F. M. BEREZIN

# LECTURES ON LINGUISTICS

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#### PREFACE

This book is based on a series of lectures read by the author to English-speaking students from various countries studying at the Maurice Thorez Moscow State Pedagogical Institute of Foreign Languages. During the lectures it became clear that students had little or no acquaintance with the general concepts of the science of language, not to mention the fact that they were completely ignorant of the contribution made by Russian and Soviet scholars to the development of linguistics. So the author made it his job to acquaint the students with the materialistic approach to the understanding of general problems of linguistics, on the one hand, and to give them an adequate knowledge of major linguistic phenomena as they are treated in Soviet linguistics, on the other.

The author is quite aware that the material in each lecture might have been presented more profoundly but he was limited by the aims of this book, which does not attempt to be a general introduction to the science of language, a task done by the Soviet books *Introduction to the science of language* by R. A. Budagov, *Introduction to linguistics* by A. A. Reformatsky, *Introduction to linguistics* by R. O. Shor and N. S. Chemodanov and others.

This book must be looked upon as an introduction to an introduction to linguistics. All the controversial problems now stimulating linguists everywhere have had to be excluded.

The English-speaking students of foreign languages faculties may use this book as a preliminary to getting down to reading about linguistics in the original and broadening their linguistic knowledge.

My debts in preparing these lectures have been so many that it would be impossible to name them all. References in the text in most cases are excluded.

The author takes the opportunity to acknowledge with gratitude the help received from friends and colleagues to whom he expresses his deepest thanks.

## Lecture 1

### WHAT IS LANGUAGE?

Interest in language, how it originated, how it works and develops, has existed from time immemorial. For a long time the word "language" was a general notion used to mean the entire communicative means of man. For many, this was the broadest way of regarding language. The Marxist understanding of the social nature of language is based on a correct understanding of the question of how language depends on and is related to society and what it means to the existence of society. Whatever earlier approaches to the nature of languages there have been, we realize now that language is a product of human society and can exist only in human society.

There is no language outside society. Language can be understood properly if it is studied in close connection with the history of human society. Language reflects the character, mentality and social activity of the people who use it.

Language is human and only human. The latest research has shown that some species of animals also communicate, but they do not talk in the sense in which we usually use this word. People can also use other means of communication, such as red lights, or flags, but these signs are interpreted into language. Language is the normal form and means of communication and it is determined by the social, economic and cultural history of the people speaking it.

To define language with precision is far less easy than, for example, to define "acid" or other chemical terms. This is because many scientific researchers are interested in language—philosophers, psychologists, logicians, sociologists, as well as linguists, just for a start.

As language is closely connected with thinking and is considered a vehicle of thought it has fallen under the scrutiny of philosophers. Logicians study the laws of thinking and their reflection in language. Language is of social character by its origin (as we shall see below) and thus draws the attention of sociologists. Many definitions of language have been made by different thinkers.

Here are some definitions of language that have been given by various scientists from several countries:

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."

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

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

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.

The 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 all these famous thinkers' definitions. Many definitions of language have been put forward, but those given above are enough to show that none of them are exclusive. 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.

All these definitions were influenced by various forms of idealistic philosophy.

The controversy in linguistics may be traced from an-

cient 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.

Ancient Greeks tried to explain the origin of language from the philosophical point of view. To be more exact, they did not deal with the problem of the origin of language but with the designation of the things which surrounded them. The ancient philosophers thought that a word must have a meaning either by nature or by convention. Either there was something in the nature of the thing described that made one particular word the right one for it, or there was no natural connection between the word and its meaning, and the thing was described by such-and-such a word only because a number of people had agreed on this meaning. These two different philosophical points of view may be called the natural school (Greek phussei "by nature") and the conventional school (Greek tessei "by convention"). Idealistic philosophers of ancient Greece like Pythagoras (about 571-491 B. C.) and Plato (427-347 B. C.) belonged to the natural school and held that language had come into being out of "inherent necessity" or "nature", which Plato called "spirit", while Democritus (about 460-370 B. C.), whom V. I. Lenin called the most brilliant representative of materialism in ancient times, and Aristotle (384-322 B. C.), 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.

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.

Dividing the philosophers of all time into "two great camps",—idealist and materialist,—F. Engels showed that allegiance to one of these camps depends upon a correct solution of the question: "...in what relation do our thoughts about the world surrounding us stand to this world itself? Is our thinking capable of the cognition of the real world? Are we able in our ideas and notions of the real world to produce a correct reflection of reality?"<sup>1</sup>

In Ludwig Feuerbach and the End of Classical German Philosophy, Engels declares the two main philosophic schools to be materialism and idealism. Materialism regards nature as primary and spirit as secondary; being is first, and thinking, second.

Philosophical materialism asserts that thinking, consciousness, being secondary in their character, nevertheless exist in reality in the same way, as different forms of movable matter. At the same time it indicates that just as one form of matter known as cerebrum stipulates the functioning of thought so this thought is accomplished in certain material form.

Marx pointed out that "from the start the 'spirit' is afflicted with the curse of being 'burdened' with matter, which here makes its appearance in the form of agitated layers of air, sounds, in short, of language."<sup>2</sup>

So, from the point of view of dialectical materialism secondariness of spirit, thinking, consciousness and primariness of matter is manifested in the fact that thinking, being closely connected with material phisiological processes, can occur and occurs only by and with the help of language.

Alongside with the philosophical problem of the interrelation between thinking and language Marxist-Leninist theory emphasizes the function of language as a kind of man's cognitive activity, as a means of transfer of experience, gained in the past, to the future generations. Thus, as far as the definition of language is concerned,

Thus, as far as the definition of language is concerned, only the materialistic viewpoint based on the theory of Marxism-Leninism, which grasps the most essential aspect of language, is correct. V. I. Lenin says, "Language is the most important means of human intercourse."<sup>3</sup>

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 be-

<sup>&</sup>lt;sup>1</sup> K. Marx and F. Engels. Selected works. Moscow, 1949, v. 2, p. 335.

<sup>&</sup>lt;sup>2</sup> K. Marx and F. Engels. The German ideology. Moscow, 1964, p. 41.

<sup>&</sup>lt;sup>3</sup> V. I. Lenin. Collected works. Moscow, 1964, v. 20, p. 396.

come clear if we analyse non-linguistic means of communication.

The transmission of meaning, the conveyance of significant concepts, may be realized not only by language, but also with sign-posts, the Morse code, gesture language and signal fires, and so on, i.e., by devices that have nothing to do either with spoken language or with its written counterpart. African natives, for example, use drums as a longdistance telephone. The same goes for the smoke signals of the American Indians.

Some non-linguistic forms of communication come close to spoken language. The whistling language used by the natives of Gomera, in the Canary Islands, who can communicate in it over very long distances (about six miles), is one of these.

Other kinds of non-linguistic means of communication come close to written language, and are supposed by some to have been its embryonic form. The "quipu", or "knots", used by the Peruvian Incas, for instance, had red ropes to symbolize soldiers, yellow ropes for gold, white ropes for silver, green ropes for grain, with a single knot signifying 10, two knots 20, a double knot 100, and so on. The messages conveyed by means of the "quipu" were so complicated that special officials called "quipucamayocuma", or "keepers of the knots" were appointed to interpret them

"keepers of the knots" were appointed to interpret them. A third important field of non-linguistic communication is gestures, which have no connection with either spoken or written language. Gestures accompany all our speech. American Indian plain tribes, for example, accompany language with gestures, strange to us, but quite intelligible to them: the hand, palm in, thumb up, is held just under the eyes to represent spying; a fist is clapped into a palm for a shot; two fingers imitate a man walking, and four the running of a horse. Some call this gesture language the "esperanto" of the primitive world.

Gesticulation as an aid to spoken language is universally used by all human communities on Earth, but to different degrees and with different symbolic meanings. Differences in the meanings of gestures are often striking, and are governed by social convention. To the Russians, for instance, a downward nod of the head means "yes", and a shaking of the head from side to side, "no". On the other hand, the modern Czechs express "no" by a downward jerk of the head.

The question why the language of gestures did not become

universal instead of spoken language may be explained by the fact that it occupies the hands, while spoken language leaves the hands free for other tasks; it also requires light and a clear view, while spoken language can be used in the dark and through obstacles.

We may say that systems of communication not based on speech, while extremely useful on special occasions, are generally inferior to spoken language as conveyors of meaning. Used side by side with spoken language, they can be good auxiliaries to it.

As we have seen, all these means of communication (called "sign-systems" in modern foreign linguistics) differ from each other both in their material form (sign-posts, signal fires, painting and so on) and in their structures and functions. But they differ from language to even greater extent. Some modern foreign 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.

Some Soviet linguists admit, that there are common features between language and other sign-systems. These common features are the following:

(a) they serve as a means of expression, conveying ideas or feelings;

(b) they are of a social character, as they are created by society with a view to serving it;

(c) they are material in essence though their material form is different (sound-waves, graphic schemes, the Morse code, and so on);

(d) 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 speciality. The development of language does not depend upon the will of the members of society. Each generation adopts the language it is given historically, and the development of language may be characterized as a historical process with its own objective laws.

To sum up. 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.

To answer the second part of the question, why is language the most important means of *human* communication, we shall consider the so-called "language" of animals.

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. Sound as the medium for this is common enough: crickets, for instance, call other crickets by noisily rubbing the leg against the body.

As for chimpanzees, it may be taken as positively proved that their range of communication is entirely "subjective", and can only express emotions, never designate or describe objects. Chimpanzees understand between themselves the expression of definite desires and urges.

Many desires are expressed by direct imitation of the actions desired. For instance, one chimpanzee who wishes to be accompanied by another, gives the latter a nudge, or pulls his hand looking at him and making the movements of "walk-ing" in the direction desired. One who wishes to receive

bananas from another, imitates the movement of snatching or grasping, accompanied by intensely pleading glances and pouts. Summoning another animal from a distance is often done by beckoning in a very human way.

Numerous investigations on monkeys have shown that the chimpanzee, for instance, obtains his object with the mutual understanding that exists between members of the same small local group. There is abundant evidence of this mutual understanding and solidarity. For example, when a member of a group of chimpanzees is punished with a blow, the whole group will set up a howl as with one voice. But they never do any common work: two apes may be similarly engaged, following a similar pursuit, in close proximity, but there is no co-operation between them.

It is generally agreed that the apes have so many phonetic elements which are common to human languages that their lack of articulate speech cannot be ascribed to secondary limitations. The chimpanzee produces sounds which vary greatly in quality and intensity. Some investigators believe that the chimpanzee is able to utter 32 words or elements of speech.

R. L. Garner, in his book *Apes and Monkeys*, has described the language of monkeys as a grammarless system of monosyllables. He claims to have learned some of their words, and to have used them successfully to communicate with monkeys from other parts of the world. He says that there are sounds, which are easily indentified but difficult to describe, such as that used to signify "cold" or "discomfort", another for "drink" or "thirst", another for "illness". There are, perhaps, a dozen more words, he continues, that can be easily distinguished.

Many people would be surprised to learn that there have been dictionaries of animal words in existence for a long time.

The deficiency in this respect is to be referred not to bodily but to mental limitations—namely that they cannot be induced to imitate sounds. Their imitative tendency seems to be determined chiefly by visual stimuli, their reaction to objective reality.

We should emphasise that animal cries are characterized by invariability and monotony. Dogs have been barking, cats miaowing, lions roaring and donkeys braying in the same way since time immemorial, while all languages evolve to some extent. 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 "...what do we find once more as the characteristic difference between the troupe of monkeys and human society?"-asks Engels, and he answers-"Labour!"<sup>1</sup> Marx in his Capital puts his finger on another difference between animal and man. "A spider carries on operations resembling those of the weaver; and many a human architect is put to shame by the skill with which a bee constructs her cell. But what from the very first distinguishes the most incompetent architect from the best of bees, is that the architect has built a cell in his head before he constructs it in wax. ... What happens is not merely that the worker brings about a change of form in natural objects; at the same time, in the nature that exists apart from himself, he realises his own purpose..."2

Alongside the classics of Marxism-Leninism, a great contowards solving this problem was made bv tribution I. P. Pavlov, the distinguished Soviet physiologist and psychologist. His discovery of conditioned reflexes and his description of the animal's new nervous connections with its conditions of life represent a great step forward in the development of the theory of reflexes. Pavlov regarded conditioned or temporarily acquired reflexes as a function of the animal organism specially adapted to achieve a more and more perfect equilibrium between the organism and its environment.

Pavlov said: "When the developing animal world reached the stage of man, an extremely important addition was made to the mechanism of nervous activity. In the animal, reality is signalized almost exclusively by stimulations and by the traces they leave in the cerebral hemispheres, which come directly to the special cells of the visual, auditory or other receptors of the organism. This is what we, too, possess as impressions, sensations and notions of the world around us, both the natural and the social-with the exception of the words heard or seen. This is the first system of

<sup>&</sup>lt;sup>1</sup> F. Engels. The part played by labour in the transition from ape to man. Moscow, 1952, p. 15. <sup>2</sup> K. Marx. Capital. New York, 1929, p. 169-170.

signals of reality common to man and animals. But speech constitutes a second signalling system of reality which is peculiarly ours, being the signal of the first signals. On the one hand numerous speech stimulations have removed *us* from reality, and we must always remember this in order not to distort our attitude to reality. On the other hand, it is precisely speech which has made us human... However it cannot be doubted that the fundamental laws governing the activity of the first signalling system must also govern that of the second because it, too, is activity of the same nervous tissue."<sup>1</sup>

These theoretical generalizations of Pavlov's revealed the nature of higher nervous activity and led him to the concept of the first and second signalling systems, of which he regarded the latter as peculiar to the human brain.

But it was labour alone that created a new element, the appearance of which marked the birth of fully-fledged man, namely, society. And language, a doubly important medium having a close relationship to thinking and an essential *social* function, makes man human and fundamentally distinguishes him from the animals.

That is why language is the most important means of human communication.

<sup>&</sup>lt;sup>1</sup> I. P. Pavlov. Selected works. Moscow, 1955, p. 262.

# THE ORIGIN OF LANGUAGE

The origin of language is hidden in the depths of antiquity. But even the ancient civilized peoples, driven by the thirst for knowledge, tried to answer the question: how did language originate? Man's search for the origin of language is deeply rooted. These inquiring spirits were driven by a desire to discover the entire history of language. As we have pointed out, the first impulse in Ancient Greece to understand the origin of language was based not on scientific research but on general philosophical premises.

The ancient Greeks made bold and persistent speculations on the origin, history and structure of language, and there were many legends among them on which language was the first to be spoken on the globe.

The Greek historian Herodotus (5th century B. C.) tells us that King Psammetichus of Egypt isolated two newborn infants to find out by their language which was the oldest nation on earth; when they began to speak, they uttered the word "bekos" which turned out to be Phrygian for "bread".

This was the first naive attempt to determine which was the earliest language.

In his dialogue *Cratylus*, Plato (427-347 B. C.) discusses 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 Epicurians and 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 problem of the origin of language was so contoversial that its discussion was forbidden at one time by several learned societies. La Société Linguistique de Paris prohibited in 1878 the submission of any papers on this subject at its sessions. Nevertheless, many profound thinkers have proposed solutions of their own to this problem.

All linguists are agreed that the problem of the origin of human speech is still unsolved. Theories have never been lacking, some traditional and mystical, others what we may call pseudo-scientific.

It was the German scientist Wilhelm Wundt in the nineteenth century (1832-1920) who 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.

Here are some of the pseudo-scientific theories of the past.

The "bow-wow" theory holds that language arose in imitation of the sounds occurring in nature. 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 "cocorico" to a Frenchman and "cucarecu" to a Russian.

The "pooh-pooh" theory holds that language consisted at first of ejaculations of surprise, fear, pleasure, pain, etc. It is linked with the "sing-song" theory, that language arose from primitive chants accompanying labour.

All the imitation theories are based on the assumption that there is a causal connection between the original words of language and the purely sensory impressions of the sounds of nature.

The theoretical impossibility of building a doctrine of the origins of language on the onomatopoeic theory (from the Greek *onomatopoeia* "making names") is easily proved. 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 theory of the priority of gesture language asserts that inward conditions and external objects and processes were initially indicated by a system of motor signs, i.e. by gestures.

There is no people on earth that even primarily, let alone exclusively, uses 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. The fact that the extremely primitive, mainly monosyllabic African Ewe language possesses greater clarity and immediate comprehensibility when used with gestures than words and sentence structures, tells us little about the priority of gesture over phonetic language.

From the point of view of practical life—and after all, that is what matters here—the unscientific theory of the priority of gesture language is really absurd, because this would have allowed communication only with people in the immediate neighbourhood, 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. According to some linguists, the two forms of expression went hand in hand from the beginning, supporting and supplementing each other, until sound language gained the upper hand and gradually pushed gestures into the background, without completely eliminating them. 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.

The German linguist Ludwig Noire (1829-1889) tried to explain the origin of language with reference to the labour activity of primitive man. He saw the origin of language in the rhythmical cries or sounds made by a body of men in the course of common work—such sounds as we hear from sailors drawing a boat or pulling at an oar.

But none of these theories give a materialistic solution to this question. Another interpretation was given by F. Engels in his unfinished work The Part Played by Labour in the Transition from Ape to Man, written in 1876. Materialism does not consider language an abstract creation of scholars or lexicologists but as something arising out of labour and practical needs of countless generations of Mankind. "Labour is the source of all wealth... But it is even infinitely more than this. It is the prime basic condition for all human existence and this to such an extent that, in a sense, we have to say that labour created man himself."1

After a long period of time, the apes "began to disaccustom themselves to the aid of their hands and to adopt a more and more erect gait."<sup>2</sup> This was the decisive step in the transition from ape to Man. Thus, the erect gait was the first premise for the birth of language and the development of consciousness.

But "the hand is not only the organ of labour, it is also the product of labour. Only by labour, by adaptation to ever new operations... has the human hand attained the high degree of perfection that has enabled it to conjure into being the paintings of a Raphael, the statues of a Thorwaldsen, the music of a Paganini...

The mastery over nature, which began with the development of the hand, with labour, widened man's horizon at every new advance. He was continually discovering new, hitherto unknown, properties of natural objects. On the other hand, the development of labour necessarily helped to bring the members of society closer together by multiplying cases of mutual support, joint activity and by making clear the advantage of this joint activity to each individual. In short, men in the making arrived at the point where they had something to say to one another. The urge created its organ; the undeveloped larynx of the ape was slowly but surely transformed by means of modulation in order to produce constantly more developed modulation, and the organs of the mouth gradually learned to pronounce one articulate letter after another."<sup>3</sup>

 <sup>&</sup>lt;sup>1</sup> F. Engels. The part played by labour in the transition from ape to man. Moscow, 1952, p. 5.
 <sup>2</sup> F. Engels. Op. cit., p. 6.
 <sup>3</sup> F. Engels. Op. cit., p. 9-11.

So neither onomatopoeic nor ejaculation theories can explain the origin of language; the first impulse was need for communication.

F. Engels portrays the general process of the development of man as an interrelation of labour, consciousness and speech.

"First labour, after it and then with it speech-these were the two most essential stimuli under the influence of which the brain of the ape gradually changed into that of man...<sup>1</sup> The reaction on labour and speech of the development of the brain and its attendant senses, of the increasing clarity of consciousness, power of abstraction and of judgement gave both labour and speech an ever-renewed impulse to further development...<sup>2</sup> By the cooperation of hands, organs of speech and brain, not only in each individual but also in society, human beings became capable of executing more and more complicated operations, and of setting themselves, and achieving, higher and higher aims."3

It may seem at first glance that Noire's theory is essentially materialistic because it is also connected with labour to some extent. But it differs from Engels's theory in that it considers that speech accompanied labour whereas Engels held that labour *created* speech. It is futile to ask whether man or language came into existence first. The two are inseparably interrelated; each presupposes the other.

The problem of the origin of language may be solved from one point of view alone, that of labour. It may be solved indirectly by determining whether such supposed human species as Homo neanderthalensis, Aurignacian man, Crô-Magnon man, etc., fulfilled the conditions which are necessarily linked with language.

The most important of these conditions was labourfirst, the preparation and gradual improvement of tools and implements. The making of tools suitable for labour and adapted to specific purposes presupposes language. Man can only construct tools appropriate to a given end if he has the capacity to control his activity together with that of his kind, with whom he had to communicate.

- <sup>2</sup> F. Engels. Op. cit., p. 14. <sup>3</sup> F. Engels. Op. cit., p. 20.

<sup>&</sup>lt;sup>1</sup> F. Engels. Op. cit., p. 13.

Trying to define the point in space and time where the human being appeared, F. Engels writes: "Many hundreds of thousands of years ago, during an epoch not yet definitely determinable, of that period of the earth's history which geologists call the Tertiary period, most likely towards the end of it, a specially highly-developed race of anthropoid apes lived somewhere in the tropical zone...<sup>1</sup>

In another of his works which we have referred to more than once, The Origin of the Family, Private Property and the State, F. Engels defines more precisely the point at which articulate speech appeared. He writes: "Man still lived in his original habitat, tropical or subtropical forests, dwelling, at least partially, in trees; this alone explains his continued survival in face of the large beasts of prey. Fruits, nuts and roots served him as food; the formation of articulate speech was the main achievement of this period."<sup>2</sup> (i.e. the lower stage of savagery—F. B.).

One important question must be touched on briefly in connection with the problem of the origin of language, that of an original language.

Like "the first man" and "the first nation", the first language is a fantasy, an unfounded hypothesis. There is no evidence at all, either historically or from comparative linguistics, for such an hypothesis. The assumption of a single original language (Ursprache) (monogenesis of language) presupposes one particular geographical area forming Man's original home. There are paleontological as well as geographical objections to this view. It is known that human remains from early prehistoric times are to be found in all parts of the globe. In addition, the fossil remains of diluvial hominids, regarded as transitional forms between diluvial anthropomorphs and modern Man have been found in nearly every continent. To cling to the hypothesis of an original home and an original language would force us to put the time of this prehistoric migration back in the early part of the diluvial period, and above all to establish the probability that the hominids taking part in this migration had a language, the supposed original language. But we know nothing of such a language, and there is little hope that

<sup>&</sup>lt;sup>1</sup> F. Engels. The part played by labour in the transition from ape to man. Moscow, 1952, p. 1. <sup>2</sup> K. Marx and F. Engels. Selected works in two volumes. Mos-

cow, 1949, v. 2, p. 169.

historical or comparative linguistic science will ever be in a position to uncover it. It would be more sensible to speak of several original languages (polygenesis of language), such as the primitive forms of Indo-European, Semitic, Malayan, and other languages which are not derivable from one another.

To our mind monogenesis and polygenesis are linked together from the beginning and determine the entire development of language.

While discussing the question of the beginning of speech and the interrelation between language and society and many other questions, scientists refer to observable facets of the contemporary speech of infants, the language of primitive groups, etc., to compare the observations obtained here with the earliest records and known historical and anthropological facts, and, basing themselves upon these comparisons, to make surmises of various degrees of plausibility and completeness.

But here we must be especially careful. The most savage of tribes to-day has advanced a long way beyond what primeval gibbering man must have been. These tribes have developed rituals and social customs. They can talk a language that, however wild it may sound to our ears, is highly complicated in comparison with what we imagine the earliest speech to have been. The languages of primitive peoples are rather confusing in their structure, but they are surprisingly suitable to the needs of the societies they belong to. Every language, whatever its structure, is highly efficient and there is no such thing as an inefficient language.

References to the language of an infant are of greater interest because 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). The language of a child cannot represent the language of our primitive ancestors, as each generation in any community learns the language of his parents and passes it on the succeeding generation; this process goes for many tens of thousands of years and brings about changes in language.

Nevertheless, theoretical considerations on the probable nature of primitive sounds are worth pointing out. The Dutch scholar Van Ginneken, for example, tried in the 1940's to develop a theory of the earliest speech sounds and languages on the basis of child psychology, linguistics and physiology. He envisages the earliest form of every phonetic language as similar to the babbling of children. The earliest oral language is supposed to have consisted originally of "clicks", sounds which are of the explosive rather than the fricative type. "Clicks" are made by the suction produced by two lips, or the tongue and the upper parts of the mouth or throat, etc. In Hottentot, Bushman, and some Bantu dialects, clicks are common sounds.

Later, clicks were transformed into consonants and words and in the course of further development acquired the melodic character of language through the introduction of vowels. According to Van Ginneken, the original clicking sounds were the basic phonetic material of the earliest spoken languages. This theory, supported by ample linguistic material, probably has some bearing on the phonetic structure of the earliest words; but it has nothing to do with the original language.

Van Ginneken thought that some consonants later resulted in larengeal sounds that replaced the adjacent consonants.

As far as the development of vowels in early language is concerned, a very interesting hypothesis was put forward by V. A. Bogoróditzky (1857-1941), the eminent Russian linguist, who wrote:

"Front vowels developed first of all, then middle vowels; first there were only monosyllabic words; then two-syllabic words appeared with certain simplifications in words with a greater number of syllables."

It has long been the dream of linguists to trace all languages back to a common source, and find out its phonetic system. Attempts to this have so far proved fruitless. The variability of languages in the course of time is such that, without any definite historical records of what languages were like five thousand, one thousand, or even three hundred years ago, classification is extremely difficult. The difficulties are aggravated by the fact that the re-

The difficulties are aggravated by the fact that the recorded history of languages belonging to different families varies in its time-span.

But whatever the difficulties, man's inquiring spirit will penetrate further and further into the depths of the past and with the help of other sciences it will attain a correct solution to the problem of the origin of language.

### NATIONAL LANGUAGES AND DIALECTS

Language came into being as a means of communication among members of a community joined together in hunting, getting food, generally producing their means of subsistence. The classics of Marxism-Leninism distinguish different stages of development in the prehistory of human society. The Origin of the Family, Private Property and the State F. Engels lays down the three main ages in the development of man: savagery, barbarism and civilization. We shall not analyse all these stages in detail, but just examine those which are closely related to language. Describing the lower stage in the development of human society-savagery (the infancy of the human race), Engels points 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. Engels points out that "in fact tribe and dialect are substantially co-extensive" and the tribe is identifiable by its peculiar dialect. At this stage "there also came a rapid increase of the population and dense population in small areas". In search for their living, the tribesmen had to go to other arable and pasture lands. Those sections that have severed relations with their tribe began eventually to speak a bit differently from their former kinsmen. 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. The nomadic way of life compelled separate families and tribes to be constantly in touch with each other, and the permanent contact between kindred tribes checked the centrifugal forces and prevented the languages from splitting completely. The Eskimo language (the number of Eskimos is less than 40,000) retains considerable similarity over its whole vast area of distribution. An Eskimo living in East Greenland would understand his counterpart from West Alaska even though they live some 5,000 km away from each other. The Evenk language is spoken by less than 13,000 people (it occupies 68th place among all the languages of the USSR) over an area of more than 3 mln. sq. km (2nd place after the territorial distribution of the Russian language) and although there are many dialects in it, its grammar and vocabulary are very similar.

On the other hand, the way of life of land-tillers and of people living in mountainous regions is very conducive to the divergence of language. New Guinea, where according to preliminary data there are 600 languages spoken, is a good example to show the extent to which such divergence can go. In the USSR, Dagestan is a region with 7 "big" nations (totalling 850,000 people) and over 20 small (whose total number is as little as 80,000 people). In the village of Khinalug (Southern Dagestan), where the Khinalug language is spoken (by about 700 people) each of the three sections of the village's population has its own peculiarities in pronouncing certain words.

In primitive community system there was no need for a common language to serve as a means of communication for hundreds of thounsands of people. True, at that stage of social development tribal alliances were made for military or political purposes. The union of 5 Iroquois tribes (Senecas, Cayugas, Onondagas, Oneidas, and Mohawkas), made in the middle of the 16th century, is a good example of such a federation. (They were later joined by the Tuskarora tribe.) The union of kindred tribes eventually became a formidable force. In their heyday, tribes that hardly num-bered 20,000 people wielded control over an area greater than that of France. However, even in the 18th century the North-American Indians did not reach a level of social development high enough to form a permanent state. Due to Anglo-French conflicts, the Five Nations of the Iroquois not only preserved their independence but succeeded in dominating the neighbouring Indian tribes. But the absence of an economic basis for the unification of the tribes and the low level of the development of social relations stood in the way of the birth of a single Iroquois language.<sup>1</sup>

The era of the appearance of the first slaveholding states of the Ancient East prepared the way for new languages to develop. A great part in the history of language was played by written language that was used as a means of state control (to estimate the taxes and duties of conquered peoples, issue laws, record the names of members of the government, carry out diplomatic correspondence, etc.). 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 Shumerian (beginning in the 4th millenium B. C.), Assyro-Babylonian (3rd-4th millenium 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. That gave rise to fundamental divergences between the literary and the spoken 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. In the history of Ancient Egypt, for example, there were at least four literary languages in succession: Old Egyptian (30th-23rd centuries B.C.), Middle-Egyptian (22d-16th centuries B. C.), New Egyptian (15th-12th B. C.) and Demothian (from the 7th B. C. until the 5th century A. D.). Either the new literary language replaced the old one completely, or a distinction was made between the use of language in different fields: the old literary language could prolong its existence as a language of religion and science. Some traces of this simultaneous application of two literary languages can be seen, for example, in the Bible, the oldest part of which is written in ancient Hebrew, and the second part in Aramaic.

<sup>&</sup>lt;sup>1</sup> Very interesting data on the life of the Iroquois tribes may be found in F. Engels's *The Origin of the Family, Private Property and the State (K. Marx and F. Engels.* Selected works in two volumes. Moscow, 1949, v. 2, p. 219-232).

The situation in Ancient Greece was quite different. There were several Greek dialects divided by linguists into four groups: Aheian, Aeolic, Doric and Ionian-Attic. Some of these dialects had literary traditions—Lesbian (the aeolian group) from the 7th century B. C. onwards, Monian from the 7th B. C., and Attic (the city of Athens) from the 5th century B. C.

The political and cultural role of Athens in Greece led to the predominance of the Attic dialect. When large numbers of Greeks began to move East after the conquests of Alexander the Great, it was this dialect that formed the basis of Koine, which gradually took the place of all the other dialects. Thus, the Greek Koine may be taken as an example of the common language, i.e. a living language which rises above dialect, spreads wider and wider and finally ousts the existing dialects completely.<sup>1</sup>

It should be noted that the notions of *literary language* 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. It goes without saying that a common language can only arise when the actual prerequisites for a geographical division of labour exist and when, therefore, the need appears for a common medium of communication used not by a narrow circle of civilized people but by the broad masses of the population. These conditions arose in the East Mediterranean in the 3rd century B.C.; but the subsequent development of the Eastern Roman Empire (Bysantine), the return to the natural economy, and the Arab and Turkish conquests contributed to the disappearance of this common language, which disintegrated into various dialects.

Latin had a similar fate.

The conquest of Italy by Rome brought Latin and the related Italian languages and dialects together. Latin won and became the common language in Italy, and later in other

<sup>&</sup>lt;sup>1</sup> On the rise of the Athenian State see *F. Engels.* The origin of the family, private property and the state. Selected works in two volumes. Moscow, 1949, v. 2, p. 232-248.

areas conquered by Rome. Since the 3rd century B. C. a Latin literary language developed, reaching its zenith in the 1st century B. C., having absorbed numerous Greek borrowings. It was recorded in Latin Grammars and has not changed since. Side by side with this classical Latin, vulgar Latin went on developing, as the common spoken language of Italy, Gallia, Iberia, North Africa and some parts of the Balkan peninsula. Brought to new countries and interacting with local languages, provincial vulgar Latin naturally began to diffuse, but as long as the Roman Empire existed, the literary language hindered this process. There was a radical change in this situation in the 5th century. The German invasion and the entrenchment of barbarian rule over the territory of the Emptre led to a decline in education which limited the use of classical Latin; even in the monasteries, the literary Latin that predominated was based on vulgar Latin. Vulgar Latin dissolved even faster. As early as the reign of Charlemagne (8th century) the first documents written in Romance languages, extensions of vulgar Latin dialects, can be found.

After the decline of the empire of Charlemagne the dialects continued to disintegrate. The 11th and 12th centuries were the turning point, because from this moment not only processes of differentiation began to prevail, but also those of integration (*integratio* (Latin) means to combine various parts into a single whole). Eventually (much later) the integration of the dialects into common languages was completed and the nucleus of the future language had already begun to form at that time. One of the first literary Romance languages was Provençal. Since the end of the 11th century, the wonderful poetry of the troubadours that became widely known outside the borders of the Provençal dialects (in Italy, Spain, etc.) was being created. The Provençal literary language towered above the dialects; it is even difficult to detect the features of a dialect in it. In the 12th century the first Provençal grammars appeared.

Under favourable conditions, the Provençal language could possibly have turned into a common language and killed the dialects. But in fact the circumstances did not allow this. There was no political centre in the South of France around which a Provençal nation could be pulled together. Right at the beginning of the 13th century its political independence was destroyed—after the Albigoy wars the Northern French landlords wiped out the Toulouse country and put an end to the economic prosperity of the region. After that the Provençal literary language was doomed and by the end of 15th century it had ceased to exist.<sup>1</sup>

The fate of the French language was quite different. Though the first works in this language appeared even in the 8th century, the prime of the French literature dated from the end of the 11th century (at that period the national epic The Song of Roland was composed). The dialects of France then had only slight differences and poets writing in their native dialects were easily understood by listeners in every corner of the country. By the 12th century the first signs of a particular ascendancy of the Ile-de-France dialect (with Paris as its centre) became noticeable. Non-Parisian pronunciation was already laughed at in the Royal Court and poets who had been born outside Paris tried to get rid of their regional expressions and accents. By the 14th century, the Paris dialect had completely conquered all the others in literature and was beginning to replace Latin in official documents. The rise of French literature caused the French language to become enormously popular throughout the country and beyond its borders: in Germany, Italy, and Spain, where a great many writers used the French language. The famous Venetian traveller Marco Polo, for example, wrote the story of his travels in French. The growing political influence of Paris and the establishment of royal authority over the landlords helped the French literary language, based on the *île-de-France* dialect to become the common language of the emergent French nation-the national French language. The most important event in this respect was the Ordinance of Francisc I (1539) that ordered the use furthermore in all official documents only of the French language, and never of Latin or regional dialects.<sup>2</sup> The expanding use of the literary language which had grown into a common language made it necessary to compile grammar books and dictionaries. The first attempts to work out a standard lan-

<sup>&</sup>lt;sup>1</sup> The Catalogne language, that was close to Provençal (a literary tradition since 13th century) seemed better able to survive: in spite of a strong influence from the Spanish language, it not only preserved its independence but also spread into Valencia and the Balear islands.

