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THE ROUNDELS OF HAGHIA TRIADA*

Introduction

A roundel is a clay disk of irregular circular or quadrangular shape on whose edge one or more seal impressions usually appear and which may or may not bear an inscription on one or even both sides.

E. Hallager has suggested that a roundel is a receipt issued by the seal owner to a store officer in exchange for the goods collected from the stores.¹

For each seal impression on the edge of the roundel the seal owner would collect one unit (or ration) of some food item or commodity (vases, textile products, animals etc.). The roundel issued to acknowledge the collection would then be inscribed by the store officer, who would usually incise some signs on one or both sides and, on rare occasions, also add numerals to specify the goods which he had consigned to the seal owner. The roundel, then, was saved by the store officer who would afterwards transfer it to the archive.

At Haghia Triada we have an example of these two phases of the utilization of a roundel, since these documents were found in both the archive and the stores (v. infra).

The twenty-three clay roundels found between 1902 and 1987 on the site of Haghia Triada are documents for which it has never been possible to state with certainty the archaeological context. This results above all from the fact that the vast majority of the archive documents found at Haghia Triada came to light during the first three pioneering excavations between 1902 and 1904.

I am most grateful to T. Iacono for the translation of this text.

E. Hallager, "The Roundel in the Minoan Administrative System" (= Hallager 1988), in: Problems in Greek Prehistory, Manchester 1986/Bristol 1988, 101–112.

It must be considered, on the other hand, that it is only during the last decades that roundels, sealings and nodules have begun to receive the attention they deserve. The scant interest shown in such documents by archaeologists in earlier days is, therefore, understandable. Moreover, a series of unfortunate events has considerably reduced the possibility of re-examining the excavation documents (plans, excavation diaries, description of the material).

The events of the Second World War and the 1966 flood in Florence caused the destruction of many documents among which were the plans showing the disposition and the enumeration of the 'fosse' and, above all, Halbherr's excavation diary of 1902.

Moreover, the fact that three quarters of a century have elapsed between the beginning of the excavation and the publication of its results has further complicated the task of Luisa Banti, who was given this assignment by L. Pernier. A first overall description of the twenty-one roundels found between 1902 and 1904 (HT Wc 3001–3020 and HT Wc 3023) was provided at the time by Doro Levi in his study dedicated to the sealings of Haghia Triada.²

In 1979 L. Godart and J.-P. Olivier published the inscriptions of twenty-one roundels in GORILA 2 (HT Wc 3001–3020) and in GORILA 5 (HT Wc 3022).³

Only two roundels (HT Wc 3022⁴ and 3024⁵) have in fact had an exhaustive publication (which examines not only the inscriptions, but also the seal impressions, the physical characteristics of the documents, etc.), while HT Wc 3023 is to date unpublished⁶ (Pl. 1).

We will therefore provide, hereafter, a catalogue of all the roundels originating from Haghia Triada, in which consideration will be given to: inscriptions, seal impressions, including those deliberately obli-

D. Levi, "Le cretule di Haghia Triada", ASAtene 8-9, 1925-26 (1929), 71-156.

J. Godart – J.-P. Olivier, Recueil des inscriptions en linéaire A (= GORILA) vol. 2, Paris 1979, 71–78; GORILA vol. 5, Paris 1985, 14.

J.-P. Olivier, "Une rondelle d'argile d'Haghia Triada(?) avec un signe en linéaire A", BCH 107, 1983, 75-84.

V. La Rosa, G. Pugliese Carratelli, "Nuove iscrizioni in lineare A dalla 'Villa Reale' di Haghia Triada", La Parola del Passato 237, 1987, 463–468. Afterwards the roundel was re-published by E. Hallager, L. Godart and J.-P. Olivier, "La rondelle en linéaire A d'Haghia Triada Wc 3024 (HM 1110)" (= Hallager et alii), BCH 113, 1989, 431–437.

⁶ I would like to thank E. Hallager who has advised me of the inventory number given at the Iraklion Museum to roundel HT Wc 3023 which had not yet been given one.

terated, fingerprints and clay quality and colour, in an attempt to derive, from these elements, as much information as possible.

Thanks to the courtesy of the Scuola Archeologica Italiana⁷, which has allowed me to make use of the information contained in Paribeni's and Halbherr's excavation diaries of 1903 and 1904, I have been able partly to re-construct the archaeological context of this set of documents, and, at least in two cases, to locate the exact discovery site of the roundels which, in the notes of those pioneers of Cretan archaeology, are called *cretule*, *placchette*, *targhette discoidali* or *rotelle*.

Provenance and Dating

The excavation of the site of Haghia Triada, found in 1901 during surface surveys by archaeologists excavating at Phaistos, began on 15th May 1902 under the supervision of Federico Halbherr.⁸

After a series of surveys – all negative – another carried out opposite the north-east corner of the small Venetian church dedicated to St. George revealed the presence of a building of major importance. Halbherr, in his first report in September of the same year, announced the discovery of "un piccolo megaron circondato da altri locali di destinazione non ancora ben chiara, più due piccole stanze, l'una con affreschi alle pareti, l'altra quasi piena di sigilli in terracotta".

In his description of the finds resulting from the test excavations of that year, Halbherr writes: "In fatto di trovamenti mobili, lo scavo di questa parte dell'edificio ha dato risultati assai soddisfacenti. Anzitutto si raccolsero cinque tavolette iscritte in caratteri micenei del tipo lineare . . .: due però sono frammentarie . . . Oltre di queste vennero in luce cinque piccole targhette discoidali in terra cotta fornite ciascheduna di una breve iscrizione di pochi segni . . ."10

I would also like to express my gratitude to Prof. di Vita, Director of the Scuola Archeologica Italiana in Athens, to Prof. V. La Rosa, who is responsible for the excavations of Haghia Triada, and Dr. P. Militello, who has provided me with the transcriptions of the excavation diaries of 1903 and 1904 as well as with precious suggestions and information.

F. Halbherr, "Lavori eseguiti dalla Missione Archeologica Italiana da Haghia Triada e nella necropoli di Phaestos dal 15 maggio al 12 giugno 1902", Rendiconti dell'Accademia dei Lincei (= RAL) XI, 1902, 433–447.

⁹ Ibid. 437.

¹⁰ Ibid. 440.

At the beginning of the excavation, the whole surface of the site was being investigated "mediante una fitta rete di pozzi rettangolari scavati alla distanza di circa tre metri l'uno dall'altro"¹¹, but, in fact, the part of the building effectively excavated in depth during the four weeks of the 1902 campaign was initially limited to rooms 4, 49, 12 and 48, while room 47 was only dug as far as the eighth step of the staircase.¹²

Only later was the excavation extended to room 13. In fact, Halbherr reports: "Il pozzo di saggio scavato sull'orlo della rampa verso l'angolo nord-ovest dell'anticamera del megaron, é penetrato in un locale di forma e dimensioni non ancora ben accertate, pieno dei materiali di una stanza del piano superiore . . . In questo piccolo spazio e a poca profondità furono ricuperati, mediante il vaglio della terra più di quattrocentocinquanta sigilli o cretule . . ."13

It is obvious, then, that since it was possible to identify this as a *megaron* and an antechamber, the excavation had to be fairly advanced in these two rooms, when room 13 was beginning to be excavated.

The first five roundels were found in a few days at a depth of 1 m. together with tablets HT 1–5 and therefore originate from the 'trincea' of the *megaron* (also known as the 'trincea centrale'), an area which comprises rooms 4–49–12–48 and the eastern half of room 47.

These first documents, as Halbherr reports, were not found in the same place: "La relativa larghezza dell'area su cui furono raccolti questi resti, lascia in dubbio, se anch'essi si debbano considerare come materiale disperso e proveniente da diversi punti del palazzo

There is no doubt, on the other hand, as to the identification of these documents, since Halbherr provides the description and the drawings of both the tablets and roundels, the latter identifiable as HT Wc 3002¹⁵, 3005, 3007, 3009, 3010.

By analyzing Paribeni's 1903 excavation diaries, it is possible to affirm that during the campaign of 1903 a total of 12 roundels were

¹¹ Ibid. 436.

¹² Ibid. 437.

^{13 &}quot;Resti dell'età micenea scoperti da Haghia Triada presso Phaestos", Monumenti Antichi dei Lincei (= MAL) XIII, 1903, para. 5, col. 29.

¹⁴ Ibid. para. 4, col. 21.

Roundels HT Wc 3001 and 3002 have the same shape and inscription, but the comparison between the drawing published by Halbherr and the two documents leaves no doubt that the roundel reproduced is actually HT Wc 3002.

found or, rather, registered, but Paribeni does not describe any of them. Thus we cannot identify them.

Among these 12 is a group of 8 roundels which was discovered on 12th March 1903 in what Paribeni defines as the "angolo nord-ovest del colle", an area comprising both the east wing of portico 11 and the western side of room 13 ('stanza dei sigilli'): "Si scava all'angolo N-O del colle sul lato esterno della grande trincea dei sigilli . . . Nell'angolo N-O si hanno molti ritrovamenti . . . Oggi si rinvennero fra la terra rossa senza tracce di carboni circostanti n. 96 tra sigilli (87) e placchette (8) di terracotta con rappresentazioni e segni, e una tavoletta iscritta mancante di una parte, frammenti di un vaso di pietra . . . Tutti questi oggetti furono trovati all'altezza di m. 1,40–0,70 dal pavimento, la tavoletta iscritta a 0,90." 16

These documents were found when the wall separating the 'stanza dei sigilli' from the east wing of portico 11 had not yet come to light. It is not possible, therefore, to tell which of the two rooms they originate from.

Another roundel impossible to identify comes almost certainly from the east wing of portico 11 together with the group of 179 sealings and a fragment of an inscribed tablet. It would seem possible to me to argue for the attribution to portico 11, given the congruence between Banti's version¹⁷ and Paribeni's diaries as to the finds associated with these documents.

