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# EGYPTO-SEMITIC COMPARISON: SOME CONSIDERATIONS ON BILABIALS AND DENTALS RELATIONSHIP

Abstract: Starting from an analysis of the Afroasiatic lexicon of Anatomy and Physiological Functions and of Physical Environment, Spontaneous Vegetation and Wild Animals, the author gives further details on bilabial and dental Afroasiatic phonemes, trying to underline the points in common between the three main theoretical Schools and the deeply differences (as in the case of the Egyptian Pharyngeal Voiced). This will be useful not only for Afroasiatic linguistics, but also for Egypto-Semitic lexical comparison.

Keywords: Afroasiatic, bilabial phonemes, dental phonemes, Diakonoff's School, neure Komparatistik, Egypto-Semitic comparison

In the Egypto-Semitic Comparison the main problem is to define clear and not problematic correspondences. This is not always simple to do because of the characteristic of ancient Egyptian Phonetic System, that (if compared to Semitic), for some scholars, has not dentals fricative and emphatics phonemes (but it shows palatalized phonemes),<sup>1</sup> which are attested in Afroasiatic and therefore they should have had a different evolution in Ancient Egyptian.<sup>2</sup> In the reconstruction of Afroasiatic Phonological System, some assumptions are used (not always agreed): (a) the Semitic Phonological System is more archaic than Berber and Egyptian, as well as the others branch and so more conservative,<sup>3</sup> (b) within one of the Afroasiatic linguistic families, at least in one language all the ancient phonological system is attested<sup>4</sup> (c) the Afroasiatic Phonological

<sup>&</sup>lt;sup>1</sup> See Conti 1978: 20; Conti 1980: 30.

<sup>&</sup>lt;sup>2</sup> See Loprieno 1995:31-32.

<sup>&</sup>lt;sup>3</sup> See Rössler 1964:199-216 and Voigt 2002: 272.

<sup>&</sup>lt;sup>4</sup> So at the base of the Common Semitic there is all the phonological inventory of Arabic and at the base of Afroasiatic there is all the inventory of Chadic plus some Cushitic phonemes

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System should have a triads series,<sup>5</sup> (d) the phonetic incompatibility theory leads to discover, especially in Egyptian, new phonemes,<sup>6</sup> (e) whether the Egyptian was a Semitic language or not, every analysis starts from the assumption that Ancient Egyptian is more innovative than Semitic,<sup>7</sup> and Cushitic,<sup>8</sup> justifying in this way the great reduction of Afroasiatic phonemes in Egyptian;<sup>9</sup> (f) following some scholars - in a different way respect to the Diakonoff's School<sup>10</sup> - the distinction between the fricative series and the plosive considered all affricate,<sup>11</sup> it is not completely proved, if not in particular cases as the labial fricative *f*, because each of these could be a secondary phonetic realization;<sup>12</sup> and last (g) the Afroasiatic Phonetic System seems to be equal to the Semitic one.<sup>13</sup> These theoretical premissis invite to make some consideration, in particular on the Bilabials and Dentals phonemes, about Correspondences and Phonetic Problems in the Lexicon of Anatomy and Physiological Functions and in the Lexicon of Physical Environment, Spontaneous Vegetation and Wild Animals.

#### **Bilabials and Labiodental**

The hypothetical existence of Afroasiatic emphatic bilabial \*p seems proved by the Semitic correspondences with the Egyptian labiodental f<sup>14</sup>, by its attestation in Berber, <sup>15</sup> by the correspondences between Chadic and Omotic. <sup>16</sup> But until today its presence in Afro-asiatic phonological system it is not completely

- <sup>11</sup> See Voigt 2002:273.
- <sup>12</sup> As Hebrew affricate.

<sup>(</sup>labialized). This axiom is still dangerous because it leads also to a large uncontrolled increase in the number of proto-phonemes; on this aporia see Hayward 2000:94, 98and note 34.

<sup>&</sup>lt;sup>5</sup> See mainly Rössler 1971: 277, Voigt 2002:267-273.

<sup>&</sup>lt;sup>6</sup> His theory was used for the Egyptian by Rössler 1971. See after Roquet 1973:108-117; Petraček 1988:371-377; criticized by Takács 1999a: 322-332; Takács 2000:352-354.

