People's Democratic Republic of Algeria

Ministry of Higher Education and Scientific Research

ECOLE NORMALE SUPERIEURE

D'ORAN



المدرسة العليا للأساتذة بوهران

Higher School of Education Department of Foreign Languages Section of English

INTRODUCTION TO LINGUISTICS II

SECOND YEAR

PRE-SERVICE (SECONDARY SCHOOL) TEACHERS

Lecturer: Dr. Zohra LABED

Academic Year

2021-2022

INTRODUCTION

SEMESTER I: THE EMERGENCE OF LINGUISTICS

CHAPTER I: CLASSICAL APPROACHES TO LANGUAGE LECTURE 1: Traditional Grammar

LECTURE 1: Traditional Grammar6LECTURE 2: Comparative Philology24

CHPATER II: MODERN LINGUISTICS

LECTURE 3 : Linguistics and Science	40
LECTURE 4 : Structural Linguistics	53

SEMESTER II: MODERNAPPROACHES IN LINGUISTICS

CHAPTER III: SCHOOLS OF LINGUISTICSLECTURE 5: The Prague School69LECTURE 6: Copenhagen School83LECTURE 7: The American School100LIST OF REFERENCES111APPENDICES112

1

INTRODUCTION

1. Academic Staff Specifics

Name	Rank	E-mail
Zohra LABED	Lecturer	zohralabed28@gmail.com

2. Course Syllabus

- 2.1. Course Title: Introduction to Linguistics II
- 2.2. Course Level: Second Year

2.3. Course Module Description

Unlike first year linguistics which deals with the synchronically scientific study of language, the present course is an introduction to linguistics from a historical point of view. It tackles the emergence of linguistics and how it has taken place as an autonomous scientific study of language through time. On the other hand, it is specifically interested in the impact of its development on education in its various manifestations over the different ages. It is delivered throughout two semesters (respectively the emergence of linguistics and modern approaches in linguistics) and divided into three chapters (Chapter One: Classical Approaches to Language; Chapter Two: Modern Linguistics; Chapter Three: Schools of Linguistics): It starts with the study of grammar in antiquity, goes through comparative philology, linguistics as a science, structuralism, and then moves to the schools of linguistics.

It is mainly composed of seven lectures given to the students in the form of hard copy or soft copy (e-format) handouts. Each lecture has both an introduction and a conclusion, and is followed by exercises, activities, quizzes and /or assignments to assess and follow up the improvement of their cognitive skills with regard to the present lectures.

2.4. The Course Objectives

- 1. The course allows a fundamental understanding of how and why linguistics has developed, and raises the students' awareness of its impact on education over time.
- 2. The course aims to provide the students with the elementary language key concepts to further get acquainted with modern linguistics.

- 3. It pushes them to get a stronger mastery of technical terminologies and their relationships in linguistics.
- 4. It provides opportunities for students, through assessment, to make use of their various thinking skills and develop them.

2.5. Course Components

Second year linguistics is a hybrid course in the sense that hard copy handouts are given to the students offline, and/ or online assessment devices such as, YouTube, digital Apps (e.g. Kahoot, Quizlet, Socrative, TED-Ed, Edpuzzle, Miro) are used in the classroom to address the lectures. On the other hand, the lecturer sometimes meets the students synchronously from home through such instructional platforms as Zoom, Google Meet, Messenger. If not, she uses with them online classrooms such as, Google Classroom or Edmodo asynchronously to share e-format documents, including soft copy handouts.

2.6. Teaching Methods

Lectures, Internet, listening (CD drives, laptops), video projects, repetitions, transcriptions

2.7. Learning Outcomes

By the end of the course, students will be able to

- identify and use diverse linguistic concepts
- give importance to the inner composition of language during the learning and teaching process
- improve their cognition and meta-cognition with regard to the evolution of linguistics as the scientific study of language.
- prepare students for post-graduate research

2.8. Assessment Instruments

At the end of each instructional semester, students go through summative assessment, respectively in the form of first term examination and second term examination (in addition to re-sit examination at the end of the year), to measure their learning achievement in that course and they will be graded. During the two semesters however, they will be exposed to a number of activities, exercises, quick tests, and/ or assignments in the classroom or given as

homework to assess them formatively. Formative assessment allows giving ongoing feedback to enhance both teaching and learning by promoting their critical thinking skills. To do this, the present lecturer has relied on Bloom's Taxonomy to make students, on the one hand, improve their lower order thinking skills (knowledge, understanding, application) by asking them, for example, to,

- define and distinguish concepts
- demonstrate their understanding of the content
- make selections and applications
- show appropriate use of linguistics language register

On the other hand, students are encouraged to make use of their higher order thinking skills (analysis, evaluation, synthesis) by doing activities asking them, for instance to,

- analyse by comparing and contrasting different linguistic approaches
- write compositions to synthesise and conclude

However, I intend in the near future to adopt learning-oriented assessment (LOA) to enhance this work. LOA instructs student to use assessment not only as a way to measure their achievement or detect their areas of difficulty and diagnose them, but also as way of students' self-assessment which motivate them to learn for pleasure and enjoyment, and thus engage them in the course learning process.

SEMESTER I: THE EMERGENCE OF LINGUISTICS

CHAPTER I: CLASSICAL APPROACHES TO LANGUAGE

LECTURE 1: Traditional Grammar

LECTURE 2: Comparative Philology

LECTURE 1: TRADITIONAL GRAMMAR

- 1. Introduction: What is Grammar?
- 2. Traditional Grammar and Language Teaching
- 2.1. The Hindus
- 2.2. The Greeks
- 2.2.1. Naturalists vs Conventionalists
- a. Onomatopoeia (i.e. the Creation of Names)
- b. Sound-Symbolism
- c. Metaphor
- d. Derivation and Antonymy
- 2.2.2. Analogists vs Anomalists
- 2.2.2.1. The Stoics
- 2.2.2.2. The Alexandrians
- 2.3. The Romans
- 2.4. The Middle Ages (Mediaeval Period): $5^{th} 14^{th}$ century
- 2.5. The Muslims
- 2.6. The Renaissance (Rebirth) (14thc- 17thc)
- 2.7. Conclusion

LECTURE 1: TRADITIONAL GRAMMAR

1. Introduction: What is Grammar?

The origin of the term *Grammar* is traced to the Greek label *grammatike*. The first part *gram* indicates *something written*; the second part *tike* comes from *techne* with the meaning of *art*. So, grammar (*grammatike*) is the *art of writing*.

2. Traditional Grammar and Language Teaching

Traditional grammar emanated, as its name entails, in antiquity in response to religious/ legal requirements, teaching and challenges against language change. Traditional grammarians were successively the Hindus, the Greeks and the Romans, grammarians from the Middle Ages (paralleled with the Muslims), those from the Renaissance era, from the eighteenth and nineteenth century, and those grammarians from some later times. The way traditional grammar is represented can correspond in many ways to the type of nowadays' grammars depicted in school textbooks and used for language teaching: Both early and numerous recent grammar researchers share the belief that the notion of real language could be taught through written language analysis.

2.1. The Hindus¹

To begin with, the Hindu traditional grammar goes almost back to the first millennium before Christ (BC), and was mainly concerned with the Indian religious and sacred language, Sanskrit. As the Hindus were expected to learn and meet the correct verbal performance of their religious texts, the Indian grammar key-figure, Panini (c. 500 BC), and his followers endeavoured to establish and teach clear-cut rules for Sanskrit including morphology (e.g. word formation) and phonetics (e.g. the pronunciation of words in isolation and in connected speech). In fact, Panini worked on his language without being aware that his efforts and productions would have a significant impact on subsequent worldwide language grammar scholarship and teaching (see Lecture II).

¹The indigenous people of India

2.2. The Greeks

Although traditional grammar had roots in the ages well before the coming of Greeks (see 2.1), its academic birth is mostly recognised only in association with the fifth century's Greek scholars. At that time, the study and teaching of grammar, in Greece, formed part of philosophy whereby the Greeks used to interrogate the nature of everything surrounding them. One major dispute centred around the issue whether the physical form of words is ruled by *nature* or *convention*: Is the relationship between the word its meaning *natural* or *conventional*? Greek philosophers targeted words as they believed that names, which are words, of things are the cornerstone of language development. Two divergent viewpoints of the origin of language have thus emerged: the *naturalists* opposed the *conventionalists*.

2.2.1. Naturalists vs Conventionalists

The first group, the naturalists (e.g. Plato), supported the assumption that this relationship is based on nature following, at least, one of the criteria below. The fact that this relationship is natural means that it is out of man's intervention. The ultimate end-point that naturalists were seeking to reach was the revelation of truths of nature. Many naturalists relied on etymology (where *etymo* means *true/ real*): the study of word origin or its true meaning, in the very hope of revealing one of the truths of *nature*.

a. Onomatopoeia (i.e. the Creation of Names)

It refers to the state of naming a thing by imitation of the natural sound related to this thing. Indeed, many words are formed to imitate the sound of their referent. e.g. *crash, bleat, tinkle, neigh, hoot*² (/tabtab/ *knock* in SA/ DA³). Or, other words, such as *peewit, cuckoo*, are still imitative of the source of the sound however rather than the sound itself.

b. Sound-Symbolism

In their study of word origin, Greek etymologists realised that naturalism is not restricted only to onomatopoeia. Instead, many other words are naturally formed following the nature of their constituent sounds. Certain sounds, the naturalists believed, carry qualities and values in the sense of *harsh, liquid, smooth*. To illustrate, *l* is a liquid sound in words like

² English rather than Greek examples

³ Standard Arabic/ Dialectal Arabic

liquid, flow, flood, lemonade... In this case, this sound is said to fit naturally the meaning of such words.

c. Metaphor

The label *metaphor* comes from the Greek language with the meaning of *to transfer* or *to carry across*, to say that metaphors carry meaning from one word to another. In addition to onomatopoeia and sound symbolism, a metaphor can be another source of natural word formation in the form of extension of that word meaning. A natural relationship results between the original and new utilisation, e.g. *the foot of a hill, the neck of a bottle, the mouth of a river*.

d. Derivation and Antonymy

Addition, deletion, substitution and sound transposition are different processes whereby a new word form is derived from an older one. Derivation is possible in case of meaning association between the forms of a word, e.g. /lánthro:pos/ man \rightarrow /anathrô:nháỏpo :pen/ considering what the man sees (unlike animals). Still a related process, a word form might be derived from the form of its opposite word as in, /líthos/ stone \rightarrow /líanthéein/ to run too much. Derivation becomes antonymy in this case.

Unlike the naturalists, the second group who are the conventionalists (like Aristotle (384-322 BC)) disbelieve in the word naturalness for two fundamental causes. They give priority to convention and the habit of using this convention between words and their corresponding concepts,

- the notion of onomatopoeia differs from one language to another language, e.g.
 /tabtab/ (SA/ DA); *knock-knock* (English); *toc-toc* (French).
- the major number of words in any language does not have a natural origin.

The state of being conventional springs out of social practices like customs and traditions, or agreement and/ or social contract among the community members. Hence, conventional word forms are under man's control.

2.2.2. Analogists vs Anomalists

8

The second century B.C witnessed another major controversy. The dispute between the 'naturalists' and the 'conventionalists' led to raise the question of language regularity: "Is language regular?" The Greek opted for the word 'analogy' to refer to 'regularity' while they denoted 'irregularity' as 'anomaly'. Many conventionalists (e.g. Aristotle) were known as analogists as they relied on the analogical reasoning in sciences when dealing with language study and teaching. Language rests on rules from which result a countless number of forms by analogy. Following the rule of the plural 's' for instance, the word tables (sing⁴. table) is formed, and so are doors (sing. door); hands (sing. hand); jobs (sing. job) analogically modelled. Identifying such rules and paradigms was the task of analogists for the purpose of generating regular words. The Alexandrian philosophers are originally analogists.

The contrary view is represented by the 'anomalists'. Although this group recognised the existence of word regularities, they highlighted cases where the analogical reasoning is not at work. e.g.

- past simple/participle of fight is fought (not fighted);
- the plural form of child is children (not childs);
- synonymy;
- homonymy;
- gender irregularities in cousins, people...

The 'anomalists' are still 'naturalists' given the fact that they saw nature as the source of language. The stoic philosophers are anomalists as indicated earlier.

In sum, the 'analogists' challenged the 'anomalists' by claiming regularity in language. The anomalists by contrast emphasised language irregularities. Such early debates between the 'naturalists' and the 'conventionalists', on the one hand and on the other, between the 'analogists' and the 'anomalists' are the essence of today's grammar teaching.

2.2.2.1. The Stoics

The Greek Stoic philosophers are basically anomalists. While they accounted for language origin, logic and rhetoric, the Alexandrians, who were though inspired by the Stoics, turned their attention to literary texts (see 2.2.2.2). The Stoic philosophers were particularly known for exploring language issues in the lookout for coherence with nature. They worked

⁴ singular

upon the relationships between words and thought. Their efforts led them to differentiate between the word form and its meaning and identify patternings like speech parts (e.g. noun, verb, adjective, adverb, conjunction...), verb as whether transitive or intransitive, verb forms as active or passive and verb tenses as perfect or non-perfect.

2.2.2.2. The Alexandrians

They were Egyptian traditional grammarians specifically from Alexandria which was an ancient Greek colony and the site of knowledge teaching/ learning and literary research. They were famous for their remarkable challenge against language change and negative attitudes towards its various manifestations, notably in the third century B.C. In other words,

- they viewed the earlier language form as purer and more correct than the later forms.
- unlike the older form, the newer forms were seen as a corruption
- speech was regarded as a derivation from writing which is relatively stable, more conserved and resistant to change

The first exhaustive grammar compilation (Technē grammatikḗ) in the Western world was realised by the Alexandrian Dionysius Thraxaround the first century B.C. This writer considered grammar as the 'technical knowledge' of language with eight speech parts: noun, verb, conjunction, article, adverb, participle, pronoun and preposition. He also identified case⁵, gender, number, person, tense, voice and mood⁶. Dionysius Thrax was nevertheless reproached for discarding the combination among speech parts and sentence analysis. His work was subsequently extended at this level by the Alexandrian AppolloniusDyscolus's grammar in the first and second century A.D.

