# A RE-EXAMINATION OF O. CAIRO JDE 72460 (= O. CAIRO SR 1475)

Ending the quest for a 19<sup>th</sup> Dynasty queen's tomb in the Valley of the Kings

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**Résumé**. Dans cette contribution, nous procédons à un nouvel examen de l'O. Caire JdE 72460 : après avoir discuté les interprétations possibles pour ce texte, en nous appuyant sur une analyse des expressions de mesure de distance dans les textes du Nouvel Empire, nous examinons les correspondances qui peuvent être établies entre les emplacements et distances mentionnées dans l'ostracon, d'une part, et les structures archéologiques conservées dans la Nécropole thébaine, d'autre part. Nous arrivons à la conclusion que ce document pourrait bien se rapporter à des travaux en cours à l'intérieur de KV 5.

**Abstract**. In this paper, we offer a new interpretation for O. Cairo JdE 72460. Based on a discussion of the expressions used for measuring distances in the New Kingdom documentation, we explore the various possible translations. We then try to map the abstract relationships between places as well as the related measurements onto actual archeological structures. We come to the conclusion that this ostracon might be linked to work in progress inside KV 5.

## 0. Introduction

The famous O. JdE 72460 — which mentions distances between several places in the Theban necropolis, including the building sites of tombs — was first published by E. Thomas in 1976<sup>1</sup>, based on an earlier transcription made by J. Černý. Some years ago, this document received a thorough commentary by K.C. Lakomy.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> E. Thomas, "Cairo Ostracon J. 72460", in *Studies in Honor of Georges R. Hughes (SAOC* 39), 1976, p. 209-216.

<sup>&</sup>lt;sup>2</sup> K.C. Lakomy, Cairo Ostracon J. 72460: Eine Untersuchung zur königlichen Bestattungstradition im Tal der Könige zu Beginn der Ramessidenzeit (GM BH 4), 2008,

The 're-examination' that follows will therefore not broach all the issues that surface when reading such a fascinating text — most of them having already been identified and discussed at length in the previous literature. Rather, we will focus on four specific points that, in our opinion, still deserve further attention.

The first section is philological and discusses issues related to the reading of the hieratic, to the segmentation of the text into sentences and to its very translation: rather than coming up with a single 'good solution,' we try to list the various possibilities and we discuss their respective implications in terms of hermeneutics. In the second section, we compare the means of expression used for measuring distances between places in O. Cairo JdE 72460 with those attested in the Late Egyptian corpus, with special attention to the documents coming from Western Thebes. Based on §1 and §2, we show in the third section how one could capture graphically — and thereby make explicit — the relations between the topographical points mentioned in the text;<sup>3</sup> we further discuss, based on archaeological evidence, how this abstract configuration could be mapped onto actual locations in the Theban necropolis. In the final section, we focus on the Sitz im Leben that is likely to account for the writing of an ostracon with such unusual content.

## 1. PHILOLOGICAL COMMENTS: READING, SEGMENTATION AND TRANSLATION

Despite the many translations of this text, its understanding is still obscured by issues pertaining to the transcription of the hieratic as well as to the segmentation of the text into sentences. We first give below an updated transcription of the text based on the photographs at our disposal, <sup>4</sup> and we suggest that the recto-verso order could be reversed.<sup>5</sup>

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with references to previous discussions of the ostracon (or part of it) on p. 1-2. The main arguments are summarized in K.C. Lakomy, ",Von dem in Arbeit befindlichen Grab der Isisnefret zu dem (Grab) des/meines Hohepriesters von Heliopolis, Meriatum (sind es) 200 Ellen': Ein Beitrag zur Konzeption und Anlage ,nichtköniglicher' Grabanlagen im Tal der Könige zu Beginn der Ramessidenzeit", GM 216 (2008), p. 33-44.

<sup>&</sup>lt;sup>3</sup> By doing so, we follow the example of R.J. Demarée, "Royal Riddles", in R.J. Demarée & A. Egberts (eds), *Village Voices. Proceedings of the symposium "Texts from Deir el-Medîna and their interpretation" Leiden May 31 – June 1 1991 (CNWS 13)*, 1992, p. 9-18, who published a text with the measurements of rooms and corridors of a tomb. Similarly, see P. Grandet, *Catalogue des ostraca hiératiques non littéraires de Deir el-Médînéh*, *Tome XI (DFIFAO 48)*, 2010, p. 72-74, regarding O. DeM 10188.

<sup>&</sup>lt;sup>4</sup> See E. Thomas, "Cairo Ostracon J. 72460", p. 210; K.C. Lakomy, *Cairo Ostracon J. 72460*, p. 106-108; K.C. Lakomy, *GM* 216 (2008), p. 42.

In §1.1 and §1.2, we discuss some palaeographical issues and we provide a translation of the text. Short grammatical comments are then given in §1.3 in order to justify some choices made in the translation.

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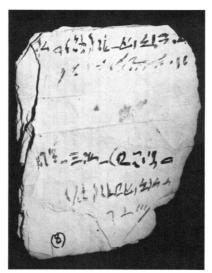


Fig. 1. O. Cairo JdE 72460, R° (E. Thomas, "Cairo Ostracon J. 72460", p. 210)

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<sup>&</sup>lt;sup>5</sup> Even if not entirely decisive, two arguments can be invoked. First, the material aspect of the stone: the 'natural' horizontal lines on the old verso (see Fig. 1) make us think that it would be more ergonomic for the scribe to use this side of the ostracon first. Second, the sequential ordering of the measurements is much easier to explain (see §3) if we follow this order than the other way around.



Fig. 2. O. Cairo JdE 72460, v° (E. Thomas, "Cairo Ostracon J. 72460", p. 210)

## 1.1. Palaeographical notes on the transcription

- R° 1 K.A. Kitchen (KRI II, 856,6-7) postulates the existence of a significant lacuna at the beginning of r° 1-2:

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It seems however (1) that this restitution is not needed for the text to make sense (see below), and (2) that the upper right corner of the ostracon is just slightly broken, as shown by the other side of the piece. Consequently, the shape of the ostracon does not allow for such restitution: only the first half of the sign is missing. Note that K.C. Lakomy, *Cairo Ostracon J. 72460*, p. 112 does not transcribe  $\P$  at the beginning of  $\P$  2.

 $-v^{\circ}$  4 For J.J. Janssen's reading 強制 after  $\mathbb{A} \times \mathbb{C}$ , see E. Thomas, "Cairo Ostracon J. 72460", p. 209 and compare with  $\mathbb{R}^{\circ}$  1-2. This reading is endorsed by K.A. Kitchen who transcribes, although with some hesitation, 点题例  $\mathbb{A} \times \mathbb{C}$  (KRI II, 856,3). The presence of  $\mathbb{A}$  after p3y is subject to caution based on the photographs.

- $-v^{\circ}$  5 The sign that has been read  $\mathscr{J}$  up until now could perhaps also be read  $\mathscr{L}$  (similar shape in P. Cairo JdE 86637,  $v^{\circ}$  XX, l. 1), abbreviation of the word 3ty, with the meaning "damaged".
- v° 6 The signs that stand between p³ and mr-m8° wr have been interpreted by J.J. Janssen as \_ႃ//, the second part of a putative possessive article p³y=f (see E. Thomas, "Cairo Ostracon J. 72460", p. 209; cautiously followed by K.A. Kitchen, see KRI II, 856,5). K.C. Lakomy (Cairo Ostracon J. 72460, p. 110-111), on the other hand, mistakes these signs for ♣, as appears from his palaeographical table. The reading \_ႃ// W being problematic from a palaeographical point of view and causing difficulties for the general interpretation of the text (who would this possessive article exactly be referring to?), we suggest reading this group simply ♠ W (compare with the writing of p³ in R° 4) in a construction p³ (n) p³ NP ("the one of the NP").
- v° 6 For this hieratic shape of &, see S. Wimmer, *Hieratische Paläographie der nicht-literarischen Ostraka der 19. und 20. Dynastie* (ÄAT 28.2), 1995, p. 132.

## 1.2. Towards a translation

The main problem that one has to face when translating this text is to determine where each sentence begins and ends. Needless to say that, in such list of measurements, depending on the places where one puts the sentence breaks, the distances and very relations between the locations mentioned in the document can vary considerably. In order to assess the plausibility of any segmentation of the text, one can rely on two types of criteria (that should ideally reinforce each other's): material features and grammaticality.

By material features, we refer to the traces of dipping as well as to the presence of blank spaces: <sup>7</sup> if the individual who wrote the ostracon is — as we think — a skilled scribe, one can hypothesize that the traces of dipping do generally not interrupt meaningful units, such as phrases or sentences. The traces of dipping (when undisputable) are marked with ''' in the transcription above. Based on this first feature, the following segmentation of the text may be suggested (each line break in the transliteration corresponds to a trace of dipping):

We are grateful to J.Fr. Quack for discussing this issue with us and confirming this reading as a likely candidate.

<sup>&</sup>lt;sup>7</sup> In this respect, see J.P. Allen, *The Heqanakht Papyri (PMMA* 27), 2002, p. 81-83 with Appendix B on p. 227-242.

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R° 1 p3 r-c-b3k n 3s.t-Nfr.t r p3 R° 2 y.i wr-m33w Mrj-Itm mḥ 200 [BLANK SPACE]
R° 3 r-83c pḥ n p3 mw-n-p.t R° 4 r p3 b3k n 3s.t-Nfr.t R° 5 [mḥ] 445
V° 1 r iwt try.t, r iwt p3 mr-mšc wr V° 2 mḥ 30
p3 r-c-b3k n wr-m33w Mrj-Itm V° 3 mḥ 25 r iwt try.t
V° 4 p3 b3k n n3 sgnn r p3y wr-m33w mḥ 40
V° 5 hd hr g3w.t mḥ.tj
nty p3 r-c-b3k ?is? im V° 6 [mḥ] 30
r p3 (n) p3 mr-mšc wr
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As can be observed, the two sentences in connection with the tomb of Isisnefret on the R° (respectively R° 1-2 and R° 3-5, separated by a blank space)<sup>8</sup> are not interrupted by traces of dipping and are two grammatically well-formed clauses.

The same holds for the  $V^{\circ}$  1-4: the traces of dipping correspond to three meaningful units, each time noting the measurement of distances between two points. Due to the quantity of information to be mentioned in the last sentence, the scribe apparently had to dip his pen twice for writing  $V^{\circ}$  5-6, but this changes nothing with respect to the fact that the textual units delimited by the traces of dipping (as well as by the spacing on the  $R^{\circ}$ ) make perfect sense as such. This criterion can therefore be taken seriously when translating the text and when interpreting its content:

 $^{R^{\circ} 1}$  The building site of Isisnefret, unto  $m^{R^{\circ} 2}y$  Chief of Seers, Meryatum: 200 cubits.

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[blank space]
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<sup>R° 3</sup> Beginning from the back of the pool of water <sup>R° 4</sup> unto the building site of Isisnefret: <sup>R° 5</sup> 445 [cubits].

v° 1 Unto the site "Willow" (and) unto the site "the Generalissimo" v° 2 30 cubits 9

The building site of the Chief of Seers, Meryatum:  $v^{\circ 3}$  25 cubits unto the site "Willow".

v° 4 The workplace of the oils (b), unto this Chief of Seers, 40 cubits.

v° 5 Going northwards through<sup>(c)</sup> the North narrows<sup>(d)</sup> where the ?old?<sup>(e)</sup> building site is: v° 6 30 [cubits] unto the one of "the Generalissimo".

<sup>&</sup>lt;sup>8</sup> This space (approximately two lines) could be accounted for in many ways (e.g. no significance, written later than the first measurement, to be "communicated" separately, etc.), but we do not want to favor any particular hypothesis at this stage.

This is one of the three possible translations for this sentence, see under §2.

