



## Morphological Typology: A Comparative Study of Some Selected Languages

Bushra Farhood Khudheyier AlA'amiri

Prof. Dr. Abdulkareem Fadhil Jameel, Ph.D.

Department of English, College of Education/ Ibn Rushud for Humanities  
Baghdad University, Baghdad, Iraq

### Abstract

Morphology is a main part of English linguistics which deals with forms of words. Morphological typology organizes languages on the basis of these word forms. This organization of languages depends on structural features to mould morphological, patterns, typologising languages, assigning them to analytic, or synthetic types on the base of words segmentability and invariance, or measuring the number of morphemes per word. Morphological typology studies the universals in languages, the differences and similarities between languages in the structural patterns found in different languages, which occur within a restricted range. This paper aims at distinguishing the various types of several universal languages and comparing them with English. The comparison of languages are set according to the number of morphemes, the degree of being analytic ,or synthetic languages by given examples of each type. Accordingly, it is hypothesed that languages are either to be analytic, or synthetic according to the syntactic and morphological form of morphemes and their meaning relation. The analytical procedures consist of expressing the morphological types with some selected examples, then making the comparison between each type and English. The conclusions reached at to the point of the existence of similarity between these morphological types . English is Analytic , but it has some synthetic aspects, so it validated the first hypothesis and not entirely refuted the second one.

**Key words:** Morphological typology, Linguistics, morphemes, Analytic, Synthetic

## التشكل المورفولوجي: دراسة مقارنة لبعض اللغات المختارة

الباحثة: بشرى فرهود خضير العامري أ. د . عبد الكريم فاضل جميل

جامعة بغداد / كلية التربية للعلوم الانسانية ابن رشد

## الخلاصة:

علم المورفولوجي هو جزء رئيسي من اللغويات الإنجليزية التي تتعامل مع أشكال الكلمات. ينظم التصنيف المورفولوجي اللغات بناءً على أشكال الكلمات هذه. يعتمد تنظيم اللغات هذا على الميزات الهيكلية لتصميم الأشكال المورفولوجية، تصنيف اللغات ، وتكليفها بأنواع تحليلية أو تركيبية على أساس الكلمات ، التقسيم والثبات ، أو قياس عدد الأشكال لكل كلمة. يدرس التشكل المورفولوجي الفروق وأوجه التشابه بين اللغات في الأنماط الهيكلية الموجودة في لغات مختلفة ، والتي تحدث داخل نطاق مقيد. تهدف الورقة إلى التمييز بين أنواع بعض اللغات العالمية المختلفة ومقارنتها بالإنجليزية. مقارنة اللغات وفقاً لعدد الأشكال ، ودرجة كونها لغة تحليلية ، أو لغة تركيبية بواسطة الأمثلة المعينة من كل نوع. وفقاً لذلك ، يُفترض أن تكون اللغات إما: تحليلية أو تركيبية وفقاً للنموذج النحوي والمورفولوجي للتشكيلات وعلاقة معانيها. تتكون الإجراءات التحليلية من التعبير عن الأنواع المورفولوجية مع بعض الأمثلة المختارة ، ثم إجراء مقارنة بين كل نوع والإنجليزية. تشير الاستنتاجات التي تم التوصل إليها إلى وجود تشابه بين هذه الأنواع المورفولوجية. اللغة الإنجليزية هي لغة تحليلية ، لكن لها بعض الجوانب التركيبية ، لذلك أثبتت صحة الفرضية الأولى ولم تدحض الفرضية بالكامل.

الكلمات المفتاحية: التشكل المورفولوجي، علم اللغة، مورفيم، تحليلي، تركيبية.

## Introduction

Typology is the study and classification of languages according to structural features, especially patterns of phonology, morphology, and syntax, without reference to their histories. It attempts to categorize languages based on similarities in structure. The term typology is borrowed from the field of biology and means ‘taxonomy’ or ‘classification’, “the study and interpretation of types”(Croft,2003:8).

