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**Urban fluctuations in the north-central region of the Nile Delta:
4000 years of river and urban development in Egypt.**

Two volumes

Volume 2:

Appendix

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Department of Archaeology

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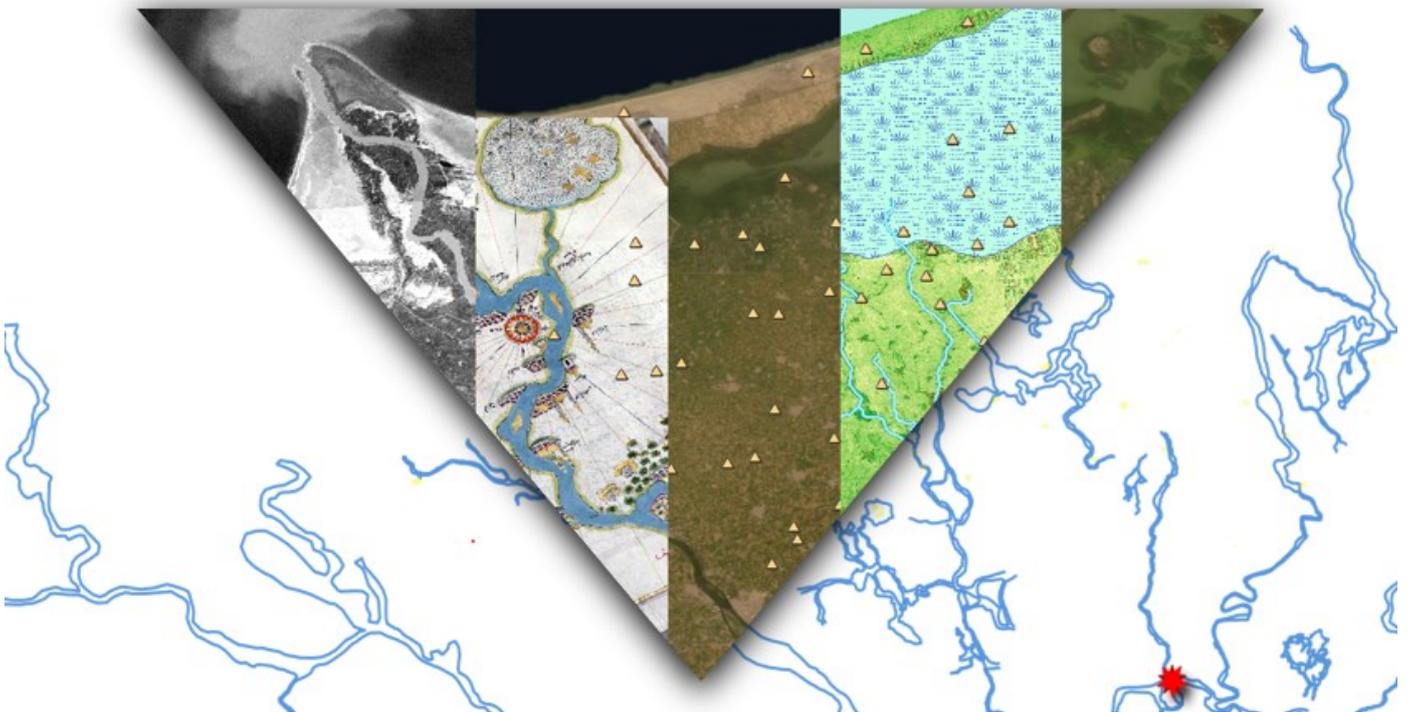


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Statement of Copyright

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Foreword

As stated in Volume 1, section 5.1.1, metadata is just information about data. This appendix is both metadata as well as supplementary material. On the one hand, the Appendix works as metadata of this research and can be used as supporting evidence, documentation, cataloguing, handling instructions, and production control of the data that is presented in this thesis. As I referred to it in Volume 1, the Appendix is like a thesis spin-off, where the reader can find more about a specific topic discussed in Volume 1, but it can also be read separately. On the other hand, the Appendix, especially Chapters 3 to 6, works as a more traditional Appendix with supplementary material that is related to the investigation but regardless of its value as raw material, without context would be hardly understood.

In the Chapter 1 of this Volume, I present the historical metadata of this research. A succinct history of Egypt from the beginning of the Dynastic period to the Tulunid period, focusing in details that I thought are relevant for the study of urban change. Each section of this Chapter, the Prologue and Groups (see Volume 1, section 5.1.1), is divided in three sub-sections: the first section, *Event*, is purely a historical narrative that do not pretend to be critical, it is a historical narrative that informs us about the historical breaks that divide the data analysed and focuses on certain events that might have changed the Egyptian spatial domain. The second section, *Reference*, includes a table where it is shown the diversity of urban forms developed within the temporal range discussed per Group number. The third section, *Urban Features*, is a critical essay regarding some of these urban forms analysing them from long historical perspective.

Chapter 2 discusses two examples of the icxitoca approach. These are two examples that I considered paradigmatic since are syntactic and pedagogic.

Chapter 3, shows the code used to develop the PostgreSQL database, including triggers, queries and functions. This code can produce an empty database, that is, the tables are going to be created but without information. Nevertheless, the code

used is also attached as a separate SQL file for those that would like to replicate this database in their own computers. The SQL file includes a copy of the database in SQL format with the information of the archaeological files as well as the temporal information.

Chapter 4 shows the code used to develop the PHP webpage hosted in AlwaysData. This webpage can be replicated locally in any computer with Apache and PHP installed, and if a PostgreSQL server is available, you could run the database, explore it visually, and even record new information. Tweaking and modifying the database structure it is possible to adapt it to any other region in the world and this is why in Chapter 3 the “empty” database is presented as such.

Chapter 5, shows the periodical sequence or temporalities used in this research. In Volume 1, sections 2.2.1.2 and 5.1.1, it is presented the general structure of the information as well as the meaning of Group, Long period, Cycle, Centre of Power and Governor is, here it is shown the data structure of each table used, and the different names that are associated to each temporality. One of the most time consuming tasks during this research was the development of these tables (see Volume 1, section 2.2.1.2) and I hope that this supplementary information can be useful for researchers trying to find a comprehensive and as complete as possible list of governors and time periods in Egypt from 3150 BCE (5100 BP; -3887 HE) to 905 CE (1045 BP; 292 HE), which is exactly 4054 years of temporal information up to the governor level, hence the title of this research.

Finally, Chapter 6 includes a poster of the Nile Delta where all the sites included in the database are shown over the Palimpsestual River Network and the reconstructed Digital Elevation Model used to model the river flow in the Delta.

At the end of this Appendix you will find the bibliographical references used along this Volume.

1 Metadata

1.0 Prologue

As animals, humans organise their space according to their needs and expectations, following specific psychological reactions determined spatially. They represent themselves spatially, and at the same time, they have a perception of the space where they live (see Mitchell and Dolins 2010; Rapoport 1977; Sambrook and Zurick 2010). The experience of space “must be acted upon, (and therefore interpreted) by animals in ways relevant to their needs and expectations” (Mitchell and Dolins 2010: 49). In this sense, cognitive archaeology, defined as “the study of all those aspects of ancient culture that are the product of the human mind” (Flannery and Marcus 1996: 351), could be a starting point to try to understand how the Delta was perceived and represented. Fortunately for us, Egypt was inhabited by people that developed a writing system that we can understand; therefore, some of their cosmology could be understood.

As a starting point, we can describe the Nile from a mundane perspective and a modern historical human perspective. The Nile River, including the Delta, is a place among the Sahara, the Red Sea, the Mediterranean Sea, the Persian Gulf via the Sinai, and Levant's arid lands. We could even include the complex terrain of the Anatolian peninsula for it was a political buffer and a recurrent conflictive zone between Hellas, Assyria, Persia, the Levant and Egypt (see Group 2) (see Gilbert 2015: 350–355). Constrained by the Sahara, the Nile is perhaps the only natural, a relatively straightforward, and non-dangerous riverine and pedestrian passageway from the whole African continent to the ancient Eurasian world and a refuge from the desert itself. Both the Valley and the Delta have been described as fertile places where human culture flourished; but this statement take for granted, its fertility and habitability, or strategic position, even though the first settlers were still hunters and gatherers, possibly looking for refuge against the aridification of the Sahara.

In this sense, Katherine Blouin (2014: 23) has criticised the idea of Béthemont (1987:24) and Manning (2010:44), that the Nile constrained human choices about space management, but Blouin considers that due to beliefs and practices this constriction was more like a “benediction”. I think that both ideas are complementary. From a modern and geographical point of view, the Nile is like a bridge between Africa and the Mediterranean Sea, as the only geographical feature that allowed humans to cross the Sahara at a minimum risk of starvation or thirst, from north to south at the eastern side of the desert. Considering its potential benefits is acceptable to think that human beings were more than happy to live along the Nile or nearby if the water resource would be available; after all, it might be a question of choice to decide to live and adapt to the desert (see Group 3. Discussion. A brief comment on the Arabs); and still, whether it is a choice or not, whether you know what “fertile” or “agriculture” means, you have to deal with the limitations given by the environmental constraints.

Agriculture and animal husbandry could be adopted as a real alternative source of food along the Nile from 5500-5000 BCE onwards (Bellwood 2005: Ch. 5; Butzer 1976: 7-9; Wengrow 2001: 97), and perhaps humans chose to live there because of its strategic position, trade routes, water, and food resources. By ca. 4000 BCE, the Mediterranean Sea reached its current level in (Butzer 1976: 23; Pennington et al. 2017; Stanley and Warne 1993) and the swampy environment of the Nile Delta, described as a large-scale crevassing river formation, potentially created “a nutritionally rich ecosystem”, probably good for fishing and seafood gatherers (Pennington, Bunbury and Hovius 2016: 200). Traces of shell middens (concheros) in the Delta are yet to be found, but certainly might have existed – such as the shell mound of El Gouna on the Red Sea (Vermeersch et al. 2005). By ca. 4000 BCE, silt accretion, might have “fostered the transition from hunting and gathering to agriculture in the delta” (Stanley and Warne 1993: 438; Williams 2019: 288-289).

