GEORGES BOHAS and ABDERRAHIM SAGUER:
*The Explanation of Homonymity in the Lexicon of Arabic.*
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This book builds on the detailed presentation of the theory of matrices and etymons (TME) by Bohas in 1997, further developed in 2000 and summarized for English readers in Bohas 2006 and by Bohas and Dat 2008, amongst others listed in the bibliography of the present work.

The theory itself is seductively simple: instead of the traditional system of triliteral "roots", with each cluster of consonants expressing a limited semantic range in a fairly arbitrary way ("writing", "sitting", "knowing", etc.), the carrier of lexical meaning is the "etymon", a pair of consonants in any order, drawn from a "matrix" composed of consonants from two different points of articulation. It is the matrix which contains the "notional invariant", the meaning common to all etymons formed from the two sets of consonants. Thus in the example given (pp. 19 ff.) the matrix consists of the nasal and coronal consonants, the notional invariant is "traction", and the etymons derived from it contain the nasals *m* or *n* in one position and the coronals *t, ṭ, š, ḍ*, etc. in the other. The biconsonantal etymon can itself be extended by a third consonant, either a "prefix" (an element such as *n, t, m*, which has a semantic value of its own) or a "crement" in any position (a consonant with no intrinsic meaning which serves to create a triconsonantal group).

Since there are only six points of articulation (labial, coronal, dorsal, guttural, pharyngeal, laryngeal), there is a theoretical maximum of 15 combinations, i.e. matrices (reduced from 21 in an earlier version of the theory), of which the authors have so far identified 12 with their notional invariant. To put that the other way round, they have distributed a large portion of Kazimirski's dictionary entries into twelve groups whose general meaning can be associated with specific phonological features.

Once this theory is accepted, their explanation of the origins of homonymy and enantiosemy follows naturally. Leaving aside morphological homonymy, e.g. *muḫtār*, either active "choosing" (= *muḫtayir*) or passive "chosen" (= *muḫtayar*), homonymy and its antithesis arise from the fusion (or confusion) of two etymons from different matrices in the same root, or from the fact that an etymon may be the realization of more than one matrix.

Homonymy can also result from borrowing, without involving etymons. Here the example chosen is *barīd* "post[horse], mail etc." (p. 51), which invites some critical comment. It has long been known that *barīd* is derived from Latin *veredus* or its Greek equivalent, and there is not much to be gained from quoting Lane on a possible Persian origin, because Lane is here merely passing on an Arab speculation which he himself does not accept: he openly prefers *veredus* and even suggests a Hebrew cognate. Nor is Kazimirski's reference to a Persian origin of much relevance (*ibid*, n. 7): the Persian connection is documented much earlier by Golius (1653, himself citing Giggeius 1632, which could not be checked).

What is truly interesting for us is that the Arabs obviously recognized that there was something foreign about *barīd*, even though it was phonologically and morphologically consistent with Arabic. However, if *barīd* lies outside the etymon system,

then so should *balġam* "phlegm", listed on p. 111 as containing the etymon *ġ, m* for "mucus" (matrix no. 9), since it, too, is a loanword.

The authors describe their position on the Arabic lexicon as "achronic" (p. 173), eliminating thereby all diachronic and synchronic considerations. This approach is consistently and rigorously applied, including a good number of occasions when they admit candidly that the theory so far cannot accommodate all the data: thus pp. 34–43 discuss matrices which are still being identified; a matrix expressing "sharpness" has not yet been established (p. 56, n. 8); the word *ʿāj* defeats them, "a primitive external to the system of etymons" (p. 69); and on p. 123 "we can make no plausible hypothesis" for three of the meanings of the verb *maraʿa*, and so on. On p. 175 the Arabic character for *ẓ* seems to have dropped out of the heading to the table of phonetic features.

Some items of data arouse suspicion, especially a handful of verbs of an unusual pattern, e.g. *bawaḫa* (p. 25), *bawaka* (pp. 29, 145), *fawaḥa* and *fawaḫa* (p. 75). Verbs of the type *sawida, ḥawila* are well attested, but the type *bawaka* is not recorded in the standard reference works – perhaps the peculiar *maṣdar* pattern *buʾūk* has led the authors astray, since a variant *buwūk* without the *hamza* is also noted, but this does not imply a Classical Arabic verbal form *bawaka*.

This same verb invites another systemic criticism of the lexical procedures: *bāka* is quite correctly glossed as "to form balls of clay by rolling it in one's hands", but this is only one of seven different meanings in the Arabic lexica (faithfully reproduced in the authors' main source, Kazimirski), the other six being the sexual coupling of domestic animals, growing fat, buying and selling, stirring a well to make the water flow more freely, becoming complicated, and being confused or distressed. The selection of rolling balls of clay certainly fits the matrix under discussion, no. 6, of making curved shapes, but we might question at least in principle its validity as conclusive evidence for this particular notional invariant in view of all its other meanings (the dictionary order in which they are listed is, of course, not historical). We might also object that the word *bayḍa* is used twice to illustrate two varieties of curved shapes in this matrix, both "testicle" and "egg" (p. 29).

As well as bypassing the traditional triliteral root theory and the doctrine that these are developments from older biliteral roots, TME has the effect of eliminating the phoneme as an analytical unit. Instead of phonemes, simultaneous bundles of distinctive features, we now have matrices, simultaneous bundles of shared features, and the phoneme becomes irrelevant, except for determining which matrix the etymon belongs to.

With TME still in the exploratory stage, a benevolent agnosticism seems most prudent until the whole lexicon has been accounted for one way or another. Nevertheless the theory does raise many important issues. For example, assigning *j* historically to the same point of articulation as *q* and *k* (p. 61, n. 19) leads to the expectation that they cannot occur together in the same etymon, which is surely worth checking. And concepts of phonosemantics and lexicogenesis, referred to rather vaguely, have relevance at the general linguistic level. Although quadriliterals are mentioned only in passing (but see earlier works of Bohas), we might wonder how many etymons can co-occur in these extended roots. Here traditional morphology might collide with TME, if, for example, we accept Ullmann's idea that in such verbs as *iṣḥanfarā* "walk quickly" (said to contain the etymon **r, f**, p. 146), -*ḥan*- is an infix creating a new derived verb stem (*Untersuchungen zur Raǧazpoesie* 1966: 140).

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