Both of them report three disks of rock crystal and fragments of stone vases: "Ad E del pilastro [referring to the corner column of portico 11, author's note] si rinvengono altre pietre lavorate una delle quali forse in situ, ed insieme carboni, tre pezzi di lastre di gesso in posizione quasi verticale sul terreno. In detto angolo N-O si rinvengono 179 sigilli, 1 placchetta ed 1 frammento di tavoletta iscritta, 3 dischetti lenticolari di cristallo di rocca . . . frammenti di vasi di pietra . . ."18

It was possibly this reference to three chalk slabs near the 179 sealings or perhaps, as P. Militello believes¹⁹, the presence of a roundel in the so-called 'casella' or 'latrina' of room 13 (v. infra) – also made

¹⁶ R. Paribeni, Taccuino di scavo 1, 12 marzo 1903, 12-13.

¹⁷ F. Halbherr, E. Stefani, L. Banti, "Haghia Triada nel periodo tardo palaziale" (= Banti 1977), ASAtene 55, 1977 (1980), 85.

¹⁸ R. Paribeni, Taccuino di scavo 1, 16 marzo 1903, 19–20.

P. Militello, "Riconsiderazioni preliminari sulla documentazione in lineare A da Haghia Triada", Sileno 14, 1988, 239, n. 24.

of chalk slabs – which led G. Pugliese Carratelli²⁰ to suggest the existence of "una cassetta formata da lastre di gesso confitte nel pavimento" containing "un gran numero di cretule".

This 'cassetta', it must be underlined, never existed, though mentioned by more than one scholar.

Two more unidentifiable roundels resulted from the detailed sifting of 'fossa 12'.

The first of these two was found on 12th March. "Fra le terre passate al setaccio si rinvennero . . . un sigillo ed una placchetta; questi due ultimi oggetti provengono dalle terre cavate innanzi la caliva del phylax."²¹

The second roundel was found on 19th March: "Dalla terra proveniente dalla 12, esaminata al setaccio, si ritrova una placchetta di terracotta ed una piccola quantità di oro."²² From the excavation diaries it is possible to infer that the 'fossa' dug in front of the keeper's lodge is 'fossa 12'.

This had as its western limit the western wall of rooms 7 and 57. On the eastern side it extended at least up to the wall between rooms 57 and 57a and, perhaps, up to the foundation of the big wall of the Mycenean *megaron* which cut room 57a into two parts.²³

The last of the 12 roundels found in 1903 was discovered on 1st April in room 59, together with numerous tablets in Linear A inside two pithoi placed along the southern wall of the room, on the east of the door connecting, via staircase 60, room 59 with rooms 8, 61 and 17: "Fuori il muro N. del piestherion e precisamente in gran parte entro due pithoi che sono alla porta N. di esso si trovano alcune tavolette iscritte e frammenti di altre, un sigillo ed una placchetta."²⁴

At the end of the 1903 campaign the total number of roundels found was 17, taking into account the 5 found in 1902.

Two more roundels were found during the campaign of 1904.

Unlike the 12 roundels of 1903 the two found in 1904 are identifiable, but it is only for one of them that the exact spot of discovery is known.

The first one to be found is probably HT Wc 3020. There is no mention of this roundel, though, not even in the excavation diaries,

^{20 &}quot;Le iscrizioni preelleniche di Haghia Triada in Creta e nella Grecia Peninsulare", MAL XL, col. 432.

²¹ R. Paribeni, Taccuino di scavo 1, 12 marzo 1903, 13.

²² Ibid. 19 marzo, 22.

²³ Ibid. 31 marzo, 50.

²⁴ Ibid. 1 aprile, 53.

although, given its identification number at the Museum of Iraklion (HM 1348), it is possible to infer that this was found during the campaign of 1904. This is the year of the discovery of the tablets from the 'casa del Lebete' whose inventory numbers start from 1306. This criterion, not valid for 1902 and 1903, is valid from 1904 onwards, when at the Museum of Iraklion materials began to be catalogued year by year.

The second roundel was found on 22nd March 1904 in burnt terrain between the two stones of the entrance of the so-called 'casella' or 'latrina' in room 13. There is no doubt that this was HT Wc <3018>, now lost. This is confirmed by Halbherr's description²⁵ first: "In questo terriccio si trovò una cretula portante l'impressione di un sigillo notevole, una donna a cavallo di un mostro marino od altro animale fantastico, più due contromarche nella scrittura lineare A di H. Triada", and Banti²⁶ afterwards: "Su un lato è il segno composto n. 87... sull'altro, il segno sillabico e ideografico 87..."

In total, therefore, the excavation diaries record the discovery of 18 of the 21 roundels which were in fact found at Haghia Triada between 1902 and 1904. The lack of these three documents can be explained by the fact that in those early years the difference between roundels, sealings and nodules was not yet very clear. For instance, HT Wc <3018> is generically referred to as *cretula* and only thanks to the description of its physical appearance and its text have I been able to identify it. It is likely, therefore, that the three missing roundels have been included among the *cretule*. In 1979 L. Godart and J.-P. Olivier assigned the code HT Wc 3021 to a fragment of sealing (HM Bk), considering it a fragmentary roundel, but then E. Hallager excluded this document from the list of roundels from Haghia Triada.²⁷

Roundel HT Wc 3022, stored in the Allard Pierson Museum in Amsterdam, originates from Haghia Triada, according to the Museum's inventory. Its origin seems to be sufficiently proved by a whole series of clues (physical aspect, size, quality of the clay), but the decisive factor is the two seal impressions belonging to type 79

²⁵ F. Halbherr, "Lavori eseguiti dalla Missione Archeologica Italiana in Creta dal 15 dicembre 1903 al 15 agosto 1905", RAL XIV, 1905, 375.

²⁶ Banti 1977 (supra n. 17), 87 no. 4.

E. Hallager, "Identical Seals on Roundels and Other Documents", in: Sceaux minoens et mycéniens. Chronologie, fonction et interprétation, forthcoming.

of Levi, which appears 41 times on some nodules from Haghia Triada presenting a countersign.²⁸

Finally, HT Wc 3024 was found on 10th August 1987: "... in superficie subito ad Ovest della rete di recinzione, in corrispondenza del portico 11. Non si ha quindi difficoltà a far riferimento al gruppo di cretule (179) con tavolette iscritte recuperato nello strato di crollo del piano superiore di questo settore della Villa."29

The analysis of all the data at our disposal confirms what the workers themselves have suggested right from the very first campaign, i.e. the existence of an archive directly above the 'stanza dei sigilli', given the considerable distance from the floor at which the documents were found. It seems to me that this room ought to be found between room 13 and the east wing of portico 11. Considering that sealings and roundels have been found over a very wide area extending from portico 11 to rooms 7 and 57 ('fossa 12') and from the 'trincea del megaron' to the boundary fence over an area of at least 170 sqm. I think that we cannot exclude the possibility that the archive consisted of more than one room. From these rooms upstairs seem to originate, therefore, 19 of the 21 roundels discovered between 1902 and 1904. The two remaining roundels, viz. HT Wc <3018>, found in room 13, and the unidentified roundel found in room 59, do not originate from the upper floor, which could mean that these two documents were waiting to be transferred to the archive upstairs, once their administrative cycle had been completed.³⁰

If doubts still remain as to the exact spot where the roundels were found, there is no doubt about the date of these documents. The analysis of associated finds confirms that all the roundels found at Haghia Triada date from Late Minoan I B.31

Shapes and Dimensions

Various types of roundels are attested at Haghia Triada, most of them in the shape of disks with an irregular edge. Being, on average, of smaller size than those from Khania, the edge is more deformed

²⁸ J.-P. Olivier, op. cit. (supra n. 4), 77-78.

V. La Rosa, op. cit. (supra n. 5), 463-464.
 In this regard, see P. Militello, "Aspetti del funzionamento del sistema amministrativo ad Haghia Triada", in: Mykenaïka, BCH supplément XXV, 1992, 412.

F. Vandenabeele, "La chronologie des documents en linéaire A", BCH 109, 1985,

by seal impressions, which gives the roundels from Haghia Triada a far less regular shape, compared with Khanian documents.

Some roundels (HT Wc 3013, 3018, 3019), impressed with larger seals, have a quadrangular shape, while others (HT Wc 3014 and 3016) recall, in their shape, the clay labels in hieroglyphic.

E. Hallager, in analysing the sections of the Haghia Triada roundel edges free from impressions, has attempted to classify the shapes of the clay pastilles while still unimpressed, thus identifying three different types: "the lentoid, the flaked lentoid and the disk".³²

The Danish scholar also finds a connection between some scribes and the shape of the clay pastilles, thus reaching the conclusion that it was not the seal owner who shaped a roundel, but the scribe himself. This hypothesis, very interesting though it may be, is based on a very small number of documents. Therefore, until there is evidence to the contrary, I still hold as valid the possibility that it was the seal owner who shaped the clay pastille. Moreover, there is nothing to prevent us from thinking that, in a few cases, either one or the other could see to the preparation of a roundel.

As for the dimensions, HT Wc 3024 is the biggest amongst the roundels from Haghia Triada, but here it is worth remembering that, contrary to what is generally believed, HT Wc 3002 (cm. 1.90 x 1.80×1.00) is not the smallest of all the roundels found, but only the smallest amongst those found at Haghia Triada;³³ the smallest of all being TY Wc 6 (cm. $1.85 \times 1.60 \times 0.85$).³⁴

The Inscriptions

The twenty-two roundels which are inscribed show a total of twenty-one groups of signs, eleven isolated signs with acrophonic or

³² E. Hallager, "Roundels among Sealings in Minoan Administration: A Comprehensive Analysis of Function" (= Hallager 1990), Aegaeum 5, 1990, 125–126.

E. Hallager, "The Use of Seals on the Minoan Roundel", in: Fragen und Probleme der Bronzezeitlichen Ägäischen Glyptik (= CMS, Beiheft 3) (= Hallager 1989), Berlin 1989, 59.

