What is Language Typology?

Linguistic typology is the study of differences and similarities that hold among human languages.

More specifically, typology is interested in the formal features of languages (such as the sound system and the grammar) rather than the individual words in a given language.

Examples of such formal features include case alignment, gender systems, tense systems as well as many other topics.

Diversity and Unity

One of the major aims of linguistic typology is to define the full range of variation between languages and to see in what respects it is possible for languages to differ, and in what respects they cannot differ (i.e. what features are common to all human languages).

In all the dazzling variation found among the 7,000 languages spoken today, there is a remarkable amount of similarity.
How much morphology?

It has long been popular to classify languages in terms of so-called morphological types. A first striking distinction is the amount of morphology that languages use. Some languages seem to use very little with the result that sentences are arrangements of simplex words. On the other extreme, we find languages that rely a lot on morphology such that single (sometimes very complex) words require a translation into a long sentence in languages of the former type.

A lot or a little

Yay (language spoken in China):

\[\text{mi}^4 \text{ ran}^4 \text{ tua}^4 \eta \text{wa}^6 \text{ lew}^6\]
not see CLASS snake CMPLT
‘he did not see the snake’

Oneida (Native American language):

\[\text{yo}-\text{nuhs}-\text{a-tho-\text{-l}é}:\]
\[\text{y}^\text{NEUT.PAT-} \text{room-} \text{epenthetic-} \text{be.cold.STAT}\]
‘The room is cold’

Isolating (analytic) vs synthetic

Isolating (analytic) morphology (or language)
In Yay every word is one morpheme.

Synthetic morphology
Oneida has complex words, i.e. words consisting of several morphemes
The index of synthesis

Isolating (analytic)       synthetic

Yay          English       Oneida

Mandarin Chinese (isolating)
(tones omitted)

ta zai tushuguan kan bao
he at library read newspaper

But:

Even Chinese has some morphology:

Inflexion penguou-men
friend PLUR

Derivation ke-kao
able depend ‘dependable’

Compounding tushu-guan
book tavern ‘library’
Calculating the degree of synthesis
Take the first 200 words in a text and analyze the words into morphemes
Then divide the number of morphemes by 200
If the result is 1, the language is fully isolating
If the result is (let us say) 5, the language is pretty synthetic

Grammatical meanings
In isolating languages grammatical meanings are expressed in terms of independent words rather than in terms of inflectional operations
Isolating languages tend to rely heavily, not only on word order, but also on context and pragmatic considerations for the interpretation of sentences

Correlations?
- Isolating languages are often spoken in Southern Asia
- These languages also mostly have tones
- Words also tend to be monosyllabic

Why would one go with the other?
Serial verbs are common in isolating languages

Isolating languages also have string of verbs:

Yay (tones omitted):

Mayfaay koŋ ma rop caw haw ku
Bamboo bend come stroke head give I

‘The bamboo bends down to stroke me head for me’

Isolating language and word order

Isolating languages have a rigid word order

After all word order is the only clue for WDWTW

(Word order typology will be discussed later)

Polysynthetic languages

This is a name for languages that are on the far right on the Index of Synthesis:

Southern Tiwa (language spoken in Venezuela):

ti-khwian-mu-ban
1st pers-dog-see-PAST
‘I saw the dog’

in-khwian-wia-che-ban
AGR-dog-give-PASS-PST
man-STG
‘The man gave me the dog’
Mohawk

Washakotya’awitsherahetkvhta’se
“He ruined her dress”

(strictly, "He made the thing that one puts on one's body ugly for her").

Noun Incorporation

Nahuatl

a. ni-c-qua in nacatl  b. ni-naca-qua
   I eat the flesh      I flesh eat

• Cf. English:

English deverbal compounds

beer drinker   ‘one who drinks beer’
machine readable ‘can be read by a machine’
heart breaking  ‘the property of breaking hearts’

But not:

*Every night I beer-drink with my room mate
**Agglutinative languages**

Another distinction is the following. There are languages
(a) in which most morphemes of a complex word
have a single meaning (and vice versa, most meanings
are expressed by a unique morpheme), and
(b) in which morphemes are combined without too
many phonological changes (such as assimilations).

Such languages are called **agglutinative**.

