Historical developments of Language Typology

- If we consult the text-books on language typology, we will come across a name i.e. Gabelentz (1901:481) who seemed to have coined the term called 'typology' (Song 2018: Pp. 8).
- Though the term 'typology' began its life in twentieth century, the language typology has a much longer history.
- The history of language typology may go earlier than 1800s, but it is assumed that the great contribution of two German linguists, **Friedrich von Schlegel** and **Wilhelm von Humboldt** and their work brought a name for typological research.
- As we have been gradually getting tuned to the fact that typology, very broadly speaking, has a twofold purpose:'...(a) to identify universals and (b) to establish the potential range of variation among languages.
- The abovementioned purpose can be understood in simple terms as, '....typology is not only concerned with the differences amongst languages, but is also keen to find out the similarities shown up by the languages.

- The two German linguists (Schlegel and Humboldt) were also very much interested in working on various kind of languages from different parts of the globe.
- They also try to fulfill the abovementioned two-fold purpose of typological research i.e. to identify universals and to establish the potential range of variation among languages.
- However, unlike contemporary typologists, they were interested almost exclusively in the morphological-structures of different languages.
- To make it more accurate and precise, they were looking at the word-formation processes which were utilized in different languages.
- And on the basis of their investigation, they proposed to categorize languages on the account of how much morphology was used in the construction of words and what kinds of morphology were used.

- Some of the terminologies that were devised by the early typologists are still in use in modern linguistics (at least in morphology and typology).
 However, the modern typology has very little in common with the
- However, the modern typology has very little in common with the research of these pioneers.
- The assumptions, methods, and focus of current typological research have all drastically changed.
- We would try to trace the historical development of the discipline in order to understand the transition of early typological research work.
- This would help us to understand not only the progress that has been made in the filed, but also the hard-work(s) of the pioneers that have shaped the critical thinking of the field.
- We would also examine the status of language typology in present time and the current research work that are being carried out in the field.
- We would also demonstrate how the present typological research have gone through a sea change, a change that is taking place in the very conception of the research goal in the area.
- All of these could happen primarily because 'typology' teaches us the methods of doing research, which is compatible with most 'formal theories in linguistics'.

The forerunners of Typology

- If we trace the history of 'language typology', we would come the names like Gabelentz, Girard, Schlegel, Humboldt and some others who helped to bifurcate the field of typology from philology (i.e. an essential component of Historical linguistics)
- The research work of Schlegel, Humboldt, and their contemporaries was carried out under a very different presuppositions.
- However, it was quite significant for the growth and development of typology that they believed language to have *an abstract organic unity*.
- Bopp (1827:Pp. 1) states, '....Languages must be regarded as organic bodies, formed in accordance with definite laws; bearing within themselves an internal principle of life, they develop and they gradually die out.'
- Under this Darwinian view, languages behave like biological species. Thus, just as biological species do, languages emerge, develop into different varieties, compete with other varieties or languages, and ultimately some cease to exist.

- It is for this reason that the formal aspects of language such as its sounds, morphemes and other grammatical components and the changes that happened to these constructs over a period of time were predictable and *not random or arbitrary*.
- Like any living organism, a language could evolve and develop over a period of time, but it would always have its essence protected and preserved during all the stages of its development.
- However, the earlier researchers in the field also emphasized that these changes were reflections of an inner character of the speakers who spoke these languages.
- They believed Chinese, English, Korean, and Uganda, differ from each other because of *the inner character of the people who spoke them* and *the differences in their culture*.
- It is *this difference of character and culture* of the speakers of the language that gave rise to the differences that are found in the structure of different languages.
- The abovementioned notion is difficult to grasp in modern times because it is really far removed from the current understanding of human language.

- The form and nature of language could definitely influence the thinking (shaping the worldview) of the speakers, however, the vice-versa effect seems little awkward, unless there is some solid scientific proof.
- We must not forget, however, that the significance of any new development has its real value in its own period of time.
- Meaning if a theory or a hypothesis is presented some hundred years ago, we can't evaluated its direct relevance in present time and say how wrong the theory was!
- We must be sensitive to this aspect of research because the resources, the prevailing line of thinking and many other factors in a given period of time influence our research work and the process of thinking and theorization.
- Some developments might cross the boundary of time-line, but we should not evaluate every development with the yardstick of present time. For example,
- In present time, most of the researchers working in different areas of linguistics begin their work with the belief that language is explicable purely in physical terms.