<sup>&</sup>lt;sup>7</sup> Even the study of Rössler 1971 starting from the idea, considering the Egyptian a Semitic language, that the its phonological system reduced the more wide Semitic system: Semitic dentals and africates (t, t, s, d), merged in the Egyptian *d* (in the rosslerian's system *t*), see Voigt 2002:271, and the development of \**d*, \*<sup>*d*</sup>*D*, \*<sup>*d*</sup>*z*, \*<sup>*d*</sup>*z* in the Egyptian <sup>*s*</sup>, see Voigt 2002:272. See Takács 1999a:271.

<sup>&</sup>lt;sup>8</sup> See Takács 1999ab:395.

<sup>&</sup>lt;sup>9</sup> In some examples six phonemes become one , see Hayward 2000:95.

<sup>&</sup>lt;sup>10</sup> See Diakonoff 1988:34; see also Blažek 1988:204; last Takács 1999a:266-270.

<sup>&</sup>lt;sup>13</sup> See last Takács 1999a:265. We emphasize the high presence of phonemes emphatic or Pharyngealized, which are attested in the most recent branches of the Afroasiatic family, for centuries in contact with Arabic, they may have been influenced by the Arabic too, see Kossmann 1997: 6 that emphasized that the phonemes t, s and h are Arabic loans, and see p. 15. See for a similar situation Haruna 1995:138-162. On similar and possible influences especially in the last millennium C.E. see Titov 1991:158.

<sup>14</sup> See Voigt 2002:271.

<sup>&</sup>lt;sup>15</sup> Hypothesis of the Russian's School, see Militarev 1976.

<sup>&</sup>lt;sup>16</sup> See Diakonoff 1988:35.

accepted.<sup>17</sup> The differentiation of the Afroasiatic \*f from \*p is confirmed by Egypto-Chadic correspondences,<sup>18</sup> even if this phonetic opposition in the others Afroasiatic branches was lost. So, it is possible to reconstruct the plosive voiceless \*p, the voiced \*b, and the fricative \*f.

In the Egypto-Semitic comparison the Bilabials show regular correspondences:

**Common Semitic (C.S.)** \**p* ~ Egyptian *p*: Akkadian *tapīļu* "drinking vessel (?)", Egyptian *tp* "head"; C.S. \*PANW, "face", -PNUW- "volgersi", Egyptian *pn*<sup>6</sup> "turn upside down", *pn*<sup>6</sup>*n*<sup>6</sup> "turn over and over",<sup>19</sup> compared by Militarev and Kogan with Cushitic, Aungi *fen* "face", Oromo *funnān* "nose", Western Chadic, Angas *pan* "guidare avanti", Berber, Ahaggar *ă-funfan* "nose";<sup>20</sup> C.S. \*KAPP-, "curved hand", Egyptian *kp* "paw"/Egyptian *kf*<sup>6</sup> "make captures",<sup>21</sup> Western Chadic \**paka* "hand"; C.S. \*<sup>6</sup>APAR- "land", Egyptian *p3*<sup>6</sup>.*t* "(irrigabile) land"; Akkadian *šurpu* "burning enchantment", Ugaritic *šnpt* "burning offer", Ugaritic *šrp*, Egyptian *s3pt* "lotus leaf"; C.S. \*PARY-, "fruit", Egyptian *prt* "fruit", "seed", Cushitic, Beja *fār* "flower", Western Chadic, Hausa *furē* "tree flower"; C.S. \*PAR-?-, "Onager",<sup>22</sup> Egyptian *p3*<sup>6</sup>*t* "quail"; C.S. \*KANAP-, "wing", Egyptian *k3pw* "Bittern"; Geez *falfal* "mole", Egyptian *pnw* "mouse", Low Eastern Chadic, Oromo *fuli?-ō* "mouse", Southern Cushitic, Rift Qwadza *pala-tiko* "mouse", Eastern Chadic, bidiya *pa*<sup>2</sup>*ila* "a kind of mouse".