1.0.1 Event

[AE.Pre-Dynastic] The pre-dynastic society was constituted in relatively dispersed settlements that faced a political upheaval process that confronted them (Gilbert 2015: 360–361). The peer polity interaction in Egypt evolved into relatively independent polities sharing a very constricted area (Manzanilla 1997: 16).

Were the islands good places to settle along the Nile (Bunbury 2012: Ch. 6; Graham 2010: 138–139)? Or levees and sand hills (turtle backs) could have been the preferred location – and perhaps only option – as has been suggested by Butzer (1976: 19,25)? What about the riverbanks or wadis (e.g Hierakonpolis) (Bunbury 2019: 50–52)? In any case, to what extent pre-dynastic communities were constrained by space, that is, practiced sedentism? As suggested by David Wengrow, at this stage there is clear evidence of a “primary pastoral community”, prone to migrate or move depending on their circumstances, specialised in hunting, fishing, and foraging, but utilizing domestic animals for milking or meat consumption (Wengrow et al. 2014: 97).

There is not such a thing that we could call state, and researchers talk about more of a peer polity interaction ceding, claiming, or acquiring power along the Nile (including the delta and the valley of the main Nile; see Espinel 2002; Eyre 1999; Savage 2001). This period has been compared to Monopoly game playing: players compete each other with roughly equal potential, among a combination of chances, while exchanging goods. As the game continues there are players that eventually gather for fortune than other, to the point that the initial, equal opportunities, are dissolved and an “advantageous position continues to reinforce itself” (Kemp 1989: 71). This period of state formation referred to as pre-dynastic cover about seven hundred years from ca. 3800 to 3100 BCE (Dee et al. 2013; Köhler 2017).

During this period, are founded the bases of the Egyptian society, including the first evidence of phonetic writing, about 3250 BCE (Regulski 2016: 1), concepts

of life and death and mortuary practices related them (Wengrow et al. 2014: 96), or even a primitive administrative regionalization based on chifdoms that will be the basis of the sepat areas and later on, the nomes or districts (see Savage 2001: 119–120). During this stage, most of the premises about Ancient Egypt might have born, reproduced, and survive for more than three thousand years.

The first traces of modern humans appeared 200, 000 years ago, in a well-developed Pleistocene world. Sharing landscapes and living together with other animals in a wide range of immense sceneries that supported most of the megafauna. For most of these species, the change between the Pleistocene and the Holocene could have signified nothing but another climatic change¹ to which they needed to adapt as they did in the past (Haynes 2018). However, as some other authors have observed, for big animals that needed large areas to reproduce themselves, Holocene dramatic landscape changes could have been more significant and may have led to their extinction (Graham et al. 2016; Yeakel et al. 2014). However, humans were, among all these Pleistocene species, relatively new. Several clues indicate that this permanent climatic change, the first of its type from a human perspective, transformed drastically human beings development so that nowadays the Holocene is also called the Human Age, the Anthropocene (Butzer 2015; Monastersky 2015). The question is, in which way?

A climatic change could have modified behaviours and interaction among humans (Pennington, Bunbury and Hovius 2016). The Holocene changes might have been the first time in 200 thousand years that humans experienced such a transformation, but more importantly, that persisted for a relatively long time, even from a geological perspective. The constriction of spaces due to environmental changes could have caused a reduction in human mobility and the necessity to share a relatively small “foraging” area with other species of animals,

¹ See for instance the records of the INTIMATE project (INTegrating Ice core, MARine and TERrestrial records) for a graph for the last 128k years of volcanic activity and climate change, and their stabilisation at the beginning of the Holocene. <https://intimate.nbi.ku.dk/>

including humans (Hsiang, Burke and Miguel 2013; Wengrow 2001). As the climate started to change abruptly and persistently in some areas and the environment was transformed, hominids' interactions multiplied.

The formation of the Egyptian state (see Savage 2001: 110–112) as has been described in at least five stages: 1) The Neolithic/Badarian primary pastoral community (ca. 4400–3800 BCE) (Wengrow et al. 2014); 2) the Naqada IA–IIB, where urbanization could have started and agriculture was intensified (ca. 3800–3450 BCE) (Pennington, Bunbury and Hovius 2016: 205); 3) Naqada IIC–D, marked by social interactions that might have expanded, created or intensified trading networks (3450–3325 BCE) (see for instance Mallory–Greenough 2002 on distribution of Basalt Vessels), although this interactions might have started a little bit earlier (Hassan 1988: 159–161); 4) Naqada IIIA–B, sedentism and a lean towards agriculturalism, possibly violent peer-polity interaction took place but also ample social networks throughout Egypt. During this stage, the Maadi–Buto “culture” in the Nile Delta had contacts with the Chalcolithic peoples of the Levant, suggesting an independent trade northern trade network (Gilbert 2015: 361). Regionally, Merimde, Sais and Buto, had some sort of interaction; whether they were competitors or partners is hard to tell (Wilson, Gilbert and Tassie 2014: 3). This period is clearly a period of social change, and the development of a shared system of communication is taking place. The Egyptian writing system “was clearly not initially designed or able to represent continuous spoken discourse” but it already shows a rebus principle in the U–j tomb labels (Regulski 2016: 3–4; Wengrow 2001: 98–99) (3325–3085 BCE) and; 5) Naqada IIIC/ First Dynasty, where the most successful polities ruled over others until a single polity imposed a territorial rule all over the Nile Valley and some deltaic regions, and the succession of power was not by force but kinship (3085–2900 BCE) (Dee et al. 2013; Hendrickx 2011; Stevenson 2016: 424). Moreover, as the habitable areas were reduced, new kinds of relationships among human groups were needed to share the same space to live. Perhaps, during these periods, humans started to develop political relationships, that is, linkages beyond kinship. For humans, this type of

relationships was new; the idea of group socialisation, perhaps, occurred in a changing environment of space constriction and scarcity of resources.

Family groups were interacting within the same space, and as the scale of mobility changed, also changed the perception of space and the way it was used, such as “inceptions of new forms of territoriality along the main north–south axis of the river” (Wengrow et al. 2014: 102; see Wilson 2003: Ch. 1). To make the most of the environment, as members of the same species, humans developed collaboration systems to solve problems. One of these problems would be prolonged permanence within the same area. This permanence highly depended upon human’s ability to compete with other animals, including other humans.

1.0.2 Reference

No map was produced for [AE.Pre-Dynastic], however, Kuper & Kröpelin (2006) developed a series of maps to represent human occupation from 8500 BCE to 3500 BCE

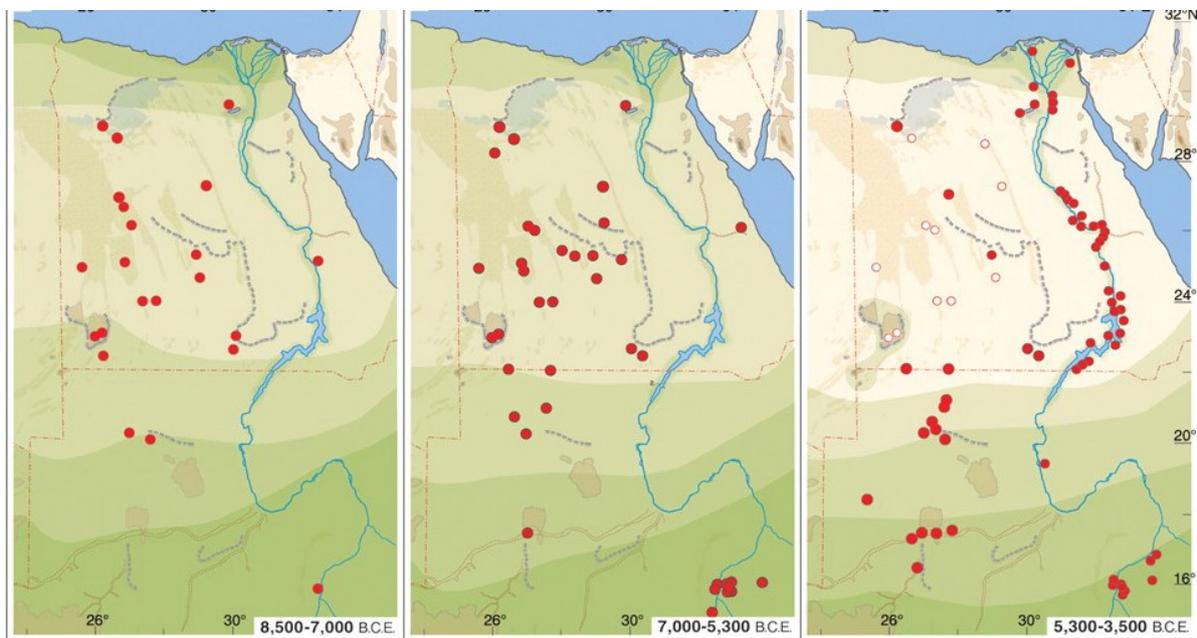


Figure 1. These maps show the development of human occupation from the Sahara to the Nile. Red dots are settlements and red circled white dots are isolated settlements in ecological refuges and episodic transhumance (taken from Kuper and Kröpelin 2006).