2.3. The Romans

The Romans were Latin grammarians who followed the path of Greek predecessors under the heavy influence of Greek tradition. Translation was adopted by the Romans in an attempt to transmit Greek research productions and teaching to Latin scholarship. In the first century A.D, the Roman Remmius Palaemon undertook the translation of Dionysius Thrax's

 ⁵ Examples: Subjective case (he) (nominative; objective case (him) (accusative); possessive case (his) (genitive)
 ⁶ Examples: Indicative mood: factual statements; asking questions; expressing opinions/ Imperative mood: commands and requests/ Subjunctive mood: doubts; conditional; imaginary situations; wishes; suggestions

writings on Greek grammar. A lot of Roman loyalty was shown for the Greeks' language works including Thrax's grammar when avoiding alteration in their application of Greek grammatical description and categorisation to Latin. This tendency was further boosted after the discovery of a wide number of similarities between Latin and Greek, a discovery which supported and nourished the assumption of prevalence of one universal grammar reflecting thought (see Lecture II). The Romans also elaborated a list of Latin equivalents corresponding to Greek technical terminology as illustrated in the table below,

Greek	Latin	Contemporary English
/ỏnoma/	nomen	noun
/anto:nymía:/	pronomen	pronoun
/syndesmos/	coniunctio	conjunction
/aitia:tike: ptô:sis/	casus accusativus	accusative case

Roman Terminology and Latin Equivalents

2.4. The Middle Ages (Mediaeval Period): 5th – 14th century

The era of the so-called *Dark Ages* in Europe (see Appendix 1) is reputed for Latin grammar conservatism which at that time reached its peak against variation and/or change. In particular, the grammar writings of Donatius and his follower Priscianus were taken as quasiholy models being seemingly the vehicles of 'real' Latin all along the medieval period. They were school textbooks and the learners were required to match rigorously and follow carefully the instructions given by the two grammarians due to the highly preserved position enjoyed by those textbooks. The fact that Middle Ages' Latin was the language of scholarship but nobody's mother tongue was one strong reason why grammarians were pleaded to prescribe the rules that govern correct language. Again and again the belief in the notion of universal grammar was reinforced such that the Roman grammarian Roger Bacon, for example, claimed grammar sameness in substance in all languages in the late thirteenth century, and that language variation is only coincidental and random (see Lecture II).

2.5. The Muslims

The Greek grammarians' works exerted a great impact on the Arabic grammatical tradition, just like this effect was on the Latin investigation. Given that the Koran revelation was in Arabic language⁷, the latter was highly perceived as sacred and unchangeable. The motivation behind the Arabic grammatical study rested on resistance against language change manifestations to preserve and teach properly the Koranic language. The major Arabic grammar forerunners were Abulaswad addu?ali (c. 688), Alkhalil (c. 791), Sibawayhi (c. 804), to name but a few. The development of Arabic grammatical study long stood as the fountainhead of inspiration to many grammars including Hebrews.

2.6. The Renaissance (Rebirth) (14thc- 17thc)

Only two languages were credited earnest scholarly investigations during the early Middle Ages, as aforementioned. Attention was hardly ever orientated towards languages other than Greek and Latin in the Western world communities until the Renaissance. More and more languages were joining the new circle of research and teaching adjudicating Latin grammar as a model: Renaissance era-grammarians found their way of prescribing the rules of Romance languages through foregoing Latin descriptions. The idea of thought structure universality and its autonomy of any given language, on the other hand, substantiated their approaches. It was supported by philosophers like Bishop Wilkins (1614-72) whose contributions backed up the assumption of "thought is prior to language".

The attitudes of traditional grammarians as that only one pure and correct language form exists was admitted and broadly adopted; it was again the mission of grammar specialists to uphold it and conserve its structures. The advent of printing was another vehicle which served grammar codification and the fixation of language rules (e.g. spelling). Institutions such as the Academia Della Crusca (1582) in Italy and the Académie française (1636) in France sprang up to watch over language stability and correctness. In the case of English-speaking world, the situation is different as language decisions were made on the ground of individual efforts. The works of Samuel Johnson's <u>Dictionary</u> (1755) and Bishop Lowth's <u>A Short Introduction to English Grammar</u> (1762) are good illustrative examples.

2.7. Conclusion

⁷ Classical Arabic

Although traditional grammar goes back to antiquity, its effect on language study and instruction is still undeniably strong in many part of the world. Any efforts deployed for modernising mother tongue and/ or foreign langue-based education cannot completely ignore this field which provides the basic steps for language learning processes.

Further Reading

- ✓ Keith, A. (2013). The Oxford Handbook of the History of Linguistics. Oxford: Oxford University Press.
- ✓ Derewianka, B. (2007). Changing Approaches to the Conceptualization and Teaching of Grammar. International Handbook of English Language Teaching, 15, 843-858.
- ✓ Trask. R. L. (2004). Key Concepts in Language and Linguistics. 2nd Edition. Routledge.
- ✓ Vivien, L. (2015). The History of Linguistics in Europe: From Plato to 1600. Cambridge: Cambridge University Press.

ASSIGNMENTS & PRACTICE

	+		=	grammatikē
Ļ		Ļ		Ļ
something written	+	art	=	

1. Where does the Greek term "Grammar" come from? Complete.

2. The Role of Traditional Grammar? Put each one of the following phrases in its corresponding circle: language preservation, language change, religion/ court, traditional grammar.



3. Draw a line identifying traditional grammarians from the "Hindus" to "Later times".

Hindus	Colonisation	Africa	Phoenicians	Arabs	Atlantic
Greeks	Americans	Amazon	Astronomy	Turks	World War II

Romans	Industrial	Muslims	Nigerians	Japanese	Brexit
	Revolution				
Civil war	Middle Ages	Technology	Renaissance	Portuguese	Music
Slavery	Golf	Columbus	World Crisis	18 th century	Globalisation
Algerians	World War I	Trump	Himalaya	19 th century	Witchcraft
Asia	Secularism	Protestants	Marketing	Freud	Later times

4. In the following table, supply information about the Hindus according to your lecture. Do the same with the Romans, the Middle Ages, the Muslims, the Renaissance, each in a separate table.

The Hindus

When?	What?	Who?	How?	Why?
		Hindus		
		Panini		

5. Contrast Greek Naturalists with Greek Conventionalists. Complete the following,



7. Supply six accomplishments realised by the stoics.



8. Who are the Alexandrians? Complete the following diagram.

_	When?	Why?
	$\uparrow \qquad \uparrow \qquad \qquad \uparrow \qquad \qquad \uparrow \qquad \qquad$	
\prec	What?	-newer forms as a corruption
\searrow		

Key Answers

1. Where does the Greek term "Grammar" come from? Fill the gaps with one word.



2. The Role of Traditional Grammar? Put each one of the following phrases in its corresponding circle: language preservation, language change, religion/ court, traditional grammar.



religion/ court

3. Draw a line identifying traditional grammarians from the "Hindus" to "Later times".

Hindus	Colonisation	Africa	Phoenicians	Arabs	Atlantic
Greeks	Americans	Amazon	Astronomy	Turks	World War II

Romans	Industrial	Muslims	Nigerians	Japanese	Brexit
Civil war	Revolution Middle Ages	Technology	Renaissance	Portuguese	Music
Slavery	Golf	Columbus	World Crisis	18 th	Globalisation
Algerians	World War I	Trump	Himalaya	century 19 th century	Witchcraft
Asia	Secularism	Protestants	Marketing	Freud	Later times

4. In the following table, supply information about the Hindus⁸ according to your lecture. Do the same with the Romans, the Middle Ages, the Muslims, the Renaissance, each in a separate table.

The Hindus

When?	What?	Who?	How?	Why?
1st millennium	Traditional	Hindus	writing emphasis	Religious/legal
(BC)	grammar			needs
c. 500 BC	Sanskrit	Panini	establish clear-	correct verbal
	morphology		cut rules	performance
	phonetics			

The Romans

When?	What?	Who?	How?	Why?
	translated	Remmius	Roman loyalty for	One universal
	Dionysius	Palaemon	Greek language works,	grammar
1 st century A.D	Thrax's Greek		boosted by discovery of	reflecting
	grammar into		similarities between	thought.
	Latin		Latin & Greek.	

⁸The indigenous people of India

The Middle Ages

When?	What?	Who?	How?	Why?
$5^{\text{th}}-14^{\text{th}}$	-Latin grammar		-Translation from	
century	conservatism	Donatius &	Greek into Latin	universal
Dark Ages	- grammar writings	Priscianus	textbooks of school	grammar
Mediaeval	quasi-holy models		matched rigorously	
Period	being 'real' Latin.		by learners.	

The Muslims

When?	What?	Who?	How?	Why?
(c. 688),	Arabic language ⁹	-Abu laswad	-Translation	preserve the
(c. 791),	highly perceived as	addu?ali	from Greek into	Koranic
(c. 804)	sacred and unchangeable.	-Alkhalil -Sibawayhi	Arabic.	language

The Renaissance (Rebirth)

When?	What?	Who?	How?	Why?
	- one pure and	- Academia della Crusca	- prescribing the	-thought
$14^{th}c$ -	correct	(1582) in Italy & Académie	rules of Romance	structure
17 th c	language form	française (1636)	languages through	universality
	exists broadly	- English-speaking world:	Latin descriptions.	autonomousl
	adopted;	individual efforts: Samuel	-advent of printing	y of any
		Johnson's <u>Dictionary</u> (1755)	served grammar	given
		and Bishop Lowth's <u>A Short</u>	codification and the	language
		Introduction to English	fixation of	
		<u>Grammar</u> (1762).	language rules.	

5. Contrast Greek Naturalists with Greek Conventionalists. Complete the following,

⁹ Classical Arabic



7. Supply six accomplishments realised by the stoics.



8. Who are the Alexandrians? Complete the following diagram.



Why?

-earlier language form purer & more
correct than later forms.
-newer forms as a corruption
-speech a derivation from writing
more stable, conserved & resistant to
change

LECTURE 2: Comparative Philology

- 1. Introduction: Language Research and Learning (The Historical Background)
- 2. Comparative Philology and its Impact on Language Education
- 3. Language Families
- 4. The Neogrammarians and Language Instruction
- 5. Conclusion

LECTURE II: COMPARATIVE PHILOLOGY

1. Introduction: Language Research and Learning (The Historical Background)

It is academically recognised by Western literature, regardless of ancient language manuscripts like Hindu works, that the study of language started rigorously at the time of traditional Greek grammarians. Scholarly and educational attention was attributed mostly to Greek as the 'real' human language while the other languages were just ignored. Translations of religious written records gave way to subsequent description of Latin and Hebrew. The grammar writings of European vernacular languages started to come out during the Renaissance. The 15th century witnessed the appearance of Italian and Spanish grammar scripts whereas the grammar of French was gaining literature in the 16th century. The following two centuries (17th and 18th) were confined to the investigation on universal logical constructions that exist within language. Logic, it was believed, is one and universal in the sense that it is common to all humans; and hence, was it possible to reach a single universal grammatical theory that would reflect the inner structure of all world's languages? Can one talk about the universalisation of grammar?

The concept of normative grammar developed in Europe as a consequence of this tendency which resulted at the same time in the application of rules of logic to grammar books. Different languages were described in the mould of Latin following this philosophy at the outset of the 19th century. The need for learning other languages, in addition to the mother tongue, was stimulated by the flourishing in commercial activities and mobility for the purpose of trade. The advent of printing invention played a vital role in the diffusion of books of language grammars so that speakers got acquainted with their own and others' language internal structures. This led to question the type of relationships prevalent among world's languages and it was the task of comparative grammar to investigate the matter.

2. Comparative Philology and its Impact on Language Education

In the late eighteenth century, the English invasion in India paved the path for English scholars to go across an ancient Indian language known as Sanskrit,

"The Sanscrit language... 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; ... no philologer could examine them all three, without believing them to have sprung from some common source, ..."

The advent of comparative philology was largely accredited to the well-known sanskritologist Sir William Jones's (1746-1794) speech above delivered in 1786 about Sanskrit and its significant interrelationship with Latin and Greek. His observations rested on similarities at the level of verbal roots and grammatical inflections. Resemblance of vocabulary was not all the time considered as it might have been the result of borrowing. He referred to a common parent language that might have vanished without any written records on it. European scholarship followed with enthusiasm this track of comparison in the hope of revealing the secrets of language genealogy. They went through comparing language grammars leading to the rise of *comparative grammar* and then after extension, the field became known as *comparative philology*.

The fact of getting into contact with Sanskrit works added a new methodological touch to European language studies and led to later evolution and development in investigating all languages. In addition to the discovery of a common antecedent language between Latin, Greek and Sanskrit, European scholars started to re-question and revise their ways of approaching languages under the impact of Sanskrit grammarians' writings. What the early Indian grammarians did was very remarkably characterised by economy, precision and conciseness, in a nearly mathematical manner. The European scholarship experienced originality through Sanskrit productions. Ancient Indian grammarians were distinct from classical Greeks in the way they conducted their studies. They added to European knowledge what the latter did not find in Greeks' works. In brief, Sanskrit contributions taught European scholars rational and systematic methods for language description.

The discovery of Sanskrit moreover boosted the development of comparative philology in the nineteenth century not only to exploit the language as an object of study but also to make of the field scientific: Introspections were viewed as hypotheses that needed urgent testing through data collection so that they might be advanced into theories. Comparative philology then deals primarily with the similarities between two or more language varieties and their grammars, a fact which served foreign language (beside the mother tongue) teaching purposes to a significant degree at that time. It is also interested in classifying world's languages and the change that hits their sound systems. Various scientific methods were employed to cast light on language ancestors and their descendent languages.

In this way, the present discipline could have achieved the status of the most important branch of language study in Europe in that century.