- If we hold this view, we would say that the production and comprehension of sentences is ultimately nothing more than the <u>firing of neurons</u>.
- Now, this could have been totally incomprehensible for a good share of human history and a laughable stuff for most of civilization in the past.
- However, in modern times it is a well known fact that the neurons themselves are subject to the same physical laws which account for planetary motion, the properties of light and reproduction.
- Therefore, we should not hold it against the scholarship of the researchers just because their theory and line of thinking can not be applied and accepted in modern times.
- It was a great help and big break through in the field of typology (or for the study of language in general) that our predecessors could advocate language to have *an abstract organic unity*.
- Their this very belief without much help and support available from scientific investigation indicates about their profound philosophical thinking.

- Coming back to Humboldtian view of language and the typological classification, they hypothesized in the following way:
- They thought that the morphological differences between languages are so striking that it could became the best mirror for the *organic unity* of languages.
- They also thought that the morphological differences between languages could also function as a reflection of the inner character (mental capacity) and the culture of the speakers who spoke them.
- According to Schlegel and Humboldt the basic distinction, on the basis of the morphological differences between languages, can best be captured among **affixal** (1a), **inflectional** (lb), and **no structure** (lc) types of languages.

Typological classification of languages on the basis of how much and what kind of morphology is used:

(1) a. Affixal: Kirundi (Niger-Congo: Burundi)

Y-a-bi-gur-i-ye abana
CI-PST-C8-them-buy-APPL-ASP C2-children
'He bought them for the children'. (Adapted from Sabimana 1986)

b. Inflectional: Attic Greek (Hellenic: Greece)

hoi stratiōtai ēgoradz-on ta epitēdeia

the soldiers buy-3P-IMPF-ACT-IND the provisions
'The soldiers were buying the provisions'. (Xenophon, *Anabasis* 1.5.10)

c. No structure: Mandarin Chinese (Sinitic: China)

wo mǎi le shuǐguǒ le

I buy ASP fruit PTL

'I have bought the fruit'. (Adapted from Li and Thompson 1981)

(1) a. Affixal: Kirundi (Niger-Congo: Burundi)

Y-a-bi-gur-i-ye

CI-PST-C8-them-buy-APPL-ASP

C2-children

(Adapted from Sabimana 1986)

'He bought them for the children'.

- Kirundi (1a) is representative of an affixal language, representative because it represents **the type** in the best manner.
- It permits a series of morphemes to be affixed to a lexical head (i.e. a verb, noun or adjective).
- Consider the verb, *y-a-bi-gur-i-ye*. There are five affixes(three prefixes and two suffixes):
- a. y-, which indicates that the subject of the verb belongs to noun class1;
- b. the past tense marker *a*-;
- c. and *bi*-, a morpheme that denotes a direct object belonging to noun class8.
- d. In addition, there are two suffixes. The applicative morpheme, -i, being used here to identify the noun *abana* (children) as the beneficiary of the act of buying, and -ye which is an aspect marker.

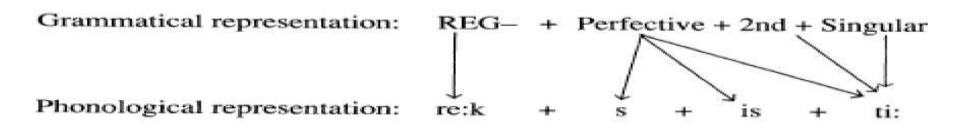
b. Inflectional: Attic Greek (Hellenic: Greece)

hoi stratiōtai ēgoradz-on ta epitēdeia

the soldiers buy-3P-IMPF-ACT-IND the provisions

'The soldiers were buying the provisions'. (Xenophon, *Anabasis* 1.5.10)