## 1.3. Notes on the translation

E. Thomas ("Cairo Ostracon J. 72460", p. 213) suggested that try.t "is apparently related to a willow divinity. Is it here a cult place and/or the tree itself (...)?" The second option can be safely discarded. First, the classifier of the cobra clearly indicates that the word refers here to a goddess (in this respect, see already the remarks in K.C. Lakomy, Cairo Ostracon J. 72460, p. 15). Second, tr.t (Wb. V, 385,13-386,2; Coptic Toype) refers to the willow, 10 a tree that requires a moist environment, which is unlikely to have existed in the Theban desert at the time. The suggestion that we have to deal with a cult place is not without parallel, since we know a stela from Deir el-Medineh<sup>11</sup>— dating from the reign of Ramesses II — that shows the dead in adoration in front of the goddess Nebet-Hetepet, 12 who is closely associated with the willow tree.<sup>13</sup> This stela therefore shows that some cult linked to the willow used to exist in the Theban area. 14 Note that a god and a goddess bearing the name try.t (Wb. V, 386,4; LGG VII, 478) are documented since the Old Kingdom and are especially well represented on coffins from Assiut and Deir el-Bersheh. 15 In our opinion, the willow-goddess mentioned here could therefore refer to one of two things: either to an otherwise unattested cultplace<sup>16</sup> for this willow goddess or to a representation of the

More precisely, to the *Salix safsaf*; cf. L. Keimer, "L'arbre *tr.t* est-il vraiment le saule égyptien (*Salix safsaf* Forsk.)", *BIFAO* 31 (1931), p. 177-227 and *LdÄ* VI, col. 1164-1166, *s.v. Weide*. This identification goes back to A. Mariette (cf. M. Erroux-Morfin, "Le saule et la lune", in S. Aufrère (ed.), *Encyclopédie religieuse de l'univers végétal, croyances phytoreligieuses de l'Égypte ancienne* [*OrMonsp* X], vol. 1, 1999, p. 293-316, with n. 2). The word is probably built on a root *tr*, with the meaning "to cover" or the like (see D. Meeks, "Notes de lexicographie (§5-8)", *BIFAO* 77 [1977], p. 87) because of its lid-shape, which can act as a refuge for crocodiles or other aquatic fauna (cf. the association of the willow with the god Soukhos).

J. Černý, Egyptian Stelae in the Bankes Collection, 1958, Stela n. 7.

J. Vandier, "Iousâas et (Hathor)-Nébet-Hétépet", *RdÉ* 16 (1964), p. 58; M. Erroux-Morfin, "Le saule et la lune", vol. 1, p. 296-297.

<sup>&</sup>lt;sup>13</sup> For the association of this goddess with a tree, see already H. Kees, "Zu den ägyptischen Mondtagen", ZAS 60 (1925), p. 6-7.

This is evidently the interpretation favoured by M. Erroux-Morfin ("Le saule et la lune", vol. 1, p. 304) who comments the occurrence of *try.t* in the Cairo ostracon as follows: "L'emplacement de « Celle du saule » (...) semble être une allusion au sanctuaire de Nébet-hétépet, où venait se recueillir les ouvriers de la nécropole, sous Ramsès II."

<sup>&</sup>lt;sup>15</sup> See already L. Keimer, *BIFAO* 31 (1931), p. 180-181; M. Erroux-Morfin, "Le saule et la lune", vol. 1, p. 303.

Daniel Arpagaus (Basel) mentioned to us a strange coincidence, namely a link between the willow tree and a "Valley of the Kings" in an Arabic source. See L. Leroy ("Les couvents des chrétiens. Traduction de l'arabe d'al-Makrizi", *Revue de l'Orient Chrétien* 3/13 [1908], p. 33-46) who translates (on p. 41) a passage related to "[l]e

- willow-goddess on the wall of an existing monument or tomb<sup>17</sup> that has been used as point of reference for the measurement. <sup>18</sup> This second option is all the more possible that the goddess *try.t* is well attested in the funerary corpora<sup>19</sup> and that we find representations of the willow tree in vignettes of the *Book of the Dead*. <sup>20</sup>
- (b) As stated by J. Černý (*A community of Workmen at Thebes* [*BdÉ* 50], 1973, p. 84), "perhaps 'the oils' were destined for the wicks used in the work underground, and their oiling was done in a particular building (or a discussed tomb?)." See also J. Černý, *Valley oft he Kings* (*BdÉ* 61), 1973, p. 44-45 about the *libs sgnn* "greased candles" stored in "the magazine" (usually *wd3*) from which they were issued from time to time (cf. e.g. O. Cairo JdE 72453; 72454; O. Petrie 5 [= K*RI* V, 537]; and O. VoQ 1 for the *libs r sgnn*, see Y. Koenig, "Nouveaux textes hiératiques de la Vallée des Reines [1]", *BIFAO* 88 [1988], p. 114).
- (c) The verb *hdi* is usually constructed with the preposition *hr* in order to refer to a movement northwards *on* water (see *Wb*. III, 354,14). However, when referring to a movement northwards in general (i.e. with no boat/water involved), the preposition *hr* can be used in order to define the landscape *through* which the movement of the subject takes place, as in P. Harris 500, v° 5,2 (= *LES* 3,2): *iw=f hr hd m-s3 ib=f hr h3s.t* "He went northwards through the desert following his wish." For the verb *hd* in relation to the measure of distance on a building site, cf. benchmark No. 1 on the foundation bed of the Asasif temple of Ramesses IV (see §2 below).

monastère des Sept Montagnes à Akhmim": "[a]u-dessus de ce couvent se trouve une source ombragée par un saule et le lieu où se trouve le monastère du saule est appelé *Ouadi 'l-Moulouk* (la Vallée des Rois), parce qu'on y trouve une plante appelée *Al-Moulouka* qui ressemble au radis."

<sup>&</sup>lt;sup>17</sup> For the representation of willow in tombs, see L. Keimer, *BIFAO* 31 (1931), p. 189-192.

<sup>&</sup>lt;sup>18</sup> For a similar practice in another ostracon, see O. IFAO 1408, l. 3, which mentions a place called "Sycamore of Pharaoh" (cf. J. Černý, *Notebooks* 116.13 with G. Burkard, "Das *litm n p3 lir* von Deir el-Medine. Seine Funktion und die Frage seiner Lokalisierung", in A. Dorn & T. Hofmann [eds], *Living and Writing in Deir el-Medine: Socio-Historical Embodiment of Deir el-Medine Texts*, 2006, p. 41).

<sup>&</sup>lt;sup>19</sup> S. Aufrère, L'univers minéral dans la pensée égyptienne, vol. 1 – L'influence du désert et des minéraux sur la mentalité des anciens Égyptiens (BdÉ 105), 1991, p. 258-260.
<sup>20</sup> La relation with the god Southers and L Vanding d'Abbadia "Southers et la coule".

<sup>&</sup>lt;sup>20</sup> In relation with the god Soukhos, see J. Vandier d'Abbadie, "Soukhos et le saule", RdÉ 13 [1961], p. 111-112 and S. Aufrère, L'univers minéral, p. 259: "Ce passage [CT VI, 25d-sq. = Spell 474] trouve son équivalent au Livre des morts, au chapitre 153A, dont la vignette représente le fameux filet tendu entre deux pieux dont l'un animé (...). Derrière ce dernier figure un arbre stylisé qui n'est pas nommé dans le chapitre mais qui ne saurait être qu'une réminiscence du saule des Textes des sarcophages."

- (d) The word  $g \Im w.t^{21}$  is a substantive most likely built on the same root as the verb  $g \Im w$  "to be narrow, constricted" (*Wb*. V, 151,6-152,7) which refers to narrow things, especially "narrow gorge or defile" and "narrow holes"  $^{23}$ .
- If this sign is indeed to be read  $\mathcal{I}$  (and not  $\mathcal{I}$ , see §1.1 above), two (e) possibilities can be envisioned. First, the sign can be understood as a phonogram with the value is; in this case, it would be used as an abbreviated writing (Wb. I, 128,7-8) of the adjective-verb '(to be) old, ancient.'<sup>24</sup> Alternatively, one could postulate a use of the sign as logographic abbreviation for words like sht-htp.w "field of offerings" (see e.g. P. Turin CG 55002, R° S where the word is almost totally lost, except for this very classifier) or sht-i3rw "field of reeds" (see e.g. P. Turin CG 55002, V B, 1.8). Both are the names of rooms in a royal tomb, which would fit the context of our ostracon quite well, see S. Demichelis, "Le projet initial de la tombe de Ramsès IV ? Papyrus de Turin CGT 55002", ZÄS 131 (2004), p. 121 for further comments; see also C. Leblanc, "Sixième et septième campagnes de fouille dans la tombe de Ramsès II (KV 7) - Années 1998/1999 et 1999/2000", Memnonia 11 (2000), p. 113 for such a room in KV 7.

#### 2. MEASURING BUILDING SITES DURING THE NEW KINGDOM

In this section, we focus on the expressions of measurements that are (in a way or another) linked to tombs or building sites within the New Kingdom documentation and we compare them with the grammatical construction of the O. Cairo JdE 72460. In the data at our disposal, the cubit unit (mh) and its subdivisions (namely the 'palm',  $\check{ssp}$ , and the

<sup>&</sup>lt;sup>21</sup> Or g3w.t-w3.t, see Wb. V, 152,18; Meeks, AL 79.3264; H.-W. Fischer-Elfert, Die Satirische Streitschrift des Papyrus Anastasi I. Übersetzung und Kommentar (ÄA 44), 1986, p. 203.

e.g. in P. Anastasi I, 23,7 (= KÄT 7, 139,5-6) t3 g3w.t nh3.ti m š3sw, k3pw hr n3 b3i(.t) "the narrow pass is made dangerous by Bedouins, concealed beneath the bushes"; P. Anastasi I, 24,5-6 (= KÄT 7, 143,5); Qadesch, §33 (= KRI II, 13,10-15) šm mš<sup>c</sup>=f hr n3 g3w.wt, iw=w mi nty hr mtn n Km.t "his army went through the narrow passes just as if they were on the roads of Egypt"; First Hittite Marriage, I. 34-35 (= KRI II, 248,1-3) sn=sn dw.w '\$3.w, g3wy.wt ksn.wt "they crossed many mountains and difficult narrows"; O. Edinburgh 916, v° 4-5 (= W.R. Dawson & T.E. Peet, "The so-called Poem on the Kings Chariot", in JEA 19 [1933], pl. XXVII-XXVIII).

<sup>&</sup>lt;sup>23</sup> See e.g. P. Chester Beatty VII, r<sup>o</sup> 1,1 (= A.H. Gardiner, *Chester Beatty Gift [HPBM 3*], 1935, vol. 2, pl. 33-33A)  $pr\{.t\}$  m g3.w ° d3r[.t] "come out of the hole, scorpion!"; P. Turin Cat. 1791, 1. 11 ink pr m g3w(.t) "3 sšp "I am the one who comes out of the narrow place 'door of light'".

<sup>&</sup>lt;sup>24</sup> It should be noted that  $\mathscr{D}$  does not seem to be attested as an abbreviation for the word *is* 'Tomb' (see I. Régen, "À propos des graphies de *iz/is* « tombe »", *BIFAO* 107 (2007), p. 171-199.

'digit',  $\underline{db}^{c}$ ) are used to measure either (a) the size of three-dimensional architectural elements (rooms, doors, corridors, recesses, etc.), or (b) the distance between two points within a tomb:<sup>25</sup>

(a) The expression of three-dimensional measures typically reads: "a place *n mḥ* X, *wsḥ.t n mḥ* Y, *ḫy n mḥ* Z", i.e. "a place that is X cubits (long), Y cubits wide, and Z cubits high" or, more explicitly, "a place, 3w=f/s (*n*) mh X, wsh.t (*n*) mh Y, hy (*n*) mh Z", i.e. "a place, its length being (of) X cubits, width (of) Y cubits, and height (of) Z cubits".