**C.S.** \**b* ~ Egyptian *b*: C.S. \*<sup>2</sup>A-BIL- "dry", Egyptian *ib* (metathesis) "be thirsty"; C.S. \*GARAB- "scabies", Akkadian and Syriac "leprosy", Egyptian *h3bb* "crokedness"; C.S. \*GABU-H-<sup>23</sup> "bald", Egyptian *gb* "lack (of something)"; C.S. \*-BKIY- "to cry", Egyptian *bgi* "be weary", Cushitic afar *bog* "to cry"; C.S. \*NAYAB "tooth", Egyptian *ibh* "tooth", Berber *ennab* "canine tooth"; C.S. \*<sup>c</sup>-AQIB-, "calcaneus", "animal hoof", Egyptian, *kb-h* "foot",<sup>24</sup> Egyptian *tbw* (< \**kb*) "sole of foot", Eastern Cushitic \**kob*- "sandal", Western Chadic, Hausa *kùbùtai* "slipper", Central Chadic, Logone *kābē* "hoof of animal"; C.S. \**gabib*-

<sup>&</sup>lt;sup>17</sup> See Takács 1999ab:395, and Takács 1999a:266. Despite its presence in the Afroasiatic, although they accept the attestation in Chadic, Orel –Stolbova 1995:16. Stolbova stresses that this phoneme belongs to the proto Chadic phonological system but not to the proto Afroasiatic, see Stolbova 1996:20.

<sup>&</sup>lt;sup>18</sup> Greenberg 1954:295-302, that suggests the presence of a phoneme /<sup>m</sup>b/, on its nature see Greenberg 1965:88-92. Already against this hypothesis Illič-svityč 1966:9-34.

<sup>&</sup>lt;sup>19</sup> On reduplication of the root see Franci 2010:97-100.

<sup>&</sup>lt;sup>20</sup> See Militarev - Kogan 2000:215.

<sup>&</sup>lt;sup>21</sup> On the suffix 'see Franci 2010:90-92.

<sup>&</sup>lt;sup>22</sup> On the suffix <sup>9</sup> see Franci 2010:95-96.

<sup>&</sup>lt;sup>23</sup> On the suffix h see Franci 2010:95.

<sup>&</sup>lt;sup>24</sup> On the suffix h see Franci 2010:89-90.

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"land", Akkadian *gabibu*, Arabic *ğabib*-, Egyptian *gbb* "land", Cushitic, Somalo *gof* "cultivated field in the bush", Central Chadic \**g(v)b*- "field", Eastern Chadic \**gab*- "clay"; Ugaritic *dbb* "ocean", Egyptian *i-db* "river bank", Afroasiatic \**dob*- "water"; Akkadian *naba'u(m)* "type of reed mat", Egyptian *nbit* "reed"; Akkadian *lābišu* "a plant", Egyptian *nbs* "Ziziphus jujuba"; Akkadian *barraqītu* "a plant", Geez *bālāq* "fragrant tree", Geez *baqalt* "date palm", Sudarabic *bql* "plant", Egyptian *b3k* "moringa arabica"; Geez *bahe/bih* "hippopotamus", Egyptian *h3b* "hippopotamus", Egyptian *bk* "hawk", Akkadian *būnum* "a bird", Egyptian *bnw* "heron", "phoenix".

## Aporias

Beside the regular correspondences, it's possible to identify the so called occasional, seemingly irregular correspondences, which the latest studies consider acceptable,<sup>25</sup> for example in Ancient Egyptian is usual accepted the alternation of *b* and p:<sup>26</sup>

**C.S.** \* $p \sim Egyptian b:$  C.S. \*PALG-, "watercourse", "stream, ditch", Egyptian *b3g* "thick of fluid"; C.S. \*PIL-, "elephant", Egyptian *3bw* (metathesis) "elephant", Berber, Tuareg *elu* "elephant", Cushitic, Galla *arba* "elephant", Eastern Cushitic \**arb*- "elephant", Central Chadic \**arp*- "elephant", Eastern Highland Cushitic, Burji *árb-a* "elephant";<sup>27</sup> Hebrew *śārāp* "poisonous snake", Egyptian *s3bt* "colored snake".

**C.S.** \***b** ~ **Egyptian p** correspondence considered occasional but acceptable:<sup>28</sup> Geez *hənbərt* "navel", Egyptian *hp3* "navel", Cushitic, Agaw and Shamir *hərbir* "navel"; Central Chadic \**hif*- "navel"; C.S. \*BIRK-, "knee", Egyptian *p3g* "to kneel", *p3d* "kneecap", "knee"; C.S. \*TABY-, "gazzelle", Egyptian *tpiw* "gazzelle".

