*PAPER 7 (HISTORICAL LINGUISTICS)*
TYPOLOGICAL CLASSIFICATION OF LANGUAGE

Attempts to classify languages by their types rather than by their relationships were made from the beginning of historical linguistics. In 1818 August Von Schlegel proposed a typological classification which was widely followed and elaborated through the 19th century and still has a great popularity.

Schlegel's system was based on the number of meaningful elements (morphemes) which could be present in a word and the modification these might undergo. According to this classification, languages can be divided into three types- isolating or analytic, inflectional or synthetic, and agglutinative. Features of these three types are usually to be found in most languages, though in different proportions. If the three types were arranged as a triangular as

```
            I
           /\
          /  \
         /    \
        /      \
       /        \
      /          \
     I ---------- A
```
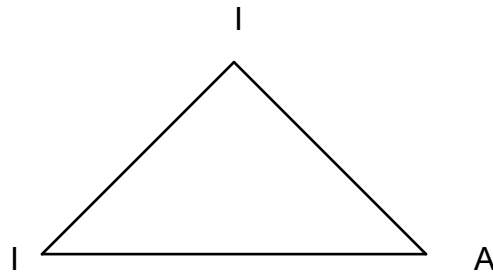
each language could be placed at some approximate point therein after a statical analysis of its word structure patterns.

1.ISOLATING (analysis): Isolating languages exhibit no formal paradigms. It has only one element of basic meaning per word and in such cases they are monomorphemic. For example, when, as, since, from, etc. and their grammatical status and class-membership is determined by their syntactic relations with the rest of the sentence in which they occur. In English invariable words such as prepositions, conjunctions and many adverbs are isolating in types. Chinese, several other Southeast Asian languages-Vietnamese are examples of such types. In them the bound morphemes are rare and words containing more than one morpheme are not thereby grammatically different. Words in such languages are assigned to word-classes on the basis of different syntactic functions.

2. INFLECTIONAL: If there are several meaningful elements, but are in some way fused together or are modified in different contexts, the language will be inflectional. In it words having several grammatical forms in which it is difficult to assign each category to a specific and serially identifiable morphemic section. Classical languages such as Latin, Ancient Greek, Sanskrit are the most obvious examples of such type. For example, Latin 'amo' (I love) is morphemically divisible into two morphemes; root /am-/and suffix /-o/; but this suffix, though morphemically not further divisible, marks five separate categories, each syntactically relevant in different ways to other words in sentences in which the form may occur: singular number, first person, present tense, indicative mood and active voice. English nouns such as men, geese, mice, women are inflectional. Inflectional languages were held to represent the highest stage of evolution and the most perfect form of human communication.

3. AGGLUTINATIVE: If there is more than one element of basic meaning, but these were kept apart from one another and undergo no modification, the language is

agglutinative. Morphologically complex words in which individual grammatical categories may be easily assigned to morphemes stung together serially in the structure of the word-form exemplify the process of agglutination. Turkish, Sudanese and Japanese are examples of such type with the Turkish as the perfect one. Languages of these types are alike of necessity in respect of word structure. Grammars of these languages are very different in other respects.

Typological classification will ultimately be based on all the systems of language, phonological as well as grammatical and semantic. But recently an approach for combining all these systems has been made available.

The most complete typology based on grammatical-semantic is that of Fink. Fink viewed man's use of speech as consisting of two essential processes:
1. analyzing a real situation into its components.
2. restoring it to a whole via the words of language.

As an illustrative situation, a man approaching would be analyzed into two components: an actor and an action. While reporting this situation, a Chinese speaker matches each component with a word: ta he lai 'come'. A Turkish speaker would use only one word: 'gelior', combining two situational elements while an English speaker would use three "he is coming", introducing more words than three are components in the situation.
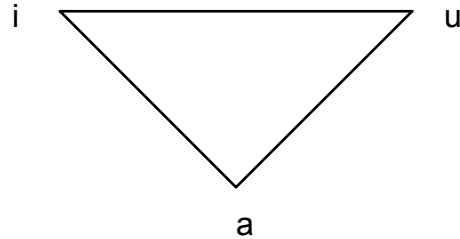
According to the analysis of the situation, Fink assumed eight types. On one side is the language like Turkish in which a word indicates several elements of a situation, on the other, the language like English in which a word indicates less than one element of a situation. Chinese provides an ideal fit between any situation and its restoration in language by representing one element with one word. Moreover, the eight types Fink proposed were not meant to be exhaustive, for others may still be discovered or may develop in future.

Though Fink gave examples with commentaries of these eight types, he found only sporadic successor to apply his system more widely and thoroughly. When typological study was again undertaken, as by Sapir, purely formal analysis was preferred to that based on form and meaning.
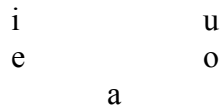
Two approaches to typological classification have been made by structural linguists, without relation to each other. Independently of typologies based on grammar, pholonolgists have attempted to set up various types of sound systems. Typologists, dealing with grammar, especially morphology, have attempted to determine general grammatical features by which languages may be typed. Those proposed by Sapir were determined from characteristics observed in a wide variety of languages, not like Fink's from the application of semantics and psychology. Greenburg so modified Sapir's approach that typological classification may finally become widely applied. His modification permits classification of languages by selected structural features rather than by the entire language. In both phonological and grammatical classification for types any structural features may be utilized which are broadly represented in a language.

