentence. American Indian languages constitute a special class in the morphological classification.

The Kazan Linguistic School is one of the trends of Russian Linguistics in the 2nd half of the 19th century. During the years 1875-95 at the University of Kazan, the first people to formulate a theory of the phoneme were the **Polish linguist Baudouin de Courtenay** (1845-1929) and his student **Mykolaj Kruszewski** (1850-87). The notion of 'morpheme', closely associated with the notion of 'phoneme' and with a synchronic conception of language, was first conceptualized in the beginning of the 1880s by Jan

Baudouin de Courtenay and Mikolaj Kruszewski in Kazan. They made a distinction between the study of the physical and physiological aspect of sounds, which they called 'anthropophonics' and that of the part played by sounds in the morphology of a language, called 'Psychophonetics'; the basic unit of this second study was given the name *fonema*, 'phoneme'. Jan Baudouin de Courtenay described the phoneme as 'the psychological equivalent of the speech sound'; that is to say the fusion in the mind of impressions given by pronunciations of one and the same sound. It was de Courtenay who drew the terminological distinction between phoneme and phone(speech-sound).He worked out the fundamental principle of the phoneme during the 1870s, thus forestalling Western European linguistics by nearly 40 years. Baudouin de Courtenay stated that the word 'phoneme' was invented by his student M. Kruszewsky.

He proceeded from the assumption that the role of sounds in the mechanism of language, for communication between people, does not coincide with their physical nature, and that this non-coincidence makes the distinction between 'phonemes' and 'speech-sounds' necessary. In his theory he subordinated the phonetic side of speech to the social function of language as a means of communication. He stated not only the mutual relationships of phonemes, but also the ways in which they are formed historically.

J. Baudouin de Courtenay and his disciples M. Kruszewski, V. O. Bogoroditsky adhered to the priority of rigorous distinction among sounds and letters, phonetic and morphological word segmentability, the priority of living language observation. The scholars of the Kazan Linguistic School perceived language as a system. In J. Baudouin de Courtenay's opinion, language system is a historical category: it changes in the process of historical language development.

System relations among language units are considered in a more detailed way by M. Kruszewski, who believed that language laws are similar to nature laws. He singled out associations according to their similarity (in modern terms – paradigmatic relations) and associations according to their contiguity (in modern terms – syntagmatic relations). According to M. Kruszewski, similarity and contiguity associations are antagonistic but at the same time the latter determines the former. M. Kruszewski presents the nature of language as ultimately a network of two sorts of associations between linguistic forms: associations based on simultaneity, or parallelism of structure, and associations based on sequence in larger structures. These are essentially the same as Saussure's notions of associative (paradigmatic) and syntagmatic relations between forms.

M. Kruszewski distinguished sound change and sound alternation, explained the arbitrariness of the linguistic sign. In order to formulate an explanatory theory of linguistic change, understanding the nature of such a system of associations is essential. According to his view, such changes illustrate the central role played by the factor of reintegration in language. For M. Kruszewski and J. Baudouin de Courtenay, language is not simply a matter of mechanical repetition but, rather, involves constant (re)recreation of the particular structures used in speech; thus, linguistic forms are constantly subject to the necessity of finding their place in the associative system.

For J. Baudouin de Courtenay, the study of linguistics must be based on an understanding of the *synchronic* nature of linguistic systems. It is living languages that are directly available for study: prior stages of linguistic history can be known only through written records, which constitute only an indirect representation of a language, and not an actual language itself.The Kazan school influenced the Prague School.

There was a movement reacted against the formalism of Neogrammarianism. **Rudolf Meringer** founded the philological school called cultural morphology, he considered that the history of words cannot be understood in isolation from cultural context. He was an editor of the journal 'Words and Things' and published many articles there; he also published a textbook of Indo-European linguistics that went into several editions. The focus of his life's work was the history of words; Rudolf Meringer's lasting contribution to linguistic science is that he first called attention to the linguistic significance of slips of the tongue. Motivated originally by Hermann Paul's observations concerning similarities between speech errors and the processes of language change, R. Meringer's researches led him to reject the possibility that speech errors and certain kinds of sound change are not inter-dependent. Errors are not random but are rule-governed; the fundamental unit of speaking is not the speech sound but the word; words can be divided into structural components that differ in the strength of their internal representations; all speakers produce errors in the same way. These conclusions would all be accepted by psycholinguists working in this field today.

Hugo Schuchardt is one of the most eminent linguists of the Germanic tradition within Romance Philology. Today, of course, his contribution is mainly of historiographic interest. For the Basque community, he is one of the most eminent foreign scholars, beside Wilhelm von Humboldt and only few others. H. Schuchardt primarily worked on traditional topics in Romance philology with a strong historic orientation, but also developed an interest in language contact and language mixing. H. Schuchardt became interested in two new fields, Creole and Basque linguistics. His most lasting contributions to modern linguistics, though, are the elaboration, with Johannes Schmidt, of the Wave model of language change and his substantial work laying the foundations of moderncreolistics.

Karl Vossler contrasted positivism and individualism as the two main approaches to an interpretation of the aesthetic theory of language and literature. He presented his theories in 'Positivism and Idealism in Linguistics' (1904) and 'Spirit and Culture in Language' (1925). He believed that language had to be studied in relation to the history of culture and the sources of linguistic innovations were the creative initiative of the individual and individual artistic intuition. K. Vossler linked the study of language and literature to philosophy and the history of culture.

Linguistic geographycalled also *dialect geography* isa trend in Italian linguistics that arose in the 1920s in opposition to neogrammarianism. It was a school of linguistics centered in Italy emphasizing the importance of linguistic geography in diachronic studies. Neolinguistic theory was set in the works of **G. Bertoni and M. Bartoli***('Introduction to Linguistics',* 1925) and **G.Bonfante***('The Position of Neolinguistics'),* and in *'The History of Linguistics in Essays and Excerpts'.* **V. Pisani** is the most prominent representative of the neolinguistic school. The object was local or regional variations of a language or a dialect studied as a field of knowledge. Neolinguistics interprets language as 'inner reality, continuous artistic creativity'. Language is an individual not a collective phenomenon. They studied the history of words in relation to the history of society. Linguistic geography and a special interest in the peripheral areas of language (dialect, slang, child language) led to the assumption that there are no linguistic boundaries. The development of areal linguistics is a part of the neolinguistic trend. The nature of these areal influences remains a matter of debate. Furthermore, areas are often hard to define. New findings

include the observation that there may be many more language areas than previously recognized.

The most widespread type of dialectal differentiation is regional, or geographic. As a rule, the speech of one locality differs at least slightly from that of any other place. Every dialectal feature has its own boundary line, called an *isogloss*. Isoglosses of various linguistic phenomena rarely coincide completely, and by crossing and interweaving they form patterns on dialect maps. An *isogloss*, is the geographic boundary of a certain linguistic feature, such as the pronunciation of a vowel, the meaning of a word, or the use of some syntactic feature. Major dialects are typically demarcated by *groups of isoglosses*. However, an *individualisogloss* may or may not have any coincidence with a language border. Similar to an isogloss, an *isograph* is a distinguishing feature of a writing system. Both concepts are also used in historical linguistics.

The substratum theory is a theory that attributes linguistic change to the influence of a substrate language. The notion of 'strata' has first been developed by the Italian linguist **GraziadioIsaia Ascoli** (1829–1907). *Stratum* (Latin for "layer") or *strate* is a language that influences, or is influenced by another through contact. A *substratum* or *substrate* is a layer of something that is below another layer, i.e. a language which has lower power or prestige than another; while a *superstratum* or *superstrate* is a language of a later, invading people imposed on and leaving features in an indigenous language, i. e. the language that has higher power or prestige. Both substratum and superstratum languages influence each other, but in different ways. An *adstratum* or *adstrate* refers to a language that is in contact with another language in a neighbor population without having higher or lower prestige.

All terms refer to a situation where a language establishes itself in the territory of another, typically as the result of migration. In the case of superstratum the local language persists and the intrusive language disappears and in the case of the substratum one the local language disappears and the intrusive language persists The term is also used to identify systematic influences or a layer of borrowings in a given language from another language independently of whether the two languages continue coexisting as separate entities. Many modern languages have an adstratum from English due to the economic preponderance of the United States on international markets.

Structural Linguistics
European Structural Linguistic Schools
Structural Linguistics was formed in the 20s-30s of the 20th century as a specific trend different from the dominating at the end of the 19th century Neogrammarian Linguistics with its exceptional attention to the history of language elements. Structural Linguistics came into being as a search of a more consistent system of basic notions of language studies as well as the aspiration for the elaboration of rigorous methods of synchronic description of modern languages unlike those that were found in Comparative-Historical Linguistics.The main principles of structuralism are as follows:
1. language is a semiotic system of signs;
2. the main principle of its organization is the principle of levels;
3. the study of language units and their relationships prevail over the study of language functions;
4. synchrony must prevail over diachrony;
5. the main language units are phonemes and morphemes, they are building material;

6. the main form of existence of phonemes and morphemes are paradigmatic and syntagmatic relationships.

The origin of structuralism is connected with the name of the Swiss linguist **Ferdinand de Saussure** (1857-1913) who is considered to be the founder of structuralism. The main ideas of this school are presented, first of all, in F. Saussure's 'Course in General Linguistics'. They are as follows:

• Systematicity of language: Language is understood as a system of linguistic signs, subordinated to its internal order, as the totality of interconnected elements.

