

The analysis of determinatives of Egyptian words for aromatic products

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ABSTRACT

Preliminary results of the analysis of determinatives of Egyptian terms used to identify aromatic products deriving from southern countries, which have shown the complexity of the ancient writing system and the importance of determinatives to represent the perceived world. The general aim to clarify the botanic interpretation of Aromata has been partially achieved adding new elements for a better understanding of the nature and origin of those raw materials.

KEYWORDS

Aromatics, determinatives, Egyptian writing system, sign meaning

The final phase of the *Aromata* project¹ has been focused on the study of the Egyptian words describing some products deriving from trade with Nubia, Punt and other southern political entities.

The terms used to identify five aromatic products object of the current research have been extracted from the complete database of all the occurrences (Fig. 1), which cover an average chronological range set from the XII Dynasty to the Ptolemaic period (1985-30 BC).

The aim was to find new evidence to support some botanic interpretations of those materials through the study of the determinative signs (used to express the semantic group related to those words) and the references and textual context of all the documented variants.


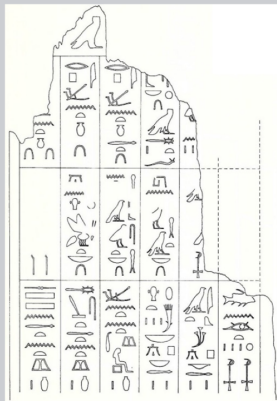

HS - 1	Context	Datation	Bibliography	Image
 (var.)	Serenput Tomb Qubbet el Hawa N. 36	XXII Dynasty	Deines Grapow 1959 pp.50-53	
Entrance hall, northern pillar	Charpentier 1989 pp.245-46			
 (det. N33)	Germer 1985 pp. 78-80			













FIGURE 1 – Database example sheet with occurrence of the word ‘hesayt’




The analysis has been focused on particular problematic words², whose determinatives and variants have been studied and compared to clear their pos-

¹ This research is part of a wider project about the linguistic and cultural areas of transitions in Africa, funded by the Italian Ministry of University and Research (FIRB 2012). See: www.africantransitions.it for more general information and regarding the *Aromata* project: I. Incordino, Foreign aromatic products in the cultural and religious identity of ancient Egypt, in: I. Micheli (Ed.) *Materiality and Identity. Selected papers from the proceedings of the ATrA conferences of Naples and Turin 2015*, Torino, EUT, 2016, pp. 149-156.


² For the suggested interpretation of those words see: Incordino I., African Aromata in Egypt: the ‘ti-shepes’, in: I.Incordino and P.P.Creasman (eds.), *Flora trade between Egypt and Africa in antiquity. Proceedings of the Conference held in Naples, Italy, 13 April 2015*, Oxford, Oxbow Books, 2017 forthcoming.


sible meaning and origin. As example, the following list includes all the occurrences and variants of the word ‘ti-shepes’, with relative chronological and provenance data:

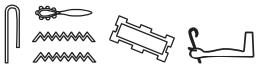
‘ti-shepes’ variant	Provenance and datation
	Serenput tomb, Qubbet el Hawa (XII Dynasty 1985-1779 BC)
	Tale of the Shipwrecked Sailor (XII Dynasty 1985-1779 BC)
	Hatshepsut Temple, Deir el-Bahari XVIII Dynasty 1550-1295 BC
	Private Tomb near TT71, Qurna Hatshepsut reign 1473-1458 BC
	Rock relief, Gebel Tingar (Elephantine) XVIII Dynasty (?)
	Tomb of Kenamun, Qurna (TT93) XVIII Dynasty 1550-1295 BC
	Tomb of Rekhmira, Qurna TT100 XVIII Dynasty 1550-1295 BC
	Rock inscription, Tombos XVIII Dynasty, Tuthmosis III
	Stela, Serabit el-Khadim XVIII Dynasty 1550-1295 BC
	Ostrakon, Deir el-Medina XIX-XX Dynasty (1295-1069 BC)
	Temple relief, Karnak XIX Dynasty, Sethi I
	Papyrus Harris I XX Dynasty (1186-1069 BC)

	Papyrus Turin B vs 1,8 XX Dynasty (1186-1069 BC)
	Edfu temple inscription Ptolemaic Period (332-30 BC)
	Phylae Temple inscription Ptolemaic Period (332-30 BC)



According to Goldwasser³, there were two different kind of determinative signs in the Egyptian writing system: the horizontal one, which is ‘iconic’

and translates an immediate meaning (es. *ꜥnkh*, ‘goat’ ) and the vertical one, which is actually a meaning ‘prototype’ and refers to a symbolic





meaning (es. *Bin* ‘bad’ ). The combination of both types through the presence of two determinatives often offers a complete view of the word and its ‘landscape’ in a tridimensional sense (es. *šhn* ‘destroy’

). In general, the choice of a particular sign to determine the word was based on the ancient model of representation of the perceived world.

Following those assumptions, the analysis of the ti-shepes determinatives has begun with the identification of six signs used in the registered references:

‘ti-shepes’ variant	Determinative sign (Gardiner code)
	N33
	M3

³ Goldwasser O., pp. 56-58.