<sup>&</sup>lt;sup>25</sup> Previous lists of documents containing measurements of tombs are found in J. Černý, Valley of the Kings, p. 23-34; R. Ventura, "The largest project for a royal tomb in the valley of the kings", JEA 74 (1988), p. 152-154; Fr. Neveu, "À propos du P. DM 28 : un conseil royal consacré aux affaires de 'La Tombe'", RdÉ 41 (1990), p. 151; R.J. Demarée, "Royal Riddles", p. 13-15 and S. Demichelis, "Le projet initial de la tombe de Ramsès IV ?", ZÄS 131 (2004), p. 115, n. 11. Here follows an updated lists of the documents (plans [Egyptian snt], notes on the advancement of work, etc.) preserving measurements of architectural elements in Theban tombs: O. Berlin [B] + O. BM EA 65944 (see R.J. Demarée, Ramesside Ostraca, 2002, p. 43 & pl. 195-196); O. BM EA 8505 (see R.J. Demarée, Ramesside Ostraca, p. 21 & pl. 48-49, with C. Rossi, "The Identification of the Tomb Described on O. BM 8505", GM 187 [2002], p. 97-99); O. Cairo CG 25184 (for the texts, see G. Daressy, "Un plan égyptien d'une tombe royale", Revue archéologique 32 [1898], p. 237-239; with C. Rossi, "The Plan of a Royal Tomb on O. Cairo 25184", GM 184, [2001], p. 45-53); O. Cairo CG 25269; O. Cairo CG 25536, r°; O. Cairo CG 25537; O. Cairo CG 25538; O. Cairo CG 25581; O. Cairo CG 25668 (on the verso, there were probably measurements of at least one room, now in lacuna); O. Cairo JdE 51936 (see C.N. Reeves, "Two Architectural Drawings from the Valley of the Kings", CdÉ 61 [1986], p. 44, 46-49 and compare with the much discussed representation of the "reposoir" in O. BM EA 41228, with C. Simon-Boidot, "Encore une révision de l'ostracon BM 41228 et sa représentation de reposoir de barque", in L. Gabolde [ed.], Hommages à Jean-Claude Goyon [BdÉ 143], 2008, p. 361-373); O. Cairo JdE 66262 (see W.C. Hayes, Ostraka and Name Stones from the Tomb of Senmut [No. 71] at Thebes, 1942, p. 15 & pl. 7); O. Cairo JdE 72451 (= KRI IV, 404); O. Cairo JdE 72452 (= KRI IV, 404); O. DeM 10188; O. IFAO 1206 (see S. Wimmer, "Welches Jahr 29?", in R.J. Demarée & A. Egberts [eds], Deir el-Medina in the Third Millennium AD. A Tribute to Jac. Janssen [EgUit 14], 2000, p. 351-358 & pl. XLVI-LI); O. Leiden F.2000/1.1 (see R.J. Demarée, "The wooden doors of a royal tomb: O. Leiden F 2000/1.1 + KV 10045", JEOL 44 [2013], p. 43-48); O. Michaelides 53; O. Michaelides 71; O. Michaelides 92; O. Strasbourg H. 112; O. Turin N. 57036; O. Turin N. 57037; P. Cairo JdE 86637, V<sup>o</sup> XX (see Abd el-Mohsen Bakir, *The Cairo Calendar*, 1966, pl. L); P. Turin Cat. 1885; P. Turin Cat. 1923, vo et alii (see R. Ventura, JEA 74 [1988], p. 137-156); P. Turin 2044 (= KRI VI, 343,1-3); P. Turin CG 55002 (see S. Demichelis, ZÄS 131 [2004], p. 114-133); P. Turin CG 55003 (= P. Turin Cat. 2039; unpublished, see S. Demichelis, ZÄS 131 [2004], p. 117).

<sup>&</sup>lt;sup>26</sup> See already the discussion and translations of such constructions by H. Carter & A.H. Gardiner, *JEA* 4 (1917), p. 135; A. Badawy, *Le dessin architectural chez les anciens égyptiens*, 1948, p. 235; J. Černý, *Valley of the Kings*, p. 20-21; E. Hornung, "Zum Turiner Grabplan", in J. Baines, T.G.H. James, A. Leahy & A.F. Shore (eds), *Pyramid Studies and other essays presented to I.E.S. Edwards (EES OP 7)*, 1988, p. 138-142. One

(b) As for the distance between two points, all the examples that we were able to collect in relation to tombs refer to the measurement of distance between two points inside a single tomb, not between different tombs.<sup>27</sup> These distances are totals that sum up the length of consecutive architectural components (corridors and rooms):<sup>28</sup> dmd, r-š3°-m p3 st3-ntr tpy r pr-n-nbw, mh 136, šsp 2; r-š3°-m pr-nnbw r p3 pr-hd r (sic) p3 nfrw, mh 24, šsp 3, dmd mh 160, šsp 5 "(sub)total: beginning from the first corridor to the House of Gold (i.e. the burial chamber), 136 cubits, 2 palms; beginning from the House of Gold to the Treasury, the Innermost, 24 cubits and 3 palms. Total: 160 cubits and 5 palms" (P. Turin Cat. 1885, Y,c & *Y,b* = H. Carter & A.H. Gardiner, *JEA* 4 [1917], p. 139-140); *dmd* b3kw iry.t r-83°-m p3 tp r t3 wsh.t m3°.t: mh 162, ir-n dny 10,062, wd3.t 112,821 "Total of the work done from the entrance to the hall "Maât": 162 cubits, amounting to 10,062 cubic cubits; remainder: 112,821 (cubic cubits)" (P. Turin Cat. 1923, v° 9-10 = KRI VI, 367,7-8).

In O. Cairo JdE 72460, the full expression<sup>29</sup> r- $\delta 3^{\circ}$ (-m) A r B, mh X "starting from A unto B, X cubits" is only used on V<sup>o</sup> 5-6 (in relation to

occasionally finds abbreviated formulae like "a room  $n \times r \times r$ ", i.e. "a room of X by Y" (see e.g. O. Cairo 25184). For the use of md.t referring to the "depth" of tri-dimensional recesses, see H. Carter & A.H. Gardiner, JEA 4 (1917), p. 137-138 and 142-143, as well as S. Demichelis, ZAS 131 (2004), p. 126; for the use of wmt referring to the so called thickness, i.e. reveal, of door-jambs, see already H. Carter & A.H. Gardiner, JEA 4 (1917), p. 146-147. See M. Bakir,  $The\ Cairo\ Calendar$ , pl. L for the use of both 3w and k3 as referring to the depth inside the mountain, i.e. length, of a corridor or room (for k3 alone, see e.g. O. Cairo CG 25581; O. DeM 10188, with P. Grandet,  $Catalogue\ des\ ostraca\ hi\acute{e}ratiques\ non\ littéraires\ de\ De\^{r}\ el-Méd\^{n}\acute{e}h$ , XI –  $N^{os}$  10124-10275 [DFIFAO 48], 2010, p. 73; O. IFAO 1206; O. Leiden F.2000/1.1). See R.J. Demarée, "Royal Riddles", p. 12 n. f for the use of k3 instead of k3 in order to refer to the height of a door. Note also that cubit measurements can be indicated by rough dots on working plans, like in O. Cairo JE 66262 (= W.C. Hayes,  $Ostraka\ and\ Name\ Stones\ pl.\ VII)$ .

<sup>&</sup>lt;sup>27</sup> For references to *outside* distances between places in the Theban Necropolis (not related to tombs), see P. Turin Cat. 1923 in n. 29.

<sup>&</sup>lt;sup>28</sup> Such a total was certainly written on P. Turin CG 55002, v<sup>o</sup> B, 9, but is now almost entirely lost: [...] w3.t-šw nfry.t r [....]; see S. Demichelis, ZÄS 131 (2004), p. 128 n. 130.

<sup>&</sup>lt;sup>29</sup> The expression (*r*-)*k*3<sup>*c*</sup>(-*m*) A (*nfry.t*-)*r* B is used both for measurements in space ("from A to B") and in time ("since A until B"), see e.g. J. Černý & S.I. Groll, *A Late Egyptian Grammar*, 1984, p. 123. Note that *m-k*3<sup>*c*</sup>(-*m/n*) is also used (sometimes as textual variant) in this expression, but much less frequently. Outside our corpus, the spatial uses of the compound preposition mostly relates to distance between places, e.g. in the Amarna boundary stelae, with long distances expressed in *itrw*, *ht* and *mh*, or in the famous P. Turin Cat 1923, r° 5-7 (= K*RI* VI, 368,10-12): *r-83<sup>c</sup>* p<sub>3</sub> mr r p<sub>3</sub> htm n p<sub>3</sub> hr, hy mh [LAC], r-83<sup>c</sup>-m p<sub>3</sub> hr r t<sub>3</sub> &d.t, mh 26 &sp 5, dmd mh 60 [LAC], wd3.t=s r mh 22 &sp 5 r hr n p<sub>3</sub> mw "From the canal to the outpost of the Tomb: height of [LAC] cubits; from the Tomb to the well: 26 cubits and 5 palms, total: 60+x cubits; [LAC] its remainder amount to 22 cubits and 5 palms to the surface of the water" (see recently G. Burkard, "Das htm n p<sub>3</sub> hr von Deir el-Medine: seine Funktion und die Frage seiner Lokali-

the longest distance between the mw-n-p.t and the building site of Isisnefret). The other distances are expressed in a more economical way. The two variants are:

- A r B, mh X "(from) A to B, X cubits" (R° 1-2 & V° 4); (1)
- A, mh X r B "(from) A, X cubits to B" (V° 5-6). (2)

In these shorter expressions, the starting point is given first (A) and the allative preposition r introduces the spatial goal or endpoint of the measurement (B).<sup>30</sup> The distance itself (X cubits) occurs either after or before the propositional phrase.

So far, so good. However, neither the long nor the short variants of the construction can adequately account for the expression of measurement that one finds on  $V^{\bar{0}}$  1-2:  $\frac{\circ}{\ln x}$  A,  $\frac{\circ}{\ln x}$  A, B, A. Further, the translation of V° 2-3, which also has the expression, largely depends upon the interpretation of this first sentence.

Previous translators of the ostracon have understood v<sup>o</sup> 1-2 in two different ways. For the first group of scholars,  $\frac{31}{122}$  is a spelling of the compound preposition r-iwd "between" (Wb. I, 58,16-59,6, cf. Coptic oyte-). An alternate interpretation is endorsed by K.C. Lakomy, Cairo Ostracon J. 72460, p. 11) who translates "Vom Boden/Standort X zum Boden/Standort Y", apparently considering that the spelling  $\frac{1}{|r|}$  stands for the preposition r + iwtn "ground, earth" (Wb. I, 58,5-10, cf. Coptic GITN). Both are actually problematic in some respects:

The compound preposition *r-iwd* is indeed used since the second (a) part of the 18<sup>th</sup> dynasty in order to refer to the relationship between two (or more) entities and occurs in two constructions:<sup>32</sup> (1) (r-)iwd A r B "between A and B" (by far the most frequent construction)<sup>33</sup> and (2) (r-)iwd A (r-)iwd B "between A and B", with a

sierung", in A. Dorn & T. Hofmann (eds), Living and Writing in Deir el-Medine: Sociohistorical Embodiment of Deir el-Medine Texts, 2006, p. 40-41).

See E. Grossman & St. Polis, "Navigating polyfunctionality in the lexicon. Semantic maps and Ancient Egyptian lexical semantics", and D. Werning, "Ancient Egyptian prepositions for the expression of spatial relations and their translations. A typological approach", in E. Grossman, St. Polis & J. Winand (eds), Lexical semantics in Ancient Egyptian, 2012, resp. p. 209-217 (with previous literature) and p. 300-sq.

