Comptes Rendus/Book Reviews

Georges Bohas. *Matrices et étymons: Développements de la théorie*. Lausanne:
Éditions du Zèbre. 2000. Pp. 171 (broché).
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This book grew out of a seminar given at the Académie des langues
anciennes at Saintes. It is a follow up on a previous book (Bohas, 1997)
that was a synthesis of the results of studies on Arabic morphology
carried out by the author and mainly his (former) students at the
Université de Paris 8. In both books, Bohas outlines a new theory of
Arabic (and by extension Semitic) morphology. The traditional and still
widely accepted approach to Arabic (and Semitic) morphology (e.g.
McCarthy, 1981) is that derivation is based on the non-linear intermixing
of two abstract morphemes: a root and a pattern. The root is often made of
three consonants and carries the core meaning of the word. The word
pattern is made of vowels or both vowels and consonants and expresses
grammatical function. A word like *batala* "he cut, separated a part from a
whole" has the root: {*b*, *t*, *l*} associated with the meaning of "cutting" and
the pattern {-*a-a-a*} indicating that it is a third person singular perfective
form.

   Although the root and pattern approach accounts for a large part of
the Arabic lexicon, it fails to explain the semantic similarity between
words that share only two consonants, for instance *batala* "to cut" and
batara "to cut (an animal's tail)". The shared consonants *b, t* are probably
the historical precursors of the triconsonatal root. Bohas calls this unit the
etymon but insists that it is synchronically operative in the Arabic
(Semitic) lexicon. In both books, Bohas provides a large amount of data in
support of the argument that roots develop(ed) from biconsonantal
etymons. The evidence that these are not based on roots is the existence of

other words that also share the same meaning but only two consonants. The added consonant is, according to Bohas, dictated by the word pattern that generally works with three consonants.

While the idea of the biconsonantal root/etymon is not new as Bohas acknowledges, the work he and his students (among others) did to reanalyze/reorganize many items of the Arabic lexicon is impressive. His major contribution, however, is the notion of the phonetic matrix, which he defines as the minimal semantico-phonetic unit that is made of "une combinaison de traits phonétiques et de noyaux sémiques" (a combination of phonetic features and semantic nuclei). (Bohas, 2000: 64). The matrix relates words sharing at least two unordered place features. These words also include the ones that have the same etymon as in (1a) and (1b) in the following list sharing the matrix {[labial], [coronal]} (Bohas, 2000: 72-73).

(1)   a. Habata: "to hit".
        b. habata: "to hit".
        c. habaʃa: "to hit".
        d. rafaza: "to hit".

In the book reviewed here, Bohas focusses mainly on the notion of the phonetic matrix, which was not discussed extensively in his previous work. He supports it with comprehensive data from Arabic as well as additional data from Hebrew.

The book, made of nine chapters, is organised as follows. The first and the second chapters are a general introduction. The first chapter outlines the main issue discussed in the book, namely the validity of the (re)analysis of the Semitic lexicon in terms of the etymon and the related notion of the phonetic matrix. In the second chapter, Bohas reviews previous proposals, mainly by 19th century Hebraists, to analyse certain

words in terms of a biconsonantal rather than a triconsonantal root. By doing so, he emphasises his contribution. He contends that he is the only one who considers the etymon a synchronic, rather than a diachronic, unit in the lexicon. He also argues that his notion of the phonetic matrix goes beyond mere description to establish a coherent theoretical framework to explain data.

Chapters 3 and 4 deal with the etymon and the phonetic matrix respectively. Chapter 3 outlines the different ways by which the etymon develops into a root. These include: (i) diffusion of the second etymon consonant as in *bajja*: "pierce (a wound or a tumor)", (ii) extension by a consonant as in *Hadaja* "to look fixedly", (iii) by prefixation of a consonant as in *nakafa*: "to recoil from something, to part", (iv) integration of two etymons: *razaba* "to stay in place without moving" from *razza* "fix solidly" and *rabba* "to stay in one place" or (v) reduplication as in *baSbaSa*[1] from *baSSa* "to shine". Chapter 4 provides extended lists of words related to a unifying phonetic matrix, as shown in (1) above.

In chapter 5, Bohas provides evidence from modern Arabic dialects for the existence of the etymon. He, for instance, gives examples from Moroccan Arabic of etymon extension by glide epenthesis and by reduplication from Damascene Arabic.

Homonymy and enantiosemy make the subject of chapters 6 and 7 respectively. In chapter 6, the author argues that the semantic duality in homonymy is due to the fact that certain etymons could belong to two different phonetic matrices and therefore to two semantic fields. In chapter 7, Bohas gives a case of enantiosemy, a word having two opposite meanings, which could be explained in terms of polysemy rather than the sum total of the meanings of two integrated etymons.

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[1] The emphatic consonants are capitalized and the etymon or matrix consonants are in bold.

Chapter 8, dubbed discussion, is for the most part an argument against one point pertinent to what Bohas calls the paradoxical position taken by those who oppose the etymon. The latter trace the quadriliteral to an extension of the triliteral but the biliteral to reduction of the triliteral.

Bohas concludes in chapter 9 by calling for further research on the etymon and the phonetic matrix in both Arabic and other Semitic languages. He also points to the implications of his theory for two established notions in linguistic theory and cognitive science: the arbitrariness and linearity of the signifier.

Probably because it was meant to rapidly disseminate the new results related to the matrix, the book's organisation is not perfect. Chapters 7 and 8 are one and four pages respectively while chapter 4 is 65 pages. This disproportionate structuring of the chapters could be improved: Chapters 6 and 7 could have been amalgamated, as could chapters 3 and 8. The introductions and conclusions to the chapters could also be made more informative.

Despite these minor formal infelicities, the contribution of this book is potentially groundbreaking not only for Semitic/non-concatenative morphology but also for theories of morphology and the lexicon in general. For one thing, the notion of the matrix challenges the belief that lexicons are based on morphemes, which are assumed to be the smallest indivisible meaning units.

References

Bohas, Georges. 1997. *Matrices, étymons, racines.* Leuven: Peeters.

McCarthy, John. J. 1981. A prosodic theory of nonconcatenative morphology. *Linguistic Inquiry,* 12: 373--418.