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Famous English and American Lexicologists

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Prohlašuji, že jsem práci zpracoval samostatně a použil jen uvedených pramenů a literatury.

Plzeň, duben 2012   …..........................

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1 INTRODUCTION

The topic of the presented Bachelor's thesis is simple, yet we have tried to describe and discuss distinctive features of linguists from Britain, America and some linguists from continental Europe. The author bears in mind that this thesis resembles any book dealing with history of linguistics, however the original intention was to give a brief description of history of linguistics. In order to describe the features, the resemblance could not have been avoided. It must be noted that the practical part is omitted.

In chapters 2 and 3, the history of Prague Linguistic Circle and the influence various linguists had upon it is dealt with. We tried to describe both approaches and their notable upholders.

In chapter 4, phoneticians from Britain were described. Again, the emphasis was laid on their contributions to linguistics. Sweet with his Romic alphabet, Jones with his cardinal vowels and Firth with his semantics and prosody are mentioned.

In chapter 5, the most outstanding American linguists from era prior to WWII are mentioned. Boas as the "father" of American anthropology and his positions he held towards the research are described. Both Edward Sapir and Leonard Bloomfield wrote books titled *Language*; morphological and phonological aspects were tried to be described.

The last but not least—sixth—chapter deals with one of the Prague's most influential contribution to linguistics—the phenomenon of phoneme. Here, one might suggest that contributions to syntax could have been mentioned, however we have decided not to include them.

The author wants to stress one important fact. This thesis has been written for students to serve as a possible starting point for further linguistic study and to point out important parts from works of various linguistic scientists in the 19th and 20th centuries.

2 PRAGUE LINGUISTIC CIRCLE – A BRIEF HISTORY

Prague Linguistic Circle (PLC; sometimes referred to as Prague School) was—during its pre-war period—a loose association of linguist with different fields of specialization. Although the members signed the Circle's articles (in 1930) in which they committed "to work on the development of linguistic research following the method of functional structuralism,"[1] not all of the linguists followed this method in their researches and papers. PLC can be described as one will with many minds.

First "manifestations" of the PLC can be traced back to the year of 1911, when Vilém Mathesius presented, on the sitting of the Czech Royal Society, his thought that the emphasis should be laid on the synchronistic approach to the language; this thought did receive mere feedback, most probably because the method of the Neogrammarians was rooted in the Czech lands. If Mathesius had given his lecture in Moscow, rather in Prague, the lecture would have caused "a veritable revolution in linguistics";[2] the lecture and the paper were not translated in any world language which might have been the cause of almost no attention paid.[3]

First sitting of the PLC was held "in the Prague English seminar, which president Mathesius was […] on 6th October 1926."[4] Five members were accompanied by dr. Henrik Becker, who presented his lecture on *The European Spirit of Language*, in which he presented his thoughts on semantic and syntactic loans, and situations in which they can be realized. Beginning with this day, the five members agreed to meet regularly, to discuss matters of common interest.[5]

The abovementioned meeting "unofficially" started the history of the Circle, which, with its papers and publications, shifted the view how language was perceived. First edition of *Travaux de Cercle Linguistique de Prague* (TCLP)—which contained Circle's works presented to the First International Congress of Slavistics—was accepted with a positive

response and can be said the TCLP attracted international attention to the PLC (including from linguists from overseas).[6] In the year of 1931, the Linguistic Congress at Geneva was held, where key questions of phonology were discussed. However, in 1930, The International Phonological Conference was convened to Prague to prepare, and discuss phonological problems for the Congress at Geneva; the Conference received wide international reception (15 scientists from abroad, along with 17 scientists from the Czech lands).[7] The theses and lectures were published in the forth volume of TCLP. The success of the Conference gave a stimulus to establish the International Phonological Association; Trubetzkoy was elected the president and the Association's task was "to attend the phonological description of the most languages of the world."[8] The Association was lawfully accepted by the Congress at Geneva.

The period between 1929 – 1939 is referred to as the "classical period." The Circle attended numerous international conferences, but did not neglect the domestic linguistic situation—the cycle of lectures about standard Czech, and language culture from 1932 which implemented some of the findings to domestic scene. In this period Trubetzkoy was writing his masterpiece *Grundzüge der Phonologie*, was lecturing at Vienna's university and published around 150 papers. Mathesius published three works—one was devoted to functional linguistics, the other one to systematic analysis of grammar, and the third to information-bearing structure of the sentence; overall, more than 130 lectures (ranging from phonetics and phonology, morphology and syntax, to questions about literary language and poetics) were presented.

When Nazis seized control over Czechoslovakia, PLC did not stop to exist; it did not publish and work as extensively as in the previous years. More than three facts can be accounted for. Firstly, Jakobson, being of Jewish origin, was forced to flee (he eventually departed in the USA); secondly, Trubetzkoy passed away at the "eve of the war", unable to

finish his work *Grunzüge der Phonologie*; another constituting facts are that Czech universities were closed by the Nazi regime, and Mathesius' progressing disease, which unabled him to attend Circle's meetings. In April, 1945, Mathesius passed away—PLC lost its founding member and president, the world lost one of the biggest minds of pre-war linguistics.[9]

The works of the PLC were renewed after the end of WWII. However, the focus was laid not on the research, but on the pedagogical work (which reflected the need to deal with the reopening of Czech universities).[10] The standards which were represented by the PLC were surviving, but were severely suppressed, as well as areas of linguistic research. The attention was paid to newly established institutions—The Linguistic Society and the Group for Functional Linguistics.[11] The PS survived the period of socialism, and was—in 1989, thanks to Petr Sgall and Oldřich Leška—restored. The PLC successfully published a new edition of TCLP and created a background for the scientists to gather and discuss language matters and findings on various field of language study.

3 COINING THE TERM FUNCTIONAL STRUCTURALISM

We must take into consideration that in the era of Austro-Hungarian Monarchy after the beginning of the 20th century, the prevailing linguistic method was the diachronic method, represented mainly by the works of the Neogrammarians. When Vilém Mathesius presented his thoughts on synchronistic method, the feedback was mild. Synchronistic method approaches the language from its current state; Mathesius' method was not solely synchronistic. Instead, the method is referred to as a synthesis of both. Mathesius named 4 main linguistic currents, which were:

1. Genetic comparison,
2. analytical comparison,
3. modern phonetics,
4. functional structuralism.

3.1 GENETIC COMPARISON (GC)

Was constantly developing from the beginnings of linguistics and is related with the works of Rasmus Rask and Franz Bopp; both of them compared languages of Europe and Asia and found out that some of the languages showed same or similar characteristics.[12] The "zenith" of this method was in the works of the Neogrammarians.

However, the very basic foundations of comparative linguistic must have been laid even before Rask and Bopp started their works. Rasmus Rask was sent by Danish Academy on a mission to India to pursue the problem of oriental languages. The stimulus to make such a decision could possibly have been a discourse of Sir William Jones.

3.1.1 SIR WILLIAM JONES

British Orientalist, jurist and philologist. In 1783 was appointed judge of the Supreme Court in Calcutta. In January 1784, the Bengal Asiatic Society was founded and on its 3rd gathering, Sir William Jones, the president of the Society, gave a discourse about Hindus, in which he commented on the Sanskrit culture, civilization and literature[13]. In this discourse, Jones stated:

> "The Sanscrit language, whatever be its antiquity, is of a wonderful structure; more perfect than the Greek, more copious than the Latin, and more exquisitely 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 have been 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 a 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; and the old Persian might be added to the same family."[14]

Jones was not the first to notice the affinity among Sanskrit, Greek and Latin, and even Persian. Before him, Sassetti (in 1585), Coeurdoux (in 1767) and Paulinus (in 1786) pointed out the relationship among these languages.[15]

3.1.2 RASMUS RASK

Danish linguist whose area of study was old Scandinavian languages. In his work, Rask pointed out the relations among Scandinavian and Germanic languages, Greek, Latin, and Slavonic languages. Rask refuses to seek the protolanguage from which all languages developed. The leading factor, when comparing relation between two languages, is the grammatical structure; comparing two languages based on their vocabulary is less accurate, for words can be easily transferred from one language to another.[16]

3.1.3 FRANZ BOPP

German philologist, whose personal task was to recreate prime stage of the language by comparing Sanskrit's morphology (mainly verb forms) with verb forms from other languages. Bopp assumed that prime words—isolated monosyllabic roots—had direct relation between the sound and the meaning. This task was impossible to achieve throughout 19th century and it is impossible to achieve such a task even nowadays. However, during his search for the protolanguage, Rask—most probably unintentionally—achieved something else. By comparing, often, different languages and their verb forms and declinations Bopp laid the foundations of comparative grammar.[17]

3.1.4 NEOGRAMMARIANS (*JUNGGRAMMATIKER*)

The birth of this linguistic groups is connected with the journal "*Morphologische Untersuchungen auf dem Gebiete der i.-e. Sprachen*" and with Karl Brugmann and Hermann Osthoff. The term *Junggrammatiker* was used in the preface of the first edition of the journal; the term Neogrammarians was coined by G. I. Ascoli and has been used ever since.[18]

The aim of the Neogrammarians was to trace back sounds and words (or so-called isolated units) to their earliest prototypes;[19] written documents served as their sources. However, that was a mistake, since:

"[...] the language of written documents is determined by the style of the particular literary work and consequently does not represent the language in its entity. This point can be illustrated by nominal clause in English. In Old English, nominal clause must have existed, but they are not found in the preserved literary texts since the style of these texts did not admit them; in Middle English they abound, especially in the drama; in the 18th century the do not occur in essays, but are often used in the drama and the realistic novel."[20]

A substantial emphasis was laid on the concept of phonetic changes. The keynote was that if a particular phone shifted in particular time and particular context, the shift must have taken place in all the words in which the phone was used in the very particular context. One of the basic principle of the Neogrammarians was that there are no exceptions in phone development.[21]

The drawbacks of the Neogrammarians were that the scientists were not paying attention to relations between the sounds or word-forms and sounds and word-forms coexisting with them in the given period of language development.[22] They started with the form of the text and proceeded to the function.

In addition, the theory of phone development is hard to apply on every situation that takes place in phone changes. We must consider the fact that every language is interacting with other languages which can influence it even on the phonic level.[23]

3.2 ANALYTICAL COMPARISON (AC)

Unlike genetic comparison, analytical comparison was a synchronistic approach. Its beginnings are connected with the works of Wilhelm von Humboldt.

