EGYPTIAN 'AYIN IN VARIATION WITH *D*

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Summary

Afroasiatic *d yields basically Egn. '. Before voiced consonants, however, both '
and *d* are attested. This provisional result is corroborated by an analysis of
phonetic root doublets with an opposition ' versus *d*.*

In the second millennium B.C. Egyptian 'Ayin was used to render Canaanite 'Ayin,
and in the first millennium Aramaic 'Ayin was used to render Egyptian 'Ayin (cf. as an
overview Satzinger 1997: 27–29). This is more or less the basis on which the
traditional Egyptological concept of the phonetics of 'Ayin rests. However, 'Ayin does
not behave like a pharyngal occlusive in respect to co-occurrence restrictions in
Egyptian roots. Instead it behaves like a dental or alveolar occlusive. O. Rössler's
conclusion that it must be of a dental (or alveolar) articulation (Rössler 1971: 270–275)
is cogent, although it is opposed to the numerous etymologies suggested so far that
equate the 'Ayins of both Egyptian and Semitic. In Rössler's view, Egyptian 'Ayin is a
voiced plosive [d]. It must not be confused with the sound, or phoneme, that traditional
Egyptological transcription renders as *d*. In Rössler's view, the latter is rather an
emphatic plosive, transcribed *ṭ*. Many recently published etymologies imply that
Egyptian *d* m a y correspond to an AA emphatic dental, although it corresponds in
others to a voiced occlusive, *d*.[1] In fact, it does not follow from Rössler's deduction
that Egyptian *d* must be emphatic in every instance. His primary argument is that the
emphatic slot of the dentals is neither occupied by *t*, the unvoiced plosive, nor by ' [d],
the voiced plosive, thus leaving *d* for it. He further supports his assumption by
pertinent etymologies, such as, for example,

> Egyptian *ḳnd*, *ḏnd* 'to become angry, furious,' Semitic *QNṬ*, with meanings like
> 'to become angry, to feel hurt, to frustrate, to despair, to fear, to be
> concerned' (Rössler 1971: 285, § 5)

> Egyptian *ḳdf* 'to collect,' Semitic *QṬP* 'to gather (fruits)' (Rössler 1971: 282, §
> 2, following Calice 1936: 41 no. 94 and 32 no. 46)

On the other hand, it may be imagined that *d did not shift from the dental articulation
[d] to a pharyngal articulation ['] in all cases. A conservative articulation may have been
retained in local idioms or linguistic norms (cf. Zeidler 1992: 208; Schenkel 1993;

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1 Cf. Vycichl 1985: 179. For Egn. *d* as a reflex of AA * *ṭ* see Diakonoff 1995: 26 no. 211; 29
   no. 220; 30 nos. 221. 222; 31 no. 224 etc.; for Egn. *d* as a reflex of AA **d* see Diakonoff
   1996: 6 no. 246; 8 no. 249; 9 no. 250; 9–10 no. 252 etc. – Ehret 1995 claims AA **d* to
   correspond to Egn. *d* (see pp. 125–137), but AA * *ṭ* to Egn. *s* (see pp. 167–173).

Satzinger 1994: 202–204), or it may have been conditioned by particular phonetic contexts (cf. Satzinger, printing). Whenever AA *d retained the dental plosive articulation in Egyptian it has obviously become "emphatic". For Egyptian d (i.e. ⟨d⟩) = Coptic T behaves all the same, whether < * ṭ or < *d.

A decision in favour of Rössler's results (viz., AA *d ~ Egn. ꜥ, AA *ṭ ~ Egn. d) or the traditional view cannot be made by simply adducing favourable etymologies and rejecting opposing ones (cf. Zeidler 1992: 206–207). Although critical assessments like the most recent contribution by J. Osing (1997) are welcome, attempts of a different dimension are called for. Rössler's approach is not based on etymologies but rather on his crucial observation of the incompatibilities (co-occurrence restrictions) of root consonants. Until now, none of Rössler's critics has been able to disprove this particular argument.