• The linguistic sign is bilateral, i.e. it has both form and meaning.

• Linguistic signs are linear in character because they have a temporal existence: two signs cannot occur concurrently.

• Distinction between *language* and *speech* (*langue* versus *parole*): *language* is a system of all rules that must be observed by all speakers of the community; *speech* is an individual phenomenon; it is a concrete manifestation of language uttered by an individual in a given moment.

• Distinguishing between the *syntagmatic* relations (the value of each linguistic sign determined by its relationship to other signs within the utterance) and *paradigmatic* relations (it is determined by the relationship to other signs that could replace it in its position).

• The rigorous separation of *synchrony* and *diachrony*.

• Language is a social fact: language is a "treasury" or "collection of impressions" that is "deposited" in identical form in the brain of each member of a given speech community.

• Opposition of *external* to *internal* Linguistics: external Linguistics embraces geographical language spreading, migration, language politics and internal is everything that somehow modifies the language system.

Ferdinand de Saussure's ideas served as a theoretical basis of different trends of linguistic structuralism and played an essential role in the development of its conceptions and methods: Geneva, Prague, Copenhagen, London Schools of Structural Linguistics and the trend of American Structuralism.The most important of the various schools of structural linguistics to be found in Europe in the first half of the 20th century included the Prague school, most notably represented by Nikolay SergeyevichTrubetskoy and Roman Jakobson, both Russian emigrants, and the Copenhagen (or glossematic) school, centred around Louis Hjelmslev. John Rupert Firth and his followers, sometimes referred to as the London school, were less Saussurean in their approach, but, in a general sense of the term, their approach may also be described appropriately as structural linguistics.

The Geneva School of Linguistics

One of the most influential trends of structuralism of the first half of the 20th century was the Geneva School of Linguistics. The representatives of this school are **Charles Bally** (1865-1947) and **Albert Sechehaye** (1870-1946) who published posthumously F. Saussure's course of lectures under the title 'Course in General Linguistics' in 1916. Besides here belongs also **Serge Karcevsky** (1884-1955) who transmitted F. Saussure's doctrines to Moscow and Prague. He was born in Russia and began his education at Moscow University, but after revolution of 1905 he emigrated to Geneva, where he attended F. de Saussure's lectures. In 1917 he returned to his motherland and due to him Russian linguists could acquainted with 'Course in General Linguistics'. A new political

situation made him soon leave for Czechoslovakia where he actively communicated with scholars of the Prague Linguistic Circle. Since the middle of the 1920s and till the end of his life he again lived in Geneva and continued publishing his works in the former USSR. Serge Karcevsky's ideas exerted influence on emerging and development of the Prague School.

The Copenhagen (Glossematic) School of Linguistics

The Copenhagen or Glossematic (from Greek *glossa - language*) school is represented by **Louis Hjelmslev** (1899-1965). His major works are 'Prolegomena to a Theory of Language' and 'A Study of Glossematics: Critical Survey of its Fundamental Concepts'. The goal of Glossematics is to establish linguistics as the exact science based on mathematics and logic. The main ideas of Glossematics are: the notions of synchronism and diachronism are to be substituted with a more universal notion – achronism (the study of language without any time references); it is possible to substitute 'less developed languages' with 'more developed' ones.

Glossematicians tried to give an exact definition of the object of Linguistics. They defined language as: schema – as a pure form, free of time and society; norm – as a material form used at a certain period of time by a certain social community; usage – as a set of habits prevailing in a given society.The two sides of the linguistic sign mentioned by F. Saussure are considered by L. Hjelmslev to have both form and substance. This leads to the recognition of a bilateral character of the two planes – 'the plane of content' and 'the plane of expression'. But the influence of the theory outside of Denmark was rather limited.

The Prague School of Linguistics

The Prague school is a tradition of linguistic thought that is associated with was a group of Czech and other linguists who formed the *Linguistic Circle of Prague*, established in 1926. The most outstanding personalities of this school were **V. Mathesius**, **B. Harvanek**, **B. Trnka**, Russian Linguists **R. Jakobson**, **N. Trubetskoy**, **S. Karcevsky** and others.

This group held regular meetings and published a journal. The primary interest of the Circle was phonological theory; the leading light in this domain was the Russian Prince **Nicholai Trubetzkoy** (1890–1838), a professor in Vienna, whose *'Principles of phonology'* made important contributions to the notion of the phoneme. Phonology is the field in which the Prague School of Linguistics achieved the most remarkable results. Prague school phonology succeed in placing the notion of the phoneme in the centre of linguistic theory, as one of the most fundamental units. N. Trubetzkoy's theory of distinctive features is based on a binary principle.

Prague school linguists also made contributions to other aspects of linguistics including the area for which the school is perhaps best remembered today, syntax. A tradition beginning with **Vilém Mathesius** (1882–1945) focused on the relation between word order and discourse – how the order of words in a sentence is affected by discourse in which it occurs. Their notions of theme or topic (what is being spoken about) and rheme or comment (what is said about it), and given (what is known to the hearer) and new (information not known) have been highly influential and occupy a place in most modern theories of syntax.

Perhaps the most famous representative of the Prague school is **Roman Jakobson** (1896–1982), who did original research in a range of areas of linguistics. R. Jakobson

emigrated to the USA in 1942, and subsequently had a significant impact on the development of phonological theory there.

The Prague School of Linguistics has much in common with other structuralist schools but this school has its own principles and techniques, it's a school of functional linguistics. Sciences of this school were interested in Germanic and Slavic languages and provided functional and structural descriptions of languages, they describedliterary languages, notions of 'a norm' and 'a code', styles of languages and style of speech, theme and rheme.

The London School of Linguistics

The London School of Linguistics was founded by **J. R. Firth** (1890-1960). It deviates from the other schools in its treatment of the priority of form over meaning. Firth, who had lived for some time in India and studied its languages, brought a number of original and provocative perspectives to linguistics; the tradition he established is called the 'London School'. Among other things, he questioned the assumption that speech can be divided into segments of sound strung one after the other. His theory of prosodic analysis focused on phonetic elements larger than individual sounds, and anticipated some developments in phonology by half a century.

J. Firth approached the whole systematic nature of language in an unparalleled way. Whereas other schools conceived of language systems as consisting of a small set of largely independent subsystems (phonology, morphology, syntax, suprasegmentals), for J. Firth language was 'polysystemic', incorporating an infinite number of interdependent micro-systems. In his work 'The Technique of Semantics' (1957) J. Firth proposed to split up the meaning into a series of component functions. Each function will be defined as the use of some language form or element in relation to some context. So, he distinguishes a number of levels of meaning, e.g. the phonetic or phonological, the grammatical, the lexical and the semantic level, the context of situation, and finally the context of culture.

J. Firth was also deeply concerned with meaning, and, influenced by the Polish anthropologist **Bronislaw Malinowski** (1884–1942), developed (at least in outline) a contextual theory of meaning that accorded a crucial role to use in context – embodied in the aphorism 'meaning is use in context'.

J. Firth did not develop a fully articulated theory of grammar, but rather laid out the framework on which a theory could be developed. One of his students, **Michael A.K. Halliday** (1925–) was responsible for elaborating Firth's ideas and developing them into a coherent theory of language. From the late 1950s, M.A.K. Halliday refined a theory that ultimately came to be known as systemic functional grammar; M.A.K. Halliday's ideas have attracted a considerable amount of attention, especially in applied linguistics. This tradition is represented in Britain, Australia, America, Spain, China, and Japan. Firth's ideas were developed in other ways as well, including by other students, and their students.

The French (Sociolinguistic) School

By the beginning of the 20th century Germany began losing its position as the centre of world linguistics. At that time one of the leading linguistic countries was France, where the activities of A. Meillet and J. Vandries had great significance for further development of the science of language. These scholars belonged to Saussurean school as A. Meillet was Saussure's disciple and J. Vandries was A. Meillet's disciple. Nevertheless, having accepted a number of Saussurian ideas they remained the scholars of the traditional

approach, mainly comparativists. During the whole 20th century France remained one of the leading centres of world linguistics.

Antuan Meillet (1866-1936) was the head of the French Linguistic Society having written 24 books and 540 articles on comparative studies of nearly all the groups of Indo-European languages. In his book 'The Languages of Present-Day Europe' he laid the foundations of Sociolinguistics.Like Saussure Meillet stressed a social character of language. Language exists as long as society, and human societies would not be able to function without language. This point of view gave the possibility of explaining the changes in language, approaching the opposition of language and speech.

In a number of cases A. Meillet's conception is close to that of Saussurean. They have a close view on the correlation between stability and changeability of language, arbitrariness of sign. But A. Meillet did not share Saussurean views on the rigorous delimitation between synchronic and diachronic linguistics.

Josef Vandries (1875-1960) is A. Meillet's disciple and his successor. He is best known as the author of the book 'Language' first published in 1921. This book touched upon a wide choice of problems including three main issues of Linguistics, namely: 1. How is language arranged? 2. How does language function? 3. How does language develop?

The most interesting chapters of the book are devoted to social functioning of language and social causes of linguistic changes. He understood language as a social phenomenon, saying that it was formed in society on the day when people felt the necessity of communicating among one another. So in his book J. Vandries stands up as one of the predecessors of Sociolinguistics which was not a particular linguistic discipline at that time.