3.2.1 WILHELM VON HUMBOLDT

Not being only a philologist, Wilhelm von Humboldt was a writer, a diplomat, and a minister. His primary aim was to create comparative anthropology, and linguistics were only "an aid" to help him achieve such a goal.[24]

Humbold tried to classify languages according to their structure and became the predecessor to modern linguistic typology. Von Humboldt tried to explain the origins of the language not from the linguistic standpoint, but rather by metaphysical thinking. He assumed that language is connatural human attribute, is an inseparable part of human psyche, and emerged simultaneously with humans as a figment of human brain. The most perfect language is Sanskrit, because it is the oldest of the languages.[25]

Wilhelm von Humboldt followed the steps of philosopher Johann Gottfried von Herder and emphasized the connection between national language and national character.[26] Languages are different, because they reflect the mentality of individual nations, and the more complicated language structure is, the more perfect the mentality is.[27]

The positive outcomes of his approach were the synchronistic study of the language and looking at the languages as a solid unit.

"The strength" of AC can be seen in comparing non-genetically related languages which helped to obtain a deeper insight into their characteristics and to determine their differences, which led to the introduction of psychology to the field of linguistics. However, the Humboldiants failed to developed strictly scientific methods.[28]

3.3 MODERN PHONETICS

Phonetics, unlike phonology, is concerned with the study of sounds of human speech. From the middle of the 19th century phonetics were gradually receiving attention, mostly because of the construction of laryngoscope and the "boom" of natural sciences. The laryngoscope was unable to record higher wave frequency, thus the phoneticians related more on their hearing, and reached a classification of phones according to the place and the manner of articulation. The findings had influence on adopting the proper articulation of foreign language.[29]

However, early phonetics did not admit the existence of allophones, thus differences in word pronunciation were attributed to dialect or accent.[30] By facing this problem, the phonetics laid basis to phonology, which received substantially higher attention from scholars. Trubetzkoy even labelled phonetics "a mere auxiliary science."[31]

3.4 FUNCTIONAL STRUCTURALISM

(sometimes also called Prague Structuralism)

The very own Prague's scientific current was a synthesis of different language approaches. Mathesius saw very clearly both advantages and disadvantages of GC and AC and struggled for a combination. He took the rigour from the Neogrammarians, and synchronistic approach and "the sense for peculiarities" from the Humboldtians.[32] To understand the term more precisely, it cannot be observed as a whole, but rather a combination of two currents which were popular in Prague—the function of the language and the structure of the language.

3.4.1 FUNCTIONAL PART

The former current was promoted mainly by the Czech scientists V. Mathesius and B. Havránek. Functional referred to the choose of language means. The primary function of the language is to convey information among members of language community (communicative

function).[33] The second function of the language is the emotional function. Phatic communication can serve as an example. Phatic communication (or small talk) is used to bridge the distance in establishing social interaction and to start a communication.[34] In non-formal situation between two acquaintances, phatic communication will look as follows:

A: "Hey man, how ya doin'?"
B: "What's up?"

In this situation we do not expect an answer; moreover the speaker have registered the presence of his acquaint and will communicate further. While using the emotional function, the writer/speaker wants to appeal to the reader/listener and to influence him in some way. The means which can be used to achieve such a task include: the speed and rhythm of the speech and the selection of the words and syntactical structures.[35]

3.4.2 STRUCTURAL PART

The structural part was promoted by R. Jakobson and N. Trubetzkoy and it is based on structuralism of Ferdinand de Saussure. F. de Saussure was a well-known Swiss linguist, whose structuralism influences language scientists "all over the world." The language was studied synchronistically (which was accepted by the PLC), but—according to Jakobson and others—the error occurred in the conception of *la langue* and *la parole*. According to de Saussure, *langue* does not possess the ability to heal itself, but merely to repair itself by the help of its own means. To use and example, if the word *pompous* ceases to be used, the synonymic words *overblown* and *portentous* would spread their area of use.[36] De Saussure did not count *parole* as an active factor. Jakobson, on the other hand, perceived the language as a system (organism) which has the ability to heal itself by replacing "dead" units with new. As an example, Jakobson presented the dropping of weak semivowels—yers ъ and ь which had phonetic value (ъ was pronounced as reduced *u*; ь was pronounced as reduced *i*), to their current state of

being purely orthographic aids to signal the reader, how should the syllables standing in front of them be pronounced. *Ъ—твёрдый знак (tv'ordyj znak)* appears after prefixes which end with a consonant if these are followed by a morpheme starting with iotated vowel *е* (je), *ё* (jo), *я* (ja), *ю* (ju); ь—*мягкий знак* (m'agkij znak) serves to soften its preceding consonant. However, having presented this thought, Jakobson was not a fundamental upholder of pure immanent development; he admitted even extralingual factors (The October Revolution and the dropping of yers, etc.).[37]

4 PHONETICS

4.1 GENERAL CHARACTERISTICS

Phonetics is a linguistic branch that studies the sounds of human speech. Its interest lies in the production, acoustic properties, and perception of speech sounds. Phonetics dealing with oral languages have three areas of interest: (1) articulatory phonetics is the study of the production of sounds; (2) acoustic phonetics is the study of physical transmission of the speech sounds between the speaker and the listener; (3) auditory phonetics studies the reception and perception of sounds by the listener.[38]

The difference between the often confused areas of phonology and phonetics is quite distinctive. Phonetics are closer to natural sciences, for they deal with the production, transmission, and perception of speech sounds. Phonology, on the other hand, is closer to psychology, for the phoneme (the smallest unit that is capable to distinguish meaning of a word) is an abstract unit of speech sound.

4.2 PĀṆINI

The very reason, why Pāṇini is being mentioned in this thesis is, that Pāṇini's works "stand in the background" of linguistic theories of the 19th—20th centuries. Pāṇini was a Sanskrit grammarian who gave detailed description of phonetics, phonology and morphology, and stood at the tip of Sanskrit grammarians' efforts to describe the language.[39] In his major work *Astadhyayi,* "Pāṇini distinguishes between the language of sacred texts and the usual language of communication."[40]

From the phonetic point of view, the Indian grammarians tried to analyse and describe the pronunciation of individual words in order to preserve the liturgical language, and reached a conclusion that the smallest pronounceable and audible part is a syllable. Although the phoneticians did not used the term phoneme, they described the

classification of phone according to its manner and position of articulation approximately 2000 years before the Europeans achieved such a task.[41]

4.3 HENRY SWEET

English philologist, phonetician and grammarian. In his books, Sweet dealt mostly with phonetics, language acquisition, Old English and Old Norse. To trace Jones' possible influence on the PLC (although D. Jones was primarily a phonetician), we have to start with Henry Sweet. Sweet published a substantial number of books, dealing with pronunciation of the English language, and as a first person emphasized the scientific status of speech research. The incentive for Sweet to pursue phonetics (although he had already earned the status of a philologist for his books about Old English and Old Norse) was Melville Bell's book *Visible Speech* (which is often referred to in Sweet's *A Handbook of Phonetics*).[42]

The fundamental book (for the first time published in 1877)—*A Handbook of Phonetics*—is devoted to articulatory phonetics, based primarily on observations, but the most interesting part for a contemporary linguist is the chapter about sound notation.

Melville Bell suggested to note every sound, according to the tongue movement, with the help of a few simple signs which could be combined (but they would always create one sign).[43] This system would, under the influence of phonology, be changing *ad infinitum.* As a phonetician, Sweet called for a "perfect alphabet" in which one sign would represent one sound (according to his opinion, the relations between the Roman alphabet and a sound represented by a letter of Roman alphabet were utterly arbitrary). Hence Sweet developed a system which he called Romic[44] (although he wrote about this system to be "too minute and inapt to be used for practical purposes"). Romic was divided into Broad Romic and Narrow Romic. Broad Romic should be capable of changing to the needs of a particular language, however, the notation should "indicate those broader distinctions of sounds which actually correspond to

distinctions of meaning in language."[45] Narrow Romic should be purposefully used in several human languages and should note the spoken utterance in the best way possible. Scientific description should be the easiest manner how to note "accurate analysis of sounds generally."[46]

To conclude: Narrow Romic should be superordinate to Broad Romic; those symbols, which did not have the semantic ability should be omitted.

With the concept of "Romic alphabet" Sweet gave first incentives for the creation of the International Phonetic Alphabet (which was released for the first time in 1888; the leading person in the creation of IPA was Paul Passy). Henry Sweet changed, with his works about phonetics and with accurate scientific methods, the perception of phonetics at British universities, mainly from the pedagogical point of view. This development was not limited only to Sweet's *alma mater*, but was also observable at University College London (ULC), where, in 1907, a new lecturer was admitted—Daniel Jones[47] (the student of Paul Passy and Henry Sweet).

4.4 DANIEL JONES

A prominent British phonetician, who as a first person used the word phoneme in the sense that is known nowadays. His works were known among the scientists, and served mostly for pedagogical purposes; Jones had influence even on American structuralists.[48]

The phonetics did not interest him only while at the University College London (in 1912 was appointed the head of phonetic department), but was a member of the International Phonetic Association; in 1950 he became the chairman of the Association, and participated in the development of IPA. What is more connected to Jones, than the phoneme, is his work on cardinal vowels.

4.4.1 CARDINAL VOWELS

Cardinal vowels are a standard reference system, which has been

devised to be independent of any language. It should help the students to acquire vowel sounds, not paying attention to sociological, dialectal and other factors,[49] and are the range of vowels which is human being capable of producing in his articulatory organs.[50] Cardinal vowels are divided into two groups: (1) primary cardinal vowels, and (2) secondary cardinal vowels, and are described by terms of: tongue position (height, front-back) and rounding of the lips.[51]

The following features are said to characterize these sounds:
1. They are independent of the vowels of any languages;
2. They are fixed reference points of "exactly determined and invariable quality";
3. They are auditorily equidistant;
4. The values of cardinal vowels should be learnt by oral instruction from a trained teacher.[52]

Eight primary cardinal and ten secondary cardinal vowels exist in English language.

Primary	FRONT	CENTRAL	BACK
CLOSE	i		u
CLOSE-MID	e		o
OPEN-MID	ε		ɔ
OPEN	a		ɑ

4.4.2 THE PHONEME

The phoneme, as an abstraction unit, was first used by Jan Baudouin de Courtenay between 1890-1895. Baudouin de Courtenay reacted on the results of experimental phonetics about a vast number of variants of one phone.[53] In 1911 Jones met Shcherba, with whom he discussed the topic of phoneme. Jones—as a practical phonetician—was aware of the importance of this theory, especially while compiling alphabets for hitherto unwritten languages.[54]

On one hand, Jones agreed with Baudouin, when saying that the

phoneme is connected with one's psychology and mind.[55] On the other hand, a physical concept of phoneme was certainly more close to Jones, the concept which is closer to phonetics and to practical use in transcription and teaching. "A phoneme is a family of uttered sounds (segmental elements of speech) in a particular language which count for practical purposes as if they were one and the same."[56] The physical part is that the allophones are set, and the phoneme is an abstract unit. Jones believed that a coherent analysis can be based solely on the study of phonological characteristics of words in a specific language group.[57] To support this idea, Jones adopted terms *diaphone* and *variphone. Diaphone* was used to describe "the range of dialectal variants, phonetic and phonemic that may occur in a given word."[58] Diphthong *-oo-* did not necessarily have to be pronounced as [u:], but only as [u]; another factors would also play a significant role (smaller territorial area, social status, …). *Variphone* is, e. g. "a phoneme, phonemic cluster or allophone that has a wide and generally unpredictable range of free or positional phonetic variations."[59]

To add more "confusion" to his theory, Jones operated with additional phonetic features such as pitch, stress, length, tone. Jones perceives the phoneme of being solely a vowel or consonant. If they were to have distinctive differences in pitch, stress or length, Jones adopted terms *toneme, stroneme* and *chroneme;* even for these three, individual phonological values were to be implemented.[60] These features are not significant for the linguist as they are significant for articulatory phonetician.