There are only two known roundels from Tylissos: TY Wc 5 (HM 430) and TY Wc 6 (HM 431), both uninscribed. Three strokes are clumsily incised on TY Wc 5, but they are not recognizable as any number or sign in Linear A. See I. Hazzidakis, "Tylissos Minoiki", AEphem 1912, 216, pl. 16e; M. Perna, "Roundels, Nodules and *noduli* from Tylissos", forthcoming. E. Hallager proposes the reading AB 81 [ku] as possible interpretation (E. Hallager 1990 [supra n. 32] 212, note 8 and table XXI).

ideographic value plus four complex signs consisting of ideograms and fractions. Three more fractions are incised on seal impressions.

The repertoire attested consists, therefore, of sixteen groups of different signs, eight isolated signs, three complex signs and three different signs for fractions (see Table 1).

	recto	verso	latus
HT Wc 3001	AB 03-28-57		A 707 supra sigillum
HT Wc 3002	AB 03-28-57		
HT Wc 3003	AB 77-27-02		
HT Wc 3004	AB 59-30-77	AB 28	A 713 supra sigillum
HT Wc 3005	AB 59-30-77	AB 28	
HT Wc 3006	AB 54-61-73	AB 60-A 314-AB 60	
HT Wc 3007	AB 54-07-30		
HT Wc 3008	AB 54-07-30	AB 26-57-59-07	
HT Wc 3009	A 333-AB 07-58-77	AB 188	
HT Wc 3010	A 333-AB 07-06-58-	77	
HT Wc 3011	AB 79-07-60		
HT Wc 3012	AB 79-07-60	AB 27-02	
HT Wc 3013	AB 188		
HT Wc 3014	AB 81-73-06-	-AB 78 AB 22	
HT Wc 3015	AB 77-81-03	A 303	
HT Wc 3016	AB 77-81-03	A 630	
HT Wc 3017 .1	AB 16-81-27 AB 07	A 625	
.2	A 306		
HT Wc <3018>	AB 188	A 624	
HT Wc 3019	AB 54		A 704 supra sigillum
HT Wc 3020	AB 188-51	A 630	
HT(?) Wc 3022	A 100/102		
HT Wc 3024 .1	AB 08-60-69-13		
.2	AB 21 ^f 6		

Table 1

Out of sixteen groups of different signs thirteen are hapax and only three are to be found on other documents:

- 1) AB 81-73-06-78 [KU-MI-NA-QE], incised on HT Wc 3014, is also to be found on a fragment of tablet (HT 54a.2) which does not provide any information on the goods registered.
- 2) AB 188-51 appears on HT Wc 3020, on nodule HT Wa 1021a and on tablet HT 123b.3. On this document, sign AB 188 is also





Pl. 1.

Pl. 2.



Pl. 3.



Pl. 4.



Pl. 5.

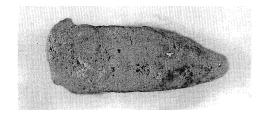


Pl. 6.

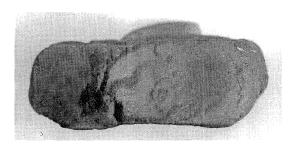
Pl. 1. The uninscribed roundel HT Wc 3023 (scale 1:1). Pl. 2. Sign A 707 incised on the impression of seal 31 of Levi on HT Wc 3001 (scale 2:1). Pl. 3. Sign A 713 incised on the impression of seal 31 of Levi on HT Wc 3004 (scale 2:1). Pl. 4. Sign A 704 incised on the impression of seal 132 of Levi on HT Wc 3019 (scale 1:1).

Pl. 5. Impression of seal 15 of Levi on HT Wc 3020 (scale 2:1).

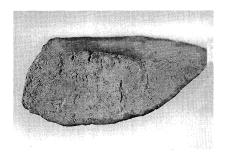
Pl. 6. Impression of seal 31 of Levi on HT Wc 3005 (scale 2:1).



Pl. 7.



Pl. 8.



Pl. 9.



Pl. 10.

- Pl. 7. Impression of seal 50 of Levi on HT Wc 3013 (scale 2:1). Pl. 8. Impression of seal 84 of Levi on HT Wc 3014 (scale 2:1). Pl. 9. Impression of seal 132 of Levi on HT Wc 3019 (scale 2:1). Pl. 10. Impression of seal 112 of Levi on HT Wc 3017 (scale 2:1).



Pl. 11.



Pl. 12.



Pl. 13.



Pl. 14.

Pl. 11. Impression of seal 125 of Levi on HT Wc 3015 (scale 2:1).

Pl. 12. Roundel HT Wc 3012: vue cavalière showing the reverse and the edge with the obliterated seal impression (scale 1:1).

Pl. 13. The reverse of roundel HT Wc 3016 (scale 1:1).

Pl. 14. Roundel HT Wc 3020 (scale 1:1).



present twice as an isolated sign, as on roundels HT Wc 3009, 3013 and <3018>.

- 3) AB 77-81-03 [KA-KU-PA], incised on HT Wc 3015 and 3016, appears as the heading on tablet HT 16 which shows in lines 2–3 both sign AB 54 (incised also on roundel HT Wc 3019) and sign AB 188 (linked with AB 81) found on HT Wc 3009, 3013 and <3018>.
- 4) Besides these three groups of signs, the inscription in line 1 of HT Wc 3017 must also be considered.

AB 16-81-27 AB 07 [QA-KU-RE DI] represents a form undoubtedly close to AB 78-81-27 AB 07 [QE-KU-RE DI] which also recurs in lines 2–3 of HT 20. This tablet presents a structure which is similar to that of HT 16, which also shows the two isolated signs AB 188 (linked with AB 81) – also appearing on roundels HT Wc 3009, 3013, <3018> – and AB 54, also found on HT Wc 3019.

Moreover, considering that the two roundels HT Wc 3016 and 3017, both impressed with seal 112, have as "pendants" tablets HT 16 and HT 20 respectively – both inscribed by scribe 10 – it is impossible not to follow J. Weingarten when she states: "The closely similar tablets HT 16 and 20 must be in some relationship to AT 112 with his echoic roundels." ³⁵

Another aspect here is also worth mentioning: the peculiar method of incision on seal impressions of fraction signs, well-documented on roundels, as well as on the *noduli* from Haghia Triada.

HT Wc 3001, 3004 and 3019 show – inscribed – the three fractions A 707, A 713 and A 704 on one of the seal impressions on the edge³⁶ (Figs. 1–2 with Pls. 2–3 and Pl. 4).



Fig. 1. Facsimile of sign A 707 incised on the impression of seal 31 of Levi on HT Wc 3001 (drawing M. Perna, scale 2:1)

J. Weingarten, "Seal-use at LM I B Ayia Triada: A Minoan Elite in Action I. Administrative Considerations" (= Weingarten 1987), Kadmos 26, 1987, 27.

³⁶ On roundels HT Wc 3001 and 3004 the fraction signs A 707 and A 713 are incised on the impression of seal 31 of Levi, while, on roundel HT Wc 3019, sign



Fig. 2. Facsimile of sign A 713 incised on the impression of seal 31 of Levi on HT Wc 3004 (drawing M. Perna, scale 2:1)

On noduli HT Wa 1020, 1021, 1023 and 1024 fraction signs A 704?, A 732, and A 704 are inscribed on the only seal impression.³⁷

The signs have been deliberately incised on the seal impressions, since at least on the edge of HT Wc 3001 and 3018 there would have been enough room to do otherwise.

J. Weingarten has convincingly explained this practice.³⁸

Starting from E. Hallager's suggestion, i.e., that for each seal impression on the edge of a roundel an officer would collect from the store one unit of some commodity, to inscribe a fraction on a seal impression would then mean modifying the value of the seal in order to indicate, probably, that the expected amount had not been entirely collected.

The Seal Impressions

Assuming that each seal is identifiable with an individual, eight people have impressed their seals on the roundels from Haghia Triada (Table 2).

The owner of seal 31 of Levi has alone impressed 60 % of the roundels and impressions. He and the owner of type 112 have together impressed 70 % of the roundels and stamped 2/3 of all the impressions.

J. Weingarten, "Some Unusual Minoan Clay Nodules" (= Weingarten 1986), Kadmos 25, 1986, 19.

A 704 is incised on the impression of seal 132 of Levi. Here it is also worth remembering that the fraction sign incised on HT Wc 3004 is by us interpreted as A 713, a sign which also occurs in hieroglyphic, and is attested so far only on tablet MA 10.

³⁷ On HT Wa 1020, 1021 and 1023, seals 37, 107 and 93 of Levi respectively are impressed; on HT Wa 1024, seal 156 (new type) of Platon is impressed.

Doc.	Seal	Shape		no. of impressions damaged or obliterated
Wc 3001-3012 and 3023	31	lentoidal	38	1 obliterated (Wc 3012), 1 damaged? (Wc 3006)
Wc 3016,3017 and 3024	112	lentoidal	9	1 obliterated (Wc 3024)
Wc <3018> and3019	132	oval	6	
Wc 3013	50	lentoidal	3	
Wc 3014	84	lentoidal	3	
Wc 3015	125?	elliptical	3	
Wc 3022	79	oval	2	
Wc 3020	15	lentoidal	1	
TOTAL:	8 types		65 im- pressions	2 obliterated, 1 damaged?

Table 2

As is the case with the nodules from Haghia Triada, on the roundels also it is possible to notice that a small percentage of individuals are responsible for a large part of the transactions attested by the roundels.

Thus, the individuals corresponding to seals 31 and 112 belong to the "Minoan elite" operating at Haghia Triada and thoroughly studied by J. Weingarten.³⁹

Five of the eight individuals who impressed their seals on the roundels have not impressed any nodule. This suggests that probably some sort of "specialization" existed for some individuals, if we assume that the discovery of certain seal impressions only on roundels is not coincidental.