Morphology is the field of linguistics that studies the internal structure of words and the different forms that words can assume by adding affixes or by combining them with other words. It is the study of forms of words. The scope of morphology is ; grammar vs. phonology and morphemes (Matthews, 1991:122).

Morphological typology is a way of classifying languages according to their morphological structures. It organizes languages on the basis of their word forms by combining morphemes. Morphological typology usually recognizes two canonical types of languages: analytic( a language where there is one-to-one correspondence between words and morphemes), and synthetic languages. (those where a word may consist of more than one morpheme, but the boundaries between morphemes in the word are always clear-cut ( Moravcsik, 2013:112).

The range of language patterns may vary according to their typology, both in the similarities and differences between languages in the ways words are formed. Katamba (1993: 41) distinguished five morphological types with examples, based on typical patterns of word formation: analytic, agglutinating, inflecting, incorporating and infixing languages.

The range of languages patterns may vary according to their, both the similarities and differences between languages in the ways in which they form words. Katamba(1993:41) distinguished five morphological types with examples, depending on typical patterns of word-formation: Analytic, ,;,and Infixing languages.

Analytic, where each word consists of one morpheme, allows no affixation . Analytic language depends more upon syntax to express grammatical categories and relationships among words (Mandarin Chinese is Analytic). Fusional languages, which combine several parts of grammatical

information, are not a clear one to one relationship between grammatical information and morphemes (Latin is fusion). Polysynthetic languages are a well- developed array of fused inflections with a great morphophonemic complexity e.g. Greenlandic (Turkish is an agglutinating). Turkish number and case are expressed by different morphemes in the noun. Arabic is an infixing language, where the affixation is located within the word (Velupillai, 2012: 108).

### 1.The Analytic (Isolating) Language

Analytical language is a type of language with a very low morpheme per word ratio, with no inflectional morphology. Each word contains a single morpheme. This language has only free forms, even sentences are a sequence of single-morpheme words, in which the word consists of only one morpheme. These languages have no inflection, and the most extreme ones make limited use of word formation processes (Shopen,2007:23)

An Analytic language is a type of language with a very low morpheme per word ratio, with no inflectional morphology. each word contains a single morpheme. This language has only free morphemes, even the sentences are sequences of single-morpheme words) in which a word consists of only one morpheme. These languages have no inflection , the most extreme ones make limited use of word formation processes (Shopen,2007:23)

This one-to-one correspondence between a morpheme and a word in some languages represents every morpheme as an independent word. An almost perfectly Analytic language has no morphological variation for tense, or for grammatical function. Even the time reference is understood from the context; Analytic languages rely heavily on context and pragmatic considerations for the interpretation of sentences, since they do not specify (as synthetic languages) an agreement between different parts of the sentence.

Analytic type words are monomorphic, invariable, and formed by a single root. There is a missing of bound forms. the meaning and function of a word considerably depend upon the syntagmatic context. There is a little morphological complexity, morphs are identifiable both phonologically and semantically, and morph boundaries are defined. The nonexistent derivation is partly replaced by compounding (Croft,2003:102 ).

## 1.1 Typical Features of Analytic Languages

Monosyllabic morphemes and words are distinguished by means of segmental phonemes, and tonemes are used in a language without inflection. The functional load is carried by tonemes in analytical languages. Function words and fixed word order were implemented in analytical languages

Analytic languages which are found in three parts of the world, in East and Southeast Asia (e.g. Chinese), as well as West Africa and South Africa . They share a number of linguistic features:

1. The monosyllabic morphemes and words
2. The extensive use of tonemes
3. The extensive use of function words
4. The use of fixed word order
5. No rigid grammatical rules (Brown, 2009: 19).