Jones was an excellent lecturer of phonetics, his theories not only enriched the International Phonetic Alphabet, but also became the basis of correct pronunciation acquisition. His cardinal vowel diagram (although underwent minor modifications) is used nowadays, 50 years after his death. "What they do [the phonemes] is to distinguish words from one another," Jones wrote. It is true, however the strong emphasis which was

laid on the phonetic-phonemic relation prevented him from finalizing the explanation to its very end.

4.5 JOHN RUPERT FIRTH

Sweet did a lot of for Britain, Jones exceeded the borders of Britain, but Firth (respectively his students) stood back of spreading the fame of London School.

Firth was originally a historian, however, after his stay in India he focused his attention to language problems. After returning back, Firth worked alongside D. Jones in the Department of Phonetics at University College London, and held part-time position at London School of Economics, which was later to become the School of Oriental and African Studies. Firth was publishing books only during his stay at ULC—*Speech* (1930) and *The Tongues of Men* (1936) were both addressed on non-academic audience.[61] After discussing topics like The Origin of Speech, Hearing and Recognition, Linguistic Kinship, Firth urges at the end of the book:

> "It comes something of a shock to realise that we English, largely responsible for the future of the only real world language, partners in a world Empire with hundreds of million of Asiatics and Africans speaking hundreds of languages, […] have up to the present made no adequate provision for the study of practical linguistic problems. […] If we could persuade certain men of wealth that linguistics was on of the more important social science, we might secure and endowment for linguistic branches."[62]

To focus more on Firth's work, the leading papers of his study can be divided into three areas: (1) the study of semantics or "meaning" and "context"; (2) the history of linguistics—mostly Britain's; (3) works in phonology, connected particularly with prosodic analysis. Being known for his work on (1) and (3), let us discuss these topic further.

What can be considered one of Firth's key ideas in the language study is the rejection of de Saussure's language division into "*la langue*" and "*la*

parole," for the language should not be studied as a mental system, but as a composition of events, the speaker has spoken and linguists should focus their attention on these speech events.[63]

4.5.1 SEMANTICS

Some of Firth's thoughts on meaning and semantics are stated in his study *The Technique of Semantics* (1935). In this paper, Firth writes about (a) the historical conception of semantics, and (b) the study of meaning.

If we were to follow the path of the term 'semantics' (or semasiology), Firth pointed attention to Samuel Johnson's *A Dictionary of the English Language* (1755), and his two principles: (1) "certain component of the meaning of word is described when you say what word it is";[64] (2) the complete meaning is always contextual."[65] When a new *Dictionary* was released a third principle was introduced: the Historical Principle[66] (the historical study of change).

The first one deals with the identification of a "certain component of meaning,"[67] that is when the word is identified grammatically.

The second one means that the specific meaning can only be understood in the speech flow; the third principle was the principle of studying the meaning as it was changing during the time, which is the area of interest of etymology. And up to the day that Firth suggested to use the word semantics for an approach to a language, the word *semantics* was still referring to the study of change.[68]

Even in the year 1933, the term *meaning* was not treated as a whole unit, but rather was divided into several subcategories which were interrelated; subcategories as intention, value, referent, emotions, when combined together were to create the total meaning. Even a technique to study the range of meanings of the words in their common background of a cultural context was proposed and called "Multiple definition."[69]

The word *semantics* got into English by "adopting" the title of a French

book, translated into English, *Semantics.* To this time the word semasiology was still in use; the adjectival form—semantic—had already been used by Leonard Bloomfield. Bloomfield faulty considered the study of meaning to be the study of grammar; contextual meaning should not be changed by grammatical description. Traditional semantics are the historical study of change of meaning.[70]

Upon closer look on Firth's own position regarding semantics, we find out that meaning is a "complex of contextual relations,"[71] and its every part—phonetic, grammatical, and lexicographic[72]—plays its "role" in this system, context.

Phonological units (or as Firth calls them phonetic substitution-counter) also play their role in the meaning, since they can contrast with other "sounds" in the system and have a relationship with other units in the particular phonetic context; they also have relationship with units, capable of replacing them.[73] On the lexical level, collocations are meant.[74]

However, the central concept is "the context of situation"[75]. In this context, the speech itself ("what they say")[76] does not solely play the key role, but the situation in which the speech takes place ("what is going on")[77] is equally important; cultural background and personal experience can be accounted as well.

Semantics, in Firth's view, was a connection among the first three language levels with their context and situation.

4.5.2 PROSODY

Let us begin with the definition of a prosody—the patterns of stress and intonation in a language. Firth used prosody to explain the phonological structure of words in a clause or a sentence. In 1948, Firth published a paper called *Sounds and Prosodies*, in which he set out his phonological ideas. These ideas were better elaborated by Firth's co-workers, who founded the London School.

One of the ideas Firth proposed was a strict rejection of purely phonemic analysis. Phonological units (the units of vowel and consonant system) can exist in the approach, but "the features of phonetic forms can be assigned to prosodies";[78] prosodies are "non-segmental entities that can be tied to any piece of phonological structure."[79] All features that mark: "the word or syllable initials[80] and word or syllable finals[81] or word junctions"[82] can be abstracted from the words or word junctions and syntagmatically considered as prosodies. This might be a slightly confusable definition, but Firth explains the problem further.

A glottal stop can be a prosodic feature of certain words, and is not a written phoneme in English. For better understanding, allow us to draw the example on Czech words. The use of glottal stop is optional, and mostly serves to distinguish divide between the words and inside word junctions. Glottal stop is inserted between (a) two vowel that do not create a diphthong (používat [po.ʔuʒi:vat], táta a máma [ta:ta ʔa ma:ma]); (b) if the word begins with a vowel, the glottal stop is used to distinguish it from the preposition (s okna [s ʔokna]); (c) and in word junctions, before the second part (trojúhelník [troj.ʔu:ɦɛlɲi:k]). If the words are of foreign origin, the glottal stop is not used.[83] In English language, the glottal stop is the feature of monosyllable words; if the monosyllable word enters a junction, the glottal stop can be lost. /T/, less frequently /k/ and /p/ can be allophones of glottal stop in Cockney.[84]

Phonemic units do not have to posses characteristic phonological features, if we are to analyse them as prosodies of sentences or words, and if we are to simultaneously analyse them from the syntagmatic point of view. The phenomenon of junctional gemination, e. g. -nn- in thinness, or penultimate stress (the stress on the second to last syllable), if approached from the syntagmatic point of view, are a characteristic feature of prosody. A very good example, when we have to pay attention, are the most common "words" *the* and *a*, pronounced with the neutral vowel [ə], the pronunciation of which depends on junction and stress.

According to these two criteria, the pronounced forms can be: [ðə], [ði], [`ðiy], [ə], [ən], [`ey], [æn].[85]

The ideas are not easy to extract from the study, thus it will be better to look into an explanatory dictionary. Prosodies can be applied to higher units than phonemes—the suprasegmental units (syllables, word, junctions, clauses, sentences), and can reflect different features of the speaker or the utterance. Hence expressing irony, sarcasm, and even emphasis are all elements of prosody. If we speak about statement clauses, imperative clauses and interrogative clauses, and if studied syntagmatically, we speak about prosodies. Prosody is, therefore, the rhythm, stress, intonation, length of syllables, loudness, pitch of speech.[86]

Firth was an eminent and a worldwide known person. This might be contradictory to the statement at the beginning of this chapter, but Firth's influence did not exceeded British borders, although he was fully aware of the linguistic development in Europe and in America. In Britain, a number of linguists was "raised" under Firth's leadership and they helped to spread Firth's idea "with an identifiably 'Firthian' approach."[87]

4.6 POSSIBLE INFLUENCE ON PRAGUE'S THEORY AND CONCLUSION

The influence of British linguists was undoubtedly immense, however, the ideas of their crucial works did not reach over British islands (it can be questioned, for Sweet's concept of Romic served as a cornerstone for the IPA, and Jones helped to expand the IPA). The British were more concerned with phonetics, while phonology was "shifted" to the background, although both Jones and Firth wrote about the phoneme. Jones was collecting materials about the phoneme throughout his career, but as a practical phonetician, he's aim was to capture the phonetic transcription by the smallest number of phonetic symbols. The phoneme was a family of sounds, which shared the same characteristics.[88]

We can certainly say that the British linguists did not fundamentally influence the PLC in any way. Prague's theory was more-or-less based on

the ideas which had arisen on the continental Europe, and the linguists that influenced the PLC were Ferdinand de Saussure and Jan Baudouin de Courtenay with Mikołaj Kruszewski and Lev Shcherba (the trio was from the Kazan School of Linguistics).

5 AMERICAN DESCRIPTIVISM

In order to get to the contemporaries of the PLC, we have to "cruise" to the 19th century to the beginnings of linguistics in North America. American linguistics was developing independently on European linguistics and its early beginnings can be divided into two areas: (1) historical and philological and (2) non-historical and non-scientific. The former followed the European tradition and was represented mainly by William Dwight Whitney. The latter was practiced by missionaries and travellers; the purpose was to accumulate a great number of language data in order to spread the knowledge of the Bible and faith.[89]

Two main features are characteristic of the American linguistics of the end of 19th century. Since all the late 19th—early 20th linguists were studying Indian languages, the emphasis was laid on anthropology. The success in studying Native American languages was immense. Many of the Indian tribes did not have any written form of the language, hence they did not have any written material, and therefore the languages were studied synchronistically. Synchronistic approach of the Americans was often criticised, as well as the Neogrammarians were criticised for their diachronic approach.[90]

The second feature is the focus on language form rather than the meaning. If they were to deal with the meaning, they would often deal only with the grammatical one.[91]

Let us start with Willliam Dwight Whitney.