On a former occasion (Satzinger, printing) I tried to show a way to obtain more lucid results in respect to the etymological correspondences of the Egyptian dental plosives. I proceeded from the Afroasiatic roots established in D'jakonov's *Comparative-Historical Dictionary of the Afrasian Languages*,[2] endeavouring on the one hand to increase the number of Egyptian d reflexes of AA *d, and on the other to adduce evidence of Egyptian ꜥ corresponding to AA *d. Although ample space was granted to the authors, I had to restrict my documentation to AA roots commencing with *d, and having a labial, dental, alveolar, palatal, lateral or velar occlusive as a second root consonant, thus leaving out the nasals, the liquids and what is called weak consonants, and all roots with consonants other than *d in the first, and *d in any but the first consonant position. This yielded, as a provisional result, a remarkable structuring of the etymologies. If the second consonant is *b, or *g/gʷ, possible Egyptian reflexes with d and others with ꜥ in the first position were found. AA roots * dVd may appear in Egyptian either as "ꜥ or as dd. In AA roots with *s, *c, *č or *ĉ in the second position, Egyptian reflexes with ꜥ prevailed by far, the second consonant being realised as ḏ (which is č̣, according to Rössler). With *k/kʷ as the second consonant, Egyptian displays either ḳ (AA *k having become "emphatic") or sk (!), whereas AA *dVḳ roots seem to have only ꜥḏ reflexes in Egyptian.

Basically, AA *d yields Egyptian ꜥ. In the context of v o i c e l e s s occlusives, complicated co-occurrence restrictions provoke modifications that seem quite unexpected, like *p > b, *s > ḏ (i.e., č̣), *k > ḳ. If, however, *k⁽ʷ⁾ is retained as k, it is the initial *d that is changed, though not to a plosive, but rather to s. In the context of e m p h a t i c s, not only the dentals and alveolars but also the palatals and laterals seem to be excluded on the AA level already, and we are left with the labial, *ṗ, and the velar/uvular, *ḳ. Whereas the only instance for the former does not seem very significant (there being also an AA doublet with the voiced plosive, *b), * dVḳ may be

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2   My work was based on part II of the Russian edition: D'jakonov 1982: 3–93. There is in fact also a revised English version: Diakonoff 1993/1994/1995a/1995b/1997.

reflected by Egyptian ʿ*ḏ*. It is mainly in the context of v o i c e d occlusives that AA **d* may be reflected by e i t h e r ʿ o r *d* in Egyptian.[3]

As stated above, further evidence was omitted from the paper mentioned. It may, however, be summarised here: AA **dVm* seems to appear in Egyptian as ʿ*m*, ʿ*n*, *dm*, *dn*, perhaps also as ȝ; **dVn* may be ʿ*n*, *dn*, perhaps also as ȝ; for **dVr* and **dVl* there are tentative entries with ʿ*r* and *dȝ*; etc. Note that all these consonants in second position are voiced in AA.

For various reasons these results could be regarded as provisional or even premature. But to a certain extent they are corroborated by other evidence. If we accept that AA **d* may be reflected by Egyptian *d* in a context of voiced consonants only, though also by ʿ, a certain number of lexical doublets should be expected in Egyptian that display ʿ in one case and *d* in the other.

Such evidence has in fact been produced, such as the following:

ʿ(*j*) 'hand, lower arm' (cf.   **dj* 'hand', deduced from hieroglyph ⟅; probably
Rössler 1971: 285 § 6;   extant in preposition *m-dj* for which see below,
Schenkel 1993: 140)   no. 11; perhaps related to *dj.w* 'five' (Vycichl
    1985: 179; Roccati 1995: 361)

Calice (1936: 25 no. 11) related **dj* to Semitic **yad-* and some Cushitic forms whereas Rössler (1971: 285–286 § 6) regarded ʿ(*j*) (**id*) as a reflex of **yad-*.

In his paper, „Ueber die Verschiedenheiten von geschriebener und gesprochener Sprache", given at the Sixth International Congress, Turin, 1991, F. Kammerzell mentioned fourteen pertinent items.[4]

1)   ȝ 'hier(her)'   *dj* 'hier(her)'
There is perfect semantic agreement. The substitution of ȝ by *j* in *dj* can be accounted for by a phonetic development: ȝ must have become mute by the time of the New Kingdom; hence, there is virtually perfect phonetic agreement.