Emile Benveniste (1902–1976) was a broad-minded scholar studying synchrony and diachrony, linguistic theory and the analysis of concrete languages. After A. Meillet and J. Vandries he was a recognized head of French Linguistics.Being A. Meillet's disciple E. Benveniste was mostly engaged in Indo-European studies, trying to synthesize the traditions of the 20th century with the ideas of structuralism. In his comparative works he aimed at the systemic analysis of semantics and etymology trying to reconstruct the fragments of world pictures of ancient Indo-European people. He was much engaged in history of Linguistics, the analysis of emerging and development of different conceptions and notions.

Andre Martinet (1908–1999) is one of the most prominent representatives of French structuralism. He has written a number of works on General Linguistics, but the best known of them are 'The Principle of Economy in Phonetical Changes' (1955) and 'Fundamentals of General Linguistics' (1960). The first of them is one of the most significant works on diachrony in world structuralism. The scholar stresses that Diachronic Linguistics should not restrict itself with the description of sound changes but it should explain these changes, revealing their causes.

American Structuralism.

American Descriptivism

Two main streams, European and American, dominated linguistics in the 20th century. The first is **structuralism** represented by Geneva, Prague, Copenhagen and London Schools of Structural Linguistics. It arose out of the aims and methods of the 19th century comparative philology with its focus on written records and its interest in

historical analysis and interpretation. The second approach is the American form of structuralism, called **Descriptivism.** It arose from the interests and preoccupations of American anthropologists, who were concerned to establish good descriptions of the American Indian languages and culture before they disappeared. Here, there were no written records to rely on, hence historical analysis was ruled out. The important peculiarity of American structuralism is the concentration on the form. The meaning, especially the lexical meaning, was disregarded.

A pioneer in this field was **Franz Boas** (1858-1942), who published his 'Handbook of American Indian Languages' in 1911. Franz Boas is considered the founder of American linguistics and American anthropology. A major concern for him was to obtain information on Native American languages and cultures before they disappeared. American structuralism has practical orientation, which is reflected in the development of the so-called *field-methods* – techniques for the recording and analysis of languages which the linguist himself could not speak and which had not previously been committed to writing. Such linguists as Franz Boas were less concerned with the construction of a general theory of the structure of human language than they were with prescribing sound methodological principles for the analysis of unfamiliar languages. They were also fearful that the description of these languages would be distorted by analyzing them in terms of categories derived from the analysis of the more familiar Indo-European languages. He established the so-called 'four-field approach', which takes into consideration: human evolution, archeology, language and culture. These points have become sub-fields of the wider discipline of anthropology in The United States.

Another peculiarity of American structuralism is that it was deeply interested in Anthropology and Ethnography: the study of American Indian languages was not limited to the languages themselves, but attention was also paid to the life, habits and 'behaviour' of Indian tribes. They maintained psychological and anthropological orientations, seeing language as intimately connected with the way of life and thought of its speakers. This notion was further developed by E. Sapir's student **Benjamin Lee Whorf** (1897–1941) into what is now known as *the Sapir-Whorf hypothesis*, which holds that the structure of the language one speaks determines how one views and perceives the world.

Edward Sapir's Linguistic Conception

E. Sapir (F. Boas' student) was highly admired during his life and is still something of a hero to many linguists. He published extensively in both linguistics and anthropology, did first-hand fieldwork on many American Indian languages, contributed to historical linguistics (in Indo-European, Semitic, and numerous Native American families; for example, he established once the Uto-Aztecan family and proposed the once controversial but now established Ritwan-Algonquian family), and wrote theoretical works, for example on the phoneme, still read with profit today. His impact in these areas was monumental. At the same time, he was also no stranger to the psychological-typological current of thought. Trained in Germanic linguistics, he fully understood the Humboldtian psychological tradition.

His book, *Language* (1921), insightfully dealt with the broad morphological typologies of the past century, but without the evolutionism which characterized them in earlier views. His own typology rested on the tradition extending from the eighteenth and nineteenth centuries represented by F. Schlegel, F. Bopp, W. Humboldt, A. Schleicher, W. Wundt, and others. E. Sapir was strongly interested in Anthropology and Psychology.

In his work 'Language' he emphasized close relation of language to human culture and society. E. Sapir defines language as a conventionaland dynamic system, as a purely human method of communication. Language and thought are interrelated. Language influences and modifies the process of cognition, shaped its character.

Edward Sapir proposed a new principle of classification of languages. This classification was based on the expression of relations within the sentence and on the presence or absence of derivation.

E. Sapir dealt with the relationship between language and extra-linguistic reality, language and thought and this made him one of the founders of **Ethnolinguistics**.

Leonard Bloomfield's Linguistic Conception

L. Bloomfield was the most outstanding representative of American structuralism. His main work is 'Language' (1933), which influenced several generations of American linguists. L. Bloomfield's primary concern was to establish linguistics as a science. He opposed the mentalistic orientation of F. Boas and E. Sapir, and was heavily influenced by the mechanistic outlook of the then fashionable *behaviourist psychology*. *Behaviorism* was a school of psychology. According to this school science can only deal with physical facts. Statements must be based on these physical characteristics. Thus, science must observe, describe physical facts and induce descriptive generalizations. Human behaviour is studied in terms of stimulus and response, consequently linguistic behaviour becomes also a pattern of stimulus and response, where language plays a mediating role. Behaviorist linguists start their studies by recording speech, and these samples will become the only basis for the study of language, in the form of speech corpus. Speech will be divided into sound segments and they will observe these segments in their linguistic context. Finally, they will classify those segments according to their distribution. However, this method made the study of meaning very complex and probably outside the domain of linguistics, and this is the main behaviorist limitation.

L. Bloomfield's approach, which focused on methodology, was the dominant force in American linguistics from the 1930s until the mid-1950s. It was mainly under the influence of L. Bloomfield that American structuralism focused on formal analysis, leaving the meaning aside. L. Bloomfield's followers pushed even further the attempt to develop methods of linguistic analysis that were not based on meaning. One of the most characteristic features of 'post-Bloomfieldian' American structuralism was its almost complete neglect of semantics.

Bloomfield introduced the principle of *immediate constituents*: any complex form can be fully described (apart from its meaning) in terms of the immediate constituents. The basic principle of the method is the division of each complex form into its two, lower-level, constituents (binary principle).

In linguistics, *immediate constituent analysis* or *IC analysis* is a method of sentence analysis that was first mentioned by Leonard Bloomfield.The process reached strategy for analyzing sentence structure in the early works of Noam Chomsky.The practice is now widespread. Most tree structures employed to represent the syntactic structure of sentences are products of some form of IC-analysis. The process and result of IC-analysis can, however, vary greatly based upon whether one chooses the constituency relation of phrase structure grammars (= constituency grammars) or the dependency relation of dependency grammar as the underlying principle that organizes constituents into hierarchical structures.

Given a phrase structure grammar (= constituency grammar), IC-analysis divides up a sentence into major parts or immediate constituents, and these constituents are in turn divided into further immediate constituents. The process continues until irreducible constituents are reached, i.e., until each constituent consists of only a word or a meaningful part of a word. The end result of IC-analysis is often presented in a visual diagrammatic form that reveals the hierarchical immediate constituent structure of the sentence at hand. Thesediagramsareusually trees. Forexample:
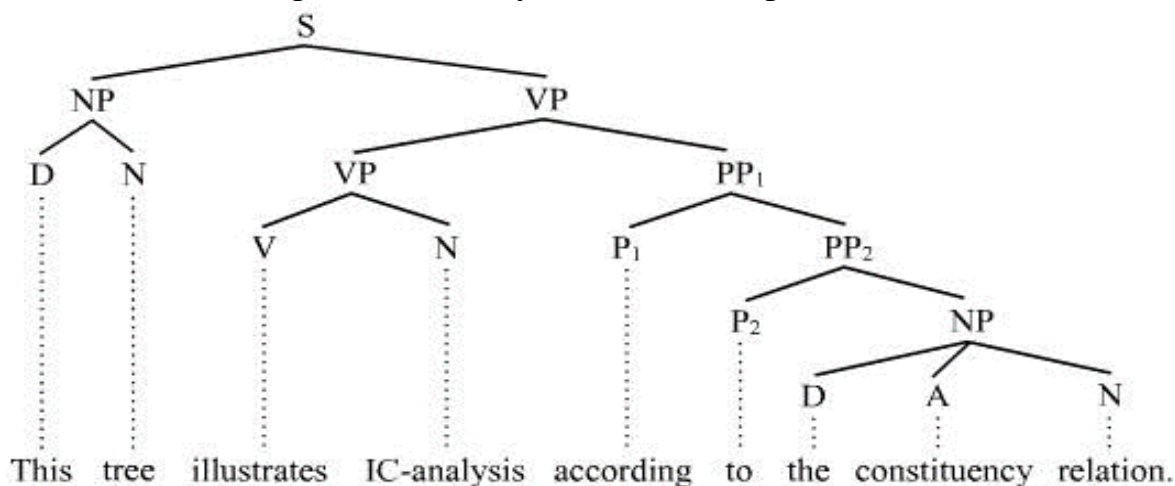
This tree illustrates the manner in which the entire sentence is divided first into the two immediate constituents *this tree* and *illustrates IC-analysis according to the constituency relation*; these two constituents are further divided into the immediate constituents *this* and *tree*, and *illustrates IC-analysis* and *according to the constituency relation*; and so on.