	W22/23
	M2
	M1
	A50

Five of them seem to be related to the horizontal dimension, representing simply the plant (or a part of it) or the product deriving from its processing (M1, M2, M3, W22/23 and N33). Only one instance can be identified as a vertical dimension (A50), which relates the raw material with its principal characteristic: its rarity and exclusivity ('precious, noble').

Notwithstanding the many different contexts of the references, it seems that the choice of one of those signs to determine the word 'ti-shepes' is not depending on the textual typology. For instance, the ti-shepes determinative of the tree or just brunch (Gardiner sign list M1/M3) can be found in both commercial/official texts (Hatshepsut reliefs, Serabit el-Khadim stela, Tombos inscription) and in temple laboratories list (Edfu, Philae) and in private contexts (Deir el-Medina ostrakon). In the same way, the determinative for the unguent vessel (W22/W23) can be found in both private funerary texts (tomb of Sarenput) and in official inscriptions (Seti I, Karnak).

To summarize, the study of those selected groups of signs chosen to represent the semantic world related to this material has shown that the determinatives used are actually composed by the picture of the material together with its most important element: the exceptionality of the derived products created with it, surely connected with the effort necessary to get it from the trade networks and the religious and mythic meaning associated⁴.

For this material, moreover, there could be also an important connection with the word 'ti', first of the two terms used to describe it, meaning 'stick, chiesel'⁵, quoted since the Old Kingdom (for an example dated to the XIII Dynasty see Fig. 2). The most relevant element seems then to be the 'stick' which should be 'fine, precious', probably because of a scented fragrance di-

⁴ Regarding the connection between aromatic materials and the divine-mythic world see: Aufrere S. *Egyptian Myths and Trade of Perfume and Spices from Punt and Africa*, in: I.Incordino and P.P.Creasman (eds.) forthcoming 2017.

⁵ I'm very grateful to Prof. Franco Crevatin for this interesting suggestion.



**Figure 2 – Statue of Khnumhotep, scribe of Elephantine temple
(XIII Dynasty 1786-1650 BC, Louvre AF9916)**

rectly connected to the Gods. Other similar references come to mind related to another foreign product, likewise imported in Egypt from south: ebony (hebeny). An ebony stick is in fact used to evoke the gods, the Books of Thoth were kept into two boxes of ebony and ivory, the magician Webainer of Westcar Papyrus kept his magic tools inside an ebony box, the goddess Sekhmet (“The Great of Magic”) has an ebony scepter⁶.

⁶ See: Aufrere S. *L'ébène, l'ivoire et la magie en Egypte ancienne*, in: *Encyclopedie religieuse de l'Univers vegetal II*, 2001, pp.321-329



Figure 3 – Incense burner
(Qustul, cemetery L, Tomb 24, A group, 3000-3200 BC)

All those elements clearly relate this material and the use of a stick with the gods and their evocation. Moreover, also ebony has many medical properties listed in the Ebers Papyrus (Eb 345, 404, 415) specially to cure eye illness (cataract, iris problems, infections, weak sight). In this regard too, the use of an ebony powder or stick can be linked with the idea of improving sight, giving an ‘extra’-sensitivity, or a double sight.

The Ebers Papyrus lists also many medical properties for *ti-shepes* too, in order to heal headache, wounds (burn), and to reactivate/stimulate blood circulation through the preparation of recipes not to ingest. According to the most quoted botanic interpretation of *ti-shepes* as an African species of camphor tree⁷, those properties find full evidence in the modern use of camphor (light anaesthetic and sedative, heal for minor heart diseases and weariness), which is recognized as toxic if ingested a quantity more than 2 gr.

Perhaps unsurprisingly, the mention of *ti-shepes* in religious/literary texts covers almost the half of the documented references to this item, while the rest derive mostly from private tombs inscriptions or official tribute lists.

At present, it appears that there was not a univocal relationship between the chosen determinative and the phase of production/part of the aromatic products. In other words, there is no decisive evidence to support the choice of the sign for tree to determine the word referring to the plant (or its parts)

⁷ See: Luchtracht A., 1988, pp.43-48.

or the presence of the balsam vessel to determine a word for derived products, such as balsam or aromatic oil. It seems more likely that as the millennia passed words such as *ti-shepes* or *hesayt* can refer to both the raw material and the derivate product without any differentiation, and these terms can signify one or more species of foreign vegetals. Therefore, while it is worth suggesting interpretations for those products from the Egyptological point of view, this direction of research might be most promising if amended. Whatever vegetal species these words could actually represent (if it is logical and reasonable to assume that we have to search for only one species referred by each word), the fundamental aspect of investigation should be oriented more to the *use* to which the Egyptians put those products.

Similarly, it would be of much use to focus additional attention on tracing the origin of some similar species that can be identified with those words. More importantly, the uses and values that they had in the culture(s) from which they derived should be evaluated. To clarify the process of transition of elements from a culture to another, it is necessary to know the “original” meaning or value of an item prior to its transformation or adaption into the “new” culture. In this respect, object as the Qustul incense burner (Fig. 3), could be useful to connect the building of a ruler image and propaganda with aromatic products and their ideological and religious value.

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