



**HAL**  
open science

# The Monetary Great Transition in Egypt (500–250 BC)

Damien Agut-Labordere

► **To cite this version:**

Damien Agut-Labordere. The Monetary Great Transition in Egypt (500–250 BC). Money Rules! The Monetary Economy of Egypt, from Persians until the Beginning of Islam, 2016, Orléans, France. hal-03092385

**HAL Id: hal-03092385**

**<https://hal.science/hal-03092385>**

Submitted on 26 Jan 2021

**HAL** is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

Spécimen Auteur

**THOMAS FAUCHER (ED.)**

# Money Rules!

**The Monetary Economy of Egypt,  
from Persians until the Beginning of Islam**



INSTITUT FRANÇAIS D'ARCHÉOLOGIE ORIENTALE

---

BIBLIOTHÈQUE D'ÉTUDE 176 - 2020

# Spécimen Auteur

## **Dans la même collection :**

Marie-Lys Arnette, *Regressus ad uterum. La mort comme une nouvelle naissance dans les grands textes funéraires de l'Égypte pharaonique (V<sup>e</sup>-XX<sup>e</sup> dynastie)*, 2020.

Yann Tristant, *L'occupation humaine dans le delta aux V<sup>e</sup> et IV<sup>e</sup> millénaires. Approche géoarchéologique à partir de la région de Samara (delta oriental)*, 2020.

Hourig Sourouzian, *Catalogue de la statuaire royale de la XIX<sup>e</sup> dynastie*, 2019.

Olivier Delouis, Maria Mossakowska-Gaubert (éd.), *La vie quotidienne des moines en Orient et en Occident (IV<sup>e</sup>-X<sup>e</sup> siècle). II. Questions transversales*, 2019.

Pierre Meyrat, *Les papyrus du Ramesseum. Recherches sur une bibliothèque privée de la fin du Moyen Empire*, 2018.

Luc Gabolde, *Karnak, Amon-Rê. La genèse d'un temple, la naissance d'un dieu*, 2018.

Yann Tristant, Matthieu Ghilardi (eds.), *Landscape Archaeology, Egypt and the Mediterranean World*, 2018.

Thomas Faucher, Andrew Meadows, Catharine Lorber, *Egyptian Hoards I. The Ptolemies*, 2017.

Edward Brovanski, *Some Monuments of the Old Kingdom in the Field Museum of the Natural History, Chicago*, 2016.

Rémi Legros (éd.), *Cinquante ans d'éternité*, 2015.

Fayza Haikal (éd.), *Mélanges offerts à Ola el-Aguizy*, 2015.

Olivier Delouis, Maria Mossakowska-Gaubert (éd.), *La vie quotidienne des moines en Orient et en Occident (IV<sup>e</sup>-X<sup>e</sup> siècle). I. État des sources*, 2015.

© INSTITUT FRANÇAIS D'ARCHÉOLOGIE ORIENTALE, LE CAIRE, 2020

ISBN 978-2-7247-0756-4

ISSN 0259-3823

Mise en page : Christine Mina

Couverture : Ismaïl Seddiq



Tous droits de traduction, d'adaptation et de reproduction par tous procédés, réservés pour tous pays. Toute reproduction ou représentation intégrale ou partielle, par quelque procédé que ce soit, des pages publiées dans le présent ouvrage, faite sans l'autorisation de l'éditeur, est illicite et constitue une contrefaçon. Seules sont autorisées, d'une part, les reproductions strictement réservées à l'usage privé du copiste et non destinées à une utilisation collective et, d'autre part, les courtes citations justifiées par le caractère scientifique ou d'information de l'œuvre dans laquelle elles sont incorporées (art. L. 122-4, L. 122-5 et L. 335-2 du code de la propriété intellectuelle).

## Contents

<b>Thomas FAUCHER</b>	
Introduction .....	1
<b>Julien MONERIE</b>	
The Elusive Coinage. Bronze Coinage in Hellenistic and Early Parthian Babylonia Through Texts and Coins .....	9
<b>Peter VAN ALFEN</b>	
The Role of Coinage in Archaic Aegean–Egyptian Overseas Trade. Another Look at <i>TAD C.3.7</i> .....	43
<b>Frédérique DUYRAT, Damien AGUT-LABORDÈRE</b>	
The Monetary Great Transition in Egypt (500–250 BC) .....	69
<b>Andrew R. MEADOWS</b>	
Weighing up the Coinage Reform of Ptolemy Philadelphus .....	89
<b>Julien OLIVIER, Bérange RE DON</b>	
Reconsidérer la politique militaire des Lagides à la lumière des données numismatiques. Frappes et trésors monétaires aux III <sup>e</sup> et II <sup>e</sup> s. av. J.-C. (env. 294-116) .....	105
<b>Olivier PICARD, Fabienne BURKHALTER</b>	
Les étapes de la réforme monétaire de la fin du III <sup>e</sup> s. av. J.-C. en Égypte d’après les sources papyrologiques grecques et la numismatique .....	139

# Spécimen Auteur

## **Gilles GORRE, Catharine LORBER**

The Survival of the Silver Standard After the Grand Mutation ..... 147

## **Catharine LORBER, Christelle FISCHER-BOVET**

Getting Paid in Ptolemaic Egypt in the 2nd and 1st Centuries BC ..... 169

## **Aurélie CUENOD, Julien OLIVIER**

D'un Ptolémée à l'autre.

Ceindre le diadème à Alexandrie (163-80 av. J.-C.) ..... 203

## **Katherine BLOUIN, Andrew BURNETT**

From Kings to Emperors.

The Development and Integration of the Egyptian Monetary System

into the Roman Empire ..... 231

## **Arnaud SUSPÈNE**

*Tanta copia nummariae rei.*

Trésor lagide et monnaies romaines entre la chute d'Alexandrie (août 30 av. J.-C.)

et les trois triomphes d'Octavien (août 29 av. J.-C.) ..... 287

## **Hélène CUVIGNY, Katarzyna LACH-URGACZ**

Ὅρεινὸν κέρμα.

Monetary Circulation in the *praesidia* of the Eastern Desert During the Principate ... 309

## **Thomas KRUSE, Bernhard E. WOYTEK**

“(Old) Ptolemaic” and “New” Coins in 3rd-Century AD Egypt.

A Reassessment of the Papyrological and Numismatic Evidence ..... 341

## **Roger BAGNALL, Gilles BRANSBOURG**

The Constantian Monetary Revolution ..... 367

## **Sobhi BOUDERBALA, Abdelhamid FENINA**

Fiscalité et pratiques monétaires dans l'Égypte pré-fatimide

à la lumière des documents papyrologiques et numismatiques ..... 393

## **Olivier PICARD**

Conclusions ..... 411

**Abbreviations** ..... 415

**Bibliography** ..... 417

Frédérique Duyrat, Damien Agut-Labordère\*

## The Monetary Great Transition in Egypt (500–250 BC)

**T**HE BASIC idea of this article was to confront coins and Demotic texts to see if the massive introduction of coins of Alexander's types during the last quarter of the 4th c. BC had observable consequences in the daily practices of payment as they are witnessed by the Demotic documentation. But going through our sources, we realised that the real transition lies earlier, during the 4th c. BC. This century closes a long period of a little more than two centuries opened by the conquest of Egypt by Cambyses in 526 BC. The "Persian period" expires in 323 when the Macedonian troops led by Alexander the Great entered the Nile Delta and the western desert. The qualifier of "Persian" should not however be misleading. Within the period separating Cambyses from Alexander, we have indeed to distinguish three phases, only two of which are actually "Persian":

- The "First Persian period", lasting a little over a century, from the conquest achieved by Cambyses to the end of the 5th c. BC (around 400), when an Egyptian king, Amyrtaeus of Sais, reached the throne of Egypt;
- This reign inaugurates a period of independence, during which Egypt was again ruled by native pharaohs. This second phase of sixty years ends abruptly with the conquest led by Artaxerxes III in 343/342;
- Egypt then came back under the rule of the Persians for a short time: ten years later it was the turn of Alexander to make his entry into Memphis.