According to this model, monsoon rains from 8500 BCE to 5300 BCE modified the desert into a savannah-like environment and settlers dispersed all

over the Eastern Sahara, potentially fostering pastoralism. Due to heavy rains, it is possible that the Nile Valley and Nile Delta were too humid and dangerous for a potential occupation. By 5300 BCE, monsoonal rains stopped and caused new Egyptian Sahara desiccation that forced populations to retreat to the Nile valley or some other ecological refuges. A full desert is supposed to have been established by 3500 BCE, centuries before the unification of Egypt.²

1.0.3 Urban Features

According to Butzer, it is erroneous to think that the Predynastic Nile Delta was uninhabitable as its “endless lines of levees and great expanses of sand islands or ‘turtlebacks’” (Butzer 1976:25) “invited” permanent settlement and were perfect for farming or grazing. Nevertheless, as pointed out before, we usually take for granted what we know and transport our ideas to ancient people, especially if we usually come from a settlement supported mainly by agriculture. In a more recent publication, Butzer argued that Ghislaine Alleaume (1992) “did not fully appreciate how the Nile and its diverging, secondary branches set the stage for artificial irrigation by basin and feeder canal systems” (Butzer 2016). Butzer added that circa 7000-6000 BCE, 70% of the Nile Delta was already suitable for agricultural settlement and that she “underestimated the complexity and effectiveness of the pre-modern irrigation system of Egypt” (2016: 63).

From my perspective, Butzer is severely critical of Ghislaine not only because he disagrees with her Eurocentric ideas, but also partially because his prejudices redound in an almost contradictory position. For example, Butzer states that early modern basins of the Nile Valley cannot be assumed to be identical with those of a millennium earlier. However, in the same article, he also

² About human response to Holocene climate change in the Sahara, see Manning and Timpson (2014). According to their model, by ca. 5500 BCE most of the Sahara would have been populated except for the westernmost region. While there is a population decrease ca. 3000 BCE, the almost full depopulation would have been until 1000 BCE.

says that the industrial-era system could be grafted onto an existing Hellenistic base with comparative ease.

Ghislaine Alleaume wrote her article in a book compiled by Christian Décobert in memory of the Jesuit Martin Maurice. Décobert wrote an introduction where he describes *père* Maurice as an Egyptian archaeologist and as a condescending teacher of Egyptian children: “À ces enfants égyptiens, très urbanisés, nés dans une bourgeoisie oublieuse de ses racines rurales, il a montré leur pays” (Décobert 1992: IX)³. Ghislaine produced an article that, in a sense, reinforces the idea that colonisation brought technological advances to Egypt; that Egypt is the gift of the Nile and; that Egyptians were just but passive actors subject to the Nile fluctuations. And so it was, at least until the 19th century, when water technology brought by French and British engineers controlled and homogenised once and for all, the indomitable Nile.

While Alleaume’s ideas might be controversial, they are not necessarily wrong considering that not only Egypt but several countries in the world were turned upside down with their own industrial revolutions; however, Butzer focuses on the epistemological issues rather than the ideological ones.

This academic dialogue between Butzer and Alleaume is essential in our discussion because it shows how ideology might obfuscate our judgements when characterising the Nilotic populations. Some prejudices cannot be avoided, and they should be considered. The discussion about Alleaume’s hypothesis starts with a reference from Passarge where Butzer indicates that he was the first to criticise the Sudd hypothesis stating that settlement was never an obstacle in the Nile plain because there was free-drainage, contrary to what happens in the Sudd. Furthermore, everything starts to twist because the Sudd flood and its water stagnation issue have not stopped people from settling there. To make his

³ “To these Egyptian children, so urbanised, born in a bourgeoisie oblivious of its rural roots, he showed their country” (My translation)

argument against Alleaume's one stronger, Butzer discussed his studies in the Delta and suggested that "only the Delta fringe was intruded by marshland, lagoons or salt flats" and settlement was perfectly reasonable everywhere else. This also implies that settlement would only be possible in agricultural land, which is not very different from Alleaume's implication that "L'Égypte utile, c'est-à-dire l'Égypte cultivable, est entièrement formée de terres alluviales." (Alleaume 1992: 303).

Just as the lack of evidence in an environment of rapid change does not imply lack of settlement, the fact that the Delta was "available" for agricultural settlement throughout the Holocene does not directly imply that humans would have practiced agriculture right away. As pointed out by Pennington, Bunbury and Hovius, the disappearance of Large-Scale Crevasse wetlands, during the fourth millennium BCE towards a meandering geomorphology, might have reduced the availability of aquatic resources leaning in favour of other proteinic resources and the expansion of agriculture (Pennington, Bunbury and Hovius 2016: 204). These findings are supported by Wengrow et al. (2014) or Dee et al. (2013), and some archaeological studies in archaeological sites in the Delta, such as Sais (Wilson, Gilbert and Tassie 2014: 170) or Tell Gabbara (Rampersad 2008: 97) where traces of mudbrick structures rather than wattle-and-daub, mammal animal bones (pigs, donkeys or cattle) and pottery associated to food production have been found after 3600 BCE, or Tell el-Farkha (Ghazala), where a brewery was discovered and dated from Naqada IID to Naqada IIIA1/2-IIIB (Chłodnicki and Ciałowicz 2018: 83–84) (see also Köhler 2017).

This discussion follows a clue found on the nature of settlements along the Nile, which differed depending on the origin of the settlers and the place they settled. To this respect, it is particularly relevant what Hermann Kees (Kees 1961: 28–29) suggested. The North-west part of the Nile Delta would have been predominantly occupied intermittently by people from the Western desert or possibly as transit, like transhumance; the north-east would have been predominantly by nomadic people coming from the Sinai but not necessarily

inhabitants of the Sinai. Regardless of the first settlers' geographical origin along the Nile Delta, Dynastic Egypt would not be possible to imagine without the hunter-gatherers and fishers and shepherds, which constituted the populations of the north-east African region. And so, people from the Eastern desert, such as the old inhabitants of Wadi Samadi (near Marsa Alam) perhaps traded malachite with the people from the Nile (Murray and Derry 1923), and later in history became a supplier of luxury goods (Phillips 1997). A similar role could have played people from the Tigray highlands and Eritrea, or the Gash Delta or Khartoum (see Fattovich 2010), who traded frankincense, gold, or ivory early in the 3rd millennium BCE. In the Western desert mobile pastoral groups mainly settled in the Kharga Oasis, might have had incursions to the Nile to get resources and possibly for trade (Briois et al. 2012: 185). The reasons behind about how people moved from a relatively nomadic culture to a more sedentary life, it is most of the time taken for granted due to the high fertility of the Nile. As defined by Wengrow, the primary pastoral community might have had a strong link with Ancient Egypt and vice versa, and the transition from nomadism to sedentism probably was a long process of give and take (Wengrow 2001; Wengrow et al. 2014). Nonetheless, to recognise fertility requires an understanding of agriculture and presumably, the only way to achieve this is by increasing your stay in one single place. This knowledge would have been difficult to obtain with a stochastic river that forced people to move around or preserve their hunter-fishermen-shepherd-gatherer lifestyle. In this sense, it would not be a coincidence, as suggested by Bunbury, that an immature river system did not allow people to settle or, paraphrasing Butzer, invited to settle; contrary to a mature river system, with more stable channels, that might actually invite you to stay (Bunbury 2019: 44). It is confusing, however, that she and Pennington et al. (2016), suggest that humans actively adopted agricultural practices when the mature system became less fertile.

For Butzer (2016), the primeval marsh myth created a false scenario of early farmers unable to settle the Valley or Delta, leading to the assumption that Predynastic settlements were limited to the wadis and the edge of the desert.

Nevertheless, this idea also created the false assumption that the only reason to inhabit the Nile Delta or the Valley is because they were expecting to take advantage of agriculture's wonders. According to him, in the case of the Delta, the symbols and toponomy of the nomes also offered evidence for a landscape full of marshes and lagoons that were transformed during the 3rd millennium BCE. Although, as shown in the famous Nile mosaic of Palestrina, or more recently (17th century) the Vatican Map of the Nile (*Vat. Turc. 73*) and the text that accompanies it, *The Book of Travels [Seyahatname]* by Evliya Çelebi, these marshy conditions persisted way after the Predynastic Nile. For Butzer, perceptions and depictions about Egypt were initially formed “by archaeologists and Egyptologists from mid-latitude backgrounds, who were unfamiliar with the juxtaposition of desert and wetland and, above all, could not be expected to comprehend the dynamics of African landscapes”.

Even though Egypt has been considered a highly agricultural landscape, it has strong links with pastoralism, hunting and fishing that cannot be denied or ignored, and that certainly have been neglected, possibly because of Childe's Urban revolution and concepts about civilisation agriculture. For instance, Cattle cults in the Arabian peninsula during the mid-Holocene, is related to territorial pastoralism, and perhaps it was the way to sustain large populations without sedentism (McCorrison et al. 2012). In this sense, Egypt seems closer to Arabia than to the Fertile Crescent in the sense that in Egypt there are more evidence for pastoralism during the 6th or 5th millennia BCE than sedentism (see Wengrow 2001: 95), despite evidence of territorialization (cultural complexes) (Fattovich 1973, 2012). Coincidentally, human response to climate change could have followed a change in behaviour in terms of food consumption and production (Pennington, Bunbury and Hovius 2016), but not necessarily a total abandonment of old practices (Hassan 1997: 56; Wengrow and Baines 2004). Nevertheless, according to Hassan, the Delta floodplain could have been “hospitable for farming and certainly pastoralism as early as 8000 BCE” (1997: 64), then again, to be hospitable

does not mean that humans will turn into farmers and pastoralists just because is possible.

The Nile Delta was still in creation when the turtlebacks were *available* for human use, but so was agriculture, sedentism or urbanisation; and humans were still adapting to Holocene changes. What if the Egyptians could not live in the Delta or the River Valley because it was too dangerous, or that they did live there but not permanently (e.g. unpredictable floods⁴)?