<sup>&</sup>lt;sup>2</sup> Up to 18th century, Latin continued to be used as the basic language of science and even now it remains the language of the Catholic church.

guage and to compile authoritative dictionaries were made. This was done by the French Academy, founded in 1635, whose first creation was the Academic Dictionary (1699), a prototype for similar dictionaries of other languages. While doing this useful work, the Academy could not go beyond its class limitations. The compilers were strongly biased against popular words and only entered words used by the nobility.

So side by side with the standardization of the written language, purism made its first appearance, a trend aimed at "cleansing" the language both of foreign words (in the case of the French language it was a question of ousting Italian and Latin words) and of "low" words, popular and dialect words. The purist tendencies of the French Academy threatened to hamper the development of the French (literary) language and to confine it to a limited section of people, making it unintelligible to the masses. The threatening crises were solved in the 19th century, when the strengthened role of the state, the economic unification of the country, and the spreading of literacy brought about a wide extension of the French literary language as a common language of the French nation; in other words, the speech of all French people was brought nearer to the standards of the French literary language. On the other hand, writers like Victor Hugo, Balzac, Flaubert, Zolà and others tried to bring the literary language closer to the popular spoken language. These two processes are still taking place to-day.

Whereas the French literary language had a long and turbulant history, following but rather lagging behind the spoken language, the Italian literary language was created "at once" by the efforts of two or three generations of great writers: Dante (1265-1321), Petrarch (1304-1374) and Boccaccio (1313-1375). After that it did not change much. The dialect of Florence provided the basis for the literary language. It was later modified by the efforts of numerous Academies which were founded in the 16th century in almost every large city.

Describing the part played by Dante in the formation of the Italian literary language, F. Engels wrote that Italy was the first capitalist nation. The decline of the feudal period of the Middle Ages, he said, and the dawn of the modern capitalist era are marked by one colossal figure—the Italian, Dante, the last poet of the Middle Ages and at the same time the first poet of the new epoch.

However, the political division of the country, which was a battlefield for unending clashes between German emperors and Popes, Frenchmen, Spaniards and Austrians, delayed the growth of the Italian literary language into the national language. It was not until the political unification of Italy in 1870 that the literary language became the language of the town population of all Italy although it met with strong resistance from local dialects, which are spoken by most of the population even to-day.

The formation of common languages in the North and East of Europe took place in still more complicated circumstances. At first, the geographical limits to the dialects of Germanic and Slavonic languages coincided with the areas inhabited by individual tribes. Later (during the development of feudalism) new dialect frontiers were formed, corresponding to the boundaries of separate feudal estates.

After the Great Migration of the Peoples (by the end of the 5th century) the dialects of the great tribes of Franks, Saxes, Bavars, Allemannes, Turings that had existed on the territory of modern Germany died out.

The rise of the Frankish kingdom, annexing the Allemannish lands and the eventual foundation of the Frankish empire of Charlemagne, uniting all those tribes, all helped to reshape the linguistic map of Germany. After the Frankish empire had disintegrated, all the large tribal dukedoms were transformed in the 12th and 13th centuries into a large number of feudal provinces isolated from each other and ruled by dukes, princes, electors, counts, bishops, etc. This political division went hand in hand with a linguistic one-dialects and *patois* grew in number, but in spite of this frag-mentation the people were still conscious of their unity, which was reflected in the common name of the continental Germans (ancient German-diutisc, modern German-deutsch). The first written records of German dialects began to appear in the 8th century and their volume increased with the passing of the centuries. In the beginning they were almost exclusively translations from Latin, but later original works of literature appeared, including fiction, law, history and commerce as its subjects. At the end of the 13th century, attempts were made to create a literary language dominating the dialects, but they were unsuccessful. It should be added that in the northern part of Germany in the 14th and 15th centuries, when the *Hanseatic Trade League* was at its peak, the common Low German language was created on the basis of the urban Lübeck dialect. It exercised a powerful influence on the development of the Scandinavian languages, but existed only for a short time, sinking later to the level of a German dialect.

A common German literary language had arisen by the end of the 15th century in the East of the country, in Saxony. It was only beginning to take root when a number of immigrants from all parts of Germany came there, so that there was a mixture of dialects. In this process, only the most widespread linguistic phenomena, characteristic of many dialects, could survive. Thus, the newly-formed Saxon dialect comprised simultaneously some traits of the Southern dialects (e.g., the diphthongization of the old long vowels, e.g. *Haus* instead of the ancient  $h\bar{u}s$  for "house", etc.) as well as some features of the Northern ones (e.g. the pronunciation of the final unstressed *-e*, uncommon in the South).

The transformation of this literary language into a common German language was greatly hastened by Martin Luther (1483-1546), the leader of the German Reformation, who translated the Bible into German, proving himself an outstanding master of style. Thanks to the printing machine, the Luther Bible reached the remotest corners of Germany and thus extended this single common language. But in Germany, as in Italy, political fragmentation hindered the final triumph of the common language over the dialects. The literary language was not standardized until rather late; for example, the final set of orthographic and pronunciation rules for the common German language was completed only at the beginning of the 20th century.

In some cases, standard languages have been created not by a process of gradual development out of one regional dialect, but more or less artificially through a mixture of features from several dialects.

After Norway was separated from Denmark (1814) their mixed language became the basis for "riksmål" (national language) or "bokmål" (bookish language), as it is now called. At the same time, the Norwegian linguist Ivar Åsen (1813-1896) made an attempt to unite all the local dialects into a single literary language which was called "landsmål" (country language) or the New-Norwegian language. These two languages (riksmål and landsmål) became state languages in 1884, landsmål being the language taught in popular schools and riksmål—the language of science, fiction, commerce, etc. The three language reforms (in 1907, 1917 and 1938) resulted in a partial unification of these two languages.

In his analysis of the emergence of capitalist nations in the world, Lenin pointed out that capitalism could not afford to have the language continually splitting, as had happened in the feudal Middle Ages. He wrote: "Throughout the world, the period of the final victory of capitalism over feudalism has been linked up with national movements. For the complete victory of commodity production, the bourgeoisie must capture the home market, and there must be politically united territories whose population speak a single language, with all obstacles to the development of that language and to its consolidation in literature eliminated.... Language is the most important means of human intercourse. Unity and unimpeded development of language are the most important conditions for genuinely free and extensive commerce on a scale commensurate with modern capitalism, for a free and broad grouping of the population in all its various classes and, lastly, for the establishment of a close connection between the market and each and every proprietor, big or little, and between seller and buver. "1

In Eastern Europe, where the Slavonic tribes were located, the first attempts to create a literary language date from the 11th century. The further development of a Russian literary language was complicated by the parallel existence of the Church Slavonic literary language which was closely related to Russian. This situation was quite unlike that of Western Europe, where Latin, the corresponding language of religion, law, and science, was unintelligible to Germans and not very clear to the Romance peoples. The Russian literary language began very early to become a common language for all Eastern Slaves. The first records of old Russian manuscripts, wherever they were written, had only slight differences from those written in Kiev. Dialect features were distinguishable only in some commercial documents.

The struggle and interaction between the Russian and the Church Slavonic literary languages resulted in the domination

<sup>&</sup>lt;sup>1</sup> V. I. Lenin. Collected works. Moscow, 1964, v. 20, p. 396.

of Church Slavonic in the 15th century, while literary Russian was retained only in ukazes, correspondence, memoirs, etc. Fiction and all the orthodox literature of that period were written in Church Slavonic.

The final standardization of the Russian literary language is linked with the name of M.V. Lomonósov, the founder of Russian linguistics, who laid down the rules of literary language in his *Russian Grammar* (1757). 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). The Russian poet Karamzín and his literary heirs, especially Púshkin, refined the Russian literary language still further.

As the centralized monarchy in Russia was formed comparatively early, the spoken language of the Moscow region (the basis of the Russian literary language) soon became a common language for the Russian nation. As the Russian language was spread over the whole of Russia, one cannot help being struck by the amazing unity of the Russian language, which continued to grow at the expense of all dialects.

The official literary languages of most countries are based upon one local dialect which assumed predominance either because it was spoken in the region where the capital was situated, or because its speakers gained political and military power, or because they set a cultural pattern for the entire country. Standard French is the original dialect of the Ile-de-France, the region surrounding the capital city, Paris. In Italy, where no political or military factor was involved, the predominance of Tuscan in its Florentine variety became established in the early 14th century, after Florence had given to Italy the mighty literary creations of Dante, Petrarch and Boccaccio. The national language of China is based mainly on the North Mandarin dialect prevalent in the region of Peking.

As was shown above, the ways in which literary languages were formed differed in different countries. Generalizing all these ways, K. Marx and F. Engels wrote: "Incidentally, in every modern developed language the naturally originated speech has been superseded, partly owing to the historical development of the language from pre-existing material, as in the Romance and Germanic languages, partly owing to the crossing and mixing of nations, as in the English language, partly owing to the concentration of the dialects within a single nation into a national language based on economic and political concentration."<sup>1</sup>

Modern times show the ever growing interference by the state in the processes of language formation, which are being influenced at the same time by school, radio, press, cinema. This interference can sometimes contribute to the consolidation of a national language.

Literary languages are being created under quite new conditions in the USSR. About 60 literary languages have been created for minor nationalities during the years of Soviet power, including Kirghiz, Chechen, Kabardin, Kara-Kalpak, Avar, and so on. Huge difficulties have been overcome. For example, the question arose, which dialect should be taken as the basis of the literary language. In some cases this dialect was chosen quite quickly, as for instance, the Sykhtyvkar dialect of Komi-Zyrjan, and the northern dialects of Kirghiz, while in others books, newspapers, and text-books were printed in all dialects (as in the present Nogai), while literary languages were only gradually built up (as in Udmurtia). Sometimes a literary language changed its basic dialect but this can only happen when it has not yet become a common language and its influence is still weak.

Let us recapitulate. The literary language begins at the same time as the written language becomes standardized. As it develops the literary language may diverge from the spoken language. This divergence can be overcome either by reforms carried out with the aim of uniting the literary and spoken languages, or by the "language revolution", i.e. the creation of a new literary language. 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. Thus, common language normally arises out of the literary language of a dialect. But sometimes a common language may spring up without a literary language. A striking example of this is the Indonesian language. There were a number of literary languages in Indonesia in the Middle Ages, such as Javanese, Sundan, Balinese, etc., while the national language was based not on

<sup>&</sup>lt;sup>1</sup> K. Marx and F. Engels. The German ideology. Moscow, 1964, p. 468-469.

any literary language, but on the spoken Malayan language, which was the means of communication for the inhabitants of different parts of the archipelago. After 1945, the language policy of the Indonesian government was intended gradually to replace all local dialects by Indonesian. From the 1930s onwards, the common Indonesian language became the literary language; so in this case, the formation of a literary language did not precede but followed the birth of the common language. The same tendency may be seen in embryo form in India, where side by side with the literary forms of Hindustani, the so-called "market" Hindustani is used as the means of communication in the towns of Northern and Western India. This embryonic common language is hindered by the ruling official literary language.

As we have seen, common languages are spreading more and more, and the languages of individual nations are becoming more monolithic all the time. But alongside the common languages, dialects continue to exist, while many languages in Africa, Asia and America exist only in dialects, without any common language. Every language of which we have sufficient knowledge is divided into several dialects. In *An Introduction to Linguistic Science*, the American linguist E. Sturtevant says that when the Natchez language of Oklahoma was first recorded a few years ago, it was spoken by one old man and one old woman, who used different dialects.

The question is often asked: what is the difference between a language and a dialect? Different answers may be given. One might answer that languages are officially accepted as national means of expression, while dialects are not.

From the literary standpoint, one might say that a language is a form of speech that has given rise to a literature, a dialect, one that has not.

Another possible reply would be that there is no difference between languages and dialects, languages being dialects which, for some special reason (such as being the speech-form of the area in which the seat of government is situated) have gained pre-eminence over the other dialects of the country.

There is no clear-cut reply to the question. Even linguists hesitate to answer it. In the 19th century, some linguists went so far as to assert that each speaker may be said to have a dialect of his own.

Once a unified language has been established, dialects tend to lose their social status, becoming what the French call *patois*, and yielding to the standard language. More and more members of the younger literate generations acquire the national language with fewer and fewer traces of the strong local peculiarities of their parents' speech. Among the chief factors nowadays that tend to destroy dialects and unify languages are education, radio, cinema, military service, trade, good networks of communications and transport, etc.

Nevertheless, in every language today dialects exist, and we shall say a few words about that.

As for American English,<sup>1</sup> some American linguists recognize three main varieties of dialect: Eastern, Southern, and Midwestern (or General American) with about 30, 40, and 110 million speakers respectively. Deeper examination, like that being carried on for the Linguistic Atlas of the United States, reveals the presence of at least twenty-four clearly-defined regional dialects, most of which are located east of the Mississippi. A few words pronounced by an American are enough to place him. *Greazy*, for example, would place the speaker south of Philadelphia, while *greassy* would place him north of Trenton. The pronunciation of r after vowels (*father* as against *fatheh*) distinguishes the Philadelphian from the New Yorker. Most American speakers distinguish in pronunciation between *horse* and *hoarse*, for and four, morning and mourning.

According to some authorities, the Southern drawl and the New England twang are in danger of disappearing, while Midwestern speech, or General American, is spreading. This is due to the migration of large numbers of Midwesterns to other parts of the country, imposing their type of speech. But this process is very slow.

The dialects of Britain are far more numerous and varied than anything we have in America. There are nine principal dialects in Scotland, three in Ireland, and thirty in England and Wales! Among the chief English dialects are: Cornwall, Devon, Somerset, Dorset, Gloucestershire, Oxfordshire, Shropshire, Lancashire, Westmoreland, Northumberland, Yorkshire, Lincolnshire, Norfolk, Cockney, and Sussex. Some of the English dialects still use *thou* and *thee* instead of *you*. *Thik* is Wexfordshire dialect for "this"; Gloucestershire uses *thak* 

<sup>&</sup>lt;sup>1</sup> Though nobody can deny the process of isolation of standard English in America, there is no agreement of opinion among linguists as to whether American English is a variant of British English, a distinct language or a dialect of British English.

for "that"; *hoo* is Yorkshire dialect for "she". In Sussex they use *scrump* for "apple", *butterfly day* for "bright day", and *drythe* for "drought". Ulster, in Ireland, uses *dayligone* for "twilight".

French has several dialects, including Picard, Norman, Lorrain and Walloon. The dialects of Italy are, in proportion to her population and area, probably the most numerous and varied of any language; they include Sicilian, Neapolitan, Roman, Tuscan, Venetian, and the Gallo-Italian dialects of north-western Italy. German has two great divisions, High and Low German, but each is subdivided into countless local varieties.

Russian has comparatively little variety of dialect, there being two main dialects in that language.

The Southern Russian dialect is characterized by strong  $\dot{a}kan'e$ , the habit of turning the unstressed o into a, the interchange ability of u/v, fricative g [ $\gamma$ ], and the hardness of z, s even when doubled: [tól'ka] (instead of the correct [tól'ko] "only". Thanks to the interchange ability of u/v, -vumay be reduced to u:  $d\acute{e}u\breve{s}ka$  instead of  $d\acute{e}vu\breve{s}ka$  "maiden"; -go- is pronounced [ $\gamma$ o], [ $\gamma$ a] ([ $\gamma$ aspadá] instead of correct [gospodá]).

The Northern Russian dialect is characterized by  $\delta kan'e$ : o retains its timbre when unstressed and is even used instead of a: [dol' $\delta$ ko] instead of [dal'ek $\delta$ ] "far", proper name [Ondr $\epsilon$ j], instead of [Andr $\epsilon$ j] and so on. It is only in this dialect that the contraction of vowels occurs as a regular feature: ae, oe, ee > a, e, e: [zna $\delta$ ], [d $\epsilon$ la $\delta$ ] instead of [zn $a \epsilon \delta$ ], [d $\epsilon$ la $\epsilon \delta$ ] "you know", "you do", etc.

The principal characteristic of its consonants is the occurrence of *tsókan'e* and *chókan'e*. The first is the use of [ts] for [ch]: [tsáj] instead of [chaj] "tea"; the latter is the use of [ch] for [ts] (as [ovchá] for [ovtsá] "sheep").

One important feature of the Northern Russian dialect is the use of a kind of article. It is generally reduced to -(o)t or -to: drugój-ot "the other", páren'-to "the lad".

Apart from regional dialects, in every country the language has special local features for individual cities.

While we are speaking about dialects, we must be clear about the so-called *social dialects*.

The most striking example of a social dialect may be found in the Yana language (an American Indian language comprising four dialects formerly spoken in neighbouring parts of the Shasta and Tehama counties in the northern part of California).

Differences in the use of Yana correspond to the sex of the speaker and person addressed. One form of speech is used by men addressing men; the other applies in any other situation: woman to woman, woman to man, or man to woman. Men use the female forms when addressing women. In quoting another person's statements, the form depends on the reported situation, so that in this case women may use male forms and men speaking to men may use female forms.

E. Sapir, a famous investigator of American Indian languages, lists the following differences in the male and female forms of the Yana language:

	Men's language	Women's language
"fire"	'auna	'auh
"my fire"	'auni ja	'au'nich
"deer"	bana	ba'
"grizzly-bear"	ť en na	t'et'

The differences between the two sets of Yana forms can be described by a fairly complex set of rules, but Sapir states some important differences as follows:

(1) With the noun, *-na* is used after vocalic stems only in male speech, but dropped in the female. After consonant stems, *-na* is retained in female speech too.

(2) In male speech the interrogative is marked by -n, and in female by lengthening (doubling) a simple vowel.

(3) The male form is *-naa*, the female, *-gaa*, for interrogative sentences requiring a negative answer.

(4) In female speech, the final syllable of a phrase ending in a single vowel is unvoiced, but voiced in male speech.

The Yana language includes a number of expressions specially used by women (or children); and alongside with these expressions it has special grammatical forms and peculiarities in pronunciation.

These special "women's languages" may be found in many parts of the world, and certain deviations in the pronunciation of women from that of men can be found in civilized societies.

Though ignoring social conflicts language is closely connected with society, it serves the needs of all classes and reflects all the changes which take place in it. It also continues to draw the community together. Under a feudal or autocratic system of government, like those ruling most countries in the 19th century, the language of the common people tended to be overlooked by the rulers who wanted to oppose themselves to the ordinary people by using a foreign language. There was no interest in the rapid extension of education. The Russian aristocracy of the early 18th and 19th century preferred to use French rather than their own language. Very often the middle aristocracy, the overwhelming majority of whom were illiterate and unable to hire good teachers of French, combined elements of French and Russian in their speech, which resulted in the so-called "Nizhni-Novgorod French", i.e., the Russian language seasoned with a few French words so scornfully mocked by V. I. Lenin in *Stop Spoiling the Russian Language*.

Sometimes certain accents, words and expressions are used by people mixing with the higher strata of society, reflecting social differences. In the USA, for example, [veiz] and [tə'meito<sup>u</sup>] are the more common pronunciation, and [va:z] and [tə'ma:to<sup>u</sup>], which are given in English-Russian dictionaries, are generally regarded as somewhat affected.

The London Cockney drops his h's at the beginning of words, saying "ouse" instead of "house", "eat" instead of "heat" and so on.

*Professionalisms*, is the name of special terms used by members of a professional group, such as railwaymen, drivers, musicians and so on.

Besides, in all languages there are slang expressions with a special vocabulary, commonly used by declassed elements. Slang, of course, borrows its sounds, grammatical forms and syntactical constructions from the common language.

Sometimes slang words turn into accepted good usage, though the rate at which they do so varies considerably. Former slang-words which to-day are words of legitimate status are "strenuous", "spurious", "clumsy" and "bogus".

Another feature of slang is their extremely high infant mortality rate. For every slang word that survives and becomes a part of the accepted vocabulary, there are dozens, perhaps hundreds, that serve for a short while and then fall out of favour.

One interesting variety of slang is the "secret" languages of children found all over the world. They represent a more systematic verbal distortion "Areway ouyway oingway outway?" ("Are you going out?") places the initial consonant at the end of the word, and adds "way"; if the word begins with a vowel, the "way" is added directly. Sometimes the trick is to break the vowel by inserting a "gad", as with "Whagadat agadare yagadou dagadoing?" ("What are you doing?")

In Germany there is the "*p*-Sprache" (*p*-language) of school children. "Ich habe ein Hut" ("I have a hat") becomes "Ipich hapabep eipepen Huput".

These "secret" languages are not original creations. They are normally founded on the language that the children already know.

But all these specific "layers" of language are limited in their usage and do not affect the norms of the standard language.

All these examples show the close relations which exist between language and society. But this problem is too complex to analyse it thoroughly as it goes beyond the scope of this lecture.

## THE COMPARATIVE METHOD

As we have seen, the human mind has been speculating for hundreds of years on the origin and relationship of languages. But the solution to all these problems was far from being correct because no linguistic material was available. It was not until the Renaissance that material was gathered for later investigators to work on, and they could not help being struck by the amasing similarity between some languages. Even in the sixteenth century, an Italian missionary called Filippo Sassetti had noted the similarity between the Italian numerals from six to nine — sei, sette, otto, nove, and their Sanskrit counterparts — śaś, saptá, astāu, náva. An attempt to classify known languages according to the resemblance between them was made by the thinker Scaliger in 1599, when he grouped the chief languages after their word for God, calling them respectively the deus-theos (i.e. Latin-Greek), gott (Germanic), and bog (Slavonic) languages.

This classification, however intelligent, might have continued blindly along these lines for ages, were it not for the discovery of Sanskrit.

In the history of language, the discovery of Sanscrit is often compared to the discovery of America in the history of Mankind. It altered at a single stroke the whole field of linguistic research.

William Jones, an English lawyer in India, wrote in 1786: "The Sanskrit language, whatever be its antiquity, is of a wonderful structure; more perfect than the Greek, more copious than the Latin and more exquisitively refined than either; yet bearing to both of them a stronger affinity, both in the roots of verbs and in the forms of grammar, than could possibly be produced by accident; so strong, indeed, that no philologer could examine them all three without believing them to have sprung from some common source, which, perhaps, no longer exists. There is similar reason, though not quite so forcible, for supposing that both the Gothic and the Celtic, though blended with a very different idiom, had the same origin with the Sanscrit."<sup>1</sup>

In these often quoted lines, Jones announced clearly and

<sup>&</sup>lt;sup>1</sup> Asiatic Research. 1788, 1, p. 422.

unequivocally the relationship between three of the great languages of antiquity—Sanskrit, Greek and Latin—and at the same time anticipated the reconstruction of that common source which, it seems, no longer exists—the parent Indo-European language itself.

This climax of language research in the 18th century heralded the full blossoming of philology in the 19th century. We have good grounds for saying that linguistics as a science was created in the 19th century, especially comparative linguistics.

The first of the great pioneers in comparative lingustics of the last century in Western Europe was the Danish Rasmus Rask (1787-1832). His major work Undersögelse om det gamle Nordiske eller Islandske Sprogs Oprindelse (Investigation on the Origin of Old Norse or Icelandic (1818) may be called a comparative Indo-European Grammar. In this book 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. Thus in Rask we find the whole kernel from which modern linguistic comparative methods have been developed.

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.

Rask examined all the languages bordering geographically on Norse 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 Rask drew up was quite correct.

Rask's great merit was not merely that his scheme of linguistic relationships was correct, but that his reasoning in substantiating them was soundly based. He was quite right to state in his book that in the comparison of languages the grammatical side should never be forgotten, for the coincidence of words was extremely unreliable.

Even without the use of Sanskrit, Rask hit upon the two sound shifts in the history of the Germanic languages. It should be added that he did not see the complete regularity of the development of sounds. For example, he did not look for the reasons for the exceptions to his main rules. It remained for later generations of linguists to make discoveries that introduced a new conception of regularity and "law" into the evolution of sounds.

It was spokesmen for the German linguistic tendency called the Young Grammarians who insisted in the 1880's on the remarkable regularity of sound-changes and proclaimed the principle that phonetic laws admit of no exceptions. If the law did not operate in some instances, they said, this was because they had been broken by analogy, e.g. by resemblances of sound or meaning which join different words together in the speaker's mind. The Young Grammarians believed that these blind fatalistic sound laws were purely destructive, breaking the systematic structure of a language until the irregularities caused by them had to be remedied by analogous formations. The two concepts of sound laws and analogy were considered enough to explain practically everything in the development of language.

Some years later objections were raised to inviolable sound laws theory, and linguistic facts made students admit the existence of other circumstances which made these sound laws more flexible. Exceptions to the rules were explained with reference to hitherto unsuspected determining factors. (See Verner's Law below.)

For example, we find in Modern English f as the representative of Middle English f in such words as fox, foot, full. But in the word vixen—"female fox"—we find v instead of f. Does this refute the theory of regular phonetic change? No, it does not if we find another explanation for the v in vixen, which is that vixen is borrowed from a dialect of Southern English speech in which f regularly became v.

Phonetic formulae testifying to the close connection between Indo-European languages are based upon close observation of phonetic relations, and there are regular sets of phonetic, morphological, and syntactical laws. For instance, in the field of phonetics comparison shows the following law: Indo-European p corresponds to Greek p, Latin p, Lithuanian p, and Armenian h or w. In Armenian, h appears where in Greek we find p: the Greek pyr "fire" is *hur* in Armenian; the Greek *pater* is *hair* in Armenian.

Changes like these may show the evolution of a single, or of a combination of sounds, from the earliest available records down to the latest innovations. One important figure in the development of comparative linguistics as a science is the German scholar Franz Bopp, (1791-1867) who wrote a book, *Über das Konjugationssystem der Sanskrit Sprache* ("On the Conjugation System of Sanskrit") (1816) comparing this subject with the conjugation of verbs in Greek, Persian, and German languages, and virtually creating the science of comparative linguistics; Sanskrit, supposed to be a more primitive language than Greek or Latin, became from then on the mainspring of linguistic research.

The merit of his book lies in its study of inflections; Bopp's main contribution was his systematic comparison of the inflectional endings of all the Indo-Europian languages.

He was dominated by one great idea, which he thought could be applied everywhere: the idea that every verb-form contains the concept "to be", and that in all verbal endings one may expect to find elements with this meaning. In all *s*-endings he sought the root *es-*, *s-* (Lat. *es-t* "he is", *s-unt* "they are"). Nowadays we cannot agree completely with this idea, but his essay is regarded as the beginning of comparative grammar.

It was the German philologer Jacob Grimm (1785-1863) who established the principle of the sound shift in the phonetic history of the Germanic group of languages or, as he called it, the Lautverschiebung in his book *Deutsche Grammatik*—("German Grammar") (1819). In his opinion, there were two sound-shiftings. The first occurred before the 4th century; the second had been completed by the 8th.

The first relates to the Low German group; the second, the High German.

These shifts may be shown by the following chart: Indo-European becomes in Low German and in High German:

bh	b	p(b)
dh	d	t
gh	g	k(g)
b	p	ff (f)
d	t	zz (z)
g	k	hh (h)
p t k	f th h	

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It will be observed, first, that the law describes the alteration only of consonants; second, that it deals with the transformation or evolution of these consonants from the parent Indo-European language into the Germanic languages. It has no reference to languages developed out of Latin or to any language outside the Indo-European classification.

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. For example, according to Grimm's Law, the Anglo-Saxon forms for "father", "mother" and "brother" should have been fæther, mothor, brothor, since the Latin pater, mater, frater have, as middle consonant t, which should give th. Why, then, has Anglo-Saxon only brothor where the th is regular; why are the other forms (fæder, modor) missing? Why does Anglo-Saxon show, instead of "fæther", fæder: medial d instead of medial th?

Verner pointed out that in Sanskrit the accents in the words for "father", "mother" and "brother" fell as follows: *pitár*, *mātár*, *bhrátar*. In the first two words the accent comes after the t; in *bhrátar* it comes *before*. The development of *bhrátar* was therefore regular: t shifted to *th* (Anglo-Saxon brothor, English brother). In cases where the accent occurred after the t, however, a further shifting took place; the t became d instead of *th*, giving the Anglo-Saxon fæ-der and modor. Verner's Law explained other peculiarities of Anglo-Saxon phonetics and grammar.

Russian linguists should also be mentioned among the founders of comparative linguistics.

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.

Lomonosov distinguished between "related" and "non-related" languages. In his rough 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.

Although he did not use the methods of comparative linguistics in his works, Lomonosov nevertheless created a basis for further investigations in this field in Russia. Russian scientists began to get interested in the comparative study of languages, and the academician P. S. Pallas edited a glossary of 285 words in two hundred languages of Europe and Asia in 1786 at the request of Empress Catherine.

Russian linguistics in the early 19th century is linked with the name of A. C. Vostókov (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. Beside this, he cleared up the problem of the so-called *juses* 

**A** , **X** and showed their relationship to the Polish nasals.

As we have said, the phonetic correspondences revealed by Rask and Grimm became the foundation of the comparative phonetics of Indo-European languages. But Vostokov's definition of the sound meaning of the Slavonic juses was no less important a discovery. He demonstrated that these juses were sounds dating from the period of common Slavonic languages. Vostokov's theory of the common origin of all Slavonic languages and the possibility of reconstructing all the languages of this group was not clearly stated and remained a mere hypothesis. Vostokov's merit is that he was the first scholar in the history of linguistics to show phonetic regularity in the sounds of related languages, anticipating Rask and Grimm.

A great contribution to comparative linguistics in Russia was made by F. I. Busláev (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 folk-lore.

Buslaev discussed the problems of comparative linguistics in connection with the history of Russian in his first book *On Teaching the Native Language* (1844), the methodological significance of which lies in the fact that Buslaev here 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. 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."<sup>1</sup>

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.

These Russian linguists contributed a great deal to the advance of the comparative method in the early 19th century. They applied this method to varying degrees, but they perfected it and managed to solve some important problems connected with the comparative grammar of the Slavonic languages.

We must explain that the comparative method tries to reconstruct certain features of the language spoken by the original single language community, on the basis of resemblances in the descendent languages. The purpose of this reconstruction is to find out the general laws governing the development of these languages, from their common source onwards. If two languages have one common feature, this

<sup>&</sup>lt;sup>1</sup> translated by me — F. B.

is more likely to have been inherited from the common ancestor of both languages than to have arisen independently in each of the two descendent languages, unless they are known to have been subjected to some common influence.

Now we must become acquainted with the concept of cognates which is a term used in comparative lingustics. The word means "born together", and it refers specifically to words which have survived in various languages from a common original language. There are dozens of examples, but let us take the word *mother*. This word certainly existed in Indo-European, probably in a form something like \**māter* (the asterisk before "mater" is intended to indicate that this form is reconstructed). Latin has preserved it intact. The Greek *meter* is not much different, nor Old Irish *māthir* or the Slavonis *mati*. The Proto-Germanic form must have been semething like \**modor*, judging from the appearance of the word in Old High German and Dld Norse; the German *Mutter* and the English *mother* have developed from the Old High German *muother* and the Anglo-Saxon *mōdor* respectively. So modern equivalents of "mother", like the French *mère*, the German *Mutter* and the Spanish *madre* are cognates.

While dealing with the reconstruction of the Proto (Common) Indo-European language (Proto- applies only to the ancestral language as reconstructed by the comparative method) we can rely only on those cognates from the related languages whose origin from this language is supported by sound laws and general tendencies in the development of their meaning, and the possibility of chance can be ruled out.

One plain example of chance is the English *bad* and the Persian *bad*, both of which have the same meaning, though the words are not related in origin. With a slight shift of sound, we have the Italian *donna* and the Japanese *onna*, both of which mean "woman", or the Russian *khoróshiy* and the Japanese *yoroshii*, both of which mean "good".

Vocabulary is therefore a very shaky criterion on which to base language kinship, though it may be observed that there are certain basic words, like names of family relationships and numerals, which are hardly ever borrowed.

Numerals are especially reliable in obtaining information about the close genetic kinship of certain languages within a linguistic group. This may be seen from the following scheme:

## Indo-European languages

Numeral	Sanskrit	Slavonic	Greek	Latin	German (Gothic)
2	dvāu	d(u)va	dýo	duo	twai
3	trayas	tri	treis	trēs	threis
4	catvāras	četyre	tettares	quattuor	fidwör
10	daša	desątь	deka	decem	taihun
100	šatam	sъto	he-katon	centum	hund

We can be certain that words similar in form are cognates if they express material phenomena like "night", "star", "snow", "wind", "thunder": animals like "hound", "goat", "ox", "steer"; parts of a house like "door", "timber"; parts of the human body like "ear", "tooth", "heart", "foot"; and most significant of all, words which express family relationships like "father", "mother", brother" and "sister". The following chart illustrates this:

Modern English	Sanskrit	Slavonic	Greek	Latin	German (Gothic)
father mother brother daughter	pitār mātar bhrātar duhitār	mati brat(r)ъ dъshti	patēr mētēr phrātōr thygátēr	pater māter frāter	fadar *mōdar brōthar dauhtar

But mere coincidences of related words are not enough to prove their close kinship. Jones pointed out as long ago as 1786 that grammatical forms had to be taken into consideration because only resemblances in the grammatical forms and the meaning expressed by them are absolutely reliable. If the same grammatical meanings are expressed in the same grammatical forms in the compared languages, we can be sure of their close relationship. Take, for instance, the verb "to take" in related languages, in the form "they take": *Russian Old Slavonic Sanskrit Greek Latin Gothic* berút berot bharanti pheronti ferunt bairand

This example shows that the endings *-ut*, *-qt*, *-anti*, *-on-ti*, *-unt*, *-and* are equivalent and come from the same source.