## 1.2 Chinese as Example of an Analytic Language

Katamba(1993:101) discussed that the morphological types in analytic morphology in Chinese bound morphemes are infrequent. Words never have inflectional affixes, they are unaffixed root morphemes. Each word in the Chinese sentence corresponds to one morpheme, where each morpheme tends to occur as a word in isolation.(e.g. the object marker ba is an independent word).

There are some facts about Chinese. It has no inflection. Subject, object, and functional words are often optional. Word, sentence boundaries, and word class distinctions are ambiguous. There is a fluid and flexible system in Chinese, despite rigid rules in Chinese grammar. In Chinese, the aspectual morpheme is realised, not by an affix, but by the independent word (Manker, 2016: 11). Katamba (1993: 101) gave an example of the Chinese language.

There are some facts about Chinese; It has no inflection. subject and object, and function words are often optional. Word and sentence boundaries, and word class distinctions are fuzzy. There are fluid and flexible system in Chinese, in spite of the rigid rules in Chinese grammar. in Chinese, the aspectual morpheme is realised, not only by an affix, but by the independent word (Manker,2016:11). Katamba(1993:101) gave an example about the

Chinese language.

Ta ba shfi mai le  
He OM book buy Asp  
He bought the book

### 1.3 Similarly and Difference Between Chinese & English

1. Speakers are more certain about sentence boundaries in English than in Chinese.
2. English is more rigid than Chinese, a speaker of English can decide whether to talk about objects in singular or the plural, and whether he wants to talk about events in the present or the past.
3. In sentences with no logical subject, a formal subject is required ( e.g. It rains ). The function of the pronoun "it" is to fill the obligatory subject slot .
4. English makes use of word order to show subject–object relationship .The subject pronoun 'he' contrasts with the object pronoun 'him' in; "He saw Lauren vs Lauren saw him". The change from 'he' to 'him' in the pronoun, marks the change in grammatical function (katamba,1993:42).
5. Similarly, in English markers of aspect and tense are usually inflectional affixes of the verb such as '-ed', as in 'cook-ed'. Both analytic properties (future morpheme will, perfective morpheme are separate words) and synthetic properties (plural (-s) are bound morphemes.
6. An analytic language such as English may contain polymorphemic words due to the presence of derivational morphemes. A language is said to be more isolating than another if it has a lower morpheme per word ratio., the English term "rice" is a single word consisting of only one morpheme (rice). This word has a 1:1 morpheme per word ratio. The word "handshakes", is a single word consisting of three morphemes (hand,shake, -s). This word has a 3:1 morpheme per word ratio (Manker,2016:89).
7. Words in English have a morph ratio for each word much larger than one. Chinese also uses word order to show definiteness (where English uses 'the' and 'a'), topic–comment relationships, the role of adverbs. English grammar would require a reference to time in the verb in every sentence( Shopen,2007:112).

## 2. Agglutinative Language

An Agglutinative language is a type of Synthetic or a Polysynthetic language which uses agglutination. It refers to the processes in which the words can be decomposed into a sequence of morphemes. Comrie(1989:50) points out, that the term Agglutinating was introduced by Wilhelm von Humboldt to classify languages from a morphological point of view. It is derived from the Latin verb Agglutinare, which means "to glue together".

In this type, language tends to be a more or less one-to-one matching of morphemes with morphs, where there is a one-to-one correspondence between meaning and form. Each of these word elements represents no more than a single grammatical category. Words may contain different morphemes to determine their meaning, but each of these morphemes ( stems and affixes) remains unchanged after their union. A word may consist of several morphemes but the boundaries between them are clearcut. There is typically a one-to-one correspondence between a morpheme and its meaning, and a morpheme has an invariant shape which makes it easy to identify( Manker, 2016:113).

Each morpheme ( free or bound morphemes) has a single function. Agglutinative languages constitute a state between fusional, and analytic languages. They resemble Fusional languages in having more than one morpheme per word, while the affixes of Agglutinative languages are more independent than the affixes of Fusional languages. Agglutinative languages share the one-to-one correspondence between meaning and form with analytic languages. Agglutinative classic examples are; Finnish, Japanese, Hungarian and Turkish (Hana &Feldman, 2013:43).