Types 15, 31, 50, 84 and 132 appear exclusively on roundels⁴⁰ (Figs. 3 with Pl. 5, 4 with Pl. 6, 5 with Pl. 7, 6 with Pl. 8 and 7 with Pl. 9), while seals 79, 112, 125 can also be found on other documents (Figs. 8, 9 with Pl. 10 and 10 with Pl. 11).

³⁹ Weingarten 1987 (supra n. 35).

⁴⁰ Levi, op. cit. (supra n. 2), 136 reports an impression of type 132 on the edge of a tablet. This is not confirmed in GORILA.



Fig. 3. Drawing of the impression of seal 15 of Levi on HT Wc 3020 (drawing E. Stefani, scale approx. 2:1).



Fig. 4. Drawing of the impression of seal 31 of Levi on HT Wc 3005 (drawing M. Perna, scale 2:1).



Fig. 5. Drawing of the impression of seal 50 of Levi on HT Wc 3013 (drawing E. Stefani, scale approx. 2:1).



Fig. 6. Drawing of the impression of seal 84 of Levi on HT Wc 3014 (drawing E. Stefani, scale approx. 2:1).



Fig. 7. Drawing of the impression of seal 132 of Levi on HT Wc 3019 (drawing E. Stefani, scale approx. 2:1).

In detail:

- type 79 can also be found on 41 countersigned nodules, 41
- type 112 is impressed on the uninscribed nodule HT HM 587 and, according to Levi, on the "sbarra prismatica d'argilla" together with seals nos. 20 and 47,⁴²
- type 125 on 251 nodules, 248 of which are inscribed and three too damaged to allow us to recognize any of the signs.



Fig. 8. Drawing of the impression of seal 79 of Levi on HT(?) Wc 3022 (drawing G. Strietmann, scale approx. 2:1).



Fig. 9. Drawing of the impression of seal 112 of Levi on HT Wc 3017 (drawing from the archives of CMS, scale 2:1).

⁴¹ Levi reports 42, ibid. 109.

⁴² Ibid. 122.



Fig. 10. Drawing of the impression of seal 125 of Levi on HT Wc 3015 (drawing E. Stefani, scale approx. 2:1).

Some of these individuals have a very personal way of impressing their seals. E. Hallager, for instance, has underlined the fact that the owner of seal 31 used to rotate the roundel through 180 degrees once one or two impressions had been stamped. The following impressions, thus, show the motif upside down.⁴³

It cannot be forgotten that all the roundels from Haghia Triada have been impressed first and subsequently inscribed, as the signs inscribed in the clay are never altered by contact with fingers.

Some of the impressions have been deliberately obliterated. Hallager, Godart and Olivier⁴⁴ have already underlined the presence of one obliterated impression on HT Wc 3024. Another example is recorded on HT Wc 3012, where impression no. 2 has been obliterated by adding some clay and levelling it with a finger (Pl. 12).

At Phaistos, on the other hand, in the two cases of obliteration (PH Wc 37 and 39), the seal impressions have been erased by rubbing a finger on the impression without adding any clay. The fact that the seal motif is still identifiable despite the obliteration suggests that the clay was, in part, already dry when the alterations were carried out.

At Haghia Triada and Phaistos every roundel is impressed by means of only one seal, unlike the roundels from Knossos and Khania where multi-seal-impressed roundels are well documented.

The Scribes

If from the seal impression it is possible to identify the different individuals who shaped and impressed the roundels, it is, on the contrary, extremely hard to identify the scribes who incised some

⁴³ Hallager 1989 (supra n. 33), 62-63.

⁴⁴ Hallager et alii (supra n. 5), 434.

signs in Linear A on these small documents, since sometimes the "text" consists of only one sign.

Nonetheless, L. Godart and J.-P. Olivier have identified some of the scribes' hands which have incised the text on the roundels.⁴⁵

In GORILA 5, though, only the scribes are indicated, with numbers ranging from 107 to 111, not mentioning, obviously, the peculiarities in the script of each individual scribe nor the clues leading to the identification of the different hands. Therefore, in the catalogue of roundels hereafter, the peculiarities in the script of a scribe – at least in those cases where it has been possible to identify him – will also be examined.

Generally speaking, we can plausibly assume that roundels HT Wc 3001 and HT Wc 3002 are probably to be attributed to the same hand, that of scribe 107. The two roundels have the same aspect, approximately the same dimensions, the same text and they both bear on the edge three seal impressions type 31 of Levi. The sequence itself in which the three impressions have been stamped is the same; the seal owner has stamped two impressions first and then, after rotating the roundel through 180 degrees, has impressed a third one which appears, therefore, upside down in relation to the other two.

It is clear that the two documents record the existence of a "routine" transaction between two individuals: scribe 107 on one side and seal owner 31 on the other. The transaction has been repeated under the same terms, since both the text and the number of seal impressions remain the same.

Another example of "routine" within these registrations is represented by roundels HT Wc 3007 and HT Wc 3008, both impressed by the same person (seal 31 of Levi), and both inscribed by scribe 109. The roundels show the same text on the obverse, thus documenting again a transaction between two individuals who repeat the same operation a second time, only varying the quantity reported (four impressions on HT Wc 3007 and three on HT Wc 3008).

With less certainty it is possible to attribute to scribe 109 also roundels HT Wc 3009 and HT Wc 3010, impressed by the same person (seal 31) and both bearing the same number of impressions and carrying on the obverse the same text.

Scribe 110 is the author of roundels HT Wc 3011 and HT Wc 3012, both bearing two impressions of the same type on the edge (31 of Levi) and the same text on the obverse.

⁴⁵ GORILA 5, 103-104.

Roundels HT Wc 3016 and HT Wc 3020 seem to be attributable to scribe 111, but here two different people have impressed the roundels, although the text on the reverse is the same.

I should not think, though, that roundels HT Wc 3004 and HT Wc 3005 could have been inscribed by scribe 108 as suggested by Godart and Olivier. Though both show the same text on the obverse and reverse, nevertheless the three signs on the obverse are of a clearly different form on the two documents. The fact that the only sign on the reverse shows similarities on the two documents is no demonstration in itself, it seems to me, that the two roundels are attributable to the same scribe.

These elements confirm that one scribe has incised roundels impressed by two different individuals, while different scribes have incised roundels impressed by the same individuals, as is the case with the nodules.

Noduli and Roundels

J. Weingarten has grouped under the term *noduli* (sing. *nodulus*) clay pastilles differently shaped so as to obtain, usually, three faces, two of which could bear small inscriptions, the third one almost always showing a seal impression.⁴⁶

The roundels surely have a function different from that of these hundreds of nodules found at Haghia Triada and presenting a characteristic hole through which a small piece of string was inserted to secure these primitive labels to various objects. Their function is also different from that of those sealings, i.e. clay pastilles, pressed on documents written on perishable material so as to secure them, and also usually showing one seal impression.

In appearance, *noduli* are undoubtedly more similar to roundels, especially to those bearing only one seal impression. The rather small sizes of these documents can be explained by the fact that they were intended to bear only one seal impression. Both roundels and *noduli*, moreover, can show short inscriptions on both sides.

Finally, both on *noduli* and roundels, examples of seal impressions "modified" through fraction signs can be found.

There exist, though, some documents which can be considered "border line" between the two groups, particularly, at Haghia Triada,

⁴⁶ Weingarten 1987 (supra n. 35), 4.

HM 1348 (= HT Wc 3020). This document was originally included amongst the roundels by L. Godart and J.-P. Olivier⁴⁷, while J. Weingarten has subsequently considered it a *nodulus*.⁴⁸ E. Hallager, after considering it a roundel,⁴⁹ has eventually accepted its identification as a *nodulus*.⁵⁰ This confusion arises from the fact that HT Wc 3020 presents characteristics mid-way between *noduli* and roundels. For example, if we examine the part of the edge not impressed by the seal, it is possible to realize that the clay pastille was originally circular. Moreover, the inscriptions on both HT Wc 3016 and 3020 seem likely to have been incised by scribe 111. He probably used the same blunt stylus, as indicated by the smears left on the clay. Another significant factor is that the inscription on the reverse of the two documents is the same. On the other hand, amongst the roundels from Haghia Triada, different shapes, not necessarily perfectly circular, are attested.

All these clues, therefore, cast doubt on the classification of HT Wc 3020 as a *nodulus*. Though not with certainty, I would personally include this document amongst the roundels.

To conclude the discussion on the function of *noduli*, if we consider them types of receipt, with a function similar to that of roundels, it is clear that they record the transfer of a small quantity of some commodity from one individual to another, as there is only one seal impression. They could conceivably represent, as suggested by J. Weingarten, receipts acknowledging performed work to be subsequently compensated for with food rations.⁵¹

On the other hand, in the necessarily elementary and functional procedure of the Minoan bureaucrats, a clay pastille with a seal impression and some signs incised on both, one, or neither face, must have an unequivocal meaning. It is quite likely that the slight morphological differences between *noduli* and roundels might perplex publishers nowadays more than they did the authors of these documents.

⁴⁷ GORILA 2, 78.

⁴⁸ Weingarten 1987 (supra n. 35), 7.

⁴⁹ Hallager 1989 (supra n. 33), 55 n. 3.

⁵⁰ Hallager 1990 (supra n. 32), 121.

⁵¹ Weingarten 1987 (supra n. 35), 17–18.

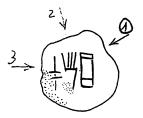
CATALOGUE

In the catalogue hereafter 'conventions' will be used which are worth clarifying so as to ensure the correct understanding of the reported data. First of all, in order to distinguish the different seal impressions on a roundel we have used the numbers 1 to 6, counting the impressions from right to left anti-clockwise from the surface of the obverse.⁵²

Second, as for the groups of signs inscribed on the roundels, we have recorded, as well as the numerical transcription, the corresponding phonetic value in Linear B in square brackets, following the example of other authors.⁵³

The drawings were provided by L. Godart, the photographs were taken by the author.⁵⁴

HT Wc 3001 (HM 79)



Description

Dimensions: cm. 2.00 x 2.20 x 0.80.