An important aspect of IC-analysis in phrase structure grammars is that each individual word is a constituent by definition. The process of IC-analysis always ends when the smallest constituents are reached, which are often words (although the analysis can also be extended into the words to acknowledge the manner in which words are structured). The process is, however, much different in dependency grammars, since many individual words do not end up as constituents in dependency grammars.The influence of Bloomfieldian structural linguistics declined in the late 1950s and 1960s as the theory of Generative Grammar developed by Noam Chomsky came to predominate.

Distributionalism

After 1945 a new generation of linguists emerged: **Bernard Bloch**, **Zellig Harris**, **Archibald Hill**, **Charles Hocket**, **George Trager**. They disagreed on many theoretical issues but shared commitment to some form of distrubutionalism. By the distribution of a linguistic element they mean the sum of the environments in which the element occurs. The crucial problem of distributional analysis was to decide whether forms occurring in the same environments were different (contrastive) or equivalent (nonconstructive).

Distributionalism, the method of linguistic analysis, was extended and refined by Zellig Harris and pioneered by L. Bloomfield and e. Sapir. Now it is called distributional analysis. As Z. Harris said, this is a 'methodological approach, of defining more freely combining new elements on the basis of occurrence-restrictions of old elements. Distributional methods disclose a detached pattern in language'.

Harris's grammar

Z. Harris distinguished within the total set of grammatical sentences in a particular language (for example, English) two complementary subsets: kernel sentences (the set of kernel sentences being described as the kernel of the grammar) and non-kernel sentences. The difference between these two subsets lies in non-kernel sentences being derived from kernel sentences by means of transformational rules. For example, 'The workers rejected the ultimatum' is a kernel sentence that may be transformed into the non-kernel sentences 'The ultimatum was rejected by the workers' or 'Did the workers reject the ultimatum?' Each of these may be described as a transform of the kernel sentence from which it is derived. The transformational relationship between corresponding active and passive sentences (e.g., 'The workers rejected the ultimatum' and 'The ultimatum was rejected by the workers') is conventionally symbolized by the rule $N_1 V N_2 \rightarrow N_2$ be V + en by N_1, in which N stands for any noun or noun phrase, V for any transitive verb, en for the past participle morpheme, and the arrow ($\rightarrow$) instructs one to rewrite the construction to its left as the construction to the right. (There has been some simplification of the rule as it was formulated by Z. Harris.)

This rule may be taken as typical of the whole class of transformational rules in Z. Harris's system: it rearranges constituents (what was the firstnominal, or noun, N_1, in the kernel sentence is moved to the end of the transform, and what was the second nominal, N_2, in the kernel sentence is moved to initial position in the transform), and it adds various elements in specified positions (be, en, and by). Other operations carried out by transformational rules include the deletion of constituents; e.g., the entire phrase 'by the workers' is removed from the sentence 'The ultimatum was rejected by the workers' by a rule symbolized as N_2 be V+en by $N_1 \rightarrow N_2$ be V+en. This transforms the construction on the left side of the arrow (which resulted from the passive transformation) by dropping the by-phrase, thus producing 'The ultimatum was rejected'.

Generativism

The mainstream of linguistics since 1957, the year in which Chomsky's *Syntactic Structures* appeared, has been dominated by **Noam Chomsky** (1928–). It is difficult to overestimate N. Chomsky's impact on both linguistics and contemporary ideas in general. It is common to speak of 'the Chomskian revolution'.

The most significant development in linguistic theory and research in the 20th century was the rise of generative grammar, and, more especially, of transformational-generative grammar, or transformational grammar, as it came to be known. Two versions of transformational grammar were put forward in the mid-1950s, the first byZellig Harris and the second by Noam Chomsky, his pupil. It was N. Chomsky's system that attracted the most attention. As first presented by N. Chomsky in *Syntactic Srtuctures* (1957), transformational grammar can be seen partly as a reaction against post-Bloomfieldian structuralism and partly as a continuation of it. In his opinion, linguistics should set itself the more modest and more realistic goal of formulating criteria for evaluating alternative descriptions of a language without regard to the question of how these descriptions had been arrived at. Within a few years, N. Chomsky had broken with the post-Bloomfieldians on a number of points. He had adopted what he called a 'mentalistic' theory of language, by which term he implied that the linguist should be concerned with the speaker's creative linguistic competence and not his performance, the actual utterances produced. He had challenged the structuralists' insistence upon the uniqueness of every language, claiming

instead that all languages were, to a considerable degree, cut to the same pattern – they shared a certain number of formal and substantive universals.

For him, the goal of a grammar is to account for the native speaker's 'competence', defined as what a native speaker knows of his or her language. Since speakers know, among other things, how to produce an infinite number of sentences, many of which never having been produced before (talked about as linguistic 'creativity'), an account of 'competence' would require the formal means to produce or generate these new sentences, hence a 'generative grammar'. A grammar was seen as a theory of a language. N. Chomsky focused on syntax, and in so doing, laid the foundation for explaining this 'creativity'.*A generative grammar* is a formal system (of rules, later of principles and parameters) which makes explicit the finite mechanisms available to the brain to produce infinite sentences in ways that have empirical consequences and can be tested as in the natural sciences. Generative grammar is a grammar in which a set of formal rules are used to generate or define the membership an infinite set of grammatical sentences in a language. Transformations were essentially rules for relating one syntactic structure to another.

N. Chomsky's approach is often called *'transformational-generative grammar'*. In N. Chomsky's theorizing about language, universals hold a central place. The primary task of the linguist, according to Chomsky, should not be to discover the structure of the language from a body of data; rather, the goals should be to describe and explain the knowledge of the structure of the language which the native speaker has. This shifted attention from actual behavior (or recorded data) to the system of knowledge that underlies the production and understanding of language, and, further, to the general theory of human language lying behind this knowledge. This was a radical reorientation of the field, rejecting the anti-mentalism of the Bloomfieldians and the anti-theorizing of the Boasians and Bloomfieldians.

The aim of linguistics is to go beyond the study of individual languages to determine what the universal properties of human language in general are, and to establish the "universal grammar" that accounts for the range of differences among human languages. The theory of grammar relies on certain general principles which govern the form of the grammar and the nature of the categories with which it operates. These principles are conceived of as universal properties of language. N. Chomsky attacked a standard view at the time that children are born with minds that are essentially 'blank slates' (the view of the behaviorist psychologists), that the human psyche is largely molded by the surrounding culture. N. Chomsky maintained that rather than being born blank slates, children have a genetic predisposition to acquire linguistic knowledge in a highly specific way. Language is extremely complex but children acquire it in a remarkably short period of time. The acquisition of language is relatively independent of intelligence – the language learning ability of dim children is not noticeably inferior to that of bright children; and language emerges at about the same time in children all over the world, uniformly regardless of language environment, culture, or ethnicity. Skill or ability seems to have nothing to do with it; however, for most other learned tasks, like roller-skating, piano-playing, etc., there are enormous differences from child to child.

Chomsky's grammar

N. Chomsky's system of transformational grammar, though it was developed on the basis of his work with Harris, differed from Z. Harris's in a number of aspects. It was

N. Chomsky's system that attracted the most attention and received further development. It comprised three sections, or components: the phrase-structure component, the transformational component, and the morphophonemic component. Each of these components consisted of a set of rules. In the following system of rules, S stands for Sentence, NP for Noun Phrase, VP for Verb Phrase, Det for Determiner, Aux for Auxiliary (verb), N for Noun, and V for Verb stem.

(1) S	→ NP + VP
(2) VP	→ Verb + NP
(3) NP	→ Det + N
(4) Verb	→ Aux + V
(5) Det	→ the, a, . . .
(6) N	→ man, ball, . . .
(7) Aux	→ will, can, . . .
(8) V	→ hit, see, . . .

(i)	S	
(ii)	NP + VP	by rule (1)
(iii)	NP + Verb + NP	by rule (2)
(iv)	Det + N + Verb + NP	by rule (3)
(v)	Det + N + Verb + Det + N	by rule (3)
(vi)	Det + N + Aux + V + Det + N	by rule (4)
(vii)	the + N + Aux + V + Det + N	by rule (5)
(viii)	the + N + Aux + V + the + N	by rule (5)
(ix)	the + man + Aux + V + the + N	by rule (6)
(x)	the + man + Aux + V + the + ball	by rule (6)
(xi)	the + man + will + V + the + ball	by rule (7)
(xii)	the + man + will + hit + the + ball	by rule (8)

This is a simple phrase-structure grammar. It generates and thereby defines as grammatical such sentences as 'The man will hit the ball', and it assigns to each sentence that it generates a structural description. The kind of structural description assigned by a phrase-structure grammar is a constituent structure analysis of the sentence.