5.1 WILLIAM DWIGHT WHITNEY

Born in 1827, W. Whitney studied to be a naturalist. The backbone of his theory was the idea of uniformitarianism, which is saying that geological events that are happening right now, always happened in the past. This definition ruled out any catastrophic or random events.[92]

Later, Whitney got hold of a book about Sanskrit grammar, which

directed his career and research away from natural sciences. After studying Sanskrit in America, Whitney travelled to Europe to study Sanskrit, and upon his return was appointed Professor of Sanskrit at Yale. He wrote *Sanskrit Grammar*, which was his best-known work, along with two books on general linguistics. The area of his study (Indic and Indo-European Languages) granted him reputation among European linguists.[93]

However, Whitney's ideas were not revolutionary or innovative, since he only helped to spread Sanskrit knowledge in America.

5.2 FRANZ BOAS

The "father" of anthropology in America, Boas was from Germany, where he gain a doctorate in physics and geography at the University of Kiel. Not having been trained in fieldwork in anthropology, Boas went on a research to Baffin Island (Canada, territory of Nunavut) and impressed by the life of the Inuit people, his attention was diverted to anthropology.

In 1895, Boas emigrated do the United States, and a year later started to lecture at Columbian University, where he led a course in training professional anthropologists. Boas' students continued to spread his ideas more, than Boas himself (sometimes can be called Boasian anthropology).[94]

Some of Boas' ideas shall be looked upon. Anthropologist's research interest (whether it is concerned with craft, faith or economic conditions) should be based on his own observations. The object of his research should not be an individual, but a group.[95] The individual is studied only as a member of certain racial or social community. Anthropologist should possess knowledge of anatomy, physiology, and psychology and it should be applied on the research of a group.[96]

Language is tied to psychology, and language was another distinctive feature of Boasian anthropology. According to this view, the language was closely tied with the life of the group and the perception of the world.[97]

What snow represents for us (used as a hypernym), it does not represent for the Eskimos. Snow is not used as a hypernym, but the Eskimos have different expression for every form of snow. It will be similar with the verb *to throw*. We often say: "Why did you throw it at me?!", and we do not refer to shape, size or consistence. For the, lets say, Native Americans, the phrase "Why did you throw it at me?!" would not be sufficient. More detailed description would be used.[98]

When dealing with language, it is necessary to mention another feature of Boasian anthropology, namely language classification. The comparison of the language of Native Americans with the languages of Indo-European origin would lead to a denial of detecting basic features of Native American languages. While describing the language, it is mandatory to base the description on language's own structure, and do not look for common structures with other languages. Instead, the languages should be grouped in families of Native American languages, which resembled each other with more-or-less characteristic structures.[99]

The language and the culture of Native Americans are more influenced by historic development, rather by geographic influence. "A people who settle in a new environment will first of all cling to their old habits and only modify them as much as is absolutely necessary."[100]

Although Franz Boas was an influential character in the history of American linguistics and anthropology, he also had "dark sides". No studying aids or a list of literature were provided for his students. The books, the student had to study, were often in foreign languages, not looking at the fact that students did not have the knowledge of the language. Boas was often high-handed; he would organize field trips, the students did not know of and felt offended when some of them rejected to participate. He felt to be obliged to enlighten the humanity through anthropology; one of these enlightenments was the problem of race.[101]

Despite his "dark sides" Boas was an excellent teacher and trained one of the best scientists in the field of anthropology. Among his students was

Edward Sapir.

5.3 EDWARD SAPIR

Excellent specialist of Indian languages was a German-born anthropologist. He contributed to the study of North-American Indian Languages and was the founder of ethnolinguistics. His opinions on language and culture, at which he arrived in his works, served as a basis of Sapir-Whorf hypothesis. Sapir was also one of the duo, who helped to spread the knowledge about the American school of structuralism (in America called descriptivism).[102]

5.3.1 SAPIR-WHORF HYPOTHESIS (Linguistic Relativity)

Sapir's opinions on language and culture were later developed by his student, Benjamin Lee Whorf. Language of the human being moulds the perception of his reality. To complete the conception, Whorf used his study of the Hopi tribe (Arizona). He addressed attention to a different understanding of time, different arrangement of parts of speech (the line between nouns and verbs is not strict—the phenomena we describe using nouns can be described by verbs in the language of Hopi); understanding the objective (tangible or sensuously tangible phenomena), and the subjective (invisible factors and the stability or the length). Whorf tried to use Sapir's ideas even in situations, when an alternative could have been used, for which he was often criticised. His contribution was that he attempted to provide enough empirical observations to back up Sapir's ideas.[103]

5.3.2 LANGUAGE

Sapir published several books and magazine articles, and his best-known book is *Language* (1921), in which he presented his conception of language.

"Language is a purely human and non-instinctive method of communicating ideas, emotions, and desires by means of a system of

voluntarily produced symbols,"[104] is acquired and hence a cultural phenomena and "fully formed functional system within man's psychic or 'spiritual' constitution."[105]

The basic units of a language are not signs, but symbols, and it is primarily an auditory system of these symbols. The communication is the cornerstone of speech and is successfully conveyed, when the listener "pictures the spoken" in his mind. Spoken symbols are the primary units, secondary units are the written forms of the spoken symbols, the "symbols of symbols."[106] "Language, as a structure, is on its inner face the mould of thought. It is this abstracted language, rather more than the physical facts of speech, that is to concern us in our inquiry."[107]

Moving on to the units of speech, Sapir was the upholder of the *item* and *process* model, the model in which certain units are derived from the basic units.[108] Sapir distinguished two types of units: (1) functional, and (2) formal. The former are made of grammatical elements (affixes), radical elements (root, stem), and sentences. The latter units are words. Functional elements can join in order to create formal elements. Five types of junction are distinguished:

A + (b)	*Singer* (A=sing, b=-er)
(A) + (b)	*Stromoví* (A=stromo-, b=-ví)
A + (o)	*Sing* (A=sing, b=0)
A	*Hamot* (nootka word for bone, the influence of singular or plural is not present)
A + B	*Země́koule* (A=země-, b=-koule)

(Upper-case letters represent radical components; lower-case letters grammatical components; round brackets represent inability to stand alone)

These elements can be randomly combined,[109] thus a word like A + (b) + C + (d) can be created (A=hlad, b=-o-, C=mor, d=-na).

Sapir as well deals with phonetics. After a description of articulatory apparatus, Sapir reaches an interesting idea at the end of the chapter. Phonetic units, or variable features have different psychological values. The sound-system, specific for a language, has inner or ideal

psychological system and is "a real and an immensely important principle in the life of a language."[110]

What is written about grammatical processes, Sapir distinguishes six of them: (1) word order; (2) composition; (3) derivation (affixation); (4) internal vocalic change of radical or grammatical elements; (5) reduplication; and (6) changes of stress. In the text, Sapir carries on to explain these processes.

Sapir reached the following conclusions in his works: (1) The mother tongue—on one hand is a social creation reflecting the objective reality, on the other hand a system, in which we are brought up and in which we think, from early childhood—moulds our perception of outer world. (2) People that have been brought up in different language environment perceive the surrounding world differently, because languages differ among themselves and reflect different environments. (3) People perceive the world through particular language, therefore worlds, in which different social communities live, are different.[111]

5.4 LEONARD BLOOMFIELD

Born in 1887, Bloomfield dominate the scene of linguistics in America from 1930's to 1950's. Graduated from Harvard College in 1906 and received a doctorate in 1909, Bloomfield also studied in Germany where he got acquainted with research of the Neogrammarians and held a view that the linguist should seek out regularity of sound change. In 1917, Bloomfield started to study the Indians of the Algonquian family (Wisconsin); in his linguistic work on the Indians he showed that the Neogrammarians' methods can be efficiently used on language of non-Indo-European family. Bloomfield also accepted de Saussures' distinction between diachronic and synchronistic approach to language, as well as his conception of language structure.[112]

Bloomfield published an enormous number of books and magazine articles. In 1914 *An Introduction to the Study of Speech* was published; in

this book Bloomfield still connects language with psychology, however this theory was later abandoned. His most important work—*Language*—in which he presented his perception of the language, was published in 1933 and instantly became *the book* of American structuralism.[113;114]

Although Bloomfield tried to abandon psychology, and use linguistic methods instead, the idea of behaviourism is present in his work (in 1921 Bloomfield met behaviourist A. P. Weiss and they mutually agreed that a mechanistic rather than mentalistic approach was necessary, if the sciences were to be "truly scientific."[115;116]

5.4.1 LANGUAGE

In the first chapter of this book, Bloomfield describes different approaches of language study in the past, and reaching the end of the chapter he states that up to 1933 (or 1930) linguists insisted on "psychological" interpretation and universality of fundamental features (such as parts of speech), although not being true, is often described using "philosophical and psychological pseudo-explanation."[117] We do not need to have historical knowledge of the language in order to give a description, but we must relate to observable data. Bloomfield, as well as Sapir, says that written language is not a language, but rather a recorded speech by visible marks.[118]

In his theory of language, Bloomfield uses the "equation" stimulus → reaction (S → R; was typical of behaviourists). In the example given in *Language*, Bloomfield exemplifies the girl's desire to eat an apple, and the process that takes place will be:

(1) Practical events preceding the act of speech;

(2) Speech;

(3) Practical events following the act of speech.

Two situations can happen: (1) the girl will grab the apple by herself and eat it (S → R); or (2) she can ask a boy to grab the apple for her, in this case she uses the linguistic substitute reaction, the scheme will look like

this: S → s … r → R; the former is the speechless reaction, the latter is the reaction invoked by speech.[119] In the latter scheme, Bloomfield automatically expects the boy will grab the apple without any other questions. He did not obviously considered the boy's possible alternative reaction.

What is to be told about grammar, Bloomfield was the upholder of the *item* and *arrangement* model, which describes juxtaposed units and the options of their mutual combination.[120]

The linguistic form (either bound or free) which partially resembles (phonetically and semantically) other forms is a *complex form*. Complex form is made up of two or more linguistic forms—*components*. *Blackberry* and *cranberry* are linguistic form made up of two components *(black- berry* and *cran- berry).* Complex forms can also have so called remainders, units, which are unique for one complex form (such as *cran-*). Each component accompany other components.[121]

The basic form without any semantic resemblance to other forms is a *morpheme*; but can, in some cases, resemble other phonetic forms [*bird* can resemble *burd-* (as in *burden*)]. These phonetic forms are called *alternants*, each of these appears under different circumstances. The alternant that has a wider range is called a *basic alternant*. Any morpheme can be described as a set of one or more phonemes in a certain arrangement.[122]

A *sememe* is the meaning of the morpheme, and has a definite and constant meaning in the system of meaning of other sememes. All morphemes form the language vocabulary (lexicon), and even though we would know the value of a substantial number of sememes, we still would not fully understand the forms in a language.[123]

If we juxtapose some morphemes, we will not know the full meaning of these words in the utterance. Part of this meaning is dependant on *arrangements*, with the help of which morphemes form themselves into complex units. The arrangement of these forms is the *grammar*; 4 types

of arranging linguistic forms are recognized.