E.g. E. Thomas, "Cairo Ostracon J. 72460", p. 212; D. Meeks, AL 77.0213 & 79.0154; R. Ventura, "On the Location of the Administrative Outpost of the Community of Workmen in Western Thebes", *JEA* 73 (1987), p. 153, n. j; *KRITAt* II, 558.

See e.g. A. Erman, *Neuägyptische Grammatik*, 2<sup>nd</sup> ed., 1933, p. 317, §634;

J. Černý & S.I. Groll, A Late Egyptian Grammar, p. 123).

As an illustration, see e.g. mh 20 r-iwd hm.t r sn.t=s "20 cubits between one post and the other" (Urk. IV, 1280,14); h3j r-iwd wd r wd "to measure between two stelae"

repetition of the compound preposition before B. This second construction is not very frequent and, besides the classic example from the *Tale of the Two Brothers*, <sup>34</sup> mostly characteristic of texts stemming from the post-Ramesside era. <sup>35</sup> The main issue in recognizing this second construction in O. Cairo JdE 72460, V° 1, however, is not diachronic in essence, but rather stems from the spelling of the preposition. Indeed, although one sees much variation in its hieratic spellings, <sup>36</sup> it seems to always include the "walking legs" classifier in the extent New Kingdom hieratic documentation and not the "irrigation canal" classifier, as in the present text. <sup>37</sup>

(b) K. Lakomy's translation is also problematic in some way. The word *iwtn* "ground" is indeed well attested with short spellings such as  $\lim_{n \to \infty} (i.e. \text{ without } n \text{ written})$ . However, the translation "Vom Boden/Standort X zum Boden/Standort Y" is difficult, since

<sup>(</sup>Amarna Boundary Stela A, l. 12); *sw r-iwd dhj r t3-mri* "it (i.e. the fortress) is located between Djahy and Egypt" (P. Anastasi 2, 1,2 = *LEM* 12,8).

iw p3-r3 hr di.t hpr w'-n mw '3 r-iwd=f r-iwd p3y=<math>f' 3" and Pre made a great water piece to appear between him and his elder" (P. d'Orbiney,  $r^{\circ}$  6,6 = LES 15,14-15).

See especially  $\underline{d}d=i t + 3 m d \cdot t + n p + 3 y b + 3 k n$  W m-b + 3 h p + 3 y = n n b, iwd=f iwd H,  $\underline{d}d p + 3 y = n$ nb "I discussed the matter of this servant of W in front of our lord, (i.e. the one) between him and H, and our Lord said (...)" (P. Louvre E 25360, r° 4-6 = D. Lefèvre, Les papyrus « d'el-Hibeh » à la 21ème dynastie. Étude philologique et prosopographique, Thèse inédite de l'ÉPHÉt., 2008, vol. III, pl. 18-18A; translation by M. Müller in TUAT.NF III, p. 338);  $mtw = f wp.t = w iwd {}^cd3 iwd m^3 {}^cw$  "and he will judge them, between guilty and innocent (P. Louvre E 25360, r° 8-9 = D. Lefèvre, Les papyrus « d'el-Hibeh », vol. III, pl. 18-18A); iw=i ir.t iwd=s iwd mhr nb "I will be between her and any illness" (P. BN 238,  $r^{\circ}$  9-11 = *OAD* pl. XXXVI; see also P. Cairo CG 58035,  $r^{\circ}$  10-11 = *OAD* pl. XXXVII; P. Louvre E. 25354,  $r^{\circ}$  8-9 = *OAD* pl. XXXII; P. Metropolitan Museum 10.53, r° 9-10 = OAD pl. XL; Papyrus C.2 Michaelides Collection, r° 28-30 = OAD pl. XXXIX; P. Turin 1983, r° 12-13 = *OAD* pl. XVIII; P. University of Chicago, r° 7-8 = OAD pl. XLII). Regarding the texts from the Ptolemaic period, see for instance the example from Dendera in DZA 20.482.290. For the uses of iwt in Demotic, see e.g. W. Spiegelberg, Demotische Grammatik, 1925, p. 141-142 (= §313-314); W. Erichsen, Demotisches Glossar, 1954, p. 26,1-sq.; CDD i, 76-77; "between A and B" is expressed by two main constructions, namely iwt A iwt B and iwt A irm/hn B.

The r tends to disappear progressively (or to be written as a simple J) and the writing of the final dental strikingly hesitates between d and t.

<sup>&</sup>lt;sup>37</sup> It should be noted that, during the Third Intermediate Period (mostly in the abnormal hieratic documents), the spelling with the classifier 👸 \_\_\_ becomes more and more common.

<sup>&</sup>lt;sup>38</sup> See e.g. O. Florence 2616, R° 6-7 (= *LES* 92,1-2, see J. von Beckerath, "Zur Geschichte von Chonsemhab und dem Geist", in  $Z\ddot{A}S$  119 [1992], p. 97-98 & 106 n. y):  $iw=f\ hr\ di.t\ htp(=i)\ m\ t^3y=i\ m^ch^c.t\ (...)\ ptr,\ isy\ p^3\ iwt(n)\ hry,\ h^3c=f\ r-bnr$  "He made me rest in my Tomb (...), but see, the ground beneath became old and dropped out". See further O. OIC 16991, v° 10 (= KRI V, 560,11); P. Chester Beatty I, r° 3,3 (= *LES* 40,3); P. Chester Beatty III, v° 2-3 (= A.H. Gardiner, *Chester Beatty Gift* [HPBM 3], 1935, vol. 2, pl. 10); P. Lansing, r° 4,4 (= *LEM* 103,5).

the allative preposition  $r^{39}$  does not have an ablative meaning ("from" or the like) outside specific verbal valency patterns in Ancient Egyptian (e.g. "distinguish A from B", etc.). If  $\frac{1}{1229} per = 1$  is indeed a spelling of iwtn, then we are most probably dealing with two coordinated prepositional phrases introduced by r (with the starting point of the measurement, A, left unexpressed): r iwt(n) try.t, r iwt(n) p3 mr-m8° wr "unto the site 'Willow' (and) unto the site 'the Generalissimo' (30 cubits)". It should be pointed out that the word iwtn is not infrequently used for referring to plots of land ('property', 'site', or the like), 40 sometimes explicitly in relation to tombs. 41

In order to discuss further the possible interpretations of V° 1-2, the spelling spelling spelling should probably be considered in relation to the occurrences of a word *iwt* in the so-called 'bench-marks' — a label used by Kitchen — that are written on the foundation bed of the funerary temple of Ramesses IV in the Asasif. These bench-marks are "control marks to check the development and the output of the construction work as well as guiding data for measurements, particularly for leveling heights." In their most complete form, they "include a date, followed by a measurement (in cubits and palms), and the specific place of a

<sup>&</sup>lt;sup>39</sup> See E. Grossman & St. Polis, "Navigating polyfunctionality", p. 213 (with previous literature).

<sup>&</sup>lt;sup>40</sup> See e.g. P. BM EA 10102, v° 4-5: *imy di.tw &b(.t) n p3 iwtn n pr n p3y f nb* "let the price of the plot of land be given to his owner" (see S.R.K. Glanville, "The Letters of Aaḥmōse of Peniati", in JEA 14, [1928], pl. 32, with p. 299, n. 8); O. Petrie 39, r° 7-8: *mrr(=i) iwtn n dmi.t=k* ° (...) *r wrḥ n ky t3* ° "I love the soil of your town more than the unguent of another land" (with C. Ragazolli, *Éloges de la Ville en Égypte ancienne*, 2008, p. 31-33).

p. 31-33).

See P. Salt 124, r<sup>o</sup> 1,15 (= KRI IV, 409,16-410,1): mtw=f b3 m p3 iwtn nty dbc hr t3 s.t nty imn.tw "and he used to hack up the ground which is sealed in the Place which is hidden".

Page 1. See M. Bietels, Thehen West (Lugger), Verbouight üben die gesten view Grehvungs.

<sup>&</sup>lt;sup>42</sup> See M. Bietak, *Theben-West (Luqsor). Vorbericht über die ersten vier Grabungskampagnen (1969-1971) (SÖAW 278.4)*, 1972, p. 20-24 & pl. XI; *KRI* VI, 49,10-12; J. Budka, "The Ramesside Temple in the Asasif: Observations on its construction and function, based on the results of the Austrian Excavations", in R. Preys (ed.), 7. Ägyptologische Tempeltagung 'Structuring Religion'. Leuven, 28. September – 1. Oktober 2005 (KSG 3,2), 2009, p. 26-35; J. Budka, "Non-textual marks from the Asasif (Western Thebes): Remarks on function and practical use based on external textual evidence", in P. Andrássy, J. Budka & Fr. Kammerzell (eds), *Non-Textual Marking Systems, Writing and Pseudo Script from Prehistory to Modern Times (Lingua Aegyptia – Studia Monographica 8*), 2009, p. 198-199; J. Budka, "Benchmarks, team marks and pot marks from the Asasif (Western-Thebes)", in B.J.J. Haring & O.E. Kaper (eds), *Pictograms or pseudo script? Non-textual identity marks in practical use in ancient Egypt and elsewhere; proceedings of a conference in Leiden, 19-20 December 2006 (EgUit 25), 2009, p. 73-78.* 

<sup>&</sup>lt;sup>43</sup> J. Budka, "The Ramesside Temple in the Asasif", p. 26.

certain activity. At the end of each of these 'benchmarks' (Kitchen['s label]) follows the name of the stone-masons' gang."<sup>44</sup> The published benchmarks that use the word *iwt* are the following:

- (No. 1) hrw.w 5 msw.t 3s.t mh 1 šsp 4 r iwt=f m hd (...) "The 5 (epagomenal) days, birth of Isis, 1 cubit and 4 palms from it(s edge/control-mark) going northwards (...)".
- (No. 2) hrw.w 5 hry.w-rnp.t msw.t Nb-hw.t (?mh 1?) šsp 3 r iwt=f n3 hrty.w n Wsr-M3<sup>c</sup>.t-R<sup>c</sup>-Nht "The 5 epagomenal days, birth of Nephtys, (?1 cubit and?) 3 palms from it(s edge/control-mark), the stone-masons of Usermaâtrenakht".
- (No. 3)  $Pth-msw-3bd\ 1\ 3h.t\ sw\ 4\ nty\ iwt\ wnm\ smh\ n\ p3\ r-c-b3k$  "Ptahmose  $-1^{st}$  month of Akhet, day 4, (point) that separates/marks the right and left of the building site".
- (No. 7) iwt p3 20 mh n Wsr-m3<sup>c</sup>.t-r<sup>c</sup>-nht "marking the 20 cubits of Usermaâtrenakht".
- (No. 10) 3bd 4 šmw sw 25 šsp 4 db° 2 r iwt=f "4<sup>th</sup> month of Shemu, day 25, 4 palms and 2 digits from it(s edge/control-mark)".
- (No. 12) hry.w-rnp.t msw.t 3s.t mh 1 ssp 2 r iwt=f "Epagomenal days, birth of Isis, 1 cubit and 2 palms from it(s edge/control-mark)".
- (No. 17) hry.w-rnp.t 5 msw.t Wsir nty iwt hrty n Wsr-m3<sup>c</sup>.t-r<sup>c</sup>-nht mh 3 ssp 1 im=f "The 5 epagomenal days, birth of Osiris, (point) that separates/marks, the stone-masons of Usermaâtrenakht, 3 cubits and 1 palm in it".

As it appears, two basic constructions are attested in the published benchmarks with *iwt*:

- (a) DATE + MEASURE + r iwt = f (No. 1, 2, 10, 12); <sup>46</sup>
- (b) (nty) iwt + COMPLEMENT (No. 3, 7, 17).