Rules (1)–(8) do not operate in isolation but constitute an integrated system. The symbol S (standing for 'sentence') is designated as the initial symbol. It is necessary to begin with a rule that has the initial symbol on the left. Thereafter any rule may be applied in any order; in doing so, a derivation can be constructed of one of the sentences generated by the grammar. The following derivation of the sentence 'The man will hit the ball' will have been constructed:

S
  NP   VP

Det   N   V   NP

                Aux   V   Det   N

    The man   will   hit   the   ball
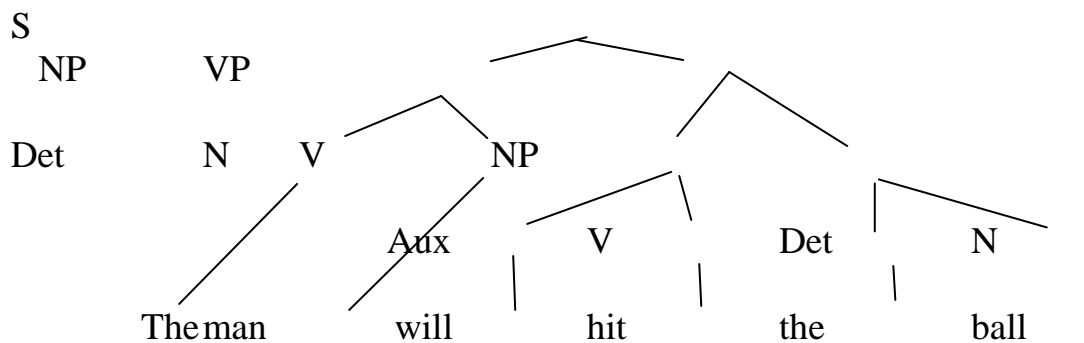
Many other derivations of this sentence are possible, depending on the order in which the rules are applied. The important point is that all these different derivations are equivalent in that they can be reduced to the same tree diagram.

If this is compared with the system of rules, it will be seen that each application of each rule creates or is associated with a portion (or subtree) of the tree. The tree diagram, or phrase marker, may now be considered as a structural description of the sentence 'The man hit the ball'. It is a description of the constituent structure, or phrase srtucture, of the sentence, and it is assigned by the rules that generate the sentence.

Each sentence in a language has two levels of representation – a deep structure and a surface structure. The deep structure represents the core semantic relations of a sentence, and was mapped on to the surface structure via transformations. When you encode this information, you create the representation that includes three pieces of information: a man,

a ball and action hitting. This information exists in the mind of the speaker as a 'deep' structure. If you transform this sentence into negative sentence or question, only surface structure changes but the deep structure remains the same.

Tagmemic, stratificational, and other approaches

The effect of N. Chomsky's ideas was phenomenal. It is hardly an exaggeration to say that there was no major theoretical issue in linguistics that was debated in terms other than those in which he chose to define it, and every school of linguistics tended to define its position in relation to his. Among the rival schools in the mid-20th century were tagmemics, stratificational grammar.

Tagmemics was the system of linguistic analysis developed by the U.S. linguist **Kenneth L. Pike** and his associates in connection with their work as Bible translators. Its foundations were laid during the 1950s, when K. Pike differed from the post-Bloomfieldianstructuralists on a number of principles, and it was further elaborated afterward. Tagmemic analysis was used for analyzing a great many previously unrecorded languages, especially in Central and South America and in West Africa.

Stratificational grammar, developed by the U.S. linguist **Sydney Lamb**, was seen by some linguists in the 1960s and '70s as an alternative to transformational grammar. Stratificational grammar is perhaps best characterized as a radical modification of post-Bloomfieldian linguistics, but it has many features that link it with European structuralism.

Paralinguistics

Para linguistics became an individual science in 1960s. As the most intelligible factor in language is not the word itself, but the tone, strength, modulation, tempo with which a sequences of words is spoken, everything that cannot be written. Paralanguage – literally 'alongside' language – is researched more widely since the term was first mentioned by **Archibald Hill** (1902-1992)in 1958. George Trager limited to 'vocal' factors. Paralinguistics deals with non-verbal means of communication that are included into speech and convey, together with verbal means meaningful information, a totality of non-verbal means of communication.

There are three types of non-verbal means: 1) Phonetic (tempo, loudness, timber, pauses, pronunciation); 2) Graphic (visualization, pictograms, way of writing letters, punctuation); 3) Kinesic (gesture, body language).

There are three types of paralinguistic means: 1) Universal; 2) Ethnolinguistic/national; 3) Individual.

There are three main functions of non-verbal means:

1.   Add additional information or complete message;
2.   Substitute omitted verbal components;
3.   Intensify the information provided by verbal means of communication.

Charles Hockett (1916-2000) was an American linguist and anthropologist. His work focused on detailed linguistic analysis, particularly morphology and phonology, and on the concepts and tools that facilitated such analysis. Hockett is most famous for defining what he called the design features of language.

The Russian and Ukrainian Linguistic Schools

The Moscow Phonological School came into being at the end of the 1920s with R.I. Avanesov, R.S. Kuznetsov, A.A. Reformatsky and others who were guided by the ideas of J. Baudouin de Courtenay. The basis of the theory of this school is a phoneme doctrine. Its most important tenet is the necessity of applying a morphological criterion to

determining a phoneme structure of language. For referring different sounds to one phoneme it is necessary and sufficient for the sounds to be in complementary distribution depending on phonetic positions and occupy one and the same place in one and the same morpheme (more exactly – morph) that is positional alternate.

The Petersburg (Leningrad) Linguistic School was organized by Baudouin de Courtenay's disciples L.V. Shcherba, E.L. Polivanovand their disciple V.V. Vinogradov and others. They understood language as the result of a collective thinking or as language activities but not as a static system.

The Leningrad Phonological School is a trend in the sound level study. Its founders were L. V. Shcherba, S. I. Bernstein, L. P. Zinder, M. I. Matusevich.

In 1912 L. Shcherba defined phoneme as a unit capable of differentiating words and their forms. The basic principles of this school's approach to sound units lie in striving to connect a linguistic nature of a phoneme with its role in man's speech activity.Phoneme, being a minimal sound unit is at the same time a unique unit as it is the phoneme that provides the use of material phenomena for the formation of meaningful language units.

L. Shcherba developed J. Baudouin de Courtenay's ideas of phoneme. Thedefinition of the phoneme given by Scerba, as the smallest general phonetic representation of the given language which is able to associate with the meaning representation and to differentiate words was of a semantic character. In this definition L. Shcherba emphasized the close connection between phoneme and meaning. His regard a phoneme as the smallest unit of a sound which serves to distinguish the significant units of language: words and morphemes.

The V.V. Vinogradov Linguistic School came into being in the 40s–50s of the 20th century. In V.V. Vinogradov's theory language study is focused on the word as the central unit of language system, on the one hand, and the text in all its complications, on the other. In the field of Lexicology V.V. Vinogradov elaborated the problem of lexical meanings of words, the phraseology doctrine as a specific branch of linguistics.

The Kharkiv Linguistic School is one of the trends of the 2nd half of the 19th century. Its representatives are O.O. Potebnya, D.N. Ovsyanniko-Kulikovsky and others. They studied language in wide cultural and historical context.The most significant achievements of the Kharkiv Linguistic School were connected with the investigations of professor O. Potebnya, who elaborated the theory of language origin and development, Historical Grammar, Semasiology, issues of interrelation of language and thinking, language and nation.

CHAPTER 3. Linguistics as a Science
The Discipline of Linguistics

We shall begin by defining *linguistics*. It is the scientific study of human language. Linguistics is scientific in the sense that the study of language must be subjected to the scientific processes of observation, data collection, formulation of hypothesis, analysis of data and formulation of theory based on the structure of the language. When we talk about language, we mean the human language, in contrast to other forms of communication such as animal communication.

An individual who engages in such a procedure of language study is called a 'linguist'. *Linguists* are professionals or language specialists who analyze any language, regardless of whether they speak the language or not. He or she develops a hypothesis, and

tests the hypothesis. The hypothesis has to be confirmed by subjecting the data to further tests. Then, the conclusions are integrated with the previous concepts. Linguists are also involved in other aspects of language development such as language planning, standardization, and language policies. They can collect data on languages that do not have written forms and propose letters of the alphabet (orthography) for such languages. This exercise forms the foundation for writing in languages.

Linguistics is the science of language(s). It is generally a **descriptive** discipline rather than a **prescriptive** one, which means that linguists do not lay down rules about how to use a certain language, but rather concentrate on describing the rules which (especially native) speakers seem to have internalised. Apart from this, there are various different ways of 'doing' linguistics. For example, we can concentrate on language as used at a certain point of time e.g. in 2018; this is called **synchronic** linguistics. Alternatively, we can look at language from a **diachronic** point of view, which involves analysing the development of a language during a certain period of time e.g. during Middle English, or in the 1950s etc. Language can be viewed at one point in time — *synchronically* — or over a period of time — *diachronically*.

Linguistics is a science which can either be studied in a **theoretical** or a more **applied** way. For example, someone may be interested in finding out exactly how questions are formed in English (= theoretical). Once the knowledge could be applied e.g. to language teaching, thereby (hopefully) enabling teachers and pupils to learn the language more effectively.

Linguistics is a micro-discipline within the macro-discipline which concerns itself with meaning as realized in icons and symbols, images and signs. This discipline which is technically called *semiotics or semiology* is definable as the science of signs. Thus, because linguistics concerns itself with language which is the essential contract that binds any society together, it has been called a social science. Linguistics has also been appropriated by the biological and physical sciences partly because human language is a bio-physical phenomenon and partly because linguistics uses some of the jargons of the bio-physical sciences.

Branches of Linguistics

Linguistics as a science covers various areas of human language which are usually discussed under two broad areas namely, micro-linguistics and macro-linguistics.

Micro-Linguistics

Micro-linguistics covers the basic components or constituents of a language. This is also referred to as theoretical linguistics. Theoretical linguists study the structural aspects of language under the broad label of grammar. Grammar is further divided into form and meaning. Under form is phonetics, phonology, morphology, and syntax while under meaning is semantics.