The attestation of ȝ is slightly earlier. Coptic has preserved the *d* doublet only: ⲦⲀⲒ 'here', cf. *B* ⲦⲎ 'there.'

2)   ȝ.*t* 'Leinenart'   *dȝj.w* 'Leinenstoffe'
As no semantic details are known, the agreement remains hypothetical.

Both forms are first attested in the Pyramid Texts. Coptic ⲈⲒⲀⲀⲨ is regarded as deriving from ȝ.*t*.

In AA, one may compare **ṭVr* II 'to plait, to sew' (Diakonoff 1995a no. 236).

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3   In Diakonoff 1995a/b there is much variation between **ṭ* and **d* (also cf. Zeidler 1992: 209). In some cases the Egyptian ʿ doublet may be derived from the AA **d* variant, whereas the Egyptian *d* root may be connected with the AA **ṭ* variant: Diakonoff 1995b: 14 no. 265 **dac*, var. **ṭac* 'knife; to cut'; Egn. ʿ*ḏ.t* 'massacre'; *ds* 'knife; flint; to cut.'

4   The publication of the paper in the Acts of the congress does not give the list mentioned, for reasons which the author explains (Kammerzell 1993), but cf. Zeidler (1992: 208). I am obliged to Dr. Kammerzell for sending me a copy of his hand-out.

3)   ꜣꜥ 1. 'spritzen'; 2. 'erzeugen; Sperma'   dꜣdꜣ 'ejakulieren'

The semantic agreement is satisfactory (*pace* Osing 1997: 229). As *dꜣdꜣ* is attested as late as the New Kingdom when ꜣ had become mute, the presence of the final ꜣ may be interpreted as a graphic phenomenon – a sort of hypercorrect spelling. But also a variant structured ABAB for an ABA form would be nothing extraordinary.[5] A root variant without reduplication is *dꜣ* 'to copulate' (Faulkner, Dictionary, 309; *Book of the Dead*).

     ꜣꜥ is attested early, *dꜣdꜣ* is of the New Kingdom. Not preserved in Coptic. Diakonoff (1995b no. 315) quotes *dꜣdꜣ* for the AA root *dḤ I 'outpour, moisture.' Orel / Stolbova (1994: 136 no. 591) quote Egn. *dꜣ* for an AA root *daʾ 'to urinate, to ejaculate, to perspire', but (1994: 141 no. 614) Egn. *dꜣdꜣ* for *dad- 'to flow, to be wet.'

4)   ꜣb (Baumsorte)   dꜣb 'Feige(nbaum)'

Perfect phonetic agreement. However, in the attestations of the "tree" there is no hint whatsoever to a fig-tree. For this reason J. Zeidler, in his evaluation of Kammerzell's list (Zeidler 1992: 208), remained sceptical. In the meantime, R. Hölzl has referred me to a spelling 𓈖𓏭 ꜣb,[6] for *dꜣb* 'fig' in an Old Kingdom inscription[7] which she is re-publishing in the *Corpus Antiquitatum Aegyptiacarum* of the Vienna collection (Hölzl, in preparation). There is no doubt whatsoever about the meaning as the 'figs' here are an item of the canonical list of offerings that is otherwise spelt *dꜣb* (see Barta 1963: 49 no. 71).

     Further corroboration comes from the verb ꜣb 'to become pleasant.' Actually, all other verbs of quality of similar meaning are related to words for sweet fruits and/or their trees which suggests that ꜣb is also related to *dꜣb*, var. ꜣb, 'fig', and that the ꜣb tree is the fig-tree:

jmꜣ 'to become pleasant, friendly'	*jmꜣ.t*, a fruit; *jmꜣ* 'male date-palm'
bnj[8] 'to become sweet, pleasant'	*bnj* 'date; *bnj.t* 'date-palm'
ndm 'to become sweet, pleasant'[9]	*ndm* 'carob-tree'
ꜣb 'to become pleasant, desirable'	*dꜣb*, var. ꜣb, 'fig'; ꜣb, a tree[10]