The importance of grammatical criteria is that words can be borrowed, but grammatical forms cannot. As far as the meaning of the reconstructed words is concerned, they need not coincide exactly; they can diverge according to the laws of polysemy, as the following example shows:

Sanskrit	kravis	Russian	krov'
Greek	kréas	Old High	
Latin	cruor	German	hrēo
Lithuanian	kraũjas	Anglo-Saxon	hrā
Old Slavonic	krъvь	English	raw

On the basis of these forms, it can be assumed that in the Indo-European parent language there was a root \*"kreu" which could assume different, though related, meanings in all these languages: "blood" in Russian, "meat" in Greek, "raw" in English.

Correct reconstruction helps us to understand the real etymology of words. We can confidently reconstruct the words in the parent language for "brother" and "sister" as \*bhrātēr and \*sueso(r). In the former, the first element bhrā—was a gradational variant of the verbal root \*bher—"to bear", "to carry". The second morpheme was, of course, the same -ter as in \*pə-tēr. In \*sue-sor the first component was the reflexive element meaning "one's own", and the second signified "female", seen also in Latin uxor or uksor "wife".

These short excursions into etymology should be enough to show the fascination of this research.

Engels appreciated the importance of the comparative method in the study of languages. He showed that "substance and form of one's own language, however, only became intelligible when their origin and gradual evolution are traced, and this cannot be done without taking into account, first, their own extinct forms, and secondly, allied languages, both living and dead."<sup>1</sup>

This important statement is of great significance for a proper understanding of the essence of the comparative method in linguistics. This method has been justified by discoveries made in the 19th century. On the basis of the comparative method it was suggested that the Latin nouns ager "tillage", and sacer "sacred" originated from the reconstructed forms \*agros and \*sakros. In 1899 a document was found

<sup>&</sup>lt;sup>1</sup> F. Engels. Herr Eugen Dühring's revolution in science (Anti-Dühring), Moscow-Leningrad, 1934, p. 358.

in Rome dating from the 6th century A. D., in which the suggested form *sakros* was found.

Some original forms calculated by eminent linguists in the 19th century by comparative method were discovered in the Hittite language in the north-east of Asia Minor at Boghazköy on the site of the prehistoric capital Hattusas, about eighty miles east of Ankara. Some cuneiform tablets in the Hittite language, discovered in Boghazköy in Asia Minor, were translated by the Czechoslovak scholar Bedřich Hrozný in December, 1915, who proved its linguistic affinity with Indo-European. A revolution was also effected in early Greek studies by the discovery in 1939 of clay tablets at Pylos in Messenia which were deciphered by Michael Ventris in 1952. This meant putting back the beginning of recorded Greek to a time long before Homer, perhaps as early as 1500 B. C.

It was suggested long ago with the help of the comparative method that the Greek words  $aichm\bar{e}$  "spear" and artokoópos "baker" arose from the forms \* $aiksm\bar{a}$  and \*arto $pok^{\omega}os$ . This was confirmed by the recently deciphered Krito-Micenian inscriptions.

The comparative method has been thoroughly applied to the reconstruction of Proto-Indo-European, Proto-Romance, Proto-Germanic, Proto-Celtic, and Proto-Slavonic. Rather less thorough use of the method has been made in reconstructing Proto-Semitic, Proto-Finno-Ugric, and Proto-Bantu. Work is well under way on the Malayo-Polynesian languages, Algonqian, and several other groups.

As we have stated, the comparison of languages which are believed to have been dialects of one language in the past, is done by what is known as the comparative method.

There is, however, another method of reconstructing the previous stages of a language when neither older texts nor related languages are known. A suitable term for this method is internal reconstruction, the theoretical foundation of which lies partly in synchronic, partly in diachronic linguistics. Synchronic linguistics (from the Greek *syn* "with" and *chronos* "time", i.e. simultaneity) deals with the study of language at the present moment, while diachronic linguistics (from the Greek *dia* "through" and *chronos* "time", i.e. of continuous time) concerns the study of language in its historical development.

Viewed synchronically, internal reconstruction tries to

obtain simple patterns by reducing the number of entities in each pattern to the minimum required in the interests of relevancy. For example, the interchange /a/-/e/,  $/o/-/\ddot{o}/$ ,  $/u/-/\ddot{u}/$ ,  $/ou/-/o\ddot{u}/$  in German nouns (sing.-plur.) are all instances of the pattern non-front vowel/front vowel.

The diachronic aspect of internal reconstruction proceeds from the fact that some complicated patterns have developed from simpler patterns at earlier periods. Thus, the interchange in English man—men, foot—feet is explained, i.e. reduced to a simpler pattern, when we know that it is due to the earlier presence of the ending -iz in some forms of the plural, and that an unstressed i caused a phonetic change in the preceding vowel, e.g. Germanic plural form \*manni changed to menn under the influence of the i.

But. on the other hand, these complicated patterns may be simplified to such an extent over the whole history of a language that the phonemes or morphemes may disappear without a trace. This simplification may be explained by the hypothesis that certain regular phonemic or morphemic changes have taken place in the past, so that gradually an earlier system can be tentatively reconstructed. For instance, it is assumed that the Proto-Indo-European language (PIE) had only one "syllabic *vocoid*" (compare with a *larengeal*). This conclusion may be drawn from three factors: (1) The PIE vowels *i* and *u* (with *m*, *n*, *r*, *l*) are interchangeable with *y* and w (*m*, *n*, *r*, *l*) and seem to have had only consonant functions originally. (2) The PIE  $\bar{e}$ ,  $\bar{o}$ ,  $\bar{a}$ , as well as a and the o which does not interchange with e are believed to have developed from e in the neighbourhood of larengeals. (3) The remaining PIE vowels e, o (and lengthened  $\overline{e}$ ,  $\overline{o}$ ) are interchangeable and seem to have developed from the same e as under (2). This so-called fundamental vowel will henceforth be written  $\ddot{a}$ .<sup>1</sup>

Borgström, who put forward this theory, says that internal reconstruction led to the following rule for the distribution of vowels, which he assumes to have been valid for a certain stage in PIE: in words containing two consonants, both were followed by a vowel; words with more than two consonants had a vowel after other consonant from the end, including the last one.

<sup>&</sup>lt;sup>1</sup> This example is taken from C. Borgström's article Internal reconstruction of Pre-Indo-European word-forms (Word, 1954, v. 10, No. 2-3, p. 278).

In the last decade the method of glottochronology has sprung up, better known as the lexicostatistic method, which envisages the measurement of linguistic change, particularly of the ages of language families without documented histories.

The basic premise of glottochronology is the fact that the basic vocabulary of human language tends to be replaced at a constant rate throughout its development. This approach is based on the principle stated by E. Sapir who said that the greater the degree of linguistic differentiation within the group, the greater was the period of time that must be assumed for the development of such differentiation.

If we could measure the degree of differentiation of two related languages, this would show the relative length of time that they had been diverging from their common ancestor: it would be glottochronology (from Greek *glotta* "language" and *chronos* "time").

The glottochronological method involves three principle variables: the rate of retention, the period of time and the proportion of coinciding test list equivalents in two languages that are related.

The formula for finding the rate of retention is  $t = \frac{\log c}{\log r}$ , in which t=the period of time between two stages of a language, c=the proportion of common forms, and r=the rate of retention. With this formula, it was found that the rate of retention is approximately 80 per cent per thousand years.

Glottochronology is the study of the rate of change in language, and the use of the rate for historical inference, especially for the estimation of the age of a language and its use to provide a pattern of internal relationships within a language family.

In principle, glottochronology should be applied only after the comparative method has prepared the ground, and it is of use mainly for languages with long historical stages of more than a thousand years.

Even in ideal conditions, glottochronological dates provide only a rough estimate of the most probable date when the related languages diverged.

Practically, different investigators give different data for the divergence dates of linguistic families. M. Swadesh, an American linguist who supports this method passionately, gives, for example, a time depth of 46 centuries since the minimum divergence between Aleut and south-west Greenlandic, considering this a unit of the fullest divergence in the family.

The exact calculation depends on many factors, such as, for example, differences in the judgment of cognates, differences in the material selected from within a family, etc.

Thus the divergence times revealed by the glottochronological method are not all accepted, since the use of this method has not been generally recognized. Beyond this, we may consider comparable those divergence times in which we have a good deal of confidence, and our degree of confidence must depend upon the circumstances. We can be more confident in divergence times that are confirmed by evidence from other sources. Swadesh was quite right when he wrote: "Lexicostatistical data must be coupled with other evidence, including that of archaeology, comparative etnography, and linguistic paleontology. The separate lines of study serve to verify or correct one another and to fill in details of the story."<sup>1</sup>

Many linguists attack glottochronology for basing itself on the false premise that, when languages begin to diverge,—the separation is sharp and complete.

Besides, it is doubtful whether the vocabulary of one language family changes at the same rate as that of another. What has been established for Indo-European languages cannot necessary be applied to other families. Then again, one should bear in mind that the test list of words taken for statistical calculation includes items of vocabulary which have been subject to various cultural influences.

We must be very careful in the application of mathematical techniques to the measurement of linguistic change. Some of them must be abandoned as groundless.

Only the comparative method that emerged at the beginning of the 19th century, now coupled with other methods which, taken together, help to penetrate deeper into the prehistoric past of the Indo-European languages, can be considered a really sound approach to the understanding of the history of language.

<sup>&</sup>lt;sup>1</sup> M. Swadesh. Lexicostatistic dating of prehistoric ethnic contacts. Proceedings of the American Philosophical Society, v. 96, p. 453.

## THE INDO-EUROPEAN LANGUAGE AND LANGUAGES

It has been estimated that there are more than 2,700 distinct languages to be found in the world to-day, and all these fall into linguistic groups which are part of linguistic families which may have appeared in different parts of the globe simultaneously.

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. It is therefore completely unscientific to establish any connection between racial origin and language.

It is often possible to show that languages are historically or genetically related, i.e. they descend from a common source, but when it comes to races we have no such evidence. We cannot say, for instance, that the Mongolian race means the same as the Mongolian languages. Furthermore, it is guite probable that no such thing as an Indo-European race ever existed. In the course of the migrations of ancient peoples, numerous linguistic and racial mixtures took place. The linguistic map of the world shows that many non-Indo-European peoples of Europe and Asia abandoned their own languages and adopted the Indo-European. The Basque language, which is spoken in the north of Spain and the south of France, resisted the assimilation of Indo-European in the past and is not genetically related to the Indo-European languages. On the other hand there is no racial difference between the Estonians, for instance, who speak a Finno-Ugric language, and the Letts, who speak a language of Indo-European origin.

So all the attempts to draw a parallel between race and language which were put forward at the end of the 19th century by chauvinistically-minded linguists were sharply criticized by progressive thinkers.

In trying to reconstruct the original state of any linguistic family, linguists face many difficulties, of which the main one is the absence of any recorded history of languages entering the family on the one hand, and the vast language migrations on the other. The tribal migrations which took place in the distant past completely obscured the linguistic state of antiquity and resulted in the disappearance of whole peoples and the emergence of new tribes with their own languages.

There are many examples of such migration. Some modern scientists, for instance, hold that the ancestors of the American Indians came from Asia and reached America by crossing the narrow and often frozen Bering Straits. The migration of these travellers, advancing in small groups, lasted over about the last 10 millenia B. C. Then the newcomers from Asia advanced to the south via the Cordilleras valleys. In the last thousand years B. C., Asian peoples occupied the whole of America, reaching its eastern and southern regions. The primitive peoples of America brought with them the languages which they had spoken earlier in Asia. The striking resemblances in the whole structural systems of Asiatic and American Indian languages suggest that they might once have had the same linguistic origin.

Polynesian languages seem to have spread in all directions from their centre of diffusion in Tahiti to Samoa, Hawaii, New Zealand, westwards to Madagascar and eastwards to Easter Island off the coast of South America.

A thorough examination of the vocabulary and grammar of African languages such as Youruba, Ibo and Ewe makes us think that over a very long period of time—perhaps several thousand years—they all developed out of the same original language, the bearers of which spread in different directions in successive migrations.

But in considering the great migrations and the prehistory of language, we shall take as an example the Indo-European family, because a lot of information has been obtained about this linguistic group through the thorough work of investigators in many countries over a long period of time.

The name given to this family of languages, Indo-European, is based on the fact that it covered most of Europe and extended eastward as far as northern India. The people speaking this original language lived a very long time ago, to be precise, about 2,500 to 2,000 B. C.

In the 19th century, it was usually held that the original home of the Indo-European people lay in Central Asia, and that successive waves of emigration from there carried the various members of the family to Europe. This is mainly to be explained by the confusion of the primitive Aryans with the much earlier Indo-Europeans, and by the importance attached to the oldest Indo-European language, Sanskrit.

Recent research has shown that it is possible to narrow down the territorial limits in Europe within which the cradle of the Indo-European languages is to be found. It is known with reasonable certainty that the Italian and Greek peninsulas were colonised from the North. The occupation of France and the British Isles by Celts from Central Europe occurred comparatively late (c. 500 B. C.). The Iberian Peninsula remained predominantly non-Indo-European until Roman times, and in modern Basque a trace of pre-Indo-European speech still survives. The Eastern limit is indicated by the fact that before the two Asiatic migrations (Tocharian and Indo-Iranian), Indo-European must have been bordered to the east by an early form of Finno-Ugric, and there is some evidence of contact between these two families in the primitive period. There is reason to believe that the original centre of Finno-Ugrian expansion lay between the Volga and the Urals, and this gives us the furthest boundary, beyond which Indo-Europian was not to be found in its early stages. This leaves the central part of Europe, extending from the Rhine to Central and Southern Russia, and the greater part of this area had long been occupied by various Indo-European dialects. Some linguists consider that it is impossible to define the original Indo-European homeland to limits any narrower than these.

What we know of Indo-European is based mainly on linguistic evidence. The Indo-European vocabulary reveals a great deal in this respect, which is not surprising when one considers that if a single word occurs in all branches of the Indo-European family, it can be safely assumed that it is descended from the original language. If this happens repeatedly in words of a certain type, we can assume that whatever those words describe was part of the original Indo-European language. Conversely, if certain kinds of words have no likenesses in the Indo-European languages, we can assume that the material circumstances which brought these words into being came relatively late. For instance, most Indo-European languages have common words for animals like bears and wolves, for plants like pine-trees, for phenomena like snow. But there are no common words for elephants, crocodiles, or palm trees.

According to these linguistic clues it would seem that the Indo-Europeans did not live near the water but in forests, because in all Indo-European languages we come across the same words for such trees as birches, willows, and oak-trees. They had domestic animals like the horse, dog, sheep, pig, goose. At some prehistoric time Indo-Europeans were apparently cattle-raising nomads and had a stone-age culture. Their instruments were probably of stone, but they made some use of metals. Their religion was probably pantheistic, with a Sky-father and an Earth-mother. We may conclude from their conquests that they were probably valiant warriors.

By studying the oldest customs of the oldest descendants of the Indo-European people, we may learn something about their social organisation. Thus, the use of cattle for money is found among the early Slavonic peoples, the Irish and the early Romans.

The comparative method allows us to state that Proto-Indo-European (PIE) was a highly inflective language. Nouns and verbs were richly varied in their paradigms. The former had no fewer than eight case-forms-nominative, vocative, accusative, genitive, dative, locative, oblative, and instrumental. Verbs made extensive use of many suffixes. Both nouns and verbs had distinct forms for the dual number. The forms of the pronouns already showed different roots, like *I*, *me*, and *we*, *us* in English. There were no separate inflexions for the passive, but only for the middle voice, which expressed the idea that the speaker was specially interested in the action denoted by the verb. As for word order, it was free as in Greek and Latin. Subject, verb, object might stand first; attribute preceded substantive, as in good man. Counting was based on ten; nevertheless traces of the duodecimal system remained. Whereas the numerals one to four were felt to function as adjectives, those above four were taken as nouns.

Shortly after 2,000 B. C. the Indo-Europeans had to make great migrations, being pressed by other tribes, and they began to migrate in different directions. Some of its members moved as far as south-east Asia, entering the Indian Peninsula through the Khyber Pass in the second millenium B. C., probably before 1,500 B. C. This group spoke a language which becomes known at a later stage as Sanskrit. On their way, these Indo-Europeans split up enough to leave several related languages scattered along their route, in Afghanistan, Baluchistan, and modern Iran.

One section seems to have gone directly westward, then down into the Balkan Peninsula, arriving at the coast of the Ionian Sea, giving us classical and then modern Greek. The Italic people pushed south from the Alps. The Proto-Germans followed the Celts and left their languages all over northern Europe.

It should not be forgotten that before Indo-European speech spread across Europe there were many earlier languages (e. g. Basque, Etruscan, and others).

It is certain that the Indo-European was not so monolithic a language as to be fully reconstructed by comparison. And as long ago as the 1880s, linguists admitted the existence of differences of dialect within the Indo-European parent language. At present we cannot do very much about these differences; but it is important to recognize their existence. A period of dialect divergence preceded the final separation of the Indo-European languages from their parent stock, and these dialects had created separate languages even before the period of the great migrations.

The question of the early Indo-European dialects has been the subject of considerable study and some useful results have been obtained. It is possible to form a fair idea of their distribution in the period preceding the emergence of separate languages. The earliest and best-known dialect distinction is that which separates the satam-languages from the centum-languages. These two groups are so named from the way they treat the Indo-European guttural [k] in the word for "hundred", which appears as an occlusive in one group of languages (Lat. centum, Gr. hekaton, Toch. känt, Goth. hund (h < k), whereas in another group of languages it corresponds to spirants or sibilants (Zend satem, O. Slav. su-to, Lith. šimtas, Skr. śatam). The languages involved in this change are Indo-Iranian, Balto-Slavonic, Armenian, and Albanian (possibly with ancient Illyrian, Thracian, and probably Phrygian). Since this feature is so widespread, and occurs without any variation of the conditions in any of the languages concerned, it must be assumed that the change took place in the Indo-European period, before the dispersal of the separate languages, and that it affected a group of related dialects within the Indo-European area.

Before the discovery of Tocharian and Hittite the centum-satəm division was commonly regarded as a division between Western and Eastern Indo-European languages, and it was customary to regard both the centum and the satəm languages as united groups. The division of Indo-European languages into these two groups was quite arbitrary and never altogether satisfactory, since for one thing Greek is cut off from the Western Indo-European languages by the intervening satəm-language Albanian, and apart from this it shows real resemblances not to them but to the satəmlanguages. But the discovery of those new languages, which we consider unmistakably centum-languages, made it quite impossible to speak of an East-West division any longer, and showed that there was no single centum-group.

On this basis, the well-known modern British linguist T. Burrow gives the following division of the original Indo-European dialects to replace the centum-satam division.

(1) A central group which can be equated with the satamlanguages.

(2) Four peripheral dialect groups surrounding the central group, namely:

(a) West Indo-European, consisting of Italic, Celtic and Germanic; (b) Greek, which, however, has special relations with the central group; (c) Eastern Indo-European which has survived as "Tocharian"; (d) Hittite and other Indo-European languages of Asia Minor which were the first to separate from the original Indo-European stock.

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 ten major branches and their main representatives are as follows:

Indo-Iranian, which was later subdivided into:

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 (the lan-

guage spoken by some three million people in the Lithuanian Soviet Socialist Republic), 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, the basis of a common and a literary language; (b) Ukrainian, called Little Russian before the 1917 Revolution, 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, chiefly in Yugoslavia, 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 in Czechoslovakia, 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.

Baltic and Slavonic are very closely related, though not 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 to-day 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, the USSR. 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) Provençal, 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 sub-group with Breton, spoken by a million people in Britanny and Welsh, spoken in Wales.

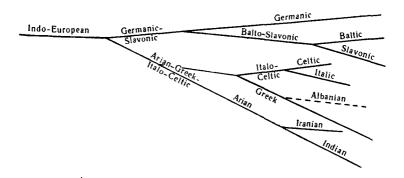
VII. Greek, with numerous dialects, such as Ionic-Attic, Achaean, Aeolic, Doric, etc. The literature begins with Homer's poems the *Iliad* and the *Odyssey*, dating from the 8th century B. C. Modern Greek is spoken in continental Greece, on the islands of the Ionian and Aegean Seas and by Greek settlements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

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.

Two main theories have been advanced concerning the break-up of the original language into those separate languages. One is the Stammbaumtheorie (the tree-stem theory), put forward by August Schleicher (1821-1868), a famous German Indo-Europeist of the last century, in his book *Compendium der Vergleichenden Grammatik der indo-germanischen Sprachen* ("Compendium of the Comparative Grammar of the Indo-European Languages") (1861). According to him, the original Proto-Indo-European splits into two branches: Slavo-Germanic and Aryo-Greco-Italo-Celtic. The former branch splits into Balto-Slavonic and Germanic, the latter into Arian and Greco-Italo-Celtic, which in its turn was divided into Greek and Italo-Celtic, etc. He gave the following scheme:



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 borne 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 the satəm-languages group, while Italic and Celtic have more in common with Germanic than Slavonic.

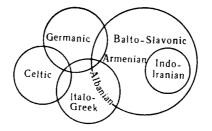
Another weak point of Schleicher's theory is that he assumed the Indo-European parent language to be monolithic, without any variety of dialect. At the same time, the process of the formation of language families is oversimplified in this theory, because he left out of account the fact that side by side 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, Iohannes Schmidt (1843-1901) argued in his book *Die Verwandtschaftsverhältnisse der indo-germanischen Sprachen* ("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.

He suggested that dialect A has some features in common with dialects B and C, others with dialects C and D but not with B, that dialect B, on the other hand, shares some phenomena with dialects C and D, but not with dialect A, etc.

This theory may be illustrated by the following diagram:



Schmidt was right to assume that the relationship between Indo-European languages could not be portrayed by means of a family tree. He cleary 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.

Two major members of the family which were discovered in the present century, are missing in these schemes. They are:

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, which for convenience are termed A and B.

XI. Hittite, which survives in cuneiform tablets recovered from Boghazköy 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 Bedřich Hrozny 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 satəm-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.

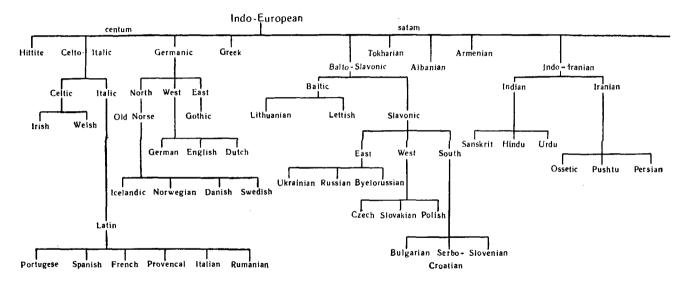
XV. Osco-Umbrian, Italic dialects closely related to Latin, and commonly grouped with it under the common name Italic.

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. In addition there is the so-called Hieroglyphic Hittite, the decipherment of which is now fairly advanced, and which is considered to be of Indo-European origin, and Carian, the decipherment of which has been recently done by the young Soviet linguist V. Shevoróshkin.

What has just been said may be summed up on the following diagram:

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Linguistic evidence shows that close contact existed between the dialects of Indo-European. From the point of view of vocabulary, for instance, Indo-Iranian shared with Baltic and Slavonic a considerable number of words which may be found only in these languages and they supply important clues of the connection between these two linguistic families: the Sanskrit word *švit* "to be bright, white" has its cognate in the Old Slavonic language in the form of *svitěti* "to dawn".

Slavonic and Indo-Iranian coincide in changing s to  $\check{s}$  in contact with the semi-vowels i and u, the vibrant r and the velar occlusive k. Slavonic shows special affinities with Iranian in its use of the word  $Bog\check{u}$  both for "god" and for "grain" or "wealth". Some common grammatical elements may be found in Balto-Slavonic and in Germanic languages; they share the element m in the Dative and Ablative cases (Old Slavonic  $vl\check{u}kom\check{u}$ , Gothic wulfam "with wolves") while in Sanskrit the element bh appears here (Sanskrit vrkeb-hyas has the same meaning).

During this period the contacts between languages were so wide that it was not only languages in the same family that had common elements, but non-Indo-European languages borrowed words from Indo-European languages too: for example, the Finno-Ugric *mete* "honey" was borrowed from the Sanskrit *madhu*, Finno-Ugric *nime* "name" has its cognate form in the Sanskrit *nāman*.

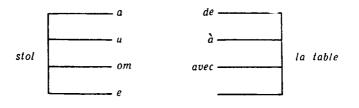
The prominent Russian linguist A. A. Shákhmatov showed that the earliest Finno-Ugric borrowings from their neighbours in south Russia show common Aryan rather than Iranian traits.

The study of close linguistic relations between the dialects of the Indo-European parent language is well under way now and the decipherment of newly discovered languages will contribute to the solution of this problem.

## THE MORPHOLOGICAL CLASSIFICATION OF LANGUAGES

It was observed long ago that the vast majority of world languages may be classified by various approaches. From the grammatical point of view, the most familiar is the morphological classification based on the structure of a word. Comparing the conjugation of the Russian word *stol* "table" (nom. *stol*, gen. *stolá*, dat. *stolú*, acc. *stol*, instr. *stolóm*, prep. *stolé*) with that of the French word *la table*, one sees straight away that there are no corresponding forms in French. The relations between words in French are expressed by means of prepositions: gen. *de la table*, "of the table", dat.acc. à *la table* "to (on) the table", and so on. This is the situation in English, too.

So languages like Russian, in which the relations between words in a sentence are expressed by flexions are called *flexional* or *synthetic*. The French and English languages are *analytic*. The relations between these two types of language were illustrated by the eminent Russian philologist N. Kruszéwsky (1851-1887) as follows:



Flexional languages

Analytic languages

N. Kruszewsky wanted to emphasize that the beginning of a word (the perpendicular line) in flexional languages does not change while its case-endings (parallel lines) are different; while in analytic languages the root of the word (the perpendicular line) is the same, and grammatical relations are expressed by prepositions (parallel lines).

But this does not mean that one group of languages is purely flexional and the other purely analytic. In flexional languages we sometimes observe analytic tendencies and vice versa. In no single language do we find either synthetic or analytic tendencies manifested purely and consistently. It is a relative question. Russian is synthetic in comparison with English, but if we examine it, we can certainly find many analytic features: the future tense of the verb *chitát*' ("to read") in its imperfective aspect is expressed analytically— $Ya \ búdu \ chitát$ ' "I shall read" by means of an auxiliary verb.

Any language may possess more than one type of wordstructure: synthesis and analysis, prefixes and suffixes, etc., all can operate in a single language.

In spite of these complications, the most familiar classification of languages by their structure, embracing almost all the languages of the world, contains four groups, known as isolating (e.g. Chinese), flexional (e.g. Latin, Russian, to some extent English), agglutinative (e. g. Turkish), incorporating or polysynthetic (like some American Indian languages, in which the distinction between word and sentence is partly effaced and where an entire series of concepts is contained within a single "word"). Of course, strictly speaking we know that it is impossible to set up a definite number of standard types that would do justice to the peculiarities of the thousands of languages and dialects in the world. A flexional language may still be analytic, synthetic, or polysynthetic.

Nevertheless, this classification is quite reasonable, because it considers the grammatical forms of languages, and we shall stick to it.

The isolating languages are sometimes called *amorphous* (from Greek *a* "not" and *morphe* "form") or *formless* and grammatical relations are expressed in these languages by word-order. The words in these languages do not depend upon one another, because they are invariable in themselves and, so to speak, "isolated" in the sentence.

The best specimen of an isolating language is the Chinese, monosyllabic and invariable. Every concept or relation is expressed by a word. These words are linked togetker in a sentence without any change of form. Most Chinese words have complete freedom of movement from one category to another, depending upon their use and position in the sentence. There is no formal distinction between parts of speech, but Chinese is a tonal language and the meaning of the words of the same structure are distinguished by tones which indicate the part of speech to be understood. A Chinese root like da can be used as a noun to mean "greatness", an adjective to mean "great", a verb to mean "to be great", and an adverb meaning "greatly". The exact meaning is made clear by where it stands in the sentence. Thus, syntactic relations are very important in these languages as they express grammatical meanings. But not all words in Chinese are used independently and not all of them consist of simple roots. Besides proper words which maintain their full lexical meaning, or as Chinese grammarians term them, "full words", there are empty words which have lost their meaning and serve for grammatical purposes as auxiliaries. Their meanings correspond to various suffixes or endings in European grammars. For example, the empty word či has the function, among others, of indicating a genitive relation; *min* "people", *li* "power" is enough by itself to signify "the power of people", but the same notion is expressed more explicitly by *min či li*. But, of course it would be wrong to consider that Chinese is a formless language because it does not use derivation as a method of word formation. Chinese has its own grammatical features, very numerous and neat, which do not exist in Indo-European languages. It has no formal elements pure and simple, no "outer form", but it shows a keen sense of relationships, of the difference between subject and object, attribute and predicate, and so on. The distinction between *leng tianqi* "cold weather" and *tianqi leng* "the weather is cold" lies not just in the attributive or predicative character of the word combination, as in Russian, but also a constant aspect of weather is expressed in the first example and a temporary one in the second. In other words, Chinese has an "inner form" in the same sense in which Russian does, although it is outwardly "formless" whereas Russian is outwardly "formal", to use the term suggested by the Amer-ican linguist Sapir. He was quite right to state that this supposed "inner formlessness" of Chinese is an illusion.

The stucture of Chinese considerably widens the scope of grammatical notions worked out on the material of Indo-European languages. Here lies the enormous significance of Chinese for general linguistics.

Another group of languages embraces languages like Turkish and Finnish and is called the *agglutinative*<sup>1</sup> group. A characte-

<sup>&</sup>lt;sup>1</sup> From the Latin verb *agglutinare* "to stick"; this term was introduced by Franz Bopp, a German phylologist.

ristic feature of these languages is the large number of so-called "stickers" — suffixes which are added to the unchangeable root of the word. These suffixes are very important, because they express the relations within the sentence. They are usually arranged in a strictly prescribed order and are subject to certain regular phonetic changes (vowel or vocalic harmony) according to which the vowel of the preceding syllable influences the vowel of the following: as in Turkish *degill mi-dir* "is it not?", *soguk mu-dur* "is it cold?", *bu süt mü-dür* "is this milk?" Vowel harmony is also found in some African languages. In agglutinative languages each of the suffixes has its definite, strictly limited meaning, i.e. each one must express one definite grammatical meaning, and each grammatical meaning is expressed by the same affix in whatever word it is required.

A typical example is the Turkish verb de which means "say" (imperative). De-yor means "he is saying" the suffix -yor expresses the aspect. In de-yor-lar "they are saying", the suffix -lar signifies plurality. In the Russian word rúki "hands", the suffix -i expresses the idea of plurality and the nominative case simultaneously. In the Tatar word kul-lar the suffix lar conveys only the plural, but not the nominative case, which is expressed by another suffix. In Russian, the same case of the same number of a different word often has a different grammatical ending-v górod-e "in the town", but v step-i "in the steppe". In the agglutinative languages one grammatical meaning is always expressed by a certain affix, though the words are different. In these languages suffixes can go on being piled up on a word one after another, and these complexes may be very long, like the Turkish düsdügümden yürügemem "because I fell, I cannot walk". Finnish, too, expresses relations by suffixes attached to the noun or verb. This shows the greater importance of suffixes in agglutinative languages than in flexional ones. Sometimes these languages use prefixes, too, for verbal derivation and subordinating conjunctions, as in flexional languages.

The agglutinative languages are peculiar in the degree of coalescence between the morphemes; that allows a definite line to be drawn between the root and the suffix, the root and the prefix and so on.

The essential characteristic of flexional languages is the inner flexion which has a grammatical meaning in many flexional languages; compare: *foot* — *feet*; the German kommen "to

come"—kam "came"; the Arabic gild "skin"—gulud "skins"; the Russian izbegát "to avoid" (imperfective aspect)—izbežát (perfective aspect).

Every affix expresses various meanings: -ing in English shows the continuous tense form together with the auxiliary verb and at the same time indicates the Present Participle. In flexional languages the degree of coalescence between morphemes is greater than in the agglutinative languages. Morphemes cannot easily be torn apart.

Sapir called this coalescence "fusion", but this term was not accepted in linguistics.

The flexional languages are divided into sunthetic (from the Greek synthesis "combination") and analytic (from the Greek analysis "separation"). The terms explain themselves. In the synthetic languages the grammatical relations between words are expressed by forms of the words themselves. In analytic languages the sentence is of prime importance and grammatical meanings are expressed by words arranged in a fixed order. But, as we have pointed out we never find pure synthesis or analysis in any language. Latin is notably synthetic, but, on the other hand, its modern descendants, Italian and French, are analytic.