\* Frédérique Duyrat, Bibliothèque nationale de France, Orient et Méditerranée – Mondes sémitiques – UMR 8167. Damien Agut-Labordère, CNRS, ArScAn-HAROC.

## TWO SOURCES ALMOST NOT OVERLAPPING

The numismatic data gathered to write this article are a global survey based on *IGCH*, *CH*, and several very recent studies.<sup>1</sup> The idea was to provide a general landscape of coin circulation to confront with the Demotic texts of the same period.

76 hoards have been examined; 98% of their contents are made of silver coins; 72 hoards out of 76 were found in the Delta, the Fayum or the area of Memphis (fig. 1).<sup>2</sup> Only four were found in the valley: Asyut (*IGCH* 1644, c.475–c.470; *IGCH* 1673, c.325–c.300); Kufit (*IGCH* 1670, c.295); Mirgissa, Sudan (*IGCH* 1685, c.275–c.270). This observation is constant between 500 and 250 BC. The Macedonian conquest does not change it. The coins in hoards are overwhelmingly big denominations (tetradrachms, staters, etc.), here again, whatever the period between 500 and 250 BC.

For the period 500–250 BC, the Trismegistos database listed 1,612 texts (June 2016). First of all, it is striking to note that the geographical origin of these documents differs completely from the hoards (figs. 1–2). The hoards have been found in the North while the texts come from the South. Is this lack of convergence a coincidence or, on the contrary, should we consider this as evidence of the geography of the Egyptian monetary history during this period?

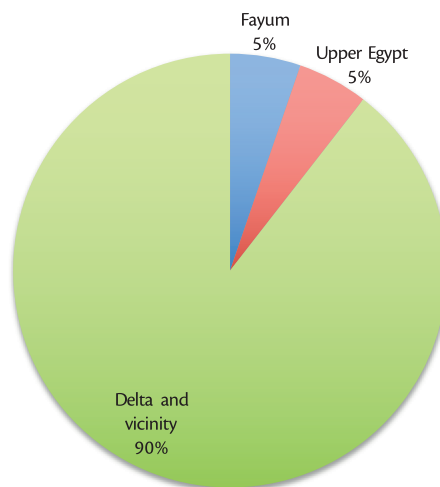


Fig. 1. Geographical provenance of the hoards.

1. LORBER 2018; FAUCHER, MEADOWS, LORBER 2017.

2. See the maps in DUYRAT 2005.

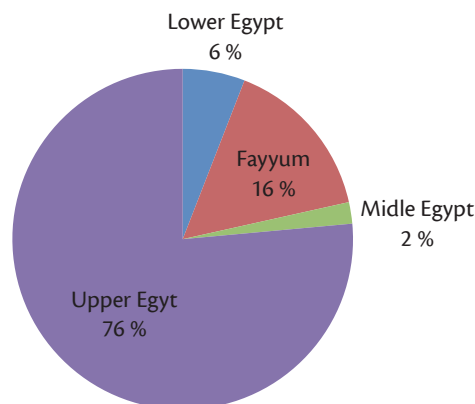


Fig. 2. Geographic provenance of the Demotic texts (500–250 BC).  
Sources: Trismegistos.org, “Demotic and Abnormal Hieratic Texts”.

## 1. THE RELATIVE DECLINE OF WEIGHED SILVER

This comparative study starts with the most obvious common topic: weighed silver. The use of this metal is frequently attested in Demotic texts and relatively well known through hoards.

### 1.1. THE EGYPTIAN CURRENCIES STILL PREVAIL IN THE DEMOTIC TEXTS UNTIL C.250 BC

Weighed silver is mentioned in the texts as *ḥd dbn*, “silver *deben*” (equal to about 91 g), or *ḥd qt*, “silver *qite*” (equal to 1/10th of a *deben*: 9.1 g). These terms appear first in the Egyptian sources of the 2nd millennium BC to indicate the value of commodities and are the sole currency attested in the Egyptian written sources of the 1st millennium BC until the 5th c. BC. In fact, since the edition of the Elephantine Aramaic papyri by Arthur E. Cowley and the ground-breaking article “La première mention du statère d’argent en Égypte” authored by Michel Chauveau, we have known that staters were used as currency units in Egypt since the very end of the 5th c. BC.<sup>3</sup>

Moreover the *sttr*, “stater”, is well attested in Demotic ostraca found in Ayn Manawir, a tiny village settled in the south of the Kharga Oasis. The oldest mention lies now in an ostrakon found in 2010 (no. 7547), which was written between December 412 BC and January 411 BC. In the Demotic documents coming from the Nile Valley, the word *sttr* is scarce until Alexander’s conquest of Egypt. Weighed silver still predominates.

3. CHAUVEAU 2000b.



## 1.2. HACKSILBER

For numismatists, weighed money is called *Hacksilber*, which means fragments, bars, dumps, and other pieces of cut metal the value of which must be guaranteed by weighing and testing the quality of the metal. Frequently mentioned in texts, weighed silver is rarely recorded in excavations or even on the art market. This can be explained by the absence of artistic value of those shapeless pieces of metal as noted by Peter Vargyas in his enquiry in Egyptian museums. He quotes the description of such a find in a register of the Egyptian museum in Cairo: “8 morceaux d’argent oxydé sans aucune valeur, ne méritant pas d’être classés.”<sup>4</sup> The same author provides an estimated number of *Hacksilber* hoards in the same museum according to the *Journal d’entrée*: 30 hoards, and 20 others in different publications.<sup>5</sup>

Several coin hoards of the 5th and 4th c. BC also contain *Hacksilber* (fig. 3).<sup>6</sup> The general trend shows a rarefaction of *Hacksilber* through the period. Cut coins—only tested, not fragmented to create fractions—are sometimes found in hoards without *Hacksilber*.<sup>7</sup> They can be seen as a sign of suspicion toward coins and counted money: the users still needed to test the quality of the metal and did not entirely rely on the issuing authority.

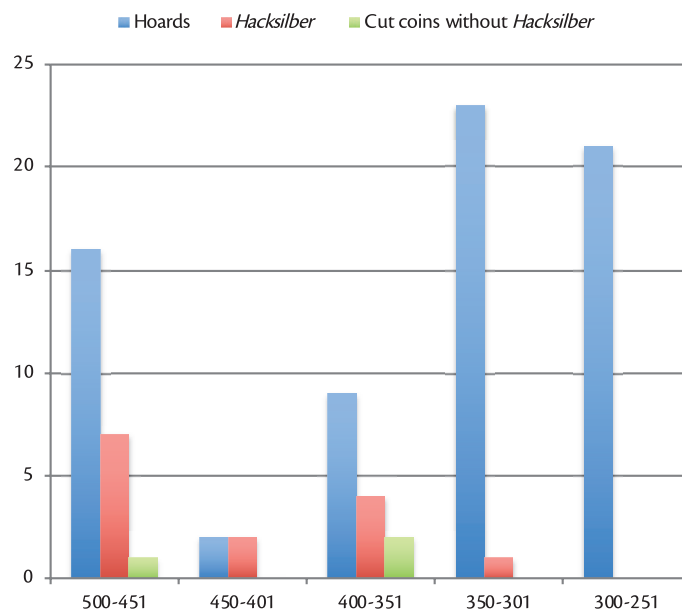


Fig. 3. Hoards containing *Hacksilber*.<sup>8</sup>

4. VARGYAS 2010, p. 156, n. 2. Same observation for a hoard found in Mesopotamia in MONERIE 2018, pp. 71–74: the *Hacksilber* has been melted down.