### 2.1 Features of Agglutinating Type

1. Words are formed by a root with a detachable sequence of affixes, each of them expressing a separate item of meaning.
2. Very high matching between morphs and morphemes.
3. Each affix carries only one meaning, no cases of homonymy or synonymy among affixes. (Brown,2009:32)
4. Word-class distinction is minimal, the same affixes tend to occur with roots belonging to different parts of speech

5. Derivational affixes are widely employed in word formation, and the distinction between inflectional and derivational affixes is very slight.( Comrie,1989:50)
6. Relatively fixed word order with no agreement (Moravcsik, 2013:101)

## 2.2 Turkish as Agglutinative Language: The Word 'Son'

Turkish is a vowel-harmony language, the vowel of the suffix is mirroring stem vowel's frontness or backness. Affixes are added to roots .The three principal allomorphs of the plural are conditioned by the last sound of the stem, the plural suffix also has variant forms. From the syntax and semantics viewpoints, a noun is segmentable into a lexical stem, a number affix, and a case affix ,or two relevant categories; Number ( singular, or plural) and Case , whose different terms Absolute ( for a Subject or an Indefinite object) , accusative ( for a definite object ) to distinguish the various syntactic and semantic functions of the Nominal phrase (Matthews,1991:206).

The word ' son ' introduces a set of allomorphs for each of the morphemes. Plural had the allomorph –'ler' in 'sonlar'. Dative, Locative and Ablative were marked by '-a', '-da' and '-dan in 'sona' , 'sonda' and 'sondan'.These four morphemes posit a further variation between a set of forms with 'e' in one paradigm (-ler, e , -de and -den) and a set with 'a' in the other (-lar, -a, -da and -dan) .The paradigm for ' son ' establishes two further allomorphs both for the Accusative and for the Genitive lie between forms in u (-u or -un) and in z (-z o r -m). (Matthews,1991:145)

Singular	Plural
Absolute	son sonlar
Accusative	sonu sonlan
Genitive	sonun sonlarm
Dative	son a sonlara
Locati'i,'e	sonda sonlarda
Ablative	sondan sonlardan



## 2.3 Similarity and Difference Between Turkish & English

- a. In Turkish, affixes are added in sequence to the end of a word. The suffix '-di' is used to express the past tense, and the suffix '-mi' is used to ask a yes/no question. There is no separate verb 'to be'. In English, the change of past tense depends on adding suffixes '- ed'. Using auxiliaries, and verb 'to be' (Brown,2009:30).
- b. Suffixes are added to the root of a verb to indicate tense and person. e.g. 'anlamıyorum' which is made up of the verb root (anla-), the negative suffix (mi), the first person present continuous tense indicator (iyor) and the first person marker (-u m). English adds the suffix '- s' with the third person in present, while it uses 'not' in the negative (Song,2014:30).
- c. Gender and number in nouns and adjectives in Turkish; Nouns do not have gender, they just show number, possession and case. Nouns can be pluralised by adding the suffix '-ler' or '-lar' but the plural is used less frequently than in English. Numbers are followed by a singular noun, e.g. one book, five book, which is the same as Welsh but may cause difficulties in English.
- d. There is no definite article and there are differences between indefinite article usage in English and Turkish( Fernando & McCarney,2012:16).