The first case (C.S. \* $p \sim$  Egyptian b) could be one attestation of the neutralization of the voiced plosive with the passage of Egyptian b > p. According to some scholars both these confusing correspondences are caused by the fact that the Egyptian b was fricative [ $\beta$ ] more than plosive, a phoneme still attested in Coptic.<sup>29</sup>

<sup>&</sup>lt;sup>25</sup> See Takács 1999a: 283-287.

 $<sup>^{26}</sup>$  See Westerndorf 1962: 23, n. 37. Takács suggests a derivation from Afroasiatic p/f, see Takács 1999a:284-286.

<sup>&</sup>lt;sup>27</sup> See Cohen 1969<sup>2</sup> :170, n° 372. See Takács 1999a: 51. See also Eastern Cushitic, Dhaasanac '*árab*, Tosco 2001, :575. However I must emphasize the probable relationship of the Semitic term with the Egyptian  $b_3$ "leopardo". Recently Militarev –Kogan 2005:227-229.

<sup>&</sup>lt;sup>28</sup> See Takács 1999a:287.

<sup>&</sup>lt;sup>29</sup> See Satzinger 1997:29.

## The Egyptian Labiodental f

The origin of the Egyptian f is interpreted in two different ways: (a) phonematization of a variety of p;<sup>30</sup> (b) an autonomous Afroasiatic phoneme.<sup>31</sup> In the Semitic language, f is just a variety sound of Common Semitic \*p, in the comparison it corresponds both to Egyptian p and f. In the Egyptian vocabulary p is attested in more words than f, probably as a result of a state control on the language in a historical period when the court was in Low Egypt, close to the Semitic area, and likely the phonematization of f is a High Egypt phenomenon on the same way of palatalization.<sup>32</sup> In fact during the Egyptian Middle Kingdom, the passage p > f is attested, but, according to Roccati, it could have been caused even by some graphic phenomenon.<sup>33</sup>

This fact leads us to a historical problem on the Bilabials in Afroasiatic, because Ancient Egyptian belongs to the three-phonetic Afroasiatic branch \*/p ~ f ~ b/, together with Chadic e Southern Cushitic,<sup>34</sup> opposite to the bi-phonetic branch \*/p ~ b/, composed by Semitic,<sup>35</sup> Omotic, Berber,<sup>36</sup> and the Cushitic.<sup>37</sup> Which is the innovative one? Greenberg suggested that the Semitic bi-phonetic system is more innovative, merging two Proto-phonemes in one.<sup>38</sup> Moscati suggested a second hypothesis: the only Common Semitic phoneme was \**p* that corresponds not only to *p* but even to Egyptian, Chadic, and Cushitic *f*, considering an innovation the Egyptian spit of \**p* in two different phonemes.<sup>39</sup>

The comparison shows that Egyptian preserved both two original Afroasiatic phonemes \*p and \*f, as in some branch of Cushitic, in Central and Western Chadic, differently to Berber and Semitic,<sup>40</sup> where is accepted just a Common \*p, that in Southern Semitic became f.

**C.S.** \* $p \sim \text{Egyptian } f$ : C.S. \*<sup>?</sup>ANP- "nose", Egyptian *nft* "breath, wind", *nf3* "blow (out of nose); Arabic *sāfa* "to smell", Aramaic *šayyep* "to blow", Egyptian \**sf* "nose", Eastern Cushitic \**šuf*- "to smell", Western Chadic \**saf*-

<sup>&</sup>lt;sup>30</sup> Cohen 1969<sup>2</sup>:166-167.

<sup>&</sup>lt;sup>31</sup> Greenberg 1958: 295-302; see alsoDjakonoff 1988: 35.

<sup>&</sup>lt;sup>32</sup> See Crevatin 1985: 130.

<sup>&</sup>lt;sup>33</sup> See Roccati 2000: 2: 4-5.

<sup>&</sup>lt;sup>34</sup> See also Takács 1999a: 395, where he emphasizes that this triad "...is an archaism preserved in same form (...) but lost in most of the other Cushitic Languages, also in Semitic and Berber...".

<sup>&</sup>lt;sup>35</sup> In Southern Semitic the Common p became f; the Ethiopian p seems to be used just in Greek loanwords.

<sup>&</sup>lt;sup>36</sup> Where the Bilabials triad is  $m, b \in p$ , see Greenberg 1958: 295.