5. VARGYAS 2010, p. 160; the author considers that only four hoards with archaeological context date back to the 2nd millennium BC. All the other ones (more than twenty) must be dated to the 1st millennium BC until the end of Persian rule. He adds that twenty more are dated to the Hellenistic and Roman periods.

6. The data of Figure 3 partially come from VAN ALFEN 2004–2005.

7. A detailed study of *Hacksilber* and cut coins in the Levant and in Egypt has been published by Peter Van Alfen. It shows that weighed silver remains more common in Egypt than in the East during the Classical period: VAN ALFEN 2004–2005, p. 16.

8. The hoards dated to a whole century are presented in the column starting with the beginning of the century.

According to the Demotic sources, weighed silver remains the medium of payment during all the Achaemenid period and the beginning of the Hellenistic period, although it disappears from the hoards found in the Delta. It seems obvious that this traditional money is still in use, even if there is very little archaeological evidence of its existence. Egyptian units of account (mainly the *qite*) are still present in 89% of the Demotic tax-receipts of the 3rd c. BC coming from Thebes or Elephantine (fig. 4). The question of its use in the Delta remains more difficult to answer, since we have no extensive written documentation and no more *Hacksilber* hoards at the end of the period. But the parallel use of two different moneys, weighed and counted silver, according to the needs of the users, must be taken into consideration.

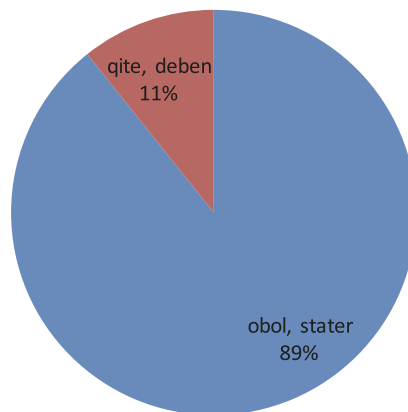


Fig. 4. Egyptian and Greek currencies attested in the Demotic tax-receipts (280–210 BC). Documentary basis: *O.Louvre*; *O.Chic.Muhs*; *O.Taxes* (total: 379 documents).

To conclude on this first point, it is now obvious that the lack of geographical convergence between texts and hoards is not entirely due to a coincidence. If the wetness of the Delta could easily explain the absence of papyrus in the north, the lack of monetary hoards in the south could be explained by the fact that *Hacksilber* remained important until at least 250 BC. Nevertheless, in spite of this geographical distinction, a comparison between the chronology of the hoards and that of the Demotic texts reveals a strange chronological convergence between our two kinds of sources during the second part of the 5th c. BC.

## 2. THE HISTORICAL MEANING OF THE LONG DOCUMENTARY GAP OF THE 5TH CENTURY (C.460–C.400 BC)

The oldest hoards buried in Egypt date back to the beginning of the 5th c. BC.<sup>9</sup> During the whole 5th century, the content of hoards is rather mixed, with coins coming from almost everywhere, but in small quantities: the Thraco-Macedonian area, the Aegean, Asia Minor, Greece, Northern Africa, Cyprus, and the Levant (fig. 5).

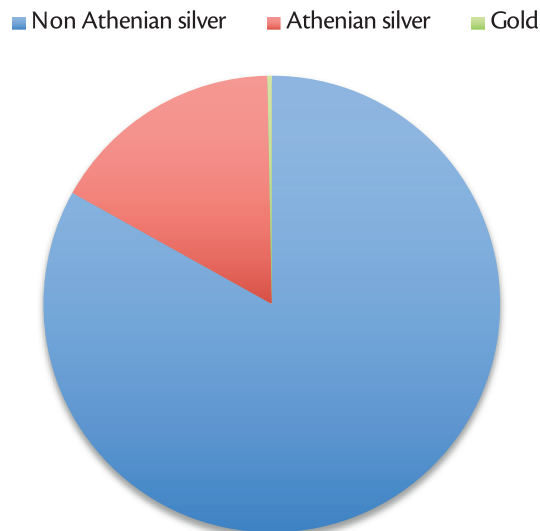


Fig. 5. Contents of Egyptian hoards, 5th c. BC.

The general trend in hoarding showed in Figure 3 is rather unexpected. An increase of the number of hoards found in Egypt, accompanying the monetisation of the country, may have seemed logical. This is, for instance, what has been observed in Syria. But Figure 3 shows on the contrary a sudden collapse of the number of hoards between 450 and 401 BC. The examination of the number of coins in hoards, at first sight, does not seem consistent with these figures (fig. 6).

9. With one exception in the second part of the 6th century: a hoard of five gold Croesus staters (IGCH 1632).

# Spécimen Auteur

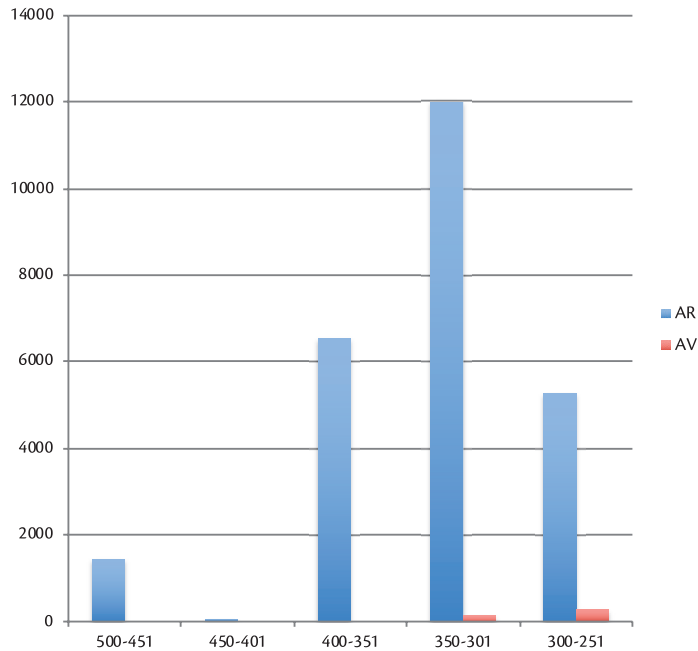


Fig. 6. Number of coins in hoards.

In fact, the content of three hoards is so considerable that it distorts the general results: Asyut (IGCH 1644, c.475–c.470 BC, 900 AR); Tell el-Maskhouta (IGCH 1649, early 4th century, 6,000+ AR), and Demanhur (IGCH 1664, 318/317 BC, 8,000+ AR). Therefore, to have an overview of more standard hoards, it is worth removing these ones from the graphs (fig. 7).

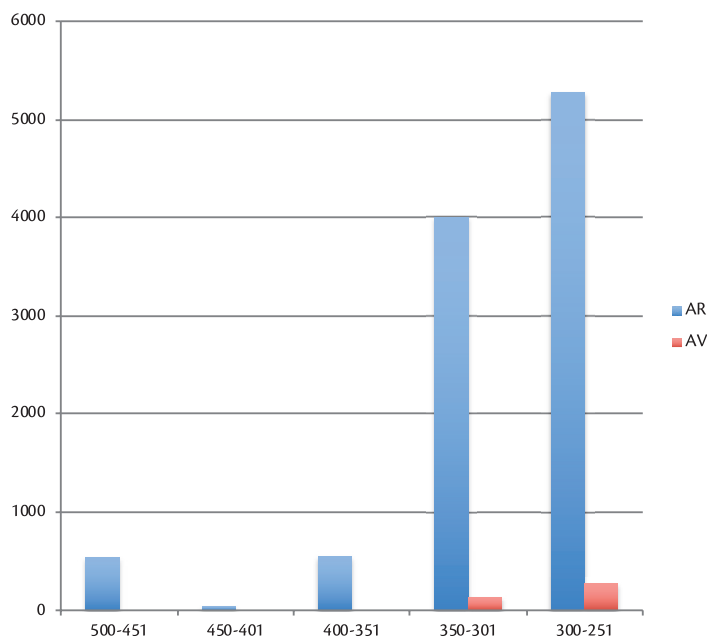


Fig. 7. Number of coins in hoards without Asyut, Tell el-Maskhouta, and Demanhur hoards.