### d. 3.Fusional ( Inflected)Language

Fusional language is a type of synthetic languages, distinguished from agglutinative languages by its tendency to use a single morpheme in combination with affixes to denote multiple grammatical, syntactic, or semantic changes (Shopen,2007:111). In fusional languages, there is no clear boundary between morphemes, and thus semantically distinct features are usually merged in a single bound form or in closely united bound

Fusional languages have more than one morpheme per word; they may have morphemes that combine multiple pieces of grammatical information; that is, there is not a clear one to one relationship between grammatical information and morphemes. Well-known representatives of this type of language include Latin, Sanskrit, and Greek (Brown,2009:91)

### 3.1 The Properties Fusional Type

1. Words are formed by a root, and inflectional affixes, which are used as a means to indicate the grammatical function of words.
2. There is a high degree of modification of internal morph boundaries, with a difficult linear segmentation.
3. Tending to express one meaning per morpheme or in a single affix.
4. Word-class distinction is maximal. Inflection, regarding both the number of inflectional classes and the extension of paradigms.
5. Stem suppletion of both homonyms and synonyms among affixes. A clear distinction between inflectional and derivational affixes.
6. Correlation with syntax in the free word order (Brown,2009:27).

. Katamba(1993:55) stated that singular plural nominative is used if the noun is the subject; 'genitive' and 'ablative'.The word 'mensis' in "Latin" is an unsegmentable morph representing the plural and nominative morphemes, and the plural and ablative morphemes.

Nominative: mensa mensre

Genitive: mensre mensarum

Ablative mensa mensis

Fusion denotes the degree to which morphological markers attach to a host stem in three types of fusion.

- a. A marker that stands alone as a free morpheme, that is, as an independent word.
- b. Markers that are bound, i.e. that have to attach to a host, are concatenative.
- c. The referring to the "root-and-pattern", which is typically found in Semitic languages(Moravcsik, 2013:93).

### 3.2 Similarity and Difference Between Latin & English

English differs from Fusional language in two fusional features; Declensions and Conjugation, and the grammatical markers.

1. Declensions when nouns and adjectives have a suffix attached to them to specify grammatical case, number, and grammatical gender; pronouns may alter their forms entirely to encode this information. In English, encoding for case is vestigial because it encompasses only pronouns, corresponding to the

single vestigial pair 'he', 'him' in English , to show subject–object relationship e.g. 'He saw Lauren vs. Lauren saw him'. (Song, 2014:40 ).

2. Conjugation is the alteration of the form of a verb to encode information about the grammatical mood, voice, tense, aspect, person, grammatical gender, and number. In a fusional language, two or more of these pieces of information may be conveyed in a single morpheme, typically a suffix. English also has two examples of conjugational fusion. The verbal suffix '-s' indicates a combination of present tense with both third person and singularity of the associated subject. The verbal suffix '-ed ', used in a verb with no auxiliary verb, conveys both non-progressive aspect and past tense( Velupillai, 2012:202).
3. English is similar to Fusional languages in having isolating markers which are different from Fusional markers. (e.g. the modal 'must' in 'He must be home by now'), Concatenative markers (e.g. plural '-s' in 'a tree' (sg) versus 'trees' (pl), and Non-linear markers as in the ablaut in (sing – sang – sung).It is impossible to give a complete inventory of grammatical markers for each language (Fernando & McCarney2012:14).

#### 4. Incorporating (Polysynthetic) Language

Incorporating languages are highly synthetic languages, in which words are composed of many morphemes. They typically have long "sentence-words"( Fernand&McCarney2012). They are like agglutinative and fusional languages in displaying a high degree of affixation and fusion of morphemes. Words in incorporating languages are formed either by inflection or extensive agglutination . Incorporating languages may have words with multiple stems in a single word ( Manker, 2016:154)

It is an extremely synthetic language, where words are very complex and sometimes constitute entire clauses, with extensive use of inflection, derivation and compounding. Having extremely complex roots and affixes combined together, often one word corresponds to a whole sentence in other languages.( Hana & Feldman, 2013:6)

A single-though extensively long-word may represent an entire phrase, or even sentence, including a verb, an adjective and an object. Incorporating languages are found among Eskimo and in Native American languages and in Aboriginal languages of Australia( Fernando& McCarney, 2012:16).