<sup>&</sup>lt;sup>37</sup> See Svolacchia 1987: 190.

<sup>&</sup>lt;sup>38</sup> Greenberg 1958:296- 299.

<sup>&</sup>lt;sup>39</sup> Moscati 1969, §§72-73.

<sup>&</sup>lt;sup>40</sup> See Orel 1995: 144.

"wind", Central Chadic \**saf*- "to breathe";<sup>41</sup> Arabic *kafal*- "back", Amharic *ğarba* "back", Egyptian *kf3* "hinder part (of bird)";<sup>42</sup> Hebrew *paḥado* "buttock", Arabic *faḥid* "buttocks", Egyptian *ḥpdw* "buttocks";<sup>43</sup> C.S. \*HUP-N- "fist", Egyptian *hf-*<sup>6</sup> "fist"; Akkadian *niqiptu* "shrub", Egyptian *ndft* "a tree"; Akkadian *pagû(m)* "monkey", Egyptian *gf (cercopithecus ethiops)* "long-tailed monkey", il proto-Chadic \*[<sup>7</sup>*i*]*puki*- "monkey".

## Dentals

There is no problem in the reconstruction of Afroasiatic Dentals.<sup>44</sup> The dental triad \*t, \*d, \*t is well preserved in Semitic, Berber (where the emphatic corresponds to the voiced d, but in the double realization to the voiceless -tt-), in Cushitic; but it was lost in Egyptian (where apparently the passage \*t > d took place), and in Chadic, with the only exception in the North Bauchi language, where \*t is attested whereas in the others languages it becomes t.<sup>45</sup>

In the comparison the correspondences between Egypto-Semitic dentals are quite regular:

C.S. \* $t \sim \text{Egyptian } t$ : C.S. \*-TYIN- "to urinate" and C.S. \*TAYN-(AT-) "urine", Egyptian šnit "storm", variant šnyt, šn<sup>6</sup>, proto Southern Cushitic \*sinty<sup>2</sup>a "urine"; C.S.\*MAT-N- "tendon", Egyptian mt "vessel, duct, muscle"; C.S. \*SAP-AT- "lip", Egyptian sp.t "lip", Cushitic Proto Rift \*s(v) fi "lips";<sup>46</sup> C.S. \*LAHY-(AT-), "cheek", Arabic and Geez "beard", Egyptian hn.t (metathesis) "face"; Akkadian šahātu(m) "part of land", Egyptian "marshland" sht; Akkadian  $ah_itu$  "river bank", Ugaritic <sup>2</sup>ah "coast", Egyptian mgwt "new land"; C.S. \*TILL-, "hill", tg "land", proto Cushitic \*ter-/tir- "dust", Western Omotic, Nao turu"land", Southern Omotic, Hamer tore "land", Western Chadic, Bole-Tangale \*tar- "farm"; Geez satt "papyrus", "reed", Egyptian swt "scirpus" (water rush), Southern Cushitic, West Rift \*caw-, Iraqw cawo "bulrushes"; Ugaritic tnn"primordial dragon", Geez taro "bull", proto Southern Cushitic \*tal- "lioness", Egyptian tg "lion"; C.S. \*N-ŪB-(AT-), "bee", Egyptian bit "bee".

**C.S.** \**d* ~ **Egyptian** *d*: C.S. \*DAM, "blood", Egyptian *i-dm* "red linen"; C.S. \*QADQAD "top of the head", Egyptian *kd* "pot"; Geez *dawal* "country, border", Tigre *dawal* "district, country", Egyptian *wdrt* "region"; Ugaritic *dbb* "ocean", Egyptian *i-db* "river bank"; C.S. \*DAT-<sup>2</sup>-, "fresh grass", Egyptian

<sup>41</sup> Takács 1997: 225.

<sup>&</sup>lt;sup>42</sup> Cohen 1969<sup>2</sup>: 114, n° 178; see also Takács 1997: 231; and Takács 1999a: 66.

<sup>43</sup> Lacau 1970: 79.

<sup>&</sup>lt;sup>44</sup> See Takács 1999a: 266-267.

<sup>&</sup>lt;sup>45</sup> See Stolbova 1996: 35. Nevertheless the passage of initial *t*- to *t* in presence of *b* leads to make some reflections on the real attestation of the voiceless emphatic in Chadic.