A polysynthetic language, as its name suggests, is more than ordinarily synthetic. Sometimes these languages (e.g. some North American Indian languages and Eskimo) are called incorporating, because the incorporation of affixes expressing different grammatical meanings into the verb is carried to such an extent that the whole expression forms one unseparable unity which can hardly be called either a word or a sentence, into which several elements enter in hardly recognizable shape. Sapir, a great specialist in polysynthetic languages, gives the following example. The idea expressed in English by the sentence: "I came to give it to her" is rendered in Chinook (an Indian language of the Columbia River) by i-n-i-a-l-u-d-am. This word consists of the root -d- "to give"; -*i*-indicates recently past time; -*n*- the pronominal subject "I"; the other -i- the pronominal object "it"; -a- the second pronominal object "her"; -l- is a prepositional element indicating that the preceding pronominal prefix is to be understood as an indirect object ("-her-to-", i.e. "to her"); and -u- indicates movement away from the speaker. The suffix -am modifies the verbal content in a local sense.<sup>1</sup> In the Nootka (language <sup>1</sup> E. Sapir. Language. New York. p. 73.

spoken by a group of Indian tribes on Vancouver Island) the word *inikwihl'minih'isit-a* corresponds to the English sentence: "Several small fires were burning in the house"; in Nootka *inikw*- means "fire" and "to fire", the derivational *-ihl* means "in the house"; *minih* conveys the idea of plurality, *-is-* is a diminutival affix; *-it-* shows the past tense and *-a* expresses the indicative mood of the verb.

We see from these examples that the distinction between word and sentence in these languages is partly obliterated and an entire series of concepts is contained within a single "word-sentence".

These are the main types of languages classified by their morphological structure. But this basis is far from ideal, because the morphological structure of a language presupposes the presence of a grammatical form. Some languages like Chinese and Vietnamese do not have any forms and are considered formless, but still they express grammatical relations in another way. Some languages occupy an intermediate position between different groups in this classification. A language may be both agglutinative and inflective, or inflective and polysynthetic, or even polysynthetic and isolating. Some French phrases, e.g. je donne "I give", je le donne, je le lui donne, je ne lui donne pas; il donne, il me donne, il m'en donne, il ne m'en donne pas can easily be analyzed in the way polysynthetic languages are. In French, various elements "wedge" into the verb. The only important difference from polysynthetic languages is in the verb, which stands at or near the end of the cluster.

The difference between the agglutinative and the flexional languages, to which most of the Indo-European languages belong, is in many points relatively vague. Considering the difference between the isolating and the agglutinative languages, E. Sturtevant, a modern American linguist, points out that the fundamental difference between Chinese and Turkish is that in the former language the tacking together of relatively short invariable elements extends from the beginning to the end of every sentence, while the Turkish sentence is normally composed of several words of varying length, only some of which consist of short elements. The resemblance between English and Chinese has been remarked more than once.

The Indo-European languages rely on affixation principally, but they use also fusion (for example, in English "hippopotamus") and other devices. All the Sino-Tibetan languages except Chinese, which is predominantly isolating, have many more signs of derivation and agglutination. The flexional languages often show some agglutination.

So it is very difficult to draw a precise line between types of languages, but assuming the existence of these four types of languages helps us to deal with them with a fair degree of precision and has the advantage of easy illustration.

Language is subject to changes during its historical development. Languages change not only gradually but consistently too. So the question arises: was language once all of the same type or is it possible that one type of languages moves towards another?

As long ago as the beginning of the 19th century, linguists were trying to classify different types of language. The German scientist Friedrich Schlegel (1772-1829) 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.

Wilhelm von Humboldt (1767-1835), a prominent German linguist and philosopher with a considerable knowledge of languages, tried to discover the general laws of linguistic development. In the introduction to his book *On the Kawi Language on Java Island* he followed the classification put forward by A. Schlegel, making it more exact. The first group of languages in Schlegel's classification he termed "isolating"; the second, having morphemes without much coalescence, "agglutinative", and the third group, "flexional". W. von Humboldt introduced the fourth type of language —*incorporating* or *polysynthetic*. He treated these groups as various stages of a single linguistic development.

This classification was not kept to by all the linguists of his time. August Schleicher (1821-1868), the German linguist who founded a naturalistic theory of language, accepted the three-fold classification.

Schleicher insisted that linguistics was a natural science, and language an object of nature just as much as a plant is. It is true that he claimed to be a follower of Humboldt with regard to the division of languages; but as a matter of fact he was not. He was a firm follower of the German philosopher Hegel, and as a Hegelian he wanted to keep the three-fold classification. He tacked together Humboldt's "incorporating" and "agglutinative" languages. His scheme of classification, as interpreted by O. Jespersen, runs as follows:

Class I—isolating or root languages:

(a) R (= root)—Chinese

(b) R + r (= root + auxiliary word)—Burmese Class II—agglutinative languages:

Synthetic type

(a) Rs (= root + suffix)—Turkish and Finnish

(b)  $\frac{R}{r}$  (= root + infix)

(c) pR (= prefix + root)—the Bantu languages

Analytic type

(d) Rs (or pR) + r — Tibetan Class III—*flexional languages*:

Synthetic type

- (a) R<sup>x</sup> (pure inner flexion)—Semitic languages
- (b) pR<sup>x</sup> (R<sup>x</sup> s) (inner and outer flexion)—Indo-European languages

Analytic type

(c)  $pR^x$  ( $R^x$  s) + r-Romance languages, English<sup>1</sup>

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, in the form in which it was expounded, 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 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

<sup>&</sup>lt;sup>1</sup> Selected writings of Otto Jespersen. London-Tokyo, 1960, p. 699.

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.

F. F. Fortunátov (1848-1914), a prominent Russian linguist and professor at Moscow University, 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). The Indo-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 (cf. Arab gatala, "he is killed", gutila "he was killed").

(3) Agglutinative languages, where affixes with one particular meaning are stuck on to an unchangeable root. Many language families come into this category. In Turkish, for example, we may cite the following paradygm of the word *dam* "roof": *damda* "on the roof" (locative case), *damlar* "roofs" (plural), *damlarda* "on the roofs" (plural number, locative case).

(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 (*nina-kakwa* means "I am eating meat") American Indian languages constitute a special class in the morphological classification.

The Fortunatov classification is very logical but its main drawback is that it leaves such languages as Greenlandic, Georgian, Malayan and some others out of all theoretical consideration.

The last attempt to classify languages was made by the distinguished American linguist Edward Sapir, who proposed

a new principle of classification in his book *Language* (1921). This classification was based on the expression of relations within the sentence and on the presence or absence of derivation. On this basis Sapir distinguishes (1) concrete radical, (2) derived, (3) concrete rational, and (4) pure relational languages. According to the "technique" by which secondary elements are attached, languages are subdivided into (a) isolating, (b) agglutinative, (c) fusional, (d) symbolic categories. By symbolic is meant the change of vowels or consonants as in *bid/bade* or the Arabic *gatala/gattala* "to kill".

His third aspect of classification relates to synthesis, and he divides languages into analytic, synthetic and polysynthetic. A language in which relations are expressed by position and auxiliaries is called *pure*, and a language using relational particles is called *mixed*. A non-deriving language is called *simple*, and a deriving one *complex*.

On the basis of this classification, English may be defined as a complex mixed-relational analytic language, fusional in technique.

Sapir's classification, however interesting it may be, still contains a number of faults. It gives a pure classification, but takes into consideration neither genetic problems nor sound relations between the classified languages.

The subsequent development of linguistics rejected a number of theories as unscientific and unreliable. Besides, the pseudoscientific assumption was drawn that the formation of languages was closely connected with the successive stages of human history. Thus, isolating languages were supposed to reflect communal society, agglutinative languages — tribal society, and inflective languages — class society.

Another theory put forward was even less scientific —that of the supremacy of one language over another. This theory was widely disseminated at the end of the 19th century. Some reactionary linguists put forward the idea that one language or group of languages, preferably the Indo-European group, was more advanced than others, better adapted to express thought. Attempts were made to prove that the Indo-European nations had been tied by bonds of blood relationship and had created and preserved the most advanced culture of the world. By force of their racial and spiritual supremacy, these nations from time immemorial had subjected to their power other smaller nations and tribes and had become their ruling section. In the opinions of these linguists, the historical mission of the nations speaking Indo-European languages was that of rulers, masters and lords over the non-Indo-European nations, whose racial peculiarities prevented them from working out firm state policies and making social progress. The Indo-European race was proclaimed the leading force in the historical development of society.

This shameful theory is supported even now by the rulers of some capitalist countries, especially in the Republic of South Africa, with its policy of apartheid, where it is a crime for an "inflective" woman to marry an "agglutinative" man. Such ideas are incompatible with the ideas of genuine linguistics, and should be condemned as unscientific.

Every language has a unique inner structure of its own and this structure may be moulded in many different ways, regardless of the material advancement or backwardness of the people that handle it. If we wish to understand languages in their true essence, we must look upon them all as equally advanced and developed.

All attempts to impose one language upon another by force are doomed to failure because they entail coercion. Criticizing the Russian liberals, who tried to make Russian compulsory among the national minorities in Russia just after the 1905 revolution, V. I. Lenin expressed the attitude of Russian Marxists to this idea. "... Russian Marxists say," he wrote in 1914, "that there must be *no* compulsory official language, that the population must be provided with schools where teaching will be carried on in all the local languages, that a fundamental law must be introduced in the constitution declaring invalid all privileges of any one nation and all violations of the rights of national minorities."<sup>1</sup>

Progressive people reject the idea of the supremacy of one language over another and acknowledge their equality in that they all express the practical needs of the people speaking them.

<sup>&</sup>lt;sup>1</sup> V. I. Lenin. Collected works. Moscow, 1964, v. 20, p. 73.

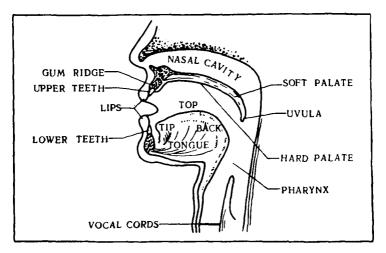
## SOME CONCEPTS OF PHONETICS AND PHONOLOGY

*Phonetics* (from the Greek *phonē* "sound") is the name of a science dealing with the analysis and classification of speech-sounds.

Speech-sounds may be examined from different points of view: (1) the biological aspect presupposes the study of the organs of speech which help to produce the sounds; (2) their acoustic study deals with such phenomena as the pitch of the sounds, which depends directly on the frequency of vibrations in a given period of time, the timbre of the sounds, that differentiates two sounds of the same pitch, the tone and the noise of the sounds which are the results of the vibrations that produce them; if vibrations are regular we have a tone; if the vibrations are irregular the result is a noise; (3) sounds of speech may be studied from the point of view of their meaning, the semiological or specifically linguistic aspect of speech.

A few words should be said about the process of the formation of speech.

The sounds that constitute speech are produced by a series of rhythmical pressures of air on the ear-drum of the listener —very gentle but very rapid pressures, the frequency of which is within the range of human hearing. Air is of an elastic



nature, and these pressures—or rather variations of pressure — are caused by a rhythmical disturbance of air at the point at which the sound originates.

Sound is caused by a stream of air passing from the speaker's lungs, upwards along the trachea (or windpipe). On its way through the trachea the air passes through the larynx (or "Adam's apple") which contains the vocal cords, along the chamber known as the pharynx; and from there out over the tongue and through the mouth, or behind the veil of the soft palate and through the nose. In the process of the formation of the voice, the role of the lungs is merely to serve a source of air, which is emitted at a controlled rate and pressure. The lungs are filled by muscular effort, and their normal condition is to relax, air being expired without effort as they do so. A stream of air, completely or partially enclosed in the vocal cavity between the larynx and the mouth and nose, oscillate back and forth. It goes out, then smaller quantities return, then still smaller quantities go out, and so on and so forth, until equilibrium is finally regained. That is how the rhythmical variations of pressure are caused which travel through the air and strike the ear-drum of the listener.

The stream of air, pressed from the lungs, passes along the trachea (or wind-pipe) to the larynx, where the sides of the trachea are narrowed until they meet. At this point the walls of the trachea become thicker and are supplied with a complex of muscles and a box-like structure of cartilage, known as the larynx. Within the larynx there are two mobile membranes running horizontally. These are the vocal cords. During normal breathing they may be held apart by the force of the outgoing stream of air wide enough so as not to interfere with it. When they are stretched and brought sufficiently close together they vibrate like a reed as air is forced through them from the lungs. The sound waves resulting from the vibration of the vocal cords are called the voice. A sound accompanied by voice (like the English b, d, v, z) is called a voiced sound; one not accompanied by voice (like English p, t, f, s) is called voiceless. The vol-ume (or loudness) of the sound varies with the air pressure from the lungs and the consequent force of each vibration. The pitch of the sound varies with the rapidity of the vibrations—the more frequent the vibrations, the higher the sound. If the pitch is constant, the result is a singing sound, but if there is a series of gliding pitches, the result is speech-sounds. The ear's main range of hearing corresponds to the range of frequencies in normal conversation.

The sound produced by the larynx does not consist of one tone. There are several tones at the same time-that is to say, several series of vibrations of different rates. The tones with the lowest frequency of vibration are called fundamental. The fundamental tone is the strongest and determines the pitch of the tone as a whole. The other tones are known as overtones; they are ordinarily weaker; overtones (or partial tones), together give the quality or colouring of the tone. But the tone is also affected by resonators. The resonator is the receptacle in which a definite volume of air is enclosed. Each resonator will reinforce several partial tones according to its shape and the volume of air that it holds. In the process of speech, the part of the resonator is played by the cavities within and above the larynx. These cavities are altered by the motion of the tongue, lips, lower jaw and soft palate.

Now that we have examined the organs of speech and the process of the production of the speech sounds, let's get down to classifying them. The primary grouping of sounds divides them into two broad types—vowels and consonants.

*Vowels* are modifications of the voice-sound in the production of which the air is allowed to flow through freely, with no, or hardly any friction or contact of the tongue or lips. They are ordinarily voiced. Vowels are classed according to the position of the tongue when they are pronounced.

According to the particular section of the mouth toward which the articulating tongue is raised, we distinguish the following vowels: front vowels, produced by a rise of the front of the tongue towards the hard palate, as in the pronunciation of the English sound /i:/ in *flee* or /e/ in *day*; back vowels, for which the back of the tongue is raised towards the soft palate, as in the case of /a:/ in the English word *part* or *father* or in the Russian *málo* "little"; central vowels which are produced when the middle of the tongue is raised toward the middle region of the palate, as in the English /ə:/ in *bird* or the Russian *múlo* "soap".

According to the degree of mouth opening, the vowel sounds are classified into high or open vowels: English /1/,

/u/, middle vowels: English /e/ in say or /o/ in hope and low, or closed vowels: English /ae/ in cat.

A simple diagram may represent the classification of English vowels in the following manner

	Open Front	Central	Close Back
	Unrounded	Unrounded	Rounded
High vowels	/1/		/u/
Middle vowels	/e/		/o/
Low vowels		/a/	

Some vowels are pronounced with rounded lips, as /o/ in *hope* or the Russian *bot* "small boat", or /u/ in *book*; cf. the Russian *put*' "way".

The vowel sounds are further classified into monophtongs, diphthongs and even triphthongs. The "phthong" part of these words is from the Greek *phthoggos*—"sound" or "voice". *Monos* is the Greek for "alone", i.e. "one"; *dyo* means "twice"; *treīs* means "three". A monophthong is a vowel of a single sound, a diphthong has two sounds, and a triphthong has three vowel sounds.

According to whether the first element of a diphthong is syllabic and the second non-syllabic or vice versa, we distinguish between falling and rising diphthongs. In English and German falling diphthongs are the rule—boy, hope, fair or the German Eisen "iron", Fräulin "miss", etc. On the contrary, the French language possesses rising diphthongs as in nuit "night", pied "foot", etc.

A consonant is a sound produced by friction, or stoppage of the breath in some part of the vocal passage. Consonants are classified according to three major criteria: the point at which the friction is made (place of articulation), the way in which it is made (manner of articulation), and the presence or absence of vibration in the larynx (voicing).

Consonants can be voiced or unvoiced, i.e. they can be made with or without the vibration of the cartilages. /p/, /t/ and /k/ are unvoiced. When we pronounce them and place the finger lightly upon the Adam's apple, we feel no vibrations. /b/, /d/, /g/ are voiced, the fingers will feel a vibration with these sounds.

Such sounds as /p/, /t/, /k/, /b/, /d/, /g/ are known as explosives, because they are accompanied by explosions.

There are other consonants besides voiced or voiceless stops: there are the fricatives or spirants. "Fricative" is from the Latin *fricare* "to rub"; "spirant" is from the Latin *spirare* "to breathe" or "to blow". A spirant or a fricative is a consonant that, unlike either the voiced or voiceless ones, may be prolonged in pronunciation /v/, /f/, /s/,  $/\theta/$  or  $/\partial/$ .

When we utter explosives, the release of air may be very sudden, resulting from a complete opening immediately after the stop. But the separation of the organs may be slow and gradual, so that the closure is followed by narrowing and the explosion turns into friction. The resulting sound is the "affricate" (Latin *affricatus*, past participle of *affricare* "to rub against") which may be defined as a combination of a stop with a spirant: /ts/, /dz/, /č/, /dz/, /pf/.

An aspirate (Latin *aspiratus* "breathed") is a sound made by breathing immediately after the explosion as, for example, in the word *papa*, where we hear something like  $/p^hap^ha/$ . Aspiratus may be defined as a kind of sound halfway between pure explosives and affricates.

Consonants are classified according to the organs which take part in the production of their sounds. Consonants are made by the teeth, the gums, the hard and the soft palate, the uvula, and the lips.

A consonant made by both lips closing is called *bi-labial* (*bi* is "two", and *labium* "lip" in Latin). These are the English /w/, /p/, /b/, /m/; the Russian—/p/, /b/, /m/.

A consonant made by the lower lip articulating against the teeth, is called *labio-dental* (the Latin for "tooth" is *dens, dentis*): the English /f/, /v/, the Russian /f/, /v/.

A consonant made by the blade of the tongue which touches the upper teeth is called *dental* (see above): English  $/\theta/$ ,  $/\partial/$ , Russian /t/, /z/, /d/, /n/.

A consonant is called *palatal* when it is made by the front tongue against the hard palate (Latin *palatum* "roof of the mouth"), such as the English /j/, /5/, /z/.

A consonant is said to be *palatalized* when it is accompanied by a /j/ element. Palatalization is caused by the rise of the middle part of the tongue towards the hard palate.

In the evolution of English we find that after the Anglo-Frisian period the k began to be palatalized before palatal vowels, which were dropped. Compare the Anglo-Frisian \*banki with the Old English benc "bench". The same process can be seen in the turning of the Russian /k/ into /č/ before soft vowels: cf. *pekú* "I am baking" and *pečóš* "You are baking".

Velar consonants are named after the Latin *velum* "the soft palate", for consonants made by the back of the tongue being pressed against the velum: English /k/, /g/; cf. the same Russian sounds.

The glottal spirant /h/ is produced by a narrowing or closure of the vocal cords.

/l/ and /r/ are classed as liquids but they differ in their method of production. When we pronounce /l/ the stoppage affects only part of the surface of articulation, so that the stream of air is allowed to flow out at one or at both sides of the tongue. So /l/ is also called a *lateral* or *side* sound (Latin *latis, lateris* "side"). The /r/ sound is made by the rapid tapping of the front tongue against the teeth ridge, The resultant effect is a thrilling or rolling noise, giving it the name *rolled* sound.

/m/ and /n/ are nasals, in which both the mouth and the nose allow the air to escape freely while the buccal passage is temporarily blocked.

We have been dealing mainly with English sounds. The sounds that characterize a particular language are referred to as the phonetic system of that particular language. Each language has its own way of producing its sounds—its own phonetic system. We hear this well enough when we listen to a foreigner speaking his own tongue or attempting to speak ours. A knowledge of phonetics helps us to appreciate more keenly the differences between the phonetic system of the native language and some other language. A more skilful adjustment of our speech organs enables us to imitate better the sounds in a system foreign to our own.

Apart from their characteristic sounds, languages can be distinguished by their subsidiary features. The main one is what is commonly known as "accentuation", a term which in most modern languages is synonymous with stress when a certain syllable of the word is pronounced with greater intensity than the rest. In the Germanic languages the stress is usually on the first syllable of a word stem, consisting of two or more syllables. French has the stress on the last syllable of the word; words like *enchantéur* "enchanter", *chantóns* "(we) sing" have the main stress on the suffix or ending.

The Slavonic languages show great diversity in this respect: Czech has an initial stress (for example prýskati "to spray"); Polish regulary stresses the penultimate syllable, while in Russian the place of the stress is irregular, or free: it may fall on any syllable of the word. Secondary stresses, common in English, French and German, do not occur in Russian. The stress in Russian is enough to distinguish different words the phonetic form of which is in other respects identical: muká "flour", múka "torment", žilá "she lived", žila "vein", etc. The Russian stress is mobile, that is, it may fall on different syllables of the same word in the course of inflection. Sometimes different forms of the same word, possessing identical endings, are distinguished from each other only by the stress: stený (gen. sing.)-stény (nom. pl. of stená "wall"). Some analogies to this function of the Russian stress can be found in English, in which in some cases the stress alone serves to distinguish the verb from the noun or adjective, as in presént/présent, incréase/increase.

Some languages have musical pitch, with the accented syllable pronounced on a higher note than the surrounding syllables. This musical pitch is still discernible in such languages as Swedish and Serbo-Croatian. In the Chinese language the voice pitch is used to convey semantic distinctions: ma, pronounced in one tone means "mother", in another, "flax", and in a third, "horse". To this example from Chinese we can add many others; e.g. the following from the Ewe language (a West African language)—to with a high tone means "ear", with a low tone "buffalo", and with a gliding tone "mortar". We also use musical pitch in order to convey emotion or emphasis.

From the classification of the sounds given above the student must not draw the conclusion that speech-movements consist of a well-defined succession of separate sounds. On the contrary, language as spoken is a continuous stream of sounds. All languages may be spoken more or less rapidly. It has been observed that the average rate for French is about 350 syllables a minute; for German, 250; for English 220. And on the continuousness of the speech stream the sounds influence one another, alter and give rise to certain sound changes of which the most familiar categories are assimilation and dissimilation.

Assimilation consists of one sound being either totally or partially made similar to another. When a sound tends to become similar to or identical with the next sound we call this process *regressive* (Latin *regressio*, "backward movement") assimilation: the Latin ad+peto>appeto, in+peto>impeto; the /s/ of goose and house has been changed to /z/ in the combinations gosling, husband; the Russian /t/ in svat "arranger of a marriage", gives /d/ in svád'ba "marriage".

Assimilation may act in a progressive direction as in English *books*, where the voiced /s/ after the voiceless consonant /k/ also becomes voiceless. In progressive assimilation, the latter consonant is altered. In all these cases, assimilation is total. Total assimilation is also found in the English gossip (from godsibb), gospel (from godspell) whereas in the English word count (<Lat. comptare), the /m/ has been partially assimilated. Where some difference between the consonants /n/ and /m/ is kept, such assimilation is partial. Examples of assimilation are very numerous in several languages.

Dissimilation is not so common as assimilation, and it takes place when of two similar sounds, whether contiguous or distant, one is differentiated from the other and replaced by another sound, often of the same general type of articulation. The English marble comes from the French marbre, which in turn is derived from the Latin marmor. The French r turns into the English l. The Latin peregrīmus becomes the vulgar Latin pelegrinus (French pèlerin, Italian pellegrino). Hence the l in the English pilgrim. The French corridor gives us the Russian word koridór which sounds like kolidór in the speech of uneducated persons.

Sounds, as we see, disappear or alter in the direction of a more familiar phonetic combination. Sometimes new sounds are introduced, e.g. "warmpth" for "warmth".

The loss of a vowel through rapid utterance (it is usually an unaccented vowel) is called *syncope*, which is from a Greek word meaning "to cut short". *Every* is pronounced /'evri/, the middle *e* is syncopated. Such phrases as *I'm* /aim/, you're /juə/, he's /hi:z/, it's /its/ are examples of syncopation of vowels. In French s'il vous plaît is often abbreviated to /splɛ/; in German *Guten Morgen* "good morning", is pronounced /morn/; cf. Russian /pžálsta/ instead of /pʌžálujsta/ "please".

The opposite of syncope is *epenthesis*, which is the Greek for "insertion". Here a vowel, instead of dropping out,

is added into the body of a word. *Henery* for *Henry*, *athaletic* for *athletic* are examples familiar in everyday English. In Russian we sometimes have epenthetical forms like *nórov* instead of *nrav* "disposition" or "temper".

When two sounds or groups of sounds separated by a certain amount of intervening material change places, this phenomenon is called *metathesis* (from the Greek *meta* "instead of", "through", and *thesis* "statement"), which usually takes place in the process of borrowing words. Metathesis may be close (English *hemlet* for *helmet*) or distant: *regular* becomes *regural*, *relevant* becomes *revelant*, *checks* separately becomes secks cheparately, I feel so foolish becomes I fool so feelish, Gut und Blut becomes But und Glut, and so on.

The phenomenon of one of two similar syllables being lost is called *haplology* (from the Greek *haploos* "simple" and *logos* "knowledge"). Examples of this are *the at(las of Ita)ly* (i.e., the atly), *para(lle)led* (i.e. paraled), n(avy)aviator; Russian *znameno(nó)sets* "banner-bearer". Similarly, the Latin compound which would normally have the form *stipipendium* "wage-payment" appears actually as *stipendium*, English *stipend*.

Some other phonetic changes should be mentioned concerning the addition or loss of sounds.

If a sound is added at the beginning of a word, this process is called *prothesis* as in the English *nickname* <*ekename*, or the Russian *vóstry* instead of the correct form *óstry* "sharp". The loss of a sound at the beginning of a word is called *aphaeresis*: the English *lone* <*alone*, *knife* and *write*, in which *k* and *w* were formerly pronounced.

As the Russian vowel system is dominated by the stress accent, vowels may occur in two forms: stressed or strong and unstressed or weak. We may note another phonetic change, particular for Russian—the so-called *reduction of sounds* (from the Latin *reductio* "to relax"). This reduction is accompanied to a varying extent, according to the particular vowel, by a change of quality resulting from a shift of articulation; for instance, god /got/ (nom. sing.) "a year", godá /gAdá/ (nom. pl.) "years" and godovój /gъdAvój/ "year's". This is a qualitative reduction. But the unstressed vowels are not all reduced to the same extent: the pretonic vowel (immediately preceding the accented syllable) is pronounced stronger than the other unstressed vowels; i.e. the quantity of the vowel changes, as in *dub* /dup/ "oak", *dubók* "a little oak", *dubóvy* "made of oak". This is an example of quantitative reduction.

In these pages we have paid special attention to one highly important type of change—the change of a sound, a phonetic change. It takes place, because sounds do not occur in isolation; they are all part of a continuous stream, and are affected by what goes before and what comes after.

But there are also phonetic changes which do not take place while we speak, but which happened long before and which are known as historical phonetic changes. In German, for example, there is the vocalic phenomenon known as *Umlaut*. Umlaut (the word was invented by the German linguist Jacob Grimm from two German words: *Laut* "sound" and *um* "about") refers to the influence upon a preceding vowel of a later one. For instance, the German for "man" is *Mann*; for "men" it is *Männer*, pronounced /menner/. The /a/ of *Mann* under the influence of an old *ir* in the plural ending, becomes /e/. If to-day we say "men" as the plural of *man*, and *feet* as the plural of *foot*, and *geese* for the plural of *goose*, it is because, before these words came into modern English, they were affected by umlaut — by the influence of a final vowel that has since disappeared.

There is also Ablaut (German ab "off"). Ablaut is known in English as vowel gradation. Ablaut refers to the regular gradation of vowels in the root in different forms of the same word. For example, sing, sang, sung; drive, drove, driven, etc. These verbs are called strong in German. In Old English this verbal irregularity was a more vital factor than it is to-day.

The phenomenon itself goes back to the era before the Indo-European parent language split up into independent languages; it is probably due to differences in accent.

Many phonetic changes are so striking, so uniform in their workings, that they have been grouped into phonetic "laws", of which the famous German philosopher and linguist Wilhelm von Humboldt spoke as early as in 1826 as general tendencies and patterns in linguistic events.

The reasons for these phonetic changes are still obscure. Some linguists were inclined to explain these changes by the environmental factor, for instance by climatic conditions. Naturally, it is unlikely that a change in the climate could have any influence on language. Nor is there good evidence for the theory that phonetic change is due to modifications in the speech organs. Attention has also been given to the general variability of pronunciation as a possible explanation. These theories, of course, are groundless, because the reasons of these changes must be sought in language itself, not in these external factors.

What we have just been speaking of refers to constituents of the phonetic aspect of language and cannot explain the essence of the mechanism of these changes. It seems probable that a new approach to the understanding of these processes may be reached by a deeper penetration into the inner structure of sounds themselves.

A new linguistic science which came into being in Russia at the end of the 19th century and was developed by Russian and later by foreign investigators helps us to understand the essence of these changes and the essence of sound itself. The name of this science is *phonology*, which is the theory of sound change in general and deals with the study of phonemes.

If in the 19th century, linguists spoke of the sounds of language, now they prefer to speak of phonemes. The distinction between phonetics and phonology is now generally accepted.

It was observed long ago that not all the sounds in any language have the same value. The difference lies much deeper than the difference in the acoustic pronunciation of sounds. Two people speaking the same language and pronouncing individual sounds exactly alike could hardly be found. But this diversity should not be noticeable by an average observer.

Sometimes sounds differ slightly in pronunciation but this difference is quite irrelevant. In English, for instance, the /t/ of *time* is distinctly different from that of *sting*, but the difference is not important. In such English words as *back* and *bag*, the meaning is different. What makes it different? Probably the two ending sounds.

All these considerations lead us to the conclusion that in language not all sounds have equal values. Sounds must be classified according to the function they perform in the language, and from this point of view speech sounds and phonemes ought to be distinguished.

Before going into an analysis of the phoneme, it is necessary to give some historical notes on the subject. The first linguist to point out the distinction between the "phone" (speech-sound), Russian "zvuk", and the "phoneme" (Russian "fonéma") was Jan Baudouin de Courtenay (1845-1929), the famous Russian philologist of Polish origin, who established himself in Russia, first as a privatdocent at St. Petersburg then as Professor for eight years (1875-1883) at Kazan, where he created his famous school of linguistics. Later he held professorships at Dorpat (1883-1893), Cracow (1893-1900) and eventually St. Petersburg (1901-1918) where he continued to develop his teaching. He spent the last years of his life in Poland.

He worked out the fundamental principle of the phoneme during the 1870's, from 1868 to be more exact, thus forestalling Western European linguistics by nearly 40 years. Baudouin de Courtenay stated more than once that the word "phoneme" was invented by his student Kruszewsky. Baudouin de Courtenay did not, however, write on this theme, and in fact, no clear exposition of it appeared in print until 1894, when he published his *Próba Teorij Alternacyj Fonetycznych*. A German translation of this, *Versuch einer Theorie phonetischer Alternationen*, was published at Strassburg in 1895.

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.

The one radical fault of his theory was the psychological concept of the phoneme; nevertheless, in one of his works (Some Branches of the Comparative Grammar of the Slavonic Languages, 1881) he showed the possibility of working out a theory of phonemes and phonetic alterations without recourse to any subjective idealistic premises.

The well-known English phonetician D. Jones points out in his book *The Phoneme: Its Nature, Development and Origin* that the term *phoneme* as used by Baudouin de Courtenay was a phonetic one. This phonetic concept can be viewed in two ways in his works—"psychologically" and "physically". Viewed "psychologically", a phoneme is a speech-sound pictured in one's mind and aimed at in the process of talking. The actual concrete sound (phone) employed in any particular speech-utterance may be the pictured sound or it may be another sound having some affinity to it, its use being conditioned by some feature or features of the phonetic context. Baudouin de Courtenay recognized two kinds of phonetics: one was called *psychophonetics* and related to the pictured sounds; the other was called *physiophonetics* and related to concrete sounds actually uttered.

Viewed from the "physical" point of view, a phoneme is a set of sounds uttered in a particular language which count for practical purposes as if they were one and the same; the use of each member of the set is conditioned by the phonetic environment, i.e. no one member ever occurs in a situation reserved for another (for example, in English the /k/ sound of *call* never occurs before an /r/; nor does the /k/ sound of *king* ever occur before /ɔ:/. Baudouin de Courtenay's theory of the phonological distribution of phonemes is very important, especially in its relationship to the construction of phonetic transcriptions, the devising of alphabets for languages hitherto unwritten and in general to the practical teaching of spoken foreign languages.

Baudouin de Courtenay's idea was developed by his immediate follower L. Ščérba in 1912, in his book *Russian Vowels in their Qualitative and Quantitative Aspects*. The definition of the phoneme given by Ščerba, 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. Ščerba emphasized the close connection between phoneme and meaning.

During the late 1920's impetus was given to the study of the phoneme by the group of Eastern European scholars, who on the initiative of the Czech linguist V. Mathesius formed themselves in 1926 into the Circle Linguistique de Prague. Foremost among them, in addition to Mathesius, were the Russian scientists N. Trubezkóy (1890-1938), R. Jakobsón and S. Karcéwsky. They were not pupils of Baudouin de Courtenay, but they were, of course, familiar with his work and influenced by it.

Ščerba disapproved of the concepts of the Prague School contributors, because they were based on idealistic premises

while he tried to discuss phonemes in a materialistic light.

His efforts were continued by the Soviet linguists, who regard a phoneme as the smallest unit of a sound which serves to distinguish the significant units of language: words and morphemes.

The phoneme and the speech-sound do not coincide; the phoneme may consist not only of one speech-sound (Russian *ura* "hurrah", English *cot*), but of two speech-sounds (English *house*, German *heute* "to-day"). Two phonemes may combine in one sound as in the Russian *sšit*", perfective aspect of the verb *šit* "to sow"), where the two phonemes /s/ and /š/ are combined into one phoneme /š/, which is long here.