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5   *Pace* Osing 1997: 229. I have noted the following cases of ABA with ABAB doublets: *b ꜥ* 'sich rühmen', *b b* 'prahlen'; *m ꜥ*, *m m* 'Füße frottieren'; ꜥ ꜥ, ꜥ ꜥ 'Kehle'; *nkn* 'verletzen', *nknk.t* 'verletztes Auge'; *šnš*, *šnšn* 'zerstören'; *dfd*, *dfdf* 'Tropfen'; *drd*, *drdr* 'Blätter (der Bäume).' The case of *ꜣš*, *ꜣꜣꜣ* 'verfehlen' may be compared with *dꜣdꜣ* for *dꜣd, the final ꜣ being possibly a hypercorrection. (All quoted, for my convenience, from the "Beinlich List", for which cf. http://www.newton.cam.ac.uk/egypt/test/beinlich.html.)

6   Junker 1943:236 fig. 98, fifth line, sixth entry from left.

7   Offering list from the Mastaba of Minu, Vienna 8533 (PM [2]III/1, 140).

8   Beginning from the MK, it is usually written *bnr* which is most probably a hypercorrection; see Schenkel 1965: 114.

9   Arab. *naꜥima* 'to become excellent, soft, pleasant', Heb. *nāꜥem* 'to become lovely, charming'; see Calice 1932: 69 no. 234 (according to Ehret (1995: 322 no. 626), from an AA root *naꜥ- 'to be soft' – also extant in Arab. *naꜥa* 'to become week' and *naꜥnaꜥa* 'to become limp' – plus adjectivising suffix *-m*; however, his Cushitic *naꜥ- is not found in Dolgopol'skij 1973).

The ꜥb tree is first attested in the Pyramid Texts, and so is the verb ꜥb; the variant ꜥb 'fig' is of the late Old Kingdom. dꜣb 'fig' is first attested in the Pyramid Texts. Neither form is preserved in Coptic.

Diakonoff (1995a no. 239) quotes Egn. dꜣb for the AA root *ṯrb 'tree.'[11]

5)   ꜥb 'Horn'   db 'Horn'

From ꜥb, Coptic B ϩⲱⲡ is derived; from db, Coptic ⲧⲁⲡ. Osing (1997: 229) points to the difference in syllable structure and vocalisation (*ꜥábVw versus *dib or *dub) which means that we are not dealing with two realisations of the same word, but rather – very probably – two realisations of the same root. It may be a taboo expression with a meaning like *'pusher.'[12] It could be imagined that db, ⲧⲁⲡ is the active perfective participle of a verb *ꜥb/db 'to push,'[13] viz. *dib (see Osing 1987: 340–341), while ꜥb(w), ϩⲱⲡ is a nomen agentis, *ꜥábVw (see Osing 1976: 186).

ꜥb is from the Old Kingdom, db from the Second Intermediate Period.

6)   ꜥb (Hundename)   db (Hundename)

The *Wörterbuch* has not db, but db.t.t, as also Janssen (1958: 181 no. 30; also cf. Fischer 1961: 153). ⟨hieroglyphs⟩ db 'jackal' (Vycichl 1958: 383 no. 16) is a variant of ⟨hieroglyphs⟩ zꜣb in CT I, 289b and therefore a different lexeme and attests to a different phenomenon (viz., d as variant of z[14]). Other forms are ꜥbw (Janssen 1958: 179 no. 15, from Old Kingdom; 181 no. 31, from Middle Kingdom), ꜥbw.tj.w (ib.: 179 no. 10; Old Kingdom).

This equation remains at best hypothetical as the meanings of these dog's names are unknown. ꜥb has been tentatively adduced (Satzinger, printing) for the AA root *dap II 'to pursue, to search' (Diakonoff 1995b no. 246; also cf. Orel / Stolbova 1994: 138 no. 596 *da'ap- 'to follow', and no. 600 *dab-, id.).

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10   Egn. ꜥb 'to become pleasant' has been compared with Heb. ꜥareb 'pleasant', ꜥarab 'to become pleasant' (Calice 1936: 125 no. 519, following Ember 1911: 88), but also with Arab. ġarīb 'strange' (Ember 1917: 85 no. 111); Egn. ꜥb, a tree, has been compared with Arab. ġarab, Heb. ꜥarab, 'willow tree' (Calice 1936: 125 no. 520, following Ember 1917: 85 no. 110). From a Rösslerian viewpoint these resemblances are either fortuitous or the result of borrowings.

