1. Introduction: the theoretical framework and earlier analyses

This article is a follow-up to our previous paper entitled “Sur un point de vue heuristique concernant l’homonymie dans le lexique de l’arabe.” By adopting a heuristic viewpoint, we take into account the fact that we have not yet finished exploring all the matrices of Arabic, and thus proceed by means of successive evaluations and provisional hypotheses. Certain points remain to be clarified; nevertheless, the level of explanation we can achieve has become clearer, as well as the explanatory methods that we are able to offer within the framework of the Theory of Matrices and Etymons (TME). Although there are already numerous publications on this subject, it is worth underlining that, within the TME framework, the lexicon is organized on three levels:

1 / The matrix: a non linearly-ordered combination of a pair of phonetic feature vectors linked to a ‘notional invariant’; for example, \{[labial], [coronal]\} ‘to strike a blow’. 

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1 It is worth defining homonymy in opposition to polysemy. Polysemy is ‘a word which brings together several meanings between which users can recognize a link’ (Nyckees, 1998: 194); the meanings are different but related. Homonymy is distinct from polysemy in that, in the case of homonymy, it seems impossible to re-establish a plausible semantic relationship’ (Nyckees, 1998: 194) between the different meanings, for example: *flies* ‘certain insects’ and *flies* ‘the opening at the front of a pair of trousers’ or *to sound* ‘to make a noise’ and *to sound* ‘to measure the depth of water’—different non related meanings.


3 That is: in a not-rigorously demonstrated manner but justified by reasons of internal coherence (see the website www.memo.fr Einstein, Albert); and accepting that you cannot explain everything.


5 This is a property of the language that was proved both formally and semantically by Bohas and Darfouf (1993), developed in Bohas (1997), which consists in the fact that
2 / The etymon: a non linearly-ordered bi-consonantal base made up of two phonemes taken from a given matrix exhibiting both the features of this matrix and its ‘notional invariant’; for example, \{b,t\} ‘to strike a blow with a sharp object.’

3 / The radical: an etymon that has developed by diffusion of the final consonant or by incrementation, or that results from the blending of two etymons; the radical includes at least one vowel and vectors the notional invariant; for example: /bvtar/, ‘to cut, to cut the tail’ (Bohas 2000, 9). The radical is the domain in which diverse morphological and Ablaut processes take place (Guerssel and Lowenstamm 1993, Segeral 1995).

So far, ten matrices have been accounted for; most of these have already been subjected to in-depth studies (see footnote 14).

Matrix 1 \{[labial], [coronal]\}
Notional invariant: ‘to strike a blow’

Matrix 2 \{[labial], [-voiced]\},\n[+continuant]\nNotional invariant: ‘movement of air’

Matrix 3 \{[labial], [pharyngeal]\}
Notional invariant: ‘(a) tightening’

Matrix 4 \{[coronal], [pharyngeal]\}\n[-dorsal],\n[-voiced]

A binary combination \{a, b\} is realized in the order a+b and in the order b+a while keeping the same notional invariant.

6 [labial] characterizes sounds produced with a constriction of the lips. For matrices 1, 2, 3, 6 we integrate on-going research which shows that the feature [labial] should not be restricted by [-sonorant] (see Mansouri, 2006).

7 [±voiced] Sounds produced with vibration of the vocal cords are said to be voiced ([+voiced]), whereas other sounds are said to be non-voiced ([-voiced]), see Dell (1973: 56).

8 [±continuant] Sounds with the feature [+continuant] are produced without interrupting the flow of air through the oral cavity; those with the feature [-continuant] are produced with total interruption of the flow of air at the oral cavity, see Halle (1991: 208).

9 [pharyngeal] characterizes segments that the Arabic tradition calls gutturals, that is: ‘h’, ‘h, x, g and q. For the problems posed by the characterization of this class, see Kenstowicz (1994: 456ff).

10 [dorsal] characterizes sounds produced with a constriction created with the back of the tongue between the soft palate and the uvula (velar and uvular consonants; rear vowels).