The phoneme is the smallest unit of language because it cannot be divided any smaller; but, nevertheless, it is a complex phenomenon. It consists of a number of features which are not independent, but occur simultaneously in the phoneme; for example, the Russian /g/ may be considered as voiced or voiceless, soft or hard, nasal or non-nasal and so on. These distinctive features usually occur together in a bundle of sound-features of several of a time. Some of these features are distinctive while others are not. The use of any particular feature is conditioned by the phonetic environment or by the position of the phoneme. In Russian, for example, the /k/—of *ruká* "hand" may occur before /a/, /o/, /u/, and at the end of a word but never before /I/ or /e/, giving us the /k'/ phoneme; this /k'/ never occurs at the end of a word; in French the hard /t/ may occur before the back vowels and at the end of the words, as in *tas* /ta/ "pile", *tôt* /tə/ "early", *ton* /tɔ̃/ "your" but it never occurs before front vowels, as in *ti* /t'ı/ "ah", *tu* /ty/ "you", where the soft /t'/ comes.

The same feature of a phoneme in different languages may have a different functional character: in Russian the voiced/voiceless feature is neutralized at the end of a word as, for example, in the words *prut* "twig" and *prud* (pronounced as /prut/) "pond", whereas in English this feature distinguishes between the meanings of such words as *bat* and *bad*.

Any linguistic phenomenon—phoneme, morpheme or word —gets its function from being in contrast with other comparable phenomena in the system. Phonemes are always members of the phonetic system of the given language and the content of each phoneme is conditioned by its position in this system. They are opposed to each other, and each of the distinctive features involves a choice between two terms of an opposition that displays a specific differential property, diverging from the properties of all other oppositions. These oppositions may be correlative or non-correlative. Correlative oppositions are those in which the members differ only in one feature and coincide in all other features.

They may be restricted to two members (voice-less): Russian /b///p/; English /b///p/; labial/nonlabial: /u:///i/or they may have three, as in Norwegian: back/middle/front/u///u//.

In language, phonemes exist in syllables and words, being put in various pronunciation environments, which are called *positions*. Russian vowels, being stressed, differ from each other: *les* "forest" and *lis* (gen. pl. of *lisá* "fox"), being unstressed, coincide and do not distinguish the meaning. The Soviet linguist A. A. Reformátsky gives the following example: *lesovód* /l'əsʌvót/ "forest expert" and *lisovód* /l'əsʌvót/, "man who brings up foxes" coincide in their pronunciation.

The same position may have a different quality in different languages. The end of the word is a weak position for the opposition voiced/voiceless in Russian and German. Lug "meadow" and luk "onion" are pronounced as /luk/. The voiced /g/ becomes the voiceless /k/ and they coincide in the sound /k/; the same happens in the German Rad /rat/ "wheel" and Rat /rat/ "council". On the other hand, in English and French this position is strong for the same opposition: bag /bæg/ and back /bæk/, in French douce /du:s/ "sweet" and douze /du:z/ "twelye".

All these facts show that the distribution of distinctive features varies from language to language.

A useful way of differentiating between phonemes in a language is to apply the substitution or commutation test, to see whether, in the same context, sound A can be substituted for sound B to form a different word. If the difference is significant, we say that two sounds which are thus in contrast must belong to different phonemes, which are said to be in a binary opposition. For this purpose minimal pairs are used, i.e. such pairs of forms in which two

sounds involved are the only features that differentiate the forms. Thus the presence in English of such a binary opposition as /n/-/n/ is proved by the use of such pairs of words as *kin* and *king*, *sun* and *sung*, *tan* and *tang*. Clearly /n/ and /n/ are two phonemes in English because one can be thus substituted for the other to form a different word. As far as the distribution of these phonemes is concerned, it is interesting to note that /n/ never occurs at the beginning of a word.

Although the phonemes of English and Russian differ considerably in their qualities, their number is about the same; there are 39 phonemes in Russian and 40 in English. According to N. S. Trubetskoy, a famous linguist who knew many languages, the number of phonemes has been found to range from little more than 20 in some Polynesian languages to about 75 in certain Caucasian dialects. In French and German, although the qualities of phonemes differ widely, their quantity is about the same, too: 35 phonemes in French and 36 in German.

It is important to point out that linguists habitually use the term phoneme in two senses: as a feature of a language structure, and as a concrete example of that feature. Every language may be said to have its phonemic or phonological structure, acquired and built up by long use as the means of communication among numbers of a social group.

There is no such thing, for example, as a general or universal phoneme /k/. There is, however, an English /k/, a Russian /k/, an Arabic /k/ and so on. Each is a feature peculiar to its own language and therefore irrelevant to any other language. This phonological structure is not an assembly of unconnected patterns, but a system showing a high degree of integration.

The phonology of any language is not a chaotic enumeration of speech-sounds and sound combinations, but a system embracing the quantity and pattern of phonemes, different kinds of distinctive features, their distribution, etc.

## WORDS AND THEIR MEANINGS

Sounds by themselves are not enough to constitute language. It is only when they are grouped into words and when these words are arranged in certain sequences to convey certain meanings that they begin to acquire the true character of language, which functions as a means of communication in human society.

The word is the fundamental unit of language, representing the things of the real world and the psychological life of man. There have been many attempts to define the word but very often they were based upon idealistic premises. The materialist definition quoted below is generally accepted in Soviet linguistics: the word is a sequence of human sounds conveying a certain concept, idea or meaning, which has gained general acceptance in a social group of people speaking the same language and historically connected.

Each word has its own meaning. A word which is devoid of meaning is not a word. This definition takes meaning as the most essential aspect of a word. So the question arises, what meaning is. We should stress that meaning is inseparable from the word itself, because it reflects the reality of things. The reality of thought which is also a material phenomenon manifests itself in language. The correct understanding of the question of meaning is closely connected with the practical theory of dialectical materialism, the fundamental belief of which is "...that outside us, and independently of us, there exist objects, things, bodies and that our perceptions are images of the external world."<sup>1</sup>

Two approaches are possible towards understanding the nature of meaning: either the meaning of a word is something independent of objective reality or the surrounding world, or it is the reflection of this objective reality in our consciousness. The first point of view is idealistic, because it deprives meaning of its materialistic essence. Of course there is a connection between the meaning of a word and the thing it denotes, but this connection is indirect.

Marx wrote on this connection between words and things:

<sup>&</sup>lt;sup>1</sup> V. I. Lenin. Collected works. Moscow, 1962, v. 14, p. 103-104.

"The name of a thing is quite external to the nature of that thing. I know nothing about a man simply because I know that he is called James".1

The word cannot be looked upon as a "pure sign", independent of the reflection of reality in man's mind with which it is inseparably connected.

The scientific approach to the understanding of a language as a means of intercourse states that a set of sounds becomes a word only when it is connected with a reflection in our consciousness of objective reality. The meaning of a word is the expression of a concept of things fixed in sounds, and a word from this point of view may be considered a form of a concept's material existence.

But how do we perceive things in the outer world? First of all, through sensual cognition, through sensation, because "...sensation is indeed the direct connection between consciousness and the external world; it is the transformation of the energy of external excitation into the fact of consciousness."<sup>2</sup> And what is sensation and consciousness? "Sensation, thought, consciousness are the supreme product of matter organized in a particular way."<sup>3</sup>

The process of achieving a cognition of the external world already suggests a certain degree of abstraction, which is provided by the sensual reflection of the objective reality. Lenin points out that Man has a very complex way of cognising reality: "From living perception to abstract thought, and from this to practice, -such is the dialectical path of the cognition of truth, of the cognition of objective reality."4 Later he goes on to say that "Cognition is the eternal, endless approximation of thought to the object. The reflection of nature in man's thought must be understood not "lifelessly", not "abstractly", not devoid of movement, not without contradictions, but in the eternal process of movement, the arising of contradictions and their solution."5

In the process of attaining cognition of the outer world, man is aware of different aspects of an object. These aspects are determined by the practical need for which the object is used.

- K. Marx. Capital. New York, 1929, p. 77.
   V. I. Lenin. Collected works. Moscow, 1962, v. 14, p. 51.
   V. I. Lenin. Collected works. Moscow, 1962, v. 14, p. 55.
   V. I. Lenin. Collected works. Moscow, 1963, v. 38, p. 171.
   V. I. Lenin. Collected works. Moscow, 1963, v. 38, p. 195.

In one of his works V. I. Lenin gives an example with a glass: "A tumbler is assuredly both a glass cylinder and a drinking vessel. But there are more than these two properties, qualities or facets to it; there are an infinite number of them, an infinite number of "mediacies" and interrelationships with the rest of the world. A tumbler is a heavy object which can be used as a missile; it can serve as a paperweight, a receptacle for a captive butterfly, or a valuable object with an artistic engraving or design, and this has nothing at all to do with whether or not it can be used for drinking, is made of glass, is cylindrical or not quite, and so on and so forth ...

Dialectical logic demands that we should go further. Firstly, if we are to have a true knowledge of an object we must look at and examine all its facets, its connections and "mediacies". That is something we cannot ever hope to achieve completely, but the rule of comprehensiveness is a safeguard against mistakes and rigidity. Secondly, dialectical logic requires that an object should be taken in development, in change, in "self-movement" (as Hegel sometimes puts it). This is not immediately obvious in respect of such an object as a tumbler, but it, too, is in flux, and this holds especially true for its purpose, use and connection with the surrounding world".1

And the aspect, property or quality of a thing which strikes man most of all, he adopts as the basis for naming it. If we take the Russian word volk, the English wolf, the German Wolf, we see that all of them go back to the Sanskrit word vrka, the root of which originally meant "tearing". This quality of the animal was taken as characteristic of it and man began to name this animal "wolf". It does not mean that the man had a definite wolf in view when he named it. A certain degree of abstraction was already supposed because "...the simplest generalization, the first and simplest formation of notions (judgements, syllogisms, etc.) already denotes man's ever deeper cognition of the objective connection of the world."2

Some linguists deny the abstract or generalized character of a word in the languages of primeval tribes.

A good example of a relatively concrete perception of images of the external world is given by the American an-

<sup>&</sup>lt;sup>1</sup> V. I. Lenin. Collected works. Moscow, 1965, v. 32, p. 93-94, <sup>2</sup> V. I. Lenin. Collected works. Moscow, 1963, v. 38, p. 179.

thropologist and linguist E. Sapir in his book *Language*, written in 1921. Comparing the method of communicating the concept *The farmer kills the duckling* in English with that in Yana, which literally translated reads something like "kill-s, he, farmer, he, to duck-ling", he notes some concrete concepts in Yana which are absent in English. The idea of farming, for example is expressed in phrases like "to dig-earth" or to "grow-cause" and so on.

In Iroquois there is no way of expressing such abstraction as "the blueness of the sky". In order to express this idea, the Iroquois native must use a paraphrase like "how the sky is blue".

In the languages of some tribes there is no general concept or word for *hand*, for instance, but there are many words for separate parts of the hand. A curious remnant of this may be found in English and German, in which *arm* means part of the body between the shoulder and the hand, and the *hand* is the end of the arm beyond the wrist, but there is no one word for this part of the body. There is no such distinction in the Russian word *ruká*.

But does it mean that it is impossible in Yana, Iroquois and other so-called "primitive" languages to convey abstract notions? No, it does not. But the way of expressing these notions is determined by the objective environment of the people speaking these languages.

In the process of acquiring experience of the surrounding world, our mind masters more and more complex and abstract concepts, which are expressed in language through the meaning of a word. In every word, concrete and abstract concepts co-exist, and V. I. Lenin says of the correlation between them: "To begin with what is the simplest, most ordinary, common, etc., with any proposition: the leaves of a tree are green; John is a man; Fido is a dog, etc. Here already we have dialectics (as Hegel's genius recognized): the individual is the universal... Consequently, the opposites (the individual is opposed to the universal) are identical: the individual exists only in the connection that leads to the universal. The universal exists only in the individual and through the individual. Every individual is (in one way or another) a universal. Every universal is (a fragment, or an aspect, or the essence of) an individual. Every universal only approximately embraces all the individual objects. Every individual enters incompletely into the universal. etc.. etc. Every individual is connected by thousands of transitions with other *kinds* of individuals (things, phenomena, processes), etc. *Here already* we have the elements, the germs, the concepts of *necessity*, of objective connection in nature, etc. Here already we have the contingent and the necessary, the phenomenon and the essence; for when we say: John is a man, Fido is a dog, *this* is a leaf of a tree, etc., we *disregard* a number of attributes as *contingent*; we separate the essence from the appearance, and counterpose the one to the other.

Thus in *any* proposition we can (and must) disclose as in a "nucleus" ("cell") the germs of *all* the elements of dialectics, and thereby show that dialectics is a property of all human knowledge in general... Dialectics *is* the theory of knowledge of (Hegel and) Marxism."<sup>1</sup>

The materialistic approach to the understanding of the essence of the meaning which is intrinsic to a word, as it is embodied in the theoretical considerations of the classics of Marxism-Leninism, should be borne in mind in the study of lexicology (from the Greek *lexis* "word" and *logos* "knowledge"), a branch of linguistics studying the vocabulary of languages, and of semasiology (Greek *sēmainein* "to signify"), a branch of linguistics studying the meanings of words and their changes.

Meaning will be the main topic of this lecture.

In the course of the historical development of a language, the meanings of words change and the development of meaning proceeds from elementary to highly complicated forms, and eventually not only the meaning of a word but the very character of the reflection of life condensed in the word changes in the course of the development of thinking.

The study of meaning is complicated by the fact that there are a lot of words with more than one meaning. That is quite natural. When a man perceives the world surrounding him he uses the same word to denote various inner features of the thing for which the word is used, i.e. he makes new applications of the word. If there is a need to name a thing or phenomenon in our material environment in any way connected with an object already designated by a word, the word is used in another meaning. This process of words acquiring new meanings led to polysemy (Greek *polys* "many",

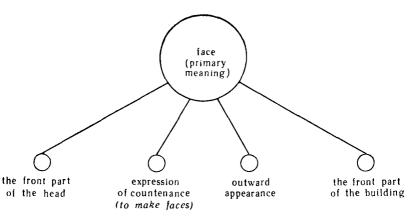
<sup>&</sup>lt;sup>1</sup> V. I. Lenin. Collected works. Moscow, 1963, v. 38, p. 361-362.

and *sēma* "sign"). The meaning of the word *house*, for example, absorbs the meanings of such words as *hut*, *cottage*, *palace*, *bungalow*, etc. These meanings cluster together, partly overlapping, partly defining each other.

In the process of further development the meaning of a word which appeared later may lose its connection with the original one and, thus, be infinitely distant from it or entirely new.

A pen was originally a "feather", but when steel pens were invented for the purpose of writing the original meaning was lost in current usage. On close analysis it can be seen that the meaning of many words has changed while their phonetic expression has remained unchanged.

In the process of the semantic development from one primary meaning, many new meanings may appear, in successive and progressive derivation. This primary meaning may be considered a centre of radiation of other meanings. The Soviet linguist R. A. Budágov suggests the following scheme for expressing polysemy:



The word *eye* originally meant the "organ of sight". From this semantic root there appeared such derivative meanings as "the power of seeing", "sight", "anything resembling an eye", like the "hole of a needle", "the loop of a hook", etc.

This is one direction in which the meaning of a word can be changed, and this may be called the *extension of*  *meaning*. The extension of meanings includes the change both from concrete to abstract and from specific to general.

The reasons for this extension of meaning can be different. They are often due to contiguity, to resemblance in form, position, colour and to the similarity of function. Sometimes the extension of meaning can be explained by extralinguistic factors or through the borrowing of words.

Numerous examples of extension of meaning caused by extralinguistic factors may be found in Russian words denoting new socialist economic relations after the Great October Socialist Revolution. The following will suffice for illustration: *temp* "tempo" in the sense of "rate of activity"; *aktiv* "active" denoting "an advanced group of men and women", and so on.

The Latin noun *passer*, *passeris* "sparrow", when borrowed by some Romance languages, got a more extended meaning in these languages: The Rumanian *pasăre* and the Spanish *pajara* mean "bird", while "sparrow" in these languages is *vrabic* and *gorrión* respectively.

The question arises, how does it happen that in the process of intercourse people do not mix up words but manage to choose the appropriate one with the necessary meaning from all the possible meanings? We may answer that the context generally gives the word its actual meaning. The context will generally show in what meaning the word is used: in its proper primary meaning or figuratively. When used literally, words have their natural, primary meaning; when used figuratively they have a non-literal, figurative meaning. The context generally shows which meaning out of all its possible meanings is to be attached to the word.

Alongside with extension of meaning, there is the process of narrowing the meaning, as a result of which a word of a broad meaning acquires a narrower specialized meaning, applicable only to some of the objects it had previously denoted, or a word of wide usage is restricted in its application and comes to be used only in a special meaning. In Old Russian, the word *kvas* meant "acid"; now it means a certain kind of beverage. The French term *chauffeur* which meant "a man who stokes a fire" acquired the general meaning of "driver", but has now been specialized to mean the driver of a motor vehicle. The English word fowl, which once meant "a bird" in general (compare the German Vogel) is now confined to a bird of the poultry variety. Corn in English means generally "seeds of cereal grasses". In America it has the specialized meaning of "maize", in England it means "wheat", and in Scotland and Ireland "oats".

Narrowing of meaning is frequently brought about by the omission of a noun and the retention of an adjective to express the whole phrase, e.g. (it leads to substantivation): private—private soldier, native—native man, general—general officer.

Words may become narrowed in meaning, and their specialized meaning often becomes generally known through the nature of the context in which they habitually occur. The word *room* originally had the broad meaning "space", a meaning which survives in such expressions as to make room, *plenty* of room, and so on; but room is generally a part of a house or building. Narrowing of meaning is less common than extension of meaning.

Narrowing of meaning leads to the appearance of terms which have only one meaning. If a term has two or more meanings, it is recognized to be ambiguous, which in its turn can bring about misunderstanding used for definite ends. As V. I. Lenin showed in *Materialism and Empirio-Criticism*: "Hence there is no doubt that both the materialist and the idealist, as well as the Humean and the Kantian lines in philosophy may be concealed beneath the word "experience"...<sup>1</sup> More than that. "There is no doubt that all Machism, in the broad sense of the term, is nothing but a distortion, by means of imperceptible nuances, of the real meaning of the word "experience"!<sup>2</sup>

The Machists, representatives of the idealistic philosophy, intentionally distorted the real meaning of the word "experience" by ascribing a new meaning to it. They understood "experience" as a totality of sensations, as a state of sensations while dialectical materialism defines experience as a human practice dealing with objective reality, existing outside and independently of us.

One-meaning terms are usually used in branches of science and technology and are of great importance for a deeper understanding of the subject.

Closely connected with the problem of polysemy is the problem of homonyms (from the Greek homos "the same"

<sup>&</sup>lt;sup>1</sup> V. I. Lenin. Collected works. Moscow, 1962, v. 14, p. 152-153.

<sup>&</sup>lt;sup>2</sup> V. I. Lenin. Collected works. Moscow, 1962, v. 14, p. 293.

and *onyma* "name", i.e. having the same name). Homonyms are words different in meaning but identical in their pronunciation.

One should distinguish between homonymy and polysemy. Polysemy is used to describe cases where different meanings of the same word are mutually dependent and proceed from the primary meaning in every direction like rays. Polysemy is the natural consequence of the meaning shift undergone by words in different contexts. With homonymy, the different meanings of words are mutually independent, there is no connection between the words whatsoever, they only have the same pronunciation and spelling, or are identical only in spelling or sound.

The Soviet linguist V. I. Abáev presents graphically the relation between polysemy and homonymy in the following way:

polysemy homonymy

In the first case the meanings are connected with each other and go from the same source, while in the second there is no such connection, and the parallel lines never intersect.

Homonyms may be of different types. We may speak of full or perfect homonyms which are identical both in pronunciation and spelling: Russian *luk* "onion" and *luk* "bow", German Acht "attention" and acht "eight", English bear and to bear. One should not confuse these with homophones which are identical only in pronunciation in the nominative and the accusative cases (Russian prut "twig" and prud /prut/ "pond", English knight—night) but with different phonemes in other forms of these words or in their compounds: prútik "small twig" and prúdik "small pond". Homographs are identical only in pronunciation and/or in spelling in one form: Russian tri "three" and tri—the imperative mood of the verb "to wipe"; English *lead* (Pres. Ind. of the verb) and *lead* (the metal).

The late Soviet linguist Professor A. I. Smirnitsky suggested the following system of classifying all homonyms:

(1) Lexical homonyms, which differ only in their lexical meaning but belong to the same grammatical category (part of speech); for instance, the English *bail* "a sum of money paid by or for a person accused of wrongdoing" and *bail* "a small metal tank for water"; German *Seite* "string" and *Seite* "side", French *louer* "to hire" and *louer* "to boast".

Lexical homonyms may be full or complete when they are homonyms in all their grammatical categories, e.g. the English *page* "one side of a leaf of paper", and *page* "a boy servant" have the same plural form *pages*, and partial when they are homonyms only in some of their grammatical categories—e.g. *to found* "to establish" and *found* (pret. and p. p. of "to find").

(2) Lexical-grammatical homonyms, which differ not only in lexical meaning but also in their grammatical category; for example, the English rose (the flower) and rose, pret. of to rise; Russian stolóvaja "dining-room" and stolóvaja used as an adjective in the word combination stolóvaja kómnata "dining-room".

(3) There may also be grammatical homonyms which differ in their grammatical meaning and express different grammatical categories.

The origins of homonymy are different. They may be the result of borrowing; for example, *fair* in the sense "exhibition" is a noun derived from the Latin *feria* and *fair* "pleasant" is an adjective derived from the Anglo-Saxon *fæger* "fair"; the Russian *brak* "marriage" and *brak* "spoilage", borrowed from the German *Brack* (from the verb *brechen* "to break"). Homonyms may be created through the break-up of a former case of polysemy. The history of form-words, prepositions and conjunctions will give sufficient evidence to show this: the English *provided*, past participle of *to provide*, and *provided* as a conjunction "on the understanding (that)"; Russian *blagodarjá*, which is the participle from the verb *blagodarit*, "to thank", and *blagodarjá* as a preposition "owing (to)". A number of words serve as examples of homonyms created by abbreviation. A few examples of this process are: *cab* "cabriolet", *cab* "cabin".

A characteristic feature of any vocabulary closely connected with the problem of meaning is the existence of several groups of synonyms. Synonyms (from the Greek syn "with" and onyma "name") are words different in sound and spelling but similar or exactly the same in meaning. Synonyms indicate the originality and preciseness of a language and enrich the vocabulary. Synonyms are created by various processes of meaning-shift alongside with the tremendous influence of foreign words through crossing with another language.

The study of synonyms enriches our vocabulary and helps to master language. The use of synonyms makes language more vivid and expressive.

Among synonyms we find words which have the same literal meaning but are appropriate only to definite contexts, on particular linguistic occasions.

Synonyms often belong to several groups. Very frequently a synonymic group consists of not a pair but several synonyms, one of which is a synonymic dominant, which is the most general word in a given group of synonyms. For example, in the group of English words *doctor*, *physician*, *surgeon* the synonymic dominant is *doctor*.

Synonyms are grouped according to similarity of meaning, and in their different meanings the synonyms may enter into different groups.

If we take the main meaning of the word bright as its reference to light, it forms one synonymic group: bright, brilliant, radiant, luminous, beaming, lustrous. In the sense of capability, the word bright is grouped with words like gifted, capable, intelligent.

According to the nature of the synonyms, we can divide them into absolute, ideographic (or relative), stylistic and phraseological synonyms.

(1) Absolute synonyms are rare. Their meaning is so fully identical that one can always be substituted for the other, e.g. airman—flyer—flying man, also—too, the Russian aeroplán—samoljót "aeroplane".

It should be borne in mind that absolute synonyms cannot have any synonymic dominants and only some groups of ideographic, stylistic and phraseological synonyms have them.

(2) Ideographic (or relative) synonyms are words expressing different shades of meaning and degrees of intensity, often quite different. Understand and realise are both used in the sense of "comprehend". But the word to understand refers to a concrete utterance: "to understand somebody's words", while the second means "to be conscious of something": Does he realise his error yet? In such synonyms as philosopher and thinker, the concepts are quite distinct. Phi*losopher* means a specialist in philosophy and a thinker in general, while *thinker* implies a person who has a gift of thorough thinking.

(3) Stylistic synonyms are synonyms having the same meaning but used in different styles. They belong to different lexical layers; for example, *courage*, *valour*, *dauntlessness*, *grit*, *gust*. Sometimes they are different in their emotive meaning: to monkey—to imitate; to begin—to fire away.

(4) Some linguists acknowledge the existence of a number of ideographic synonyms which have the same meaning in certain word-combinations (phraseological units). Such synonyms are generally called *phraseological synonyms*. Phraseological synonyms may be illustrated by the use of such English words as *language* and *tongue*. We say both the *English* language and the *English tongue* but we say *mother tongue*, and not *mother language*.

In English there are also some so-called *local synonyms*, i.e. a number of technical, political, geographical, military and other words which do not coincide in England and America:

English

American

government	administration	
office, ministry	dep <b>ar</b> tment	
tube	subway	
lorry	truck	
posť	mail	

As to the origin of synonyms, we must distinguish: (a) synonyms resulting from the development of meaning through different shades of common meaning, e.g. *handsome*—*pretty*—*lovely*.

(b) a small number of synonyms borrowed from dialects: charm—glamour (Scot.), ghost—bogle (North Engl.)

(c) synonyms created as a result of crossing with other languages, such as *begin* (English)—*commence* (French). In English the word *boss* is an Americanism, but the Americans borrowed it from the Dutch *baas* "master".

(d) synonyms created through contraction: *examination*—*exam*, *laboratory*—*lab*, *veteran*—*vet*., etc.

Closely related to synonyms are euphemisms (from the Greek *eu* "well" and "*phēmi* "I speak"), words which try to conceal unpleasantness by using synonymous decent words.

The origin of euphemism is to be sought in the remotest past, at the early stage of civilization, when religious taboo dictated the avoidance of certain terms. But euphemisms are frequent in the languages of civilized people as well as in savage tribes. People refuse, for instance, to utter the name of a person who is no longer living, so that the name actually becomes obsolete among the tribe. Words connected with sacred beings and objects must not be uttered, as these things should not be directly named.

The essential characteristic of euphemisms is that they eventually lose their euphemistic character, and assume the complete meaning and connotation of the original word they have displaced, become taboo, and ultimately have to be replaced by new euphemisms.

Euphemism has spread to all relations of life. To it we owe hundreds of expressions introduced because their equivalent had somehow or other gone out of use or come to be regarded as too crude for polite use. Instead of *dead* it is common to say the deceased, the departed, the late, the lamented, etc. For the direct verb to die there are expressions like to decease, to join the majority, to go to one's last reckoning, to go the way of all flesh, to expire, to pass away, to go west, to kick the bucket, etc. Underclothes finds a substitute in underwear, petticoat in skirt, drunkenness in intoxication, dirty in unclean, untidy, foolish in unwise, and so on.

Words having an unpleasant connotation are sometime replaced by letters: e.g. T. B. for *tuberculosis*, to hell — to "h" with it.

The meaning of an unpleasant word is sometimes expressed by a whole group of words. The following examples will indicate this tendency to use understatement or circumlocution to avoid giving offence: to lie---to misrepresent the facts, deaf --hard of hearing.

Such are the main types of euphemisms.

Previously I have mentioned that taboo sometimes brought about the appearance of euphemisms. Now we shall get acquainted with this notion.

In primeval communities there are some peculiarities which are largely or entirely dependent on old beliefs, according to which certain words and expressions are "taboo" (Polynesian *ta* "to mark", "to point", and *pu* "wholly") for certain persons. The use of taboo words is connected with the belief that there is something magical or mystical in a name. This something has power over things and is bound up with them in such an intimate manner that we cannot imagine it. Many primitive peoples are afraid of mentioning their names to strangers, because it is considered to be part of their being, and they do not wish others to get power over them by knowing their names. M.Levy-Brühl, a famous French anthropologist, cites many interesting examples in his book *La mentalité primitive* on this subject. In some Australian tribes, for instance, everyone has two names: a general name and a special name known only to members of his own totem-group. A woman, who must not pronounce the name of her father-in-law or his brother, must be careful, too, not to pronounce any word that sounds like that name.

In many countries it is not only persons who change their name; cities do too. This change of name is supposed to be of great symbolic importance to the life of the nation. The name of the ancient Japanese capital was Yeddo, which was given up later and replaced by the new name Tokyo, meaning the "eastern residence". The name of the old Russian capital St. Petersburg was changed into Leningrad to commemorate the place where the founder of the Soviet state announced to the world the birth of a new Socialist epoch.

Alongside with synonyms we can distinguish words which express contrasting ideas. Words opposite in meaning are called antonyms (Greek anti "against" and onyma "name"): English dutiful—dutiless, godly—godless; Russian khoróshij "good"—nekhoróshij "bad".

Not every word needs an antonym, though practically every word has a synonym. Many words of concrete meaning (i.e. nouns) have no antonyms, e.g. *table*, *lamp*, *tree*, etc.

Names of physical or mental qualities (adjectives) usually have antonyms, e.g. *beautiful—ugly*, *big—small*, *bright dim*, *old—young*, etc.

Abstract notions also have antonyms, e.g. *love-hatred*, *friendship-enmity*.

Words may be put into antonymic groups according to plurality of meaning—each meaning of a word may have a different antonym. If the word *fast*, for instance, is used in the sense of "fixed firmly", then the antonym will be *loose*. When *fast* means "rapid", the antonym will be *slow*. When *fast* means "dissipated" or "pleasure-seeking", as in the expression *fast company*, the antonym will be *temperate*, *sober*, *quiet* or something like that. The use of antonyms for stylistic purposes is presented in antithesis or opposition, excellent examples of which are the following:

"The history of all hitherto existing societies is the history of class struggle. Freeman and slave, patrician and plebeian, lord and serf, guild-master and journeyman, in a word, oppressor and oppressed, stood in constant opposition to one another, carried on an uninterrupted, now hidden, now open fight, a fight that each time ended, either in revolutionary re-construction of society at large, or in the common ruin of the contending classes." (K. Marx and F. Engels, *Manifesto of the Communist Party.*)

A brilliant example of a skilful usage of synonyms and antonyms for stylistic purposes is the beginning of A Tale of Two Cities by Ch. Dickens: "It was the best of times, it was the worst of times, it was the age of wisdom, it was the age of foolishness, it was the epoch of belief, it was the epoch of incredulity, it was the season of Light, it was the season of Darkness, it was the spring of hope, it was the winter of despair, we had everything before us, we had nothing before us..."

Having considered the different types of meaning-changes a few words should be said about concreteness and abstraction in the meaning of a word. If we compare such words as *table*, knife, etc. with love, friendship, fear, etc., we note the abstract character of the latter in comparison with the former. A modern man speaking such languages as English, French, Russian, etc., takes no notice of the differences between words of these two kinds. But in less developed languages this complex system of abstract words has not yet been worked out. The French anthropologist L. Levy-Brühl gives many examples of these concrete concepts in his book La mentalité primitive. Instead of saying the man killed a rabbit, a Ponka man has to say: "man, he, one, alive, standing, kill-ed (intentionally), with arrow, rabbit, it alive, sitting" because the form of to kill is to be chosen from a number of appropriate forms specially for the given case. The people of the Arunta tribe (Australia) use (hard) as a stone instead of hardness; like moon denotes roundness. In Arabic there is a very detailed nomenclature for camel.

Consciousness is directed at perceiving concrete things and phenomena and only gradually, step by step, in the process of its historical development, does it grasp more complicated and abstract ideas. Under favourable conditions a language abundant with concrete concepts begins to acquire abstract words. Examples of this may be observed in many languages of small nationalities of the Soviet Union which gained favourable conditions for their development.

The appearance of abstract words in language should not be mixed up with the development of figurative meanings of words that already previously existed. The transformation from the literal meaning of a word to the figurative one is achieved easily because of the close connection between these two types of meaning. This figurative speech penetrates all common speech. When, for example, we call a person *chief* (<Latin *caput* "head") we underline one particular feature or function of the human head, namely, that it is the most important part of a human organism. But we may apply it to something else which shares this feature, i.e. most important, principal: *the chief river of a country*.

These figures of speech based on a transference of meaning are called *tropes* (from the Greek *trópos*,  $< trép\bar{o}$  "to turn").

The transference of the meaning of words usually takes place when there is something common between two things or phenomena, a word for one of which exists; this commonness may be in the likeness of their functions or their common connections or associations.

The transference of meaning founded on similarity is metaphor (from the Greek *meta* "over" and *pherein* "to carry"). In a metaphor, which is the commonest of all figures of speech, transference is based upon resemblance in colour, movement, etc.

When we call "knowledge" a *lamp* or a certain flower a *day's eye* (*daisy*) or say a *stony heart*, we identify one subject with another and ascribe to one the qualities of the other.

Very often a metaphor becomes so common in language that the flexibility of the original figure is reduced and gradually lost by its frequent usage. Such metaphors are called *fossilized*, *faded*, or *trite metaphors*; long and short are used in connection with time as well as with space, to which they rightly belong. These fossilized metaphors become a very important means of enriching the vocabulary of a language.

The main metaphoric transferences are due to

(1) similarity of quality: e.g. *lion* ("a brave man"), *fox* ("a sly man"), *star* ("a leading actress");

(2) similarity of appearance: e.g. a leg of the table, needle's eye; urm of the chair;

(3) similarity of position: e.g. foot of a mountain, bottom of a page; head of a procession;

(4) similarity of sound: e.g. *barking* (for cough);

(5) similarity of movement: e.g. *foxtrot*, *caterpillar*;
(6) similarity of function: e.g. the Russian *strelyát*',
"to fire", has nothing to do with the word *strelá*, "arrow",

but their function is the same, "to kill somebody".

Sometimes metaphors are based on more abstract qualities: e.g. *the avenue to fame, the scream of society, angel* ("bene-factor").

Metaphoric extension is the ordinary process in all languages, and we continually find it in studying the history of words; for example, the French *tomber dans l'erreur* "to fall into error"; *passer (quelque chôse) sous silence*, German *mit Stillschweigen übergehen* "to pass into silence".

The above metaphors show that every occupation of Man, every subject (however remote) that engages Man's attention, has furnished the language with metaphoric expressions.