Linguistic levels

Within linguistics there are such levels as:

Object of study	Name of field	Size of unit
Language use	PRAGMATICS	Largest
Meaning	SEMANTICS	|
Sentences, clauses	SYNTAX	|
Words, forms	MORPHOLOGY	|

Classified sounds	PHONOLOGY	|
All human sounds	PHONETICS	Smallest

Phonetics concerns itself with the production and classification of speech sounds. This is a branch of linguistics that is concerned with the study of speech sounds - how they are produced (articulated), sent across (transmitted) and perceived (reception). In other words, phonetics accounts for how human beings generate speech sounds, the physical properties of the sounds and how they are received by the hearers. There are three areas of study in phonetics, and they are: articulatory, acoustic and auditory phonetics. Articulatory phonetics deals with the production of speech sounds. Acoustic phonetics deals with instrumental production of sounds, while auditory phonetics as to do with how sounds are perceived by the organs used for hearing, the ear and the brain.

Phonology concerns itself with the production and classification of speech sounds. Phonology is the study of how speech sounds combined to form patterns and systems. It helps us to know the combination of sounds that are permissible in a language. It is related to Phonetics in that phonetics supplies the data for phonology. A phonological account will show which sounds can make a difference in meaning of words. For example, /p/ and /b/ make a difference in the meaning of the following words in English: Park /pa:k/ Bark /ba:k/. In phonology, sounds that make a difference in the meaning of words are the significant sounds in a language and are known as phonemes. It is not only the sounds that can make a difference in the meaning of words; other features like stress, intonation and tone perform similar functions.

Morphology concerns itself with the identification and classification of meaningful units. This is the branch of linguistics that studies the internal structure of words and how words are formed in a language. Morphology accounts for word formation in languages. The basic unit of analysis in morphology is called the 'morpheme'. A morpheme is defined as the minimal meaningful unit of grammatical analysis. For example, the word 'unfaithfulness' can be broken into different units or morphemes as in Un + faith + ful + ness. The main word or the root morpheme is *faith.* This word is called a free morpheme because it can stand on itsown and have meaning. The other parts of the word (unfaithfulness) that are attached to the left (prefix) or right (suffix) of the root word that cannot stand on their own and have meaning are called bound morphemes. They have meaning only when they are affixed to the main word.

Syntax concerns itself with the identification and classification of stretches of meaningful structures and the rule underlying them. Syntax is the study of how words are arranged to form sentences. Just as minimal units of speech form the data for phonetics and phonology, and morphemes are the minimal units in morphology, the sentence, made up of phrases and words are the minimal units of study in syntax.The words in a language have to be arranged according to the rules of that language to make meaning. These rules are innate and internalized rules and constitute the knowledge that a native speaker has of his or her language.

Semantics concerns itself withexplaining the symbiosis that exists between sound and meaning. Semantics is the branch of linguistics that is concerned with meaning in language. The main reason for communicating is to make meaning. The goal of semantics is to develop theoretical framework of statements of fact and definitions on the basis of which meaning can be described.*Semantics* is related to both philosophy and logic.

Semiotics is the study of communication systems in general. *Sign language* is a common meansof communication among those who are deaf and can, if learned from childhood, approach natural language in terms of scope and flexibility.

There are two main components of meaning namely, lexical meaning and phrasal meaning. Lexical meaning refers to meaning of words in terms of their properties e.g. gender, animate, quantity etc. Phrasal meaning refers to meanings of word combinations.There are four recognizable types of meaning: *lexical* meaning, *grammatical* meaning, *sentence* meaning and *utterance* meaning which refer to the areas of derivational morphology, inflectional morphology, syntax and pragmatics respectively.

External meaning relationships involve *sense* (relationships between words) and *denotation* (relationship of word to what it signifies).There are various internal meaning relationships such *synonymy* (sameness of meaning), *antonymy*(difference in meaning), *hyponymy* (hierarchical order of meaning).

Different models for semantic analysis are available: *prototype theory*, where a central concept is taken as typical and less central ones are peripheral, and *componential analysis* which seeks to break words down into their component semantic parts.

Pragmatics is the study of language from the point of view of *usage*. It has various sub-formsdepending on the emphasis given by linguists, for instance it can be investigated from a strictly linguistic stance or with regard to social factors. **Pragmatics**, the study of how utterances are used in communicative acts, and the role played by context and non-linguistic knowledge in the transmission of meaning

Macro-Linguistics

Apart from dividing language into various tiers, one can study linguistics from different points of view. Here one is not restricted to a single level so one speaks of a linguistic area. Macro-linguistics refers to aspects of linguistic study which involve the application of the findings of theoretical linguistics to the analysis of language in use. It is also called Applied Linguistics, because it involves the application of linguistics in relation to other disciplines. The sub-fields that come under this label include: sociolinguistics, historical linguistics, mathematical linguistics, ethno-linguistics, psycholinguistics, computational linguistics, and clinical linguistics, etc.

Sociolinguistics

Sociolinguistics is the study of society on the way language is used. The main aim of sociolinguistics is to study language in its Social and Cultural context. This includes the study of language in a society or speech community; language varieties; and language functions.Sociolinguistics relates the differences observed in language use to the problems that arise from those social aspects. Examples include the study of how individual's pronunciations differ between groups that are separated by certain social variables such as ethnicity, religion, status, gender, etc. The variation of a language from one region to another is called dialect while variation of language among social classes is referred to as sociolects.

Historical Linguistics

Historical linguistics was developed in the nineteenth century. During this time, linguists were concerned with the historical development of languages. The aim of such investigations was to arrive at general hypotheses about how languages change over time, and therefore is also known as diachronic linguistics as opposed to synchronic linguistics which is non-historical linguistics. Historical linguistics did not originally develop as a

branch of linguistic study as it is today. It began as the core of linguistic research with its investigation into the historical development of English from Anglo-Saxon which is currently referred to as the Romance languages – French, Spanish, and Italian, which in turn originated from Latin. The two primary methods of research are the 'comparative method' and 'internal reconstruction'. In comparative method, the linguist examines data from languages for which it is possible to establish a historical relationship. In internal reconstruction, the linguist relies on diachronic data from within the particular language being investigated. The internal reconstruction is mostly used in those rare instances when a language appears to have no 'relations' with other languages. Through historical linguistics, languages are classified into families based on relationships with other languages.

Anthropological linguistics

Anthropology is a holistic science in that it can encompass every aspect of human society and culture in the present, and can trace human evolution and development stretching back into prehistory.There are two main branches of anthropology: 1) *Cultural or social anthropology* which studies living human societies and their cultural systems; 2) *Physical or biological anthropology* which is primarily concerned with human evolution at a much greater time depth.The first type of anthropology, *social anthropology*, has a linguistic dimension to it. It studies the use of language in different cultures and is concerned with how cultures reflect their specific features in the language or languages they speak. Linguistic anthropology can thus be seen as a superset to sociolinguistics is that it is concerned with large-scale differences.

The fundamental concern of anthropological linguistics is to investigate the relationship between language and culture. To what extent the structure of a particular language is determined by or determines the form and content of the culture with which it is associated remains a controversial question. Vocabulary differences between languages correlate obviously enough with cultural differences, but even here the interdependence of language and culture is not so strong that one can argue from the presence or absence of a corresponding cultural difference. Some of the major grammatical distinctions in certain languages may have originated in culturally important categories (e.g., the distinction between an animate and an inanimate gender). The *'Whorfian hypothesis'* (the thesis that one's thought and even perception are determined by the language one happens to speak), in its strong form at least, is no longer debated as vigorously as it was a few years ago. Anthropologists continue to draw upon linguistics for the assistance it can give them in the analysis of such topics as the structure of kinship. A later development, but one that has not so far produced any very substantial results, is the application of notions derived from generative grammar to the analysis of ritual and other kinds of culturally prescribed behaviour.

Ethnolinguistics

Ethnolinguistics is a field of linguistic anthropology which studies the language of a particular ethnic group. Ethnolinguistics is often associated with regions where ethnicity plays a major role in language description and status. It studies the way perception and conceptualization influences language, and shows how this is linked to different cultures and societies. An example is the way space is perceived and expressed in various cultures. In many societies, words for the cardinal directions East and West are derived from terms for sunrise/sunset.

Psycholinguistics

Psycholinguistics is the study of the psychological and neurobiological factors that enable humans to acquire, use, and understand language.The boundary between linguistics and psycholinguistics is difficult, perhaps impossible, to draw. So too is the boundary between psycholinguistics and psychology. What characterizes psycholinguistics as it is practiced today as a more or less distinguishable field of research is its concentration upon a certain set of topics connected with language and its bringing to bear upon them the findings and theoretical principles of both linguistics and psychology.

Psycholinguistics is concerned with the psychological mechanism underlying speech production and pereception. It also studies how children acquire their first language, speech perception, and loss of the ability to use and understand language. Modern research makes use of biology, neuroscience, cognitive science, and information theory to study how the brain processes language. There are a number of sub-disciplines; for example, as non-invasive techniques for studying the neurological workings of the brain become more and more widespread, neurolinguistics has become a field in its own right.

Psycholinguistics covers the cognitive processes that make it possible to generate grammatical and meaningful sentence out of vocabulary and grammatical structures, as well as the processes that make it possible to understand utterances, words, text, etc. Developmental psycholinguistics studies infants' and children's ability to learn language, usually with experimental or at least quantitative methods.

