Fiat Lingua

<p style="text-align:center">Designing an Artificial Language:</p>

Arabic Morphology

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Here's an idea for those among you looking for an unusual morphology for your artificial language (henceforth AL). How about basing it on the tri-consonantal system of Arabic (and of other semitic languages such as Hebrew and Syriac)?

Rather than start with a formal description of Arabic morphology, let me give you a general definition and several simplified examples. Later, I'll discuss how all this stuff can be applied to an AL design.

Most Arabic morphemes are defined by three consonants, to which various affixes (prefixes, suffixes and infixes) can be attached to create a word. For example, the tri-consonant "ktb" represents the concept of *writing*. Here are some of the ways in which "ktb" is turned into real Arabic words:

```
    kataba      - to write              pattern: CaCaCa
    ?aktaba     - to cause to write     pattern: ?aCCaCa
                                          (where '?' is a glottal
                                          stop)
    kaatib      - writing               pattern: CaaCiC
    kitaab      - a book                pattern: CiCaaC
    kutub       - books                 pattern: CuCuC
    kitaabah    - writing profession    pattern: CiCaaCah
    kattaab     - author                pattern: CaCCaaC
                                          (note doubled middle
                                          consonant)
    miktaab     - writing instrument    pattern: miCCaaC
```

In addition, verbs can be inflected to indicate person, number, gender and tense:

```
    kataba      - he wrote              pattern: CaCaCa
    katabna     - we wrote              pattern: CaCaCna
    katabuu     - they wrote            pattern: CaCaCuu

    yaktubu     - he writes             pattern: yaCCuCu
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naktubu        - we write              pattern: naCCuCu
yaktabuuna     - they write            pattern: yaCCaCuuna

sayaktubu      - he will write         pattern: sayaCCuCu
sanaktubu      - we will write         pattern: sanaCCuCu
sayaktabuuna   - they will write       pattern: sayaCCaCuuna
```

And there are many, many other derivations. Note, however, that all of them have "k", "t", and "b" in common (in exactly that order - a different order will indicate a different basic concept). Thus, the three consonants define the basic concept, while the affixes (i.e., patterns) define the way that the concept is applied. In actual Arabic, most of the affixes are applied in a regular and predictable way. Some, however, are irregular, with basic nouns and their plural forms being the biggest offenders.

The use of affixes **inside** a word, called "infixation", may seem strange at first, but even English has constructions that are reminiscent of infixation, such as "mouse/mice", "goose/geese", "take/took" and "sing/sang/sung". Note that these are not true examples of infixation, which does not exist in English, since they are irregular and unproductive. I use them only as an illustration. However, generalizing and regularizing the process could result in an extremely productive system.

Incidentally, if you're interested in just how productive this system is, consider that Arabic has approximately 31 consonants (the actual number depends on dialect and on who's counting). Thus, the number of possible tri-consonantal permutations is 31x31x31 = 29,791. Not all of them are used, of course, but when you multiply that large number by the number of possible patterns (about four hundred), the result is an extremely rich and flexible lexicon, something for which Arabic is justifiably famous.

Now, if you want to create an AL with this type of morphology, all you've got to do is define a concept for each tri-consonant and for each affixation pattern. Here are some examples that I made up:

```
mbs => the concept of "beauty".

CaCoC => an adjective describing a state.
         Thus, "mabos" = "beautiful".

CuCiC => a noun describing a state.
         Thus, "mubis" = "beauty".

aCCaC => infinitive form of a transitive, causative verb.
         Thus, "ambas" = "to make beautiful, to beautify".
         Also, if you wish to inflect your verbs for
         person, number, gender and tense, you could, for
         example, use suffixes:
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                    "ambasufda" = "we beautify"
                    "ambasufti" = "we beautified"
                    "ambasufku" = "we will beautify"
                    "ambasizda" = "he beautifies"

          and so on.

   puCCaC => an infinitive describing a state.
          Thus, "pumbas" = "to be beautiful".
          Again, suffixes can be used for inflections:
                    "pumbasanda" = "she is beautiful"
                    "pumbasanti" = "she was beautiful"
                    "pumbasanku" = "she will be beautiful"
                    "pumbasulda" = "they are beautiful"

          and so on.

   diCCaC => an infinitive meaning "to become" a state.
          Thus, "dimbas" = "to become beautiful".
          Again, suffixes can be used for inflections:
                    "dimbasosda" = "it is becoming beautiful"
                    "dimbasosti" = "it became beautiful"
                    "dimbasosku" = "it will become beautiful"
                    "dimbasufda" = "we are becoming beautiful"

          and so on.
```

To create compound words, convert one of the components to a pattern and apply it to the tri-consonant of the head word of the compound. As an example, let's create a compound for the word *mansion* from the roots for *wealthy* and *house*. Assume that the tri-consonant for *wealth* is "wlt", and the tri-consonant for *house* is "hns". Thus, using the patterns I listed above, the adjective*wealthy* would be "walot", and the noun *house* would be "hunis". Furthermore, we will create rules that convert a tri-consonant to a pattern for exclusive use in forming compounds. I won't elaborate on what these rules could be, but will simply provide an example. Let's say that the adjective/noun compounding pattern of "wlt" is "waltaCoCCi". Thus, we can create the word "waltahonsi" to mean *mansion*.

I leave the rest up to the reader's fertile imagination.

Please keep in mind that I'm not trying to convince anyone to actually **design** an AL with this kind of morphology. I'm simply providing an illustration of how things **could** be done differently. However, if I should ever come across an AL designed by a native speaker of Arabic, I would not be at all surprised if it had a morphology similar to what I've described here.

<p style="text-align:center;color:red;">End of Essay</p>

[Postscript: I'd like to thank Ken Beesley for correcting my English examples of infixation, and for providing me with a more accurate value for the number of infixation patterns in Arabic.]