The transference of meaning based on contiguity in space or in time, causality, etc., is called a metonymic change of meaning. So metonymy (Greek meta "substitution", onyma "name"), may be defined as the method by which the name of one thing is changed for that of another to which it is related by association of ideas, both having close relationship to one another. The man who says I am reading Pushkin, meaning "Pushkin's works", uses metonymy.

The simplest case of metonymy is synecdoche (literally "receiving together"; from the Greek syn "together", ekdechomai — "I join in receiving"). Synecdoche consists in the substitution of a whole by some of its parts or vice versa. (Latin pars pro toto or totum pro parte.)

In metonymic transference of meaning there may be

(1) the name of a receptacle used for its contents or the container for the thing contained: e.g. *he ate three dishes, the hall was applauding*;

(2) the name of a place used for its inhabitants: e.g. *city*, *village*;

(3) the name of an instrument used for its function: e.g. the best pens of the day;

(4) the sign for the thing signified: e.g. gray hair (=old

man) should be respected; from the cradle to the grave
(=from childhood to death);

(5) a part of a species substituted for the whole or genus: e.g. a squadron of a hundred sabres; a fleet of fifty sails (=fifty ships);

(6) a whole of genus substituted for a part of species: e.g. *he is a poor creature*.

The following cases of metonymy are also worth mentioning:

(a) the abstract substituted for the concrete: e.g. *the authourities were greeted*;

(b) the name of a material used for the thing made of it: e.g. *the marble speaks*, that is, "the statue made of marble".

Sometimes metonymy is so disguised that it is rather difficult to recognize it. Here are some examples of faded metonymy and synecdoche: *book* (from old English  $b\bar{o}c$  "beech-tree") or *library* (from the Latin *liber* "book"), originally the "bark of a tree".

Sometimes the nominative meaning is changed into the notional in metonymy:

(1) the name of a person becomes the name of a thing associated in some way or another with the person: *sandwich*, two slices of bread usually buttered and having a thin layer of meat or cheese spread between them, after John Montagu, earl of Sandwich who lived in 18th century. It originated from Sandwich's hasty lunches of meat between slices of bread during a busy session of the parliament.

(2) the name of the inventor becomes the name of the invention: *mauser*—after Paul Mauser (1838)—a trade mark taken from the name of the inventor of a special kind of firearm.

(3) the name of a country or town becomes the name of the thing produced there: *Manchester* meaning "cotton textiles", called after the English town.

The three types of semantic changes (extension of meaning, narrowing of meaning and transference of meaning) which we have just been speaking of are based on logical relations which connect the newly developed meanings with the previous ones. This logical principle of classification put forward by H. Paul, a prominent representative of the psychological trend in linguistics at the end of the 19th century, includes a fourth type, degeneration and elevation of meaning, *h* nerbole and *litotes*. By degeneration of meaning we mean the falling of a word into disrepute. The emotional shade of meaning usually connected with the social estimation of a person absorbs all the other meanings and becomes the principal one. As an example of degradation we may take the word *villain*. Originally in Latin this word meant a man who worked on a villa. Such a person was felt by his social superiors to have a low sense of morality, and the word *villain*, at first a term implyng nothing unfavourable, came to be derogatory. These transformations of meaning reflect class relations in the country, the attitude of the ruling classes towards the toilers and social injustice in bourgeois society.

The process that leads to the heightening of meaning is called *elevation of meaning*. *Minister* now means "an important public official", but in earlier times it meant merely "servant" in English.

Another example may be given: Old English  $cn\bar{i}ht$  meant "a boy", "servant" (*cf.* German *Knecht* "a servant"); now *knight* has the figurative meaning of "an honourable man".

The *hyperbole* (Greek for "exaggeration") is a stylistic device, used to make speech more vivid and expressive: for example, I am terribly glad, I adore him, to roar with laughter.

The *litotes* (Greek for "simplicity") is used as an expression of simulated modesty or for the sake of emphasis. *She is not bad* often means "she is very nice". The litotes is naturally closely connected with what we have called *euphemism*.

Paul's classification, however complete it may be, does not cover genetic factors in semantic changes, on the one hand, or maintain singleness of principle, on the other hand, because the logical principle does not embrace the multiplicity of all changes of meaning. But it is generally accepted in almost all text-books on linguistics and many linguists follow it.

## MAIN GRAMMATICAL CONCEPTS AND CATEGORIES

Grammar is a branch of linguistics which deals with the structure of words and their forms. Grammar is divided into morphology (from the Greek *morpha* "form" and *logos* "know-ledge") which is the science of forms, and syntax (from the Greek *syn* "with" and *tássein* "to put in order") which deals with the arrangement of those structures and forms. The grammar of any language has a system of forms and syntactical combinations whose structure allows us to express our thoughts and our attitude to reality.

For a long time, grammar was considered an annex to logic. Formerly, when men tried to settle all problems by thinking about them abstractly, it was thought that there was such a thing as universal grammar, which was patterned after the classical models. Our modern languages are still sometimes taught in the same terms as Latin grammar was in the Middle Ages. All the attempts made to write out a logical grammar based on Latin, into which the forms of every language could be 'fitted, have been quite unscientific, because languages differ in their structure and possess their own peculiarities in their expressions of different grammatical functions.

It was pointed out in the previous lecture that the word is the fundamental unit of language. But the word is not perceived as an indivisible whole; it consists of morphemes, i.e. separate parts with grammatical significance.

The primary element of a word is generally called the *root*. The root is the main unchangeable part of the word conveying the fundamental lexical meaning of the word. Apart from the root, words contain affixes expressing lexico-grammatical meanings and serving not ony to make new words but to show the relations between words. We may call affixes "semantically weakened morphemes".

Affixes coming before the root are called *prefixes* (from Latin *praefixum* "fastened before"), those coming after the root, *suffixes* (Latin *suffixus* "fastened after").

As a general rule, prefixes modify the meaning of words, while the addition of a suffix not only modifies the meaning but changes the word itself from one part of speech into another. The *stem* is the part of a word got by adding an affix to the *root*. Thus in the word *mod-i-fy* the root is *mod*, the stem *modi* and the suffix *fy*.

Closely related to affixes are grammatical *endings* (inflections from the Latin *flecto* "to bend") which express the different grammatical meanings implied in words.

There are languages which do not use prefixes (Finno-Ugric, Turkish) and grammatical relations in these languages are expressed by suffixes. Take the Kirghiz kol-dor-um-go "with my hands", where the root is kol "hand", -dor- the plural suffix, *-um-* the possessive "my" and *-go* expresses the instrument-al case. Other languages use prefixation. The idea expressed in English by the sentence "I came to give it to her" is rendered in Chinook (an Indian language of the Columbia river) by i-n-i-a-l-u-d-am. This word consists of the root -d- "to give". six functionally distinct prefixes and a suffix. Of the prefixes, i- indicates recently past time, -n- the pronominal subject "I", -*i*- the pronominal object "it", -*a*- the second pronominal object "her"; -l- is a prepositional element indicating that the pronominal prefix is to be understood as an indirect object (-her-to-, i.e. "to her"); and -u- an element that indicates movement away from the speaker; the suffix -am modifies the verbal content in a local sense. It is obvious that in this language the greater part of grammatical relations is expressed by prefixes rather than suffixes.

A morpheme inserted right into the body of the stem is called an infix. Infixation inserts one or several sounds into the root of the word, like -n- in the Latin vinco "I conquer". as opposed to its absence in vici "I have conquered". This process is completely unknown in English, unless we consider the -n- of stand (as opposed to stood) as an infixed element. But it can hardly be said that the -n- here is felt as an infixed element with a specific meaning. Indo-European languages like Latin, Greek and Sanskrit made considerable use of infixes to differentiate the present tense of a certain class of verbs from other forms (a Latin example has been quoted above; Greek lamb-an-o "I take" and e-lab-on "I took"). Infixed sounds are often nasal and liquid. More striking examples of this process may be found in many of the languages of South-East Asia. In the languages of the Mon-Khmer group the -n- infix generally makes nouns and adjectives instrumental.

Of all these grammatical forms affixation is the one most

frequently used. And of the three types of affixation we have just mentioned—the use of prefixes, suffixes, and infixes suffixation is much the commonest. The great majority of known languages use prefixes and suffixes at the same time, but their relative importance varies enormously. In some languages, such as Latin and Russian, the suffixes alone relate the word to the rest of the sentence, the prefixes being confined to the expression of ideas that define the specific meaning of the root. In Russian, for instance, prefixes are commonest in verbs, and suffixes in nouns.

We cannot always clearly differentiate between the suffixes of a language as one group and its prefixes as another. In the majority of languages that use both types of affixes, each group has both definitive and formal or relational functions. All we can say is that a language tends to express similar functions in either the one or the other way.

Whatever great differences between affixes and words there may be in Indo-European languages like Russian, German, English, etc., there are points of contact between them from the point of view of their origin. Thus, -hood in childhood, -dom in freedom, -ly in lovely and many others were words before they were reduced to the function of grammatical elements:  $h\bar{a}d$  (>hood) meant "manner", "condition",  $-d\bar{o}m$  (> doom) had the meaning of "decision", "power", "fate" (cf. modern English doom), the modern English suffix -ly which was taken from the Middle English ending -lick, in Anglo-Saxon the ending -lic (with both long i and short), goes back to the noun lic meaning "body". Also related to *līc*, the Anglo-Saxon for "body" is the English word like, indicating resemblance in such words as fatherly, manly, friendly, etc. The German suffix -heit in such words as Schönheit "beauty", Weisheit "wisdom" goes back to the noun meaning "state", "condition", "manner". In the English adverb *nowadays* the *-s* was at first a genitive ending of the noun "day"; at present it is interpreted as an adverbial suffix. Many affixes have been borrowed from the cultural languages of antiquity. The prefixes com-, extra-, a-, in-, etc., or the suffixes -able, -age, -cy, -ism, -ist and scores of others are of Latin or Greek origin and are more or less alive in present-day English, Russian and French.

It should be noted that the boundaries between the morphemes changed in the course of the historical development of languages, i.e. words changed morphologically. The main factors that contributed to this change were discovered and analyzed by the Russian philologist V. A. Bogoroditsky (1857-1941) who called these factors "opróščenie" (the most appropriate English term is "simplification") and "pererazložénie" (a possible corresponding English term is "decomposition"), i.e. the change of boundaries between morphemes. Simplification is a grammatical process as a result of which a compound word loses the independent meanings of its component parts and is perceived as a single one. This process can be seen in every language. For example, the Russian word *vkus* "taste" is not divided now into the prefix *v*- and the root *-kus* "morsel", though once this word was considered a compound. The English *daisy* we consider as a simple word, although etymological analysis shows that it used to consist of two morphemes, two roots—first the Anglo-Saxon *dæges*, "day" and second *ēage* "eye", i.e. it meant "the eye of the day". Such German words as *Vorrat* "stock", *mitunter* "sometimes", *zurück* "back" may be explained as the result of this process.

The modern English word *husband* is hardly realized by the average speaker to be composed of *house* and *bond*, though in Anglo-Saxon and Middle English it was a compound (A.-S. *hūsbond* "master of a house", M. E. *hosbonde*, *husbonde* "master of the house or family"). Scheriff in Anglo-Saxon was  $sc\bar{i}r$ -ger $e\bar{f}a$ , where  $sc\bar{i}r$  corresponds to the modern "shire" and ger $e\bar{f}a$  the Middle English *reve*, a high administrative official. The list of examples is endless.

Closely connected with this process is the process we have called *decomposition*, which changes the boundaries between morphemes in words. For instance, in the words *development*, *amazement*, *ornament*, the suffix *-ment* is derived from the Latin *mens*, *mentis*, meaning "mind". *Mens* is a feminine noun. In the ablative case, therefore, the form would be *mente*; if we did something "with a clear mind", or a "serene mind", or a "sound mind", the Latin expression would be in the ablative case for the description of manner.

The modern English *pea* is derived from the Latin *pisum* and was in the Old English period *pēse*. In Middle English its plural is found to be *pēsen* or *pēses*, which clearly shows that the singular should be not *pea* but *peas(e)*. But when the old plural ending *-en* was lost, *pease* was taken for a plural, and a new singular, *pea*, was introduced. The affix here absorbed part of the root. There are many examples of similar processes in the history of every language. In Old Russian the word *žena* "wife", was declined in the following way: dat. pl. *žená-m* "to wives", instr. pl. *žená-mi* "with wives" and so on, i.e. the stem was *žená-*. Now the stem is *žen-*; it coincided with a root and the sound *a* joined the ending: dat. pl. *žénam* "to wives", instr. pl. *žén-ami* "with wives" and so on. In this case the ending widened due to the stem.

This process may lead to the acquisition of a new sound, as in the middle Latin *lazur*, alongside the middle French *azur* and Italian *azurro*, or to the loss of the first sound, as in the English *an adder* from the Middle English *a nadder*. Of course, all these changes took place gradually.

Up till now we have been speaking of the structures and forms of words. But the question arises, how the relations between words or grammatical meanings can be conveyed.

Grammatical meanings may be expressed not only through affixes, which we have already examined, but through internal vocalic or consonantal changes in the root, too. In some languages, such as English, German, Russian, vocalic change has become one of the main ways of indicating fundamental changes in the grammatical function. Vocalic change is of even greater significance in Semitic languages. For example, the consonantal group GNB in Hebrew expresses the idea of "stealing". Naturally, these consonantal sequences have been abstracted from the actual forms. The consonants are held together in different forms by characteristic vowels and as they are in definite grammatical forms, they express different grammatical functions. For instance, GNoB means "to steal"; GaNaB "he has stolen"; GoNeB "stealing"; GaNuB "being stolen". In Arabic the noun balad "place", has the plural form bilad, ragil "man" has the plural form rigal. In the same way, we have the English and German alternations of the type sing-sang-sung, nehmen "to take"-nam "took"—genommen "taken" (in English and German respec-tively). This type of vocalic change is called *Ablaut*. Another kind of vocalic change in Germanic languages is Umlaut,<sup>1</sup> which differentiates between the singular and plural forms: English foot-feet, mouse-mice; German Bruder "brother"-Brüder "brothers".

<sup>&</sup>lt;sup>1</sup> See Lecture 7, p. 88.

Consonantal change as a functional process is probably less common than vocalic changes, but it is not exactly rare. There is an interesting group of cases in English, where certain nouns and corresponding verbs differ solely in that the final consonant is voiceless in one case and voiced in the other. Examples are: wreath (with th as in think), but to wreathe (with th as in them); house, but to house (with s pronounced like /z/).

Sometimes grammatical functions may be expressed by reduplication. The process consists of the repetition of all or part of a root, stem or word and is generally used to indicate such concepts as plurality, increase of size, added intensity, continuous tense, and so on. For example, in the Malayan language reduplication expresses plurality: orang "man"-orang-orang "men". Reduplication as a means of emphasis is characteristic of many languages: Russian dada "yes-yes", net-net "no-no". In English, words of the type sing-song, riff-raff, roly-poly, are more common. W. Somerset Maugham says of a girl in his story Nail Mc Adam: "She spoke English with sing-song Russian intonations". Here we have either change of the vowel or change of the initial consonants. Such examples as the Russian chudo-uudo ("monster"), the Chinese ping-pang "rattling of rain on the roof" are very interesting. Reduplication is employed in Russian to express the superlative degree of an adjective: for example, the Russian *dobryj* ("kind")-*dobryj* is understood as "very kind". Such locutions as "a *big-big* man" or "Let it cool till it's thick-thick" are common in children's speech.

The most typical examples of reduplication are those which repeat only part of a root. The best-known examples are probably the original reduplications of our Indo-European languages, which help to form the perfect tense of many verbs (e.g., Sanskrit *cakara* "I have done" from the verb *kar* "to do"; *dadarśa* "I have seen" from the verb *darś* "to see"; Latin *spondeo* "I promise", *spopondi* "I have promised".

Some languages, like Latin, express practically all grammatical relations by means of modifications within the body of a word itself. Word order makes little or no difference at all in these languages. Whether we say in Latin pater amat filium "the father loves his son" or amat pater filium or filium amat pater or pater filium amat or amat filium pater makes little or no difference. In other languages the word order will be different if we translate this sentence: German—der Vater liebt den Sohn; French—le père aime le fils. Word order takes on a real functional value. In English it may make little grammatical difference whether we say yesterday the man saw the dog or the man saw the dog yesterday; but it is not a matter of indifference whether we say—yesterday the man saw the dog or yesterday the dog saw the man. In this sentence the all-important indication of the subject depends entirely on the positions of certain words in the sentence. In this case the word order in English is as important a means of grammatical expression as is the use of case endings in Latin.

In some languages word order distinguishes the attribute from the word attributed; in English *the round home* and *the home round* express quite different notions. In Russian this rule is not so rigid because of the different forms of attribute and a word attributed. The word order for expressing these grammatical relations varies in different languages; French—les savants sourds and les sourds savants differ from the same notions in English, the deaf wise men and the wise deaf men.

Stress and pitch may serve to show certain grammatical relations too. Tonal differences in the same syllable are of the most fundamental grammatical importance. In Shilluk (one of the languages of the headwaters of the Nile) the plural of the noun often differs only in tone from the singular, e.g. *jit* (high tone) "ear", but *jit* (low tone) "ears". In the pronoun *three* forms may be distinguished by tone alone; *e*, "he" has a high tone and is subjective; *-e*, "him" (e.g. *chwol-e* "he called him") has a low tone and is objective; *-e*, "his" (e. g. *wod-e* "his house") has a middle tone and is possessive. In aboriginal America, pitch accent is known to function as a grammatical process. A good example of such a pitch language is Tlingit spoken by the Indians of the southern coast of Alaska. In this language many verbs vary the tone of the root according to tense; *hun* "to sell", *sin* "to hide", *tin* "to see" and many other verbs, if low-toned, refer to past time, if high-toned, to the future.

Stress may be as functional as pitch. In Russian, stress can differentiate between words:  $m\dot{u}ka$  "torture" and  $muk\dot{a}$ "flour";  $kr\dot{u}\ddot{z}ki$ , "mugs" and  $kru\ddot{z}ki$  "circles". But sometimes the stress may move away from one syllable to another and distinguish between grammatical forms. In Greek, for instance, it is typical of true verbal forms. There is a great accentual difference between a verbal form like *elúthemen* "we were released", accented on the second syllable of the word, and its participial derivative *luthéis* "released", accented on the last. This comes out very clearly in such English pairs as *to expórt* and *éxport*, in which the difference between the verb and the noun is entirely a matter of changing stress. In Russian the word *rukí* (gen. sing. "hand") differs from *rúki* "hands" only in the position of the stress.

A common device for word-making is the process of composition, which consists of uniting into a single word two or more words to form a new entity. Almost any combination of parts of speech may be done in this way, though some combinations are far more common than others, and some are rather unusual. Yana, an Indian language of California (see p. 37) can freely compound noun with noun and verb with noun, but not verb with verb. On the other hand, Iroquois can compound only noun with verb, never noun with noun. The combination *stone wall* is beyond the power of this language. Each language has its own types of composition order. In English the qualifying element regularly precedes (*the human language*); in certain other languages it follows (as in French *langage humain*).

The process of composition differs from the mere juxtaposition of words in a sentence in that the compounded elements are felt to constitute parts of a single word. The essence of a compound word is that it expresses a single idea. But there are different degrees of closeness in the merging of the separate elements of a compound. It is therefore practically impossible to draw a rigid demarcation line between compounds and free syntactical groups. It should be noted that in the commonest compounds, the last element expresses a general meaning, whereas the prefixed element makes it less general. Thus, *motor ship* is a ship, but a particular kind of ship; *water lily* is a lily, but a particular kind of lily.

The process of composition, says the prominent Soviet linguist A. A. Reformatsky, may have two tendencies—agglutinative and fusional. The first tendency gives us a new word which is equivalent to the sum of meanings of two compounded words: German Kopfschmerzen "headache" (Kopf "head" and Schmerzen "ache"), Russian profrabota ("tradeunion work") or stengazeta ("wall-newspaper"). Under the second heading a new word appears, the meaning of which is more than the sum of meanings of compounded elements. The English words *typewriter* and *killjoy* are not merely the sum of the combined meanings of *type* and *writer* or *kill* and *joy*. In English the unity of the word *typewriter* is further safeguarded by a predominant accent on the first syllable and by the possibility of adding such suffixes as the plural -s to the whole word. The English word *killjoy* is also an illustration of a compound word, but this resulting word has a nominal, not a verbal function. We cannot say *he killjoys*!

It is curious to observe how greatly languages differ in their ability to use the process of composition. There is a great variety of types of composition. The simplest form of compounds is the welding of two words that already exist in the language: *broadcast*, *newsboy*, *watermill*, etc.; Russian: *kolkhoz* "collective farm", *proforg* "trade-union organizer"; French: *rendez-vous*, *pince-nez*, *cache-nez*; German: *Wanduhr*, *Kindergarten*, *Stundenplan*, etc.

In many languages composition is confined to what we may call the *delimiting function*, when of the two or more compounded elements one is given a more precisely qualified significance by the others. In English, for instance, such compounded elements as the *red* in *redcoat* or the *over* in *overlook* merely modify the significance of the dominant coat or *look*.

One should distinguish between morphological and syntactical composition. In morphological composition, two words are joined together by means of a linking vowel or consonant, e.g.

Anglo-Russian electro-motor gasometer speedometer		linking	vowel	0.
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Compare with the Russian *parohód* "steamship", *parovóz* "engine", etc. Morphological composition with the linking vowel *o* is common in technological terminology.

Compounds with the linking consonant *s*, an old English survival, as in *boatsman*, *craftsman*, *sportsman*, *tradesman*, etc., are comparatively few in number (the linking *s* goes back to the English genitive case inflexion).

Grammatical meanings may be expressed not only within words, but outside of them too, i.e. by means of relational words which accompany presentational words. These relational words do nothing but show the relations either between the parts of a sentence or between sentences.

Among relational words the following are to be distinguished:

(a) prepositions, which express relations between the parts of a sentence. Even in languages with a developed case system, prepositions play an important role, serving to differentiate the relations which are often indicated only vaguely by case inflexions. Compare the Russian: On stoyál **u** okná ("He stood at the window") and On smotrél iz oknà ("He looked from the window").

The translation of the Russian sentences shows that in modern English, which has lost almost all case-forms, prepositions have become a most important means of indicating the various relations of nouns to the other words in the sentence. Prepositions may express different relations: the book on the table, French: aller à Paris "to go to Paris" (space relations), Russian: v dva chasá "at two o'clock" (time relations) and so on. Sometimes prepositions may occur not before nouns, as is usual, but after them: Latin: timoris cause "for fear", Russian: bóga rádi "for God's sake", where the prepositions cause and rádi "for" stand after the nouns.

(b) conjunctions have no independent meanings of their own, but serve to connect words, groups of words, and sentences or clauses. This connection is brought about either by coordination or by subordination. Accordingly, conjunctions are classed as co-ordinative (and, but) and subordinative (that, unless, when, though, etc.). With respect to their form, conjunctions are divided into simple (since, before), correlative (both... and, as... as), phrase-conjunctions (as soon as, as if).

(c) articles, the semantic function of which is to express whether the object named has already been mentioned. The languages that use an article generally put it before the noun, but some languages convey it in the form *boy-the*. Among the languages that have a postpositional article are Rumanian, Swedish, Norwegian, Danish, Icelandic, Armenian.

(1) The first grammatical function of the article is to signify the noun, i.e. it shows which word is the noun: to

play—the play; German: schreiben "to write"—das Schreiben "a letter"; French: charmer—le charme. The article may turn sentences into nouns: French—il va et vient "he walks to and fro", and le va et vient "walking to and fro", German an und für sich sein "to exist in itself and for itself" (about things) and das an und für sich Sein "being in itself and for itself".

(2) The second grammatical function of the article is to denote whether the thing named is known to the listener or not: a(an)—the in English; ein—der, eine—die, ein—das in German; un—le, une—la in French.

(3) Then the article may distinguish the gender. For example:

	German		French		
	the def. art.	theind.art.	the def. art	the ind. art	
masculine	der	ein	le	un	
feminine	die	eine	la	une	
neuter	das	ein			

(4) The fourth grammatical function of the article is to show the number. French gives a good example of this: the pronunciation of *chat* and *chats* ("cat" and "cats") is the same and only the article in *le chat* and *les chats* shows the number.

Historically, the growth of the articles seems to be the result of an emphatic or concretizing tendency and they owe their origin to numerals and demonstrative pronouns.

(d) Auxiliary verbs have no independent meaning of their own but help to build up the analytical forms of the verb. In English there are auxiliaries of tense (*shall*, *will*), aspect (*to be*), voice (*to be*), mood (*should*), etc.

Usually the verbs to be, to have are taken as auxiliary in most languages: German—sein, haben; French—être, avoir; Russian imét' "to have", byt' "to be".

(e) Some form-words are not clear-cut in their grammatical function, but accompany presentational words and express grammatical nuances which are expressed by affixes in other languages. For instance, in Turkish and English there is no grammatical gender; the noun does not possess any special gender forms, neither does the accompanying adjective, pronoun or article. There is hardly any gender-forming suffix in English apart from the suffix *-ess* expressing the feminine gender. Its chief use is to distinguish between people (host—hostess) and a few animals (lion—lioness). When nouns are limited to one sex, words are sometimes added to specify the sex, forming a compound (he-cat—she-cat, girl friend—boy friend; cock-sparrow, hen-sparrow; Turkish erkek kedi "he-cat" — disi-kedi "she cat"). Such words are called empty words.

We have briefly reviewed the main means of expressing grammatical meanings used by all known languages to denote the fundamental grammatical categories.

Now the question arises what is a grammatical category. The Soviet linguist N. S. Pospélov defines it in the following way (translated by me.—F. B.): "Grammatical categories are generalized grammatical meanings, characteristic of a certain language, that are expressed in changes in the forms of words and combinations of words in sentences."<sup>1</sup>

Let us consider certain features of grammatical categories as they are set forth by Soviet linguists.

(1) Each grammatical category is of a generalized character. This means that it embraces a whole group of words that is larger in number with a higher degree of abstraction. The degree of abstraction is different in various grammatical categories. Some are very abstract, such as mood; others are influenced by the lexical meanings of the words. The degree of abstraction depends on the range of the grammatical category. We may speak of a general and a particular grammatical category. For instance, the grammatical category of the genitive case is particular in the context of the case in general. In this relation there are grammatical categories of general tense and particular tenses of a verb, of aspect in general, and the perfective and imperfective aspects in particular, and so on.

(2) We may speak of a grammatical category if there is a special grammatical form for its expression. For example, in Russian there are three primary tenses (present, past and future) which are expressed by grammatical forms. But the so-called secondary grammatical tenses are absent in Russian, such as Present /Past Perfect, Future in the Past in English, Plusquamperfect and Futurum II in German, because in

<sup>&</sup>lt;sup>1</sup> N. S. Pospelov. Sootnošenije meždu grammatičeskimi kategorijami i častjami reči. ("Interrelations between grammatical categories and parts of speech.") in «Voprosi grammatičeskogo stroja». M., 1955, p. 74.

Russian we have no special grammatical forms for their expression.

(3) Grammatical categories manifest themselves when different forms of the same word are opposed and contrasted. A grammatical category must be represented by two series of correlative forms of a word, i.e. by two series which are identical in lexical meaning and have the same grammatical meaning, but differ in the grammatical meaning inherent in this grammatical category. If we take the English *boy* in the common case and *boy's* in the possessive case, these two forms are not contrasted in their meaning, but correlative.

(4) Grammatical categories are divided into morphological and syntactical ones. Parts of speech with grammatical categories which are displayed in the forms of a word are morphological ones. Syntactical categories are those which use combinations of words and sentences.

(5) The system of grammatical categories is historical in its nature. In the process of the development of language some grammatical categories may disappear. For example, in old English there were four cases: nominative, genitive, dative and accusative. But in the course of time the original nominative, dative and accusative merged into one uninflected form, the common case. The old genetive case is represented in Modern English by the inflected possessive case of nouns (*boy's, bird's*) and some pronouns (*one's, somebody's*). Thus, Modern English has two systems of cases, one for nouns, another for some pronouns. The means of expression of grammatical categories, their meanings and use have also changed. In place of the old case inflexions certain prepositions are used in Modern English to convey some of the meanings expressed in other languages by cases.

A comparison of the grammatical categories of Russian with those of other languages reveals some of the fundamental differences.

Let us consider the main grammatical categories of a noun and a verb in different languages.

In nouns the grammatical category of gender is basic. We divide nouns into "masculine", "feminine" and "neuter" according to whether they denote males, females or inanimate objects. *Man*, *woman* and *table* are, respectively, masculine, feminine and neuter by reason of their meaning, but not of their termination. Of course, gender does not have to correspond to natural sex. Some languages often give an excellent clue to gender in the endings of their nouns; in Latin and Russian, for instance, nouns ending in -a are normally feminine, though there are some exceptions, and adjectives used with them must agree in gender; that is, they also take on a feminine ending.

Some languages, like Latin, Greek, German and Russian divide nouns into genders, and sometimes without any logic, make many inanimate objects masculine or feminine, and a few animate objects neuter.

The differences between languages in this respect are striking. In German Person "person", Waise "orphan", Wacht "guard", Memme "coward" are all feminine, whereas Kunde "customer", Kamerad "comrade", Dienstbote "servant" are masculine, regardless of sex. Drohne "drone" is feminine and Weisel "queen bee" masculine!

Some languages make no gender distinction whatsoever. In Hungarian the same word means "he", "she", "it". In Chinese and Japanese there is no gender at all.

In Iroquois there are two so-called genders which might be called the *noble* and the *mean*. The former is used for words referring to men and good spirits; the latter is used for words referring to women, male and female animals, evil spirits, and inanimate objects.

Some languages of the Indo-European group have no neuter gender, only a masculine and feminine, as is the case in French and Italian. In Spanish, for example, the feminine is used with things which are round but not long (ball, apple, water-mellon). What is more interesting is that in this language trees are masculine but their fruits are feminine because of the collective meaning of that gender. The same two-gender system appears also in the Semitic group of languages.

It is impossible to say what it was in particular that gave rise to the category of gender, but the best hypothesis which explains how the gender-system arose is that the original distinction was made between living and lifeless things, between animate and inanimate objects. The distinction between animate and inanimate things was understood in magical forms. Moving things were considered animate and inert objects as inanimate. Animate beings were then further subdivided by sex into masculine and feminine. The sun, moon and sky were masculine, the earth feminine. Certain elements, like fire, were variously considered sometimes as active (Latin *ignis* and Sanskrit *agnih* are masculine) and sometimes inert (Greek *pyr* and German *Feuer* are neuter). In Semitic languages there is no distinction between animate and inanimate, only between masculine and feminine. As for the occurrence of the neuter gender in connection with animate beings (German *Mädchen* and *Fräulein* "girl" and "miss", or English *it* referring to a baby), that can be ascribed to the fact that the individual in question has not yet proved to be animate by reproducing offspring.

Other languages make quite another classification of subjects quite different from the two- or threefold gender classification. The Bantu languages of Africa classify nouns into seventeen classes by means of various prefixes, and the appropriate prefix must be used with all modifiers associated with the noun.

In the Swahili language, spoken in Zanzibar and on the neighbouring mainland, there are about twenty one prefixes to distinguish different things. The prefix m-/wa, for example, refers to rational beings including people: *mtoto* "child", *watoto* "children". The m-/mi- class refers to animates including things which seem to be animate because they move: *mgun* "foot".

In the Caucasian languages, nouns are classified into four or eight classes, which distinguish rational objects (males and females: *father*, *son*, *brother* and *so* on, and *mother*, *sister*, *daughter*, etc.) and irrational objects (individual objects like *dog*, *house*, *tree*, collectives and relative substances).

Another category of a noun is that of number, which is more universal than that of gender because since time immemorial men have always distinguished between one thing and more than one. In many languages nouns are conceived either as singular, plural or collective (e.g. *foliage*). The ancient Indo-European languages, notably Sanskrit and Greek, as well as the Semitic languages, had, apart from the singular and plural forms, aslo a dual form, indicating two. This, of course, was used especially for things that come in pairs, like eyes, hands, feet. According to A. Meillet, a famous French linguist, the disappearance of the dual in old Greek is due to an advance in civilization.

In some American Indian and native Australian languages, on the other hand, the grammatical distinction between singular and plural does not exist at all. The ways of forming the plural vary in different languages. Sometimes they reflect different types of the concrete plural. Mayan, for example, simply adds the word for "they" to the singular. Many languages repeat the singular form (Bushman *tu* "mouth", *tu-tu* "mouths"—see reduplication). A Tahitian says "heap-man" for "men".

The actual use of the plural form, where it definitely exists, does not always follow what seems a logical system to us. As a general rule, Finnish and Hungarian always use the singular form instead of the plural after numerals, so that a sentence like \*I see five man is natural to them. Russian has the genitive singular of the noun after two, three and four, the genitive plural from five onwards ("one house", "two of house", "five of houses")

The present notion of number has undergone a very complex development and some linguists consider that it was connected with parts of the speaker's body. There are indications in some African languages that parts of the body first gave rise to numerals. It is said that in the Ewe language numbers are expressed by touching the fingers in a specified way. Counting by some tribes in British New Guinea is often quoted as an example of the most archaic number system. The natives reckon by touching the wrist, elbow, shoulder, neck, etc. The remnants of this system may be found in some modern European languages, in which the decimal system is based on the usage of the fingers of two hands. This leads us to the conclusion of that counting was originally demonstrative and the system of numerals depended on parts of the body.