Almost completely preserved roundel (Cod. Munsell HUE 10 R 4.5/4 weak red). Clay mixed with yellowish granules which emerge to the surface.

Small crack along the edge near the first sign of the inscription. Barely noticeable fingerprints on both sides and on the edge but not on the seal impressions.

⁵² In the figures below the position of the seal impressions is indicated by means of small arrows around the facsimile of the roundel.

⁵³ Hallager et alii (supra n. 5), 434.

⁵⁴ For the seal impressions we have used photos with a scale 2:1. The scale of the documents is 1:1.

The obverse shows an inscription consisting of three signs in Linear A. Its surface, slightly concave, appears to be irregular due to the emergence of a small stone near the second sign of the inscription, which does not modify, though, the shape of the sign. The signs have been shallowly, though clearly, impressed by means of a very thin stylus.

The reverse, uninscribed, appears polished and slightly concave.

The edge is slightly thickened, given the presence of three seal impressions type 31 of Levi. On seal impression no. 1 (Fig. 1) fraction sign A 707 is incised. Seal impression no. 1 is impressed upside down in relation to impressions nos. 2 and 3.

Impression no. 2 is well preserved.

Impression no. 3 is deprived of its left side.

Probable sequence of impressions nos. 3-2-1.

The inscription

recto .1 AB 03-09-57

lat. A 707 (supra sigillum)

Scribe: 107 HT Wc.

AB 03 appears in its most usual form with only one vertical stroke crossed by two horizontal parallel strokes whose left ends stop at a small rupture of the clay. The horizontal inferior stroke is deprived of its left end, destroyed by the rupture.

The second sign is interpreted in GORILA as AB 09.55 This appears in the form of four vertical lines originating from the same horizontal stroke. Under this sign, the characteristic vertical stroke of AB 09 is incised starting from the right end of the horizontal stroke.

Examples palaeographically close to this one are only to be found on HT Wc 3002, 3004 and 3005.

AB 57 appears in its usual form.

The group of signs 03-09-57 can only be found on two roundels, HT Wc 3001 and 3002.

The seal impression

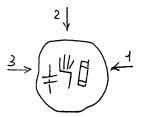
Dimensions: cm. 1.2 x 0.8.

⁵⁵ GORILA 2, 72. The sign is identified by Godart and Olivier as AB 28, but in the index it is recorded as AB 09 [SE] (GORILA 5, 77 and 146). It would therefore seem wiser to me to put dots below the sign.

The three impressions originate from the lentoidal seal type 31 of Levi (Fig. 4), who recognizes in the motif ". . . l'immagine della mosca, o forse cicala o ape, con le ali aperte e le zampette viste come schiacciate, tre per ogni lato; anche qui a destra sembra di vedere uno stelo"⁵⁶.

In my opinion, this motif seems to recall the vegetal rather than animal world, and in this regard I find the typology of sign no. 31 very close to that of type no. 9 of Levi, described by the Italian scholar as: "Due fusti d'albero, col tronco grosso e de ciascuno dei quali si dipartono due rami nudi . . . a destra delle linee ornamentali che si incontrano ad angolo retto." ⁵⁷ In the case of seal no. 31, instead of tree trunks there are two fern-type bushes with three little sprigs each criss-crossing, and, on the right, two lines, a straight one and a wavy one, crossing at right angles.

HT Wc 3002 (HM 80)



Description

Dimensions: cm. 1.90 x 1.80 x 1.00.

Completely preserved roundel, fine, well-baked clay (Cod. Munsell HUE 10 R 4.5/4 weak red), brown in colour on the reverse, while the edge and the obverse are covered by a thin layer of whitish limestone granules.

Presence of fingerprints visible on the entire surface of the roundel but not on the seal impressions.

Levi, op. cit. (supra n. 2), 94. J. Weingarten, however, considers it an identifiable talismanic motif (J. Weingarten, "Seal Use at LM I B Ayia Triada: A Minoan Elite in Action II. Aesthetic Considerations", Kadmos 27, 1988, 102 and note 30).
 Ibid. 88.

The obverse shows a slightly concave and irregular surface on which three signs have been clearly but shallowly incised with the aid of a very thin stylus.

The reverse, uninscribed, has a polished, slightly concave surface. The edge, slightly thickened, has three seal impressions type 31 of Levi.

Seal impression no. 1 is upside down compared to impressions no. 2 and no. 3.

The inscription

.1 AB 03-09-57

Scribe: 107 HT Wc.

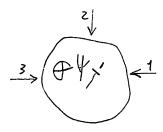
The inscription is like that on the obverse of roundel 3001. As well as the physical appearance and the dimension of the roundel, the form of the signs (especially sign no. 09) and the type of stylus used are the same as those of roundel 3001. All this seems to confirm that the two roundels are the work of the same scribe.

The seal impression

The three impressions, clearly recognizable, belong to type 31 of Levi (see HT Wc 3001).

Probable sequence of impressions nos. 3-2-1.

HT Wc 3003 (HM 77)



Description

Dimensions: cm. $2.30 \times 2.40 \times 0.90$.

Completely preserved roundel (Cod. Munsell HUE 5 YR 6/3.5 light reddish brown). Presence of fingerprints on the whole surface of the roundel but not on the seal impressions.

The obverse, whose surface appears to be quite polished and slightly concave, shows an inscription consisting of three signs in Linear A, clearly but shallowly incised. The reverse, uninscribed, has a very irregular surface, given the presence of granules mixed with the clay. The edge, much thickened, shows three seal impressions type 31 of Levi impressed in the same direction.

The inscription

.1 AB 77-27-02

Scribe: unidentified.

The word [KA-RE-RO] is a hapax in Linear A.

Sign AB 77 appears in its most common form, with the two perpendicular strokes in the shape of a cross. The circumference was drawn first, then the vertical stroke and finally the horizontal one.

The second sign of the inscription, identified by L. Godart and J.-P. Olivier⁵⁸ as sign AB 27, appears here in a peculiar form. The scribe has incised two small, vertical and parallel strokes first and then a third oblique stroke which extends to the bottom.

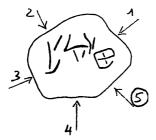
Sign AB 02, finally, is of a common form, i.e., two vertical strokes separated by a third horizontal one.

The seal impression

The three seal impressions belong to type 31 of Levi (see HT Wc 3001). They are all quite deeply impressed, but with the motif in an oblique direction to the major axis of the edge.

⁵⁸ GORILA 5, 77 and 165.

HT Wc 3004 (HM 64)





Description

Dimensions: cm. 2.70 x 2.20 x 0.90.

Opistograph, completely preserved roundel. Fine clay (Cod. Munsell HUE 5 YR 5.5/3 light reddish brown/reddish brown). Presence of fingerprints on the whole roundel surface but not on the seal impressions.

The obverse shows an inscription consisting of three signs very deeply incised by means of a thin stylus.

The small clay globes raised at the sides of the incised signs confer an irregular appearance on the surface of the obverse.

The reverse, on the other hand, shows a more regular surface. The only sign which appears here, AB 09, is clearly but less deeply incised compared with those on the obverse. Presence of clearly visible fingerprints on the left of the sign; on the right, a fingerprint with a groove left by a fingernail.

The edge seems slightly thickened. Five seal impressions appear here.

The impressions all belong to type 31.

Impressions no. 1, no. 4 and no. 5 are impressed in the same direction, while no. 2 and no. 3 are impressed upside down. On seal impression no. 5, fraction sign A 713 is incised (Fig. 2).

The inscription

recto .1 AB 59-30-77 verso .1 AB 09

lat. A 713 (supra sigillum)

Scribe: unidentified.

Sign AB 59 appears in a simplified variant consisting of only three strokes.

Sign AB 30 also appears in a rather simplified form, without the vertical stroke usually present at the bottom of the sign. Moreover, it is not possible to distinguish the two 'x' typical of this sign.

Sign AB 77 presents a circumference which folds back on itself to form the horizontal segment of the sign.

On the reverse a sign is clearly incised. This has been identified by L. Godart and J.-P. Olivier as sign no. 09 [SE] in Linear A⁵⁹. The form is similar, but not identical, to that of HT Wc 3001 and 3002.

The only sign which appears on the edge has been identified by us as the fraction sign A 713. The sign has been incised on seal impression no. 5 by means of a rather thick stylus. It consists of three strokes – one vertical and two oblique – which join on meeting the vertical sign.

The two oblique strokes are incised from left to right, as is proved by the fact the clay raised by the stylus forms a slight bulge on the right. The sign was incised while the clay was still very wet.

The group of signs AB 59-30-77 also appears on HT Wc 3005.

The seal impression

The five seal impressions belong to type 31 of Levi (see HT Wc 3001). Impressions no. 4 and no. 5 are hardly recognizable.

HT Wc 3005 (HM 75)





Description

Dimensions: cm. $2.30 \times 2.20 \times 0.90$.

⁵⁹ Ibid. 73.

Opistograph, completely preserved roundel covered on the obverse and edge by a thin whitish layer (Cod. Munsell HUE 2.5 YR 4/3.5 reddish brown). Presence of fingerprints on both sides and on the edge.

The obverse shows a concave surface on which three signs in Linear A are very deeply incised.

The reverse, of a dark brown colour, is also concave. It bears a

sign in Linear A. Very evident fingerprints.

The edge is thickened over 1/3 of the circumference and shows two seal impressions not impressed in the same direction. On the lower part of the first sign of the obverse, the edge has been "pinched" between two fingers in order to support the roundel while the obverse was being incised.

The inscription

recto .1 AB 59-30-77 verso .1 AB 09

Scribe: unidentified.

Signs AB 59 and 09 are similar to those appearing on roundel HT Wc 3004.

Sign AB 30 shows the vertical stroke reduced almost to a dot.