Language acquisition by children is one of the topics most central to psycholinguistic research. The term acquisition is preferred to 'learning', because 'learning' tends to be used by psychologists in a narrowly technical sense, and many psycholinguists believe that no psychological theory of learning, as currently formulated, is capable of accounting for the process whereby children, in a relatively short time, come to achieve a fluent control of their native language.

Speech perception is another important area of psycholinguistic research that has been strongly influenced by theoretical advances in linguistics and, more especially, by the development of generative grammar. It has long been realized that the identification of speech sounds and of the word forms composed of them depends upon the context in which they occur and upon the hearer's having mastered, usually as a child, the appropriate phonological and grammatical system.

Other areas of psycholinguistics that should be briefly mentioned are the study of *aphasia* and *neurolinguistics*. *Neurolinguistics* should perhaps be regarded as an independent field of research rather than as part of psycholinguistics. The neurolinguist addresses the research question: how is linguistic knowledge represented in the brain? We firmly believe that cognitive capacities are the product of structures in the brain. However, the direct study of the human brain is fraught with difficulties. Most obvious among these is the fact that ethical considerations forbid intrusive experimentation on human brains.

Clinical Linguistics

Clinical Linguistics is a sub-discipline of linguistics, it is the application of linguistic theory to the fields of Speech-Language Pathology. Speech language pathologists work on corrective measures to cure communication disorders and swallowing disorders.Clinical linguistics plays a key role in the description, analysis and remediation of communication impairment. The study of linguistic aspects of

communication development and disorders is also of relevance to linguistic theory and our understanding of language more generally.

Mathematical Linguistics

Mathematics is the science of patterns; knowledge is compressed by finding such patterns. Thus, mathematics compresses knowledge or information. *Mathematical linguistics* is the study of linguistics using mathematical methods of analysis. It covers broad areas of linguistics, probability theory, speech synthesis, speech recognition, computational linguistics (formal languages and machines). It focuses on the statistical and mathematical representation of information in texts; statistical and algebraic linguistics constitute two different areas of mathematical linguistics.

Computational Linguistics

Computational linguistics is an interdisciplinary field dealing with the statistical and/or rule-based modeling of natural language from a computational perspective. This modeling is not limited to any particular field of linguistics. Traditionally, computational linguistics was usually performed by computer scientists who had specialized in the application of computers to the processing of a natural language. Recent research has shown that human language is much more complex than previously thought, so computational linguists often work as members of interdisciplinary teams, including linguists, language experts, and computer scientists.

Machine translation remains the sub-division of computational linguistics dealing with having computers translate between languages. Some of the areas of research that are studied by computational linguistics include aided ***corpus linguistics***.

Corpus linguistics

A *corpus* is a collection of related language data which is compiled and analyzed linguistically. Such data can be synchronic or diachronic. In the latter case its consists of *texts*, in the former it could also contain *sound files* or transcription of speech.The advantage of a corpus is that it can offer sufficient attestations of a structure or word to allow linguists to make statistically reliable statements. Equally corpora can be used to disprove assumptions, e.g. about when a certain structure appeared, in what type of text, or with what author.A corpus can also be used for style analysis and may in some cases help to determine authorship by looking at recurrent patterns in the syntax or vocabulary of an author.One should also mention that in some instances corpora are not useful because they do not tell us what is or was not possible in a language.

Discourse analysis

Discourse analysis or studies, is a general term for a number of approaches to analyze written, vocal, or sign language use, or any significant semiotic event.The objects of discourse analysis (discourse, writing, conversation, communicative event) are variously defined in terms of coherent sequences of sentences, propositions, speech, or turns-at-talk. Contrary to much of traditional linguistics, discourse analysts not only study language use 'beyond the sentence boundary' but also prefer to analyze 'naturally occurring' language use, not invented examples.**Text linguistics**is a closely related field. The essential difference between discourse analysis and text linguistics is that discourse analysis aims at revealing socio-psychological characteristics of a person/persons rather than text structure.

Discourse analysis is concerned with the analysis of spoken language in sections larger than thesentence. The two main features for successful discourse are *coherence*

(based on semantic transparency) and *cohesion* (achieved through formal mechanisms such as sentence connectors and anaphoric elements).Discourse analysis has been taken up in a variety of disciplines in the humanities and social sciences, including linguistics, education, sociology, anthropology, social work, cognitive psychology, social psychology, area studies, cultural studies, international relations, communication studies, biblical studies, and translation studies, each of which is subject to its own assumptions, dimensions of analysis, and methodologies. Topics of discourse analysis include:

- The various levels or dimensions of discourse, such as sounds (intonation, etc.), gestures, syntax, the lexicon, style, rhetoric, meanings, speech acts, moves, strategies, turns, and other aspects of interaction;
- Types of discourse (various types of discourse in politics, the media, education, science, business, etc.);
- The relations between text (discourse) and context;
- The relations between discourse and power;
- The relations between discourse and interaction;
- The relations between discourse and cognition and memory.

A question many linguists ask is: 'Are there general principles which will determine the relevance or nature of the specification?'The ***ethnography of communication*** concerns itself with discourse strategies in cultures which differ considerably from each other.

Stylistics

Stylistics, a branch of applied linguistics, is the study and interpretation of texts in regard to their linguistic and tonal style. As a discipline, it links literary criticism to linguistics. It does not function as an autonomous domain on its own, and it can be applied to an understanding of literature. Sources of study in stylistics may range from canonical works of writing to popular texts, and from advertising copy to news,non-fiction, and popular culture, as well as to political and religiousdiscourse.

Stylistics as a conceptual discipline may attempt to establish principles capable of explaining particular choices made by individuals and social groups in their use of language, such as in the literary production and reception, the study of folk art, in the study of spoken dialects and can be applied to areas such as discourse analysis as well as literary criticism.

One of the aims of stylistics in this sense is to identify those features of a text that give it its individual stamp and mark it as the work of a particular author. Another is to identify the linguistic features of the text that produce a certain aesthetic response in the reader. The aims of stylistics are the traditional aims of literary criticism. What distinguishes stylistics as a branch of linguistics is the fact that it draws upon the methodological and theoretical principles of modern linguistics.

Applied linguistics

In the sense in which the term *applied linguistics* is most commonly used nowadays it is restricted to the application of linguistics to language teaching. Much of the expansion of linguistics as a subject of teaching and research in the second half of the 20th century came about because of its value, actual and potential, for writing better language textbooks and devising more efficient methods of teaching languages. Linguistics is also widely held to be relevant to the training of speech therapists and teachers of the deaf. Outside the field of education in the narrower sense, applied linguistics (and, more particularly, applied

sociolinguistics) has an important part to play in what is called language planning i.e., which language or dialect should be made the official language of the country and how it should be standardized.

Dialectology and Linguistic Geography

Dialect geography Dialect study as a discipline — dialectology — dates from the first half of the 19th century, when local dialect dictionaries and dialect grammars first appeared in western Europe. Soon thereafter, dialect maps were developed; most often they depicted the division of a language's territory into regional dialects. The 19th-century rise of nationalism, coupled with the Romantic view of dialects and folklore as manifestations of the ethnic soul, furnished a great impetus for dialectology.

The first dialect dictionaries and grammars were most often written by scholars describing the dialect of their birthplace or by fieldworkers whose main method of investigation was free conversation with speakers of the dialect, usually older persons and, preferably, those who showed the least degree of literacy and who had travelled as little as possible. Many of these grammars and dictionaries recorded dialectal traits that deviated from the standard language.

With the accumulation of dialectal data, investigators became increasingly conscious of the inadequacy of viewing dialects as internally consistent units that were sharply differentiated from neighbouring dialects. It became more and more clear that each dialectal element or phenomenon refused to stay neatly within the borders of a single dialect area and that each had its ownisogloss; consequently, maps of dialects would have to be replaced by maps showing the distribution of each particular feature. While sound scientifically, the preparation and compilation of such maps, called linguisticatlases, is a difficult, costly, and time-consuming job.

The most effective and thorough — as well as the most expensive,— way of presenting data in linguistic atlases is by printing the actual responses to questionnaire items right on the maps. Phenomena of linguistic geography, however, are usually represented by geometric symbols or figures at the proper points on the map or, even more summarily, by the drawing of isoglosses (linguistic boundaries) or by shading or colouring the areas of particular features.Only dialect atlases can furnish the complexity of data of the major dialectal phenomena in a multitude of geographic locations. The inventory of linguistic phenomena is so rich, however, that no one questionnaire can encompass it all. Moreover, the use of a questionnaire unavoidably brings about a schematization of answers that is lacking in spontaneity. For these reasons, other kinds of publications, such as dialect dictionaries or monographs based on extensive free conversation with speakers of local dialects, are complements to linguistic atlases.

*Social dialectology*It is a method for investigating thesocial variation of dialects; social variation, in contrast to geographic variation. Normally, speakers of one of the social dialects of a city possess at least some awareness of the other dialects. In this way, speech characteristics also become subjectively integrated into the system of signs indicating social status.

As a consequence of an individual's daily contacts with speakers of the various social dialects of a city, elements of the other dialects are drawn into his dialect. The collective result of such experiences is the spread of linguistic variables — i.e., groups of variants (sounds or grammatical phenomena) primarily determined by social (educational, racial, age, class) influences. There are intermediate stages of frequency between different

social groups and entire scales of transitions between different age groups, thus creating even greater variation within the dialect of an individual. The variables also behave differently in the various styles of written or spoken language used by each speaker.The study of variables is one of the central tasks of any investigation of the dialects of cities. Applying the statistical methods of modern sociology, linguists have worked out investigative procedures sharply different from those of traditional dialectology.

