

## Review

**Marcin MICHALSKI, Georges Bohas and Abderrahim Saguer, *The Explanation of Homonymy in the Lexicon of Arabic*. Lyon 2014. ENS Éditions. 192 pp.**

The objective of this book is to show how the phenomenon of homonymy of Arabic radicals can be accounted for within the framework of the theory of matrices and etymons (TME) developed, and still being developed, by Georges Bohas, Mihai Dat and Abderrahim Saguer, and well known to Arabists and Semitists. In the book, the results of the authors' work on this subject are revisited and developed. Some fifty roots are accounted for within the framework they have proposed. The data are taken from Kazimirski's dictionary and checked in b. Manẓūr's *Lisân al-'Arab* and al-Fayrûzâbâdî's *Al-Qâmûs al-Muḥîṭ*.

According to the authors of TME, the traditional tri-consonant root framework is not sufficient for a complete analysis of the Arabic lexicon, particularly the problems of homonymy and enantiosemy. The root, they claim, cannot be the primary organizing element of the lexicon because it is not situated at the pertinent phonetic level. The semantic and phonetic relationships between words cannot be accounted for in an adequate manner through an analysis limited to the root. In order to understand how the Arabic lexicon is organized, another model must be used. The authors propose an explanation within their TME. The ultimate objective they pursue is to fully organize the lexicon into matrices, which will also allow them to make the class of 'accidental homonymy' as small as possible.

The authors distinguish the concept of 'root', understood as "an abstract tri-consonant compound which may or may not appear in reality", e.g.  $\sqrt{rmy}$  for the verb *ramâ* 'to throw', as opposed to the concept of 'radical', conceived of as "a nominal or verbal form stripped of its prefixes and/or suffixes" (p. 7), e.g. *ramay* in *ramaytu*. Thus, they understand a 'radical' as what is referred to as a 'stem' or 'theme' in general linguistics. What they are interested in is the homonymy of radicals. While generally the cases they analyze concern the homonymy of radicals, in some instances what one is faced with is the homonymy of roots. For instance, on pp. 48–49, where "an obvious case of homonymy" is said to obtain between *naṭara* 'to disperse', *naṭura* 'to blow one's

nose' and its IV Form, viz. *'antara* 'to pierce someone with a sharp instrument and to make the blood flow', homonymy concerns roots, not radicals. A similar case can be found on p. 103, where we read that "The verb *mataka* carries the following definitions": (i) 'to cut in two, to dissect', (ii) Form III 'outwit someone, [...]', and (iii) Form V 'to sniff'. However, one is dealing here with three different verbs and radicals: *mataka*, *mâtaka* and *tamattaka* rather than with one "verb *mataka*". Homonymy in this case, as well, obtains between roots, not verbs or radicals.

In Chapter 1, "Some forgotten yet obvious points", the authors remark that the fact that the tri-consonant root is not the ultimate component of the organization of the lexicon was obvious in the 19th century. They adduce examples of words (pp. 10–18) that make it easy to realize this fact. In Chapter 2, the TME is presented and the authors show that within its framework it is possible to link the notional invariant to the phonetic invariant at an adequate level. It is useful to sketch its fundamental assumptions here. Within TME, the root is no longer the initial component of the lexicon but is analyzed (i) as an etymon and a crement (a crement has no semantic-grammatical value), e.g.  $[[bt]r]$ , (ii) as two etymons, e.g.  $[bt]x[tk]$ , or (iii) as an etymon and a prefix (a prefix has a semantic-grammatical value), e.g.  $[n[hj]]$  (p. 19). An etymon is "a binary composite of non linearly ordered phonemes" (p. 20), which means that the order of the constituents of an etymon is free. For instance, the etymon  $\{b, t\}$  appears both in *batta* 'to cut, slice by cutting' and in *tabba* 'to cut, slice by cutting' (p. 21) – let us remark here that the phenomenon of non-linear ordering of units conveying meaning has been considered rather exceptional from the point of view of general linguistics. Etymons are not the initial constituents of the lexical units. In order to find a "notional invariant", one has to look deeper, into the matrix, which can be explained as follows: "related etymons amalgamate around a combination of phonetic features which constitute the corner-stone of the relation between sound and meaning, which we call a matrix." (p. 19). Thus, meaning (the notional invariant) has to be looked for not in the roots, not in the etymons and not in the phonemes but in the matrices of phonetic features.

So far, the authors have identified and structured nine matrices (presented on pp. 23–34). Others are in the process of being identified and/or structured. The authors point out that as far as the problem of motivation is concerned, the primitive idea standing behind a notional invariant should be concrete. For instance, the verb *lahana* 'to take a liking to someone' incorporates the etymon  $\{h, n\}$  representing a matrix with the notional invariant 'stifled voice, dull, raspy voice', which is the point of departure to reach the abstract meaning of what such a voice expresses, namely tenderness (p. 84).