3. Language Families

Comparative philologists observed despite linguistic differences that languages might be gathered into categories according to their similarities (i.e. correspondences). These language categories were subsequently labelled language families. Indo-European language is one family language which gained a remarkable scholarly attention and literature. It embraces Latin, Greek, Sanskrit, most European languages and Northern India as shown in the following table (from Simpson, 1979) which provides a wealth of further examples and details.

- A. INDO-EUROPEAN FAMILY:
- (a) Germanic branch: English; Dutch, Afrikaans; German, Yiddish; Icelandic; Norwegian, Swedish, Danish; †Gothic.
- (b) Celtic branch: Breton, †Cornish, Welsh; Irish, †Manx, Scots Gaelic.
- (c) Italic branch: †Oscan, †Umbrian; †Latin and its descendants, the 'Romance' languages viz. French; Spanish, Portuguese, Catalan, Provençal; Sardinian; Italian; Rumanian.
- (d) Balto-Slavonic branch:
 (i) Baltic group: Latvian; Lithuanian.
 (ii) Slavonic group: Polish, Czech, Slovak; Russian, White Russian, Ukrainian; Slovene, Croatian, Serbian; Macedonian, Bulgarian.
- (e) †Ancient Greek, Modern Greek.
- (f) Albanian.
- (g) Armenian; †Phrygian.
- (h) Indo-Iranian branch:
 - (i) Iranian group: †Avestan, †Pahlavi, Persian, Kurdish, Pashto.
 (ii) Indic group: †Sanskrit; Hindi, Urdu, Bengali, Punjabi, Gujerati, Marathi, Sinhalese, etc.
- (*i*) *†Anatolian branch* (Asia Minor): *†*Hittite; *†*Luvian, *†*Lycian; *†*Lydian.
- (j) *†Tocharian branch* (Chinese Turkestan): *†*Tocharian A (Eastern Tocharian, Turfanian); *†*Tocharian B (Western Tocharian, Kuchean).
- B. HAMITO-SEMITIC (OF AFRO-ASIATIC) FAMILY:
- (a) Semitic branch: †Classical Hebrew, Modern Hebrew; †Syriac, †Aramaic; †Akkadian, †Ugaritic, †Classical Arabic, Modern Arabic colloquials, including Maltese; †Classical Ethiopic (Ge'ez), Amharic, Tigre, Tigrinya.
- (b) Cushitic branch (E. Africa): Beja; Afar; Galla; Somali.
- (c) Berber branch (N. Africa): Tuareg; Kabyl.
- (d) †Ancient Egyptian, Coptic.
- (e) Chad branch (W. Africa): Hausa.
- C. FINNO-UGRIAN (OF URALIC) FAMILY (Europe and Siberia: Finnish, Estonian, Lapp; Hungarian; Ostyak; Cheremis; Samoyed.
- D. Basque.
- E. CAUCASIAN LANGUAGES:
- (a) Northern Caucasian branch includes Lezgian, Kabardian, Circassian.
- (b) Southern Caucasian branch includes Georgian and Mingrelian.

F. ALTAIC FAMILY: (Asia Minor, Central and East Asia):

- (a) Turkic branch: Turkish; Uzbek, Kazakh, Kirgiz.
- (b) Mongolian branch: Mongolian (Khalkha); Buryat.
- (c) Tunguz branch: Tunguz; Manchu; Evenki, Goldi.
- (d) Korean.
- G. NIGER-CONGO FAMILY:
- (a) West Atlantic branch (Senegal, Gambia, N. Nigeria): Wolof; Fulani.
- (b) Kwa branch (Ghana, Nigeria): Gã; Yoruba; Igbo; Ewe; Efik.
- (c) Benue-Congo group: this includes the Bantu languages, e.g. Swahili; Kikuyu; Zulu; Xhosa.
- H. KHOISAN GROUP (S.-W. Africa): Bushman; Hottentot.
- I. DRAVIDIAN FAMILY (S. India): Tamil, Malayalam; Telegu.

J. SINO-TIBETAN FAMILY:

- (a) Tibeto-Burman branch: Tibetan; Burmese.
- (b) Sinitic branch: most Chinese 'dialects', e.g. Cantonese; Taiwanese; Shanghai Chinese; Mandarin dialects, including Pekingese, Szechuan dialect, Nanking Chinese.
- K. TAI FAMILY: Thai (Siamese); Laotian; perhaps Vietnamese.
- L. MON-KHMER FAMILY: Mon (Burma, Thailand); Cambodian; perhaps Vietnamese.
- м. Japanese.
- N. MALAYO-POLYNESIAN FAMILY:
- (a) Malay branch: Malagasy; Malay, Indonesian; Javanese; Sundanese; Tagalog; Hanunóo.
- (b) Polynesian branch: Samoan; Fijian; Maori; Tongan; Hawaiian.
- O. American Indian languages number hundreds; the suggested numbers of language *families* are of the order of between 25 and 50 in North America, around 20 in Central America and 108 (!) in South America. Noteworthy names are: Eskimo; Nootka; Navaho; Hopi; the Algonquian family (including Cree, Fox, Menomini, Ojibwa); Maya; Quechua; Guarani.
- P. The languages of Borneo, New Guinea and Australia have been little investigated up to now, but work has begun. It is said that the Australian indigenous languages all belong to one family, but that the other territories appear to contain large numbers of language-families.

Table 1: Language Families (from Simpson, 1979)

From the table, the following inferences could be drawn about the Indo-European category. One language family can be one branch (e.g. Germanic language groups) or one branch with sub-groups (e.g. Italic language groups Oscan and Umbrian; Latin sub-groups: Spanish, Italian, Catalan, French, Romanian). Still other languages could be solitary-member families as they, each, stand in isolation and do not bear resemblance to other languages (e.g. Albanian language).

-Proto-languages

One ambition of comparative philologists was to arrive at reconstructing the source language of a group of related languages by drawing comparison between this group parts and displaying their common features. They believed in these similar features as belonging to one same antecedent language which subsequently gave birth to the above descendent languages. For example, Latin is the Proto-language¹ of Romance languages, French, Spanish, Italian, Catalan; the Germanic language is the parent language of English, German, Scandinavian languages (Norwegian, Swedish, Danish), Icelandic language, Dutch, Gothic; the Semitic language gathers Classical Arabic, Modern Spoken Arabic, (Classical and Modern) Hebrew, Aramaic (For further details see Table 1).

-Family Tree

Schleider (1821-1868) worked on a theory of family language members and how they are interrelated. A descendent language makes its appearance on the basis of sound-shift or a grammatical change that occurs among its speakers' group while this does not take place among other speakers with whom they originally shared one single language. This results in two distinct languages instead of one. The new language may go through the same division process to give birth to other new branches. The theory is called *family-tree theory*. The Indo-European family tree and its branches could be illustrated as below,

¹ antecedent language, Proto-language and parent language are used interchangeably



Figure 1: Indo-European Family Tree (from Simpson, 1979)

However, it should be noted that the reconstruction of family-trees rests on only partial consideration of language correspondences. Still in the case of the Indo-European languages, Italic and Greek are similar in some feminine nouns with masculine suffixes; Greek, Armanian and Indo-Iranian share the similarity of some past tenses with e-prefixation. Some Indo-European languages are distantly related² (e.g. English and Russian) or even more distantly related (e.g. English and Turkish). Some other languages are closely related (e.g. German and English).

4. The Neogrammarians and Language Instruction

A group of young scholars proclaimed their revolution in the late nineteenth century against the way language was tackled, and this had a straightforward impact on language instruction at that time. Historicity, language non-organic state, and rule exceptionlessness are their principle claims. First, they stuck to historical methodology in dealing with language. Paul (1846-1912) asserted that "what is not historical in linguistics is not scientific". He differentiated between language studies as descriptive and historical on the one hand, and as static and revolutionary on the other hand. He also distinguished between the individual's speech and the language of a speech community. Second, Karl Verner (1846-1896); Karl Brugmann (1849-1919); Hermann Osthoff (1847-1909); August Leskian (1840-1916) are neogrammarians who strongly criticized the belief in language as an organic being. Third, they went on to assume the exceptionlessness in sound laws and Verner proposed to reverse "no rule without exceptions" into "no exception without rule". Any regularity is only apparent and is the outcome of another law. What are seemingly exceptions, in other terms, fall into one of three justifications.

² genetic or historical relationship

The first criterion has to do with sound-shift constraints. Following Grimm's Law the Germanic f, θ , d correspond the Indo-European p, t, k respectively. Verner displays that Grimm's law works if the root syllable is stressed in Sanskrit. In case the stress is on a different syllable, this is not an exception but has a different explanation such that the Germanic voiced b, d, g respectively become the corresponding sounds to the Indo-European p, t, k. The second reason makes reference to analogy. Existing forms can be remodelled leading to the rise of other new forms. For instance, intervocalic [s] becomes [r] in Latin in the course of time as in, honos→honoris→honor. This is interpreted in terms of analogy with an already present form: oratoris→orator. In short, the first two sound changes are obviously due to internal factors. The third cause yet is related to borrowing which is rather an external factor. Forms that are borrowed are expected to escape rules.

5. Conclusion

Both traditional grammar and comparative philology have an effective contribution in the development of what is known as "Grammar Translated Method". The latter is one type of instructional method that relies heavily on memorisation and translation to address a language. Presenting the target language rules to the student and/ or contrasting them with those of the mother tongue is a fundamental phase while teaching a second/ foreign language before making applications via given activities and exercises.

Further Reading

- ✓ Keith, A. (2013). The Oxford Handbook of the History of Linguistics. Oxford: Oxford University Press.
- ✓ Rastogi, K. (1997). Structural Linguistics: Its Origin and Development. Delhi: Penman Publishers.
- ✓ Simpson, J (1979) A First Course in Linguistics. Edinburgh University Press
- ✓ Trask. R. L (2004) Key Concepts in Language and Linguistics. 2nd Edition. Routledge
- ✓ Vivien, L. (2015). The History of Linguistics in Europe: From Plato to 1600. Cambridge: Cambridge University Press.

ASSIGNMENTS & PRACTICE

I. Choose the most appropriate phrase to fill in the gaps.

1. Academic interest was addressed to Greek as thewhereas other languages were just disregarded.

- o sophisticated language
- o 'real' human language
- o artificial language
- o second language

2.were the theatre of enquiry on universal logical structures within language. The belief was that logic is one and universal in the sense that it is common to all humans.

- \circ 5th century
- o 15th century
- \circ 16th century
- \circ 17th and 18th centuries
- \circ 21st century

3. The idea of normative grammar resulted from the application ofto grammar books.

- o rules of logic
- o Greek language
- European norms

4. Diverse languages were treated in the mould of following this philosophy at the beginning of the 19th century.

- o Hindu
- o Latin
- o Arabic
- o Hebrew

II. The English occupation of India in the late eighteenth century gave access to English researchers to explore Sanskrit. What can you understand from the sanskritologist Sir William Jones's (1746-1794) speech below,

"The Sanscrit language... 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; ... no philologer could examine them all three, without believing them to have sprung from some common source, ..."

III. Below is the Indo-European language family. Give the names of its sub-categories according to their corresponding language branches (from Simpson, 1979).

a: English; German; Dutch; Africaans; Swedish; Danish; Norwegian;			
Icelandic; Yiddish; Gothic.			
b: Breton; Welsh; Irish; Scots; Manx; Gaelic; Cornish			
c: Umbrian; Latin and its descendents; Oscan.			
d: Baltic group (Latvian; Lithuanian); Slavonic group (Polish, Czech,			
Slovak, Russian, White Russian, Ukrainian, Slovene, Croatian, Serbian, Macedonian,			
Bulgarian).			
eGreek			
f. Albanian;			
g. Armenian/ Phrygian.			
h Iranian group (Avestan, Pahlavi, Persian, Kurdish, Pashto); Indic			
group (Sanskrit, Hindi, Urdu, Bengali, Punjabi, Gujerati, Marathi, Sinhalese).			
i: Hittite, Luvian, Lycian, Lydian.			
j (Chinese Turkestan): Tocharian A (Eastern Tocharian, Turfanian);			
Tocharian B (Western Tocharian, Kuchean).			
IV What are the language branches corresponding to each of the following Hamite-			

IV. What are the language branches corresponding to each of the following Hamito-Semitic Family sub-categories? Do a research if required (from Simpson, 1979).

a. Semitic branch:

b. Cushitic branch:
c. Berber branch:
d. Ancient Egyptian, Coptic
e. Chad branch:

V. According to you what does the neo-grammarian Paul (1846-1912) mean by "what is not historical in linguistics is not scientific". Paraphrase the quotation in a paragraph.

IV. According to you what does the neo-grammarian Verner () mean by reversing "no rule without exceptions" into "no exception without rule". Paraphrase the quotation in a paragraph.


Key Answers

I. Choose the most appropriate phrase to fill in the gaps.

1. Academic interest was addressed to Greek as thewhereas other languages were just disregarded.

- o sophisticated language
- o 'real' human language
- o artificial language
- o second language

2.were the theatre of enquiry on universal logical structures within language. The belief was that logic is one and universal in the sense that it is common to all humans.

- \circ 5th century
- \circ 15th century
- \circ 16th century
- \circ 17th and 18th centuries
- \circ 21st century

3. The idea of normative grammar resulted from the application ofto grammar books.

- \circ rules of logic
- o Greek language
- European norms

4. Diverse languages were treated in the mould of following this philosophy at the beginning of the 19th century.

- o Hindu
- o Latin
- o Arabic
- o Hebrew

II. The English occupation of India in the late eighteenth century gave access to English researchers to explore Sanskrit. What can you understand from the sanskritologist Sir William Jones's (1746-1794) speech below,

"The Sanscrit language... 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; ... no philologer could examine them all three, without believing them to have sprung from some common source, ..."

III. Below is the Indo-European language family. Give the names of its sub-categories according to their corresponding language branches.

a. **Germanic branch**: English; German; Dutch; Africaans; Swedish; Danish; Norwegian; Icelandic; Yiddish; Gothic.