#### 4.1 Formal Properties of Incorporation

Incorporating structures can be classified according to what type of material gets incorporated and the degree of formal cohesion between the components ( Hana & Feldman, 2013:49). The incorporated nominal constituent consists of:

1. A free form of a noun
2. A bare noun root
3. An apical suppletive or semi-suppletive form

#### 4.2 Greenlandic Eskimo as an Incorporating Language

The incorporating languages are characterized by extreme internal complexity of grammatical words. The bound morphemes often express the syntactic structure and semantic content reserved for lexemes in languages of other types. They refer to the combination of large numbers of morphemes within one word. In incorporating languages there is a distinction between morphology; the study of word structure, and syntax; the study of sentence structure( Shopen, 2007:437). The typical incorporating language example is Greenlandic Eskimo.

e.g. angyaghllangyugtuq { 'he wants to acquire a big boat' }

(Eskimo) 'palyamunurringkutjamunurtu' { 's/he definitely did not' } ( Hana & Feldman, 2013:49).

#### 4.3 Similarity and Difference Between Eskimo's Language & English

Eskimo language is different from English, where changes of word order can be expressed in Eskimo in one word , that may include a verb and its object, what is said using a whole sentence containing several words in English. Eskimo's language is a language with long words that tend to have very Eskimo extensive agglutination and inflection . The words of an Eskimo language sentence can generally be put in any order, without affecting basic meaning , but small changes in the verb form have a large impact , however. The prefixes on the verb while leaving word order constant is enough to reverse the meaning of the sentence. These sentences are not expressed as a separate noun phrase . It is “incorporated” into the verb, forming a kind of

compound. (katamba,1993:40)

The unifying property of Eskimo language is that every participant of an event be expressed somehow in the main verb, either as a pronoun-like prefix, or as an incorporated noun. A sentence without these features is ungrammatical. No such requirement holds in English. Eskimo language is like English in that 'give' names an event involving three participants, a subject (the giver), an object (the given thing), and an indirect object (the receiver). All three must be expressed in both languages. The observation that a noun incorporated into a compound can only express the object is also valid for both languages: English has the compound form gift-giving, and baby-giving ( unlikely meaning ). Noun is accented on the first syllable (conflict , export) and a corresponding Verb on the second ( Manker, 2016:155).

This may be achieved by incorporating the subject and object nouns into complex verb forms. it also has polymorphemic words such as the infamous anti-dis-establish-ment-arian-ism sporting six morpheme.

## 5. Infixing (introflexion) languages

Infixing languages are Afro-asiatic languages, they usually form words by inserting a word-building element within the root(Fernando &Dee McCarney,2012:17). When words are constructed or partially constructed not through the concatenation of linearly separable morphemes, but by the interdigitation of morphological forms which individually do not constitute self-standing phonological wholes. This type of morphology is variably termed introflexional , nonconcatenative, or transfixing ( Brown,2009:27 ) .

Traditional typology neglected this morphologica processes typical of Semitic languages like Arabic and Hebrew. Much of Semitic inflection involves infixing vowels in a root that consists of consonants (Katamba,1993:102) .

### 5.1 Properties of Infixing Language

1. Inflectional and some derivational categories are expressed through affixation.
2. Derivational categories, which are expressed by introflexion, take complementary prefixes or,suffixes.

3. The focus on the formal written-based variety of the language, considering how infixing interacts with inflecting morphology (Brown,2009:19).

## 5.2 Arabic as an Example of Infixing Language

Arabic morphemes are mostly defined by consonants, to which affixes can be attached to create a word. Basic noun and verb stems in Arabic comprise a consonantal root and a pattern. The pattern can be divided into two elements – a prosodic template and a vocalic melody. Most consonantal roots are trilateral. The root expresses the content meaning of the word, while the pattern expresses functional meaning (katamba,1993:103).