When analyzing the etymons and the matrices, sometimes the authors take diachronic changes into account, which may influence the configuration of the phonetic features of a phoneme. For instance, "the *l* of *laffa* is not a 'true' *l*,

but lexically an *dʰ* [from historical *dʰaffa* ‘to bring together’ – M.M.] and [...] as such, it has the feature [guttural] of the emphatics.” (p. 92). The authors adopt the idea that *j* manifests the feature [dorsal] of *g* (e.g. examples 6.1.4. on p. 27) but it would be good to state it explicitly in the text. In the table of phonetic features on p. 175, *j* is not marked as [dorsal]; this is only suggested by an arrow running from *g*.

In Chapter 3, “Homonymy”, the problem of homonymy is presented. Numerous cases of this phenomenon in the Arabic lexicon that cannot be explained by borrowings or diachronic development of sounds can, according to the authors, be explained within TME, to which Chapter 4, “The explanation of homonymy in the theory of matrices and etymons”, is devoted. Thus, the homonymy of a radical may be attributed to three causes:

- I. blending of two etymons, the meanings of both of which are manifested by the resulting radical; for instance, the two different senses of the verb *garaza* ‘to prick something with a needle; to drive in, to plunge (a sharp instrument); to plunge the tail into the ground to lay eggs (of locusts)’ and ‘to give but very little milk’ are the result of the blending of the etymons {*ġ*, *r*} ‘lack of milk’ (cf. e.g. *ġirratun* ‘lack of milk’) and {*r*, *z*} ‘to drive a sharp object into’ (cf. e.g. *razza* ‘to plunge the tail into the ground’);
- II. the etymon being a realization of several matrices and manifesting the meanings of these matrices; for instance, *mata’a* ‘to hit someone with a stick’ manifests the meaning ‘to strike’ of the matrix {[labial], [coronal]}, and *mata’a* ‘to increase tension, to extend a rope lengthwise’ manifests the meaning ‘traction’ of the matrix {[+nasal], [coronal]};
- III. the possibility of more than one etymonial analysis, “such as [nX]Y, n[XY] and n[X]Y” (p. 53). This means that the etymon may consist in (i) the first and second or (ii) the second and third or (iii) the first and third consonant of the root.

Pp. 58–69 contain a case study of radicals with an initial *n*, for which, as has been the case with some other radicals, sometimes the authors have been able to explain only a part of a group of homonyms or to identify the etymon but not the matrix. This issue returns in Chapter 5, “Elaboration of the theory: levels of explanation”, where two levels of explanation are more explicitly distinguished: “Explanation through the identification of the parent matrix” (p. 72) and “Explanation through identification of the parent etymon” (p. 78). The qualifier ‘parent’ does not seem really necessary here, since ‘matrix’ does not differ from ‘parent matrix’, and the same applies to ‘parent etymon’. For the first level of explanation, where the matrix is identified, it is represented graphically by means of a ‘lexicogenic tree’. For instance, on p. 76, such a tree for the radical *labaḥ* illustrates six different matrices manifesting themselves in three different etymons. In the case of *labaḥ*, the authors have succeeded in

matching every meaning of this radical to a matrix and thus have reached the optimal level of explanation, which, as they observe, is not always possible. In some cases, “the present state of research only enables the etymons to be identified without attaining the matrix level” (p. 78).

According to the authors, enantiosemy, usually believed to be a “quirk of Arabic”, is also explainable by TME. For instance, the fact that the verb *la‘aṭa* carries two opposite meanings: ‘to delay paying a debt’ and ‘to hurry, to hasten’, can be explained by it being the result of a blending of two etymons with opposite senses, *lṭ* ‘to delay’ and *ṭ* ‘to go rapidly’, which are preserved in the resulting form (p. 79, the problem of enantiosemy is returned to in Ch. 11 “Consequence: the explanation of enantiosemy”).

Chapters 6–10 are devoted to case studies conducted within the proposed framework. By analyzing a large number of verbs, the authors show how TME functions and demonstrate its explanatory capacity. The cases studied involve radicals with an initial *l* (Ch. 6), initial *m* (Ch. 7), initial *r* (Ch. 8), initial *t* (Ch. 9), and initial *s/š* (Ch. 10). The question of which of these initial consonants may be matricial (derived from the matrix), be a prefix or a simple crement is also considered here.

The book is a very useful monograph for those who are looking for a comprehensive presentation of TME combining a clear presentation of the framework itself and an analysis of a number of cases intended to show its explanatory capacity.

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