- b. Celtic branch: Breton; Welsh; Irish; Scots; Manx; Gaelic; Cornish
- c. Italic branch: Umbrian; Latin and its descendents; Oscan.

d. **Balto-Slavonic branch**: Baltic group (Latvian; Lithuanian); Slavonic group (Polish, Czech, Slovak, Russian, White Russian, Ukrainian, Slovene, Croatian, Serbian, Macedonian, Bulgarian).

- e. Ancient/ Modern Greek
- f. Albanian;
- g. Armenian/ Phrygian.

h. **Indo-Iranian branch**: Iranian group (Avestan, Pahlavi, Persian, Kurdish, Pashto); Indic group (Sanskrit, Hindi, Urdu, Bengali, Punjabi, Gujerati, Marathi, Sinhalese).

i. Anatolian branch: Hittite, Luvian, Lycian, Lydian.

j. **Tocharian branch** (Chinese Turkestan): Tocharian A (Eastern Tocharian, Turfanian); Tocharian B (Western Tocharian, Kuchean).

IV. What are the language branches corresponding to each of the following Hamito-Semitic Family sub-categories? Do your research if required.

a. Semitic branch: Classical/Modern Hebrew; Classical/ Colloquial Arabic; Akkadian; Ugaritic; Classical Arabic; Tigrinya; Syriac.

b. Cushitic branch: Galla; Afar; Beja; Somali

c. Berber branch: Kabyl; Tuareg

d. Ancient Egyptian, Coptic

e. Chad branch: Hausa.

SEMESTER I: THE EMERGENCE OF LINGUISTICS

CHPATER II: MODERN LINGUISTICS

LECTURE 3: Linguistics and Science

LECTURE 4: Structural Linguistics

LECTURE 3: LINGUISTICS & SCIENCE

- 1. Introduction
- 2. Linguistics vs Traditional Grammar
- 3. Linguistics as a Scientific Study
- 4. Renaissance
- 5. Evolutionism
- 6. Romanticism
- 7. Wilhelm Von Humboldt
- 8. Lexical Borrowing
- 9. Conclusion

LECTURE III: LINGUISTICS & SCIENCE

1. Introduction

The seeds of linguistics were nurtured within the realms of traditional grammar and comparative philology which opened the way to establishing the principles and canons of language structuralism. The breakthrough discovery of Sanskrit urged comparative philologists to start their search for correspondences between the three languages, Greek, Latin and Sanskrit in their attempt to set up the parent language. Neo-grammarians devoted their language study to sound laws being identified as exception-free while the presence of any exception is but the result of a different sound law (see 5). It was, on the other hand, becoming more and more obvious that learning a language could take place without having a clear vision of its different structures.

It is actually the inadequacies encountered in studying language by early academics that boosted the emergence of linguistics, as is the case of the first inadequacy which goes back to the analytic course followed by Thrax in his Greek language grammar archetypal. The fact of applying this model to other languages led to only its partial if not limited validity. Another deficiency was related to the absence but prominence of language tackling while endeavouring a thorough understanding of notions like thought, culture, and society. Still another early weakness behind the rise of modern linguistics had to do with translating modes and the enthusiastic drive of moving forward with machine translation. Renaissance, evolutionism, romanticism and other significant events outlined below (Sections 4, 5, 6, 7, 8 respectively) also inspired language scholarship and education to give rise to linguistics.

2. Linguistics vs Traditional Grammar

We can illustrate the dissimilarities between classical and more recent language studies by drawing a contrast between linguistics and traditional grammar. The latter started around the fifth century whereas the former began as structural linguistics in the early nineteenth century. Still traditionally, the grammatical rules of European languages were believed to apply to any other language on the basis of analogy as the principle of language regularity. It was yet realised later on that this assumption did not account for real facts on languages: Traditional grammarians were unable to consider the inherent differences between languages. In structural linguistics however, every language has its particular underlying system that is worth considering. Linguists look at language structure as an object of study in itself as every language is ruled and patterned on different levels, and therefore analogy for them is a minor factor.

While traditional grammar is prescriptive on the other part such that it is interested in dictating grammatical rules, linguistics is descriptive in the sense that it contemplates language configuration without calling upon correctness. Further, primacy is given to writing in traditional grammar over speech; the spoken form of language is but an imperfect version of the written form which is purer and more correct, a belief which made the written language prior to the spoken language for the classical grammarians, and the sounds explained in the form of word letters. On the contrary, the structural trend sees that the written letters are only symbols shaping the spoken form sounds.

3. Linguistics as a Scientific Study

Linguistics is usually defined as the scientific study of language. The question is what the relationship between linguistics and science is. With the turning up of structuralism, language study witnessed a new era of dissociation from traditional grammarians and comparative philologists' approaches. It was formally inaugurated on account of Saussure's theory and in reaction to several classical introspective and intuitive postulations on language. For a more comprehensive and all-inclusive language description, structuralists were getting aware of science as a significant fountainhead providing them with tools and procedures in their new path of investigating and teaching linguistic facts.

It was scientifically increasingly realised that the linguistic treatment was in need of **objectivity** to be comprehensively justified, transparently displayed and publicly communicated; and, this could occur only if it is detached from any individual biases caused by feelings, attitudes, opinions, personal ideas. **Exhaustiveness** takes place when significant facts are fully and thoroughly examined. Additionally, linguists are bound to be **clear** in their work by avoiding confusion and suspicion. They are also expected to go through **simplicity** in their material examination which should be uncomplicated, intelligible, coherent and straightforward. Discarding contradictions make of language study **consistent** on the other

hand. Moreover, scientific language procedures are highly characterised by **economy** on the basis of precision, conciseness, and shortness in indicating facts.

On the other side, the scientific method undergoes stages-built process that is explored in language study and that needs to be shown to language learners. Scientific observation is the first stage and comes out of individuals' inner curiosity about all what surrounds them through their senses. Naturally, questions are made about what is seen and/ or heard. In the scientific method, they are exploited to figure out hypotheses which are temporary explanations to research observations. Hypothesising goes through experiment for the purpose of checking its validity and the extent to which it satisfies the research question. Experiments are undertaken in various ways such as recording spontaneous speech, interviewing or submitting a questionnaire. Once data are obtained, they are analysed to check their hypothesised explanations, and then a decision is made to whether modify, refine, extend or refute them. So clearly, linguistics calls upon empirical investigation as it is based on data obtained through senses: speech (heard); reading/ writing; (direct or instrumental) observation of vocal organs and their gestures. It also highlights the presence of a theoretical paradigm in correspondence with the experimental side of the current language research.

4. Renaissance¹

The advent of Renaissance was another conducting potency towards the elevation of language studies. A snowballing number of languages were to be part of the academic research following the pattern of Latin. In that era furthermore, the coming-up of printing facilitated linguistic ruling codification while allowed a wider diffusion of manuscripts and books. This fact provided guidance of language use and raised speakers' awareness of the interior structure of languages. In addition to the requirement of comprehending the mother tongue, growing attention to foreign language teaching/ learning was taking place following the important commercial and trading development among diverse populations.

5. Evolutionism

Language study methodology² suffered serious shortcomings at the outset of the 19th century. Scholars in this field were doing research with difficulties and their linguistic works

¹ See 2.6/ Lecture I; see 1/Lecture II

were progressing timidly. Therefore, they were in the lookout for orientation and direction from other longer life span scientific study fields with well-established tools and methods. At that time, natural and biological sciences knew wide-ranging progress and could play to a large extent the role of source of methodological scrutiny for language researchers. In his language description, Schlegel (1772-1829) borrowed comparative anatomy terminology that paved the way to the rise of comparative grammar register. He used for instance to employ terms like "structure", "organic function" and pioneered the morphological categorization of languages in the mould of biological sciences.

More importantly, the classical scientific procedure obtained from the naturalistic knowledge sticks to another name, Schleicher, who set forth the idea that language is a living organism. Many contemporaries used his naturalistic principles to come up with their theories, including the notions of "analogy" and "sound laws". Since language is a natural phenomenon being exposed to evolution, he firmly believed that language study is a natural science and its methodology obeys naturalistic rules. He insisted on the presence of regularity in sound laws (see 1) and established phonology as an important component of linguistic analysis. He was also the predecessor of the method of reconstruction while supplying a family tree to illustrate the links between the Indo-European languages.

This German scholar however was the object to considerable criticism. His reconstruction tree of Indo-European languages neglects the existence of dialectal varieties together with their differences. It also covers an abrupt division of the language into descendent languages which do not get into contact. Schleicher on the other part exaggerates his metaphoric analogy between "language" and "living organism" in terms of birth, growth and death: Despite his influential assumptions, subsequent language researchers objected his evolutionary orientations; they did not as well accept his concept of language as a living organism.

² Ibn al-Haytham ابو علي الحسن ابن الحسن بن الهيثم (965-1039) is seen as the forerunner of scientific methodology as he used to highlight the importance of empirical findings and reproducibility of data.

6. Romanticism

The end of the eighteenth century knew the arrival of romanticism in Germany in opposition to classicism that reigned antecedently. Romanticism activists condemned the traditional belief that the standards of literary excellence are invariable and unchanged through time. Ancient Germanic languages were a subject of investigation out of the rise of romantic curiosity for German old times. A different impact on the other hand is reflected in Herder's (1744-1803) romantic claim that language is a means of communicating emotions, particularly it expresses the national sentiment of its users. That language possesses a national attribute inspired afterwards Wilhelm Von Humboldt (1767-1835) who identified language as a distinct object that frames thought of its speakers (see 7).

7. Wilhelm Von Humboldt

In parallel with comparative philologists in the nineteenth century and contrary to the prevailing intellectual atmosphere, the German Wilhelm Von Humboldt was captivated by the notion of states of language in specific time points rather than historically. What he did in fact was that he radically disengaged his studies from Indo-European languages to finally get preoccupied with research on the Kawi language of the Malay-Polenesian family. In this way, he drew scholarly attention to other distinct spoken varieties to expand the cycle of language exploration and alter the manner linguistic analysis was carried out. Under Herder's (1744-1803) remarkable effect, Humboldt regarded language as a living organism functioning in response to natural laws. The components of language organism are systematically interconnected and language for him is mainly a human phenomenon that implies speaking and which in turn means human speaker's action made intelligible to the hearer. Humboldt's views to language have led subsequently to the across-the-board conceptual usage of "structuralism".

8. Lexical Borrowing

Similarities among languages were recognised through comparison and analogy in the earlier times. The most obvious resemblance was taking place of course at the level of vocabulary. According to comparative philologists however one should make a difference between lexical correspondences between languages over time and vocabulary resemblance due to borrowing which comes out as a consequence of contact between languages in the long run, and the passage of items from one language to another. Therefore, detecting similarities was more credible within the frame of comparative philology on the basis of language grammars and pronunciations. The promotion of language studies has conducted to the scientific differentiation between various language phenomena.

9. Conclusion

The emergence of linguistics an independent scientific study of language has led many educators to jump from using "Grammar Translation Method" to adopting another method referred to as "the Direct Method". Instructing a second/ foreign language through this method is undertaken without entire reliance on the mother tongue or translation. It highlights the possibility of learning directly in the target language.

Further Reading

- ✓ Boadi, L.A. et al. (2004). Grammatical Structures and its Teaching. Ibadan: African University Press.
- ✓ Keith, A. (2013). The Oxford Handbook of the History of Linguistics. Oxford: Oxford University Press.
- Rastogi, K. (1997). Structural Linguistics: Its Origin and Development. Delhi: Penman Publishers.
- ✓ Vivien, L. (2015). The History of Linguistics in Europe: From Plato to 1600. Cambridge: Cambridge University Press.

ASSIGNMENTS & PRACTICE

	Traditional Grammar	Linguistics
Emergence		
Object of Study		
Function		
Primacy		

1. Contrast Linguistics with Traditional Grammar

2. What are the characteristics of linguistics as a scientific study?





3. What are the scientific stages of linguistics?



4. How did the Renaissance contribute in making language study move forward?



5. In the following table, supply information about Evolutionism and Romanticism and their relationship with the emergence of linguistics.

When?	What?	Who?	How?	Why?

6. In the following table, supply information about Wilhelm Von Humboldt.

When?	What?	Who?	How?	Why?

7. Write a composition in which you explain how language scholars make use of Newtonian physics and Darwinian biology as a model to scientifically develop their linguistic analysis

Key Answers

1. Contrast Linguistics with Traditional Grammar

	Traditional Grammar	Linguistics
Emergence	fifth century	early nineteenth century
Object of Study	same grammatical rules to all	every language possesses its specific
	languages by analogy	inner system worth studying.
Function	prescriptive	descriptive
Primacy	writing is prior to speech	speech is prior to writing

2. What are the characteristics of linguistics as a scientific study?





3. What are the scientific stages of linguistics?



4. How did the Renaissance contribute in making language study move forward?



5. In the following table, supply information about Evolutionism and Romanticism and their relationship with the emergence of linguistics.

When?	What?	Who?	How?	Why?
19 th century	language is a	Schleicher	Use of	Language is a natural
	living organism		naturalistic	phenomenon
			principles	
18 th century	romantic claim	Herder	National	Condemning the belief that
	about language		sentiment	standards of literary excellence
				invariable/ unchanged

6. In the following table, supply information about Wilhelm Von Humboldt.

When?	What?	Who?	How?	Why?
	disengagement		research on the	
	from Indo-	Wilhelm	Kawi language of	Interested in states of
19 th century	European	Von	the Malay-	language in specific
	language studies	Humboldt	Polenesian	time points
			family.	