11   The Egyptian would suggest an AA root doublet *drb.

12   Even today, hunters use numerous expressions of this kind, while meticulously avoiding the normal terms for the game and the parts of its body.

13   Cf. Diakonoff 1995b: 7 no. 247: AA *dVp 'to push, to press', and Orel / Stolbova 1994: 172 no. 753: AA *düp 'to push.'

14   Cf. ḫnz 'durchziehen' : ḫnd 'betreten'; zmꜣ 'vereinigen' : dmꜣ 'zusammenbinden'; zn 'abschneiden' : dn (and dndn) 'abschneiden' (Schenkel 1993: 145); zbnbn 'sich ergehen' : dbnbn 'durchwandern (einen Ort)' (Vycichl 1985: 172). – There are also root doublets with variation of ꜥ and z; see Kammerzell's 1991 hand-out mentioned above, and add pnꜥ 'umwenden', pnꜥnꜥ 'mehrmals umdrehen' : pnz 'umdrehen' (Ward 1977: 280).

7)   ꜣb.t 'Weberin' (?)   dbj.t (Stoffsorte)

Zeidler (1992: 208) is sceptical about this item. There seems to be, however, additional evidence for these root doublets with meanings connected with weaving and linen: ꜣbꜣ(j)t 'ribbon' (Meeks, *AL* 77.0612; Meeks, *AL* 78.0684); ꜣby(t) 'reins(?)' (Meeks, *AL* 78.0678); sdb (s-db ?), smooth seam of linen-cloth (*Wb.* IV, 368); sdb (s-db ?), a dress (ib). Nevertheless, the equation remains hypothetical.

    ꜣb.t has been tentatively adduced (Satzinger, printing) for the AA root *dap I 'to plait, to sew' (D'jakonov 1982 no. 105; this root is not included in the Englisch edition, Diakonoff 1995b; but cf. Diakonoff 1995a no. 224, *taf II 'tying, plaiting').

8)   ꜣb.t (Pflanzenart)   dbj.t (Pflanzenart)

Hypothetical, for lack of semantic details.

9)   ꜥnw (Steinsorte)   dnj 'Steinblock'

jnr ḥḏ nfr n ꜥnw 'good white stone of ...' is a term for limestone, in contrast to jnr ḥḏ nfr n rwḏt which means sandstone; both expressions date back to the Middle Kingdom. – In addition to dnj 'Steinblock' (*Wb.* V, 466,8, with reference to O. Gardiner 51, dynasty 18), compare dnw, a piece (of stone?) used for mending a monolithic obelisk of granite, and probably being of the same material (cf. *Wb.* V, 464,6, with reference to *Urk.* IV, 367,2), and Late Egyptian dnw, probably a stone used for masonry (Wente 1961: 257 note n). The semantic agreement seems poor, one will doubt that the ꜥ and d words are doublets.

10)   ꜥgꜣ (Verbum der Bewegung)   dgꜣ 'gehen'

The semantic coherence is not cogent, though not impossible (it is rejected by Osing 1997: 229).

    Orel / Stolbova (1994: 143 no. 619) quote dgꜣ for an AA root *dag-/*dig- 'to go.'

11)   m-ꜥ 'mit, bei'   m-dj 'mit, bei'

Both prepositions are assumed to mean 'in the hand of' (see, e.g., Schenkel 1993: 140). For ꜥ(j) and dj, 'hand,' see above. Coptic has ⲚⲦⲀ⸗, ⲚⲦⲉ-.

12)   bꜥn 'einfassen'   bdn 'einwickeln'

The semantic coherence is not cogent, though possible (it is rejected by Osing 1997: 229); the phonetic agreement is good, though bdn has a variant with metathesis, bnd.

    All forms are attested in Late Egyptian only. Diakonoff (1994 no. 80) quotes bdn for AA *bad II 'garment, wrapping, strap; to wrap, to tie.' Ehret's (1995: 91 no. 39) quoting of bꜥn 'mounting (what a statue, etc., sits on)' for an AA root *-baꜥ 'to sit' is not convincing.