The verb stem' katab' consists of the root 'k- t- b' {write}, the template CVCVC {PERF}, and the vocalic melody a-a {ACT}.The three consonants define the basic concept, while the affixes define the way that the concept is applied. The vocalic melody a-a indicates perfect aspect active voice, or perfect aspect passive voice, and imperfect aspect passive voice. Stems are the product of introflexion ( Comrie, 1989:50). Grammatically complete words involve affixational elements like :

- . Verbal pronominal prefixes and suffixes
- . Object suffixes
- . Possessive suffixes
- . Sound plurals
- . Dual
- . Case (nominative , accusative , genitive )
- . Mood endings (indicative , subjunctive , jussive)
- . Pronominal prefixes and most suffixes, the feminine suffix, sound plurals and the dual comprise consonants and vowels.

The use of affixes inside a word, or the "infixation", the result could be an extremely productive system. Verbs can be inflected to indicate person, number, gender and tense( Manker, 2016:276).

kataba            he wrote pattern  
katabna        we wrote pattern

katab-tu        I wrote  
katab-ta        you wrote

yaktubu (female)	he writes pattern	katab-ti	you wrote
naktubu (plural)	we write pattern	katab-tum	you wrote
sayaktubu ( plural/ female)	he will write pattern	katab-tunna	you wrote
sanaktubu (Brown,2009:52)	we will write pattern.	katab-at	she wrote

### 5.3 Similarity and Difference Between Arabic & English

1. In English, the grammatical processes are expressed through prefixes or suffixes and do not affect the form of the individual morphemes. This is the opposite of infixing. English is not an infixing language , yet it has constructions that are of infixation, such as the irregular plurals "mouse/mice", "goose/geese", men of man, and the irregular past ,and past participle forms "take/took", "sing/sang/sung".

2. In Arabic, most of the affixes are applied in a regular and predictable way. Some, however, are irregular. These examples of infixation are not true, and does not exist in English, since they are irregular and unproductive (Matthew, 1991:140).

### Conclusion

The distinction between analytic and synthetic languages is a continuum, since languages display different degrees of synthesis. The degree of synthesis or analysis in a given language can be calculated, by dividing the number of morphemes in a sentence by the number of words. Some languages are considered more synthetic than others.

Structural patterns are not randomly distributed. Structural patterns are not randomly distributed. Studying the range of patterns in which languages may differ is the domain of language typology. It investigates both similarities and differences between languages in the ways words are formed. This investigation is based on typical patterns of word-formation .

Morphological typology is sometimes defined as a classical science which established a small set of types, such as analytic and synthetic, which



in turn, consists of subtypes: agglutinating, fusional , incoperating, and polysynthetic language.

## References

- Brown, K .(2009) Concise Encyclopedia of Languages of The World : Cambridge, Elsevier Ltd.
- Comrie, B.( 1989), Language Universals and Linguistic Typology: Oxford , Mack well Publisher Limited.
- Croft, W. (2003)Typology and Universals; London, Cambridge University Press.
- Fernando, J. & McCarney, D. (2012) Comparison among Languages: Britain: Life long Learning programme.
- Hana, J. & Feldman, A. (2013): Computational Morphology. Prague. Charles University..
- Katamba , F. (1993) Morphology: USA : St. Martin's Press.
- Manker, Jonathan.2016 "Morphological Typology." Ling 100 –Introduction to Linguistic Science. [http:// linguistics.bekerley .edu](http://linguistics.bekerley.edu).
- Matthews, P.( 1991) Morphology: New York : Cambridge University Press.
- Moravcsik ,E.( 2013) Introducing Language Typology: New York : Cambridge University Press.
- Shopen ,T.( 2007) Language Typology and Syntactic Description : New York : Cambridge University Press.
- Song, J.(2014) Linguistic Typology: Morphology and Syntax: New York , Routledge.
- Velupillai,V.(2012) An Introduction to Linguistic Typology: Philadelphia, John Benjamins Publishing Company.