

## A Word Based Analysis of Semitic Morphology

Elabbas Benmamoun, University of Illinois at Urbana-Champaign

In this paper, I shall propose that what has been labelled a reciprocal verb such as *kaatab* in Arabic is just a plural form of the verb *katab*, a case of verbal plurality, in the sense of Greenberg 1991, that is found in many non-Semitic languages. This in turn opens up the possibility for a unified analysis of verbal and nominal morphology that crucially relies on the theory that Arabic word formation in particular and Semitic morphology in general, is word based rather than root based.

Support for the proposal that the so-called reciprocal is a plural verb comes from the fact that it can occur with a reflexive prefix in addition to vowel length (*ta+kaatab*).

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|-----|----|---|----|---|
| (1) | a. | ta-saabaq-aa<br>refl-raced-dual   | b. | ta- <span style="font-family: monospace;">□</span> aanaq-aa<br>refl-embraced-dual |
|     | c. | ta-naaqas <span style="font-family: monospace;">□</span> -aa<br>refl-debated-dual | d. | ta-qaatal-aa<br>refl-fought-dual  |

This redundancy disappears if we separate plurality and reflexivity, with vowel length encoding plurality and the prefix *ta* encoding reflexivity. Moreover, the so-called reciprocal form in Arabic (when not co-occurring with the reflexive prefix) is transitive (it takes a direct object) which should not be expected since reciprocal formation crosslinguistically usually yields intransitive forms.

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|-----|----|---|----|--|
| (2) | a. | saabaqa-haa<br>(he) raced her   | b. | <span style="font-family: monospace;">□</span> aanaqa-haa<br>(he) embraced her |
|     | c. | naaqas <span style="font-family: monospace;">□</span> a-haa<br>(he) debated her | d. | qaatala-haa<br>(he) fought her   |

Finally, that vowel length encodes plurality is evident within the nominal system where the bulk of the so-called broken plurals differ from the corresponding singular form by having a long vowel (*maktab<sub>SG</sub>* <---> *makaatib<sub>PL</sub>*) Thus, the fact that both reciprocity in verbs and plural formation in nouns involves vowel length is not accidental under the present proposal.

If the so-called reciprocal verb, effectively the broken plural verb, is on a par with broken plurals nouns, the immediate question that arises is whether they are derived in the same way. According to McCarthy and Prince (1990) the bulk of Arabic broken plurals (e.g. *maktab* ---> *makaatib*) involves the mapping of a syllabic trochee (*mak*) onto an iambic plural template (CVCVV) while the derivation of the reciprocal verb, according to McCarthy (1993), involves the affixation of a mora to the first syllable (*katab* ---> *kaatab*). Reciprocals receive a different analysis from plurals nouns because most previous analyses have taken the perfective form (*katab*) as the basis for deriving the reciprocal. A unified analysis can be provided if we assume, contra McCarthy (1983), that the "reciprocal" is derived from the imperfective verb (*ya-ktub*, he writes) in which case in both derivations, plurality is indicated by vowel length following the second radical of the noun and the imperfective verb (Ratcliffe 1997)

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|-----|----------------|--------|----------|------------|
| (3) | Verbal Plural  | yaktub | yukaatib | yuk+aa+tib |
|     | Nominal Plural | maktab | makaatib | mak+aa+tib |

More independent evidence, both syntactic and morphological (Benmamoun 1999, in press), will be given to show that the imperfective plays a central role in Arabic inflectional and derivational morphology leading to the conclusion that Arabic and Semitic morphology is word based rather than root based. For example, the imperfective occurs in contexts where the main tense information is carried by a clitic, particle, or not morphologically realized at all. In other words, the verb is realized in the imperfective when it is not marked for tense, unlike the perfective.

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|-----|----|-------------------|----|------------------------|
| (4) | a. | lam yaktub        | b. | lan yaktuba            |
|     |    | neg.past write    |    | neg.fut write          |
|     |    | 'He didn't write' |    | 'He won't write'       |
|     | c. | sawfa yaktubu     | d. | yaktubu                |
|     |    | fut write         |    | write                  |
|     |    | 'He will write'   |    | 'He writes/is writing' |

Moreover, the imperfective (5b) and not the perfective (5c) is clearly the base for deriving the imperative (5a) as shown by the fact that the two forms, as opposed to the perfective, have the same vocalic melody (Brame 1970).

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|-----|----|-----------|----|--------------|----|------------|
| (5) | a. | ktub-uub. | b. | ta-ktub-uu   | c. | katab-tum  |
|     |    | write.mp  |    | 2-write-mp   |    | wrote.2mp  |
|     | a. | z[liis-uu | b. | ta-z[liis-uu | c. | z[alās-tum |
|     |    | sit-mp    |    | 2-sit-mp     |    | sat-2mp    |

All these facts follow if the imperfective is the unmarked form. This in turn explains why it is precisely this form that is implicated in word formation. This is not surprising given that usually it is the unmarked or default form that is implicated in derivational/correspondence relations.

## References

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