(1) **Word order**. If we place along *to hit*, *John, Bill*, then by creating *John hit Bill* will be meant something different that *Bill hit John*. The form *John Bill hit* cannot exist, for the English language does not order the words in such way.[124]

(2) **Modulation** (use of secondary phonemes). Secondary phonemes are not independent morphemes and in an utterance they can only show in arrangements of morphemes. Secondary phonemes carry grammatical meaning; this meaning can be expressed by pitch (*Joe!* x *Joe?* x *Joe.*), and in complex forms by stress.[125]

(3) **Phonetic modification**, the change in the primary phonemes of a word. *Do* [dōō] + *not* [nŏt] will join and create *don't* [dōnt], however in this case, the junction is optional, because we can use the non-contracted form *do not*. In words like *duke* [dju:k] after adding suffix *-ess*, the phonetic modification will take place: *duchess* [dŭch'ĭs].[126]

(4) **Selection** of forms will result in possible different meaning. The use of exclamation mark is a good example. Combined together with a morpheme, the results can be: (a) draw person's attention (*Peter!, Boy!*); (b) a command (Run!, Swim!). The different form in the same position have different meaning, and therefore can be a part of different form-class. Such a form-class can be composed of *duke*, *baron, prince*, which are typical of adding *-ess* to create expression addressing their female counterparts (*duchess*, *baroness*, *princess*). Words like *painter*, *banker, teacher* would be excluded from this class. The final meaning depends upon the selection of the components.[127]

The abovementioned arrangements appear in various combinations, and each of them represent one *taxeme*, the smallest unit of form; thus we have the taxeme of modulation, taxeme of selection, taxeme of word order, and taxeme of phonetic modification. Taxeme, if standing alone, is meaningless, however taxemes can be arranged into *tactic forms*

(conventional grammatical arrangements). If a meaning is given to a tactic form, we call it a *grammatical form*. Now, the smallest meaningful unit of grammatical form is a *tagmeme*, and each tagmeme carries its own meaning, an *episememe*.[128] This is another confusable definition, let us explain the problem (the same utterances as Bloomfield is using will be used).

Take the utterance *John ran away*; four taxemes (which form the tactic form) appear in this grammatical form: (a) the taxeme of selection (John over Joe); (b) another taxeme of selection (ran away over, let say, stepped aside); (c) another taxeme of selection (which tells us we have picked an action to perform); and (d) the taxeme of word order (we cannot say *ran away John*). The taxeme of modulation and phonetic modification are omitted. Thus if we take individual taxemes, they do not possess any meaning, but when joined together (selection + selection + selection + word order) they create a tagmeme in the meaning of that John performed an action (ran away). "Any utterance can be fully described in terms of lexical and grammatical forms; we must remember that the meanings cannot be defined in terms of our science."[129]

Grammatical forms can be grouped into three classes:

 (1) **Sentence-type** class [when a grammatical form is spoken alone (but must consist of minimally two taxemes)]. The taxemes of modulation mark the end of a clause/sentence, and also mark the stressed part of a clause/sentence. Sentence types can be distinguished into (a) full sentences, and (b) minor sentences.

 1. Full sentences can be further divided into *actor-action construction* (statement, interrogative) and in a *command.* Actor-action construction, such as *I sing* has two components *I* (the actor) and *sing* (the action), is typical for, e. g. English, German, French. The Slavonic languages do not have the actor-action construction, because the components are often combined in one word (*zpívám*).

2. Minor sentences encompasses interjections and semi-clause construction, such as Here?, When?, That way.; they often are answers to questions.[130]

(2) **Construction** deals with syntax (in syntactic construction only free linguistic forms exist). Every phrase (a syntactic construction) is arranged by a meaningful set of taxemes. Morphology is also a part of the construction class, but, unlike syntax, deals also with bound forms as components. Syntax is concerned with the construction of phrases, morphology with the construction of words and parts of words. Phrase-words and some compound words are at the border morphology-syntax.[131]

(3) The third class is called **substitution**. "A substitute is a linguist form of grammatical feature which, under certain conventional circumstances, replaces any on of a class of linguistic forms."[132] The substitute can only replace forms of a certain class (it is its domain), which means that the domain is identifiable by means of grammar. Pronouns are often substitutes, and anaphoric and cataphoric references are good examples of substitution.

Bloomfield's theory of grammar played a significant role in the history of American linguistics, and was elaborated further. What is Bloomfield also known for is his contribution to phonology in the United States.

5.4.2 THE PHONEME

Is the smallest unit which makes a difference in meaning. Phonemes can be divided into two groups: (1) primary phonemes, and (2) secondary phonemes.

The number of primary phonemes in one's language can range from about 15 to about 50. These phonemes are called simple. Alongside simple phonemes, English also has compound phonemes. Standard English has 32 simple phonemes and 8 compound phonemes.[133;134]

Secondary phonemes appear only in combination of two or more

speech forms[135] into larger units. A word (several simple speech forms) consisting of two or more syllables is always accompanied by a secondary phoneme—stress. A pitch at the end of the sentences is also a secondary phoneme (distinction among imperative, interrogative and declarative clauses, or semi-clauses). A comma is also considered to be a secondary phoneme.[136]

Phonology defines individual phonemes and occurring combinations. If the combination can be pronounced then it is a *phonetic form*. Phonetic forms bearing meanings are linguistic forms. Linguistic form is a Greek prefix *aero-*, which is pronounceable and carries a meaning of air, atmosphere; such a word is an *aerosol*; Latin prefix *aud(i)-* carries the meaning of hearing, listening, sound, hence an *auditorium* represents a linguistic form. We can say that all prefixes, suffixes, roots, and stems of Greek and Latin origin are phonetic forms with meanings. So are all words, phrases, clauses, and sentences in the English language.[137]

This is basically all that is important for us if we are dealing with morphology and phonology. The sixth chapter of Bloomfield's *Language* is called TYPES OF PHONEMES, however the chapter describes the phoneme from the phonetic point of view, thus is dealing more with phonetics.

American phonology is not a phonology in its strict meaning, but rather a phonology with "a slight touch of phonetics." Therefore, if we are concerning ourselves with features of speech such as pitch, stress, pauses, and duration in connection with phonemes, we are studying phonemics.

6 PRAGUE SCHOOL

6.1 THE PROBLEM OF PHONEME

As a starting point we must state that the phoneme phenomenon was predominantly Jakobson's and Trubetzkoy's research.

At the beginning of PLC, both of them uphold the Baudouin's concept that is the psychologistic approach. Trubetzkoy in his paper in 1929 still approached the problem from the psychologistic angle. However, when approached from the psychologistic angle, the problem was still being shifted from linguistics to other field(s), hence the Prague linguists decided to rely on their own linguistic method in order to arrive at a definition.[138]

Jakobson arrived at a definition: "The phoneme … by this term we designate a set of those concurrent sound properties which are used in a given language to distinguish words of unlike meaning."[139] The phoneme can be divided into simultaneous elements (phonological units, relevant phonic qualities, distinctive features). The PLC gave preference to acoustic approach over the physiological. If studied from the functional point of view, the sounds implementing the phoneme are called *phonemic variants*. Here we must pay attention, for phonemic variants are something different that *allophones.* "Allophone replaces, in specific positions, the sound which most commonly implements the phoneme."[140] Allophones are only the forms, if the phoneme is spoken "incorrectly." Allophone is /pʰ/ if spoken in *pop*, where the correct phone should be /p/. Phonemic variants, according to Prague's theory, were divided into (a) principal phonemic variants (this would be the sound /p/; the variant is less dependant on its neighbouring phonemes and does not bear "emotional colouring");[141] and (b) combinatory phonemic variants (the occurrence of which depends on neighbouring phonemes; in our case of /pʰ/ by the word-initial). The phoneme which bears "emotional colouring" is a stylistic phonemic variant.[142]

Phonological correlations are a class of relevant phonic differences, and are made up of binary oppositions (such as voiced and voiceless character of occlusives).[143] The phonological correlation constitutes a "system of phonological oppositions characterized by a presence and absence of certain phonic features which differentiates as a number of phonemes which can be abstracted, in the given phonological system, from the opposed pairs."[144] To put it more usefully, such a correlation pair is /p/—/b/: /p/ being the occlusive voiceless consonant, /b/ being the voiced variant. Another example of phonological correlation is /f/—/v/: /f/ is a voiceless fricative[145], /v/ is the voiced counterpart. Both of these examples are correlation of voice; if we put /p/ and /f/ together, they are in a correlation of occlusiveness.[146] Josef Vachek in *The Linguistic School of Prague* gives the following example:

/p/ ⎯ /b/

/f/ ⎯ /v/

(horizontal line is the correlation of sound; vertical line is the correlation of occlusiveness).

Final version of these oppositions was presented in Trubetzkoy's *Grundzüge der Phonologie*, where he divided phonological oppositions into: (1) bilateral, and (2) multilateral. The former oppositions are those which are not found in other phonemes (such an opposition is /p/—/b/). The latter are those which phonic structures can be found in other phoneme within the given phonological system (such multilateral phonemes are /m/—/n/, correlation and nasality of which can be found in /ŋ/.[147]

However, there are situations in which the phonological opposition is neutralized. Such an example of neutralization are the Russian word лёд and лёт (ljod and ljot, the former meaning ice, the latter meaning a flight), the phonetic implementation of both is [l'ot]; /t/ in [l'ot] is an archiphoneme.[148] The theory of phonemic opposition was later developed by Roman Jakobson and Morris Halle.[149;150]

In utterances, we find combinations of phonemes and not all phonemes can equally combine. Thus some of the phonemes "can only occur in limited numbers of positions."[151] The phoneme /h/ can be of assistance: /h/ appears only in pre-vocalic positions at the beginning of morphemes.[152]

Jakobson along with Trubetzkoy developed techniques of analysis of sound systems of language that could have been applied to morphology as well as to syntax.

7 CONCLUSION

Once we have described the specific aspects of linguistic scientists, we are able to make a conclusion about the influence on PLC: the influence was not direct.

If we look at each of the linguists, we notice that the British "scientists" were mostly phoneticians, and Firth was concerned with semantics rather than with phonology. The influence from overseas did not have a huge impact either. Hence we must look at the influence from a different angle. After WWII, linguists began to pursue problems of phonology, morphology, and syntax, the question is why? One possible explanations (which the author upholds) is that the problems of articulatory phonetics had been—more-or-less—solved, and if not, they diverged to the area of phonology.