Social dialectology has focused on the subjective evaluation of linguistic features and the degree of an individual's linguistic security, phenomena that have considerable influence on linguistic change. Linguistic scientists, in studying the mechanism of such change, have found that it seems to proceed gradually from one social group to another. Specific methods for such investigation are being developed, as well as ways of applying the results of such investigation to educational policies.

Lexicography

Lexicography involves the documentation of words that form a vocabulary. Such a documentation of a linguistic vocabulary from a particular language is usually compiled in a dictionary. **Lexicography** is divided into two separate but equally important groups:

- **Practical lexicography** is the art or craft of compiling, writing and editing dictionaries.
- **Theoretical lexicography** is the scholarly discipline of analyzing and describing the semantic, syntagmatic and paradigmatic relationships within the lexicon (vocabulary) of a language, developing theories of dictionary components and structures linking the data in dictionaries, the needs for information by users in specific types of situations, and how users may best access the data incorporated in printed and electronic dictionaries. This is sometimes referred to as 'metalexicography'.

A person devoted to lexicography is called a **lexicographer**.

Cognitive linguistics

Cognitive linguistics takes an opposing position to the historically prominent position of Noam Chomsky and others in the field of generative grammar. Cognitive linguistics is closely associated with semantics. In its approach to semantics, it is distinct from psycholinguistics, which draws upon empirical findings from cognitive psychology, rather than underlying concepts, to explain the mental processes that underlie the acquisition, storage, production and understanding of speech and writing. Cognitive linguistics broadly breaks down into three main areas of study: cognitive semantics, cognitive approaches to grammar and cognitive phonology.

- Cognitive semantics, dealing mainly with lexical semantics, separating semantics (meaning) into meaning-construction and knowledge representation.
- Cognitive approaches to grammar, dealing mainly with syntax, morphology and other traditionally more grammar-oriented areas.
- Cognitive phonology, dealing with classification of various correspondences between morphemes and phonetic sequences.

Aspects of cognition that are of interest to cognitive linguists include:

- Construction grammar and cognitive grammar.
- Conceptual metaphor and conceptual blending.
- Image schemas and force dynamics.
- Conceptualorganization: Categorization, Metonymy, Frame semantics, and Iconicity.
- Gestureandsignlanguage.

- Linguisticrelativity.
- Culturallinguistics.

Related work that interfaces with many of the above themes:
- Computational models of metaphor and language acquisition.
- Dynamical models of language acquisition
- Conceptual semantics.

Cognitive linguists deny that the <u>mind</u> has any module for language-acquisition that is unique and autonomous. Although cognitive linguists do not necessarily deny that part of the human linguistic ability is innate, they deny that it is *separate* from the rest of cognition.

Ecolinguistics

It emerged in the 1990s as a new paradigm of linguistic research which took into account not only the social context in which language is embedded, but also the ecological context in which societies are embedded. Among main things, the challenge was to make linguistics relevant to the issues and concerns of the 21st century, particularly the widespread destruction of the ecosystems that life depends on. The field of Ecolinguistics has developed considerably, employing a wide range of linguistic frameworks and tools to investigate the foundations of unequal and unsustainable societies and contribute to social change. The Ecolinguistics Association, characterizesEco linguistics in this way:'Ecolinguistics explores the role of language in the life-sustaining interactions of humans, other species and the physical environment. The first aim is to develop linguistic theories which see humans not only as a part of society, but also as a part of the larger ecosystems that life depends on. The second aim is to show how linguistics can be used to address key ecological issues, from climate change and biodiversity loss to environmental justice'.

In this way, the 'eco' of Ecolinguistics corresponds to ecology in its literal sense of the relationship of organisms (including humans) with other organisms and the physical environment. There are two main areas of interest for Ecolinguistics in its literal sense. The first can be described as 'The Ecological Analysis of Language', and the second 'Language Diversity'.

The ecological analysis of language draws on a wide range of linguistic tools including critical discourse analysis, framing theory, cognitive linguistics, rhetoric and systemic functional grammar. Approaches such as environmental communication and ecocriticism have broadly similar aims and techniques to this form of Ecolinguistics.

Language diversity is part of Ecolinguistics because of the relationship between diversity of local languages and biodiversity. This relationship arises because of the ecological wisdom (or cultural adaptation to the environment) that is encoded in local languages. The forces of globalization and linguistic imperialism are allowing dominant language to spread, and replace local languages. This leads to a loss of both local cultures and the important ecological knowledge contained within their languages. One of the goals of Ecolinguistic research is to protect both cultural diversity and the linguistic diversity that supports it.

Translation

The sub-field of translation includes the translation of written and spoken texts across mediums, from digital to print and spoken. To translate literally means to transmute the meaning from one language into another. Translators are often employed by

organizations, such as travel agencies as well as governmental embassies. Translators are also employed to work within computational linguistics setups. Translation is also conducted by publishing houses, which convert works of writing from one language to another in order to reach varied audiences.

Language typology

Language typology involves the classification of languages according to their grammaticalstructure and not on the basis of genetic affiliation.There are four basic types: *analytic* (little or no morphology), *synthetic* (many polyfunctional inflections), *agglutinative* (monofunctional transparent inflections), *polysynthetic/incorporating* (extreme compression of lexical and morphological forms).

There would seem to be a *typological cycle* such that languages develop from analytic to synthetic, back to analytic and so on. A language can become analytic when it loses inflections as has happened in the history of English. Furthermore, some universals imply the existence of others and are hence called *implicational universals*.Language type involves a number of factors. Morphological structure is one but *syntacticorganization*is another. This covers a number of features andlinguists have noted that features with similar values tend to cluster together. A language which shows similar values for the various syntactic features is termed *harmonic*.

*Contrastive linguistics*is a relatively recent sub-discipline in linguistics which is concerned withthe comparison of two languages with the deliberate goal of indicating the pitfalls for language learners with an outset language X and a target language Y.In its orientation, contrastive linguistics is *synchronic* and does not consider possible genetic relationships between languages. There is a *theoretical* and an *applied* approach to the field which are concerned with outlining general principles and applying these in practical analyses respectively.

The main phenomenon which is considered in contrastive linguistics is *interference* which represents the use of structural features from the outset language in the target one. The simplest form of interference is substitution. Speakers also show over- and under-differentiation according to whether a feature, possible in the target language, is more or less frequent in the outset language and hence used more or less often by the second language speaker.Interference is found on all levels of language. For instance, on the sound level it represents a *foreign accent*. On the lexical level it is found in the many cases of *false friends*. In syntax it canlead to a not inconsiderable amount of misunderstanding if the structures produced cannot be processed by native speakers of the target language. It can also be found on the level of pragmatics where differences in discourse strategies can lead to disconcerting effects in the target language.

Interlinguistics

It is the study of various aspects of linguistic communication between people who cannot make themselves understood by means of their different first languages. It is concerned with investigating how ethnic and auxiliary languages (lingua franca) work in such situations and with the possibilities of optimizing interlinguistic communication, for instance by use of international auxiliary languages, such as Esperanto or Interlingua. These are languages that are created by an intentional intellectual effort, usually with the aim of facilitating interlinguistic communication, but there are also interlanguages that have arisen spontaneously. These are called *pidgin languages*.Most publications in the

field of interlinguistics are, however, not constructive, but rather descriptive, comparative, historic, sociolinguistic, or concerned with translation by humans or machines.

Semiotics

It is also called *semiotic studies* (not to be confused with the Saussurean tradition called *semiology* which is a part of semiotics). It is the study of meaning-making, the study of sign processes and meaningful communication.This includes the study of signs and sign processes, indication, designation, likeness, analogy, allegory, metonymy, metaphor, symbolism, signification, and communication.Semiotics is closely related to the field of linguistics, which, for its part, studies the structure and meaning of language more specifically. The semiotic tradition explores the study of signs and symbols as a significant part of communications. As different from linguistics, however, semiotics also studies non-linguistic sign systems.

CONCLUSION

You have been introduced to linguistics, language and their relationship. The various fields of linguistic study were also briefly introduced. Grammar of language is the main focus of linguistics study. It can also be examined from the perspective of other disciplines such as history, mathematics, anthropology, sociology, and psychology.**Linguistics** has been defined as the scientific study of language(s) which involves scientific processes of observation, data collection, formulation of hypothesis, analysis of data and formulation of theory based on the structure of the language.

The levels of linguistics are **intra-linguistic**. But there are aspects of linguistics which are **extra–linguistics**. These result from the interaction between linguistics and man in society or other disciplines: with the immediate context of usage (pragmatics); with post-literate society (sociolinguistics); with pre-literate society (anthropological linguistics); with literature (stylistics) with neurology (neurolinguistics); with computer science (computational or computer linguistics); with psychology (psycholinguistics). These are some of the branches of linguistics. When levels of linguistics interact with branches of linguistics, we have applied linguistics. Linguistics can be practiced qua (as a particular example of) linguistics or applied to human needs. The former is narrowly called theoretical or formal linguistics and the latter, more broadly called applied linguistics. **Applied linguistics** comprises second language learning and teaching, language planning, speech therapy, translation and interpreting.

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