- Inflectional languages, like Greek (1b), would also accept affixation, but the affixes that are employed typically contain a great deal of semantic information.
- For example, the suffix *-on* reveals that the subject is third person (i.e. refers to someone other than the speaker or listener)
- That the subject is plural, that the verb is past tense and has a durative aspect, and that the sentence is a statement rather than a command or a condition.
- In inflectional languages, all of these functions/meanings are fused into a single affix, unlike affixal languages which tend to employ affixes that provide one piece of information each.
- Recall the sentence in Latin which we discussed in the morphology class. Latin: [re:ksisti:] 'You (sg) have ruled'.



all, meaning there are no prefix, infix and suffix in such languages.

Take a note of fact that in Mandarin Chinese (1c), which is commonly used as representing the type or class of a *no structure language*, we find that;

a). It has no verb agreement with the subject, b). The aspect marking, if it

occurs at all, comes as a separate particle (or a word) rather than a verbal

shuĭguŏ

In no structure languages, as the name suggests, affixation is not used at

'I have bought the fruit'. (Adapted from Li and Thompson 1981)

fruit

c. No structure: Mandarin Chinese (Sinitic: China)

măi le

ASP

 \mathbf{wo}

affix.

They thought that languages were unified in their structure, and morphological classification such as mentioned above was thought to be very useful in categorizing languages into different groups.

This kind of language classification obviously would not make sense to

us, however, it was the only means or may be the only prevailing conditions in the past to classify the languages into groups.

- Similar to the mainstream thinking of modern linguistics, Humboldt assumed that *language had an inseparable association with the human mind*.
- In fact, he believed that universals of language were actual manifestations human thought (Brown 1967).
- However, unlike modern linguists, Humboldt (1971) also thought that structural differences in languages must reflect the basic differences of the mental capacity and activity of various speech communities.
- The quality of languages, he thought, could be determined by how closely they resembled to an idealized linguistic system.
- And thus he claimed that language structure was reflection of intellectual capacity of the community that spoke it.
- This led his linguistic philosophy to manipulate the claims of cultural superiority using the following logic.

- Because German matches more closely to the structure of a perfect language than Chinese, it is superior to Chinese.
- Also, because language structure derives from intellectual prowess, it follows that German thought is superior to Chinese thought.
- However, we, in modern times, have to reject both the assumption that languages can be judged against any ideals and also the claim that variations in language structure relate to differences in any intellectual capacity.
- The linguists, in the present time, find it absurd to make any judgments about the superiority of a culture on the basis of how words are formed and sentences are composed.
- So, a change was urgently in demand by the researchers in the field and the change came in the later half of 1800.
- It almost appeared such that a shift in the thrust area of typological research has started taking place.
- The typological research was becoming more dominated by the *historical-comparative method* to language study.

- The major goals of linguistics were seen as understanding the processes that gave rise to language change and determining the historical relationship among languages.
- For this reason, typology was marginal to linguistics in the first half of the 1900s.
- However, in the early twentieth century several important changes took place with the advent of Ferdinand de Saussure.
- He and his contemporary linguists began to argue that, although language may be organic and therefore changing, but at any given point in time language is a self-contained system.
- Thus, Leonard Bloomfield (1933,19) wrote, "...in order to describe a language one needs no historical knowledge whatever."
- This brought a shift from a *diachronic* (historical) perspective to a *synchronic* perspective (looking at a language at a single stage in its development).

But, they completely rejected any belief that differences in morphological form revealed differences in the "inner form" of the language and intellectual capacity of the people who spoke it.

Across the Atlantic, linguists at Prague School were also looking

Bloomfield and other linguists from American Structuralism

in their research on languages.

continued to use and emphasize the usefulness of morphology

at languages similar to what one would like to call typological approach.

They argued that *certain characteristics of language are inherently linked*.

Roman Jakobson (1929,1963) pointed out that the vowel inventory and consonant inventory in languages are connected in predictable ways.

For example, if a language has nasal vowels, it will also have

nasal consonants.

Statements like this capture facts about language that are always true.