Even Butzer said that “there was no settlement shift from the margins of the desert hills, the *khaset* land, into the fertile floodplain, or *ta* land, after agriculture was introduced” (Butzer 1976: 19); more recently has been observed that sedentary pastoralists communities might have settled along the Nile but not necessarily adopted agriculture as their main food basis (see Wengrow et al. 2014: 97–98). To this respect, it is interesting that agriculture in northern Egypt has been dated to ca. 5300–5000 BCE, whereas in Upper Egypt goes back to ca. 7000–6700 BCE (Allen 1997; Bellwood 2005: Ch. 5; Butzer 1976: 4–7; Mączyńska 2013: 49). It is possible that agriculture appeared in the north first but due to sedimentation has been difficult to find traces of farming practices (see Bunbury 2019: 45). In any case, if it existed, was adopted just as part of a varied and vast diet and not the main source of food, mixed with other subsisting methods such as fishing, hunting, or herding. Then, perhaps agriculture moved south, where fishing, hunting, or herding were also practised. Then the question is how and when agriculture became the main source of food in the south? Agricultural practices might be related to resource management, community co-operation and aggregation of families into settlements (Hassan 2010), possibly triggered by scarcity of products and therefore, the development of storage devices (Bellwood 2005: Ch.5). As pointed out before, the constriction of space could have played a role in all this for it were nomadic people forced to remain in much more confined

⁴ See Note 11, in Butzer (1976: 9)

place (the Nile Valley), and also forced to share it with their neighbours. A potential decrease of availability of food, could have been the cause of these social conflicts, the monopoly game (Kemp 1989: 71). The large-scale crevassing to meandering transition period, where water resources and availability of prey animals was reduced (Pennington, Bunbury and Hovius 2016), a change from a summer to a mainly winter rainfall regime (Williams 2019: 230), and the aridification of the Sahara mentioned above were all have been causes of competition for resources.

These circumstances might have empowered newly created polities from the south by cohesion among them in terms of spatial aggregation and social organization and created the foundations of a peckish ruling class more preoccupied for expanding its power and luxuries rather than satisfy its basic instincts (but see Midant-Reynes 2014; sp. 7-8). Then agriculture might have returned to the north accompanied by men hungry for power, territory, and luxury goods, and hence, agriculture ended up superseding other forms of subsistence, precisely to overcome the scarcity of resources but not only because they decreased, but also because sedentism also increased population numbers.

1.1 Group 1

1.1.1 Event

[AE.ED] At the beginning of the dynastic period, when the process unification of Egypt started, there was a society that was coming together with political and social alliances, led by a person known as Horus (king) (Gilula 1982; Wilkinson 2000; see above). Possibly due to trade (Savage 2001: 130) and the need to negotiate transactions, the systems of communication were transformed in order to have a lingua franca all along the Nile. It is possible that the systems of communication were gradually homogenised fusing shared symbols among the polities in the Nile but perhaps highly influenced by the most powerful ones, which in this case would have been Hierakonpolis or Abydos (Savage 2001: 129–133). The most powerful polities started to transform the urban landscape and

expanded their influence by controlling trade routes or making alliances or even monumental constructions (e.g. around Memphis) and to some extent large-scale architectural projects to display wealth for their kings (Bard 2003); however, this unification would include the Nile Delta as a whole only from the beginning of the [AE.OK] (Espinel 2002; Eyre 1999; Savage 2001; Trigger 1983).

[AE.OK] At this stage, Memphis and its surroundings were for most of the third millennium BCE, the capital of the recently created and possibly unique country-state (Malek 1997, 2003). During the second millennium BCE, the country-state is consolidated (Trigger 1993). For its archaeological relevance, the distinction between religion and state is exemplary; the recognition of the mortuary temple as a standardised architectural feature of the urban landscape it could be a helpful variable to consider in this instance. Religion played an important role at the governmental level but was more intrinsically related to the ruling elite rather than to state affairs (Bell 1971: 21; Kemp 1983; Trigger 1993). It is possible that displays of wealth using funerary contexts, were a reminiscence of this sort of adoration for the ruling elite. It seems that before and during the primaeval unification there was a constant competition among the polities to create the most luxurious and impressive funerary complex to show wealth and power, but with a unified country governed by a powerful king known as Horus, and all the surplus dedicated to a single ruling elite, the largest tombs and funerary complex created during this period are linked to the country's capital.

[AE.1I] Controlling a country state as large as Egypt could have been difficult at times when the divine power of the king was not enough to maintain cohesion along the Nilotic land. Furthermore, regardless the continuous river communication and watertight borders, transportation times were still long, and communication could take days. Even though the Pharaoh was the only king for all the land, regional ruling elites still existed. It is very likely that the country was divided with defined borders comprehending the area of influence of each old polity or possibly divided by watershed size along the Nile, or cultivable area. These administrative districts were distributed along the floodplain and were

called *sepat*. If these units were defined by watersheds, they ranged in size from about 840 hectares in the upper part of Egypt to 8400 hectares in the Nile delta (Kees 1961: 50; Said 1993: 188). This period is considered a breakdown of Egyptian prosperity, for some constitutes a “dark age” (Bell 1971). Politically, just as the unification, it seems more a reorganisation of the country. This reorganisation possibly triggered by fluctuations in the Nile sedimentation regime but was also caused by a renewed competition among the polities. It has been suggested that long term fluctuations in the Nile changed the pattern of sediment deposition and that this phenomenon may have led to the demise of [AE.OK]; the ratio of the sapropel core between 4200 and 4500 years B.P. (Gawad 2007) and the strontium isotope minima (Krom et al. 2002) provide evidence of a decline in Nile flows. It has also been suggested that a second wave of aridification severely affected human populations (Hassan 2010: 14–15; Petit-Maire and Guo 1996; Stanley et al. 2003). This might be true, but what it is not clear is what exactly was the “disaster” (Bell 1971; Moeller 2005). Whatever is the case, a change is recorded. From a political point of view, it seems that local elites regained power and moved the pole of government from the centralised and divine figure of the King to a regional and more human figure (Kemp 1983; Seidlmayer 2003). The super centralisation of power in the figure of the Pharaoh and how the benefits of the “afterlife” (luxuries, goods, wealth) were restricted to the ruling elite close to the dynasty, might have created tension or envy with local elites in the sepatu and they could have created alternative trading networks or display wealth emulating the central power. Eventually, the King figure was somehow eclipsed by all these regional powers. For some [AE.11] was a revolution whose result was “the democratisation of the afterlife”. Although Kemp considers that this view denies “the Egyptians the capacity of speculating and questioning rationally the nature of their society” (Kemp 1983: 116), from my perspective, this is one of the reasons of the upheaval during this period, and hence the revolution: the capacity of the local elites to speculate and question the nature of the central power, and hence, to maintain themselves with or without an Horus (king).

[AE.MK] If we consider [AE.1I] a time of change like the Pre-Dynastic / Early Dynastic times, what exactly changed and how was the reunification possible? We can assume that local polities were again co-opted by the most powerful one, but certainly something should have changed for them to accept again submission to the figure of a unique ruler. If [AE.1I] was triggered by climate change which caused the legitimacy of the King and his administration to decay, the political system should have changed to face social restlessness more efficiently. It is possible that the local polities were transformed into religious units congregated in the temple and, while retaining their economic power and luxuries, their political influence and social power was impoverished by a powerful mobile court with the King as the ultimate leader, controlling the whole country (Espinel 2002).

[AE.2I] In the sixteenth century BCE, a flux of immigrants from the Levant founded the city of Avaris, allegedly introduced the horse and the chariot in Egypt and took over half of the country for at least one hundred years until the city of Thebes rebelled against them (Bietak 1975: 25; Tignor 2010: 58; Stantis et al. 2020). On this occasion, the renewed figure of the Pharaoh and *ma'at* was affected by external forces; *t'wy* was occupied by foreigners and only a strong figure representing the unity of these two lands had the power and presumably, a duty (possibly only in regards to their own interests) to protect the country (Assmann 2005: 136–137; Bunbury and Jeffreys 2011).

[AE.NK] It is not a coincidence from a *ma'at* perspective that the Theban Royal house polity repelled the *hiksos* for it was their duty, and perhaps they had the support of other polities to regain control of trade routes. The sovereignty of Egypt was regained with strong native polities that regained control of the whole country and went further south beyond the first cataract (Kees 1961: 196–197; Bourriau 2003; Freeman 2014: 62–77).

[AE.3I] In the seventh century BCE, due to political and social threats, Psammetichus I, asked for help to Ionian and Carian mercenaries, apparently stronger and equipped with better weaponry and strategies. In addition, during

the seventh century BCE, Aegean traders were allowed to control a purely Greek settlement called Naukratis in the Nile Delta (Klotz 2015; Briant 2017).