But whatever the first means of reckoning were they reflect objective reality and "...the concepts of number and form," as F. Engels writes, "have not been derived from any source other than the world of reality."<sup>1</sup>

Cases make up another grammatical category of a noun which appears in some languages, the function of which is to express the relation of a word to another word in a word combination or sentence by means of special morphemes in synthetical languages (usually by inflections as in the Russian *kniga brata* "a brother's book") or by means of prepositions in analytical languages: cf. English *the room of my brother* or French *nous sommes à la maison* "we are at home". But as we have said before, cases and prepositions are not 1 F. Engels. Herr Eugen Dühring's revolution in science (Anti-Dühring). Moscow-Leningrad, 1934, p. 47. identical to each other in the expression of grammatical meanings.

The correlation between prepositions and inflections which show the grammatical meaning of a case has changed in the history of every language. In Old English, for instance, there were four cases (nominative, accusative, genitive and dative); the disappearance of inflection in the noun has left the preposition to do its work, and in Modern English we speak of one common case.

The original Indo-European parent-language seems to have had eight cases: nominative or subject-case; genitive or possessive-case; dative or indirect object-case; accusative or direct object-case; vocative or direct address-case; instrumental or *with*-case; locative or *in*-case; ablative or *from*-case. Each of these had its own distinctive endings, which permitted the language to dispense with fixed word-order, on the one hand, and prepositions on the other. As the case-endings fell away in some divisions of Indo-European, syntactical position and the use of prepositions grew in importance. But it is a mistake to explain the use of prepositions to the falling-off of the ancient case-endings. Russian to-day has six cases, but has developed a lot of prepositions and a fairly fixed word-order.

The number of cases is different in various languages. Languages like Finnish, Hungarian and Turkish have many cases. Finnish grammar has 15 cases. In some languages the grammatical category of case is more abstract while in others it is more concrete and specific. Wherever they exist, cases form a rigid system, the parts of which depend upon and condition each other.

In Indo-European languages the verb has the grammatical categories of person, aspect, tense, mood and voice because the verb is a part of speech which shows whether the subject acts itself or is acted upon on the part of another subject (voice), expresses the time of the action (tense), how the action is regarded by the speaker (mood), the particular manifestation of the action (aspect) and classifies actions according to who has performed them (person). Indications for person, number and gender or class come into the verb through pronouns, as in Russian (on) byl,  $(on\hat{a}) byl\hat{a}$ ,  $(on\hat{o}) b\hat{y}lo$ ,  $(on\hat{i}) b\hat{y}li$  "he, she, it was; they were". As we have said before, gender, number and case are not properly verbal concepts; they are characteristic of nouns.

Of all the verbal grammatical categories, tense is the most typical, showing how the speaker determines the time relation of the utterance to the moment of speech. The notion of the moment of speech is very important because in some languages tenses are arranged to express the time of an action (past, present and future as in Russian Ya pisál "I wrote", Ya pishú "I write" and Ya búdu pisát' "I shall write"), but in other languages the relation of the speaker to the moment of speech is conveyed indirectly, e.g. through intermediate points, like the pluperfect and future perfect (as in English I had written my exercise before he came or in French j'aimai, "I've loved"). The English He has come bears on the present situation while the Russian On prishól may mean "He has come" or "He came", e.g. it refers to the action as taking place in the past without any reference to the present.

Some languages are extremely poor in time-distinction, others are extremely rich. In the languages of primitive tribes, time-indication in a verb led to great complexity owing to the inclusion in a word of many particular features of each single event. Wishram, for instance, an Indian language of the Pacific Northwest, is said to distinguish between recent past, remote past and mythological past, while native Australian language has five future tenses, two for things that will happen to-day, the others for more indefinite future periods.

There is reason to believe that the only two true tenses of Proto-Indo-European were the present, used also for the future, and the past. From these two fundamental time-notions there developed in the course of centuries a multiplicity of tenses. Some linguists hold that the distinction between present and past was originally not a time-distinction at all, but a distinction between incomplete and completed actions, or instantaneous versus durative, in a word, a distinction which still appears in the aspects of Slavonic verbs.

It follows from this that tense and aspect are grammatical categories which are closely connected to each other. The main divisions of time—present, past and future—are expressed in two aspect forms: the common and continuous. The common aspect represents an action as simply occurring. It may refer to concrete actions and to actions of a more abstract, general character as well. The interrelation between the tense and the aspect of the verb are seen distinctly in Slavonic languages, especially in Russian. A perfective verb in Russian in the present tense has the meaning of the future tense: Ya zdélaju "I shall do", i.e. the present perfective refers to a definite future time. The present imperfective refers to the present time, as in Ya pishú "I am writing". So perfective verbs are not used in the present tense and imperfective verbs have only an analytical future, cf. Russian Ya búdu pisát' "I shall write". The English common aspect is rendered in Russian by the perfective or imperfective aspect which are associated in such a way as to cover the time scale.

Sometimes the Russian imperfective aspect is compared with the English continuous aspect but the English continuous aspect has a much narrower meaning than the Russian imperfective aspect. The continuous aspect in English expresses a concrete action in its development at a given moment whereas the Russian imperfective shows an action in its development without concretizing it.

In Russian the verb possesses a more developed grammatical aspect category, and tense categories denote aspect too.

In English, German, and French, which have special morphological means for conveying aspect forms, the latter are expressed either by tenses (French *il tomba* "he has fallen and *il tombait* "he was falling", English *he was speaking* and *he has spoken*) or by specialized auxiliaries including lexical means: *he smiled* and *he gave a smile*. By means of these auxiliaries there may be conveyed such aspect forms as duration or momentariness, reiteration or singleness of action, the beginning or the end of the action and so on: for example, *to pity, to take pity on*, etc.

The mood is the form of the verb presenting actions as occurring (indicative), i.e. what the speaker affirms, conceived as possible (subjunctive), ordered (imperative), noncommittal (infinitive), wished for (optative), made to take place (causative), etc. This category shows in what relation to reality the speaker places the action or state expressed by the verb. Thus the category of mood expresses modality, which is the relation of the action or state expressed by the predicate to reality as it is regarded by the speaker. Modality may be expressed lexically—by modal verbs (*She can easily do it*), by parenthetical words and expressions (*Perhaps*, *he will come to-morrow*), syntactically (German: *Sie lesen* "You read"—*Lesen Sie*! "Read!" and phonetically—'You do it!).

As for voice, we must say that the voice shows the relation between the subject and the predicate verb in the sentences. The active voice indicates that the subject of the sentence acts, that it is the doer of an action. The passive voice indicates that the subject of the sentence is acted upon, that it is the recipient of an action. Constructions which designate natural phenomena (French *il pleut* "it is raining", Russian *smerkaetsja* "it is growing dark") are present in many languages. In Russian some passive constructions are derived from the reflexive pronoun; for instance, Ya umyvájus' "I wash myself". Verbs of emotion are also expressed with a passive form in Russian; cf. *im khoroshó živyótsja*. "they live comfortable" ("to them well is it lived"), *mne khóchetsja spat*' "I want to sleep", and so on.

Voice is connected with the transitive and intransitive character of a verb. Intransitive verbs (*to work*, *to laugh*, etc.) have no voice.

Besides these two voices there exists the middle voice, and there is strong reason to believe that Indo-European active and passive voices were originally an active voice and a middle voice.

## WRITING AND ORTHOGRAPHY

The invention of writing was one of the greatest achievements in the history of Mankind, giving a new and better method of human intercommunication. It is no exaggeration to say that on the day when a people learned to write and to preserve written documents it passed out of pre-history and embarked upon a new course of development.

For centuries before the invention of writing, accumulated knowledge had to be passed on by memory, but, as a Chinese proverb says, the palest ink is better than the most retentive memory. The significance of writing is that it helps to transmit human knowledge from one generation to another and here lies its advantage over spoken language.

Sometimes writing is called written language, as opposed to spoken language. But this definition is far from correct because it is not an exact equivalent of spoken language, and sounds in spoken language do not coincide with letters in written language, and written language does not replace spoken language but supplements it as another means of communication.

As far as the origin of writing is concerned we must proceed on the assumption that writing was not invented by any one man in any definite place nor in any one particular period. Its history and pre-history are as long as the history of civilization itself and it was invented in several places and by different peoples.

Like painting and sculpture, writing is probably in its origin a ceramic art. The origin of writing arose partly through trade among early peoples, by means of rough and conventional pictures of commercial objects, which shows a complicated level of social relations at that time, and partly through the necessity to record something for a long period of time.

It seems certain that writing developed from narrative drawings, but these drawings were not what we mean now by the word. They represented simply lines gouged on the surface of hard flat objects. For example, seven horizontal lines on a North American Indian's gravestone mean the seven campaigns of the dead Chief, and three perpendicular lines indicated the three wounds he received in battles. In the early stages of the development of writing, objects were used to designate what was to be transferred. This may be illustrated by the famous story of Darius and the Scythians, which the Greek historian Herodotus mentions in his' chronicles. When Darius invaded the country of the Scythians they sent him a messenger with a bird, a mouse, a frog and five arrows. Darius thought that this meant that the Scythians surrendered land, water and arms to him. But he found that the message was: "Unless, o Persians, ye can turn yourselves into birds and fly through the air, or become mice and burrow under the ground, or be as frogs and take refuge in the fens, ye shall never escape from the land but die pierced by our arrows."

Of course, it is not a letter as we understand it now, but it is a kind of writing in which each object symbolizes something.

Before real writing, there was picture writing. Every word and every letter known to us was once a picture. Primitive systems of writing like the Egyptian and Assyro-Babylonian were originally based on pictorial representation pure and simple. A pictograph<sup>1</sup> is a symbol denoting a definite object like a fish or a tree or a man. Pictures were used to recall ideas, but in the right order.

• "sun",  $\bigwedge$  "go", or in the Sumerian

"hand".

With the development of writing, the original picture often became quite unrecognizable, as in later Sumerian

הת "hand".

<sup>1</sup> From the Latin pictus "painted" and the Greek grapho "I write"

The picture writing depended entirely upon familiarity with the practice of communication by this means, and a knowledge of the particular subject of the message.

But the number of picturable objects has definitely limits, and people began to feel the practical necessity of recording non-picturable things. As soon as they became aware of the shortcomings of their pictures, they developed them into symbols of non-picturable things, actions and ideas. So the transition from pictography to ideography was connected with the necessity to convey things that could not be painted. The Chinese, for instance, combined their pictographs for "sun" and "tree" into an ideograph signifying "east" (the sun rises through the trees). "Sun" and "moon" put together to form "light"; "eye" and "water" to form "tear"; "woman" plus "child" gave "good". Two or more ideographs, once contrived out of pictographs, could be combined to denote still more complicated or abstract concepts: for example "green" and "year", themselves ideographs originally contrived out of earlier pictographs, mean "youth".

There is one great advantage in a pictographic-ideographic system of writing. No matter how much languages may be different, all speakers will be capable of understanding one another's message because of the graphic representation of what is meant. Nowadays we have a certain number of ideographical symbols;  $H_2O$ , for example, means the same to a Russian chemist as it does to an American one, though they pronounce it differently. To-day in China people speaking mutually unintelligible dialects are able to read one another's writing with no difficulty, as Chinese characters are designed to convey meaning rather than sounds.

The step from pictogram to ideogram is the step from direct representation to symbolic representation. A circle standing for the sun is no longer a pictogram; it is an ideogram. Two clasped hands standing for agreement, or welcome, no longer constitute a pictogram; they make an ideogram the pictorial symbol of an idea.

The necessity of speeding up writing, combined with the possibility of writing longer and more complex messages, made pictures change into conventionalized symbols called *hieroglyphs.*<sup>1</sup> Nevertheless, the hieroglyphs retained

<sup>&</sup>lt;sup>1</sup> From Greek hieros "sacred" and glyphein "to carve".

their picture-like features and may be defined as beautifully stylized pictures.

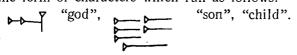
The Egyptian hieroglyphs make up the best-known hieroglyphic system. The Egyptian hieroglyphic system is founded on the communication of notions in the drawings themselves, though there was a mixture of word and sound characters. This system of writing makes it possible to convey abstract concepts.

The peculiar thing about the Egyptian hieroglyphic system is that the quality of the vowel is not indicated, though an alphabet of twenty-four consonants was developed. The same syllabic character can mean "ta", "to", "te", etc. For instance the proper name of the Greek king Ptolomees which was read on the stone from Rosetta is shown as follows:

$$\left(\begin{array}{c} \Box & \swarrow & \swarrow & \swarrow \\ \Box & \swarrow & \bigtriangleup & \swarrow \\ \Box & \swarrow & \Box & \blacksquare \end{array}\right) = \begin{array}{c} P & O_M^L & EES \\ T & O_M^L & EES \end{array}$$

A new stage in the development of writing historically appeared in the countries of the Near East in the form of the cuneiform inscriptions practised by the Sumerians and the Assyrians. In cuneiform (from the Latin *cuneus* "wedge") inscriptions all the characters are compounded of wedges and they arose from older characters more like hieroglyphs.

The characters were written on soft clay with a sort of wooden stylus which was pressed into the clay. This explains the form of characters which run as follows:



Sumerian script consists of syllables which are easily analysable and sometimes rather complicated. Having started with a pictographic-ideographic system, the oldest peoples—Sumerians, Assyro-Babylonians and Egyptians, soon began to isolate certain characters and give them a phonetic value. The Egyptian symbol for "sun" was a picture of the sun. The spoken Egyptian word for "sun" was *re*. The sun-picture is often found in hieroglyphic inscriptions standing not for "sun" but for the spoken syllable *re* occurring in a longer word. A phonetic formation based upon the initial sound (syllable or letter) of the word for what a picture represented is called *acrophonic*, or *acrophonetic*.

The invention of acrophony liberated humanity from slavery to the picture as a means of transmitting thoughts and emotions. Acrophony stands at the beginning of soundwriting, which is an advance from picture-writing. And it remained for the Phoenicians and the Hebrews finally to use their symbols with the exclusively phonetic value of single syllables or consonants, dropping the ideographic connotation altogeter. At this point, we have the beginning of a true phonetic alphabet.

The appearance of an alphabet, each sign in which stood for one letter, is one of the very greatest events in human history. An alphabet or collection of letters is far more manageable and useful than pictographs and hieroglyphs.

The very word "alphabet" betrays its pictographic origin. This Greek word is made up of the names of the first two letters in the Greek language: "alpha" and "beta", which mean nothing else in Greek. In the Semitic languages they mean respectively "ox" and "house". In the course of time the picture of the ox ("aleph") was worn down to symbolic form, just as the sound of *a* represented the phonetic residue of what was once the entire word *aleph*.

Letters themselves are a late invention in the history of writing. The analysis of words into letters, e.g. into symbols that stand for each component sound of the word, is a very late triumph in the history of writing.

As we have seen, all the systems of writing mentioned above were syllabic in character and lacked any precise indication of vowels. The characters were neutral as to vowels. One sign designated any syllables which had a particular consonant and any vowel.

When the alphabet appeared —the first was the Semitic alphabet—efforts were made to indicate that the preceding character should be pronounced with a long vowel. As to the short vowels, the device was hit on to indicate them, but only with the addition of so-called *diacritical* (from the Greek *diakritikos* which means "distinctive") signs—lines, curls, dots—which were put on, over and under the old syllabic characters. But, of course, these vowel-marks are not letters. It is the Greeks to whom the honour belongs of having distinguished and developed a full system of vowels and consonants.

The oldest forms of the Greek letters are identical with the most ancient Semitic characters, but the internal principle of this script differed radically from the Semitic basis.

From the Greek alphabet a whole series of national alphabets appeared.

The Greek alphabet, for instance, gave rise to the Etruscan, which in turn gave rise to the Roman. Another variant of the Greek alphabet was adapted for use by the Goths by their bishop Wulfila in the fourth century A. D. Still another version of the Greek alphabet was devised by the two bishops Cyril and Methodius for the Slavs. Faced with Slavonic sounds which did not exist in Greek, they stretched the Greek alphabet, added one or two Hebrew characters, and invented others. The result was the Cyrillic alphabet used to-day by Slavonic nations like Russian, Ukrainian, Serb and Bulgarian. The Poles, Czechs, Slovaks, Croats and Slovenes adopted the western Roman alphabet.

Other developments of the original Semitic alphabet appear in the Armenian alphabet and in the ancient alphabet of India, called Devanagari, in which Sanskrit is written and which is written under the line.

The major civilized languages of the earth may thus be said to have two main systems of writing, drawn from separate sources: the Chinese picto-ideographic, which also serves Japan; and the Semitic phonetic alphabet, derived from an Egyptian hieroglyphic which was also originally of a pictographic nature.

Japan received the Chinese system of writing about A.D. 300. The Japanese use the same symbols as the Chinese, but since the spoken languages are totally different. the symbols are differently read; the symbol for *man*, from instance, pronounced /jên/ in Chinese, reads /hito/ in Japanese.

Chinese and Japanese, when printed on a page, are read from top to bottom, with the vertical columns running from right to left, though other arrangements are possible. It should be added here that in various alphabets the direction of writing is different: from left to right, from right to left, from top to bottom; man even writes backward and, on occasions, upside down. The change of direction in writing is called the *boustrophedon*, a Greek term which refers to the turning of the oxen in their ploughing (bous means "ox" and strephein "turn").

Many languages use auxiliary marks like accent-marks, cedillas, tildes, and hooks over vowels and consonants, to indicate a modified pronunciation of the symbol in question. This is again due either to the fact that the language had changed since the alphabet was adopted, or that at the time of the adoption the language had sounds that did not fit very well into the scheme of the Roman alphabet.

It should be noted that there is no language which has absolute letter-for-sound correspondence, though Finnish comes quite close, using a single letter of the alphabet for each sound of the language, and indicating a long vowel or consonant by writing it twice.

At present, the phonetic alphabet—based upon the principle of a single letter for a single sound—is used chiefly by phoneticians. The artificial International Phonetic Alphabet, consisting of some hundreds of characters, has been devised to represent all the sounds occurring in all known languages. It is practically impossible to find sounds represented by the same letters in two different languages which absolutely coincide.

Summing up this short sketch of the history of writing, we may agree with the American linguist E. Sturtevant who says that in many parts of the world the following stages in the development of alphabetic writing can be distinguished: the first writing was contrived from pictures; picture-writing was conventionalized and simplified and represented the objective world directly. Secondly, picture writing was replaced by ideography in which pictures became symbolized and gained conventional phonetic value. Then some of these symbolized pictures began to stand for single syllabic characters. And the last stage was marked by the appearance of vowel letters to be written.

The Chinese and American Indian systems of writing may serve as an example of the first (pictorial) stage in the development of alphabet. Then they gave way to systems that moved forward from pictogram to ideogram. Then the Assyrian-Babylonian cuneiform inscriptions appeared. Later sacred documents written in hieroglyphics came into being. This type of alphabet was followed by Semitic writing and all its widely divergent developments—the Devanagari of India, the Greek alphabet with its different offshoots, the Roman alphabet. These are the historically recorded systems of writing. While writing words in any language one must take into account not only their pronunciation, but other aspects too, conditioned by the history of a language and the etymology of its words. Here lies the difference between the orthographic rules of writing (from the Greek *orthos*, "straight" and *grapheo*, "to write") and those of spelling. The orthographic rules of any language are based on different principles.

(1) The phonetic principle.—The spelling of some words in a language is simple, because it does not differ with their pronunciation: as one speaks, one writes. For example, the spelling of such Russian words as *stól* "table", *bábushka* "grandmother", etc. coincides with their pronunciation. A great number of analogous examples may be found in German— *Fenster* "a window", *geben* "to give", *kurz* "short", and so on. There are less such words in English: *cot*, *fit*, *trick* and others and in French: *il* "he", *tu* "you". Under the phonetic principle a word is written as it is pronounced.

(2) Side by side with words spelt according to their pronunciation, there are a lot of words whose spelling differs from their pronunciation. The spelling of those words is based on the etymological (morphological) principle, under which words in writing keep alive etymological ties. For instance, in English the Past Indefinite of verbs is formed by means of the suffix *-ed* with voiceless /t/ after voiceless consonants (*looked*, *stopped*), though it is spelt with voiced *-d*.

This principle is widely used in all languages. In German it is important: *Tag* "day" is pronounced like /tak/, though the spelling is supported by other morphological forms: *Tage* /tage/ but not /take/.

In French this principle is of great importance too; for example, the spelling of an unpronounced consonant in adjectives is supported by feminine forms where this consonant is pronounced: *petit* [pətr] "small" and *petite* [pətrt] "small" (feminine).

Thus, the spelling of words based on the etymological (morphological) principle may always be explained within the given language by applying either to their proper etymology or to their morphological forms.

(3) Alongside with spelling that may be explained by a living etymology or by morphological factors of a modern language, there are many words whose spelling can be understood only with reference to the history of the language, that explains the origin of such spelling. So this principle is called the historical or traditional principle.

English gives an unprecedented example of this historical orthography: *night* /nat/, *partial* /pa:j = 1/, *search* /s $= t_j/$ . The difficult orthography of French is mostly explained by a wide usage of this principle. As an example we may take the suffix /-a:s/ which is spelled either -*ance* (<Latin -*antia*) —for instance, *souffrance* "suffering" or -*ence* (<Lat. -*entia*)—for example. *presence* "presence", according to the historical principle.

In German this principle is not important, but still examples of it can be found. The spelling of words like *Fenster* "window", *Feder* "feather" and *Vater* "father", *Veilchen* "violet", with the v pronounced as /f/ is one case.

(4) The last, hieroglyphic, principle explains that the spelling is used specially to distinguish homonyms in writing; good examples of this are the French pairs of words: a (3rd person of the verb *avoir* "to have") and  $\dot{a}$ —the preposition "to". In German the words *viel* "many" and *fiel* "fell", *Lied* "song" and *Lid* "eyelid", and others are characteristic.

There are many words with hieroglyphic spelling in English: sea and see; site and sight; meet, meat and mete.

We cannot say that the orthography of language is based on one definite principle. In every language there is a combination of different principles and one of these is dominant. In Russian, the etymological (morphological) principle prevails, though, of course, there are many words based on other orthographical principles. The same situation exists in German. In French the phonetic principle is quite weakly developed while the traditional principle together with the hieroglyphic one is dominant. The same can be said of English. All these principles influence upon each other, since they all operate side by side.

## MAIN STAGES IN THE DEVELOPMENT OF SOVIET LINGUISTICS

After the Great October Revolution every nation in the Soviet Union received wide opportunities to create its own culture—socialist in content and national in form. The linguists were confronted with a task of immediate importance, i.e. to help nations that had no written language to work one out.

But besides this new kind of practical activity, apart from the very important task of language construction to promote the national culture of the peoples of the first socialist state, our linguists felt an acute need to revise their theory critically too. A leading figure in this revision was N. Marr (1864-1934), who had been highly esteemed in the Russian Academy of Sciences before the revolution.

It is not accidental that the work of revising theoretical assumptions was not led by a student of Indo-European languages. The practical activity of the Soviet linguists was concerned mainly with studying and describing non-Indo-European languages—namely those of the nationalities making up the Soviet Union. It is natural, therefore, that a student of Caucasian and Semitic linguistics was better able to see the critical condition of current Indo-European linguistics by the comparative method. Marr acknowledged certain merits in Indo-European linguistics in the development of the science of language, but he thought that these merits belonged to the past.

Marr also understood that Indo-European linguistics at the beginning of the century served as a considerable support to the reactionary theory of racial discrimination and the allied theory of the different values of different languages.

The spokesmen of old-fashioned Indo-European linguistics argued that the so-called Indo-European nations were tied by bonds of blood and had created and preserved the most advanced culture of the world. By force of their racial and spiritual supremacy, these nations had subjected other smaller nations and tribes to their rule from time immemorial and had become their masters, bringing them to a higher material and cultural level. All the achievements of human society were in one way or another ascribed to the Indo-European nations. In the opinion of German linguists who put forward the Indo-European theory, the historical mission of these nations was that of rulers, masters and lords over the non-Indo-European nations, whose racial peculiarities allegedly prevented them from working out consistent policies and making social progress. The Indo-European race was proclaimed the leading force in the historical development of society.

These ideas were incompatible with the ideas of fraternal solidarity between all nations and of internationalism. First and foremost, they conflicted sharply with the rational materialistic concept of the nature of historical progress. By the 20's these concepts were beginning to win overwhelming support from our intellectuals, who were enthusiastic in helping the common cause of building a new society free from the exploitation of Man by Man. Therefore, the sharp reaction against the Indo-European theory and its unconditional rejection were quite natural and reasonable. They were expressed most clearly in the scientific method developed by Marr in the early 20's in the USSR.

Only Japhetic linguistics could save the science of language from its theoretical deadlock—that was Marr's opinion. The study of Japhetic (or Caucasian) languages, in his opinion, made it possible to understand linguistic processes in the system of different language families that had at any time been in contact with the Japhetic race of the Caucasus.

Japhetic linguistics was based on the theory that language crossing played a highly important role in the formation of certain languages, especially the Indo-European ones. Marr saw the main explanation for divergencies between closely related dialects in language crossing.

On the basis of these new methods, Marr tried to solve the problem of the origin of the Indo-Europeans. Marr persisted in the search for the answer to the fundamental problem of Indo-European linguistics. In the middle 20's he advanced propositions that proved fatal both for his scientific prestige and for the future of the whole Japhetic theory, that in its first stage had been so promising. In 1924 Marr published an article called *The Indo-European Languages of the Mediterranean Area*, where he stated without any proof that the Indo-European languages were not a separate family of languages but only one stage in the world glottogonic process, namely, the stage necessarily following the Japhetic structure of speech.

The conception of the stage-by-stage development of language ends the period of research by Soviet linguistics into Indo-European linguistic problems.

First of all, this theory called for a new linguistic method radically different from the traditional comparative method, enabling linguists to handle the vocabulary of different languages without any hindrance on the part of the sound laws put forward by the Young Grammarians.

So in 1926 Marr put forward his notorious four-element analysis, the principles and procedure of which remained unclear both to the scientist's followers and, evidently, to the scientist himself. For example, he noted the word *deutsch*, *deut*, the contracted form of which, *dt* is added (simultaneously or in the order *d*, then *t*) to *sta*, giving the word for "town"—*die Stadt*; if this is pronounced /šta/ or /sta/, it is the written stem of the name of the townbuilder *Ištari* that plays a special role in the cosmic worldoutlook of the Germans.

The absurdity of such reasoning strikes even a layman ignorant of the sound laws of the historical comparative method. The stem -sta- has nothing to do with the name of any goddess of the ancient Near Eastern peoples; it is the stem of the short ancient High German verb stan, from which the form of a noun of feminine gender is formed by adding the usual suffix t, which can in no way be identified with the word deutsch because, among other things, the presence of the d and t sounds in the words *deutsch* and *Stadt* tells us nothing of the mutual relation of these words. The dt combination in the word Stadt came from the later phonetic change of the word, which can be easily traced back to the form Stat which was subjected to the influence of the preterit form of the verb stand. These arbitrary manipulations with lexical elements of different languages discredited Marr's whole theory.

A pseudoscientific assumption of the superstructural nature of language was taken as the methodological basis for his theory of the stage-by-stage development of language. The transition of society from one structure to another must be accompanied, according to Marr, by the transition of language from one state to another, with changes of language states taking the form of abrupt and fundamental breaks in the language structure followed by new, qualitatively different language structures, still preserving a number of relics of the preceding structure. Thus, isolating languages allegedly reflected communal social formations, the agglutinative languages—tribal society, and inflective languages—class society.

But that interpretation logically led to the conclusion that the development of the languages, for example, of the Chinese and other peoples in the Sino-Tibetian group stopped before the formation of these peoples, while the development of the languages of many other peoples froze at the time of communal society or, at least, the early stages of the feudalism. The question arose, why do peoples of the same level of social development living on adjacent territories and sometimes incorporated in one state have languages at different stages of development? The theory of a common glottogonic process could not supply an answer to this question. This is the error of the main premise of this theory that a given morphological type of language corresponds to a specific social formation.

The predominance of the stage-by-stage concept of language development in the 30's dampened the initiative of Soviet linguists. Therefore, the 1930's mark a search for a compromise way out of the suffocating atmosphere of the vulgar and mechanistic scheme of language change rigidly linked to social change. One of these was in the field of linguistic geography. This made it possible, on the one hand, to preserve certain features of the Marr theory in the early stages, while, on the other, to get down to real scientific research into the theoretical study of languages which could bring positive results.

Despite certain common features that the Marr theory has with Soviet language geography, the latter was in those years in a way a veiled reaction to Marr's method of investigating language phenomena, the futility of which was painfully obvious.

In linguistic geography Soviet linguists saw the possibility of finding a field for more fruitful work than that prescribed by followers of Marr's theory.

In this and many other linguistic questions Soviet linguists developed the traditions of linguistics in Russia. The book compiled by the Moscow Dialects Committee called *The Map* of Russian Dialects in Europe was published in 1915. In this work the stress was laid on the phonetic feature of dialects, which did not give very wide scope for developing dialectology with research into specific important dialectological problems.

Soviet linguists do not confine themselves to studying dialects spread over the territory of the Soviet Union. In their studies of linguistical subjects from the geographical point of view they have a broader range for solving important Indo-European problems. For instance, the contemporary Soviet scholar V. M. Zhirmúnsky stressed the importance of language crossing in the history of cognate dialects. Zhirmunsky starts from the principal contradiction between comparative linguistics and linguistic geography, i.e. the contradiction between the law of sound alterations discovered by the Young Grammarians, and the inconsistencies and violation of sound laws in dialects.

The theoretical views of Zhirmunsky were expressed in *German Dialectology* (1956) which is a critical summary of work in this field as well as a further development of this branch of linguistics on the basis of the Marxist materialistic approach to language phenomena.

Soviet linguists devote a lot of attention to language geography because it enables them to reveal relations between cognate and non-cognate languages in very old times and to reconstruct later features in Indo-European peoples and languages on the basis of isoglosses and their crossings.

Soviet linguistics in the 30's is characterized by a sharper er interest in the social problems of language and the essential peculiarity of that period was that the centre of attention in linguistic research was shifted on to the investigation of the sociological aspect of language. The titles of works of that time such as *Language and Society* (1926) by R. O. Sor and *Language as a Social Phenomenon* (1925) by M. N. Péterson and others of this kind speak for themselves. It is quite natural, because language is not a creation of a single man; it belongs to society, to the people speaking it, and the society is not indifferent to language.

It should be said in passing that it was I. Baudouin de Courtenay in the history of Russian linguistics who was the first to draw attention to the social division of language. But his approach to the problem was psychologically coloured, and the sphere of sociology is far from that of psychology. When we speak of the social division of society into classes and of the social differentiation of language, we do not mean class languages but social dialects, characteristic of a certain social stratum of the population. Engels said in one of his works that the British working class had become quite a different people from the British bourgeoisie... The workers spoke a different dialect, had different ideas and concepts, different moral principles, different religions and political views from those of the bourgeoisie.

Soviet linguists began to consider language as a social phenomenon from the point of view of the class struggle, the reflections in language of changes which take place in society. The sociology of language included the working out of such problems as the description of language as a system, the functions of language in society and those social factors which influence the development of language.

Among the Soviet linguists of the 30's engaged in all these problems the name of E. D. Polivánov should be mentioned, an outstanding specialist in the study of eastern languages, particularly Japanese. In his book *For Marxist Linguistics* (1934) and in many articles he studied the problem of the causal relations between social and economic factors, on the one hand, and linguistic phenomena, on the other.

The attention of Soviet linguists could not but be drawn by the theme of the influence of political changes on the evolution of language, in particular, the influence of the Great October Socialist Revolution on the modern Russian language and on the languages of different nationalities in the USSR. These problems are discussed in the book Language of the Revolutionary Epoch.

The revolution brought a lot of new notions and ideas into life which had to be expressed in language, such as *Sovdep* "council of workers' and peasants' deputies", *kolkhoz* and so on, which were commonly used after the revolution. It is natural why these changes were reflected in the vocabulary of the Russian language, because the vocabulary of any language is more susceptible to changes of this kind. As far as phonetics is concerned, that reflects the social changes too but to a lesser extent. For example, after the 1789 French Revolution the diphthong *oi* in such words as *roi* "king", *loi* "law" was pronounced /wa/ instead of the former /we/.

One of the last books in which problems of social dia-

lects were analysed was V. M. Zhirmunsky's *National Language and Social Dialects* (1936) where he stressed the importance of their study. But from the middle 1930's onwards these problems were neglected and abandoned and only now have they come to the forefront of Soviet linguists.

Efforts to create written languages for small nationalities of the Soviet Union went hand-in-hand with a careful study of the phonetics of the languages of these peoples, which resulted in a high development of phonetics in Soviet linguistics. The high level of phonetics in Russia contributed to its development after the October Revolution.

The prominent Russian linguist I. A. Baudouin de Courtenay put forward the theory of the phoneme, which was fruitfully developed by the Academician L. V. Ščérba. As he writes in his autobiography, his major contribution in the field of phonetics was made by elaborating the theory of the phoneme. He was the first to point out the semantic role of the phoneme. Defining the phoneme, Ščerba stressed the close relationship between phoneme and meaning. He defined the phoneme as a sound type capable of distinguishing words and their forms. This definition of the phoneme and its variants made a great influence on the Prague linguistic school and above all on its outstanding members N. S. Trubetskoy and R. Jakobson, who regarded Ščerba and I. Baudouin de Courtenay as the founders of the theory of phonemes. Ščerba's theoretical views on phonetics have been developed by his disciples in the years of Soviet government (Prof. E. D. Polivánov, Prof. G. S. Ahvlediáni, Academician A. P. Baránnikov, Prof. B. A. Lárin, and others).

A number of trends have manifested themselves in Soviet phonology, though they are not yet very pronounced. These include the so-called Leningrad phonological circle (Prof. L. R. Sinder, Prof. Bernstein, and others), on the one hand, and the Moscow phonological circle (the late Prof. A. I. Smirnitsky, Prof. G. S. Ahvlediani and others), on the other.