As in Figure 3, the second half of the 5th century is characterised by a collapse in number of coins found in hoards. Then, from the first half of the 4th century, the increase of the number of hoards and the number of coins in hoards is consistent. The superior number of hoards between 350 and 301 BC must be related to the conquest by Alexander and then by the wars of the Diadochi. Insecurity over a long period of time encouraged hoarding and non-recovering of the hoard burials due to death or deportation of the owners.<sup>10</sup> But the average number of coins per hoard allows no doubt about the general trend (fig. 8). Despite the weakness of the second half of the 5th century, hoards are more numerous and bigger across the period in the scope of this article.

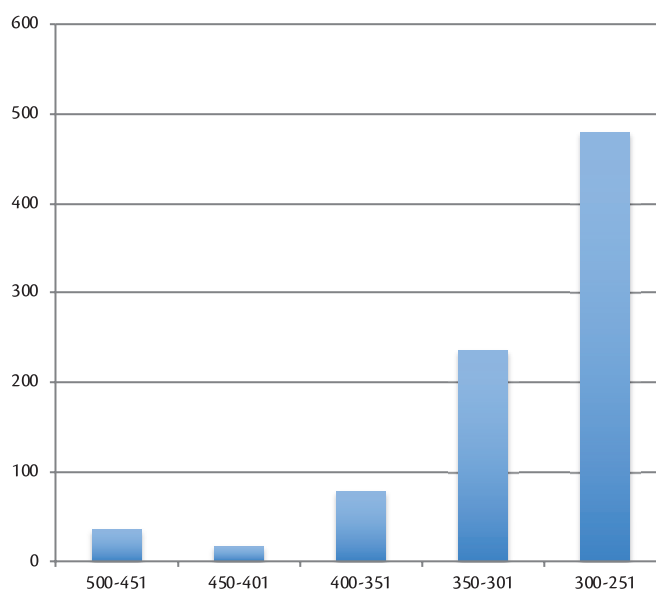


Fig. 8. Average number of coins in hoards without Asyut, Tell el-Maskhouta, and Demanhur hoards.

A comparative study of single finds from the excavations of Heracleion, Naukratis, Alexandria, and Athribis (all situated in the Delta) has been offered by Andrew Meadows in a recent article.<sup>11</sup> Only Naukratis provides coins of the 5th c. BC, which astonishes A. Meadows:

Given what we know of the tight economic links between Thonis-Heracleion and Naukratis [...] it seems extraordinary that Thonis-Heracleion should not be demonstrating a similar pattern. The absence of 5th-century coinage from Thonis-Heracleion seems unlikely to be by chance. The site has yielded pottery from this period, and earlier, particularly in the northern part of the site. Another possible reason for absence of 5th-century material at Thonis-Heracleion might seem to be the fact that the majority of coin finds from the site (as they are from all archaeological sites) are of bronze,

10. DUYRAT 2011.

11. MEADOWS 2015, p. 126.

and that there exists no 5th-century bronze coinage. However, it should be noted that eighteen 4th-century silver coins have been found at Thonis-Heracleion. The absence of 5th-century coinage from Thonis-Heracleion thus remains a mystery, and it is tempting to suggest that the reason for the difference in this respect between Thonis-Heracleion and Naukratis may lie in the different statuses of the two settlements.<sup>12</sup>

It is not possible to draw immediate conclusions from one single site, but according to the hoard landscape, the exception seems to be Naukratis, maybe protected by the Persian as a foreign settlement, not Thonis-Heracleion.

It would be easy to find numismatic reasons for the weakness of the period 450–401 BC. Coins can be melted down and disappear, they can be sent back to other countries through the stream of exchange,<sup>13</sup> they can simply not be hoarded. All these reasons would mean that the phenomenon observed is in fact due to a distortion of our source and does not reflect the reality of the 5th c. BC. At first glance, Demotic texts do not seem to show a similar gap in documentation (fig. 9).

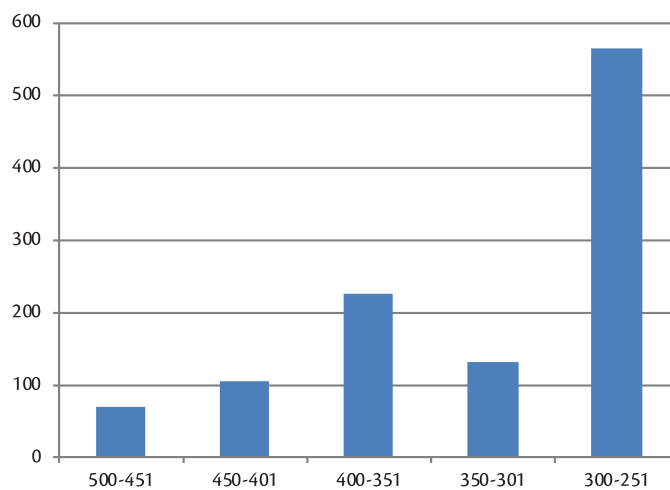


Fig. 9. Chronological distribution of the Demotic documents from 500 to 251 BC.

Sources: Trismegistos.org, “Demotic and Abnormal Hieratic Texts”.

However, this graph, based on the numbers provided by Trismegistos database, is somewhat misleading. If we consider only the documents which are precisely dated to the period 451–400 BC (meaning bearing a complete Egyptian date in the document and not dated by palaeographic criteria or contextual elements), the shape of the graph becomes rather different, revealing a forty-year documentary gap between 485 BC (the beginning of Xerxes’ reign) and 445 BC (fig. 10).

12. MEADOWS 2015, pp. 126–127.

13. See the debate about the absence of owl in the Athenian arche: FLAMENT 2011; KONUK 2011.

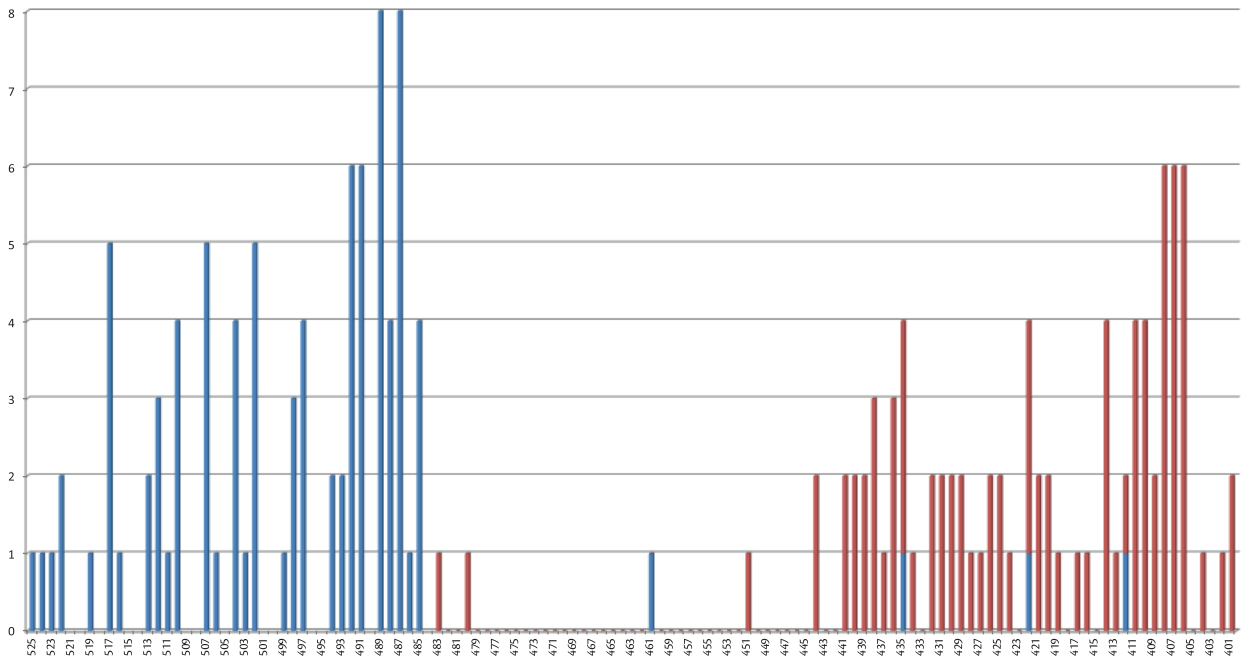


Fig. 10. Chronological survey of precisely dated documents from the First Persian period (the ostra of Ayn Manawir appear in red).