<sup>&</sup>lt;sup>46</sup> For all Cohen 1969<sup>2</sup>: 139, n° 289. On Egyptian word see Lacau 1970: 54-56.

*dyt* "papyrus plant"; C.S. \*TIQD-, "almond tree", Egyptian *kdt.t* (metathesis) "a conifer"; C.S. \*DABY- "bear", Egyptian *db* "hyppopotamus"; Geez *dəgdəg* "rooster", Arabic *dağāğ* "domestic bird", Egyptian *dgyt* "a bird".

# The correspondence of Ancient Egyptian with the Semitic Dental Emphatic \**t*

The relationship of Egyptian with the Semitic Dental Emphatic \**t* is controversial, because according to the theory of Rössler and *neure Komparatistik* the only acceptable correspondence is C.S.\**t* ~ Egyptian *d*, denying completely the correspondence C.S. *d* ~ Egyptian d,<sup>47</sup> while Cohen suggested that "...*les correspondances donnent t, rarement d*...".<sup>48</sup> Nevertheless some scholars don't assume such categorical vision,<sup>49</sup> underlining the solidity of this correspondence, probably due to the fact that the only distinctive feature could be the "voiced":<sup>50</sup>

Common Semitic	Egyptian	
/ <u>t</u> /	/d/	/t/
[PLOSIVE]	[PLOSIVE]	[PLOSIVE]
[DENTAL]	[DENTAL]	[DENTAL]
[VOICELESS]	[VOICED]	[VOICELESS]
[EMPHATIC]	-	[ASPIRATED]

The correspondences show that both t and d correspond in the same percentage to the dental emphatic.<sup>51</sup>

C.S. \**t*~ Egyptian *t*:<sup>52</sup> Akkadian di Mari *tapī-hu* "pot", Egyptian *tp* "head"; C.S. \*MAȚAR- "pioggia", Egyptian *mtr* "acqua";<sup>53</sup> C.S. *'atar-* "incense", Egyptian *'ntyw* "myrrh"; Geez *təsn* "thyme", Egyptian *nstyw* (metathesis) "shrub (alkanna tinctoria)"; C.S. \**hatt-* "stick, branch", Egyptian *ht* "albero", Eastern Cushitic, Saho-Afar *had-a* "tree", proto Chadic \**k-d* "tree"; C.S. \*ȚIQD-, "almond tree", Egyptian *kdt.t* (metathesis) "a conifer".

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C.S. \**t*~Egyptian *d*: \*ŠIT-, "buttocks", Egyptian *šd* "vulva" (loanword?), Cushitic, Burji *suutoo*, Berber, Nefusi *eddist* "belly" and Figuig \**ds* "belly".

<sup>&</sup>lt;sup>47</sup> Rössler 1971: 272-274 e p. 285.

<sup>&</sup>lt;sup>48</sup> Cohen 1969<sup>2</sup>: 155.

<sup>&</sup>lt;sup>49</sup> See Diakonoff 1988: 35, for whom AA \*t > Eg. d. Loprieno emphasizes AA \*t, \*s > Eg. d, see Loprieno 1995: 32.

<sup>&</sup>lt;sup>50</sup> See Diakonoff 1988: 35-36; Loprieno 1995: 32.

<sup>&</sup>lt;sup>51</sup> See Loprieno 1977: 131.

<sup>&</sup>lt;sup>52</sup> See Cohen 1969<sup>2</sup>: 155; see also Orel – Stolbova 1995: XVIII-XIX.

<sup>&</sup>lt;sup>53</sup> See Fronzaroli 1965: 139-140; see also Orel – Stolbova 1995: 379 n° 1747.

**C.S.** \**d* ~ Egyptian *t*: C.S. \**dl*<sup>*h*</sup> "bava", Egyptian *t*<sub>3</sub>*<sup>h</sup>* "bava, umore"; C.S. \*GILD "skin", Egyptian <u>*hnt*</u>, "skin", <u>*h*</u><sub>3</sub>*w* "skin", Southern Cushitic \**gn* "skin", Chadic, kera *gòlgò* "skin of animal"; Akkadian *sādu* "meadow", Egyptian *stt* "field".