As a point of departure, one notices that the word(s) *iwt* do(es) apparently fulfill a similar function in all these marks. Therefore, one would like to be able to identify a root that makes sense in the two syntactic contexts. M. Bietak originally translated the word *iwt* as "house/temple", referring to *iwy.t* "Haus, Götterwohnung", (Wb. I,

<sup>&</sup>lt;sup>44</sup> D. Polz, "The Ramsesnakht Dynasty and the Fall of the New Kingdom: A New Monument in Thebes", *SAK* 25 (1998), p. 281.

<sup>&</sup>lt;sup>45</sup> J. Budka ("Benchmarks, team marks and pot marks", p. 75) states that "the benchmark was written exactly on the step between the deeper western and the lower eastern foundations. Therefore, it probably refers to the *separation* of the westernmost part of the foundation from the eastern side" [our italics].

<sup>&</sup>lt;sup>46</sup> The photographs and facsimiles (M. Bietak, *Theben-West (Luqsor)*, pl. XI; J. Budka, "The Ramesside Temple in the Asasif", p. 33-35; J. Budka, "Benchmarks, team marks and pot marks", p. 77) show quite clearly that the preposition *r* is to be transcribed before *iwt* in each case, *pace* Bietak and Budka (see e.g. Fig. 3).

 $<sup>^{47}</sup>$  See Cl. Vandersleyen, "Une tempête sous le règne d'Amosis",  $Rd\acute{E}$  19 (1967), p. 136, §18.

49,5-8). This interpretation is difficult for at least three reasons: (1) as shown by Fig. 3, the classifier of iwt is not likely to be  $\Box$  in these texts (as transcribed by Bietak, Kitchen and Budka), but rather  $\triangle$ ; (2) the  $\P$  expected in the New Kingdom hieratic documents for this word is not written; (3) from a grammatical point of view, a substantive like iwy.t cannot be accounted for in the context of bench-marks No. 3, 7, 17 (i.e. after nty).

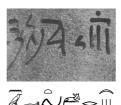


Fig. 3. Spelling of *iwt* in benchmark No. 2, line 2

K. Kitchen (KRITA VI, 50) translated the word *iwt* as "ground" — benchmark No. 1 for instance is translated "1 cubit, 4 palms, its ground, going north" —, probably linking the spelling with *iwt*(*n*) (see above).

J. Budka made a major step towards understanding the precise meaning of *iwt* in these marks when she "tentatively propose[d] a direct relation between the term in the bench-mark and the type of structure which is addressed by it." She suggested to link the word *iwt* to the verb *iw* "abtrennen, etw. abschneiden" (*Wb.* I, 48,1-2) and hypothesized that *iwt* could refer to "what is excavated", therefore "foundation bed/basin" in the context of the bench-marks. This proposal — stimulating as it may be — is perhaps not ideal, since it fails to explain the use of this word in all contexts, especially after *nty* (No. 3 and 17).

Rather than referring to the foundation bed under construction, we suggest that *iwt* is used in these bench-marks for referring to the building process itself, and more precisely to the very measurement of distances and to the marking of the work (being done or to be done). Accordingly, *iwt* in these texts is perhaps better understood as being linked to the root *iwd* "to separate, divide, etc." (*Wb*. I, 58,11-59,6), which can be actualized as a verb, with the meaning "to divide, to mark (the separation)" (No. 3, 7, 17), or within a prepositional phrase, when marking the point of reference for measurements in the bench-marks, namely "a given distance from the bench-mark."

<sup>&</sup>lt;sup>48</sup> J. Budka, "The Ramesside Temple in the Asasif", p. 28.

<sup>&</sup>lt;sup>49</sup> The other point of reference is left unexpressed, since it is contextually clear for the scribes what the distance refers to. Compare with the temporal use of r-iwd in i.ir=ih3b n=k iw 20 n hrw r-iwd=f "It's twenty days ago that I wrote you!" (P. DeM 8, r° 9).

To sum up and link these data to the text of the O. Cairo JdE 72460, we think that three translations are to be taken into consideration. None of these is completely unproblematic:

- (1) r-iwt A r-iwt B: "Between 'Willow' and 'the Generalissimo', 30 cubits":
- (2) Coordinated prepositional phrases introduced by r + iwtn: "Unto the site 'Willow' (and) unto the site 'the Generalissimo' 30 cubits."
- (3) Coordinated prepositional phrase introduced by *r-iwt*: "From 'Willow' and from 'the Generalissimo', 30 cubits."

Even if option (1) cannot be ruled out based on  $V^0$  1-2 alone, the fact that  $\lim_{x \to \infty} F^0 = 0$  occurs again in front of  $f^0 = 0$  occurs again in front

### 3. THE DATA OF THE OSTRACON AND THE ARCHAEOLOGICAL EVIDENCE

Based on the previous discussions, we are now able to represent schematically the possible relationships between the locations mentioned in O. Cairo JdE 72460 (§3.1). Subsequently, we suggest a possible finding spot for this ostracon (§3.2) and we discuss some prosopographical issues (§3.2). Both aspects will indeed matter when we will try to map the abstract configurations (§3.1) with actual archaeological evidence in the final section (§3.4).

### 3.1. Distances and relations between the 'toponyms' of the ostacon

In the O. Cairo JdE 72460, seven 'toponyms' are explicitly mentioned. For the sake of clarity, we use the same abbreviations as the ones found in Lakomy's translation and comment:

- (G)  $p \ge r r b \ge k$   $n \ge s \cdot t N f r t$ , the tomb of Isisnefret, under construction;
- (C) (p3 r-<sup>c</sup>-b3k n) Mrj-Itm, the tomb of the high priest of Heliopolis, Meryatum, under construction;
- (H) p3 mw-n-pt, 'the water of the sky';
- (A) (*iwtn*) *try.t*, (the place of the) willow-goddess;
- (B) (iwtn) p3 mr-mš<sup>c</sup> wr, (the place of) the Generalissimo;
- (D) p3 b3k n n3 sgnn, the workshop/building site of the oils;
- (E) g 3w.t mh.tj, northern narrow;
- (F) p3 r-5b3k ?is?, the ?old? building site.

Two main configurations emerge, depending on the translation that one gives to  $r \ iwt(n) \dots r \ iwt(n)$  in  $v^0$  1. Fig. 4 corresponds to the first interpretation given in §2, namely '30 cubits between D and E' while

Fig. 5 renders the options 2 and 3, i.e. '30 cubits between an unexpressed point X, and the places D and E'. Further, it should be noted that:

- (1) The size of the lines between locations is proportional to the distance measured in cubits.
- (2) The dotted line between B and E is oriented northwards. The orientation of all the other lines, on the other hand, is arbitrary and will have to be adapted when mapping these schemas on actual plans.

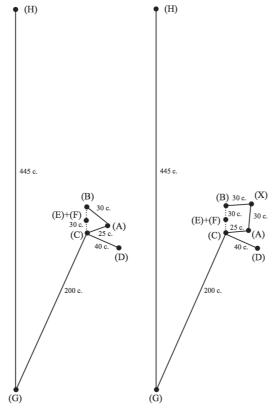


Fig. 4. Distances and relations (1) Fig. 5. Distances and relations (2)

As is clear from Figures 4 and 5, the very center of attention of this document is the construction site of the high priest of Heliopolis, Mrj-Ttm (B), since (1) this is the place that connects the  $R^0$  and the  $V^0$ , (2) almost all other distances are mentioned in relation to this place, and (3) the scribe uses the possessive(/?demonstrative?)  $p^3y(=i)$  when referring to it.

#### 3.2. The finding spot of the ostracon and the modern number 8

In modern times the number "8" was noted in a circle at the bottom of the *recto* (see Fig. 1). Ostraca with similar modern numbers, published by J. Černý, <sup>50</sup> have been discussed by K.C. Lakomy <sup>51</sup> who linked them to excavations in the Valley of the Kings conducted by H. Carter in 1902 on behalf of T.M. Davis and to earlier excavations of G. Daressy. However, the meaning of such numbers is left unexplained. When compared with the other modern numbers found on these ostraca (1, 2, 3, 7, 10 in relation with the excavations of H. Carter; three times 18, 37 in relation with the excavations of G. Daressy) it becomes quite obvious that they are very likely referring to the find-spots of the ostraca, using the KV number of the tomb next to which each piece was found. <sup>52</sup>

If this interpretation of the modern number is correct, O. Cairo JdE 72460 was most probably found near the tomb of Merenptah (KV 8). This location, however, cannot be correlated with the excavations conducted by H. Carter in various places in the Valley of the Kings during the year 1902.<sup>53</sup> An explanation can be tentatively offered: the ostraca with modern numbers were stray finds made by H. Carter while walking around in the Valley. As a matter of fact, O. Cairo JdE 72460 was treated differently (with the number "8") than all the other pieces stemming from the 1902 excavation (which do not bear such a number).

This likely find-spot (near KV 8) and the quick connection established between "the tomb under construction of the high priest of Heliopolis Meryatum" and KV 5 (sons of Ramesses II) as well as between "(the place of) the Chief of the Army" and the tomb of Ramesses II (KV 7)<sup>54</sup> or that of Merenptah (KV 8), evidently explains the exhausting excavations in the Valley of the Kings between 2007-2008 — especially in the surroundings of the tomb of Merenptah (KV 8) — by an Egyptian team under the direction of Z. Hawass who was

<sup>&</sup>lt;sup>50</sup> J. Černý, Ostraca hiératiques (CG 25501-25832), 1935.

<sup>&</sup>lt;sup>51</sup> K.C. Lakomy, *Cairo Ostracon J. 72460*, p. 4-5.

<sup>&</sup>lt;sup>52</sup> This hypothesis is corroborated for example by O. Cairo CG 25262, with the modern n° 37, which is linked to Loret's excavations near KV 37, see C. Orsenigo, "King's Valley Tomb 37: Analysis of finds from Loret's 1899 excavations", *GM* 216 (2008), p. 61-74. We are grateful to Rob Demarée for pointing to us this paper.

See K.C. Lakomy, *Cairo Ostracon J. 72460*, p. 3 with Fig. 2 on p. 107.

<sup>54</sup> The identification of the "place of the chief of the army" by K.C. Lakomy (Cairo Ostracon J. 72460, p. 15-22, especially p. 22) as being the tomb of Ramesses II was followed by M. Barwik (The Twilight of Ramesside Egypt. Studies on the History of Egypt at the End of the Ramesside Period, Warsaw 2011, p. 261-262 with n. 36). The later does however not exclude that the title mr-mšc wr could refer to one of the sons of Ramesses II. Further comments below (§3.3).

attempting to find the tomb of queen Isisnefret.<sup>55</sup> The fact that none of the structures mentioned in the text — especially the site "Willow", the "workplace of the oils", and the "the ?old? building site" — have been found in the surroundings of the entrances of KV 5 (identified as tomb of Meryatum) and KV 7 (tomb of Ramesses II) may further suggest that the assumptions/identifications made by scholars regarding the toponyms of O. Cairo JdE 72460 were perhaps not correct. For some other proposals see below.

### 3.3. Date of composition and related prosopographical issues

The mention of Meryatum with his title High Priest of Heliopolis can be taken as *terminus ante quem non* for the writing O. Cairo JdE 72460, because he did not get this position before year 26 of the reign of Ramesses II.<sup>56</sup> This fits well with the date proposed by K.C. Lakomy, who also drew on palaeographical evidence: the ostracon can be attributed to the second half of the reign of Ramesses II (or even later i.e. in its last third).<sup>57</sup>

Some observations can be added to the prosopographical data discussed by K.C. Lakomy:

- wr-m33w. To the references regarding Meryatum, add D. Raue (Heliopolis und das Haus des Re: Eine Prosopographie und ein Toponym im Neuen Reich [ADAIK 16], 1999, p. 203), who suggests that Meryatum did not hold the title wr-m33w before year 30 of Ramesses II and that Meryatum probably was still active in the 4th decade of Ramesses II. 58
- mr-mš<sup>c</sup> wr. Besides the attribution of this title to Ramesses II, it can also be linked with at least three of his sons: Amenher-khepeshef (1<sup>st</sup> son; death around year 20 of the reign of Ramesses

<sup>&</sup>lt;sup>55</sup> Z. Hawass, "Preliminary Report of the Supreme Council of Antiquities (SCA) excavation in the valley of the kings (2007-2008)", in Z. Hawass & S. Ikram (eds), *Thebes and Beyond. Studies in Honour of Kent R. Weeks (CASAE* 41), 2010, p. 57-84. For a short comment on this excavation report, in which graffito 307 was misunderstood as containing information about the workman Userhat building a tomb for his father Amunnakht, see R.J. Demarée, "Hieratic obstacles in recent publications", *GM* 235 (2012), p. 100-111. See also the announcement of the expected discovery of KV 64 (the tomb of Isisnefret?) by Z. Hawass http://www.drhawass.com/blog/video-kv64-be-discovered-all-egyptian-team (last accessed on 2014-06-15).