What is more surprising is that of the 176 precisely dated documents concerning the First Persian period (526–400 BC), 95 come from the recent French excavations held in Ayn Manawir in the deep south of the Kharga Oasis where a small and remote Egyptian village was located. This illustrates obviously the fortuitous nature of the documentation we have. But the fact remains, that, for the Nile Valley, we do not have any Demotic documents which can be dated with certainty from 485 to 400 BC: no letter, no receipt, and, what is more puzzling, not even a contract during this eighty-year period. From the middle of the 7th c. BC and the appearance of the first Demotic texts down to the 2nd c. AD, there is no such long break in the chronology of the Demotic documents. The absence of hoards during the same period encourages us to focus on the history of this period following the reign of Darius I.

First, we shall look at the construction or restoration activities in Egyptian temples from Cambyses to the rule of Achoris, the most important king of the 29th Dynasty in the first decades of the 4th c. BC (fig. 11). The data used in this graph are based on the number of sites where the building activity of a king is attested by one or several cartouches. Thus, this does not take into account the importance of the building work carried out.

# Spécimen Auteur

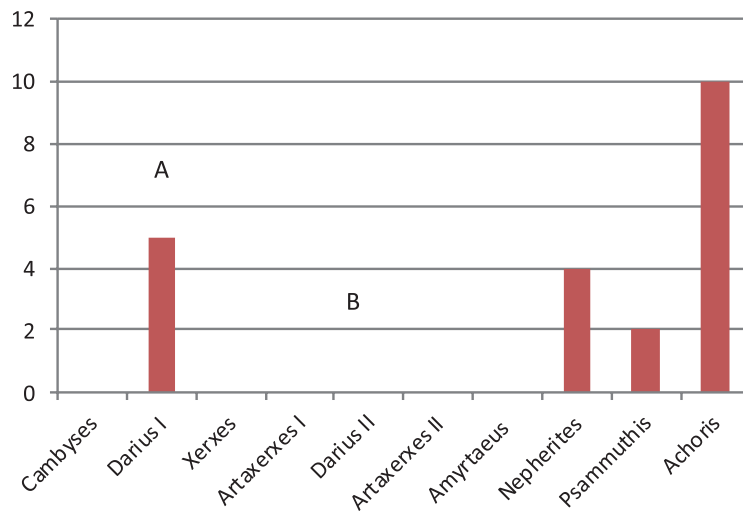


Fig. 11. Building activities in Egyptian temples from Cambyses to Achoris (526–480 BC).

Sources: Darius I: Busiris, Karnak (temple of Khonsu), el-Kab, Hibis, Qasr el-Guheita—for references, see Wasmuth 2017, pp. 239–242. Concerning the independent kings of the 4th century, see Traunecker 1979.

This graph shows two salient facts:

- A. The reign of Darius I is clearly distinguishable from all others because of the building activities in Egyptian temples in Upper Egypt but also in the Delta. The absence of construction during the three-year rule of Cambyses is irrelevant;
- B. The most intriguing is the complete absence of attested construction or renovation in the Egyptian temples during no less than eighty years.

This kind of huge gap in sacred building activities—over three generations—is unprecedented in the history of pharaonic Egypt, probably since the middle of the 2nd millennium BC, to such an extent that one might suspect our reading of the different cartouches attested on the stone blocks. From a strict philological point of view, the cartouches where the name “Darius” is inscribed could be related to the rule of Darius I or Darius II. As we have no other royal name for the two Darius, whereas Cambyses’ name as “son of Re” is attested in several documents, the doubt remains.

However, a diachronic analysis of the graffiti attesting royal activities of stone extraction in the main Egyptian quarries (Wadi Hammamat, Tura, and Masara) clearly shows the importance of the rule of Darius I in the field of stone extraction (fig. 12).



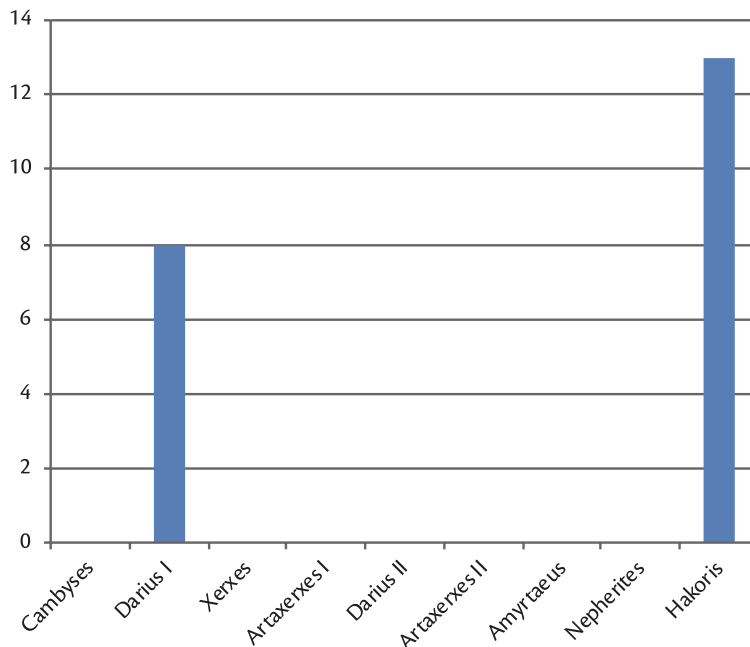


Fig. 12. Royal cartouches attested in the main Egyptian quarries.  
Sources: Posener 1936, nos. 12, 14–16, 18–23;  
Spiegelberg 1905; Devauchelle 1983a.

Thus, given the data available, we can only confirm that with the rule of Xerxes started a long period of breakdown in the construction and renovation activities of sacred buildings in all Egypt. The recovery observed with the advent of the independent king Nephertites, in the 4th century, confirms that this exceptional situation in pharaonic history was due to the political will of the Achaemenid power in Egypt.

The trend observed for the building activities is replicated in the diachronic analysis of the votive objects bearing a king's cartouche and of the commemorative stelae related to the cult of the Memphite Apis bulls. The refusal to support Egyptian religious institutions is thus apparent even in the gift of sacred furniture made in stone as *naoi* but also of precious artefacts such as the *menat*-necklace and *sistrum*. If we examine the number of votive objects bearing the cartouche of a Persian king, the rule of Darius is, as elsewhere, the only one attested (fig. 13).