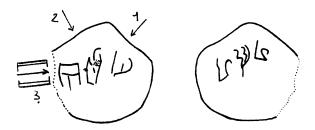
Finally, sign AB 77 inside the circumference only shows the vertical stroke without the horizontal one. There are no examples palaeographically close to this variant of sign AB 77, except for MA Wc <5>a.2 where the vertical stroke is missing.

The group of signs AB 59-30-77 is also to be found on HT Wc 3004.

The seal impression

The two impressions, perfectly recognizable, belong to seal no. 31 of Levi (see HT Wc 3001).

HT Wc 3006 (HM 66)



Description

Dimensions: cm. $[2.60] \times 2.60 \times 0.90$.

Opistograph, almost completely preserved roundel (Cod. Munsell HUE 2.5 YR 3/3.5 dark reddish brown). The clay is mixed with minuscule dark granules emerging on to the obverse and reverse, giving the two surfaces an irregular aspect.

Fingerprints especially noticeable on the reverse.

The obverse has a slightly concave and irregular surface carrying an inscription consisting of three signs in Linear A. The first sign appears to be slightly damaged by a small crack extending mainly along the edge. The signs are shallowly incised.

The reverse also appears slightly concave and has an irregular surface bearing an inscription consisting of three lightly engraved signs in Linear A. The reverse is marginally affected by the crack on the edge.

The edge, slightly thickened, shows two seal impressions type 31 of Levi, impressed in the same direction.

A break of approx. 1 cm. along the edge has possibly removed an entire seal impression.

The inscription

recto .1 AB 54-61-73

verso .1 AB 60-A 314-AB 60

Scribe: unidentified.

Signs AB 54 and AB 73 are of a common form.

The second sign of the obverse is interpreted in GORILA⁶⁰ as sign AB 61, but I think that we cannot dismiss the possibility that this could be sign AB 69. Therefore, we have put dots below the sign.

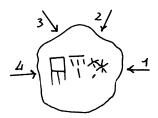
On the reverse sign AB 60 appears in its most common form.

Finally, here we find the only attestation of sign A 314 in the documents from Haghia Triada.

The seal impression

The two seal impressions on the roundel edge belong to type 31 of Levi (see HT Wc 3001), and are impressed obliquely to the major axis of the edge.

HT Wc 3007 (HM 76)



Description

Dimensions: cm. 2.30 x 2.30 x 0.70.

Almost completely preserved roundel. Colour reddish brown (Cod. Munsell HUE 2.5 YR 4.5/4 reddish brown). Presence of fingerprints on the obverse, reverse and edge.

The obverse shows a surface which is fairly concave and polished but for a small stone which produces an elevation near the third sign of the inscription, without altering, though, the layout of the sign. The obverse carries an inscription consisting of three signs clearly but shallowly incised.

The reverse, uninscribed, shows a very irregular surface, given the presence, beneath the surface clay, of some granules.

The edge, moderately thickened, carries four seal impressions type 31 of Levi.

⁶⁰ Loc. cit.

Very evident fingerprints also on seal impression no. 3. Seal impressions nos. 1 and 2 are impressed upside down compared to impressions nos. 3 and 4. All impressions are well preserved.

The inscription

.1 AB 54-07-30

Scribe: 109 HT Wc.

The three signs of the inscription are of a fairly common form.

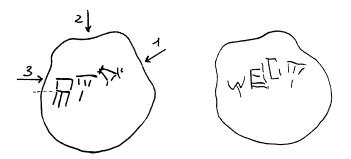
It is worth mentioning that the vertical stroke of sign AB 30 has been substituted with a large dot, probably since the scribe was constrained by the presence of the granule emerging near the sign.

The group of signs is also attested on HT Wc 3008.

The seal impression

The four seal impressions belong to type 31 of Levi (see HT Wc 3001).

HT Wc 3008 (HM 63)



Description

Dimensions: cm. 3.00 x 3.20 x 0.90.

Opistograph, completely preserved roundel (Cod. Munsell HUE 2.5 YR 4/5 reddish brown-red). Clay mixed with minuscule dark granules. Fingerprints visible on both sides and on the edge.

The obverse, inscribed, shows an unpolished surface which is also concave, due to an evident fingerprint, and irregular, given the pres-

ence of dark granules. These, though not altering the layout of the signs, have probably determined the upward displacement of the second and third signs of the inscription.

The inscription on the obverse consists of three signs, clearly, albeit shallowly, incised.

The reverse, inscribed, also shows an unpolished surface, concave, due to a fingerprint, and irregular, given the presence of dark granules which, again, might have affected the disposition of the script. Four signs are clearly, if shallowly, incised.

The edge shows three seal impressions type 31 of Levi, slightly damaged. Impressions nos. 2 and 3 are stamped upside down in relation to impression no. 1.

The inscription

recto .1 AB 54-07-30 verso .1 AB 26-57-59-07

Scribe: 109 HT Wc.

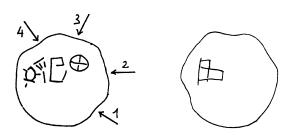
The signs of the inscription are all perfectly identifiable and of a common form.

The group of signs AB 54-07-30 occurs also on the obverse of HT Wc 3007.

The seal impression

The three seal impressions belong to seal type 31 of Levi (see HT Wc 3001).

HT Wc 3009 (HM 67)



Description

Dimensions: cm. $2.50 \times 2.50 \times 0.90$.

Opistograph, completely preserved roundel. Clay well-baked (Cod. Munsell HUE 2.5 YR 4/3.5 reddish brown). Fingerprints clearly visible on both sides and on the edge.

The obverse shows a polished and misshapen surface.

It bears an inscription in Linear A consisting of four signs shallowly, but clearly incised.

The reverse, covered by a whitish layer, shows an irregular, undulating surface due to the pressure of the fingers which has caused the clay to slip in two places, thus producing two very significant elevations. There are numerous intersecting fingerprints.

One single sign, again clearly incised, appears on the surface of the reverse, eccentrically positioned so as to avoid the clay elevation.

The edge shows two small cracks. It bears four seal impressions type 31 of Levi all impressed in the same direction.

The inscription

recto .1 A 333-AB 07-58-77

verso .1 AB 188

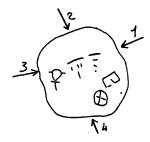
Scribe: 109 HT Wc?

The sign A 333 only appears on roundels HT 3009 and 3010. All signs are of a common form.

The seal impression

The four seal impressions, well-preserved, belong to type 31 of Levi (see HT Wc 3001). Impressions nos. 1 and 2 are stamped upside down in relation to the other two.

HT Wc 3010 (HM 72)



Description

Dimensions: cm. $2.50 \times 2.50 \times 1.10$.

Almost completely preserved roundel. Well-baked clay (Cod. Munsell HUE 10 R 4.5/4 weak red). Fingerprints visible only on the edge.

The obverse shows a regular and polished surface with traces of whitish limestone. It carries an inscription consisting of five signs in Linear A.

The signs are shallowly albeit clearly incised.

The reverse, uninscribed, shows a very concave and irregular surface due to the emergence of some granules. The edge bears four seal impressions type 31 of Levi. Impressions nos. 1, 2 and 3 are impressed in the same direction. Emergence of a small granule near impression no. 1.

The inscription

.1 A 333-AB 07-06-58-77

Scribe: 109 HT Wc?

The signs constituting the inscription are all easily identifiable and of a common form except for sign 06 which appears in a rarer variant consisting of four horizontal, parallel bars of decreasing lengths from top to bottom. The closest form to this, palaeographically, can be found on KN Zb 40.2.

The inscription appears to have been incised untidily, as if the scribe had misjudged the space needed or, rather, as if the two last signs had been added subsequently. The depth of the last two signs, in fact, is definitely smaller compared to that of the three other signs, and this is particularly the case with AB 77. The group of signs A 333-AB 07-06-58-77 is a hapax, but on roundel HT Wc 3009 group A 333-AB 07-58-77 is incised, which differs from the previous one only in that sign 06 is missing.

The seal impression

The four seal impressions belong to seal no. 31 of Levi (see HT Wc 3001).

Probable sequence of impressions: nos. 1-2-3-4.

HT Wc 3011 (HM 74)



Description

Dimensions: cm. 2.20 x 2.40 x 1.10.

Well-preserved roundel, except for a little crack in the clay on the reverse and on seal impression no. 1. Clay mixed with some brown granules (Cod. Munsell HUE 2.5 YR 5/5 reddish brown–red).

Fingerprints are not evident except on the obverse and the edge.

The obverse bears an inscription consisting of three signs in Linear A. The surface is slightly concave and irregular. The signs are clearly and fairly deeply incised.

The reverse, uninscribed, is slightly concave with a little crack in the clay near the edge.

The edge shows two seal impressions type 31 of Levi not impressed in the same direction.

The inscription

.1 AB 79-07-60

Scribe: 110 HT Wc.

The signs composing the inscription are all perfectly identifiable.

Sign AB 79 appears in the same form as on HT Wc 3012.

Sign AB 07 is of a common form except for the vertical bar which is here oblique.

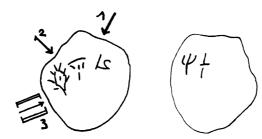
Sign AB 60 slants to the right as on HT Wc 3012.

The group of signs 79-07-60 also appears on HT Wc 3012.

The seal impression

The two seal impressions belong to seal no. 31 of Levi (see HT Wc 3001). The impressions are ill-preserved, shallowly impressed, and with fractures in the clay.

HT Wc 3012 (HM 70)



Description

Dimensions: cm. 2.40 x 2.70 x 0.70.

Opistograph roundel, well-baked clay (Cod. Munsell HUE 5 YR 4.5/4 reddish brown). Completely preserved except for a missing fragment between the two seal impressions on the edge.

Presence of fingerprints on the entire surface of the roundel, though not on the seal impressions.

The obverse shows a surface which is irregular due to a minuscule stone emerging between the second and third sign of the inscription. Various fingerprints can be observed. Three signs are shallowly incised by means of a thin stylus.