LECTURE 4: STRUCTURAL LINGUISTICS

- 1. Introduction
- 2. Diachrony vs Synchrony
- 2.1. Diachronic Axis
- 2.2. Synchronic Axis
- 3. Langue vs Parole
- 3.1. Langage
- 3.2. Langue
- 3.3. Parole
- 4. Form vs Substance
- 4.1. Form
- 4.2. Substance
- 5. Linguistic Sign: Signifier vs Signified
- 6. Syntagmatic Relations vs Paradigmatic Relations
- 6.1. Syntagmatic Perspective
- 6.2. Paradigmatic Perspective
- 7. Intrinsic Aspect vs Extrinsic Aspect
- 8. Structural Linguistics in Language Education
- 9. Conclusion

LECTURE IV: STRUCTURAL LINGUISTICS

1. Introduction

The nineteenth century was majorly devoted to comparative philology as most of language scholars were interested in purely historical relations between languages and their sound-changes. A different way of approaching language was raised by the Swiss researcher Ferdinand De Saussure (1857-1913) who came to be known as the father of Modern Linguistics at the beginning of the twentieth century. Within his theoretical framework, the scholar offered new ways of describing language causing a rupture from traditional conceptions. This was through suggesting a number of dichotomies (oppositions) seen as fundamental to the linguistic thinking language education. After Saussure's death, his students collected, reconstructed and published his notes in 1916 to give birth to his influential book *Cours de linguistique générale*. For Saussure, language should be scientifically studied as an autonomous and isolated object. This study is known as structural linguistics which is based on the Saussurean dichotomies outlined below.

2. Diachrony vs Synchrony

Language is a *succession* of *states* of an inner system. The notions of *succession* and *state* have led Saussure to restate respectively this idea as an opposition between *diachronic linguistics* and *synchronic linguistics*. This dichotomy has offered a new dimension to the study of language construction.

2.1. Diachronic Axis

It is the study of language from a historical point of view. It is concerned with the period of time along which a language form is examined. Linguists tend to compare two or more states of language at different points in time and explore their development.

2.2. Synchronic Axis

It is the study of a state (état de langue) of language at any particular point in time. Regardless of its chronological evolution, the questions *how language is structured?* and *how could it be described?* represent the key-inquiries in modern linguistics. Synchronic linguists in other words seek to describe language in the way they observe it, without bearing interest at its historical change.

3. Langue vs Parole

In his synchronic study, Saussure splits language into langage, langue and parole.

3.1. Langage

It is the faculty of speech or linguistic disposition.

3.2. Langue

Langue is the system of language, its underlying order and rules, implicit structures of utterances. It is a social fact in the sense that it is the common property of a particular speech community and shared among ALL this community members. As defined by Saussure, it is "La partie sociale du langage, extérieure à l'individu, qui à lui seul ne peut ni la créer ni la modifier; elle n'existe qu'en virtue d'une sorte de contrat passé, entre les membres de la communauté" (Saussure (2016), p. 31). Language study, for him, deals with langue.

3.3. Parole

It is speech, the actual use of language, the realisation of langue and application of language rules. Unlike langue, it is individual varying from one speaker to another. It is heterogeneous and therefore not counted for by Saussurean linguistics.

Saussurean differentiation has been established between langue and parole and summarized in the following table. Separation between parole and langue has allowed distinguishing two different fields of study. Phonetics studies physically speech sounds while phonology is concerned with the distinct abstract segments of the underlying system in which they are functional.

4. Form vs Substance

Saussure makes an analogy between language and a game of chess which is composed of a board and pieces. What is significant to the game is not the material they are made of or their shape but rather the function/ value they offer following the game rules. You can replace the king by another element whatever its material (plastic, wood, metal) or shape, a fact which does not impact the game itself and its rules. Analogically, Saussure distinguishes between form and substance. Language is not substance, but form.

4.1. Form

It makes reference to those values or sets of contrasts of language signs (see 4) derived from the underlying system. i.e. langue, of this language; abstract elements and relations that are realizable into different meanings and sounds.

4.2. Substance

It involves actual physical utterances. Sound and meaning compose substance.

5. Linguistic Sign: Signifier vs Signified

Langue is a system of interdependent signs with a value (see 3.1) that they have got from their place in this system which is double-sided as comprising two inseparable constituents; signifiant (signifier) and signifié (signified). A linguistic sign has a value means that it stands only in contrast with other (distinct) signs within language.

Signified: Concept; what is understood by a given form

Signifier: Sound image in the speaker's memory; congregation of phonemes

Saussure compares their attachment to each other to the union of the two sides of a single sheet of paper. Both signifiant (sound image) and signifié (meaning image) (that is sign) are of a psychological nature; within the speaker's mind. Their relation is not natural but conventional (institutionalised)¹ and therefore arbitrary. Saussure has reserved space for linguistics within a more general realm of signs, namely semiology.

6. Syntagmatic Relations vs Paradigmatic Relations

Any element in language stands in association with another element in the same language. And this relation is either syntagmatic or paradigmatic. Stated differently, the inner structure of a language embodies syntagmatically and paradigmatically ordered signs. Both syntagmatic and paradigmatic relations are important for the value of sentences such as *John cried* which cannot be understood if one of the relations misses.

¹ The essence of sign is rooted in the Greek controversy as whether the source of words is nature (God's gift) or convention (human construction). Saussure is a conventionalist.

6.1. Syntagmatic Perspective

It indicates the horizontal combination of language entities, a stretch of language composed of two or more neighbouring forms/ fragments (being still limited in number and cannot take the place of one another) which fall under a certain ruling order. Syntagma is of linear sequence which does not rely on the meaning of every syntagmatic component in isolation but its signification is mutually determined. In the exemplary sentence *John cried*, the elements along this line, *John* and *cried*, have the syntagmatic relation subject-predicate.

6.2. Paradigmatic Perspective

It is the vertical link between entities of the language system. Paradigmatic relations take place at the same point in a particular syntagma such that one element can be used in alternation with its associative element. In the sentence *John cried*, *John* and *cried* have the paradigmatic relation to other forms in language which do not occur in the sentence but could substitute for one or both of them; *John*: he, my father, George, nobody; *cried*: is eating, went, works, had left. The same could be said about *under*, *behind*, *in front of* which can replace *on* in the example, *The cup is on the table*, but cannot all occupy this same sentence. This is not the case of *at* or *between* being irrelevant in place of *on*. Unlike the elements of syntagmas, items that stand in paradigmatic relations are unlimited in number.

In short, De Saussure perceives the underlying system (langue) of language as the cofunctioning of syntagmatic and paradigmatic perspectives. It can be split into components tackled syntagmatically taking into account their linear association, or analysed paradigmatically by considering the alternatives of language ingredients.

7. Intrinsic Aspect vs Extrinsic Aspect

The internal construction of a given language constitutes the intrinsic aspect of this language. However, the extrinsic aspect has to do with the external (regional, historical, political, religious) factors surrounding language which do not necessarily exert influence on language underlying mechanism. Saussure makes a comparison with the chess game to clarify this point. The game originated from Persia and then was introduced to Europe. This extrinsic event does not intrinsically cause any impact on the game including its regulations that govern its way of playing. Therefore, language can be studied at its intrinsic level without reference to its extrinsic environment or past.

8. Structural Linguistics in Language Education

Linguistics helps language learners to be aware that the various structural (e.g. phonological, syntactic, lexical) patterns of language are tightly interrelated to make that language function meaningfully. They need, of course, to study the different language components individually to understand how they operate in isolation. Yet, they also need to be shown that language does not work or make sense if one of the structures is lacking. Teaching any language through a structuralist approach requires emphasis on four main skills namely, listening, speaking, reading, and writing with, at least, respect to proper grammar, sufficient vocabulary, and clear pronunciation.

9. Conclusion

It is important to note that the above linguistic concepts were tackled various times by many language specialists before Saussure. Yet, the latter scholar has successfully exploited the concepts integrating them into a more general and original theoretical paradigm which unavoidably still has limitations. Despite their basic placement for treating any linguistic system, Saussurian framework has proved to be confusing when put sometimes into (instructional) practice. This has incited the emergence of structuralist schools and academic societies to cope with Saussurian deficiencies among which we distinguish Prague School, Copenhagen School and Americal School. They have all inevitably however been under the effect of Saussure's dichotomies.

Further Reading

- ✓ Boadi, L.A. et al. (2004). Grammatical Structures and its Teaching. Ibadan: African University Press.
- ✓ Saussure. F (1916). Cours de Linguistique Générale. Edition Critique par Tulio de Mauro. 1983. Paris: Payot.
- ✓ Trask. R. L (2004). Key Concepts in Language and Linguistics. 2nd Edition. Routledge
- ✓ Vivien, L. (2015). The History of Linguistics in Europe: From Plato to 1600. Cambridge: Cambridge University Press.





1. Contrast comparative philology with structural linguistics

2. Are the following phases related to synchrony or diachrony? Succession; historical viewpoint; state of language; period of time; particular point in time; comparison between language states; particular language structure; different points in time; language description; language development; structural linguistics; chronological evolution



3. Complete the following table



4. How can you distinguish between form and substance?



5. Classify the following phrases according to their reference to sign, signifier or signified: value; significant; concept; sound image; double-sided; congregation of phonemes; union of the two parts; distinctive; sound image; signifié; within the speaker's mind; conventional relationship; inseparable components; in the speaker's memory; meaning image; psychological nature; arbitrary.



6. Draw a line identifying syntagmatic relations from the left to right and paradigmatic relations from left to right.

Syntagmatic

Perspective

horizontal	inhuman	review	interest		associative
pronunciation	language	value	scholar	meaning	glossematics
	stretch	judgement		variation	
limited	earth	unlimited	alternatives	semantics	Panini
number		items			
literature	irreplaceable	orders	Greeks	English	pronoun
news	replaceable	order	spelling	Thrax	dictation
same	local	Chomsky	linear	methodology	overlapping
syntagma					
vertical	subjective	sanskrit	philology	mutually	unisolated
				meaningful	

Paradigmatic

Perspective

7. How can you describe the intrinsic parameter as opposed to the extrinsic parameter? Fill in the diagram below.



Key Answers

1. Contrast comparative philology with structural linguistics



2. Are the following phases related to synchrony or diachrony? Succession; historical viewpoint; state of language; period of time; particular point in time; comparison between language states; particular language structure; different points in time; language description; language development; structural linguistics; chronological evolution



3. Complete the following table

Langue	Parole	
Internal knowledge of language	actual utterances/speech	
language rules	application of language rules	
social/shared	personal	
homogeneous	heterogeneous	
stable	variable	
essential	less essential	
phoneme as a unit	sound as a unit	

4. How can you distinguish between form and substance?



5. Classify the following phrases according to their reference to sign, signifier or signified: value; significant; concept; sound image; double-sided; congregation of phonemes; union of the two parts; distinctive; sound image; signifié; within the speaker's mind; conventional relationship; inseparable components; in the speaker's memory; meaning image; psychological nature; arbitrary.



6. Draw a line identifying syntagmatic relations from the left to right and paradigmatic relations from left to right.

Syntagmatic

Perspective

horizontal	inhuman	review	interest		associative
pronunciation	language	value	scholar	meaning	glossematics
	stretch	judgement		variation	
limited	earth	unlimited	alternatives	semantics	Panini
number		items			
literature	irreplaceable	orders	Greeks	English	pronoun
news	replaceable	order	spelling	Thrax	dictation
same	local	Chomsky	linear	methodology	overlapping
syntagma					
vertical	subjective	sanskrit	philology	mutually	unisolated
				meaningful	

Paradigmatic

Perspective

7. How can you describe the intrinsic parameter as opposed to the extrinsic parameter?

Intrinsic Parameter	Extrinsic Parameter
- internal construction - linguistic levels	regional factorshistorical events
- structural feature	 political decisions religious beliefs
	- surrounding language
	- environment - past

SEMESTER II: MODERNAPPROACHES IN LINGUISTICS

CHAPTER III: SCHOOLS OF LINGUISTICS

LECTURE 5: The Prague School

LECTURE 6: Copenhagen School

LECTURE 7: The American School

LECTURE 5: THE PRAGUE LINGUISTIC CIRCLE

- 1. Introduction
- 2. Phonology: Definition
- 3. The Phoneme
- 4. Phonemic Opposition
- 5. Phonological Distinctive Features
- 6. Phonemic Overlapping
- 7. Morpho-phonology
- 8. Conclusion

LECTURE V: THE PRAGUE LINGUISTIC CIRCLE

1. Introduction

The thirties witnessed the most prominent achievements, notably in phonology, within the Prague School at two levels: phonological features and morphophonemic structure. Saussure's linguistic theory and Russian linguistics could be two sources of inspiration to the Prague School in addition that many of its works are considered but original. Some of Prague scholars are, V. Mathesius, K. Bühler, D, Jones, L. Tesnière, É. Benveniste, A. Martinet, S. Karcevskij, R. Jakobson, N. S. Trubeckoj. Some of their well-known productions are: "Travaux du Cercle Linguistique de Prague".

2. Phonology: Definition

Phonology is the scientific study of language sound system, the phonemes, their oppositions and features. In fact, the phonological field of study was officially admitted within the frame of linguistic research and gained its autonomy and status as a direct outcome of Prague scholarship' efforts.

3. The Phoneme

Words are made of letters in writing but phonemes in speech. Letters are not necessarily the same as phonemes. For instance, *can* and *king* start with different letters which are, however, pronounced alike. Both letters correspond to the phoneme k. The phoneme is the smallest distinctive (contrastive), structural and functional unit in the sound system. It is minimal in the sense that it is not possible to break it up further into smaller elements. It also differentiates word meanings.

Phonemes are represented in slant brackets (/ /) in phonology. For instance, /pill/, no matter how /p/ varies, continues to contrast with /kill/, /fill/, /hill/, /mill/. There is one basic unit or phoneme that makes the difference. Language phonemes can be established by finding out **minimal pairs** (pairs of words with the same sounds in the same order, except that they differ in one single sound in the same position. Examples, fill/full; light/ might; book/look....

4. Phonemic Opposition

Phonology tackles "only those contrasts in sound (the phonemes) which make differences of meaning within language" (Crystal, 1999: 236). The phoneme, according to Saussure, is not seen as an acoustic substance but as a value within the underlying system of

language in relation or opposition, as Prague phonologists call it, to other phonemes. What are the different oppositions that you may get out of the consonant system of English?