# Spécimen Auteur

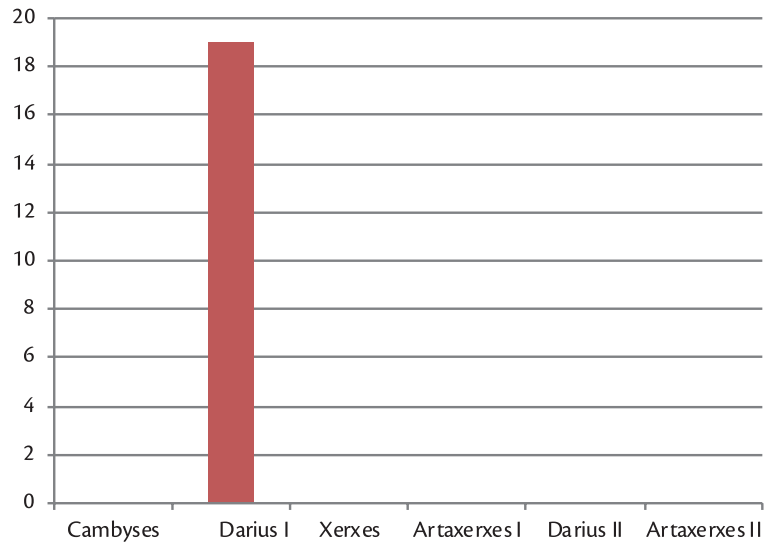


Fig. 13. Votive objects bearing a royal cartouche.

Source: Posener 1936, pp. 153–160;  
Wasmuth 2017, pp. 242–243; 316–317.

The situation is almost identical for the commemorative inscriptions concerning the Memphite Apis bull (fig. 14).

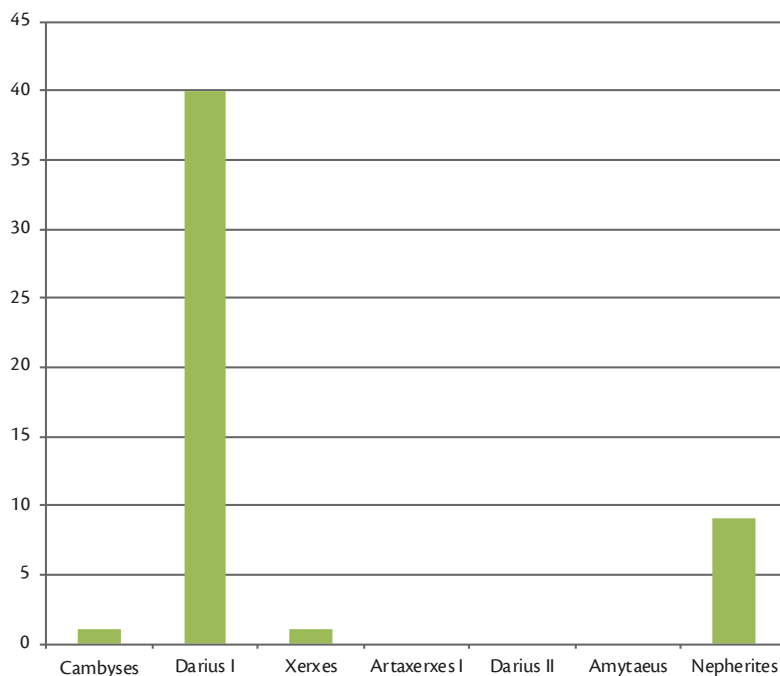


Fig. 14. Commemorative inscriptions concerning the Apis bulls.

Sources: Posener 1936; Devauchelle 1994; Smith, Andrews, Davies 2011;  
Wasmuth 2017, p. 242.

All the data support the existence of two different phases in the policy of the Persian kings towards Egyptian religious institutions. This convergence of results based on multiple types of documents makes unlikely any assumption that the absence observed after the reign of Darius—over eighty years—results from a “statistical illusion”:

- During the first forty years of the first Persian domination, perhaps during the rule of Cambyses but mostly under Darius I, the Persian kings treated the Egyptian temples much like traditional pharaohs;
- The advent of Xerxes in the middle of the 480s changed the situation radically: the Persian power seems to have put an end to all kinds of support for Egyptian temples.

Xerxes’ harsh policy against the Egyptian temples was prefigured by Cambyses between 526 and 552 BC. The Great King promulgated a decree which stands at the very origin of the impoverishment of Egyptian religious institutions during the 5th c. BC. Cambyses’ decree dismantled the donation network organised by previous pharaohs for the benefit of the temples, and compelled them to self-sufficiency. For example, the suppression of royal donations in timber forced them to buy this costly raw material to preserve their cargo fleet. Donations in textiles, poultry, seeds, and silver were also abolished altogether. Those in cattle were halved. But as livestock, textile and seeds were produced locally by the temples, the royal donations were in this case not vital to the economy of the divine domains. As the dates of the two versions of Cambyses’ decree we have are posterior to the Persian period, there is a very high probability that this text was still relevant well after the rule of Cambyses; both contain two lists of temples which continued to benefit from the amount of grants which prevailed before Cambyses’ reform.<sup>14</sup>

The fact that Darius’ temple policy continued that of Cambyses is also shown by the diachronic analysis of the emission rate of donation stelae commemorating the gifts by kings or by private individuals to religious institutions. The sudden disappearance of these documents under the rule of Cambyses continues throughout the whole of the First Persian period (fig. 15).

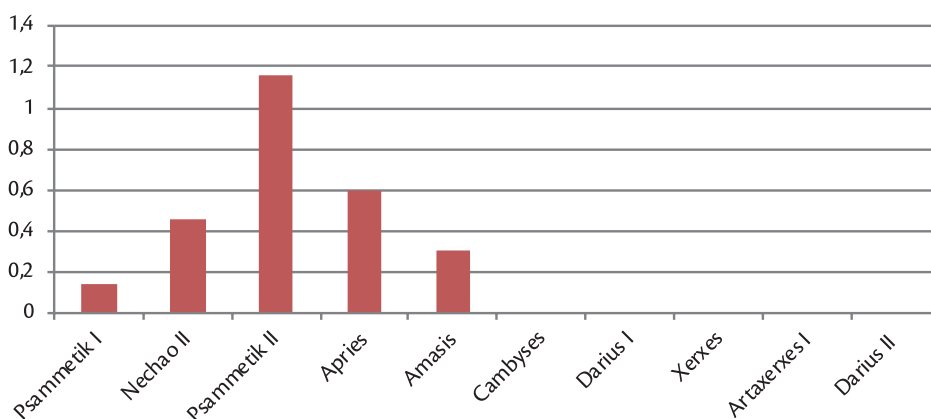


Fig. 15. Emission rate of donation stelae from Psammetik I to Darius II (number of stelae/number of regnal years. Total: 50 stelae).

Sources: Meeks 1979; Meeks 2009.

14. AGUT-LABORDÈRE 2005, AGUT-LABORDÈRE 2016b.

As the emission of royal and private donation stelae came to an end at the same time, we have to suppose that a global prohibition of donations to religious institutions was promulgated by Cambyses at the outset of the conquest. The objective pursued by the Persian authorities was to protect the property of the Egyptian crown. It is noteworthy that the trend to restrain donations to religious institutions begins with the rule of Apries, as if the Saite kings had initiated a movement ended by Cambyses. The halt, or the restriction, of royal donations and the prohibition of private gift of land to temples have the same objective: securing the royal income. This type of management is hardly surprising in the case of a rich province freshly conquered.

If the end of donations can explain a decrease in the wealth of the temples, it cannot explain the disappearance of silver from hoards. Any classicist would think of the situation of the Greek cities of Asia Minor, so wealthy until the revolt of 499, and diminished thereafter. Recent studies on the economy of Babylonia provide interesting parallels with what we observe in Egypt. From the beginning of the Persian period, the Babylonian cuneiform texts mention an increase in fiscal pressure, an acceleration of the circulation of silver due to the royal demand of tax payments in this metal, a price inflation, and several revolts during the reign of Xerxes. The economic crisis is stabilised only during the second half of the 4th century.<sup>15</sup> If such a phenomenon had occurred in Egypt during the 5th century, the fiscal pressure on silver could explain the absence of silver hoarding, and the increase of taxation the impoverishment of the temple economy.