The reverse, inscribed, shows a slightly concave and polished surface with evident fingerprints. The inscription consists of two signs clearly, albeit shallowly incised with a thin stylus.

The edge presents two seal impressions type 31 of Levi fairly deeply stamped in opposite directions.

On impression no. 2 there is a smear, caused accidentally when the clay was still wet.

On the edge, a small quantity of clay of a slightly different colour has been added, which might have obliterated a seal impression stamped by mistake, as on HT Wc 3024.

This hypothesis is confirmed by the fact that the roundel's profile, at this point on the edge, appears flattened (Pl. 12).

The inscription

recto .1 AB 79-07-60 verso .1 AB 27-02 Scribe: 110 HT Wc.

The signs composing the inscription are all easily identifiable.

AB 79 appears in the same form as on HT Wc 3011.

AB 07 is of a common form.

AB 60 has a common form but slants noticeably to the right as on HT Wc 3011.

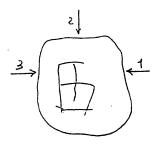
AB 27 and AB 02 are of a common form.

The group of signs AB 79-07-60 also appears on HT Wc 3011

The seal impression

The two seal impressions, clearly stamped, belong to seal no. 31 of Levi (see HT Wc 3001).

HT Wc 3013 (HM 71)



Description

Dimensions: cm. $3.00 \times 2.90 \times 0.80$.

Completely preserved roundel of an irregular rectangular shape. Well cleaned clay (Cod. Munsell HUE 5 YR 4/6 yellowish red). Very evident fingerprints on the whole surface of the roundel but not on the seal impressions.

The obverse shows a very concave surface on which numerous fingerprints appear, especially on the lower part where two are noticeable, superimposed in opposite directions. There is just one sign, deeply and clearly incised.

The reverse, uninscribed, is slightly concave over most of its surface and convex at the bottom of the roundel. In the middle of the concave part an elevation appears, caused by some granules enclosed beneath the surface clay. Evident fingerprints. The edge is flattened in the lower part of the roundel. This deformity of the edge is due to the fact that, while being incised, the roundel was held between two fingers, as can be inferred from the two series of fingerprints on the bottom part of both the obverse and the reverse. At the bottom right corner, the edge shows the impression of some textile material. On the edge, three impressions type 50 of Levi have been impressed in the same direction.

The inscription

.1 AB 188

Scribe: unidentified.

Only one sign is incised on the obverse of the roundel, this being AB 188 which appears in its most common form.

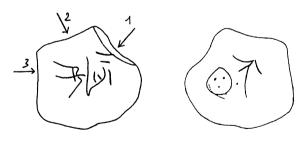
The seal impression

Dimensions: cm. 1.5×0.9 .

Lentoidal seal.

D. Levi⁶¹ wrongly reports that the roundel only bears one seal impression, type 40. There are definitely three impressions, and all ill-preserved. In his description of seal no. 50, though, Levi reports: "Tre impronte, sui lati di una targhetta iscritta. Bue accosciato . . . ; purtroppo però tutte le impronte sono assai sbiadite." The 'targhetta' Levi refers to is therefore undoubtedly HT Wc 3013.

HT Wc 3014 (HM 65)



61 Levi, op. cit. (supra n. 2), 82.

⁶² Ibid. 99. See also E. Hallager, "Identical Seals on Roundels and Other Documents", in: Sceaux minoens et mycéniens. Chronologie, fonction et interprétation, forthcoming.

Description

Dimensions: cm. 2.70 x 2.80 x 0.90.

Opistograph roundel, almost completely preserved. Fine clay (Cod. Munsell HUE 5 YR 4.5 reddish brown). Fingerprints on the whole surface of the roundel but not on the seal impressions.

The obverse has a concave and polished surface and carries an inscription consisting of three signs. The incision is deep and clear. The third sign of the inscription (AB 06) has definitely been incised after the impression of seal no. 1, since the horizontal stroke of sign AB 06 continues on the edge as far as the seal impression, which proves that the roundel has been impressed first and subsequently incised. Very evident fingerprints.

The reverse has a flattened surface; thin fragments of surface clay have come off. An inscription consisting of two signs is clearly and fairly deeply incised. Very evident fingerprints.

The edge, thickened, shows a little crack. Three impressions type 84 of Levi are stamped on the edge in the same direction.

The inscription

recto .1 AB 81-73-06verso .1 -AB 78 AB 22

Scribe: unidentified.

The three signs on the obverse AB 81, 73 and 06 are of a common form and are accurately incised.

The reverse shows sign AB 78 in the variant with three dots, and ideogram AB 22, which has its only certain attestation on roundel HT Wc 3014. The word [KU-MI-NA-QE] also appears on tablet HT 54a2, one of the rarest groups of signs to be found both on roundels and tablets.

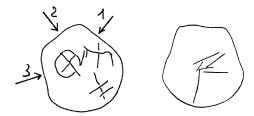
The seal impression

Dimensions: cm. 1.5×0.5 .

The three impressions on the roundel edge belong to seal type 84 of Levi, depicting two mastiffs. One is crouching, with its face raised towards the other animal standing over it. The latter carries on its head a peculiar circular object, as on seal no. 85, which this seal clearly resembles.

The impressions belong to a lentoidal seal and show the motif almost complete. Fingerprints are clear and fairly deep.

HT Wc 3015 (HM 78)



Description

Dimensions: cm. 2.20 x 2.20 x 0.60.

Opistograph roundel, completely preserved. Sifted clay (Cod. Munsell HUE 2.5 YR 4.5/4 reddish brown). Presence of very evident fingerprints on the whole surface of the roundel but not on the seal impressions.

The obverse is slightly concave. On its surface three signs are shallowly incised by means of a very thin stylus. Very evident fingerprints.

The reverse, slightly convex, bears only one sign, again shallowly incised. Evident fingerprints.

The edge gets much thinner at the part which is unimpressed. Three impressions of the same type are not very clearly impressed in the same direction.

The inscription

recto .1 AB 77-81-03

verso .1 A 303

Scribe: unidentified.

The inscription has dimensions out of proportion, considering the small surface of the roundel.

All the signs are of a common form.

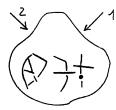
The word [KA-KU-PA] also appears on roundel HT Wc 3016 and on tablet HT 16.1.

The seal impression

Dimensions: cm. 1.2×0.5 .

The three seal impressions belong to an unidentifiable seal of an elliptical shape. Three quarters of the surface of the impression appear flattened and no motif can be distinguished. One noticeable small roundish formation at the corner of the impression. D. Levi suggests that this could be seal no. 125 (Pl. 11).⁶³

HT Wc 3016 (HM 68)





Description

Dimensions: cm. $2.60 \times 2.50 \times 0.90$.

Opistograph, completely preserved roundel of a brown, although not uniform, colour, with beige striations (Cod. Munsell HUE 5 YR 4.5/4 reddish brown). Fine and well-baked clay. Evident fingerprints on the obverse, the reverse and the edge. The roundel is similar, given the colour of the clay, to HT Wc 3024, with which it also has the seal impression (type 112 of Levi) in common.

The obverse has a concave surface which bears an inscription consisting of three signs clearly and deeply incised. Fingerprints particularly evident on the left side of the obverse.

The reverse, slightly convex, presents an inscription consisting of two 'complex signs'⁶⁴ preceded by two vertical bars whose meaning is uncertain. The signs are clearly and deeply incised. Clear fingerprints.

The edge shows two impressions type 112 of Levi impressed in the same direction. Seal impression no. 2 shows an accidental smear of the clay. Evident fingerprints.

⁶³ Levi, op. cit. (supra n. 2), 131–132. On this seal see also E. Hallager, "On the Track of Minoan Bureaucrats and their 'Clients'", in: Εἰλαπίνη. Τόμος Τιμητικός γιὰ τὸν Καθηγητή Νικόλαο Πλάτωνα, Herakleion 1987, 351 and fig. 4.

⁶⁴ For the definition of "complex sign" see GORILA 5, XX.

The inscription

recto .1 AB 77-81-03 verso .2 A 630 (= '304+03' '303'D)

Scribe: 111 HT Wc.

Sign AB 77 is rather irregularly drawn. The circumference consists of two badly drawn semicircles and the horizontal bar lacks its right part.

Sign AB 81 is of a common form.

Sign AB 03 appears in the variant with only one horizontal bar, the second being replaced by a dot, a variant well documented in the tablets from Haghia Triada and Phaistos (HT 115b.1 and PH 7a.1).

The signs on the reverse are of a common form. It is worth pointing out the presence of two vertical strokes on the left of the inscription on the reverse. Considering that two seal impressions appear on the edge, it is tempting to interpret the two vertical bars as two units, inscribed on the reverse due to lack of space on the obverse, and therefore referring to the group of signs AB 77-81-03.

Another interpretation, which I would personally find convincing, is that the two vertical strokes might represent an attempt by the scribe to test the "functioning" of his stylus, slightly damaged at the point, as seems to be confirmed by the presence of a smear inside the track left in the clay by the stylus (Pl. 13). The smear is highly evident on roundel HT Wc 3020 (Pl. 14) – whose reverse bears the same inscription as that on the reverse of HT Wc 3016 – probably incised by the same scribe. A similar case occurs on the reverse of tablet HT 97a, where the scribe uses the reverse to verify the "functioning" of his blunt stylus.

The seal impression

Dimensions: cm. 1.4×0.9 .

The two impressions, of medium depth, belong to a lentoidal seal, type 112 of Levi. It shows a man kneeling to shoot an arrow. His waist is thin and encircled by a belt; his two legs have some sort of double ring.

Rather deep impression.

HT Wc 3017 (HM 69)





Description

Dimensions: cm. $2.50 \times 2.30 \times 0.90$.

Opistograph, completely preserved roundel, well-baked clay (Cod. Munsell HUE 2.5 YR 4/4 reddish brown). Fingerprints visible on the whole surface of the roundel but not on the seal impression.

The obverse has a flattened surface.