The voiceless stops $p \ t \ k$ are in contrast to the voiced stops $b \ d \ g$. Trubetzkoy dealt with different phonemic classifications such that each phoneme could be contrasted to other phonemes with regard to their places of articulation for example: The labels $p \ b \ m$ are in contrast to the velars $k \ g \ y$; the stops $p \ t \ k \ b \ d \ g$ are opposed to the nasals $m \ n \ y$ as shown below,



5. Phonological Distinctive Features

Phonemes are perceived as 'bundles of features', such as stop, backness, nasality, voicedness. During the forties and fifties, Jackobson moved forward with the theory of phonological features to realize that in many diverse languages, the same features:

- can be repeatedly utilised for phonemic description (e.g. labial, voiced, contoid).
- do not all take place in some languages (e.g. palatalization is found in Russion while not in English)
- characterise only a specific number of languages (e.g. vowel rounding in German).

A phoneme is a bundle of features means that it is a series of binary choices. Each phoneme is associated with plus or minus a feature. f s f in English is given a minus value for the voicing feature in opposition to v z z with a plus value. A matrix is composed of horizontal rows with
the distinctive features whereas the vertical columns provide the segments. A + or a - reside in the spaces in the matrix. The items *good fun* could be displayed as follows,

	g	u	d	f	Λ	n
vocoid	-	+	-	-	+	-
contoid	+	-	+	+	-	+
labial	-	-	-	+	-	-
fricative	-	-	-	+	-	-
voiced	+	+	+	-	+	+

6. Phonemic Overlapping

Prague phonologists believe that the phoneme is not a family of sounds neither is it a sound by itself. They use the notion of phonemic overlapping to explain this in some languages. Overlapping is either partial or complete.

Partial Overlapping

Jackobson et al (1952) worked on the Danish illustration of /t/ and /d/. [t] (initially) and [d] (finally) are two different allophones of the same phoneme /t/. We say that the phonemes /t/ and /d/ are in partial overlapping.

Initially: $/t/ \rightarrow [t]$ e.g. $/tag/ \rightarrow [tag]$ roof $/d/ \rightarrow [d]$ e.g. $/dag/ \rightarrow [dag]$ day

Finally: $/t/ \rightarrow [d]$ e.g. $/hat/ \rightarrow [had]$ hat $/d/ \rightarrow [\tilde{d}]$ e.g. $/had/ \rightarrow [ha\tilde{d}]$ hate

Complete Overlapping

It is raised when one single sound is allotted to two different phonemes. Another notion that the Prague school emphasise is that of the Archiphoneme to talk about the occurrence of this neutralisation. In American Spoken English, /wetiŋ/ and /wediŋ/ are both pronounced as [weriŋ]. This indicates that a neutralisation of the opposition /t,d/ has occurred in this environment (/t/ and /d/ are intervocalic). Such cases give way to the Archiphoneme

which is used to show that in certain positions, some phonemes lose their distinctive force. Thus, for the American [weriŋ], we use either the Archiphoneme /T/ as in /weTiŋ/ or the Archiphoneme /D/ as in /weDiŋ/. Consider the following examples,

7. Morpho-phonology

It is the scientific study of an abstract unit, known as morphophoneme (morphoneme), underlying two alternating phonemes and taking place in one concrete form or another in reaction to specific conditions. The description of this abstract structure involves both the phonemes and the grammatical segments (morphemes .e.g. *ian*, *ion*). For example, the *c* in *magic* is uttered as *k* but *c* in *magician* is pronounced as *f*. Another example is that *t* in *concentrate* is heard as *t* while it is pronounced as *f* in *concentration*. *I* within the suffix is not uttered in the two instances. Thus, the morphoneme *K* corresponds to *c* in *magic* and *f in* magician while *T* is t in *concentrate* and *f* in *concentration*.

The morphonological structure can also be represented in the form of feature matrices with a two level-sound structure. The concrete phonetic level is obtained under the application of phonological rules to the more abstract morphonological level. For instance, the English rules applied to get the alternation *magic – magician* and *concentrate – concentration* are as follows and which means (a) T and K become f before i, and (b) i is removed between f and a vowel,

$$T$$
(a) $\rightarrow \int / \rightarrow i$

K
(b) i $\rightarrow \emptyset \rightarrow v$

8. Conclusion

As the Prague School scholars are interested in pronunciation from the phonological point of view, their principles have had a profound impact on language education, particularly with regard to the rise of "the Audio-Lingual Method". Teachers adopting this method integrate all the language skills (listening, speaking, reading, writing), while they prioritise speaking and accuracy in this skill. Pronunciation is taught through forming habits in the learners and encouraging repetitions.

ASSIGNMENT & PRACTICE

1. Choose the most appropriate answer,

The Prague School emerged in

- o the 20's
- \circ the 30's
- o the 70's
- o the 90's

The Prague School was inspired by

- Saussure's linguistic theory and Russian linguistics.
- o Traditional grammar
- Saussure's linguistic theory
- Russian linguistics and comparative philology

Phonology is the scientific study of

- language sounds
- o phonemes
- o phonemes and their contrasts
- phonemic oppositions.

Thanks to the Prague School, phonology

- obtained an academic recognition
- \circ existed and was broadened
- o disappeared
- was praised and encouraged.

Words are made of letters which are in speech

- \circ the same as phonemes.
- o not necessarily the same as phonemes.
- \circ not the same as phonemes.

The phoneme is the smallest distinctive means that it is

• possible to break it up into smaller segments.

- impossible to build it up into further segments
- not possible to break it up into smaller segments.

Minimal pairs are pairs of words with the same sounds in the same order but they differ in,

- one single sound in different positions.
- \circ one single sound in the same position.
- distinct sounds in different positions
- distinct sounds in the same position.

2. Contrast phonemes in respect to their place of articulation, manner of articulation, and voicing.

	La	bial	D	ental	Alv	veolar	Р	ost-	Palatal	Vela	ır	Glottal
							alv	eolar				
Nasal		m				n					ŋ	
Stop	р	b			t	d				k	g	
Affricate							t∫	dʒ				
Fricative	f	v	θ	ð	S		ſ					h
					Z		3					
Approximant						1		r	j		W	

3. Which distinctive features correspond to each of the following phonemes? Write (+) to identify the features or (-) to signal their absence.

	b	m	d	n	g	ŋ
Stop						
Voiced						
Labial						
Nasal						
Velar						
Alveolar						

4. Explain the position of the Archiphoneme in the following items as seen in your lecture,

betting-bedding writer – rider wider – whiter ledding-letting better-bedder

5. Consider the morphonemes in the following items,

music – musician finance – financial relate – relation inspect – inspection reject - rejection

Key Answers

1. Choose the most appropriate answer,

The Prague School emerged in

- \circ the 20's
- the 30's
- \circ the 70's
- o the 90's

The Prague School was inspired by

• Saussure's linguistic theory and Russian linguistics.

- Traditional grammar
- o Saussure's linguistic theory
- Russian linguistics and comparative philology

Phonology is the scientific study of

- language sounds
- \circ phonemes
- o phonemes and their contrasts
- phonemic oppositions.

Thanks to the Prague School, phonology

- o obtained an academic recognition
- \circ existed and was broadened
- o disappeared
- was praised and encouraged.

Words are made of letters which are in speech

- \circ the same as phonemes.
- \circ $\,$ not necessarily the same as phonemes.
- o not the same as phonemes.

The phoneme is the smallest distinctive means that it is

o possible to break it up into smaller segments.

- o impossible to build it up into further segments
- o not possible to break it up into smaller segments.

Minimal pairs are pairs of words with the same sounds in the same order but they differ in,

- one single sound in different positions.
- one single sound in the same position.
- o distinct sounds in different positions
- o distibct sounds in the same position.

2. Contrast phonemes in respect to their place of articulation, manner of articulation, and voicing

Place of Articulation

The labial m is in contrast to the alveolar n and in contrast to the velar η . The velar k is in contrast with the labial p and the alveolar t. The dentals θ ð are in contrast to the post-alveolars t $\int dz$. The palatal j is in contrast to the velar w.

Manner of Articulation

The nasals m n n are in contrast to the stops b d g. The affricates $t\int dz$ are in contrast to the fricatives $\int z$ The approximant z is in contrast to the fricative z. The stop p is in contrast to the fricative f. The stops p b t d are in contrast to the fricatives f v $\theta \delta$.

Voicing

The voiceless affricate $t \int is$ in contrast to the voiced affricate d₃. The voiceless fricative f is in contrast to the voiced fricative v. The voiceless alveolar s is in contrast to the voiced alveolar z. The voiceless velar k is in contrast to the voiced velar g. The voiceless stop t is in contrast to the voiced stop d. **3.** Which distinctive features correspond to each of the following phonemes? Write (+) to identify the features or (-) to signal their absence.

	b	m	d	n	g	ŋ	
Stop	+	+	+	+	+	+	
Voiced	+	+	+	+	+	+	
Labial	+	+	-	-	-	-	
Nasal	-	+	-	+	-	+	
Velar	-	-	-	-	+	+	
Alveolar	-	-	+	+	-	-	

4. Explain the position of the Archiphoneme in the following items as seen in your lecture,

betting-bedding

In American Spoken English, /betiŋ/ and /bediŋ/ are both pronounced as [beriŋ]. This indicates that a neutralisation of the opposition /t,d/ has occurred in this environment (/t/ and /d/ are intervocalic). Such cases give way to the Archiphoneme which is used to show that in certain positions, some phonemes lose their distinctive force. Thus, for the American [beriŋ], we use either the Archiphoneme /T/ as in /beTiŋ/ or the Archiphoneme /D/ as in /beDiŋ/.

writer – rider

In American Spoken English, /raɪtə/ and /raɪdə/ are both pronounced as [raɪrər]. This indicates that a neutralisation of the opposition /t,d/ has occurred in this environment (/t/ and /d/ are intervocalic). Such cases give way to the Archiphoneme which is used to show that in certain positions, some phonemes lose their distinctive force. Thus, for the American [raɪrər], we use either the Archiphoneme /T/ as in /raɪTə/ or the Archiphoneme /D/ as in /raɪDə/.

whiter - wider

In American Spoken English, /waɪtə/ and /waɪdə/ are both pronounced as [waɪrər]. This indicates that a neutralisation of the opposition /t,d/ has occurred in this environment (/t/ and

/d/ are intervocalic). Such cases give way to the Archiphoneme which is used to show that in certain positions, some phonemes lose their distinctive force. Thus, for the American [rarrər], we use either the Archiphoneme /T/ as in /warTə/ or the Archiphoneme /D/ as in /warDə/.

ledding-letting

In American Spoken English, /letiŋ/ and /lediŋ/ are both pronounced as [leriŋ]. This indicates that a neutralisation of the opposition /t,d/ has occurred in this environment (/t/ and /d/ are intervocalic). Such cases give way to the Archiphoneme which is used to show that in certain positions, some phonemes lose their distinctive force. Thus, for the American [leriŋ], we use either the Archiphoneme /T/ as in /leTiŋ/ or the Archiphoneme /D/ as in /leDiŋ/.

better-bedder

In American Spoken English, /betə/ and /bedə/ are both pronounced as [berər]. This indicates that a neutralisation of the opposition /t,d/ has occurred in this environment (/t/ and /d/ are intervocalic). Such cases give way to the Archiphoneme which is used to show that in certain positions, some phonemes lose their distinctive force. Thus, for the American [berər], we use either the Archiphoneme /T/ as in /beTə/ or the Archiphoneme /D/ as in /beDə/

5. Consider the morphonemes in the following items,

music – musician

The *c* in *music* is uttered as *k* but *c* in *musician* is pronounced as *f*. *i* within the suffix is not uttered in this instance. Thus, the morphoneme *K* corresponds to *c* in *music* and *f* in *musician*. The English rule applied to get the alternation *music* – *musician* is as follows and which means (a) *K* becomes *f* before *i*, and (b) *i* is removed between *f* and a vowel,

(a) $K \to \int / \to i$ (b) $i \to \varphi \to v$

finance – financial

s in *finance* is heard as *s* while it is pronounced as f in *financial*. *i* within the suffix is not uttered in this instance while *S* is *s* in *finance* and *f* in *financial*. The English rule applied to get the alternation *finance* – *financial* is as follows and which means (a) *S* becomes *f* before *i*, and (b) *i* is removed between *f* and a vowel,

(a)
$$S \rightarrow \int / \rightarrow i$$

(b) $i \rightarrow \phi \rightarrow v$

relate – relation

t in *relate* is heard as *t* while it is pronounced as \int in *relation*. *i* within the suffix is not uttered in this instance while *T* is t in *relate* and \int in *relation*. The English rule applied to get the alternation *relate* – *relation* is as follows and which means (a) *K* becomes \int before *i*, and (b) *i* is removed between \int and a vowel,

(a)
$$T \rightarrow \int / \rightarrow i$$

(b) $i \rightarrow \emptyset \rightarrow v$

inspect - inspection

t in *inspect* is heard as *t* while it is pronounced as f in *inspection*. *i* within the suffix is not uttered in this instance, while *T* is t in *concentrate* and *f* in *concentration*. The English rule applied to get the alternation *music* – *musician* is as follows and which means (a) *K* becomes *f* before *i*, and (b) *i* is removed between *f* and a vowel,

(a) $T \rightarrow \int / \rightarrow i$ (b) $i \rightarrow \phi \rightarrow v$

reject – rejection

t in *reject* is heard as *t* while it is pronounced as *f* in *rejection*. *i* within the suffix is not uttered in the two instances while *T* is t in *reject* and *f* in *rejection*. The English rule applied to get the alternation *reject* – *rejection* is as follows and which means (a) *K* becomes *f* before *i*, and (b) *i* is removed between *f* and a vowel,

(a)
$$T \rightarrow \int / \rightarrow i$$

(b)
$$i \to \phi \to v$$

LECTURE 6: THE COPENHAGEN LINGUISTIC CIRCLE

- 1. Introduction
- 2. Content Plane vs Expression Plane
- 3. Relations within the Language System
- 4. Formal Universals vs Substantive Universals
- 5. Glossematics
- 6. Conclusion

LECTURE VI: THE COPENHAGEN LINGUISTIC CIRCLE

1. Introduction

Established at the beginning of the thirties, the Copenhagen school was pioneered by the Dutch Louis HJELMSLEV who advanced a theory in his publication (1953) <u>Prolegomena</u> to a Theory of Language to conceptualise language in a more mathematical way. The Copenhagen linguistic circle precursor approached the sign system under the influence of Saussurean taxonomy to talk about it in terms of content and expression.