1.1.2 Reference

2 Table 1. Group 1

Culture	Term	Type	Concept1	Concept2	Remarks
Egyptian	sp't	Region	Polity	Territory / Geometrical division / Administrative purposes	Geographical Area. Defined possibly by a piece of land irrigated directly by the main watercourse or perhaps by watershed. It is possible that a watershed also played an important role in its definition, possibly from the capital or main town. It is also possible that each sepat was constituted originally as a territorial unit controlled by an autonomous polity with its gods and rules. After the unification, each sepat became a district unit with more or less defined borders. According to Herodotus, geometry played an important role in defining space (see Vasunia 2001: 81-82). Thus, a flat area was divided arbitrary possible for administrative purposes. The symbol is supposed to represent an idealised plan view of canalised agricultural fields. However, this idea is not shared by Willems (2014:5) who studied the coloured depictions of the symbol with bands (see Group 1: Urban Features. The Egyptian City) to imply that the lines that represent sp't are mostly black and not blue. Also interesting is to note that canal irrigation is thought to have been introduced in Egypt during the New Kingdom or even afterwards, which implies that an early symbol depicting geometrical canal irrigation would have been improbable (see Mays 2008; 2010; Cookson-Hills 2014)
Egyptian	niw.t	Urban	Settlement	Built-up area	Settlements. Diversified by function and possibly by social class differences rather than the importance of the settlement. The importance was constructed historically and socially (e.g. Thebes, Naukratis & Memphis).
Egyptian	i't	Landscape feature	Island / mound	Habitable area	A mound along the Nile, emerging from it. A levee, turtleback or an island.
Egyptian	w ³ Hyt	Urban	Settlement	Built-up area	A small settlement, perhaps a farmer or peasant settlement.
Egyptian	dmi	Urban	Settlement	Built-up area	A settlement. Due to the hieroglyph used to name it ("to touch"), has been associated with a port; a place where "ships 'touched' the land" (Snape 2014:36). This settlement hierarchically might be below niw.t, but it would have been a primary urban component
Egyptian	Xnw	Architectural / urban	Unit		Residence, Home, the Interior (Goelet 1999)
Egyptian	Hwt	Architectural / urban	Unit		It is supposed to represent a plan of a state, but see Figure 2

Egyptian	pr	Architectural / urban	Unit	Urban unit	Possibly an enclosure or state. It has been understood as a house and described as a house plan. Interestingly, the term was used to refer to state or property. This might have more sense from a representational point of view given the internal complexity of the houses but the clear rectangular shape of an enclosure (e.g. Papyrus Lansing building; see Snape 2014)
Egyptian	at	Architectural	Unit	Urban unit	Room/house

1.1.3 Urban Features

To talk about the Ancient Egyptian city, we must divide Egypt in at least three parts: the pre-pharaonic or pre-dynastic society; then the Egyptian society constituted as state, that is, the dynastic society; and finally, the more mature, institutionalised, and complex society.

In the Predynastic society, we find dispersed and different settlements that –although they could have had a common past, or even a common ancestor (or ancestors), whether they wanted it or not –faced a process of political change. In this society or societies, there still did not exist a model or system of belief shared by all the inhabitants of an area, nor a standardisation of symbols, nor a system of documentation shared by all these societies. There is no such thing that we could call state, and researchers talk about more of a peer polity interaction ceding, claiming or acquiring power along the Nile (Kemp 1989: 71–74; Renfrew 1986: 1; Cherry 1986: 19; Espinel 2002; Savage 2001; Stevenson 2016).

During this period, however, are founded the bases of the Egyptian society, and hence its importance because some of the premises about what will be Egypt are to be created and survive for more than three thousand years.

At this point, the city, or, at least what I call the city, incipient, in its process of creation/definition, is almost by antonomasia, just an island *-iw-* (see Ragazzoli 2016: 42) emerging from the flood waters (the *gezira*; see Van Wesemael, deWitt and Van Stralen 1988: 126–128), that becomes a mound *-iʔ-* once the water receded. These mounds, which are called nowadays *koms* (in singular: كوم) (see Trampier et al. 2013: 218) (from Arabic “to pile up”, “pile”, “hill”) (Wehr 1976), where one of the few places where it was possible to live, apart from the edge of the desert, river tributaries (*wadis*) or oases areas.

Due to conflicts among polities, the settlement-island-mound (see above and below) possibly walled, was perfect from an incipient geopolitical point of view for it offered a natural delimited and raised area with protection during the annual flood, but also with direct access to the precious liquid. It can be argued

that the same conditions could have applied to the desert edge or wadi, nevertheless, it could have been more problematic to maintain a large population in this area for there is not enough arable land, pasture would have been problematic, and the water could have been far away unless they settled close to a spring or a Nile tributary (*wadi*), which might have had water during the summer season. Therefore, the island/mound could be the best place to settle from a pragmatical point of view, among other things, because it offered drinking water all the year for it is next to the River or can be linked to the river with a canal (Graham 2010; Bunbury 2019: 77). This could also be the practical reason of leaving the desert to the dead and moving the settlements closer to the river despite how dangerous could it be (Bussmann 2014: 331). The island/mound secluded the human groups, but the river, the valley, and the desert, unified them. The peer polity interaction that took place in Egypt evolved to a system of relatively independent polities sharing a very constricted area. The more each group grew, the more conflicts they had with their neighbours (Kemp 1989: 72–73; see above). Probably at the beginning, any kind of alliances were sorted out to remain in peace and to share spaces and resources, but the more the society grew in population and complexity, and more resources were needed to maintain it, the more problematic the relationships were among these groups. At this point, it is plausible that with a relatively limited space, they managed to organise themselves into a new political system to glue all the polities together.

In the second stage, the beginning of the dynastic period proper, which coincides with the so-called unification of Egypt (Early Dynastic) and the Old Kingdom, we have a society recently unified, led by a person known as Horus-king. At some point, this person was linked with the cosmos and the power attributed to this person to intercede between humans and the netherworld, and more importantly, to control the floods (Bell 1971). To what extent the power of this person was recognised all over the Nile is something that is hard to tell, but this might explain the mobility of the court in order to reinforce the idea of power, wealth and ubiquity of the King (Espinel 2002: 22–23; Kemp 1983: 56–60), and also,

as Trigger pointed out, the strong central government might have helped the creation of an homogenous country that ended up sharing similar values or “cultural standards” (see also Bard 2003: 78; Trigger 1983: 69), despite the social differences among polities all along the Nile, or marked geographical differences between the Valley and the Delta (Espinel 2002: 28–31).

Once the state was consolidated, this became the period of the great pyramids, and the period when pragmatism, trial, and error, played an important role in the definition of the country-state, and the creation and systematisation of all the paraphernalia that accompanied it. Is in this context of interaction between different regional polities and the creation of a centralized administration in Upper Egypt, possibly in the area of Abydos (Regulski 2016: 5–6), that the first attestations of writing are found and with it, the first traces of the constitution of a standardized narrative to legitimize power of one region or group over others. It is the period when the god on Earth (the Horus-king, son of Re; see Wilkinson 2000) builds, not his/her tomb, but his/her new home in the netherworld, or perhaps the gate to that realm (Malek 2003: 92–93). During these years, it is possible that agriculture was also systematised, and the Nilometer invented or at least perfected (either technically or ideologically). A system of communication and historical documentation is standardised and just a few had this knowledge, whether it was created for taxation purposes or as a system of communication among all the polities governed by the ruling elite, or as an exclusive system of communication among the living and the death, it was used for the state apparatus to legitimate its being (Regulski 2008: 998–999, 2016: 5; Wilson 2003: 8–11).

And then, who controls the world, also controls the history and the river, and who controls the river controls everything. In this stage, there still did not exist a standardization of the temple, or at least a standardised building found all

along the Nile that could be related to systematic and generalised religious⁵ practices such as those observed in [AE.NK]; rather, what it seems to exist is a building almost exclusively for a small elite, a mortuary temple or perhaps a small shrine, indistinguishable from other buildings (see Kemp 1972, 1989: 115). In this sense, it is not surprising that the tomb and the town of the dead became neuralgic to the Egyptian society: massive works that that functioned like open space adatories, temple-cities so to speak, in which public display and permanence over generations was not only a power display of power but a constant reminder to legitimate the power of the ruling elite. In this settlement, made for the dead –at least the ruling elite dead–, is where most resources and surplus are spent, and where more people could do a non-productive/specialist artisan job, and so, it is also the place where the royal mortuary temple was built (Kemp 1972, 1983: 85–96).

The tombs and mortuary temples unified the people regionally, which along with the “royal appropriation of local cults” (Bussmann 2014: 333) shown with the Pharaoh’s tomb or royal mortuary temples, maintained coherence and integrity nationwide, and functioned as the cosmological centre of the Egyptian city.

⁵ Religion here is understood as defined by Frazer (1922: 50).

1.2 Group 2:

1.2.1 Event

By [AE.LP], according to Alan B. Lloyd (2003: 334), the *sepat* was the basis of the provincial administration in Egypt. Each *sepat* was governed by an overseer or overlord of each administrative unit, known in modern literature as nomarch or Gaufürst, literally the governor of a nome or a *Gau* (Fischer 1977; Helck 1977: 386).

The main difference from the previous period is that the country was reunified again, and a new pole of influence for the whole country was created in Sais, even though the central government seemed to be operating from Memphis (Lloyd 2003: 332). In the seventh century BCE, due to political and social threats from the South, Psammetichus I, asked for help from Greek mercenaries, apparently stronger and equipped with better weaponry and strategies. During the seventh century BCE, these mercenaries were allowed to control a purely Greek settlement (*emporion*) in the Nile Delta called Naukratis (Briant 2017; Klotz 2015; Pfeiffer 2010).

As has been pointed out in Group 1, every time the country appears fragmented was due to empowerment of local rulers; however, by the end of [AE.NK] the constant expansion campaigns of Egypt and the constant foreign pressure, created the perfect conditions for foreign leaders to be more active inside Egypt to the point of govern the country during most of [AE.3I]. It is not a coincidence that Psammetichus of Sais, one of the kingdoms controlling areas along Egypt, gained more power “under the nominal suzerainty of the Assyrians” (Lloyd 2003: 282) after his father, Necho, along other dynasts surrendered to Assurbanipal (Winnicki 2009: 112–113). Regardless of this foreign influence, the native Egyptian administration was still used up until [GR.HE] to some extent, despite the evident changes in nomenclature (e.g. from *sepat* to *nome*). This is not to say that Native Egyptian administration was monolithic, but the essence of the

Egyptian structure was used or adapted to the new circumstances, rather than adapt a foreign one completely, or create a new one from the bottom.

[PE].[First Achaemenid Period (FA); Late Dynastic (LD); Second Achaemenid Period (SA)]. In the sixth century BCE, Croesus, the last King of Lydia, would have allied with Amosis II, a pharaoh of the Twenty-sixth Dynasty and Nabodinus, the last king of Babylon, to defeat the Medians. This alliance destabilised the whole region and created the conditions for the Persians to conquer Lydia, Babylon and Egypt (see Herodotus 2:72-86). This period is divided into three parts with the first Persian domination from 525 to 402 BCE [PE].[FAP], then the Late Dynastic period, also known as Egyptian Independence [PE].[LD] (ca.404-343 BCE; Lloyd 2004: 377-382). Finally, a brief second Persian domination, from ca. 341 BCE until Alexander invaded Egypt in 332 BCE [PE].[SA] (Lloyd 2004; Vasunia 2001: 20-25).