### 3. THE REIGN OF OWLS AND THE PERIOD OF INDEPENDENCE (C.400–C.330 BC)

It is significant that the oldest occurrence of silver staters in Egyptian texts is no older than 412/411 BC in Ayn Manawir (Demotic)<sup>16</sup> and 407 BC in Elephantine (Aramaic).<sup>17</sup> Michel Chauveau considers that, in the oasis of Ayn Manawir, this could be explained by the sudden introduction of a new medium—the Attic tetradrachms—by one powerful family of the oasis. But the real question lies elsewhere: were Athenian owls so familiar in the Delta itself by c.412 BC? They are represented with many other mints in the hoards of the first half of the 5th century. Then no coin is attested before the very beginning of the 4th century on the currently accepted hoard chronology.

15. JURSA 2010, pp. 745–753; MONERIE 2018, pp. 63–66.

16. *O.Man.* 7547; see AGUT-LABORDÈRE 2014.

17. PORTEN, YARDENI 1989, text 2B 4.5.

# Spécimen Auteur

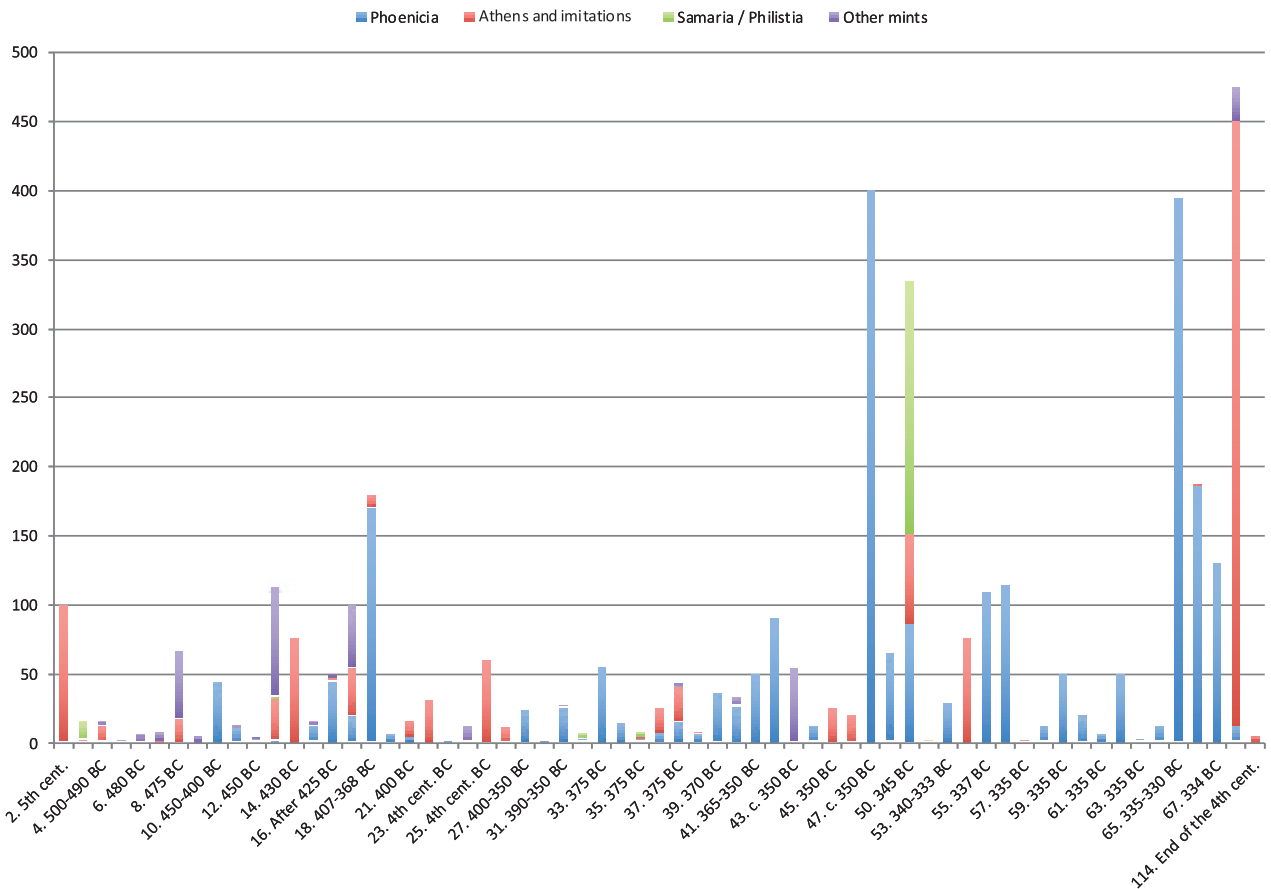


Fig. 16. The Syrian hoards, 5th–4th c. BC.  
Source: Duyrat 2016.

Understanding of the situation in Egypt can be improved by comparison with the situation in other areas of the Persian Empire during the same period. In Syria, the second half of the 5th century shows a very different monetary landscape (fig. 16):

Foreign coins, especially Athenian tetradrachms, figure prominently in 5th-century hoards. Out of the total volume of coins (819 specimens, all denominations included), Athens and its imitations constitute 35%, Phoenician mints 38%, other mints, scattered around the Aegean Basin, in southern Anatolia and on Cyprus, 25%, while Samaria and Philistia, confined to local circulation, account for only 2% of the whole. The number of hoards where they appear supports the significant share of Athenian types: 12 out of 19 in all, or 63% of the 5th-century hoards. In many hoards Athenian tetradrachms form a minority, with the exception of those from Phoenicia (no. 21), Marash in Commagene (no. 2), and Ramallah (no. 14). The coins are sometimes cut, mixed with *Hacksilber*. Fragments of archaic coins, such as the Athenian *Wappenmünzen*, still circulate in the mid-5th century because of their metallic value.<sup>18</sup>

18. DUYRAT 2016, pp. 309–313.

In Syria, Athenian coins appear in numerous hoards throughout the whole 5th century, without the interruption noticed in Egypt. The evolution to the 4th century is gradual, the issues of the Phoenician mints predominating. No brutal contrast between a mixed composition of hoards and a totally Athenian-type composition can be noticed in Syria, in contrast to Egypt where there seems to be a breakdown in monetary culture between the mixed circulation of the first half of the 5th century and a uniform circulation of owls in the 4th c. BC.

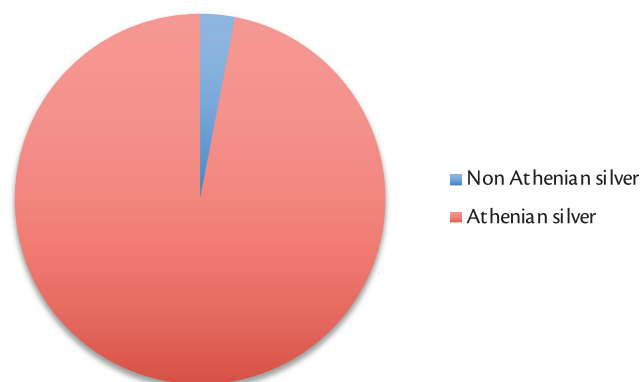


Fig. 17. Contents of Egyptian hoards, 4th c. BC (before 332 BC).