Ščerba regarded all linguistic problems from the standpoint of general linguistics. He rejected Indo-European comparative linguistics, for, in his opinion, this method ignored the functions and relations of a separate language system within the Indo-European family of languages. Therefore he turned from idealistic psychological linguistics to the new materialistic philology. In conformity with these new views Ščerba regarded language as a social constant, something unified and obligatory for all members of a given community. The language system was, in Ščerba's opinion, something which found its expression in individual language systems. He felt it necessary to give more attention to studying modern languages.

Hence he put forward the typological study of language structures instead of the old comparative grammar. He regarded as one of the principal tasks of general linguistics a comparative study of the structures of languages, laws of formation, the development and coexistence of a language structure, as well as the laws of coordination and interconditionality of all its elements. Sčerba thought that an intensive and scrupulous study of language structures would be the most reliable means of solving most of the problems of general linguistics.

Ščerba stressed the importance of distinguishing between active and passive grammar. The distinction was especially pronounced in syntax. In Ščerba's opinion, passive syntax only included studying the meanings of syntactical means, namely word order, word combinations, sentence stress and sentence intonation. Active syntax included means of expressing ideas; for instance, means of expressing logical judgement, or independence of the action from the will of the doer, etc.

From these general considerations it can be clearly seen that in Ščerba's original works syntax had a markedly psychological and phonetic colouring; to Ščerba the core of syntax was a notion of a group of words (syntagma) rather than the notion of a sentence. In his *Phonetics of the French Language* Ščerba gave a more or less complete definition of syntagma: "Syntagma," he said, "is a phonetical entity expressing a single whole sense in the speech-thought process, which might be contained in a word, a word combination or even a group of word combinations." Syntagmas could be united in larger groups with a different intonation, finally forming a sentence which could be either a group of syntagmas or one syntagma. To form a syntagma was the same as to extend a noun, an attribute, a verb or an adverbial modifier by other words.

But a syntagma should not be confused with a word combination, for, according to Ščerba, a word combination was a word unit built according to laws of language, expressing a whole notion. It is to be regretted that these contradictory and sometimes vague ideas were never further developed by Ščerba.

While Ščerba's ideas do not form a system, he actively advocated the development of Soviet linguistics on a dialectical and materialistic basis. In forming his linguistic theories he tried to study language material profoundly without bias. He regarded it as an expression of the system of a language. Being an original scientist he always arrived at new ideas and new solutions to linguistic problems.

In the 40's the development of linguistic investigations in the Soviet Union was retarded to a certain extent because of wartime difficulties, when many research workers, including many linguists, either went to the front as volunteers or joined the ranks of the People's Army. Research centres were evacuated to the east of the country.

But at that period, however difficult it was, there was no break in the working out of major linguistic problems, among which works by I. I. Meščanínov (a prominent Soviet linguist and specialist in Paleo Asiatic languages) deserve special mention. He was engaged in problems of linguistic typology, that branch of linguistics which studies language resemblances and differences and their correlation in languages of different families and types. The examination of all these problems in languages with different structures throws light on general tendencies in the development of language. And which part of grammar in various languages makes the examination of these resemblances and differences possible? According to Meščaninov, it is elements of syntax, as opposed to morphology and lexicology, which are common to all languages. These views were expounded in his books General Linguistics (1940), Parts of Speech and Parts of the Sentence (1945), and in the monograph The Structure of the Sentence, which was published later (1963).

Meščaninov's considerations are quite understandable, if one takes into account the fact that the structure of thought conditions the structure of linguistic phenomena on the level which directly participates in the language performance of its function as a means of communication. And the level in question is syntactical because it is impossible to communicate with the help of words and word-combinations without arranging them into sentences which are the domain of syntax. Only through the sentence as a unit of syntax and only in the sentence can we use words and wordcombinations. Grammatical categories of syntax (subject, predicate, object and attribute) are, to Meščaninov's mind, universal categories which are present in every language.

The presence of some syntactical categories in language as basic and fundamental ones and the absence of others may serve as a basis from which to single out various types of language structure. Incorporation, for instance, a linguistic process in which a sentence is made up through the insertion of words into a single sentence, is characteristic of a number of Paleo-Asiatic and American Indian languages. This incorporating process does not exist in other languages.

Meščaninov postulates three syntactical stages in the development of languages: passive, ergative and active. Each stage is determined by the syntactical arrangement of the transitive verbs in a language. According to Meščaninov, the incorporating languages are at the passive stage because they do not distinguish between a word and a sentence.

The next stage in the development of languages is the ergative stage, so called after the ergative case in a number of languages, indicating the doer of an action. In an ergative construction the transitive verb points to the doer of an action which is in the objective case instead of the nominative. The following sentence in Georgian should make the essence of this construction more clear.

Monadirem (the noun "hunter" in the ergative case) *iremi* (the noun "deer" in the nominative case) *mohkla* (the verb "to kill"). The word-for-word translation of the sentence may be approximately presented in the following form "(By) a hunter a deer is (killed) dead". This example shows that the ergative construction is equivalent neither to the active nor the passive voice. Some scholars hold that an analogous construction may be observed in English sentences like "We were ten strong boys, and soon by our efforts the lorry went up", while the passive construction is "The lorry was lifted by our efforts".

Though in the modern Caucasian languages the ergative construction is quite distinct it is not, nevertheless, consistent in usage. Developments in the structure of the Caucasian languages towards bringing them together with a synthesis of the Indo-European languages made Meščaninov come to the conclusion that the ergative construction is an intermediate link between the incorporating and synthetic languages, like Indo-European, the fundamental syntactical feature of which is the nominative case as the only possible form of the subject, which is not related to the character of the verb.

Following Marr's erroneous teaching that various stages in the development of language correspond to different social and economic formations, Meščaninov refers the passive stage to the tribal society of the language community, the ergative stage to the feudal period, and the active stage to later periods in the development of social formations. This mistaken conclusion of Meščaninov was justly criticized at the linguistic discussion of 1950.

The main merit of Meščaninov's theoretical considerations lies in the fact that the attraction of vast linguistic material from languages with different structures led to a study of the gradual formation of the grammatical system of each language. Syntactical theories by Meščaninov, built up very logically, combined with abundant factual material, had a profound influence upon Soviet linguists in the 30-40's, and syntax has become the main subject of linguistic research.

The works of such leading Soviet linguists as M. M. Gúhman, A. V. Desnítskaya, V. N. Yártseva, in which they analysed the syntactical structures of different languages, established the fact that the first stage in the development of all the languages, that had ever existed, whatever their structure, was the undifferentiated condition of lexical units. It was not until later that the process of bifurcation of nouns and verbs took place, and when the grammatical category of transitiveness began to develop in a language.

In his works of that period, especially in *Parts of Speech* and *Parts of the Sentence* Meščaninov put forward the idea of the existence in language of so-called *notional categories* by which are meant the notions, expressed in language and existing in a given social environment.

These categories are not described with the help of language, but expressed in its lexics and grammar.

Those notional categories which are embodied in syntactical or morphological forms become grammatical notions. According to Meščaninov, notional categories are subject and predicate, object and attribute, and they are expressed in the semantics of a word, in their syntactical construction and in the morphological arrangement.

The specific features of notional categories may be understood if one acknowledges in them the categories of consciousness, i.e., the categories which reflect in our consciousness the connections and relations which exist in objective reality. This objective reality is reflected in thought and constitutes the content of consciousness, which is expressed through language. The logical nature of the relationship between the thought and the thing is universal and adequate. So in all the languages of the world there exist such universal linguistic categories as subject, object, predicate and attribute, and the relations between parts of a sentence conveyed by them. On the basis of these relations rests a common language foundation which determines the different types of grammatical structures in various languages. As we said above, the elements of syntax constitute this common language foundation.

The importance of Meščaninov's works and the works of those linguists who developed his ideas lies in the fact that for the first time in Soviet linguistics of the 40's the problems of the typological studies of languages and the exposition of language universals were included in research into linguistic problems. And it was only much later that these problems attracted the attention of linguists abroad.

It is noteworthy that the importance of typological comparison in comparative linguistics is recognized now by most contemporary linguists. A special report was presented on the problem at the 8th International Linguistic Congress in Oslo in 1957.

During the years since the revolution a new branch of linguistics has been formed—the history of the Russian literary language with elements of historical grammar, historical lexicology, dialectology and history of literature. This new branch studies tendencies in the development of language and literature in connection with general historical trends.

The history of the Russian literary language is inseparable from the history of Russian social thought and science.

In the pre-revolutionary period works devoted solely to the history of the Russian literary language were few and general studies were nothing but enumerations of facts relating to the language. Academician V. V. Vinográdov (born in 1895) was the first to systematically analyse this new subject.

Vinogradov's works on the language of Russian writers are characterized by profoundness of study, cleverness of observation and unrivalled knowledge of Russian in its historical development. Many of Vinogradov's works are devoted especially to the language and style of the great Russian poet A. S. Púshkin, who started a new period in literary Russian.

On the basis of Pushkin's works, Vinogradov demonstrates the synthesis of different elements of the language, the unification and concentration of means of spoken Russian, as a result of which the national literary language developed, absorbing both bookish elements and elements of popular and poetic language.

A desire to analyse problems of style more deeply made Vinogradov search for a more accurate definition of style and led him to a new understanding of style as a branch of linguistics. Vinogradov distinguishes between the common literary style and the individual style of a writer, pointing out at the same time their close contact. Vinogradov says that the purpose of stylistics is to understand more profoundly the existing progressive standards of modern speech, to find in it the intricate interplay and at the same time the struggle of the old and the new.

The linguistic discussion of 1950, which put an end to the Marr regime that had been imposed on Soviet linguistics, and to the vulgar perversion of Marxist-Leninist theses in their application to the science of language, was of great importance for Soviet linguistics.

For this period, Academician V. V. Vinogradov's publications putting forward his theory of lexical meaning are of particular importance. He bases his classification of lexical meaning on semantic positional variants and distinguishes some types of contextually conditioned meaning. His approach to language as a system in all its parts underlies the working out of particular problems of phraseology, which he founded as a separate branch of linguistics.

Three types of phraseological units were established by V. V. Vinogradov—phraseological concretions (sraščénija), phraseological unities (edínstva) and phraseological collocations (sočetánija). This is one example of classification in the analysis and differentiation of different phraseological expressions. V. V. Vinogradov established the main characteristic features of each group of phraseological units as follows:

(1) Phraseological concretion is a unit in the meaning of which it is impossible to discern a connection with the meanings of the component elements; a phraseological concretion is a semantic unit, the equivalent of a word devoid of its inner form; examples: *popast' pal'tsem v n'ebo "to fire into the wrong flock"*, *deržát' úho vostró* "to look out for squalls" and so on.

(2) Phraseological unity is a unit the elements of which are semantically inseparable, but the connection of the components with the same words in free use is not arbitrary; for example, *kormít' závtrakami* "to feed breakfasts to" (i. e. "to feed hopes to"), *hvatátsa za solóminku* "to clutch at a straw", etc.

(3) Phraseological collocation is a closed series of word collocations of which only one is basic and restricted, while the others are used freely: *postávit' voprós* "to raise a question", "to put a question".

Vinogradov's theoretical considerations led not only to the design of phraseological dictionaries in particular, but to further analysis of the structural properties of words.

The system of classifying phraseological units has been widely adopted by lexicographers working on other languages. It is interesting to note that till now there is no corresponding discipline officially observed in Western European or American linguistics.

Thanks to the works of V. V. Vinogradov, and of such Soviet lexicographers as L. V. Ščerba, A. I. Smirnitsky O. S. Akhmánova and A. V. Kunin, lexicology got solid theoretical foundation and won worldwide acclaim. Foreign linguists admit that the scale of lexicographic work in the USSR is unique, and its average quality enviable. The remarkable vigour of lexicological research in the Soviet Union in the 1950's should be pointed out here. Major stimuli to this research were considerations of cultural developments and the flourishing of the national cultures, requiring dictionaries of all types for scores of languages.

As far as the development of grammar is concerned, it should be noted that already in the 30's Academician Vinogradov elaborated the theory of Russian grammar as well as the principles and trends of its structure. His many years of study of morphology and all the forms and categories of Russian were summed up in 1938 in the two-volume work *Contemporary Russian*. The first volume is devoted to a critical analysis of the development of grammatical science during the last few centuries. The second chapter of this edition gives the notion of the word from dialectical and materialistic positions and criticizes some individual theories of bourgeois scientists.

The second edition is devoted to a detailed description of the grammatical structure of Russian from the aspect of morphology.

Some new grammatical theories deserve mentioning, especially that of Prof. A. I. Smirnitsky, who in his article Lexical and Grammatical in a Word, distinguished the word from the word form. The word form was the concretization either of the grammatical form of the word or of the grammatical shaping of the word. The grammatical forms of the word are simply abstract inflectional forms. The word form is the concrete word, i.e. the combination of grammatical form with lexical morpheme, e.g. *górod* "city", the nom. sing. of the word *górod*, that is of a given masculine word of a certain declension. The tipo-forma of the same word has all the formal properties except the lexical morpheme; that is, the nom. sing, of any word of the masculine declension which is bisyllabic and has a stressed initial syllable. The grammatical form equals the nom. sing. According to Smirnitsky, the progress of abstraction in grammar goes from word form via tipo-forma to grammatical form. In Smirnitsky's theory we see a new approach to morphemic problems which cast a new light on this relatively static discipline.

The major event in the field of Russian and general syntactical studies since the 1950's was the appearance of the great work, the *Academic Grammar*, vol. 1, 2, which deals with Russian syntax both from the point of view of morphologically-defined word-combinations and of sentence parts and types. One should note, too, the great wealth and variety of individual studies on minor problems, treated in many interesting articles. The importance and scope of these studies give reason to believe that the quality of Soviet linguistic research in the field of syntax has made enormous strides forward, and the work now done in the USSR is of the highest international standard.

After the 1950 linguistic discussion Soviet scientists wrote many valuable works in the field of general Indo-European studies in which they critically analysed the work done in Western countries and at the same time they contributed themselves to many branches of comparative linguistics. A bibliography of Soviet publications of this period shows that a lot of works in the field of Indo-European languages were published in addition to many dictionaries. All these publications testify to the great amount of work already done in this field, and still being done by Soviet investigators. A detailed analysis of the work done goes beyond the scope of this lecture, but some books must be mentioned, among which the team work *Problems of Comparative and Historical Study of Indo-European languages* should be included, the contributors of which are leading Soviet linguists of the day: V. I. Abáev, R. I. Avanésov, O. S. Akhmanova, B. V. Górnung, M. M. Gúhman, P. S. Kuznetsóv who made an attempt to survey the entire field of Indo-European studies.

After a long discussion the Soviet scholars of German philology got down to writing a five-volume *Comparative Grammar of German Languages*, edited and contributed to by such well-known Soviet Germanists as V. M. Zhirmunsky, M. M. Guhman, E. A. Makáev. Till now four volumes have appeared. This work gives good coverage of material from many European and American sources.

Now the attention of Soviet linguists is being attracted to work in the less developed fields of Indo-European studies and they are trying to gain an understanding of recent developments, like the interpretation of the larengeal theory, the decipherment of old written documents and some other accessible fields of Indo-European. Their survey of data and interpretation of data is contained in internationally known publications.

In the middle of the 1950's it was pointed out in Soviet linguistic periodicals that the task of Soviet linguistics was to draw on everything valuable and fruitful in world linguistics and develop research on basic questions of semiotics, information theory, and applied linguistics. So the leading place in linguistic development in the USSR at that period was occupied by the application of mathematical methods to linguistics, and mathematical linguistics has developed into a recognized discipline, though its precise outline is still uncertain in many respects. First mathematical linguistics was applied to a detailed mathematical logical analysis of particular problems of phonology, morphology and syntax.

Mathematical methods and models suggest also the introduction of statistical data into the working out of rational rules of planning and composition of various types of dictionaries, on the one hand, and into the study of literary style, on the other.

This work is supposed to be carried out not only on the theoretical level but also practically, especially in the field of automatic translation, the importance of which is its stimulating role in the development of linguistics.

The problems of automatic translation are closely connected with those of the automatic recognition of the texts which, in its turn, presupposes the decomposition of text forms into constituents that can be used in dictionaries. All this helps to penetrate deeper into the morphological structure of language, and a number of schemes for achieving the mechanical recognition of grammatical morphemes have been devised.

In general, research into automatic translation in the Soviet Union leads to a more detailed analysis of specific phenomena in the Russian language and the elaboration of more profound linguistic theory. Hundreds of papers and monographs have been presented on the subject in research centres in Moscow, Gorky, Kiev, Tbilisi and other places. The scope of the work done has naturally given a striking variety of new concepts and built up close links between linguists and mathematicians, the union of which will stimulate a more profound understanding of linguistic phenomena.

This is not a systematic account but a short summary of the main tendencies and trends in the development of linguistic science in the Soviet Union over the last 50 years. It is impossible to cover all the complex problems in such a short lecture, the aim of which is to show that the theoretical and methodological foundations of Soviet linguistics have made it a notable school in world linguistics and given it interesting content. That is why any comparison between Soviet linguistics and other trends in world philology would be impossible without taking into consideration the differences in the principal methodological foundations of linguistic research and the development of linguistics in the Soviet Union during the past 50 years.

It shows the importance of the difficult but indispensable process of working out new theoretical and methodological foundations for philology.

# SUPPLEMENT

## CLASSICS OF MARXISM-LENINISM ON LANGUAGE

1.

The production of life, both of one's own in labour and of fresh life in procreation, now appears as a double relationship: on the one hand as a natural, on the other as a social relationship. By social we understand the co-operation of several individuals, no matter under what conditions, in what manner and to what end. It follows from this that a certain mode of production, or industrial stage, is always combined with a certain mode of co-operation, or social stage, and this mode of co-operation is itself a "productive force". Further, that the multitude of productive forces accessible to men determines the nature of society, hence, that the "history of humanity" must always be studied and treated in relation to the history of industry and exchange. But it is also clear how in Germany it is impossible to write this sort of history, because the Germans lack not only the necessary power of comprehension and the material but also the "evidence of their senses", for across the Rhine you cannot have any experience of these things since history has stopped happening. Thus it is quite obvious from the start that there exists a materialistic connection of men with one another, which is determined by their needs and their mode of production, and which is as old as men themselves. This connection is ever taking on new forms, and thus presents a "history" independently of the existence of any political or religious nonsense which would especially hold men together.

Only now, after having considered four moments, four aspects of the primary historical relationships, do we find

that man also possesses "consciousness"; but, even so, not inherent, not "pure" consciousness. From the start the "spir-it" is afflicted with the curse of being "burdened" with matter, which here makes its appearance in the form of agitated layers of air, sounds, in short, of language. Language is as old as consciousness, language is practical consciousness that exists also for other men, and for that reason alone it really exists for me personally as well; language, like consciousness, only arises from the need, the necessity, of intercourse with other men.\* Where there exists a relationship, it exists for me: the animal does not enter into "relations" with anything, it does not enter into any relation at all. For the animal, its relation to others does not exist as a relation. Consciousness is, therefore, from the very beginning a social product, and remains so as long as men exist at all. Consciousness is at first, of course, merely consciousness concerning the *immediate* sensuous environment and consciousness of the limited connection with other persons and things outside the individual who is growing self-conscious. At the same time it is consciousness of nature, which first appears to men as a completely alien, all-powerful, and unassailable force, with which men's relations are purely animal and by which they are overawed like beasts; it is thus a purely animal consciousness of nature (natural religion).

We see here immediately: this natural religion or this particular relation of men to nature is determined by the form of society and vice versa. Here, as everywhere, the identity of nature and man appears in such a way that the restricted relation of men to nature determines their restricted relation to one another, and their restricted relation to one another determines men's restricted relation to nature, just because nature is as yet hardly modified historically; and, on the other hand, man's consciousness of the necessity of associating with the individuals around him is the beginning of the consciousness that he is living in society at all. This beginning is as animal as social life itself at this stage. It is mere herd-consciousness, and at this point man is only distinguished from sheep by the fact that with him consciousness takes the place of instinct or that his instinct is a conscious one.

<sup>\* [</sup>The following words are crossed out in the manuscript:] My relationship to my surroundings is my consciousness.

This sheep-like or tribal consciousness receives its further development and extension through increased productivity, the increase of needs, and, what is fundamental to both of these, the increase of population. With these there develops the division of labour, which was originally nothing but the division of labour in the sexual act, then that division of labour which develops spontaneously or "naturally" by virtue of natural predisposition (e.g., physical strength), needs, accidents, etc., etc. Division of labour becomes truly such from the moment when a division of material and mental labour appears. From this moment onwards consciousness can really flatter itself that it is something other than consciousness of existing practice, that it really represents something without representing something real; from now on consciousness is in a position to emancipate itself from the world and to proceed to the formation of "pure" theory, theology, philosophy, ethics, etc..."

K. Marx and F. Engels. The German ideology. Moscow, 1964, p. 41-43.

2.

Here, therefore, *language* is regarded as a product of the species. That Sancho speaks German and not French, however, is something he in no way owes to the species, but to circumstances. Incidentally, in every modern developed language the naturally originated speech has been superseded, partly owing to the historical development of the language from pre-existing material, as in the Romance and Germanic languages, partly owing to the crossing and mixing of nations, as in the English language, partly owing to the concentration of the dialects within a single nation into a national language based on economic and political concentration. As a matter of course, the individuals at some time will take completely under their control this product of the species as well.

K. Marx and F. Engels. The German ideology. Moscow, 1964, p. 468-469.

For philosophers, one of the most difficult tasks is to descend from the world of thought to the actual world. *Language* is the immediate actuality of thought. Just as philosophers have given thought an independent existence, so they had to make language into an independent realm. This is the secret of philosophical language, in which thoughts in the form of words have their own content. The problem of descending from the world of thoughts to the actual world is turned into the problem of descending from language to life...

The philosophers would only have to dissolve their language into the ordinary language, from which it is abstracted, to recognise it as the distorted language of the actual world, and to realise that neither thoughts nor language in themselves form a realm of their own, that they are only *manifestations* of actual life...

Language, of course, becomes a phrase as soon as it is given an independent existence.

K. Marx and F. Engels. The German ideology. Moscow, 1964, p. 491-492.

## 4.

The name of a thing is something distinct from the qualities of that thing. I know nothing of a man, by knowing that his name is Jacob. In the same way with regard to money, every trace of a value-relation disappears in the names pound, dollar, franc, ducat, etc. The confusion caused by attributing a hidden meaning to these cabalistic signs is all the greater, because these money-names express both the values of commodities and, at the same time, aliquot parts of the weight of the metal that is the standard of money. On the other hand, it is absolutely necessary that value, in order that it may be distinguished from the varied bodily forms of commodities, should assume this material and unmeaning, but, at the same time, purely social form.

K. Marx. Capital. Moscow, 1965, v. 1, p. 100-101.

...but while even the most completely developed languages have laws and conditions in common with the least developed ones, what is characteristic of their development are

> K. Marx. A contribution to the critique of political economy. Chicago, 1904, p. 269.

#### 6.

Production by isolated individuals outside of society something which might happen as an exception to a civilized man who by accident got into the wilderness and already dynamically possessed within himself the forces of society is as great an absurdity as the idea of the development of language without individuals living together and talking to one another.

> K. Marx. A contribution to the critique of political economy. Chicago, 1904, p. 268.

# 7.

We make our history ourselves, but, in the first place, under very definite assumptions and conditions. Among these the economic ones are ultimately decisive. But the political ones, etc., and indeed even the traditions which haunt human minds also play a part, although not the decisive one. The Prussian state also arose and developed from historical, ultimately economic causes. But it could scarcely be maintained without pedantry that among the many small states of North Germany, Brandenburg was specifically determined by economic necessity to become the great power embodying the economic, linguistic and, after the Reformation, also the religious difference between North and South, and not by other elements as well (above all by its entanglement with Poland, owing to the possession of Prussia, and hence with international political relations—which were indeed also decisive in the formation of the Austrian dynastic power). Without making oneself ridiculous it would be a dif-

the points of departure from the general and common.

ficult thing to explain in terms of economics the existence of every small state in Germany, past and present, or the origin of the High German consonant permutations, which the geographical wall of partition formed by the mountains from the Sudetic range to the Taunus widened to form a regular fissure across all Germany.

> K. Marx and F. Engels. Selected works. Moscow, 1949, v. II, p. 443.

## 8.

Polarisation. For J. Grimm it was still a firmly established law that a German dialect must be either High German or Low German. In this he totally lost sight of the Frankish dialect. Because the written Frankish of the later Carlovingian period was High German (since the High German shifting of consonants had taken possession of the Frankish South-East), he imagined that Frankish passed in one place into old High German, in another place into French. It then remained absolutely impossible to explain the source of the Netherland dialect in the ancient Salic regions. Frankish was only rediscovered after Grimm's death: Salic in its rejuvenation as the Netherland dialect, Ripuaric in the Middle and Lower Rhine dialects, which in part have been shifted to various stages of High German, and in part have remained Low German, so that Frankish is a dialect that is both High German and Low German.

F. Engels. Dialectics of nature. Moscow, 1964, p. 220.

#### 9.

The significance of *names*. In organic chemistry the significance of a body, hence also its name, is no longer determined merely by its composition, but rather by its position in the *series* to which it belongs. If we find, therefore, that a body belongs to such a series, its old name becomes an obstacle to understanding it and must be replaced by a *series name* (paraffins, etc.).

> F. Engels. Dialectics of nature. Moscow, 1964, p. 299.

The young citizen of the future will not be much troub-led with philology. "The dead languages will be entirely done away with ... the foreign living languages, however ... will remain of secondary importance." Only where intercourse between nations extends to the movement of the masses of the peoples themselves would these languages be made accessible, according to needs and in an easy form. "Really educative study of language" will be provided by a kind of general grammar, and particularly by study of the "substance and form of one's own language".- Even the national narrow-mindedness of man at the present day is much too cosmopolitan for Herr Dühring. He wants also to do away with the two levers which in the world as it is today give at least the opportunity of rising above the narrow national standpoint: knowledge of the ancient languages, which opens a wider common horizon at least to those people of various nationalities who have had a classical education; and knowledge of modern languages, through the medium of which alone the people of different nations can make themselves understood by one another and acquaint themselves with what is happening beyond their own frontiers. On the contrary, the grammar of the mother tongue is to be thoroughly taught. "Substance and form of one's own language", however, only become intelligible when their origin and gradual evolution are traced, and this cannot be done without taking into account, first, their own extinct forms, and secondly, allied languages, both living and dead. But this brings us back again to territory which has been expressly forbidden us. If Herr Dühring strikes out of his curriculum all modern historical grammar, there is nothing left for his language studies but the old-fashioned technical grammar, of the old classical philological type, with all its casuistry and arbitrariness, based on the lack of any historical basis. His hatred of the old philology makes him elevate the very worst product of the old philology into "the central point of the really educative study of language". It is clear that we have before us a linguist who has never heard a word of the wide and successful development of the historical science of language which had taken place during the last sixty years, and who therefore seeks "the eminently modern elements of education" in the science of language, not in Bopp, Grimm and Diez, but in Heyse and Becker of blessed memory.

F. Engels. Anti-Dühring. Moscow, 1947, p. 476-477.

## 11.

It has already been noted that our simian ancestors were gregarious; it is obviously impossible to seek the derivation of man, the most social of all animals, from non-gregarious immediate ancestors. Mastery over nature began with the development of the hand, with labour, and widened man's horizon at every new advance. He was continually discovering new, hitherto unknown properties in natural objects. On the other hand, the development of labour necessarily helped to bring the members of society closer together by increasing cases of mutual support and joint activity, and by making clear the advantage of this joint activity to each individual. In short, men in the making arrived at the point where they had something to say to each other. Necessity created the organ; the undeveloped larynx of the ape was slowly but surely transformed by modulation to produce constantly more developed modulation, and the organs of the mouth gradually learned to pronounce one articulate sound after another.

Comparison with animals proves that this explanation of the origin of language from and in the process of labour is the only correct one. The little that even the most highlydeveloped animals need to communicate to each other does not require articulate speech. In a state of nature, no animal feels handicapped by its inability to speak or to understand human speech. It is quite different when it has been tamed by man. The dog and the horse, by association with man, have developed such a good ear for articulate speech that they easily learn to understand any language within their range of concept. Moreover they have acquired the capacity for feelings such as affection for man, gratitude, etc., which were previously foreign to them. Anyone who has had much to do with such animals will hardly be able to escape the conviction that in many cases they now feel their inability to speak as a defect, although, unfortunately, it is one that can no longer be remedied because their vocal organs are too specialised in a definite direction. However, where vocal

organs exist, within certain limits even this inability disappears. The buccal organs of birds are as different from those of man as they can be, yet birds are the only animals that can learn to speak; and it is the bird with the most hideous voice, the parrot, that speaks best of all. Let no one object that the parrot does not understand what it says. It is true that for the sheer pleasure of talking and associating with human beings, the parrot will chatter for hours at a stretch, continually repeating its whole vocabulary. But within the limits of its range of concepts it can also learn to understand what it is saying. Teach a parrot swear words in such a way that it gets an idea of their meaning (one of the great amusements of sailors returning from the tropics); tease it and you will soon discover that it knows how to use its swear words just as correctly as a Berlin constermonger. The same is true of begging for titbits.

First labour, after it and then with it speech-these were the two most essential stimuli under the influence of which the brain of the ape gradually changed into that of man, which for all its similarity is far larger and more perfect. Hand in hand with the development of the brain went the development of its most immediate instruments—the senses. Just as the gradual development of speech is inevitably accompanied by a corresponding refinement of the organ of hearing, so the development of the brain as a whole is accompanied by a refinement of all the senses. The eagle sees much farther than man, but the human eve discerns considerably more in things than does the eye of the eagle. The dog has a far keener sense of smell than man, but it does not distinguish a hundredth part of the odours that for man are definite signs denoting different things. And the sense of touch, which the ape hardly possesses in its crudest initial form, has been developed only side by side with the development of the human hand itself, through the medium of labour.

The reaction on labour and speech of the development of the brain and its attendant senses, of the increasing clarity of consciousness, power of abstraction and of conclusion, gave both labour and speech an ever-renewed impluse to further development. This development did not reach its conclusion when man finally became distinct from the ape, but on the whole made further powerful progress, its degree and direction varying among different peoples and at different times, and here and there even being interrupted by local or temporary regression. This further development has been strongly urged forward, on the one hand, and guided along more definite directions, on the other, by a new element which came into play with the appearance of fully-fledged man, namely, *society*.

F. Engels. Dialectics of nature. Moscow, 1964, p. 175-177.

12.

Throughout the world, the period of the final victory of capitalism over feudalism has been linked up with national movements. For the complete victory of commodity production, the bourgeoisie must capture the home market, and there must be politically united territories whose population speak a single language, with all obstacles to the development of that language and to its consolidation in literature eliminated. Therein is the economic foundation of national movements. Language is the most important means of human intercourse. Unity and unimpeded development of language are the most important conditions for genuinely free and extensive commerce on a scale commensurate with modern capitalism, for a free and broad grouping of the population in all its various classes and, lastly, for the establishment of a close connection between the market and each and every proprietor, big or little, and between seller and buyer.

Therefore, the tendency of every national movement is towards the formation of *national states*, under which these requirements of modern capitalism are best satisfied. The most profound economic factors drive towards this goal, and, therefore, for the whole of Western Europe, nay, for the entire civilised world, the national state is *typical* and normal for the capitalist period.

V. I. Lenin. Collected works. Moscow, 1964, v. 20, p. 396-397.

The approach of the (human) mind to a particular thing, the taking of a copy (=a concept) of it *is not* a simple, immediate act, a dead mirroring, but one which is complex, split into two, zig-zag-like, which *includes in it* the possibility of the flight of fantasy from life; more than that: the

possibility of the *transformation* (moreover, an unnoticeable transformation, of which man is unaware) of the abstract concept, idea, into a *fantasy* (in letzter Instanz\*=God). For even in the simplest generalization, in the most elementary general idea ("table" in general), *there is* a certain bit of **fantasy**.

V. 1. Lenin. Collected works. Moscow, 1963, v. 38, p. 372.

## Stop Spoiling The Russian Language

(Some Thoughts at Leisure, i.e. While Listening to Speeches at Meetings)

We are spoiling the Russian language. We are using foreign words unnecessarily. And we use them incorrectly. Why use the foreign word *defekty* when we have three Russian synonyms—*nedochoty*, *nedostatky*, *probely*.

A man who has recently learned to read in general, and to read newspapers in particular, will, of course, if he reads them diligently, willy-nilly absorb journalistic turns of speech. However, it is the language of the newspapers that is beginning to suffer. If a man who has recently learned to read uses foreign words as a novelty, he is to be excused, but there is no excuse for a writer. Is it not time for us to declare war on the unnecessary use of foreign words?

I must admit that the unnecessary use of foreign words annoys me (because it makes it more difficult for us to exercise our influence over the masses) but some of the mistakes made by those who write in the newspapers make me really angry. For instance—the word *budirovat* is used in the meaning of arouse, awaken, stir up. It comes from the French word *bouder* which means to sulk, to pout, which is what *budirovat* should really mean. This adoption of Nizhni-Novgorod French is the adoption of the worst from the worst representatives of the Russian landowning class, who learned some French but who, first, did not master the language, and who, secondly, distorted the Russian language.

Is it not time to declare war on the spoiling of Russian?

V. I. Lenin. Collected works. Moscow, 1965, v. 30, p. 298.

<sup>\*</sup> in the final analysis - Ed.

#### Abbreviations and other symbols

A. D. -- Anno Domini

\* means that the form is hypothetically reconstructed and not recorded in any written documents

> means becomes

- < means is derived from A. S. Anglo-Saxon B. C. Before Christ

- PIE Proto-Indo-European
- 'above a vowel means main stress  $\sim$  above a vowel means nasalization
- š phonetically, same as [ʃ]
- č phonetically, same as [tj]
- ž phonetically, same as [3]

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