2. Content Plane vs Expression Plane

No matter how much complex the language fragment (signs, words, phrases, clauses, sentences, paragraphs, texts), according to Hjelmeslev, it could be divided into content plane and expression plane.

Expression Plane	Content Plane
thought container	thought
Extralinguistic aspect	language system
letters, sounds	sound combination to make meaning

Table I: Expression Plane vs Content Plane

Between the content form and the expression form¹ prevails an interrelationship identified by the principle of Commutation.

Rule

The distinction on the content plane level

corresponds to the/

has an equivalent/

commutes with a

distinction on the level of the expression plane. This distinction is described as germaine to the language under study. If not, this distinction is not germaine.

¹ See Saussurean definition (Lecture V)

Examples

English: you \rightarrow female, male (not germaine distinction)

Oran Arabic: nta, nti \rightarrow male, female (germaine distinction) Tlemcen: Arabic ntina \rightarrow male, female (not germaine)

3. Relations within the Language System

Chain is the notion used by Hjelmslev to refer to a language construction like a word, clause, phrase, set of sentences.

Sign chain = content plane chain + expression plane chain

such as the chains above consist of the components of the underlying linguistic system. The system relates to ====&&&

Syntagmatic Relations

The following example illustrates language relations which are syntagmatic which in turn could be drawn in the form of tree diagram,

- A. The old house dilapidated quickly.
- **B.** The old house **C** dilapidated quickly
- **D.** The **E** old house **F** dilapidated G quickly
- H. old I house

A=B+CB=D+EE=H+IC=F+G

- A: the whole sentence, represents the class of all sentences.
- B: represents the class of all subjects.
- C: represents the class of all predicates.
- D: represents the class of all articles.

- E: represents the class of all noun phrases
- F: represents the class of all verbs
- G: represents the class of all adverbs
- H: represents the class of all adjectives
- I: represents the class of all nouns



Syntagmatic Relation within a Sentence Chain

Paradigmatic Relations

They could be understood through this operation suggested by Hjelmslev,

X = Y + Z such that X is a complex structure, Y and Z are its components. Here, three distinct relations prevail,

- 1. X = Y + Z such that both Y and Z are indispensable to X (e.g. he disappeared: Ns+Vs)
- X = Y + Z such that one of them (Y or Z) is necessary, the other is optional (e.g. blue sky: Ns + adjs)
- 3. X = Y + Z such that both Y and Z are optional to X (e.g. she reacted quickly Immediately: advs+advs)

4. Formal Universals vs Substantive Universals

The three relations above allow obviously the formation of a structure composed of distinct language constituents. Yet, they are still not adequate to account for all natural language complexities. A different categorisation is required to consider more languages and their structural classes. Copenhagen scholars opt for formal universals in contrast to substantive universals. The characteristics that have to do with all language grammars are indicated as formal universals while the phonological properties are known as substantive universals. The former features should be included in all languages, however the latter are particular to distinct languages (each language possesses its own properties).

5. Glossematics

It was already indicated in the previous lecture that the Prague Linguistic Circle identifies words as combinations of phonemes with certain distinctive features. Hjelmeslev has subsequently made a leap forward to consider the semantic structure beside the phonological structure, a fact which has led to the rise of glossematics. This scientific area of study deals with glossemes. A **glosseme** refers to the minimal phonological and semantic units which, together, is not possible to break them up linguistically further. The glosseme is in fact composed of expression figurae and content figurae. In this way, Saussure's definition of language as a system of signs has been altered and broadened by the Copenhagen Linguistic Circle to talk about language as a system of figurae in the sense that only if a set of phonemes gather in a certain way, they gain the rank of signs.

Expression Figurae

Expression figuraes indicate the smallest expression (phonological) components deprived from their own meaning. i.e. phonemes and their features.

Content Figurae

Content figuraes are those constituents of meaning. i. e. semantic features which do not have to do with (single) phonemes in isolation, but they result from a combination of a set of phonemes. Said differently, the sign content comprises arrangements of semantic characteristics similarly to the case of their phonemes which embody amalgamations of phonological properties. As an illustration, we consider the following pairs. Their analysis is applicable to any natural language,

	In each pair, the items are differentiated according to sex: male/
man/ woman	female or gender: masculine/ feminine.
father/ mother	

father/mother share the feature *parent*.

If we carry on subdivisions into further smaller semantic features, we could obtain consequently the following,

father	mother	father/ mother
animal	animal	animal
human	human	human
male	female	antecedent
antecedent	antecedent	parent
parent	parent	

6. Conclusion

The Copenhagen School achievements have paved the way to the emergence of "Communicative Language Teaching" which gives special consideration to the learners' different styles and needs. All language skills are important to communicative language teachers. Yet, their approach rests on authentic materials to make speaking interactions among the students take place as in the real life.

Further References

- ✓ Keith, A. (2013). The Oxford Handbook of the History of Linguistics. Oxford: Oxford University Press.
- ✓ Ogbulogo, C. (2005). Concepts in Semantics. Sam Iroanusi Publications
- ✓ Rastogi, K. (1997). Structural Linguistics: Its Origin and Development. Delhi: Penman Publishers.
- ✓ Trask. R. L (2004). Key Concepts in Language and Linguistics. 2nd Edition. Routledge

ASSIGNMENT & PRACTICE

1. Define the phrasal items below,

Content Plane Expression Plane Principle of Commutation. Germaine distinction Formal Universals Substantive Universals Glossematics Expression Figurae Content Figurae

2. Does the distinction on the content plane level has an equivalent distinction on the level of the expression plane? Is it germaine?

French: information; English: information French: toi, moi, lui English: news; statistics Oran Arabic: huwa/hija Spanish: nosotros/nosotras, vosotros/vosotras; French: nous, vous Spanish : subjuntivo pasado ; subjuntivo presente; French: subjonctif

3. How do the following examples illustrate the syntagmatic relations? Draw them in the form of tree diagram,

The wise man writes fast. A small tree fits perfectly. This famous actor ranks first. Those boxes weigh heavily.

4. How do the above examples illustrate the paradigmatic relations?

5. Explain the meaning of the expression figurae and the content figurae through the following examples

son/ daughter brother/ sister grandfather/grandmother uncle/ aunt he/she him/ her

Key Answers

1. Define the phrasal items below,

Content Plane

It refers to thought related to the language system whereby sounds combine to make meaning.

Expression Plane

It has to do with how thought is extralinguistically shaped in the form of letters and sounds.

Principle of Commutation

It pinpoints the interrelationship between the content plane and the expression plane such that the distinction on the content plane level commutes or not with a distinction on the level of the expression plane.

Germaine distinction

In cases where the distinction on the content plane level corresponds to a distinction on the level of the expression plane, it is denoted as germaine.

Formal Universals

The features that are common to all language grammars are known as formal universals.

Substantive Universals

They entail the phonological characteristics specific to individual

languages.

Glossematics

It studies glossemes: The minimal phonological and semantic unit that cannot be divided further into smaller elements.

Expression Figurae

It is the smallest expression (phonological) constituents (phonemes and their properties) dispossessed from their particular meaning.

Content Figurae

It makes reference to the components of meaning, that is semantic properties of an arrangement of a number of phonemes.

2. Does the distinction on the content plane level has an equivalent distinction on the level of the expression plane? Is it germaine?

French: information, informations → singular, plural (germaine distinction);
English: information → singular, plural (not germaine)
French: toi, moi, lui → female, male (no germaine distinction)

English: news; statistics \rightarrow singular, plural (not germaine)

Oran Arabic: huwa/hija \rightarrow female, male (germaine distinction)

Spanish: nosotros/nosotras, vosotros/vosotras \rightarrow female, male (germaine distinction) French: nous, vous \rightarrow male, female (not germaine)

Spanish: subjuntivo pasado; subjuntivo presente \rightarrow pasado, presente (germaine distinction) French: subjonctif \rightarrow pasado, presente (no germaine distinction)

3. How do the following examples illustrate the syntagmatic relations? Draw them in the form of tree diagram,

The wise man writes fast.

- C. The wise man writes fast.
- **D.** The wise man **C** writes fast.
- **D.** The **E** wise man **F** writes G fast.
- H. wise I man

A=B+CB=D+EE=H+IC=F+G

A: the whole sentence, represents the class of all sentences.

- B: represents the class of all subjects.
- C: represents the class of all predicates.
- D: represents the class of all articles.
- E: represents the class of all noun phrases
- F: represents the class of all verbs
- G: represents the class of all adverbs
- H: represents the class of all adjectives
- I: represents the class of all nouns



Syntagmatic Relation within a Sentence Chain

A small tree fits perfectly.

E. A small tree fits perfectly.

F. A small tree C fits perfectly.D. A E small tree F fits perfectly.H. small I tree

$$A = B + C$$
$$B = D + E$$
$$E = H + I$$

$$C = F + G$$

A: the whole sentence, represents the class of all sentences.

B: represents the class of all subjects.

C: represents the class of all predicates.

D: represents the class of all articles.

E: represents the class of all noun phrases

F: represents the class of all verbs

G: represents the class of all adverbs

H: represents the class of all adjectives

I: represents the class of all nouns



Syntagmatic Relation within a Sentence Chain

This famous actor ranks first.

- A. This famous actor ranks first.
- **B.** This famous actor **C** ranks first.
- C. D. The E famous actor F ranks first.
- H. famous I actor

A=B+CB=D+EE=H+IC=F+G

A: the whole sentence, represents the class of all sentences.

- B: represents the class of all subjects.
- C: represents the class of all predicates.
- D: represents the class of all articles.
- E: represents the class of all noun phrases
- F: represents the class of all verbs
- G: represents the class of all adverbs
- H: represents the class of all adjectives
- I: represents the class of all nouns



Syntagmatic Relation within a Sentence Chain

Those old boxes weigh heavily.

- **A.** Those old boxes weigh heavily.
- **B.** Those old boxes **C** weigh heavily.
- C. D. Those E old boxes F weigh G heavily.

H. old I boxes

A = B + C

 $\mathbf{B} = \mathbf{D} + \mathbf{E}$

 $\mathbf{E} = \mathbf{H} + \mathbf{I}$

C = F + G

A: the whole sentence, represents the class of all sentences.

- B: represents the class of all subjects.
- C: represents the class of all predicates.

D: represents the class of all articles.

- E: represents the class of all noun phrases
- F: represents the class of all verbs
- G: represents the class of all adverbs

H: represents the class of all adjectives

I: represents the class of all nouns



**

Syntagmatic Relation within a Sentence Chain

4. How do the above examples illustrate the paradigmatic relations?

X = Y + Z such that X is a complex structure, Y and Z are its components. Here, three distinct relations prevail,

- 1. X = Y + Z such that both Y and Z are indispensable to X (e.g. he disappeared: Ns+Vs)
- X = Y + Z such that one of them (Y or Z) is necessary, the other is optional (e.g. blue sky: Ns + adjs)
- 3. X = Y + Z such that both Y and Z are optional to X (e.g. she reacted quickly Immediately: advs+advs)

5. Explain the meaning of the expression figurae and the content figurae through the following examples

1.brother/ sister	The items are differentiated according to sex: male/ female or
uncle/ aunt	gender: masculine/ feminine.
	brother/ sister have the feature sibling in common and share the

feature kinship with uncle/ aunt.

•

If we carry on subdivisions into further smaller semantic features, we could obtain consequently the following,

brother/ sister	uncle/ aunt	brother/ sister-uncle/ aunt
human	human	human
descendent	family	family

family sibling kinship

kinship

brother, sister, uncle, aunt possess sound structures (expression figurae) which together with semantic features (meaning) constitute the content figurae.

2.son/ daughter In each pair, the items are differentiated according to sex: male/ grandfather/grandmother female or gender: masculine/ feminine.

son/ daughter have the feature *sibling* in common and share the feature *kinship* with grandfather/grandmother.

If we carry on subdivisions into further smaller semantic features, we could obtain consequently the following,

son/ daughter	grandfather/grandmother	son/ daughter-
		grandfather/grandmother
human	human	human
descendent	parent	family
sibling	antecedent	kinship
	kinship	

father, mother, brother, sister, aunt, son, daughter possess sound structures (expression figurae) which together with semantic features (meaning) constitute the content figurae.

3.he/ she	The items are differentiated according to sex: male/ female or
him/ her	gender: masculine/ feminine.
	he/ she have the feature <i>subject</i> in common and share the feature

direct object with him/ her.

If we carry on subdivisions into further smaller semantic features, we could obtain consequently the following,

he/ she	him/ her	he/ she - him/ her
human	human	human
speech part	speech part	speech part
subject	direct object	pronoun

he, *she*, *him*, *her* possess sound structures (expression figurae) which together with semantic features (meaning) constitute the content figurae.

LECTURE 7: THE AMERICAN SCHOOL OF LINGUISTICS

- 1. Introduction
- 2. Bloomfieldian Linguistic Forms
- 3. Chomsky's Challenge
- 4. Generative Grammar
- 5. Transformational Generative Grammar
- 6. Conclusion

LECTURE VII: THE AMERICAN SCHOOL OF LINGUISTICS

1. Introduction

In the United States, structural linguistics emerged to describe, record and therefore preserve Indian languages which were majorly unwritten and in their way of extinction (death/ loss/disappearance). The cornerstone of American school's structural linguistics is found in the studies of Zelling Harris and Leonard Bloomfield.

In their process of language examination, American linguists restricted themselves to one way analysis such that they started looking at phonemes followed by morphemes before reaching syntactic rules. Each linguistic level in this order composes the constituents of the next level. Altering levels was not allowed as it would only lead to disorder according to early structuralists.