<sup>&</sup>lt;sup>56</sup> K.A. Kitchen, *Pharaoh triumphant. The life and times of Ramesses II*, 1982, p. 111. For a later date proposed for his appointment as High Priest see next paragraph.

K.C. Lakomy, Cairo Ostracon J. 72460, p. 7-10 especially p. 9.
 According to C. Obsomer (Ramsès II: Abou Simbel, Louxor, Néfertary, Qadesh, 2012, p. 279 & Fig. 132), Meryatum passed away between year 46 and 52.

II); Ramesses (2<sup>nd</sup> son; death around year 50), Merenptah (13<sup>th</sup> son).<sup>59</sup>

Isisnefret. This name is not accompanied by a title and is not written in a cartouche. Therefore, we think that other identifications than (1) the wife of Ramesses II<sup>61</sup> or (2) his daughter, the later wife of Merenptah, can be envisioned. The name Isisnefret is attested for at least two other women from the royal family at the time: the daughter of Khaemwaset, son of Ramesses II, and the daughter of Merenptah, the future king. The tomb of an Isisnefret found in 2009 in Saqqara close to that of Khaemwaset (or to his *ka*-chapel) and oriented on the axis of this building was interpreted by N. Kawai as belonging to Isisnefret, the daughter of Khaemwaset. This is indeed one possibility; the other one would be to attribute this tomb to Isisnefret, daughter of Merenptah, who is mentioned in P. Leiden I 350 with the same title (*sps.t*) as the one on the sarcophagus that has been found in the Saqqara tomb.

It seems more likely that the tomb in Saqqara should be attributed to the daughter of Merenptah rather than to the daughter of Khaemwaset, but N. Kawai's interpretation cannot be completely disregarded. Therefore, each one of these 'Isisnefret' could be the one referred to in O. Cairo JdE 72460.

On the other hand — if the ostracon was indeed written during the last third of the reign of Ramesses (see above) — it does not seem possible to link the Isisnefret mentioned with one of the known queens:

(1) For the wife of Merenptah (daughter of Ramesses II), the ostracon is too old.

<sup>&</sup>lt;sup>59</sup> A. Gnirs, *Militär und Gesellschaft: Ein Beitrag zur Sozialgeschichte des Neuen Reiches (SAGA* 17), 1996, p. 79-84, p. 127-128; A. Gnirs, "Coping with the Army: The Military and the State in the New Kingdom", in J.C. Moreno García (ed.), *Ancient Egyptian Administration*, 2013, p. 642-647, p. 656-658 (P. Leiden I 350 vso).

The main argument here is the absence of any title. Indeed, the other individuals in this text are either accompanied by a title or referred to by their title solely. The 'cartouche' argument is a supporting argument, but no compelling evidence. See e.g. the name of the king's daughter Isisnefret, without cartouche, in P. Leiden I 362, r° 2 (= K*RI* II, 927,1).

<sup>&</sup>lt;sup>61</sup> The same opinion is expressed by C. Obsomer (*Ramsès II*, p. 248 with n. 173): "L'ostracon Caire JE 72460 (K*RI* II, 855.14-856.10) concerne une autre Isis-néfret."

<sup>&</sup>lt;sup>62</sup> The latest discussion of the different persons named Isisnefret is found in N. Kawai, "The Tomb of Isisnefret at Northwest Saqqara", in M. Barta, F. Coppens & J. Krejci (eds), *Abusir and Saqqara in the year 2010/2*, 2011, p. 497-511; see also C. Leblanc, "Isis-nofret, grande épouse de Ramsès II, la reine, sa famille et Nofretari", *BIFAO* 93 (1993), p. 313-333.

<sup>63</sup> See already N. Kawai, "The Tomb of Isisnefret", p. 508.

Regarding the wife of Ramesses II, she most probably passed away in year 34 of his reign according to K.A. Kitchen, <sup>64</sup> or even (2) earlier. 65 As she was the 'second' wife of Ramesses II (just behind Nefertari), the work on her tomb should have been completed by the time the Cairo ostracon was written. Indeed, the construction of a tomb used to be started quite early after an individual reached a high ranking position; thus, at latest after the death of Nefertari in year 24 of the reign of Ramesses II, the work on her tomb must have started (or even got the final decoration with her title of hm.t wr.t njsw.t). According to C. Leblanc, the construction of a rockhewn tomb for a royal wife (or a princess) in the Valley of the Queens did not take more than two years — when compared to the duration of the construction of royal tombs in the Valley of the Kings, this estimation fits quite well. C. Leblanc further observed that at latest around year 40 no additional tombs for queens or princesses were built in the Valley of the Queens.<sup>60</sup>

### 3.4. Linking the toponyms with known structures: 3 proposals

Keeping in mind the probable find-spot of the ostracon as well as the prosopographical data discussed just above, we can now proceed and try to map the abstract configuration of the location mentioned in the ostracon (§3.1) onto actual archeological structures in western Thebes.

### 3.4.1. Previous interpretations of O. Cairo JdE 72460

E. Thomas linked the data of the ostracon to the Valley of the Kings, but she neither published a sketch of the relationship between the locations mentioned nor tried to locate the tomb of Isisnefret. In the past years, the first excavation to take place in an area where a hypothetical tomb of Isisnefret could be located — namely between the tomb of Horemheb (KV 57) and Ramesses III (KV 11) resp. Ramesses VI (KV 9) — was the 'Amarna Royal Tomb Project' (ARTP).

K.C. Lakomy has also suggested that the tomb of Isisnefret might still be hidden somewhere in the Valley of the Kings. As we discussed above

<sup>&</sup>lt;sup>64</sup> K.A. Kitchen, *Pharaoh triumphant*, p. 100; see also C. Leblanc, "L'identification de la tombe de Henout-mi-rê. Fille de Ramsès II et grande épouse royale", *BIFAO* 88 (1988), p. 140, n. 26 (with references to an earlier date for the death of Isisnefret).

<sup>&</sup>lt;sup>65</sup> Isisnefret and Meryatum should have lived during the same period, given that the building sites of their tombs are mentioned in the ostracon, see C. Leblanc, "Thèbes et les pluies torrentielles. À propos de *mw n pt*", *Memnonia* 6 (1995), p. 199. During four to eight years, those two individuals are attested together (from around year 26). A dating of the text to this period cannot be ruled out.

<sup>66</sup> C. Leblanc, *BIFAO* 93 (1993), p. 140-142.

(§3.2), this is likely to have been the very reason for the excavations conducted recently in the Valley of the Kings by Z. Hawass.

### 3.4.2. Valley of the Kings

As a starting point for the toponyms with known structures, we focused on the *mw-n-p.t*, <sup>67</sup> because all the other places are problematic in some respect. The phrase *mw-n-p.t* is to be understood based on the graffiti in which this expression occurs: it refers to a place where water comes down from heaven (over cliffs) or where such water stays in an artificial lake after a heavy rainfall. <sup>68</sup> The context of this ostracon rather supports the latter interpretation, namely that reference is made here to a basin of water resulting from heavy rainfall. In principle, artificial/natural basins or lakes could be everywhere in the Valley of the Kings. Based on the location of the graffiti with occurrences of the word *mw-n-p.t* (see n. 68) however, it seems clear that the *mw-n-p.t* rather refers to a lake that is the result of water *coming down from cliffs*.

Below is a list of possible mw-n-p.t (starting points for measurements) and final points (possible locations for the building site of the tomb of Isisnefret)<sup>69</sup> — the data are visualized in Fig. 6.

It should be stressed that, for measuring the distance of 445 cubits, we did not draw abstract circles of 445 cubits, <sup>70</sup> but followed putative ancient pathways in the Valley of the Kings: <sup>71</sup>

<sup>&</sup>lt;sup>67</sup> For the meaning of *mw-n-p.t*, we follow C. Leblanc, *Memnonia* 6 (1995), p. 198: "[*mw-n-p.t*] fait allusion aux traces laissées par une pluie qui se serait abattue sur Thèbes à cette époque [i.e. second part of Ramesses II's reign]"; see also C. Leblanc, in *Memnonia* 6 (1995), p. 199: "les traces significatives que celle-ci [i.e. la pluie] avait pu laisser à un endroit précis de la Vallée et que le rédacteur du document utilise comme un repère topographique"; again C. Leblanc, in *Memnonia* 6 (1995), p. 203: "pour indiquer l'endroit où l'eau a laissé des traces significatives : une cascade, un bassin, voire un petit lac artificiel."

<sup>&</sup>lt;sup>68</sup> See the graffiti 3012 and 3013 in the rear part of the Valley of the Queens with a natural basin and also a dyke some meters away from the rear. See also the graffito 1736 in the Western Valley of the Kings near a natural/artificial basin under a high cliff.

<sup>&</sup>lt;sup>69</sup> The references to tombs built after the reign of Ramesses II (see §3.2 for the datation of the Cairo ostracon) are meant as geographical indications and not as reference to those tombs, even though it cannot be excluded that a later tomb reused an already existing structure.

Tutankhamun, 1998, p. 199-200, with figure on p. 201) was the first who visualized the distances (circles in light gray on our Fig. 6). He combined the distance of 445 cubits (between the *mw-n-p.t* and the tomb of Isisnefret) with the distance of 200 cubits (between the tomb of the High Priest of Heliopolis Meryatum and the tomb of Isisnefret). He takes the entrance of KV 5 as the tomb of Meryatum and proposes some possible locations for the tomb of Isisnefret at the intersection of the two circles.

- (a) bottom of the cliffs near KV 34 (Thutmosis III), KV 42 (Meritre-Hatshepsut) final points: entrance of KV 11 (Ramesses III) (a') or somewhere between KV 49 and KV 12 (a"),
- (b) bottom of cliffs near KV 15 (Sety II) and KV 13 (Bay)<sup>72</sup>, which did not yet exist, when the text was written,
  - (b1) crack in the rear part of the bay final points: entrance of KV 10 (Amenmesse) (b1') or KV 9 (Ramesses VI) (b1") or the area in between.
  - (b2) entrance of KV 15 (Sety II) final points: east of KV 10 (Amenmesse) (b2') or in the area of the entrance to KV 9 (Ramesses VI) (b2"),
  - (b3) entrance of KV 13 (Bay) final points: area of KV 16 (Ramesses I) (b3') or of KV 55 (b3") (an already existing tomb of the post Amarna period),
- (c) bottom of the cliffs in the area of KV 43 (Thutmosis IV) and KV 19 (Mentuherchopeshef),
   (c1) cliff near the entrance of KV 43 (Thutmosis IV) final point:
  - area east of KV 10 (Amenmesse) (c1'),
  - (c2) entrance of KV 19 (Mentuherchopeshef) final points: area between KV 10 (Amenmesse) and KV 11 (Ramesses III) (c2'), entrance of KV 9 (Ramesses VI) (c2"), or entrance of KV 55 (c2"'),
- (d) cliff near the entrance of KV 35 (Amenhotep II) final points: area east of KV 18 (Ramesses X) (d') or around 30 to 40 cubits north of KV 5 (d"),
- (e) cliff behind KV 8 (Merenptah) final point north: entrance area of KV 3 (e'); final point east: area east of KV 18 (Ramesses X) (e"); final point south (e""): in the area around KV 61,
- (f) cliff south of the entrance of KV 1 (Ramesses VII) final point south: entrance of KV 5 (f'); final point north (not in the area known to be used as burial ground in the Valley of the Kings) (f").