Phonetics describes the process of creating sounds, and when a problem was encountered, that one sound can be pronounced several ways, the assumption was the pronunciation is related to social status, education, region, ethnicity, …. The problem of vast number of pronunciation of one sound was grasped by Jan Baudouin de Courtenay and his co-workers and developed further. R. Jakobson and N. Trubetzkoy, both being of Russian nationality, crossed this problem in Russia and brought it to the Czech lands. The problems of phonetic observations from Britain could have "landed" on continental Europe, where the problems were discussed and developed further. The author assumes that the phoneticians were in the background, when the phonology was emerging and, therefore, indirectly influenced PLC.

8 ENDNOTES

1 VACHEK, J., Prolegomena k dějinám Pražské školy jazykovědné, p. 93.
2 VACHEK, J., The Linguistic School of Prague, p. 5.
3 Ibid., p. 4.
4 VACHEK, J., Prolegomena k dějinám Pražské školy jazykovědné, pp. 13–14.
5 VACHEK, J., The Linguistic School of Prague, pp. 8–9.
6 Ibid., pp. 9–10.
7 VACHEK, J., Prolegomena k dějinám Pražské školy jazykovědné, p. 18.
8 Ibid., pp. 18–19.
9 VACHEK, J., The Linguistic School of Prague, p. 12.
10 Ibid.
11 Ibid., p. 13.
12 MATHESIUS, V., A Functional Analysis of Present Day English on a General Linguistic
   Basic, p. 9.
13 MASTER, A., The Influence of Sir William Jones upon Sanskrit Studies, p. 801.
14 JONES, Sir William, Discourses delivered before the Asiatic Society, p. 28.
15 MASTER, A., The Influence of Sir William Jones upon Sanskrit Studies, p. 804.
16 ČERNÝ, J., Dějiny lingvistiky, p. 91.
17 Ibid., p. 92.
18 Ibid., p. 104.
19 VACHEK, J., The Linguistic School of Prague, p. 16.
20 MATHESIUS, V., A Functional Analysis of Present Day English on a General Linguistic
   Basic, p. 10.
21 ČERNÝ, J., Dějiny lingvistiky, p. 105.
22 VACHEK, J., The Linguistic School of Prague, p. 16.
23 ČERNÝ, J., Dějiny lingvistiky, p. 105.
24 Ibid., p. 94.
25 Ibid., p. 95.
26 Linguistics (science), Britannica Online Encyclopedia.
27 ČERNÝ, J., Dějiny lingvistiky, p. 95.
28 MATHESIUS, V., A Functional Analysis of Present Day English on a General Linguistic
   Basic, p. 11.
29 Ibid., p. 100.
30 Linguistics (science) :: Phonology, Brittanica Online Encyclopedia.
31 VACHEK, J., The Linguistic School of Prague, p. 19.
32 Ibid., p. 17.
33 Ibid., p. 33.
34 Ibid., p. 33.
35 Ibid., pp. 34–35.
36 Linguistics, A brief history.
37 VACHEK, J., The Linguistic School of Prague, p. 21.
38 Phonetics, Wikipedia.
39 Panini biography, The MacTutor History of Mathematics archive.
40 Ibid.
41 ČERNÝ, J., Dějiny lingvistiky, p. 59.
42 ANDERSON, S., Phonology in the twentieth century, p. 173.
43 SWEET, H., A Handbook of Phonetics, p. 100.
44 See Appendix on 52.
45 SWEET, H., A Handbook of Phonetics, p. 103.
46 Ibid.
47 ANDERSON, S., Phonology in the twentieth century, p. 174.
48 People, A-H, Ling Links.
49 LINDBLOM, B., SUNDBERG, J., A quantitative theory of cardinal vowels and the teaching of
   pronunciation, p. 19.
50 ROACH, P., English phonetics and phonology, p. 13.
51 LINDBLOM, B., SUNDBERG, J., A quantitative theory of cardinal vowels and the teaching of
   pronunciation, p. 20.
52 Ibid.

53 ČERNÝ, J., Dějiny lingvistiky, p. 124.
54 ANDERSON, S., Phonology in the twentieth century, p. 175.
55 Ibid.
56 McDAVID, R., The phoneme: Its Nature and Use, p. 378.
57 ANDERSON, S., Phonology in the twentieth century, p. 176.
58 McDAVID, R. I., The Phoneme: Its Nature and Use, p. 383.
59 Ibid.
60 Ibid., p. 381.
61 CHAPMAN, S., ROUTLEDGE, Ch., Key Thinkers in Linguistics and the Philosophy of Language, p. 80.
62 FIRTH, J. R., Speech, pp. 78–79.
63 CHAPMAN, S., ROUTLEDGE, Ch., Key Thinkers in Linguistics and the Philosophy of Language, p. 81.
64 FIRTH, J. R., Papers in Linguistics: 1934 –1951, p. 7.
65 Ibid.
66 Ibid.
67 Ibid.
68 Ibid., p. 8.
69 Ibid., pp. 10–11.
70 Ibid., p. 15.
71 Ibid., p. 19.
72 Here we might argue that lexicology should be written. Lexicography, in this context, is practical lexicology.
73 FIRTH, J. R., Papers in Linguistics: 1934 –1951, pp. 20–21.
74 CHAPMAN, S., ROUTLEDGE, Ch., Key Thinkers in Linguistics and the Philosophy of Language, p. 81.
75 FIRTH, J. R., Papers in Linguistics: 1934 –1951, p. 27.
76 Ibid.
77 Ibid.
78 CHAPMAN, S., ROUTLEDGE, Ch., Key Thinkers in Linguistics and the Philosophy of Language, p. 82.
79 Ibid., p. 83.
80 Word and syllable initials—the pronunciation of the initial letter and initial syllable of a word.
81 Word and syllable finals—the pronunciation of the last letter or syllable of a word. A good example can be a pronunciation of -s at the end of a word; the pronunciation is based on the final sound of the word, before adding -s.
82 FIRTH, J. R., Papers in Linguistics: 1934 –1951, pp. 122–123.
83 Ráz (fonetika), Wikipedia.
84 Cockney, Wikipedia.
85 FIRTH, J. R., Papers in Linguistics: 1934 –1951, p. 131.
86 Prosody (linguistics), Wikipedia.
87 CHAPMAN, S., ROUTLEDGE, Ch., Key Thinkers in Linguistics and the Philosophy of Language, p. 83.
88 VACHEK, J., The Linguistic School of Prague, p. 47.
89 ANDERSON, S., Phonology in the twentieth century, p. 194.
90 ČERNÝ, J., Dějiny lingvistiky, p. 200.
91 ČERNÝ, J., Dějiny lingvistiky, p. 200.
92 ANDERSON, S., Phonology in the twentieth century, pp. 194–195.
93 ANDERSON, S., Phonology in the twentieth century, p. 195.
94 People, A-H, Ling Links.
95 BOAS, F., General Anthropology, p. 666.
96 BOAS, F., Anthropology and modern life, p. 12.
97 BOAS, F., General Anthropology, p. 130.
98 Ibid., p. 673.
99 STOCKING, G. W., A Franz Boas Reader, p. 158.
100 BOAS, F., Handbook of American Indian Languages, pp. 55–56.
101 BOAS, F., Anthropology and modern life, pp. 9–10.
102 Edward Sapir, Brittanica Online Encyclopedia.
103 ČERNÝ, J., Dějiny lingvistiky, pp. 405–407.
104 SAPIR, E., Language, p. 8.

105 Ibid., p. 10.
106 Ibid., p. 20.
107 Ibid., p. 22.
108 ČERNÝ, J., Dějiny lingvistiky, p. 201.
109 SAPIR, E., Language, pp. 25–32.
110 Ibid., pp. 54–55.
111 ČERNÝ, J., Dějiny lingvistiky, p. 405.
112 Leonard Bloomfield Biography, BookRags.com.
113 Ibid.
114 ČERNÝ, J., Dějiny lingvistiky, p. 204.
115 Ibid, pp. 204-205.
116 Leonard Bloomfield Biography, BookRags.com.
117 BLOOMFIELD, L., Language, p. 17.
118 Ibid., pp. 19-26.
119 Ibid., pp. 23-26.
120 ČERNÝ, J., Dějiny lingvistiky, p. 201.
121 BLOOMFIELD, L., Language, pp. 160-161.
122 Ibid., pp. 161, 164.
123 Ibid., pp. 160-163.
124 Ibid., p. 163.
125 Ibid.
126 Ibid., pp. 163-164.
127 Ibid., p. 164.
128 Ibid., p. 166.
129 Ibid., pp. 166-167.
130 Ibid., pp. 170-171, 177.
131 Ibid., p. 207.
132 Ibid., p. 247.
133 Ibid., p. 90.
134 See Appendix on 54.
135 Meaningful unit of speech—a morpheme, a word, a sentence. Also called linguistic form.
136 BLOOMFIELD, L., Language, p. 90.
137 Ibid., p. 138.
138 VACHEK,J., The Linguistic School of Prague, p. 44.
139 Ibid., p. 45.
140 Ibid., p. 51.
141 Ibid.
142 Ibid.
143 Occlusives are sound produced by stopping airflow by occlusion in the vocal tract.
144 VACHEK, J., The Linguistic School of Prague, p. 55.
145 Fricatives are consonants produced by forcing air through a narrow channel made by placing two articulators close together.
146 VACHEK, J., The Linguistic School of Prague, pp. 55-56.
147 Ibid., p. 57.
148 Archiphoneme represents two or more phonemes when distinction between these has been neutralized. Shown by a capital letter, e. g. /T/ for /t/ and /d/ in German words Rat and Rad [raT]. Der Rat is a meeting, das Rad is a bicycle.
149 See Appendix on 54.
150 VACHEK, J., The Linguistic School of Prague, p. 61.
151 Ibid., p. 64.
152 Ibid.

9 BIBLIOGRAPHY

9.1 Printed Sources

- BLOOMFIELD, Leonard. *Language*. Repr. London: G.Allen, 1970.
- ČERNÝ, Jiří. *Dějiny Lingvistiky.* Olomouc: Votobia, 1996. ISBN 80-85885-96-4.
- FIRTH, J.R. *Papers in linguistics : 1934-1951*. Repr. London: Oxford University Press, 1964.
- FIRTH, J.R. *Speech*. London: Ernest Benn, 1930.
- MATHESIUS, Vilém. *A Functional Analysis of Present Day English on a General Linguistic Basic*. 1. vyd. Praha: Academia, 1975.
- ROACH, Peter. *English phonetics and phonology: a practical course.* 2nd ed. Cambridge: Cambridge University Press, 1991. ISBN 0 521 40719.
- SAPIR, Edward. L*anguage : an introduction to the study of speech*. 3rd Impr. London: Rupert Hart-Davis, 1971.
- SWEET, Henry. *A new english grammar : logical and historical. part 1, Introduction, phonology and accidence*. Oxford: Clarendon Pr., 1968.
- VACHEK, Josef, ed. *Z klasického období pražské školy 1925-1945*. 1. vyd. Praha: Academia, 1972.
- VACHEK, Josef. *Prolegomena k dějinám Pražské školy jazykovědné*. Jinočany: H & H, 1999. ISBN 80-86022-12-9.
- VACHEK, Josef. *The Linguistic School of Prague : An Introduction to Its Theory and Practice*. Bloomington : Indiana University Press, 1966.