American structuralism on the other hand relied on taxonomic methods whereby phonemes were classified into morphemes and morphemes were congregated into word(s) (classes) which finally were clustered into sentences.

2. Bloomfieldian Linguistic Forms

A linguistic form represents, according to Bloomfield, an organised arrangement between phonemes and meaning. Given that phonemes do not carry meaning in isolation, they cannot be considered as linguistic forms. Still for Bloomfield, the study of a linguistic form does not require a deeper research on meaning which might otherwise be a misleading concept for language description. His sub-division of linguistic forms is illustrated in the following table,

Linguistic Form	Examples
Free Forms	tall/ girl, tall girl
Bound Forms	affixes (prefixes, infixes, suffixes)
Simple Forms	prepositions, articles, pronouns
Complex Forms	free form+ other forms

Immediate Constituent Analysis

The combination of complex forms is a constituent that could be classified into immediate or ultimate. Let us consider the following sentence. "old Tom came back" consists of two Immediate Constituents (I.C): "old Tom" and "came back" and four Ultimate Constituents (U.C): "old", "Tom", "came¹", "back"



3. Chomsky's Challenge

After his graduation from Pennsylvania University, Chomsky² went through language structural methodology in his analysis of syntax. However, he noticed some anomalies at the level of his present application,

– although the structuralists' approaches went quite well with phonemes and morphemes, they did not reveal the same results with sentences. The reason is the restricted number of phonemes and the relatively wider but still restricted number of morphemes compared with the unrestricted number of sentences in a given language. Accounting the number of phonemes and morphemes is possible, unlike the case of

¹ "came" is further subdivided into two Ultimate Constituents: "come" + "past"

² Chomsky was one of Harris's students

sentences: Language has the capacity of giving ceaselessly (constantly/ continually) new sentences.

- The taxonomy followed by the former structural linguists does not seem fruitful as for the inner sentence relations or the relations prevailing among sentences. The method of Immediate Constituent Analysis (I.C.A), for example, is not powerful enough to disambiguate such sentences as "they can fish" which in fact implies two different senses:
 - 1. It is possible for them to fish
 - 2. They place fish in cans

The method I.C.A stands unable to separate the two ideas behind the current sentence,



UC UC UC

The source of sentence ambiguity is the syntactic construction rather than the words themselves. The following sentences are additional ambiguous examples,

- \checkmark I like her cooking
- ✓ Flying planes can be dangerous
- \checkmark The shooting of the hunters is terrible

If we consider, on the other hand, the following two sentences we realise,

- 1. John is easy to please
- 2. John is eager to please

At first glance, it may seem that these two sentences possess the same syntactic construction or surface structure. Yet, sentence 1 and 2 carry two different deep structures: While "John" represents the direct object of the verb "to please" in the first sentence, it plays the role of subject in the second sentence. Ambiguous sentences on the whole are just discarded and neglected by structural linguistics.

4. Generative Grammar

Chomsky attacked the structural methodology of classifying utterances on the basis of discovery procedure applications on language corpora. Instead, he opted for a linguistic description able to evaluate the production of countless numbers of language sentences. This description falls under the heading of generative grammar which, as its name indicates, provides tools in the form of a set of rules generating (or engendering) as many credible language sentences as possible.

The fact of excluding meaning from the structural analysis, ICA, is identified as critically weak and unable to consider the ambiguity within such cases as the examples mentioned just above. To disambiguate, the linguist needs to account for these sentences at two distinct structures: Superficial/ apparent level (surface structure) and underlying/ hidden level (deep structure). Ambiguity rests in the fact that the surface composition does not reflect the deep construction. The table below illustrates,

Syntactic Levels	Ambiguous Sentences
Surface structure	Flying planes can be dangerous
Deep structure	1.Planes [that fly] can be dangerous.
	2.[Making] planes [fly] can be dangerous.

Chomsky (1957): Phrase Structure Grammar

Following the procedure of ICA, Chomsky aims to collect data as for the sentence constitution. Yet, he goes through a gradual series of derivations rather than dividing the sentence into its IC and UC. His analysis takes the form of

$$X \rightarrow Y / Z$$

such that,

X: structural analysis (SA)
Y: structural change (SC)
→: rewrite (or replace) instructions
/ : the context
Z: the context of rule application

As part of the rule, this means, SA is rewritten as SC in a particular context. In other words, Chomsky adopted a systematic set of step-by-step rules allowing him to move from the surface construction (input) of a given sentence towards its deep structure (output) in this way,

S Noun Phrase (NP) Verb Phrase (VP) \rightarrow +VP NP Verb +NP Determiner (T) Noun (N) +Т $\{a, the, this....\}$ \rightarrow Ν {girl, boy, linguist....} \rightarrow Verb {kick, saw,} \rightarrow

This grammar is indicated by Chomsky as Phrase Structure Grammar (PSG). The above grammatical rules are ordered such that each rule is derived from another preceding rule. They also lead to come up with the tree diagram (Phrase Marker) below,



the	man	meets	the	woman
this	girl	saw	that	plant
a	boy	forgot	his	book
•	•	•	·	
•	•	•	·	
•	•	•	·	

The more lexicon is provided, the more sentences are generated. Phrase Structure Grammar has the ability of producing an infinite number of sentences from a very finite number of rules. To recapitulate, generative grammar comprises rules that account first for S (or Sentence) with its tree diagram (Phrase Structure Marker).

Additional Phrase Structure Concepts,

Base Component: involves Phrase Structure Rules that stimulate underlying strings of elements representing the deep structure of a kernel sentence.

Kernel Sentence: refers to a simple active declarative sentence produced via the application of Phrase Structure Rules.

Kernel String: T + N + Verb + T + N

Criticism of Phrase Structure Grammar (Chomsky (1957))

Despite the capacity of Phrase Structure rules in producing an unlimited number of kernel sentences, Phrase Structure Grammar still stands unable to display the same generative power regarding all sentence cases of a given language. It does not, for instance, operate for the following three cases.

Case I: John is easy to please John is eager to please Phrase Structure rules are content with producing one single tree diagram only for both above sentences in spite of their syntactic dissimilarity.

Phrase Structure Rules		Lexical Entries					
S	\rightarrow	NP1	+	VP	Verb	\rightarrow	{is}
VP	\rightarrow	Verb	+	NP2	NP1	\rightarrow	{John}
NP1	\rightarrow	Ν			Adj	\rightarrow	{easy, eager}
NP2	\rightarrow	Adj	+	Inf	Inf	\rightarrow	{to please}







Only one single phrase marker is, too, attributed to this sentence that implicitly has two deep dissimilarities, as already indicated.

Phrase Structure Rules			Lexical Entries		
$S \rightarrow$	NP1 + VP	Verb	\rightarrow	{like}	
$VP \rightarrow$	Verb + NP2	NP1	\rightarrow	$\{I\}$	
NP1 \rightarrow	Pro1	Pro2	\rightarrow	{her}	
NP2 \rightarrow	Pro2 + N	Ν	\rightarrow	{cooking}	



Case III: The girl writes a letter. A letter is written by the girl.

These two seemingly different surface structures (active and passive respectively) underlie deep similarities with one single phrase marker. However, the application of Phrase Structure Rules results in two separate and distinct tree diagrams corresponding to the above sentences which have the same meaning.

5. Transformational Generative Grammar

The following type of grammar includes Transformational Rules applied to the result of Phrase Structure Rules,

1) S NP VP + \rightarrow 2) VP NP Verb + \rightarrow NP sing 3) NP \rightarrow NP plur T + N4) Npsing \rightarrow 5) Npplur T + N + s \rightarrow 6) Verb Aux + V \rightarrow 7) Aux C(M)(have + en)(be + ing) \rightarrow C (obligatory) a) Aux \rightarrow b) Aux C + M \rightarrow c) Aux C + be + ing \rightarrow d) Aux C + have + en \rightarrow e) Aux C + M + have + en \rightarrow f) Aux C + M + be + ing \rightarrow C + have + en + be + ingg) Aux \rightarrow h) Aux C + M + have + en + be + ing \rightarrow S/ Npsing 8) Number Transformation: C \rightarrow Ø/ Npplur Past/ elsewhere 9) Passive Transformation (optional): NP1 - aux - V - NP2 \rightarrow NP2 - aux + be + en - V - by + NP110) T. Affix (obligatory): $Aff + v \rightarrow v + Aff$ Aff \rightarrow { past, s, ing...} $\{M, v, be, have\}$ v \rightarrow 11) Negative transformation (optional): X1 - X2 - X3X1 - X2 + not - X3 \rightarrow

12) Do Affix: # Aff \rightarrow do + Aff

13) T. Question (optional):

 $X1 - X2 - X3 \longrightarrow X2 - X1 - X3$

Obviously, Chomsky did not refer to meaning in his *Syntactic Structures* (1957). Generative grammar rules made it possible to move from the apparent to deep sentence representation without considering the semantic interpretation. After being criticised at this level however, Chomsky's tendency took another direction through his 1965 model as introduced in *Aspects of the Theory of Syntax*. This model allowed finally the addition of the semantic component to Chomskian Generative Grammar Theory. Likewise, the contribution of this scholar has been very significant to structural linguistics as it sets up the fountainhead of the major linguistic key-concepts.

6. Conclusion

The American school has led to a special contribution in the development of online education as a result of revolutionising language computing and automisation. An increasing number of theories are recognized by the scientific community with regard to how quality online education can take place. Yet, they all take implicitly or explicitly into consideration chomskian principles and findings in dealing with language e-learning and/ or instruction.

Further References

- ✓ Bloomfield, L. (1933). *Language*. New York: Holt, Rinehart & Winston.
- ✓ Chomsky, N. (1957). Syntactic structures. The Hague: Mouton.
- ✓ Chomsky, N. (1965). Aspects of the Theory of Syntax. Cambridge, MA: MIT Press.
- ✓ Derewianka, B. (2007). Changing Approaches to the Conceptualization and Teaching of Grammar. International Handbook of English Language Teaching, 15, 843-858.
- ✓ Heine, B., Narrog, H., Haspelmath, M .(2015). Framework-Free Grammatical Theory. The Oxford Handbook of Linguistic Analysis, Oxford University
- ✓ Malmkjaer, K. (2009). *History of grammar*. Routledge.

ASSIGNMENT & PRACTICE

Composition Writing: Choose one of the following options, and write a composition

1. Compare and contrast the three schools of linguistics

2. On the basis of you research, take an exemplary theory (e.g. *Community of Inquiry, Online Collaborative Learning, Connectivism*, or *another theory*) on online education and explain the extent to which it considers the works of the American school.

3. What are the limitations of Chomsky's theory in teaching English as a foreign language to pre-service teachers? Can you give four of them in your writing composition?

LIST OF REFERENCES

Bierwich, M. (1971). Modern Linguistics: Its Development, Methods, and Problems. Paris: The Hague Bloomfield, L. (1933). Language. New York: Holt, Rinehart & Winston. Boadi, L.A. et al. (2004). Grammatical Structures and its Teaching. Ibadan: African University Press. Bouhadiba, F's Handouts. (2015). Algeria: University of Oran 2 Chomsky, N. (1957). Syntactic structures. The Hague: Mouton. Chomsky, N. (1965). Aspects of the Theory of Syntax. Cambridge, MA: MIT Press. Derewianka, B. (2007). Changing Approaches to the Conceptualization and Teaching of Grammar. International Handbook of English Language Teaching, 15, 843-858. Heine, B., Narrog, H., Haspelmath, M .(2015). Framework-Free Grammatical Theory. The Oxford Handbook of Linguistic Analysis, Oxford University Keith, A. (2013). The Oxford Handbook of the History of Linguistics. Oxford: Oxford University Press. Lyons, J. (1968). Introduction to Theoretical Linguistics. Cambridge: Cambridge University Press Malmkjaer, K. (2009). History of grammar. Routledge. Ogbulogo, C. (2005). Concepts in Semantics. Sam Iroanusi Publications Rastogi, K. (1997). Structural Linguistics: Its Origin and Development. Delhi: Penman **Publishers** Saussure. F (1916) Cours de Linguistique Générale. Edition Critique par Tulio de Mauro. 1983. Paris: Payot. Simpson, J. (1979). A First Course in Linguistics. Edinburgh University Press Trask. R. L. (2004). Key Concepts in Language and Linguistics. 2nd Edition. Routledge Vivien, L. (2015). The History of Linguistics in Europe: From Plato to 1600. Cambridge:

Cambridge University Press.

APPENDICES

Appendix 1: The Middle Ages in relation to Traditional Grammar

Reminder

It started in Europe after the decline of the Western Roman Empire. The following table illustrates the chronological location of this period:

Western History						
Antiquity	Early Age	High Age	Late Middle	Modern Period		
		$(11^{th} - 13^{th} c)$	Age			
	-population	-population				
Greco-Roman	decrease	increase	-hanger			
world	-deurbanisation	-political	-plague			
intersecting	-people mobility	organization	-war			
civilisations of	-conquests:	-trade rise	-population	Renaissance		
ancient Greece	a.Germanic	-technological	decrease			
and ancient	kingdoms	and agricultural	(e.g.Black			
Rome	b.Mohamed's	innovations	death in 13 th c)			
	successors	-Recontrol of	-church debates			
	(Caliphares'	Eastern lands				
	rules-7 th c)	from Muslims				

Appendix 2: The Renaissance in relation to Traditional Grammar

Reminder

Renaissance $/\underline{ri'}$ nersons/is one era from European civilisation. It started in Italy (Florence) in the Late Middle Ages before it expanded its footprints on the European continent. It is a cultural revolution comprising artistic³, social, intellectual and political movements. There

³ The artistic movement is perhaps the most distinctive feature that characterises the Renaissance

was a classical revival in terms of values, references and learning. Some of its characteristics are:

- The collapse of the feudal system⁴
- Trade emergence
- Printing invention
- The growth of political diplomacy
- Painting flourishment
- Scientific recognition of observation

⁴Feudalism : the social system adopted by Europe in the Middle Ages. People were given land and protection by a nobleman. In turn, they had to work and fight for him.