It should first be noted that all the endpoints in the area of KV 10 (Amenmesse), KV 11 (Ramesses III), KV 9 (Ramesses VI), and KV 55 (a'-c2"') can be safely excluded as location for the tomb of Isisnefret, since this area has been excavated until the bedrock over the past years. For the same reason, we can rule out the endpoint near the tomb of Ramesses I (KV 16) (b3'), and the one east of the tomb of Ramesses X (KV 18) (d').

<sup>&</sup>lt;sup>71</sup> All the distances are obviously approximate, since they depend on the precise topography of the ancient pathways and on the exact starting point for the measurement at the bottom of the cliffs. Given that no distance in the ostracon has a granularity inferior to 5 cubits, a tolerance of 5 cubits seems reasonable.

The cliff at the bottom of which the tomb of Bay (KV 13) was built had been chosen by E. Thomas ("Cairo Ostracon J. 72460", p. 214) as location for the *mw-n-p.t* 

These endpoints being excluded, we are left with KV 10 (an initial tomb project for Isisnefret, reused), KV 5 or KV 3 (reused afterwards) as possible location for the tomb of Isisnefret. Furthermore, two other endpoints have not been discussed yet: the area around KV 61 and the area 30 to 35 cubits north of KV 5.

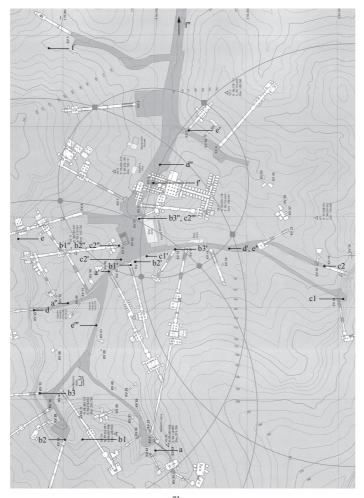


Fig. 6. Map of the Valley of the Kings<sup>73</sup> with possible locations for the *mw-n-p.t* as starting points (a-f) for measuring the distance of 445 cubits to the hypothetical place of the tomb of Isisnefret (a'-f').

For the signification of the light grey, see n. 70.

 $<sup>^{73}</sup>$  K. Weeks (ed.), Atlas of the Valley of the Kings (PTMP 1), 2000, sheet 3/72.

At this point of our reasoning, we have no other option than to proceed with a *reductio ad absurdum*: if the location of the tomb of Isisnefret is KV 10, KV 3, KV 61 or an area 30 to 35 cubits north of KV 5, the tomb under construction for the High Priest of Heliopolis Meryatum has to be situated 200 cubits away from these points, as stated in the text. As a matter of fact, no such structure appears to exist, which casts doubts on these points as possible location for the tomb of Isisnefret.<sup>74</sup>

To conclude, when one plots the measurements of the ostracon on a map of the Valley of the Kings, taking into account the various possible locations for the *mw-n-p.t*, no convincing proposal can be made for the identification of a structure of a tomb belonging to Isisnefret based on actual archaeological evidence. This observation is further corroborated by the fact that three other structures mentioned on the ostracon have apparently not been identified by any archaeological mission over the last 120 years. Why should the tomb of Isisnefret still be hidden somewhere in the Valley of the Kings?

## 3.4.3. Valley of the Queens

In our view, a likely find spot in the Valley of the Kings for the ostracon does not necessarily imply that the places and distances mentioned in the text cannot refer to another area in western Thebes

If one identifies Isisnefret as being the wife of Ramesses II, then her tomb was most probably built in the Valley of the Queens, where other wives of Ramesses II, like Nefertari (QV 66), Henutmire (QV75), Bintanath I (QV 71), Meritamun (68) and Nebettawi (60), were buried. In this context, it is interesting to see that all the places can be linked with existing structures, i.e., tombs, that respect the distances mentioned in the text (see Fig. 4-5).

As in §3.4.2, we took the *mw-n-p.t* as starting point for our reasoning. Based on the graffiti 3012 und 3013 in the rear part of the Valley of the

<sup>&</sup>lt;sup>74</sup> Note that the same reasoning applies if one takes the basin beside/at the end of a drainage channel, which was found a few years ago by Z. Hawass in the area east of the entrance of KV 8 (Merenptah)/in the vicinity (?) of KV 7 (Ramesses II), see http://www.drhawass.com/blog/press-release-latest-news-valley-kings (last accessed June 2014), with the first figure. When measuring 445 cubits from the approximate location of this basin, the endpoints can be (1) in the area between KV 28 and KV 44, (2) a few meters to the west of KV 60, (3) in the area between the three tombs KV 26, KV 30 and KV 40, (4) in the pathway leading to the tomb of Ramesses VII (KV 1), (5) in the area in the front of the tomb of Bay (KV 13) or (6) outside the area in which the royal tombs were built in the Valley of the Kings. It should be noticed that this very basin has been linked by the excavator with the toponym "willow tree" of v° 1 (and referred to as a possible resting place for the workmen). Here on the contrary, we regard it as a possible location for the *mw-n-p.t.* 

Queens, the location of the *mw-n-p.t* can be precisely determined (see Fig. 7). The designation of this small gorge as a *mw-n-p.t* is attested since year 62 of Ramesses II, but the phrase can obviously have been used much earlier by workmen for referring to this (and other similar) site.

When plotting on the map a distance of 445 cubits starting from the mw-n-p.t (Graffito 3012, 3013), we find that QV 75, the tomb of Henutmire (a'), is a possible endpoint. If one wishes to link this tomb with Isisnefret, one has therefore to assume that it was designed for her, but that it has been taken over and finished for Henutmire, who was buried there. <sup>76</sup>

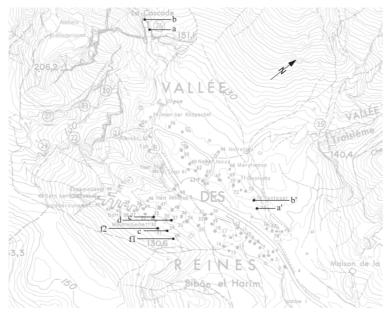


Fig. 7. Map of the Valley of the Queens with two possible places for the *mw-n-p.t* places (a, b) as starting points for measuring the distance of 445 cubits to the hypothetical location of the "tomb of Isisnefret" (a', b') and other structures (tombs) that fit the measurements mentioned in O. Cairo JdE 72460.

<sup>&</sup>lt;sup>75</sup> For these two graffiti see A. Dorn & M. Müller, "Regenfälle in Theben-West", ZÄS 133 (2006), p. 90-93 with a revised reading of the date in Graffito 3013 – year 62 of Ramessess II instead of year 2. Graffito 3012 is dated to the 4<sup>th</sup> year of Merenptah.

<sup>&</sup>lt;sup>76</sup> C. Leblanc, *Ta Set Neferou. Une nécropole de Thèbes-ouest et son histoire, I.*, 1987 (unpublished dissertation, université de Lyon II), p. 541-545 with plan on p. 164. During the excavation of the tomb, no archaeological evidence pointing to such a reuse has been found.

C. Leblanc comes to a slightly different conclusion when he reports<sup>77</sup> that he measured in 1986 a distance of 445 cubits starting from the *mw-n-p.t* and identified QV 74, the tomb of Douatenipet (b'), as endpoint. This tomb was constructed and decorated during the reign of Ramesses II for an unnamed princess, but was not used at that time; Douatenipet reused the structure during the 20<sup>th</sup> dynasty.

Whether one takes a' or b' as starting point for measuring the next distance — i.e. the 200 cubits from the tomb of Isisnefret (= Henutmire or Douatenipet) to the tomb of Meryatum — does however not matter much. Indeed, the endpoint is in both cases QV 29 (c) or QV 30. Both tombs are dated to the 18<sup>th</sup> dynasty according to C. Leblanc, and no traces of occupation during the 19<sup>th</sup> dynasty (e.g., for Meryatum) have been observed so far. Quite the contrary. Indeed, based on the finds in the tomb, YQ 30 is apparently the burial place of Nebiry, from the time of Hatshepsut/Thutmosis III. Furthermore, these simple tombs with a shaft and one single room have not much in common with what could be expected to be the tomb of the High Priest of Heliopolis Meryatum.

One can nevertheless venture to explore the 'Valley of the Queens hypothesis' more thoroughly. Some 30 cubits north of QV 29 (c), we find QV 27 (d), which could be the place of the *mr-mš*<sup>c</sup> *wr*. At a distance of 40 cubits ('workplace of the oils') from QV 29 (c) lies QV 32 (e) and in a distance of 25 cubits ('place of the Willow-Goddess'), one finds QV 28 (f1) and QV 31 (f2), if we assume that *try.t* is a tomb structure.

However, most of the places referred to in O. Cairo JdE 72460 are (r-c-)b3k, i.e. tombs under construction, and not ancient burials of the 18<sup>th</sup> dynasty. This leads us to conclude that it is difficult to match the data provided by the ostracon with actual structures in the Valley of the Queens.<sup>80</sup>

## 3.4.4. Inside KV 5

As we have been unable to come up with any convincing proposal regarding the location of the tomb of Isisnefret when put in relation to the other places mentioned in O. Cairo JdE 72460, both in the Valley of the Kings and in the Valley of the Queens, we suggest that, instead of trying to relate structures in the necropolis from the outside, one could

<sup>&</sup>lt;sup>77</sup> C. Leblanc, *BIFAO* 93 (1993), p. 330.

<sup>&</sup>lt;sup>78</sup> C. Leblanc, *Ta Set Neferou*, p. 407-410 with plan on p. 135.

<sup>&</sup>lt;sup>79</sup> Excavations of the Museum of Turin (1903–1920), see E. Schiapparelli, *Relazione sui lavori della missione archeologica italiana in Egitto (anni 1903-1920). Volume primo. Esplorazione della "Valle delle Regine" nella necropoli di Tebe*, 1924, p. 35-39.

<sup>&</sup>lt;sup>80</sup> For an overview of the dates of these tombs see C. Leblanc, *Nefertari: Ausgrabungen im Tal der Königinnen*, 1998, p. 20-21.

look *inside* existing structures? In this section, we argue that the most likely solution to the puzzle of this ostracon is to locate the places and measurements *within* KV 5. The following arguments can be listed:

- Fragments of the canopic jars of the High Priest of Heliopolis Meryatum were found within KV 5,<sup>81</sup> which may be taken as evidence that he was buried there and that KV 5 should, in one way or another, be linked with the writing of this ostracon.<sup>82</sup>
- The simultaneous work at three different places can be better explained if it makes reference to three different rooms within KV 5 (one for the oils, a storeroom [?], one for Meryatum, one for Isisnefret). Further, the mention of an already existing or damaged tomb and of a 'narrow' can be explained within KV 5 (see below).
- Distances given in cubits were generally used by the workmen from Deir el-Medineh for measurements *inside* rooms or tombs (see above §2).
- The name 'Isisnefret' is mentioned in the text without any title: she is neither *hm.t. wr.t. nsw.t.* nor *z3.t. nsw.t.* and her name is not written in a cartouche (for the significance of the titles in the text see *mr-m8*° *wr* [without name] and that of the *wr-m33w Mrj-Itm*). There is consequently no proof in favor of the identification of Isisnefret with a queen (wife of Ramesses II or Merenptah). This means that we do not necessarily have to search for the tomb of a queen, but rather for the tomb of a lower rank member of the family of Ramesses II. As such, Isisnefret can probably be identified as the daughter of Khaemwaset, son of Ramesses II. This assumption can account for a burial within KV 5.84
- It is highly questionable whether the *mr-mš*<sup>c</sup> *wr* refers to the individual with the highest possible rank, i.e. the king Ramesses II, <sup>85</sup> especially since no textual evidence points in this direction: at

<sup>&</sup>lt;sup>81</sup> E.C. Brock & N. Walschaert, "Inscribed Objects", in K.R. Weeks (ed.), KV 5. A Preliminary Report on the Excavation of the Tomb of the sons of Rameses II in the Valley of the Kings (PTMP 2), 2000, p. 106 with Fig. 95.