9.2 Internet Sources

- ANDERSON, Stephen R. *Phonology in the twentieth century: theories of rules and theories of representations* [online]. Chicago: University of Chicago Press, 1985, 373 s. [cit. 2012-03-22]. ISBN 02-260-1916-0. Dostupné z: http://books.google.cz/books?id=k-ph4xhJ8BYC&printsec=frontcover&hl=cs&source=gbs_ge_summary_r&cad=0#v=onepage&q&f=false
- BOAS, Franz. *Anthropology and modern life*. New York: Norton, 1962. Dostupné z: http://archive.org/details/anthropologymode00boas.pdf
- BOAS, Franz. *General Anthropology*. D. C. Heath and Company, 1938. Dostupné z: http://archive.org/details/generalanthropol031779mbp.pdf
- BOAS, Franz. *Handbook of American Indian languages*. Washington: Govt. print. Off., 1911. Dostupné z: http://archive.org/details/handbookofameric01boas.pdf

- CHAPMAN, S. & ROUTLEDGE, Ch. *Key Thinkers in Linguistics and the Philosophy of Language*. Edinburgh: Edinburgh University Press, 2005. pp 80-86 . Dostupné z: http://www.englang.ed.ac.uk/people/firth.pdf
- Cockney. In: Wikipedia: the free encyclopedia [online]. San Francisco (CA): Wikimedia Foundation, 2001- [cit. 2012-04-12]. Dostupné z: http://en.wikipedia.org/wiki/Cockney
- Edward Sapir. Brittanica Online Encyclopedia [online]. 2012 [cit. 2012-04-12]. Dostupné z: http://www.britannica.com/EBchecked/topic/523671/Edward-Sapir
- HOLCOMBE, John. *Linguistics: a brief history* [online]. 2007 [cit. 2012-03-11]. Dostupné z: http://www.textetc.com/theory/linguistics.html
- Jakobson and Halle's distinctive features (1956) [cit. 2012-04-16]. Dostupné z: ssovideo.iis.sinica.edu.tw/SLG/ngasr/Feature-tables.pdf
- JONES, Sir William. *Discourses delivered before the Asiatic Society: and Miscellaneous Papers on the Religion, Poetry, Literature, etc. of the Nations of India* [online]. London, 1824 [cit. 2012-03-22]. Dostupné z: http://books.google.cz/books?id=mNk_5vKDvj8C&printsec=frontcover&hl=cs#v=onepage&q&f=false
- Leonard Bloomfield Biography. BookRags.com | Study Guides, Lesson Plans, Book Summaries and more [online]. 2012 [cit. 2012-04-12]. Dostupné z: http://www.bookrags.com/biography/leonard-bloomfield/
- LINDBLOM, B., SUNDBERG, J.. A quantitative theory of cardinal vowels and the teaching of pronunciation. In: *STL-Quarterly Progress and Status Report*. Stockholm: School of Computer Science and Communication, 1969, s. 019-025. 10: 2-3. Dostupné z: www.speech.kth.se/prod/publications/.../1969_10_2-3_019-025.pdf
- Linguistics (science) :: Phonology. Brittanica Online Encyclopedia [online]. 2012 [cit. 2012-04-12]. Dostupné z: http://www.britannica.com/EBchecked/topic/342418/linguistics/35089/Phonology
- Linguistics (science). Britannica Online Encyclopedia [online]. 2012 [cit. 2012-04-12]. Dostupné z: http://www.britannica.com/EBchecked/topic/342418/linguistics
- MASTER, Alfred. *The Influence of Sir William Jones upon Sanskrit Studies*. Bulletin of the School of Oriental and African Studies [online]. University of London, 1946, roč. 11, č. 04, s. 798-806 [cit. 2012-03-22]. Dostupné z: http://www.jstor.org/stable/608592
- McDAVID, Raven I.. The Phoneme: Its Nature and Use by Daniel Jones. In: *Language*. United States: Linguistic Society of America,

1952, s. 377-386. 28: 3. Dostupné z:
http://www.jstor.org/stable/410108

- Panini biography. The MacTutor History of Mathematics archive [online]. 2012 [cit. 2012-04-12]. Dostupné z: http://www-history.mcs.st-and.ac.uk/Biographies/Panini.html
- People, A-H. Ling Links [online]. 2001 [cit. 2012-04-12]. Dostupné z: http://www.ttt.org/LingLinks/a_h.html
- Phonetics. In: Wikipedia: the free encyclopedia [online]. San Francisco (CA): Wikimedia Foundation, 2001- [cit. 2012-04-12]. Dostupné z: http://en.wikipedia.org/wiki/Phonetics
- Prosody (linguistics). In: Wikipedia: the free encyclopedia [online]. San Francisco (CA): Wikimedia Foundation, 2001- [cit. 2012-04-12]. Dostupné z: http://en.wikipedia.org/wiki/Prosody_%28linguistics%29
- Ráz (fonetika). In: Wikipedia: the free encyclopedia [online]. San Francisco (CA): Wikimedia Foundation, 2001- [cit. 2012-04-12]. Dostupné z: http://cs.wikipedia.org/wiki/R%C3%A1z_%28fonetika%29
- STOCKING, George W. *A Franz Boas reader: the shaping of American anthropology*, *1883-1911*. Midway reprint ed. Chicago: University of Chicago Press, 1989. ISBN 978-022-6062-433. Dostupné z: http://books.google.cz/books?id=0gN2LBm3MXsC&printsec=frontcover&hl=cs#v=onepage&q&f=false
- SWEET, Henry. *A Handbook of phonetics*. Oxford: Clarendon Press, 1877. Dostupné z: http://archive.org/details/handbookofphonet00swee.pdf

10 ABSTRACT

The aim of this bachelor's thesis was to describe the most outstanding works of linguist from the era prior to WW2 and the approaches they held.

The beginning of this thesis is dedicated to the most outstanding linguists in the Czechoslovakia—the linguists of the Prague School. The information provided is focused on history, since the viewpoint are discussed further.

This part is followed by a description of linguistic approaches to language research prior to PLC—still within the borders of continental Europe. The genetic comparison, analytical comparison and the approach of functional structuralism are described.

The most notable scholars from Britain, and their contributions to the world of language study is mentioned in the fourth chapter.

The penultimate chapter describes the language, as viewed by the Americans. Language was studied as a part of anthropology and cultural life. Then, the grammatical and phonological viewpoint are mentioned

In the last but not least chapter, the theoretical background for the phoneme phenomenon as dealt with by the Prague is provided.

The conclusion of the presented thesis summarizes the facts and tries to give a description of the sought influence.

11 RESUMÉ

Cílem této bakalářské práce bylo popsat nejvýznamnější lingvistická díla z období před druhou světovou válkou a postoje, které lingvisté zaujímali.

Začátek této práce je věnován nejvýznamnějším lingvistům v Československu – lingvistům z Pražské školy. Poskytované informace jsou zaměřené na historii, jelikož postoj k jazyku je vysvětlen v následující kapitole.

Tato část je následována popisem lingvistických metod výzkumu jazyka před obdobím Pražského lingvistického kroužku, a stále se pohybujeme na kontinentální Evropě. Geneticko-srovnávací, analyticko-srovnávací a funkčně-strukturální přístupy jsou popsány.

Nejvýznamnější učenci z Británie a jejich příspěvky pro svět jazykového studia jsou zmiňováni v čtvrté kapitole.

Předposlední kapitole popisuje jazyk, jak byl viděn očima Američanů. Jazyk byl studován jako součást antropologie a kulturního života. Posléze jsou zmiňovány gramatické a fonologické postoje.

V poslední kapitole je poskytnuto teoretické pozadí fenoménu fonémy, a jak se k tomuto problému stavěla Praha.

Závěr předložené práce shrnuje fakta a snaží se popsat hledaný vliv.

12 APPENDICES

12.1 ROMIC ALPHABET

(As presented by Sweet in *A handbook of phonetics* on pp. 191-192)

Vowels

aa	pap*a*, f*a*r, gl*a*ss, *a*fter, *au*nt
æ	m*a*n
ae	*ae*rate, b*ea*r, f*a*re
ai	Is*ai*ah, *ai*sle, w*i*ne
ao	extr*a*ordinary, br*oa*d, m*o*re
au	F*au*st, n*ow*, n*ou*n
e	r*e*d
ei	th*ey*, v*ei*l, n*a*me
i	*i*ll, fish*e*s
ii, iy	mach*i*ne, f*ee*l
o	n*o*t, cl*o*th, cr*o*ss, s*o*ft
oi	b*oy*, b*oi*l
ou	fl*ow*, s*ou*l, st*o*ne
u	f*u*ll, p*u*t, g*oo*d
uu, uw	tr*u*th, r*ue*, f*oo*l
ə	*u*p, c*o*me; fath*er*, h*ere*
oe	h*er*, t*u*rn, h*ea*rd

Consonants

c	*ch*ur*ch*, ca*tch*
dh	*th*en, wi*th*
j	*j*u*dge*, *g*entle
q	si*ng*, fi*ng*er
sh	fi*sh*
th	*th*ink
x	si*x*, wre*cks*
y	*y*oung
zh	rou*ge*, pleasure

12.2 PRIMARY PHONEMES BY BLOOMFIELD

(As presented in Language on p. 91; Standard English in Chicago in 1933)

Primary phonemes

[a]	alms	(amz)	[i]	pin	(pin)	[r]	rod	(rɑd)
[ɑ]	odd	(ɑd)	[j]	yes	(jes)	[s]	sod	(sɑd)
[b]	big	(big)	[ǰ]	gem	(ǰem)	[š]	shove	(šov)
[č]	chin	(čin)	[k]	cat	(kɛt)	[t]	tin	(tin)
[d]	dig	(dig)	[l]	lamb	(lem)	[θ]	thin	(θin)
[ð]	then	(ðen)	[m]	miss	(mis)	[u]	put	(put)
[e]	egg	(eg)	[n]	knot	(not)	[v]	van	(vɛn)
[ɛ]	add	(ɛd)	[ŋ]	sing	(siŋ)	[w]	wag	(wɛg)
[f]	fan	(fɛn)	[o]	op	(up)	[z]	zip	(zip)
[g]	give	(giv)	[ɔ]	ought	(ɔt)	[ž]	rouge	(ruwž)
[h]	hand	(hɛnd)	[p]	pin	(pin)			