13) *ḫ ʿbj.w* (Bezeichnung für Feinde)   *ḫdbj.t* 'Haufen geschlagener Feinde'
For lack of semantic details, their relationship is only hypothetical. But see for the
meaning the verb *ḫdb* 'to overthrow'[15] (first attested in the Middle Kingdom), the
enemies are probably 'the overthrown ones.' The forms seem to have an *ḫ*- root prefix
(cf. Thausing 1932), the root being *ʿb- and *db-, respectively. It may be compared
with AA *dab IV 'to trample, to pound, to knock' for which Diakonoff (1995b
no. 252; Orel / Stolbova 1994: 139 no. 602 have *dab- 'to trample') quotes for
Egyptian: *dbdb* 'to knock, to thump (of heart),' medical text; cf. also *ʿbb* 'to knock (at
door)', dynasty 18 (see Satzinger, printing).

  ḫ ʿbj.w is attested in the Late Period only, *ḫdbj.t* from dynasty 20.

14) *ḫfʿ* 'fassen, packen'   *šfd* 'fassen, packen'
Perfect semantic agreement. For a correspondence of *ḫ* and *š* cf. *zšš* 'to tear out
(papyrus)' and *zḫz* 'to tear out (papyrus, Eye of Horus)' (both attested in the Pyramid
Texts, Old Kingdom). *kfʿ* 'to make captures, booty' is probably due to a phonetic shift
of the New Kingdom.[16] *ḫfʿ* is first attested in the Pyramid Texts, *šfd* in the Coffin
Texts.

  Rössler (1971: 286 § 6) equated *ḫfʿ* with Semitic *ʿBD* 'to serve' (cf. Zeidler 1992:
206); one will agree with Osing (1997: 226) who rejects this for semantic reasons.
Vycichl (1958: 375) quoted Ember (1930 § 5h. 1) who relates Egyptian *ḫfʿ* to Arabic
ḥafaʿa, but this does not mean 'to seize' but rather 'to feel giddy.' Instead, Arabic
qabaḍa 'to seize (with the hand/fist), *empoigner*', Hebrew *qābaṣ*, etc. 'to assemble' is
here suggested.[17]

  Another couple of doublets have been suggested (see Zeidler 1992: 208; cf.
Loprieno 1995: 45):

mšʿ 'marschieren' (Late Egn., from   *mšd* 'durchwandern' (Demotic, „Abl[eitung]
  an Old Egn. root), Coptic ⲙⲟⲟϣⲉ   n[eu]äg[yptisch]"), Coptic ⲙⲟⲩϣⲧ̄

Phonetically, they correspond perfectly, but a semantic relation cannot be accepted on
closer inspection (also cf. Osing 1997: 229). *mšʿ* is related to *mšʿ* 'army' and it means
'to march', later also 'to walk.' If there is a Demotic *mšd* 'durchwandern'[18] it is
certainly not derived from *mšd* in its oldest attestation, the "bulletin" of the Battle of

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15   *ḫdb* is regarded as the etymon of Coptic Ϩⲧⲟⲡ 'fall, destruction.'
16   Cf. ⲕⲱ < *ḫáʒaʿ; perhaps, also ⲕⲱⲗ̄ < * *ḫánap* (cf. Westendorf, *Handwörterbuch*, 62, but see
      Černý, *Etym. Dictionary*, 57). – Coptic ⲕⲱⲱⲃⲉ 'to compel, to seize by force', and ⲕⲃⲁ
      'vengeance, violence' (Vycichl 1983: 71) are derived from *kfʿ*, whereas *ḫfʿ* 'fist' is continued in
      Ϩⲱϥ 'hand (as measure)' (for Ϩ < ʿ cf., e.g., B ϪⲟⲩⲕϨ [S ϫⲱⲱⲕⲉ] < Demot. *dḳʿ*), and *šfd* in
      ϣⲱϥⲧ 'fist.'
17   Orel / Stolbova quote Egn. *ḫfʿ* for an AA root *qafVʿ 'to hold' whose third radical solely
      depends on the Egyptian word (for Semitic they compare Akk. *ḫapû*).
18   No source is given. The Coptic word shows that the wandering is derived from the
      investigating: ⲙⲟⲩϣⲧ̄ 'to examine, to search out, visit'; 'to consider, to visit; to wander'
      (however, Crum, *Dictionary*, 207a adds to the latter, "? confused with ⲙⲟⲟϣⲉ" [which is <
      mšʿ(.w); it is originally a qualitative / old perfective, cf. Polotsky 1957: 229 note 1]).