16

Later work by the Prague School, particularly by *Skalička* (1935, 1979), recognized that many *language* properties are associated in probabilistic rather than absolute manner.

In describing them, one can only propose a non-absolute

universal (tendency) and should have space for the others who will further take up the issue and continue the research.

So, the American Structuralists and the linguists from Prague School helped the discipline of typology to flourish in several way.

But, it was Joseph Greenberg who made a landmark change in the outlook of the field of typology and the nature of typological work.

His contributions in the field can not be described in some numbers or points, however, some very important ones can be stated for pedagogical purpose as follows:

- *First*, Greenberg (1954) pioneered to establish a quantitative and qualitative basis for typological study.
- Until the time of Greenberg, typology was highly subjective and it lacked the "scientific" standards that American linguists were trying so desperately to achieve in the 1940s and 1950s.
- Greenberg developed a strategy to measure numerically both the degree and the types of morphology present in a language.
- His quantitative approach showed that languages did not fall into discrete morphological types (Croft 1990).
- That is, a language such as English cannot be said absolutely to be *an inflecting* or *no structure language*, rather, it is closer to being a no structure language than Greenlandic Eskimo but more inflecting than Khmer (Mon-Khmer: Cambodia).

The second contribution of Greenberg in the field was that according to him the proper task of typology is not comparing languages per-se but instead comparing the construction types that are found in different languages.

The real task of the typological work is not to answer "What kinds of languages are there?" but to answer "What kinds of structures do languages have ?"

This assumption has become explicit in the work(s) of many current typologists and also in several theories of grammar (e.g. Relational Grammar, HPSG and also in LFG).

Third, Greenberg made full use of the ideas and the notions proposed by the Prague School that certain aspects of structure in language correlate and the implicational universals can be stated in terms of the correlation.

These implicational universals have a form such as "given X in a language, Y is also found."

His seminal paper, "Some Universals of Grammar with Particular Reference to the order of Meaningful Elements" (Greenberg 1966), brought out 45 implicational universals.

Greenberg's *fourth contribution* is related to the approach and the focus *on the ways* that described the language-change in course of time.

Greenberg's interest in diachronic linguistics was in many ways a come-back to the earlier days of typology in which *historical comparative* linguistics predominated the research in the field of typology.

The uniqueness of Greenberg's work, however, was in his use of language change as an explanation for language universals.

The basic insight is the following;
'...because the form that a language takes, must have

resulted from the change that has occurred at some point in time in the language;

Therefore, one should expect to find some explanations for universals by examining the processes of language-change.

Finally, Greenberg helped to draw attention to the importance of a proper database in the research for language universals.

He made at least some attempts to remove the *genetic* biases from his claims about universals by using a large sample of languages (30 languages altogether) and including languages from many language families.

The last great impact that happened on typological research is due to the linguistic development that took place in Generative school of thought.

Chomsky's model of linguistic competence and its evolution which can be traced through Chomsky's work during 1957, 1965, 1970,1981 and post-1990 have had great impact on the research in language typology.

- For those who are familiar with different fields of linguistics, the inclusion of Chomsky as one of the major contributors in the field of typology might appear awkward or even objectionable.
- After all, Chomsky himself has never engaged in typological research and has generally been skeptical about typology's capacity to inform him in establishing his UG in syntax.
- The facts, however, remain debatable and we could still say that the cornerstone concept of Chomsky's model, Universal Grammar, has great influence on typology
- Chomsky's notion of universal grammar has some bearings to the typological investigation into the nature and function of languages.
- After all, the search for universals, word-order, implication of word-order etc. is somewhat related to the notion of UG which is advocated by Chomsky.
- The next slide a small hint and proof as to how typology has benefited from Generative school of thought.

- INPUT:
- $S \rightarrow NP; VP$
- VP→V; NP
- Together, the rules generate the following structures:
- OUTPUT
- NP_{sub} V NP_{obi} [=SVO]
- NP_{sub} $NP_{obj}V$ [=SOV]
- $V NP_{obj}NP_{sub} [=VOS]$
- NP_{obi} V NP_{sub} [=OVS]

That's all for today ©