The aporias within a regular system of correspondences, as in the case of the voiced and the voiceless, were seen as consequence of the Ancient Egyptian tendency to the neutralization of the voiced plosive, that shifted the phonetic relationship from voiceless/voiced to aspirated/voiceless. But we can suggest one example not related with this process, C.S. \*ŠIT-, "buttocks", Egyptian *šd* "vulva", Cushitic, Burji *suutoo*, Berber, Nefusi *eddist* "belly" and Figuig \**ds* "belly", where the Afroasiatic documentation shows the regularity of this oscillation.

Hard to explain the correspondence C.S.  $*t \sim Egyptian s$ , attested as irregular C.S.  $*T\bar{I}N$ -(AT-), "clay", Egyptian *sin* "clay", Eastern Chadic, Somray *sińa* "clay";<sup>54</sup> as well as these comparison with the relationship C.S.  $*t \sim Egyptian$  0, likely evidence of a common Afroasiatic bilitteral root, extended by a suffis: Geez *salit* "sesame oil", Arabic *salīt* "sesame oil", Egyptian *š<sub>3</sub>w* "coriander", Eastern Cushitic, Saho-Afar *salīt*, Somali *salid*.

#### The Problem of the Egyptian Pharyngeal Voiced 5

After Rössler's statement about the correspondence C.S.  $*t \sim Egyptian d$ , the next step was trying to define the real phonetic value of the Egyptian d. Starting from the idea that the Egyptian f was incompatible with dentals and alveolar, at least in the Pyramid texts and in a different way than the Semitic one, Rössler suggested that its real phonetic value should be found exactly within those phonemes whereby the Egyptian f is incompatible, dental and/or alveolar, and it was the voiced counterpart of voiceless \*t and emphatic \*t. So Rössler reconstructed for the grampheme  $<^{c}>$  the phonetic value [d], that in comparison should correspond to the Common Semitic  $*d, *d, *z, *d, *5^{c}$  an unusual correspondence that Loprieno interpreted as the passage of Afroasiatic Apicals and Interdentals  $*d, *z \in *d$  in the Egyptian f through an intermediate stage with pharyngealized lateral:  $*d, *z \in *d > *: > f^{c}$  Others like Zeidler suggested the presence of a third phoneme d, near <t > /t/ and <d > /t'/, without a proper

<sup>&</sup>lt;sup>54</sup> Already Cohen 1969<sup>2</sup>: 142, n° 297. Note the Egyptian word *sint* "clay seal". Orel and Stolbova didn't accept this comparison, see Orel – Stolbova 1995: 475 n° 2249, and they suggested a comparison of the Egyptian word with Western Chadic, *\*sin-* "field", Central Chadic *\*sin-* "field", Eastern Chadic *\*sinya-* "land". But also we should consider the comparison with the Egyptian word *dni-tni* "dry land" (AEO 54).

<sup>&</sup>lt;sup>55</sup> Rössler 1971: 273, 276-277, 285-286, 288, 291-293. Against the theories of Rössler see Conti 1976: 50-55; and Ward 1985: 232-248. For a critical analysis see Takács 1999a: 333-393.

<sup>&</sup>lt;sup>56</sup> Loprieno 1995: 31.

grapheme, that in the Middle Kingdom took a pharyngeal articulation  $\frac{c}{2}/2^{1.57}$  The theory is yet ambivalent as the following example indicates C.S. \*DARDAR-"thistle", Egyptian 'r "reed pen", near to another comparison Ugaritic 'r'r "Tamarisk", Hebrew 'r'r, Syriac 'arō, Arabic 'ar'ar, Akkadian aru(m) "branch, frond" of Tamarisk; Geez ba'r "reed leaf". Could they be interpreted as dialectal differences?<sup>58</sup>