While Alexander was trying to finish a long term blood-feud with the Persians, the rising of power of the relatively small *urbs* of Rome in the vicinity of Magna-Grecia was almost completely neglected from Ptolemaic Egypt (Braudel 2002: 277-279; Lewis 1983: 10). There is some evidence, for instance, that Etruscans or Romans sent an embassy to Alexander, possibly looking for an alliance against the Gauls (Badian 2012d: 117). Traditionally, however, contacts between Rome and Greece have been established until Pyrrhos of Epirus' victory/defeat ("Pyrrhic victory") against the Romans between 280 and 275 BCE (Braudel 2002: 279-280; Freeman 2014: 377-378); basically, the fall of Tarentum in 272 BCE –de facto taking possession of Magna Grecia– would have attracted attention of the Hellenistic world (Peirano 2010). Ironically, it is not a coincidence that Ptolemy II Philadelphus, did send an embassy to Rome in 273 BCE in exchange of friendship (Dionysius of Halicarnassus 2017: XX.14; Lewis 1983: 10; Titus Livius 1814: XIV).

[GR].[HE] With the Greeks, more explicitly, after Alexander the Great, new names and new ways of doing politics were developed in Egypt. The Ptolemies, the new rulers of Egypt, managed to fuse Greek religion with the Egyptian one.

During the Ptolemaic period, the capital of Egypt was moved to Alexandria (Hansen 2006; Vasunia 2001).

Philadelphus tried to create the Nesiotic League to have a dominion in Hellas and failed, perhaps because of the power of the Macedonian kings in the region (Meadows 2013: 38). Therefore, when Romans defeated the Greeks in Magna Grecia, and Philadelphus sent almost immediately some ambassadors to Rome, was perhaps Philadelphus' attempt to gain power in the region without even realising that the Aegean was going to become a Roman province and Ptolemaic Egypt, albeit a strong ally and friend, a kind of protectorate that evolved into a sort of puppet kingdom (Bowman 1996: 32–33; Braudel 2002: 320–324; Lewis 1983: 10–11). As pointed out by Irene Peirano (2010), the Greeks ended up being barbarized by Romans and the Romans Hellenized –at least rhetorically. Just as we have seen with Strabo and his critic on Greek cities (see supra; Strabo 1903: V.3.8), Dionysius of Halicarnassus' *Antiquitates Romanae*, also exacerbates Roman superiority over Greeks, but just as Herodotus did, without negating his links with the people they admire. Irene Peirano considers that Dionysius was offering to Roman aristocrats an “*exempla* from their history that they can follow in order to reaffirm Rome's Greek heritage and thus reverse the impending moral decline” in his own time, which coincides with the annexation of Egypt to the Roman Empire (Peirano 2010: 51).

In a sense, even though Egypt was still functioning as a relatively independent nation-state, she became in practice a series of Greek polis (as political communities) governed by a Ptolemaic King; the districts or nomes (from Greek νομῶν), a reminiscence of the Egyptian *sepat*. Alexandria diminished the political power of several settlements in the Nile Delta, including Naukratis (Coulson and Leonard 1979) and Sais.

[GR].[Romans] With Rome, Egypt was converted into a province of another foreign empire. A collection of nomes integrated within two geographical areas called respectively Aegyptus and Thebaid. These nomes had a capital settlement

(metropolis). The local governor became just an administrative officer of the Roman Empire in charge of ensuring the flow of goods from the nome to Alexandria, and from there to Rome (Ritner 1998; Wilson 2012; Freeman 2014).

The Romans deployed a vast army in Egypt with two legions garrisoned in Alexandria and Babylon –where they built a fortress (Aja Sánchez 2008a: 392)– to protect trading posts and control the flow of goods (Bowman and Rathbone 1992: 110–111; Milne 2013b: 169–175).⁶ Local enterprises reached a new level of development, and inside the settlements, it is noticeable that the production of some goods was industrialised (such as flax or perfume Blouin 2014: 85 & 233).

The most evident change in cosmological/ideological terms in Egypt during the Roman Empire is the implementation of a monotheist religion that evolved relatively quietly during the first three centuries of the Common Era. At its highest peak of development, monotheistic religions (e.g. Judaism or Christianity) overran the polytheistic ones, named Native Egyptian (Coptic), Greek or Roman (Aja Sánchez 2007; Milne 2013a: 96–97).

The first Christian churches in Egypt probably were built in Alexandria, a traditionally religious tolerant city. The church records suggest that by 42 CE, Mark the Evangelist founded the patriarchate of Alexandria (Haas 1997: 181).

With the fall of Jerusalem in CE 70, Christians and Jews fled to Egypt (Freeman 2014: 496–498), finding in Alexandria a relatively tolerant religious settlement where they could preach their beliefs (Aja Sánchez 2007). Possibly from Alexandria, both groups started to spread to the Delta –although Jews had a strong presence since [AE.3P]– but only Christianity had enough power to survive in a highly urbanised rural landscape, amongst the indifferent, or otherwise hostile, Roman Empire.

⁶ There is some evidence that might indicate the existence of fortification in areas where a Diocletian castra was built, such as Qarte el-Toub in Bahariya (Colin et al. 2012) or Tell el-Herr in Sinai (Valbelle, Carrez-Maratray and Bonnet 2000).

[ER].[Roman; Pretorian Prefect of the East] Less than a decade later after Diocletian became emperor, the Tetrarchy was created. From 293 CE, two Augustus ruled two different parts of the Roman Empire: a western part, governed by Caesar Constantius under Maximian, and an eastern part, governed by Caesar Galerius under Diocletian himself. This system worked as such from 293 to 306 CE –when Diocletian abdicated, and disintegrated in 310 CE when the Caesars were proclaimed Augustus. From this point onwards, until 324 CE, the struggle for power between the leaders of the Roman Empire among the rising power of the Christians, dissolved the Tetrarchy as such completely, but it established the foundations of the binary system that Constantine I created after he was appointed as the only Augustus for the entire Empire (Corcoran 1996: 1–9). At this point, Rome was not exactly the seat of the government and emperors move from one place to another; this had impacts in the decentralization of power but also “fostered imperial building and stimulated urban development” in settlements where emperors resided (Cameron 1993: 43). These settlements had urban features to meet imperial demands, and the trend was started by Diocletian who built his palace in Split, with a hippodrome. This style was followed by Constantine I, who apart from starting a church building program in the places he visited, transformed the city of Byzantium into Constantinople (Cameron 1993: 43), which became figuratively a copy of Rome –the New Rome– but by the end of the 4th century CE, became *de facto* a true Imperial capital (Cameron 1993: 63). In a sense, what happened after the reign of Diocletian, resembles what happened after Mentuhotep II, at the beginning of [AE.MK], where the reunification of Egypt also might have involved the creation of new *capitals*, that is, settlements to supply the needs of the mobile court (see Group 1). As for Constantinople, the amount of resources that needed to be built up to meet Constantine demands (Cameron 1993: 63), ended up in changing the flux of Egypt’s annual grain delivery to Rome to the New Rome (Papaconstantinou 2012: 198).

It is not a coincidence then, that Constantine I, son of Maximian, a military member of Diocletian and Galerius, and proclaimed Augustus by his father’s

troops, continued, consolidated and improved Diocletian's administrative reforms; witnessing the pros and cons of Diocletian's arrangements, he removed, for instance, the military functions of the praetorian prefects (Cameron 1993: 47–53).

The power of the Christian polities and their relationships with the Empire was shown with the Edict of Milan in 313 CE (Ehler and Morrall 1988: 4–6). At this point it was evident that the decentralisation of power from Rome to the East provinces, gave political presence to cities such Antioch, Jerusalem and Byzantium. The appearance of monastic settlements changed the urban landscape in the Nile Delta, specifically in isolated areas, either on the outskirts of cities or far from them,

“[...] but most, including the most eminent ones, are scattered throughout the desert like a heavenly army girded for battle and on alert in the military tents, always ready to heed the call of their king. Fighting with the weapons of prayer and protected from the enemy's onslaughts by the shield of faith” (Rufinus of Aquileia 2019: 62, (Prologue,11)).

And so, despite the political struggles after the 4th century CE all over the empire, the development of the Christian faith attracted the attention of the Roman Empire (Bagnall 2007: 2–3). According to the *History of the Christian Church* by Philip Schaff, the 4th, 5th, and 6th centuries can be summarised and divided as follows (1997a: 11): 1) The Constantinian and Athanasian, or Nicene and Trinitarian age (311 to 381 CE); 2) the post Nicene, or Christological and Augustinian age, defined by theological controversies (381 to 451 CE); 3) the age of Leo the Great, which marks the papal supremacy in the West (440 to 476 CE) until the fall of the western side of the Roman Empire; 4) the Justinian age, which Scharff considers to have been the supremacy and rise of the Byzantine “state-church despotism” followed by its decline (527 to 590 CE), and; 5) the Gregorian age, considered to be the final transition from a Graeco-Roman (pagan?) world to medieval Romano-Christianity (590 to 604 CE).

The cities seem, according to Bagnall, up until the Justinian age, the main foci of production and trade in Egypt, but it is certain that small villages, farmstead units (epoikion) and peripheral units (e.g. monastic settlements), not only transformed the landscape of Egypt, but also the social and economic relationships with the Empire.