Compound primary phonemes

[aj]	buy	(baj)	[ij]	bee	(bij)	[ɔj]	boy	(bɔj)
[aw]	bough	(baw)	[juw]	few	(fjuw)	[uw]	do	(duw)
[ej]	bay	(bej)	[ow]	go	(gow)			

12.3 JAKOBSON AND HALLE'S DISTINCTIVE FEATURES

	Feature	Opposed to	Acoustic description	Articulatory description
1.	Vocalic	Non-vocalic	Sharply defined formant structure	Voiced, with free passage of air through vocal tract
2.	Consonantal	Non-consonantal	Low total energy	Onstruction in vocal tract
3.	Compact	Diffuse	Energy concentrated in central area of spectrum	High ration of front resonance chamber to back
4.	Tense	Lax	High energy with greater spread across spectrum and longer duration	Greater deformation of vocal tract from its rest position
5.	Voiced	Voiceless	Periodic low frequency	Vocal cord vibration
6.	Nasal	Oral	Additional formants and less intensity in existing formants	Coupling of nasal cavity
7.	Discontinuous	Continuant	Interruption or abrupt transition	Rapid closure and opening of vocal tract
8.	Strident	Mellow	High intensity noise	Rough-edge effect at point of articulation
9.	Checked	Unchecked	Higher rate of energy discharged	Glottalized
10.	Grave	Acute	Energy concentrated in lower frequencies	Peripheral (towards front or back of vocal tract)
11.	Flat	Plain	Downward shift of weakening of upper frequencies	Narrowed aperture (e. g. by lip rounding
12.	Sharp	Plain	Upward shift of upper frequencies	Reduced oral cavity and widened pharynx

12.4 THE FOUNDING MEMBERS OF PRAGUE LINGUISTIC CIRCLE

(taken from J. Vachek's The Linguistic School of Prague and altered where necessary)

BOHUSLAV HAVRÁNEK (1893 – 1978)

B. Havránek was born in 1893 in Prague; studied at Caroline University in Prague under the comparativist Josef Zubatý and the Slavicist Jiří Polívka. In 1929-1945 Professor of Comparative Slavic Linguistics in Brno, then in the same capacity at Caroline University, Prague. Since 1952 Director of the Institute of the Czech Language of the Czechoslovak Academy of Sciences. Specialized in problems of standard language, of comparative Slavic grammar, of the Balkan languages and especially of Czech. Main works: *Genera verbi v jazycích slovanských* (1926); *Česká nářečí* (1934); *Vývoj spisovného jazyka českého* (1936); *Studie o spisovném jazyce* (1963). Editor-in-chief of the Circle's periodical *Slovo a slovesnost* since 1935, Member of the Czechoslovak Academy of Sciences, honorary member of the Bulgarian and (East) German Academies of Sciences, and President of the PLC since 1945.

ROMAN OSIPOVIČ JAKOBSON (1896 – 1982)

R. O. Jakobson was born in Moscow in 1896. Strongly influenced by the Russian linguistic schools of Baudouin de Courtenay, F. F. Fortunatov, and L. V. Ščerba; came to Prague in the early twenties. Professor at Brno University (1933-1939). Had to leave Czechoslovakia at the time of Nazi occupation; departed in the USA and became Professor of Slavic languages and literatures at Harvard University, and of General Linguistics at MIT in Cambridge, Massachusetts. His wide interests were divided between linguistics and theory of literature (especially theory of verse). In linguistics, he mainly concentrated on phonology [see Vol. I of his *Selected Writings* (1962), and his book *Sound and Meaning* (1978)], on problems of structural grammar [see, e. g. his Beitrag zur allegemeinen Kasuslehre (1936)], on the development of speech in a child. PLC's first Vice-President.

VILÉM MATHESIUS (1882 – 1945)

V. Mathesius was born in Pardubice in 1882, studied at Caroline University in Prague, where he became Lecturer in 1909 and later (1912) Professor of English. Originally dividing his interest between English literary history and

general linguistic problems, since the early twenties because of his ailing eyesight concentrated more and more on the study of language. Pioneer of the synchronistic approach to language facts (see his 1911 treatise *On the Potentiality of the Phenomena of Language*), he worked out the method of analytical comparison, the so-called "linguistic characterology", which he applied, in numerous writings, to English and Czech. Died in 1945. His main (posthumously edited) volumes: *Čeština a obecný jazykozpyt* (1947); *Obsahový rozbor současné angličtiny na základě obecně lingvistickém* (1961). Founder, and President continuously until his death of the PLC. A detailed obituary of V. Mathesius, written by B. Trnka, is included in Thomas Sebeok's book *Portrait of Linguists* (1968).

JAN RYPKA (1886 – 1968)

J. Rypka was born in 1886 in Kroměříž, became Lecturer in Turkish and Modern Iranian Philology at Caroline University in Prague in the mid-twenties, and, later on, Professor of that discipline. His main interest centred in problems of Iranian literature and in metrical research on Iranian poetry—see, e. g. his paper *La métrique du Mutaqárib épique persan* (1936). Member of the Czechoslovak Academy of Sciences and PLC's first Honorary Treasures.

BOHUMIL TRNKA (1895 – 1984)

B. Trnka was born in 1895 at Klečná near Humpolec, studied in Prague as V. Mathesius' pupil. In the mid-twenties was appointed Lecturer, and in the early thirties Professor of English at Caroline University, Prague. His interest centered especially on problems of general grammar, mainly phonology (including its quantitative problems), structural morphology and syntax. His main works were: *Syntaktická charakteristika řeči anglo-saských památek básnických* (1925); *On the Syntax of the English Verb from Caxton to Dryden* (1930); *A phonological Analysis of Present-Day Standard English* (1935). Long-term honorary of the PLC.

12.5 Glossary of Linguistic Terms Appearing in the Work

affix (linguistics)	A bound morpheme that is joined before, after, or within a root or stem.
allophones	One of two or more variants of the same phoneme (the aspirated \p\ of *pin* and the unaspirated \p\ of *spin* are *allophones* of the phoneme \p\).
anaphoric reference	Refers back. *The significant thing about **Helen's** answer was that **she** felt **she** had to lie when **she** said it*.
bound morpheme	A bound morpheme is a grammatical unit that never occurs by itself, but is always attached to some other morpheme.
cardinal vowels	A set of theoretical vowel sounds, based on the shape of the mouth needed to articulate them, that can be used to classify the vowel sounds of any speaker in any language.
cataphoric reference	Refers forward. *Later, when **she** met us at the train station, **mother** looked ill*.
chroneme (Jones)	A phoneme that is characterised by its length.
derivational affix	An affix by means of which one word is derived from another. Is closer to the word's root. The derived word is often of a different word class from the original. *Joy**ful**, joyful**ness***.
diachronic approach	An approach which studies the language from its historic point of view.
diaphone (Jones)	The range of dialectal variants, phonetic and phonemic that may occur in a given word.
diphthong	A complex speech sound or glide that begins with one vowel and gradually changes to another vowel within the same syllable, as (oi) in *boil* or (ī) in *fine*.
episememe (Bloomfield)	A meaning of tagmeme.
formal units (Sapir)	Words.
functional units (Sapir)	Affixes, roots, stems, and sentences.
glottal stop	A stop consonant articulated by releasing pressure at the glottis; as in the sudden onset of a vowel.
language level	English has five language level, each of which deals with different problems of language. Phonetic, morphological, lexical, syntactical, and speech level.
langue	Language considered as an abstract system or a social institution, being the common possession of a speech community. It can encompass vocabulary, grammar, and pronunciation.

morpheme	The smallest meaningful unit of a word that cannot be divided further. *-ed* in *played* is a morpheme referring to past.
morphology	The form and structure of words in a language, esp the consistent patterns of inflection, combination, derivation and change, etc., that may be observed and classified.
parole	The act of speaking; a particular utterance or word.
phatic communication	Also called small talks. Conversational speech used to communicate sociability more than information.
phone	A speech sound considered without reference to its status as a phoneme or an allophone in a language.
phonemic variants (PS)	The [possible] sounds implementing the phoneme.
phonemics	That aspect of linguistics concerned with the classification, analysis, interrelation, and environmental changes of the phonemes of a language.
phonetics	The science concerned with the study of speech processes, including the production, perception, and analysis of speech sounds from both an acoustic and a physiological point of view.
phonology	The study of speech sounds in language or a language with reference to their distribution and patterning and to tacit rules governing pronunciation.
prosody	The patterns of stress and intonation in a language.
protolanguage	An extinct and unrecorded language reconstructed by comparison of its recorded or living descendants and hypothetical ancestor of group of languages or language families.
root	A part of a word that is not further analysable into meaningful elements, is morphologically simple, and carries the principle portion of meaning of the word in which it functions.
semantics	Semantics is, generally defined, the study of meaning of linguistic expressions
sememe (Bloomfield)	A meaning of a morpheme.
speech form	Also linguistic form. A meaningful unit of speech (as a morpheme, word, or sentence).
stem	A stem is the root or roots of a word with any derivational affixes. Inflectional affixes are added to stem.
stress	Stress is an increase in the activity of the vocal apparatus of a speaker.

stroneme (Jones)	A phoneme with distinctive stress.
supresegmental units	Units that are above phonemes. Syllables, word, and even phrases.
syllable	A unit of spoken language consisting of a single uninterrupted sound formed by a vowel, diphthong, or syllabic consonant alone, or by any of these sounds preceded, followed, or surrounded by one or more consonants.
syllable finals	Last syllable of a word. Or-gan-**ic**.
syllable initials	Initial syllable of a word. **Or**-gan-ic.
synchronistic approach	An approach which studies the language from its current state.
syntax	The study of the rules whereby words or other elements of sentence structure are combined to form grammatical sentences.
tactic form (Bloomfield)	Combination of two or more taxemes.
tagmeme (Bloomfield)	The smallest meaningful unit of grammatical form.
taxeme (Bloomfield)	The smallest unit of form.
toneme (Jones)	A phoneme with distinctive pitch.
variphone (Jones)	a phoneme, phonemic cluster or allophone that has a wide and generally unpredictable range of free or positional phonetic variations.
word finals	Last consonant or vowel of a word. Asid-**e**.
word initials	Initial consonant or vowel of a word. **A**-side.
word junction	A connection of two or more words.
word-form	A word in particular grammatical form. Such a form is Czech *u stolu*. *Stolu* is a derived word-form from *stůl*.