When previous scholars assumed that the measurements refer to distances between tombs, the "tomb under construction of Meryatum" was considered to be KV 5 (*pars pro toto*). This assumption however is not supported by any textual information.

83 The link between the name 'Isisnefret' and a queen, as well as K.C. Lakomy's

The link between the name 'Isisnefret' and a queen, as well as K.C. Lakomy's conclusion (*Cairo Ostracon J. 72460*, p. 95-97 and *GM* 216 [2008], p. 39) that queens were still buried in independent tombs in the Valley of the Kings during the 19<sup>th</sup> dynasty (just as during the 18<sup>th</sup> dynasty; see for example the case of KV 32, Tiaa, wife of Amenhotep II and mother of Thutmosis IV) have far reaching implications that we do not want to endorse here.

<sup>&</sup>lt;sup>84</sup> We acknowledge the fact that KV 5 is most probably referred to in P. Turin 1880 ( $r^0$  4,13) as  $p_3$  is n n<sub>3</sub> ms.w-nsw.t "the tomb of the royal children (of king R. II)", but we do not consider that this appellation speaks definitely against the burial of female family members in KV 5.

<sup>85</sup> K.C. Lakomy, Cairo Ostracon J. 72460, p. 15-22 (especially p. 22).

least three sons of Ramesses II also held this title, and according to the text the holder of this title should also be buried within KV 5.86

We can now provide some explanations for the toponyms of the ostracon in connection with KV 5:

- try.t: as we argued above (§1.3.a), try.t could refer to an image of a tree-goddess<sup>87</sup> within the tomb.<sup>88</sup>
- hd hr g3w.t mh.tj "going northwards through the north narrows".
   One should first keep in mind that two systems of orientation can be observed in tombs, an absolute and a relative one. Within KV 5, this sentence might point to the northern part of starting with corridor 11 or corridor 20.
- Assuming that the expression p3 b3k n n3 sgnn "the workplace of the oils" refers to a storeroom and not to a representation of sacred oils in a wall painting, which could be found virtually in every room, it would make sense to localize this room near the entrance of KV 5, where lamps could be distributed to the workers when entering the tomb. This would mean that the short distances were measured somewhere near room 3, the 16 pillared hall.
- mr-ms<sup>c</sup> wr: it could refer to a depiction of one of the sons of Ramesses II holding this title in KV 5. The prince Ramesses is depicted in room 1 of KV 5 holding the mr-ms<sup>c</sup> /// title. <sup>89</sup> mr-ms<sup>c</sup> wr can also be understood as a designation of the burial chamber of the prince Amunherchepeshef or of the prince Ramesses who both held the mr-ms<sup>c</sup> wr title. The name could for instance be written on the wooden door or on the doorframe of his room/burial chamber. Could we further imagine that the use of the title without the full name was a way to refer to a room (tomb) or an image of a person still alive (but already presented as a dead person in the context of KV 5)? If so, based on a dating to the text in the last third of the reign of Ramesses II (§3.3), the mr-ms<sup>c</sup> wr can be identified as being the prince Ramesses.
- mw-n-p.t: it can make reference to one of two things. (1) Assuming that the tomb was once affected by rainwater, mw-n-p.t could designate the lowermost part of the tomb, where rainwater once

<sup>&</sup>lt;sup>86</sup> See above §3.3, with reference to A. Gnirs, *Militär und Gesellschaft*, p. 79-84 and p. 127-128.

<sup>&</sup>lt;sup>87</sup> See A. Dorn, Arbeiterhütten im Tal der Könige. Ein Beitrag zur altägyptischen Sozialgeschichte aufgrund von neuem Quellenmaterial aus der Mitte der 20. Dynastie (ca. 1150 v. Chr.) (AH 23), 2011, p. 102 (with a different identification).

The name of places in tombs is frequently linked to the decoration found on walls, see e.g. S. Demichelis, ZÄS 131 (2004), passim.

E.C. Brock, "Wall Decoration", in K.R. Weeks (ed.), KV 5, p. 59-60 with Fig. 47.

E.C. Brock, "Wall Decoration", in K.R. Weeks (ed.), *KV* 5, p. 59-60 with Fig. 47.

For the life of the prince Ramesses see K.A. Kitchen, *Pharaoh triumphant*, p. 102-103. The ostracon would consequently be dated before year 50 when Merenptah became the next holder of this title.

stayed after a rainfall. (2) As this measurement is set apart from other ones, one could argue that it refers to a distance (mostly) ouside KV 5. In this case, the *mw-n-p.t* would be a basin at the foot of a cliff of the Valley of the Kings. Three of the location mentioned above (d, e, and f) can indeed lead straight into KV 5: cliff-point *d* leads 30 to 40 cubits inside KV 5, cliff-point *e* around 120 cubits (which offers many possibilities for proposing a room of KV 5 as the tomb of Isisnefret) and cliff-point *f*, which leads more or less to the entrance.

The mention of a *mw-n-p.t* in the context of this ostracon remains quite unexpected. Did rainfall occur on a particular date that can be linked to one of the individuals mentioned in the text? Did it affect the tomb KV 5 during the building process? Or was it a place important for unknown reasons, e.g. water for the building site, or the like? We prefer to leave these questions open in the framework of this paper.

Which rooms within KV 5 could the r- $^{c}$ -b3k be linked to?

At the present stage of excavation and publication of KV 5, 91 any attempt to combine the data of O. Cairo JdE 72460 with known structures within KV 5 is not fruitful, it cannot be decided whether the long distances of 445 cubits refer to an *inside* or to an *outside* measurement. Indeed, two corridors within KV 5 lead still further on, but remain unexcavated — room 26/27 in the northern part of the tomb and room 16 in the southern part. 92 If the measurements mentioned in O. Cairo JdE 72460 have to do with distances within KV 5, then the tomb goes on for at least 80 meters more. 93

#### 4. CONCLUSIONS

Based on a philological analysis of the constructions used for measuring distances between topographical points, we discussed the possible translations of O. Cairo JdE 72460. This allowed us to draw two likely representations of the relationships between the places mentioned in the ostracon, mostly building sites. Since we were unable to map this

<sup>&</sup>lt;sup>91</sup> See the annually updated detailed reports on the KV 5 website: www.kv5.com "What's new" with the progress report.

<sup>&</sup>lt;sup>92</sup> www.kv5.com: progress report, TMP-August-2012-Progress-Report.pdf, plan on p. 4 (2013-06-05).

<sup>&</sup>lt;sup>93</sup> It could be argued that 445 cubits (around 232 m) is too long a distance for a measurement inside KV 5, but we consider it definitely possible that more corridors extend under the first level of the tomb, with many more side-chambers. Yet another explanation for the long distance inside could be the existence of a corridor similar to the one found in the tomb of Sethy I. As is well-known, about 100 meters after the entrance of this tomb, a corridor starts in the sarcophagus chamber and leads downwards for at least another 100 meters.

abstract schema onto actual archaeological structures in the Theban necropolis and since, in the extent 'Deir el-Medineh' corpus, measurements in cubits are usually used for distances *inside* buildings or tombs, we hypothesized that this ostracon could refer to places inside KV 5, the largest tomb in the Valley of the Kings. In order to strengthen this hypothesis, we suggest several possible links between the content of the text and KV 5.

First, the canopic jar fragments of the High Priest of Heliopolis Meryatum were found in KV 5. This does not lead us to equate the building site of Meryatum with KV 5 as a whole, as former scholars have done. Rather, we interpret it as a possible indication that the ostracon mentions rooms under construction  $(r3-c-b3k)^{94}$  within KV 5.

Second, when reading the text literally, Isisnefret is not said to be a queen. 95 Other individuals bearing this name and belonging to the family of Ramesses II could therefore be referred to in this ostracon: (1) Isisnefret, daughter of the famous son of Ramesses II, Khaemwaset, might have been buried, as many other family members of Ramesses II, within KV 5; (2) Isisnefret, the daughter of the future king Merenptah, is yet another possibility. We know that one of those two women was buried in Saqqara and the other in the Valley of the Kings.

Third, when linking the measurements to rooms, and probably also wall decorations, within KV 5, the fact that three places were 'under construction' at the same time can easily be explained as well as the presence of an old/already existing tomb. This also accounts for the fact that the structures of the V° are all located quite close to each other (25, 30, 40 cubits).

Finally, besides the unknown localization of the tomb of Isisnefret, none of the three other mentioned structures has been found until today outside KV 5, even though they should be located within an area of around 440 m² in the almost completely excavated Valley of the Kings. This observation throws doubt on the very existence of an independent tomb of Isisnefret in the Valley of the Kings, which is not a room in KV 5, as we tentatively suggest here.

In conclusion, the search for a queen tomb in the Valley of the Kings is based on several assumptions that are not corroborated by the text of O. Cairo JdE 72460. The identification of KV 5 as the tomb referred to in this text is, we believe, probably more congruent with the data of this fascinating piece of writing. Furthermore, the generally accepted analy-

<sup>&</sup>lt;sup>94</sup> It is worth mentioning that the word is "tomb" is not attested in O. Cairo JdE 72460.
<sup>95</sup> Why she is not mentioned with the expectable s3.t-nsw-title is hard to say.

sis of the royal burial practices is consistent with the scenario we propose: from the time of Ramesses II onwards, queens (although not reigning ones, such as Tawosret) were buried in the Valley of the Queens or elsewhere, for instance, in Saggara, <sup>96</sup> but not in their own tombs within the Valley of the Kings. Accordingly, the tomb of the queen Isisnefret is still to be identified; as C. Leblanc argued, based on the complete excavation of the Valley of the Queens with no finding of any sort related to this queen, Isisnefret was most probably buried in Saqqara.<sup>97</sup>

Finally, linking the data of O. Cairo JdE 72460 with structures inside KV 5 allows one to put forward an explanation for the very existence of this text (Sitz im Leben): the scribe might have been in charge of the building site of the High Priest of Heliopolis Meryatum —which is the link between the R<sup>0</sup> and the V<sup>0</sup> and is introduced by p3y(=i) and could have taken measurements between places related in a way or another to 'his' building site: did he need more workmen because of the long distances mentioned or were there questions about a too slow work in progress, so that a scribe noted the distances in order to produce arguments against existing critique? 98 Whatever was the actual reason which led to writing this text, it is an absolutely unique piece that illustrates most clearly the fact that the practices of the Deir el-Medineh community of workmen continue to escape full explanation and to stimulate the imagination.

We hope that this journey through philology, history, and archaeology has been enjoyable for Pascal Vernus, a true master and endless source of inspiration for anyone interested by hermeneutic questions in the field of Egyptology.

<sup>&</sup>lt;sup>96</sup> C. Obsomer (Ramsès II, p. 248) suggests locating the tomb of Queen Isisnefret in Saqqara (area of the monastery of St. Jeremiah).

<sup>97</sup> C. Leblanc, *BIFAO* 93 (1993), p. 314-317.
98 As appears from O. DeM 238 (with F. Neveu, *RdÉ* 41 [1990], p. 147-148), measurements can be copied on official documents and transmitted to an administration. In this respect, cf. the opinion of S. Demichelis (ZÄS 131 [2004], p. 114) regarding the plan of tombs on Papyri.

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