Five signs are incised. The fifth was probably incised after a while, as appears from the smaller depth of the sign and from the fact that the stylus raised less clay compared to the other signs. Clear fingerprints.

The reverse is slightly concave with fingerprints which are less evident than on the obverse. Two "complex signs" are incised clearly and shallowly.

The edge bears only one, deeply stamped, seal impression, and not five, as Levi reports.⁶⁵ While incising the text, the scribe has left two finger impressions on the edge, produced in the action of grasping the clay pastille in order to inscribe it. These two small depressions are clearly visible on the roundel edge.

The inscription

recto .1 AB 16-81-27 AB 07 .2 A 306 verso .1 A 625 (= '303' D '304+03')

Scribe: unidentified.

The signs are all quite clearly incised.

⁶⁵ Levi, op. cit. (supra n. 2), 80.

Sign AB 16 appears in the variant showing two dots instead of two horizontal lines.

Sign AB 81 is incised obliquely towards the top.

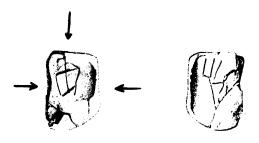
Sign A 306 appears in a variant palaeographically close to that of HT 115b.3.

The two "complex signs" present on the reverse are the same as on HT Wc 3016 and HT Wc 3020 but are here in reverse order.

The seal impression

The edge of the roundel bears only one seal impression type 112 of Levi. Impression fairly deep (see HT Wc 3016).

HT Wc <3018> (HM? Document lost)



Description

(Reconstruction from the drawings and descriptions of Levi, Halbherr and Banti.)

Opistograph, not completely preserved roundel, burnt and of an irregular rectangular shape similar in type to HT Wc 3019.

The obverse shows a fragmentary and concave surface on which one sign only has been incised.

The reverse also presents a damaged, concave surface on which two "complex signs" have been incised.

The edge is damaged and flattened at the lower part.

The inscription

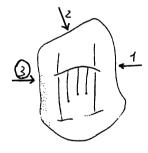
recto .1 AB 188 verso .1 A 624 (= '303' D) The sign incised on the obverse is interpreted in GORILA⁶⁶ as AB 77, but the photo of the obverse is published upside down, just as it appears in Levi's book.⁶⁷ We have here proposed its interpretation as AB 188, both because a hypothetical AB 77 would appear here in a rather peculiar form, and also because sign AB 188 is attested in two other cases as an isolated sign on the roundels from Haghia Triada.

The seal impression

Levi⁶⁸ reports that there are three seal impressions, all of type 132.

The type of seal is also confirmed by Halbherr⁶⁹ who, nevertheless, mentions two impressions, but the irregular quadrangular shape of the roundel is similar to those of HT Wc 3013 and 3019 (also presenting three impressions), which would seem to confirm Levi's version.

HT Wc 3019 (HM 73)



Description

Dimensions: cm. $2.30 \times 3.40 \times 1.10$.

Completely preserved roundel of irregular quadrangular shape with three thickened sides plus one which is extremely thin.

Clay of a reddish brown colour with darker stains (Cod. Munsell HUE 2.5 YR 4/5 reddish brown-red). Evident fingerprints on the whole surface of the roundel except on the seal impressions.

⁶⁶ GORILA 2, 77.

⁶⁷ Levi, op. cit. (supra n. 2), 82.

⁶⁸ Loc cit

⁶⁹ Halbherr, op. cit. (supra n. 25), 375.

The obverse appears very concave as a consequence of the fact that the person who impressed the roundel grasped the clay pastille between two fingers while stamping the impression.

The obverse presents only one sign, very deeply and clearly incised.

Evident fingerprints.

The reverse, uninscribed, is concave and shows numerous fingerprints.

The edge is thickened on three sides and extremely attenuated on the fourth. On the lower part of the roundel two clear fingerprints are visible on two sides, thus showing how the roundel was incised while being held between two fingers.

The edge presents three seal impressions type 132 of Levi, one of which (no. 1) is very deeply impressed. Impression no. 2 is less evident. Impression no. 3 shows the fraction sign A 704 (Fig. 7). All three are impressed in the same direction.

The inscription

recto .1 AB 54 lat. A 704 (supra sigillum)

Scribe: unidentified.

Sign AB 54 appears in a form known from Haghia Triada tablets (e.g. HT 16.2, HT 20.4).

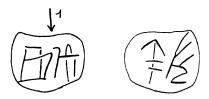
Sign A 704 is deeply incised, thus seriously damaging impression no. 3.

The seal impression

Dimensions: cm. 2.3 x 1.1.

The three impressions belong to seal no. 132 of Levi probably originating from a ring with an oval-shaped signet depicting a female figure riding, "side-saddle", a monster with an elongated body and a long neck. The female figure is not reproduced in its entirety on the impression, in that the head is missing. Her arms are raised towards the sky, her waist is narrow, which gives fullness to the bosom. She is wearing a frilled dress tight at the waist with a belt. Some sprigs seem to be hanging on both sides of the woman.

HT Wc 3020 (HM 1348)



Description

Dimensions: cm. 1.90 x 1.80 x 1.00.

Small opistograph roundel, completely preserved, of a reddish brown colour (Cod. Munsell HUE 2.5 YR 5/4 reddish brown). Wellbaked clay with rare incorporated granules. Fingerprints on the whole surface of the roundel but not on the seal impression.

The obverse presents a slightly concave surface on which two signs are deeply incised by means of a stylus damaged at the point, as may be inferred from the smear in the clay on the left of the first sign (Pl. 14). Evident fingerprints.

The reverse is slightly concave, with granules emerging from beneath the surface clay. Very evident fingerprints.

It bears an inscription consisting of two signs, deeply and clearly incised. The edge is thickened near the seal impression and attenuated on the opposite side.

The inscription

recto .1 AB 188-51 verso .1 A 630 (= '304+03' '303' D)

Scribe: 111 HT Wc.

The signs are of a common form.

The group of signs AB 188-51 is to be found also on HT Wa 1021 and HT 123.3.

The inscription on the reverse, the stylus, and conceivably also the scribe are the same as for HT Wc 3016.

The seal impression

Dimensions: cm. 1.35×0.98 .

The only seal impression on the edge of the roundel belongs to the lentoidal seal no. 15 of Levi. The motif depicts a bird with opened

wings and a long tail; the head and neck are turned over as if in the act of turning (Fig. 3). The motif is almost completely preserved. Rather deep impression.

HT(?) Wc 3022 (Allard Pierson M. 10.615)



Description

Dimensions: cm. $2.30 \times 1.80 \times 0.80$.

Completely preserved roundel, fine, well-baked clay of a brown not uniform colour (Cod. Munsell HUE 5 YR 5/5 reddish brown-yellowish red).

The obverse has a concave and regular surface with one sign clearly and fairly deeply incised.

The reverse, uninscribed, bears an evident fingerprint. The edge is thickened due to two seal impressions type 79 of Levi, impressed in the same direction.

The inscription

.1 AB 100/102

Scribe: unidentified.

Sign AB 100/102 is perfectly legible.

It does not appear on any other roundel from Haghia Triada, despite being well-attested on Khanian roundels, either alone or in a group of signs.

The seal impression

Dimensions: cm. 1.5×0.9 .

The two impressions belong to an oval seal, type 79 of Levi (Fig. 8), who describes the motif as: "Due gazzelle in galoppo verso destra. Secondo la prospettiva convenzionale cretese, la seconda gazzella è posta molto più in alto della prima e cade sulle zampe anteriori

piegando indietro la testa, verso il maschio che tenta di domarla e che cozza con la sua fronte sulla fronte della femmina; il sesso del maschio è indicato chiaramente sotto il ventre disteso; in basso è accuratamente reso il suolo roccioso. Le zampe degli animali sono completamente stirate, secondo lo schema compiuto del 'galoppo volante'."⁷⁰

The two seal impressions are ill-preserved, but the type is well-known since it appears on 41 countersigned nodules.

HT Wc 3023 (HM 1177)

Description

Dimensions: cm. 2.00 x 1.80 x 0.89.

Small, uninscribed, almost completely preserved roundel (Cod. Munsell HUE 2.5 YR 5/5 reddish brown–red). Coarse clay mixed with some granules emerging to the surface. Fingerprints on the whole surface of the roundel but not on the seal impression.

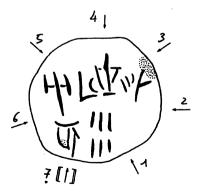
Side A (above the seal impression), slightly convex, presents a small crack near the edge.

Side B (under the seal impression) is slightly concave and irregular. The edge appears slightly thickened near the only seal impression.

The seal impression

The seal impression belongs to type 31 of Levi (see HT Wc 1).

HT Wc 3024 (HM 1110)



⁷⁰ Levi, op. cit. (supra n. 2), 108–109.

Description

Dimensions: cm. 2.90 x 3.20 x 1.50.

Completely preserved roundel of a reddish colour (Cod. Munsell HUE 1 OR 4.5/5 weak red), mixed with some granules. Fingerprints on the whole surface of the roundel but not on the seal impressions.

The obverse shows a polished surface on which an inscription consisting of five signs in Linear A and a numeral have been incised.

The reverse is uninscribed. The surface is polished.

The edge, slightly thickened, carries six seal impressions type 112 of Levi, plus a seventh which has been deliberately obliterated by adding some clay and polishing off the excess.

The inscription

.1 AB 08-60-69-13 .2 AB 21^f 6

Scribe: unidentified.

Signs AB 08 and AB 69 are of a common form.

Sign AB 60 appears in the variant inclined towards the right. The fourth sign of the inscription, of doubtful identification, is interpreted by Hallager, Godart and Olivier⁷¹ as AB 13.

Sign AB 21^f appears in a peculiar form, close to that on HT 95b.2.

The seal impression

The six seal impressions, all well-preserved, belong to type 112 of Levi (see HT Wc 3016).

⁷¹ Hallager et alii (supra n. 5), 434.