In phonological classification much effort has been devoted to types of arrangements of phonemes. Some languages have triangular system of vowels, i.e. Arabic dialects. Classical Latin has five vowel system or some dialects of English have nine vowel system.
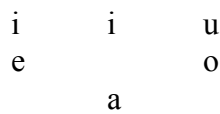
ARABIC

```
          i  \‾‾‾‾‾‾‾‾‾‾‾‾/  u
             \          /
              \        /
               \      /
                \    /
                 \  /
                  \/
                  a
```

CLASSICAL LATIN   i   u
                                    e   o
                                        a

ENGLISH   i   i   u
                                    e   o
                                        a

TAUKWA   i   o
                               e   a
```

      Vowel systems may be classified for degrees of openness and looseness, with two in Arabic, Toukwa and Turkish, three in classical Latin and English, four in Italian and so on. Classifying these by number of distinctive position from front to back would result in two for Toukwa, three for English and four for Turkish.

      Consonant systems, too, may be classified for configuration of components. English has relatively large number of fricatives, few stops, a syntactical arrangement for voiced and voiceless entities throughout the obstruent system of stops and nasal.

      By classification for the distinctive features set up by Jacob and his colleagues, vowels and consonants may be treated together. In this way the stop systems of Czech and French pattern like the vowel systems of Wicheta and Arabic.

|  | Czech | French | Wicheta | Arabic |
|---|---|---|---|---|
| compact | k   e | k | a | a |
| diffused |   pt | pt | u   i | u   i |
|  | Grave acute | Grave acute | Grave acute | Grave acute |

      Other phonological features for use in typological classification are the role of quantity, juncture, and the structure of the syllable. The number of phonemes preceding following the syllabic peak might be noted and compared.

      Sapir's classification by morphological criteria resulted in four basic types of language, but his classification, like those of Fink are not precise and are difficult to compare from language to language. Greenberg attempted to solve this problem by suggesting that classification of languages for their types be replaced by ranking for individual criteria.

Instead of labeling a language as synthetic or analytic, Greenberg proposed that a synthetic index be determined for any given language. Greenberg's synthetic index indicates the ratio of morphs per word in a given language. Sapir's sentence:
(i) The (ii) farm (iii) er (iv) kill (v) ed (vi) the (vii) duck (viii) ling - yields a synthetic index, of 1.6 for it contains eight morphs but only five words. In selected examples Greenberg found synthetic index to be 1.68 for English 3.72 for Eskimo and 1.66 for Armamese.

Greenberg's second index is one of agglutination. When morphs are added to bases in a language like Turkish, many of them assume different shapes by automatic alternation. The genetive morpheme alternates in accordance with the form to which it is added, the genetive 'ev' house is even, of at 'horse' atin, of yol 'read' yolun. If all morphemes functioned in this way in Turkish, the index of agglutination would be 1.00.

A third index is that of morpheme class per word, with subdivisions for root, derivational and inflectional morphemes. English has virtually one root per word; though some words like 'blackbird', contain more than one root per word. It also has relatively low index of derivational morphs per word, and a moderate index of inflectional morphs per word.

A fourth index is that of affixes per word. As in other Indo-European languages the index of prefix is low in English, the index of suffixes relatively high.

Greenberg's fifth index deals with relationship, the indication of relationship by order, by pure inflectional or by argument. Relationship in English is largely indicated by order, to a much smaller degree by inflection, and to an even lesser degree by argument.

The rank order determined by these five criteria seems to result in classification similar to that of Fink. Of Greenberg's eight examples, Eskimo has the highest ratio for synthesis, the lowest for agglutination. Armamese has the highest ratio for isolation, the lowest for affixes per word. Under both systems of classification we might label Eskimo polysynthesis, Armamese isolating.

The criteria for ranking languages by syntax have also been tentatively proposed. One such is ratio of particles to words, proposed by House holder. Another ratio is based on the number of words before heads of constructions to words after them.

Of these three linguistic level the morphological level is clearly the most successful. In accordance with the techniques applied for morphology, it would be useful to produce phonological classification. By doing so, phonological typing will be based on analysis of running texts rather than on analysis of phonological systems.

Although the chief aim of typology is classification of languages, it promises new techniques of historical studies. Typological classification applied at selected stages of languages would enable us to mark their development on the basis of verifiable criteria. Such indices would not be based on a selected segment of the vocabulary, but would include borrowings, which hamper genealogical classification. Until typological classification by indices had been carried out extensively for a great number of related languages, we cannot know what insight it will give us into language change or language inter-relationship.