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**Turkish**

 yap-tığ-im hata-yı memleklet-i
make-PART-my mistake-Obj country-Obj

tan-ma-ma-m-a ver-ebil-ir-siniz
know-not-GER-my-to give-can-TENSE-you

'you can ascribe the mistake I made to my not knowing the country'

A classic example of a very long Turkish word is:

Avrupa-ul-dan-yap-meyanlardan-sinz
Europe-from become cause PASS unable one-who PLUR from you

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**More Turkish**

 ev 'house'
ev-im 'house my'
ev-ler 'house PLUR'
ev-ler-im 'house PLUR my'
ev-de 'house in'
ev-im-de 'house my in'
ev-ler-im-de 'house PLUR my in'
Nahuatl (a Mexican language)

<table>
<thead>
<tr>
<th>Morpheme</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>no-kali</td>
<td>'my house'</td>
</tr>
<tr>
<td>no-pelo</td>
<td>'my dog'</td>
</tr>
<tr>
<td>no-kali-mes</td>
<td>'my house PLUR'</td>
</tr>
<tr>
<td>mo-kali</td>
<td>'your house'</td>
</tr>
<tr>
<td>mo-pelo</td>
<td>'your dog'</td>
</tr>
<tr>
<td>i-kali</td>
<td>'his house'</td>
</tr>
<tr>
<td>mo-pelo-me</td>
<td>'your dog PLUR'</td>
</tr>
</tbody>
</table>

In this example /no/ expresses 'my,' /mo/ 'your,' /i/ 'his,' and /mes/ 'plural.' The noun /pelo/ means 'dog,' and the noun /kali/ means 'house.'

Fusional languages

Then there are languages in which:

(a) morphemes typically express various meanings at the same time and/or in which
(b) where the boundaries between different morphemes are blurred and obscured by phonological processes which make it difficult to say where one morpheme ends and the next one begins.

These languages are called fusional.

Fusional

A factor that must be kept in mind is that the label 'fusional' involves two criteria, i.e. a semantic criterion (conflation of grammatical meanings) and a phonological criterion (phonological rules that blur the boundaries between affixes).
English

he speak - s
[3rd person, singular, present tense]

The index of Fusion

Agglutinative    fusional
←-----------------------------x→
Nahuatl  Latin

Index of Fusion and Index of Synthesis: relationship

The index of fusion is not relevant for isolating languages
Nor does it apply to derivation or compounding
Thus, the fusional mode applies to inflectional systems,
when single affixes express several grammatical meanings
at the same time.
Polysynthetic systems tend to be agglutinative (because
each morpheme has its own meaning, there are so many in
a word)
Historical changes

It has often been suggested that languages display a specific pattern of change in their morphological systems toward the ideal of ‘Latin’:

isolating $\Rightarrow$ agglutinating $\Rightarrow$ fusional

The circle of morphology

- isolating
- loss of affixes
- agglutinating
- reduction and merger of affixes
- fusional
- reduction of free words to ‘clitics’ and then affix

Isolating $>$ agglutinating

Free words become ‘clitics’ and then affixes

Melanesian Pidgin where prepositions became affixes:

Aus bloŋ mi $>$ aus blo-mi ‘my house’

Loŋ aus $>$ l-aus ‘at-house’

This process is called ‘grammaticalization’
Mongolian languages

In Classical Mongolian 'mine' was expressed as in English, by a free possessive pronoun:

morin minü 'my horse'

In the modern language Kalmyk Mongolian, we find:

möre-m 'my horse'

The free form minü has been reduced to a suffix -m.

Clitics as an intermediary phase

When a free word develops into an affix, it is often the case that there is an intermediate phase in which the free word reduces and adjoins to an adjacent word:

The man is brave > The man's brave
He has not come yet > He hasn't come yet

The auxiliary 'is' and the negative 'not' reduce and adjoin to the preceding word so that combinations man's and hasn't sound like one word. It is understandable that children might take 's or 'n't to be suffixes.

Agglutinating > fusional

Paamese (Austronesian language):

ko-i-lesi-nau > ki-lesi-nau
you-FUT-see-me you.FUT-see-me
Fusional > isolating

English has lost most of its inflectional affixes

Latin > Spanish

Latin had suffixal forms for future: cantabo 'I'll sing', but it got out of use and was replaced by constructions like: cantara debeo/habeo/volo 'I must/have/want to sing'. The construction with the verb habere became the most popular one, and it simply came to indicate future tense. Then the forms of the verb habere reduced and became suffixes:

cantare habeo cantaré I'll sing
cantarás you'll sing
cantarás s/he'll sing
cantaremos we'll sing
cantareis you'll sing
cantarán they'll sing

Now, Spanish uses the future tense suffixes less and less and instead one hears: voy a cantar 'I am going to sing'.