Morphological language typology

There is an older system of morphological classification that divides languages into four basic types: isolating (or, monosyllabic), agglutinative, inflective (or, fusional), and incorporating (or, synthetic). In the past, this four-way classification was misused by various scholars, who viewed the types as stages in linguistic evolution. This typology is no longer viewed this way, but it is certainly still used to provide an imprecise and imperfect but still useful rough morphological characterization of languages.

The four types differ in their degree of morphological synthesis, that is, the four type range from most analytic to most synthetic. Of course, these types are relative rather than absolute, that is, no language is purely one type or another.

For example, as John Algeo pointed out (xxx:76), different parts of the English morphological system suggest different analyses. Monosyllabic English forms, particularly the grammatical words like to, for, when, not, must, the, and or, make English appear to be isolating (or, monosyllabic). Inflectional paradigms such as ox, ox’s, oxen, oxen’s for nouns; show, shows, showing, showed, shown for verbs; and go, better, best and big, bigger, biggest for adjectives suggest that English is inflectional (or, fusional). Words composed of easily-segmentable prefixes, roots, and suffixes, like anti-dis-establish-ment-ari-an-ism and photo-graph-ic-al-ly make English look decidedly agglutinative. And, finally, verb constructions like horseback-riding and to baby-sit have an undeniable incorporative or element to them.

a. …ya dumayuchto eto sam ...

…ya duma -yu -chto eto sam ...
…I / think / first person singular indicative mood / that / this /most / ...

Russian is ___________________________.

b. Lăn lăn dân chủng học làm chính trị

Lăn lăn dân chủng học làm chính trị
time / time / people / multitude / learn / make / government / rule

Vietnamese is ________________________.

c. La muljuna viro kreskigis

la mul- jun -a vir -o kresk -ig -is
the / un- / young / adjective / man / noun / grow / cause to / past tense

mal- grand -a -n pom -arb -ar -o -n
/un- / large / adjective / accusative / apple / tree / collection / noun / accusative

Esperanto is _________________________.

d. Ua mau ke ea o ka ?aina i ka

ua mau ke ea o ka ?aina i ka
perfective aspect / constant / the / life/ of / the / land / in / the / ...

Hawaiian is __________________________.
Joseph Greenberg in an article entitled “A quantitative approach to the morphological typology of language” (International Journal of American Linguistics XXXVI (1960), 178-194), uses a more refined approach to measuring the degree of morphological synthesis. As one of his indexes, Greenberg uses a measurement called an “index of synthesis”. Algeo describes the procedure as follows (xxxx:76),

Take a passage written in the language you wish to type; the longer the passage, the more accurate the index will be. Count the number of words in the passage (W). Count the number of morphemes, that is, the smallest meaningful units, in the passage (M). Divide the number of morphemes by the number of words (M/W). The result will be the index of synthesis.

Certainly, in the sentences above, the size of the sample is far, far too small to attain a meaningful result. Nonetheless, in order to understand the process involved in calculating the index, for each of the six languages examined above, calculate the index of synthesis.

Practice Exercise.

Label each of the following language samples as monosyllabic (or, isolating), inflectional, agglutinative, or incorporating (or, polysynthetic). Do not assume a one-to-one correspondence between the number of answers and the number of questions.

g.  no\textsuperscript{55} ma\textsuperscript{31} la\textsuperscript{55} η\textsuperscript{31}, ηα\textsuperscript{55} zu\textsuperscript{31} mo\textsuperscript{31} a\textsuperscript{55} 

   no\textsuperscript{55} ma\textsuperscript{31} la\textsuperscript{55} η\textsuperscript{31}, ηα\textsuperscript{55} zu\textsuperscript{31} mo\textsuperscript{31} a\textsuperscript{55} 

   you not come AUX I leave want PAST

   ‘It's not because you came that I left’

   The Hani language is ________________.
h. evcikden evciklerimizde
   ev-cik-den ev-cik-ler-imiz-de
   house-little-from house-small-plural-our-in
   'from a little house' 'in our little houses'

Turkish is ________________________.

i. szara chwytała największe kawałki
   szar-a chwyta-ł-a
   gray-NOM singular catch-past-3rd person singular feminine
   naj-więk-sz-e kawał-k-i
   superlative-large-comparative-ACC-plural piece-diminutive-ACC plural

Polish is ________________________.

j. phà tshèu hâu tsāu ĭâu lāŋ tū;k
   phà tshèu hâu tsāu ĭâu lāŋ tū:k
   male person that have two classifier child

Hlai is ________________________.