1.2.2 Reference

Table 2. Group 2

<i>Culture</i>	<i>Term</i>	<i>Etymology</i>	<i>Type</i>	<i>Concept1</i>	<i>Concept2</i>	<i>Similitudes</i>	<i>Remarks</i>
<i>Persian</i>	Kura	probably Qaria or from Choria?	Urban	District, rural district	A city, a town, a tract of country		Risāle-i Mi'māriyye (1987) Ca'fer Efendi, Brill Archive, 126 páginas ---- F. Steingass, 2018, Persian-English Dictionary: Including Arabic Words and Phrases in Persian Literature, Routledge, - 1548 páginas
<i>Persian</i>	khavza					Nome	Risāle-i Mi'māriyye (1987) Ca'fer Efendi, Brill Archive, 126 páginas
<i>Persian</i>	ulka		Area	Dominion, province			F. Steingass, 2018, Persian-English Dictionary: Including Arabic Words and Phrases in Persian Literature, Routledge, - 1548 páginas
<i>Persian</i>	Oshtana		Area	Province	Political division	Nome	
<i>Persian</i>	Shahr Oshtana	from Shahr and oshtana, lit. the political division of a city (main town)	Area	Sub Province	Political division		It is a modern concept but still interesting for its relationship with shahr
<i>Persian</i>	“shah” (šāh)	From prince, shah (ver F. Steingass, 2018)	Urban	Settlement	City / Town	Polis	Risāle-i Mi'māriyye (1987) Ca'fer Efendi, Brill Archive, 126 páginas ---- F. Steingass, 2018, Persian-English Dictionary: Including Arabic Words and Phrases in Persian Literature, Routledge, - 1548 páginas
<i>Persian</i>	Xšāyaθiya dahyūnām vispazanānām	king of the countries containing all races or king of the peoples of every origin					Josef Wiesehöfer 2001 (pp. 29). Kingship is rooted in Persia, specially in Persis, and has to be part of the Achaemenes family (Haxamanis). The king was not worshipped as a god nor a attributed divine origin, but the implicit relationship with the gods gave give legitimacy.
<i>Persian</i>	šāhanšāh, sahan sah, shahansa	king of kings, prince of princes	Area	Empire			
<i>Persian</i>	deh						

<i>Persian</i>	Shasa, (xšaça-, “realm, province”)							
<i>Persian</i>	phrouroi	garrison	Urban	Settlement	building			Josef Wiesehöfer 2001, "supplied (from local resources) by the satrap and had a commanding officer appointed by the king" (pp. 62)
<i>Persian</i>	frataraka	superintendent	Area	Province governor				Josef Wiesehöfer 2001, this term applies to Egypt.
<i>Persian</i>	dahyu	country	Country	Country	Region / Province	Nation		Josef Wiesehöfer 2001, "countries and people", or only "the people"
<i>Persian</i>	shahristan		Urban	Settlement	Large fortified city			F. Steingass, 2018, Persian-English Dictionary: Including Arabic Words and Phrases in Persian Literature, Routledge, - 1548 páginas
<i>Ptolemies</i>	Nome	From Ancient Greek νομός (nomós), from νέμειν (némein, “to divide”).	Area	Polity	Administrative division	sepat		Geographical Area. Regions defined by attributes characteristic of the Greek territory where the “island” and the landforms played an important role in defining the conception of space. Each island was defined by itself as an island and as a nome, and also each valley, basin or mountain range that defined a specific natural division for which the city-state founded in this area ruled over that specific territory.
<i>Ptolemies</i>	-polis	From Ancient Greek πόλις (pólis, “city”). Suffix used to form the name of a town. From Proto-Indo-European *tpolH-, o-grade form of *tpelH- (“fortification”). Crocodilopolis. Not to be confused with Polis, a political unit, a country, a city-state, a community				<i>niw.t</i> and <i>dmi</i>		During the annual flood, settlements in Egypt looked like islands, and after all, the desert was not habitable. These settlements/islands, were not differentiated by functions nor they were self-sufficient like the Greek city-state (poleis). The main transformation between the Dmi/Niw.t → -polis is that of the concept of the Greek Poleis, where each “main” settlement, became de facto a city-state. However, it is possible that the areas dedicated historically to funerary, administrative, religious or memorial complexes were reduced drastically due to the constriction of space.

<i>Ptolemies</i>	Khôra				(persian kura?)	
<i>Ptolemies</i>	-oikos					
<i>Romans</i>	nome	Area	Polity	Province	nome, even though the name was preserved, probably for administrative purposes, the Imperial simile would be the municipium or probably the regiones.	The new super territorial state beyond the limits of the Egyptian State, unknown either for Greek and Egyptians. The Imperial State. A blow to the grecoegyptian model, because of the transformation-relationship of the nome/sepat; -polis/niw.t, which was almost organic. The city-state, relatively independent of everything, allowed the prevalence of the Egyptian State as long as each nome was self-governed following the rules of the territorial state. Therefore, Egypt was “independent” from Greece, and each nome, relatively independent from each other. And as long as the tributary flux was preserved there was no problem. But, a different state, the Imperial state, almost intangible, superceded the functions of both the city-state and the territorial state; both forms became an appendix of a larger state, which in turn was careless about internal divisions or town functions such as sepat/nome or niwt/-polis; concerned only about the successful and effective transfer of tribute to the Empire, to reproduce and maintain the Imperial state. The regions as well as the main towns or capitals of each region, lost historical importance. The prevalence, heyday, vitality, or importance of a region or town was related directly to the way it was linked to the influx of tribute to the Empire. One town or region, could compete with another to earn the Empire's grace by producing goods of Imperial interest, and eventually they could make a profit of it and gain economic, social and political wealth and power. Apart from Rome, the nome capitals disappear as such, but became the main nodes in the redistributory process.
<i>Romans</i>	urbs, cita	Enclosed area for taking auspices	Urban	Settlement	City	-polis It was proposed that this word was connected to “enclosure” and was linked to orbis “circle”, but this was dismissed in 2001; “enclosed area for taking auspices’ (p.

50) [in Driessen 2001], which gradually came to indicate the inhabited settlement when this extended more and more across the original templum” (Vaas 2011: 643)

Romans	Civis; civitas	Citizen; an organized community, state	Urban	Polity	Citizen/City, State, city-state	Polis (see -polis)	“Vine 2006b assumes a PIE /-stem abstract noun 'society' derived from the adj. *kei-uo- 'socially close' continued in other IE languages. This would also explain why the derivatives <i>civicus</i> , <i>cfvilis</i> mean 'pertaining to society/the civic order' rather than 'pertaining to a citizen5.’” (Vaas 2011: 116)
Romans	Municipium	From <i>munus</i> , <i>muneris</i> , “task, function, duty”	Urban / Area	Polity / Administrative area	City/Town	Polis (see -polis) / nome	This is similar to a polis as a political entity rather than as a urban settlement. Therefore, more similar to a nome, but with more political independence.
Romans	oppidum	Fortified town, barriers	Urban	Settlement	Town	-polis	This might be a big urban settlement, with walls or fortified but very likely not a capital of a municipium / nome; Fort; Hillfort (but see Almagro-Gorbea 1995); The oppidum could have been the antecedent of the castrum
Romans	vicus	Block of houses, village, small settlement	Urban	Settlement	Village		From <i>ueik</i> , <i>ueicus</i> , “settlement”, “The noun <i>villa</i> < *weik-sla- was probably derived from the verb *ueik- 'to settle' or from the root noun; from <i>villa</i> was then derived <i>villicus</i> , with simplification of the geminate -ll-.” (Vaas 2011: 675)
Romans	Castrum	Fortified post or settlement	Urban	Settlement	Town / Village		From this word it is derived <i>castellum</i> or <i>qasr</i> (قصر), and it might be the evolution of the oppidum. The word <i>castrum</i> it might be related to the word <i>castrare</i> , from <i>kastro</i> , or <i>kers</i> , “to cut”, meaning, “cut-off part”, in the sense of an area cut-off from other areas, therefore, with a fence or wall. (Vaas 2011: 97–98) This word is mostly used for military camps, evolved to refer to castles and also, in some languages to refer to military activities (e.g. Spanish, “castrense”).

1.2.3 Urban Features

Egypt opened up to the world, as Winnicki suggested (2009: 4), during [AE.NK]. With the Egyptian expansion not only were the Egyptians exploring the world outside its borders, but also the world could 'see' inside Egypt. When referring to contacts between Egypt and Greece, it is usually the 7th century BCE that is the the period when these close contacts were established (see Pfeiffer 2010). Nevertheless, to understand the process of the acceptance of Greek rule over Egypt and the creation of a new autochtonomy and even the subsequent Roman expansion over the country of the Nile it is important to understand, at least basically, how these two cultures started to engage and relate.

The political and economic landscape of Northern Egypt started to change with the Hyksos. The Hurrian kingdom of Mitanni "became Egypt's natural adversary in the struggle for control over northern Syria." (Winnicki 2009: 11-12). The Hittites, however, had more control over this area than the southern and Nilotic Egyptians for which it was perhaps an important buffer zone against intrusions from segregated polities left split or disunited after the Hyksos, along the Levant; also the control of this area was important for trading further east with Assyria. The Hittites took over the Hurrian kingdom between the 15th and 14th centuries BCE. These social and political movements, without doubts, turned on some alerts in the Anatolian peninsula as well. Egyptian kings such as Thutmose III or Amenhotep IV did not keep the autonomy in the region and instead ruled directly over it, where they found allies against nomadic tribes from the east, the Apiru, while the Syrian kings found a way to fight back the Hittite Suppiluliuma. The Egyptians, trying to expand, fortify or secure this territory once and for all, were fighting and subduing Syrian kings, but they were also acquiring new enemies and attracting attention from other kingdoms much more powerful than those they fought most of [AE.NK]. In fact, Ramses II agreed to a peace treaty with the Hittite king, Hattusilis, rather than trying to subdue him (Winnicki 2009: 14-26), inasmuch as both kingdoms were unable to crush each other for good. This peace treaty –which led to a friendly relationship with the Hittites, the Ugarit and

the Amurru (Winnicki 2009: 23)— might be, later on, the basis of protection and collaboration between Lydia, Babylonia and Egypt against the Medans.