## **Fricative Interdentals**

The Fricative Dentals or Interdental are Semitic characteristic phonemes and their relationship with Egyptian seems similar to the evolution that these had in some Semitic Languages. The C.S. \* $\underline{t}$  usually corresponds to Egyptian *s*, and C.S. \* $\underline{d}$  both to the Egyptian *z*, and d,<sup>59</sup> even if there are some uncertainties:<sup>60</sup> C.S. \* $\underline{d} \sim Egyptian z$ , C.S. \* $\underline{D}I$ 'B- "wolf", Egyptian *z*<sub>3</sub>*b* "jackal",<sup>61</sup> Cushitic, Beja *diib* "wolf", Eastern Chadic \* $\underline{z}abiy$ - "Hyena", Omotic \*zobb-;<sup>62</sup> to which we can add, considering the alveolar oscillation, the example (C.S. \* $\underline{d} \sim Egyptian s$ ) C.S. \* $\underline{D}IR\bar{A}$ .", "arm", Egyptian *h*-*sr*<sup>6</sup>" arm", Western Chadic \**sar* "arm, hand".<sup>63</sup> Hard to explain the relationship \* $\underline{d} \sim Egyptian t$  attested in the example C.S. \*-HDIY-"to pant", in Arabic "to rave", Egyptian *ht* "call out", explicable, attested the word to the Egyptian Middle Kingdom, by the neutralization of the opposition between voiced and voiceless, reconstructing an original \**hd*, and leading that comparison to the correspondence with C.S. \* $\underline{d}$ .<sup>64</sup>

With the Semitic Fricative Interdental Voiceless Ancient Egyptian shows different seemingly irregular correspondences:<sup>65</sup>

**C.S.** \* $\underline{t} \sim \underline{Egyptian} t$ , C.S. \* $DA\underline{T}$ -?-, "fresh grass", Egyptian dyt "papyrus plant"; C.S. \* $BURA\underline{T}$ -, "juniper", Egyptian  $b_3t$  "bush", "wisp (of corn)", attested in Chadic Cushitic.<sup>66</sup>

C.S. \**t* ~ Egyptian š: 12. C.S. \*-**T**YIN- "to urinate" e C.S. \***T**AYN-(AT-) "urine", Egyptian šnit "storm", variant šnyt, šn<sup>9</sup>, proto Southern Cushitic \*sinty<sup>2</sup>a "urine"; C.S. \*np<u>t</u> "saliva", Egyptian *išf* "saliva";<sup>67</sup> 126. C.S. \*NAY<u>T</u>-, "lion",

<sup>&</sup>lt;sup>57</sup> Zeidler 1992: 206-210.

<sup>&</sup>lt;sup>58</sup> On the same way Schenkel 1993: 137-149; and also Loprieno 1994: 372.

<sup>&</sup>lt;sup>59</sup> On <u>d</u> see Cohen 1969<sup>2</sup>: 158-159; Ward 1961: 37, n. 83. On <u>t</u> see Ward 1962: 410; Conti 1976: 46.

<sup>60</sup> See Conti 1976: 24.

<sup>&</sup>lt;sup>61</sup> Already Cohen 1969<sup>2</sup>: 159, n° 347. See also Takács 1999a: 73-74 ; and Takács 2000: 349-350. Recently Dolgopolsky 2004: 422.

<sup>62</sup> See Militarev - Kogan 2005: 105-108

<sup>63</sup> See Takács 1999a: 39.

<sup>64</sup> See Takács 1999a: 268.

<sup>&</sup>lt;sup>65</sup> See Takács 1999a: 312-314, 316-317.

<sup>66</sup> See Orel – Stolbova 1995: 38-39 n° 155, and Takács 2001: 32-35.

<sup>67</sup> Ward 1962: 410-411.

Egyptian *wnš* "jackal", Berber, Tuareg *ehěnši* "jackal", Beni Sous *uššen* "jackal", Cushitic, proto Sidamo \**weš*- "dog".<sup>68</sup>

In fact the correspondence C.S.  $*t \sim \text{Egyptian } \check{s}$ , that was more excluded than doubted by Cohen,<sup>69</sup> starting from the analysis of the Semitic Placenames Egyptian Execration Texts, it must be related more to the loanwords,<sup>70</sup> than to a common root. So, as in the case of C.S. t, the Egyptian corresponds to the C.S.  $*\underline{t}$  with t.

The correspondence C.S. \*‡~ Egyptian *t* seems acceptable: C.S. \*<sup>c</sup>AŢM, "bone", Egyptian <sup>c</sup>*t* "limb, member of body", C.S. \*ŢABY-, "gazelle", Egyptian *tpiw* "ox", but likely "gazelle".

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 $<sup>^{68}</sup>$  On the meaning of "wolf" see also Hodge 1976:11, and Cohen that suggested a comparison with Berber Sous *uššen* "jackal", see Cohen 1969<sup>2</sup>: 199, n° 514.

<sup>69</sup> See Cohen 1969<sup>2</sup>: 157.

<sup>70</sup> Franci 2000: 151-154.

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