It is very interesting to note that the gap during the second half of the 5th century coincides with the maximum output of Athens, between 454 and 413 BC. Does the absence of hoards mean that the millions of owls issued by Athens did not reach Egypt? According to the current dating of hoards by numismatists, Athenian owls became the major and almost unique currency of Egypt from the beginning of the 4th century to c.335 BC, not earlier (fig. 17). This means that they became the main currency at the same time as mint(s) striking imitations in Egypt are supposed to have begun their issues, maybe in the 390s. The chronology of these imitations has been refined by A. Meadows thanks to the discovery of a die in the excavations at Heracleion.<sup>19</sup> An older triple die known in the Adda collection, in Alexandria, is dated—by the style of the three heads of Athena it bears—to the very end of the 5th century or the beginning of the 4th century (it is probably a die of imitations). The die found in Heracleion, with three sides too, only bore heads of Athena of the Pi-style, that is later than the mid-4th century, when the originals were struck in Athens. To these imitative Egyptian issues, well attested in hoards,<sup>20</sup> must be added three clearly Egyptian groups: a rare issue of gold with Athenian types, signed by Pharaoh Tachos (361 BC); other signed issues—Athenian type tetradrachms with the name of Artaxerxes III or his satraps—were struck after the re-conquest by Persians in 343 BC; and finally, the Nectanebo gold staters with hieroglyphic types, usually dated to the early 330s.

19. MEADOWS 2011.

20. MEADOWS 2011, p. 107, Table 1.

To summarise the situation, during the 4th century, Athenian type coins become suddenly the unique silver currency of Egypt. While Syria is characterised by civic coinages, mixed with Athenian coins, Egypt uses only the Athenian tetradrachm. The almost complete absence of cities in Egypt can explain this homogeneity, no municipal authority trying to spread its personal badges. But this does not solve the question of the issuers of local imitations. From 404 to 342 BC, Egypt was ruled by independent pharaohs who sought support from Sparta and Athens against the Persian power.<sup>21</sup> It is interesting to note that it is during the same period that owls became the unique currency of the country. Another point must be underlined. The excavations of Thonis-Heracleion and Naucratis provided a much larger number of “Kition” bronze coins, with a lion and a bull, than the excavations in Kition themselves. A. Meadows suggests the possibility that these coins are an imitative bronze coinage struck in the Delta, maybe in Heracleion.<sup>22</sup> These coins emphasise tight relationships with Cyprus, which was also a mercenary recruitment area during the wars of the independent pharaohs supported by Athens and Sparta against the Persians.<sup>23</sup>

#### 4. THE GRADUAL “STATERISATION” OF SOUTHERN EGYPT (C.330–C.250 BC)

Alexander was supposed to be the beginning of this paper, but he will be its conclusion. Gold, suddenly, is represented in several hoards dated c.330 (only one is dated c.325–c.300 BC: *IGCH* 1672 from Abusir). This phenomenon is closely related to the conquest of Egypt by Alexander the Great: no gold Alexanders are known before 325 BC, but a gold coinage was available in Egypt before the conquest: remarkably, three hoards contain Nectanebo gold staters probably struck during the early 330s<sup>24</sup>. Then Philips and Alexanders are found in hoards, probably brought by the conqueror’s armies. All were found in the Delta or the area of Memphis. This high concentration of gold in a short period of time and a limited area must be related to the conquest.

A massive introduction of silver Alexanders, always in the same zone of circulation, characterises the last quarter of the 4th c. BC. Twelve hoards between 325 and 305 BC, gathering 11,713 coins, represent nearly 16% of the hoards of the 250-year period in the scope of this article, but concentrated in only 8% of the timeline. Four hoards (25%) are over 1,000 coins, culminating with the enormous amount of the Demanhur deposit (*IGCH* 1664, 8,000 coins). Two of the four hoards located in Upper Egypt date to the last quarter of the 4th century, emphasising the penetration of currency in the valley, maybe with foreign armies.

21. AGUT-LABORDÈRE 2012; RUZICKA 2012, chapters 6 to 17; WOJCIECHOWSKA 2016, chapter 2.

22. MEADOWS 2015, pp. 128–129.

23. AGUT-LABORDÈRE 2012, p. 227.

24. FAUCHER, FISCHER-BOSSERT, DHENNIN 2013.

The Ptolemaic domination of Egypt brought great changes in coin circulation. Only Ptolemaic coinage was accepted in Egypt. Silver and gold were hoarded before 250 BC. We also observe more coins per hoard and more gold than during the time of Alexander and the Diadochi.

Mentions of *sttr* are more frequent in the Demotic texts. At first sight, the fact that *dbn* and *sttr* are equally attested in the contracts dated from Alexander's conquest to 250 BC could mean that Greek currencies spread through Middle and Upper Egypt during the first decades of Ptolemaic rule (fig. 18).

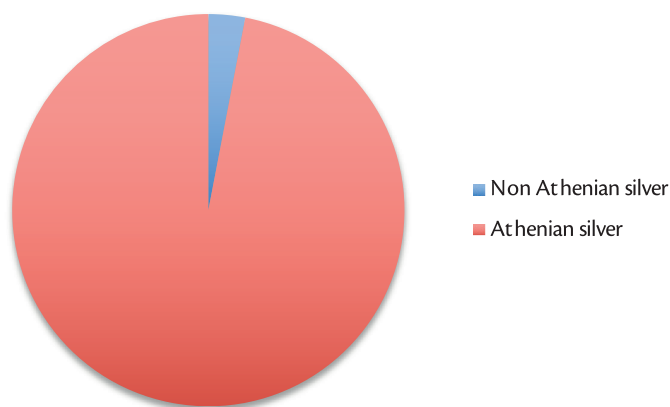


Fig. 18. Currencies attested in the Demotic contracts (330–215 BC). Documentary basis: 28 Demotic contracts.

Nevertheless, this last chart is quite misleading in some ways. To evaluate correctly the importance of the use of Greek staters as unit of account in the Demotic contracts, we have to look at the position of the *sttr* in the wording of the amounts; during the period 330–250 BC: in 100% of the cases, staters appear in second position to convert an amount which is first expressed in Egyptian currency units, *deben* or *qite*.

P.BM 10529, year 9 of Ptolemy II (P.BM. GLANVILLE 1939, pp. 43–44)

6 ḥḏ qt r sttr 6

6 silver *qite* makes 3 staters

The scribes used this kind of formula to avoid the misinterpretation of the numbers they wrote.<sup>25</sup> We cannot be sure that this is possible to infer from the position of the different units of account in this formula what sort of money was being used effectively. At least, the analysis of the role of staters in Demotic contracts between 330 and 250 BC shows that most of the Demotic scribes of this period continued to think first in terms of Egyptian weighed money. Paradoxically, the increase of mentions of staters in Demotic contracts during the same period indicates that the decades following Alexander's conquest were a starting point for the spread of Greek currency units in Middle and Upper Egypt. Their diffusion means that the notion of counted money was more broadly accepted far away from Alexandria and the Delta.

25. AGUT-LABORDÈRE 2016a.



## CONCLUSION

As a result of the lack of written sources, we are unable to understand fully the monetary practices in the Delta for the whole period 500–250 BC. The situation is different in Middle Egypt, and moreover in Upper Egypt. The comparison between coins and texts, even if they do not overlap, helps to provide a better understanding of the economic history of Egypt during the 5th and 4th c. BC.

First of all, the absence of texts, of building programs in the temples or of royal gifts to the Egyptian gods observed from 460 to 400 BC in the whole Egypt can be connected with the complete lack of hoards during this period. This probably matches the harsh fiscal policy instituted by the Great Kings from the reign of Xerxes (486–465 BC) against the Egyptian elites.

Secondly, “the reign of the owls” from the period of independence until the Macedonian conquest (c.400–c.330 BC) fits with the emergence of the staters in the Demotic contracts (mainly in Kharga) and with the pro-Athenian foreign policy of the independent pharaohs of the 4th c. BC.

All these observations must be situated within a long trend which extends beyond 250 BC, during which weighed silver is gradually replaced by coins.