Qadesh. This *mšd* has a variant form *wšd* in another copy of the text. It is probably
identical with *wšd* 'to address,' 'to question (in court).' Its meaning in the Qadesh text
is obviously 'to interrogate' (Kitchen 1996: 15), and not 'to send away' (Meeks *AL*
79.1380). There is, however, a direct line of descendance to Demotic *mšt*
'untersuchen, inspizieren' (Erichsen 1954: 182). Possibly, the verb *mšd* is derived
from a noun **mšd*, 'investigation,' or the like, that is formed from the verb *wšd* with
an *m-* prefix.

Our examination of the root or word doublets has yielded the following assessment.
Evident doublets:

ꜥ(j) 'hand'; cf. *m-*ꜥ 'mit, bei' (OEgn.)   dj 'hand'; cf. *m-dj* 'mit, bei' (LEgn.)
ꜣ 'hier(her)' (MK)   dj 'hier(her)' (Amarna)
ꜥ 1. 'spritzen'; 2. 'erzeugen; Sperma' (*PT*)   dꜣdꜣ 'ejakulieren' (*BD*)
ꜣb 'fig (tree)' (OK)   dꜣb 'Feige(nbaum)' (*PT*)
ꜥb 'Horn' (OEgn.)   db 'Horn' (med.)

Probable doublets:

ꜥb.t 'Weberin' (?) (OEgn.)   dbj.t (Stoffsorte)
ꜥgꜣ (Verbum der Bewegung) (dyn. 18)   dgꜣ 'gehen' (LEgn.)
bꜥn 'einfassen' (LEgn.)   bdn 'einwickeln' (LEgn.)
ḥꜥbj.w (Bezeichnung für Feinde) (late)   ḥdbj.t 'Haufen geschlagener Feinde' (NK)
ḥfꜥ 'fassen, packen' (*PT*)   šfd 'fassen, packen' (*CT*)

Possible doublets:

ꜣ.t 'Leinenart' (OK)   dꜣj.w 'Leinenstoffe' (*PT*)
ꜥb (Hundename) (OK)   db (Hundename) (*dbt.t*: MK)
ꜥb.t (Pflanzenart) (MK)   dbj.t (Pflanzenart) (med.)

Improbable doublets:

ꜥnw (Steinsorte) (MK)   dnj 'Steinblock' (LEgn.)
mšꜥ 'marschieren' (LEgn.)   mšd 'durchwandern'   (Demot.)

In 10 of the 13 not improbable cases, ꜥ/d is in initial position. In one case, viz. ḥꜥb-
/ḥdb-, ḥ- is prefixed to root-initial ꜥ/d. In bꜥn/bdn, ꜥ/d is positioned between two other
consonants (the second of which may be a root suffix). In ḥfꜥ/šfd, ꜥ/d is in the third and
final position. Where ꜥ/d is not in the final position it is followed by *j* (1 case), ꜣ (4
cases), *b* (5 cases), *g* (1 case), or *n* (1 case). It will be noted that these are virtually the
same conditions under which AA **d* is reflected by either Egyptian ꜥ or *d*. However,
the force of this result is impaired by the co-occurrence restrictions of the Egyptian
roots, which would not allow all consonants after ꜥ or *d*. Nonetheless, it is worth
noting that no doublets have been discovered that have in the first position ꜥ or *d*, and in
the second position one of the voiceless consonants, that are compatible with ꜥ and *d*,
like *p*, *ḥ*, *ḫ*, *z*, *š*, *ḳ* or *ḏ*.[19]

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19   I am indebted to Georg Brein for informations on the Vienna M. A. thesis he is preparing, viz.
      Wurzelinkompatibilitäten im Wortschatz der Pyramidentexte.

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