Meanwhile, Egypt was protecting, as usual, its western borders, continuously menaced by nomadic tribes such as the *Tḥnw* (Tjehenu) [AE.OK] or the *Tmḥ.w* [AE.MK]. The west seems to be not really a problem despite some state campaigns, whenever the raids of the tribes exceeded tolerable limits, such as Seti I's expedition against the Meshwesh (Mšwš) documented in Karnak (Winnicki 2009: 28). Still, the Meshwesh were a threat and Rameses II built fortresses against them (see Snape 2014: 220–221), and Merenptah fought them at the same time the Sea Peoples⁷ came to Egypt. The Meshwesh, came with the Libyans [Libu] (*Rbw*) or the Kehek (*Khk*), and many other allies (Winnicki 2009: 29). The Libu and the Meshwesh are of particular interest because it is highly likely that they are the first, yet indirect, link between Egypt and Greece via Cyrene, founded ca. 637 BCE (Jeffery 1961).

It has been pointed out that colonisation was inherent to Greek people, people whose membership is associated to Hellas (Hansen 2006: 33–34). Colonisation was very important for Greek people and nowadays it is considered that poleis arose as a result of colonisation (Freeman 2014: 150; Hansen 2006: 44). According to Herodotus, the king of Thera went to Delphi looking for answers – related perhaps to resource management— and the oracle suggested that he establish a new colony in Libya; a place that Grinnus did not even know (Herodotus 1920: IV.150–152; Hughes 2014:164). Interestingly, the oracle's suggestion was not followed and it was not until the environmental situation in Thera was disastrous that the Therans tried to fulfil a renewed oracle's suggestion that a colonisation quest started. They looked for help in Crete, the Egyptian Keftiu, known to Egypt since at least [AE.MK] (Kemp 1983: 148; Winnicki 2009: 46).

⁷ People “from the sea” (*n p' jm*): Tjeker, Danun, Ekweh, Luka, Pelest, Sherden, Shekelesh, Tursh and Weshesh (Winnicki 2009: 79).

And so, they found Cretan people who had travelled to Libya. The Therans spent some years trying to colonise some places in Libya with bad results, until the oracle told them that they needed to go inland where there were pastures “thine eyes have never beheld them” (Herodotus 1920:IV.157). The Therans managed to settle inland and founded Cyrene after some agreements with the local population (Herodotus 1920:IV.158). This was done with difficulties. For Therans, there was an issue regarding which people could acquire citizenship in Cyrene among Greeks (the Hella domain), where it involved people from Sparta (the metropolis, the mother city), people from Crete (traditionally colonists from Sparta) or people from Thera itself; but eventually, they needed to manage frictions with the Libyan themselves, with whom they got into war (Freeman 2014: 150–151; Jeffery 1961: 142–143).

Cyrene, as one might expect, threatened the Libyan territory. The Libyans, through Adikran, sought Egyptian help and Apries responded sending troops to fight Cyrene (ca. 570 BCE). Herodotus is quite clear: “Cyrenaeans marched out to the place Irasa and the spring Thestes, and there battled with the Egyptians and overcame them; for the Egyptians had as yet no knowledge of Greeks, and despised their enemy [...]” (Herodotus 1920:IV.159). This statement might be misleading if we consider Psammetichus I (664–610 BCE) efforts to promote trade with the Phoenicians and Greeks, and military alliances with Carian and Ionian mercenaries according to Diodorus Siculus (Diodorus Siculus 2017:I.66). In this respect, Herodotus seems to contradict himself because he mentions that Carians and Ionians were the first men of alien speech to settle in Egypt. I am inclined to think that Herodotus did not consider the Carians or the Ionians, as Greeks:⁸

“It comes of our intercourse with these settlers [Carians and Ionians] in Egypt (who were the first men of alien speech to settle in the country) that *we Greeks* have exact knowledge of the history of Egypt from the reign of Psammetichus onwards” (Herodotus 1920:II.154) - A. D. Godley

⁸ Italics and underline mine. These translations are shown just to show the differences among them.

“and they [Carians and Ionians] being settled in Egypt, we who are Hellenes know by intercourse with them the certainty of all that which happened in Egypt beginning from king Psammetichos and afterwards; *for these were the first men of foreign tongue who settled in Egypt*” (Herodotus 1890:II.154) – G. C. Macaulay

“*They were the first foreigners to live in Egypt* [Carians and Ionians], and it is thanks to their residence there that we Greeks have had some connection with the country, and that is how we have reliable information about Egyptian history from the reign of Psammetichus onwards.” (Herodotus 2008:II.154) – Robin Waterfield

“Desde el tiempo en que dichas tropas se domiciliaron en Egipto [Carians and Ionians], por medio de su trato y comunicación, nosotros los Griegos sabemos con exactitud y puntualidad la historia del país, contando desde Psamético y siguiendo los sucesos posteriores a su reinado. Los Jonios ó Carios fueron los primeros colonos de extranjero idioma que en Egipto se establecieron” (Herodotus 1898:II.154) – Father Bartolomé Pou

“Y a raíz de su establecimiento en Egipto [Carians and Ionians], nosotros los griegos, merced a las relaciones que mantenemos con ellos, sabemos con precisión todo lo que, a partir del reinado de Psamético, ha sucedido en Egipto, pues *ellos fueron los primeros contingentes de extranjeros cuyo establecimiento fue admitido en Egipto*” (Herodotus 1977:II.154) – Carlos Schrader

“Grazie al fatto che costoro si stabilirono in Egitto [Carians and Ionians], noi Greci, mantenendo dei contatti con loro, siamo in grado di conoscere con esattezza tutto ciò che è accaduto in Egitto a partire del regno de Psammetico in poi; *in effetti essi furono i primi uomini di lingua straniera a stabilirsi in Egitto.*” (Herodotus 1996:II.154) – Fiorenza Bevilacqua & Aristide Colonna

Even if both Herodotus and Diodorus are wrong, we can observe that Herodotus always refer to Ionians and Carians as different from Hellas and even speaking a different language (e.g. Book I, 92 or 171). So, it is very likely that Herodotus or Diodorus had a different concept of what Hellas was or simply, perhaps, Hellas grew due to colonisation (see Hansen 2006: Ch. 4). In fact, it is possible that Carians and Ionians were subdued by Greek colonisers just as the Libyans from Cyrene were subdued.

Whatever is the case, due to this defeat, a civil war arose in Egypt and Apries was deposed while Amasis took over the country (Lloyd 1983: 343–344, 2003: 367;

Winnicki 2009: 116). The following events mark the beginning of a strong relationship and collaboration, politically and economically, between Greeks, Libyans and Egyptians that involved a reconceptualization of politics and urbanization.

The fragility of a recently unified country was evidenced over and over. Foreign pressure due to Greek colonisation tradition or Libyan power, including the *machimoi* power; foreign pressure from the east from powerful kingdoms (e.g. Chaldean kingdom under Nebuchadrezzar II), and a myriad of alliances with foreign powers to defeat even more powerful enemies are common examples (Lloyd 1983: 285; Winnicki 2009: 116). The events at Cyrenaica are not isolated, but it is indeed remarkable that Herodotus explicitly said that Cyreneans were the first Greeks that the Egyptians came to know. This raises the question: to what extent the Milesians (Ionian and Carian people) were considered as Greek people by Herodotus—granted that Naukratis was indeed founded during the reign of Psammetichus I? If we consider them as the Greek colonisers, they are found within the core of the Nile Delta in Naukratis, Kom Firin, Sais, Athribis, Bubastis, Mendes, Tell el-Mashkuta, Daphnai or Magdolos at least 50 years before Apries' defeat (Pfeiffer 2010: 15). On the other hand, Jan Willem Drijvers (1999: 18) has pointed out that Strabo's Milesian foundation of Naukratis might be wrong as somehow Strabo "muddled up the story" and could have confounded an Inaros' revolt against the Persians that took place in 465 BCE, and that the almost mythical foundation of Naukratis by Milesians is later.

If we follow Stefan Pfeiffer (2010: 18), it is very likely that a group of Milesians settled in or around the Bolbitinic mouth were requested by Amasis to fight against Apries near Momenphis (Kom el Hisn - 24). Apries, recently defeated by Cyreneans, according to Herodotus, had an army of Carian and Ionian mercenaries (the Milesians). Nevertheless, if we consider that Apries failed as king of Egypt (Herodotus 1920:II.161-162), and Amasis the one who took control of the country after him; it is possible that Amasis made a better offer to the Milesians to support him against Apries (How and Wells 1989). It is probable that Milesians

stationed in the coast of Egypt were in fact waiting for someone to dictate their terms and sell themselves to the better bidder. The political agreement between Milesians and Egyptians under Amasis took effect and he made them his “bodyguards” and in turn, they would be able to establish an emporium next to Sais, the capital of the country. Being Greek or having at least Greek customs, probably was decisive for Amasis to hire them to fight Cyreneans, in as much as Cyreneans and Libyans might be seen as potential threats. He supported both groups, the Libyans and the Cyreneans in a kind of peace treaty, and the Cyreneans were integrated to the Egyptian domain similarly to the Libyans when Amasis married princess Ladike (Lloyd 1983: 343–345; Vasunia 2001: 23–26; Winnicki 2009: 116, 408 & 453).

In any case, the Greek settlers reached Egypt and they arrived in time to serve the king’s pacification strategy against foreign forces and just as the Libyans, they became allies, friends and kings as well, once they acquired power within this turbulent [AE.LP] society, continuously threatened by expanding polities.

The Ptolemies were Macedonians, heirs of a cultural Greek tradition, part of Hellas domain. As explained in Section 2 (Volume 1), culture here is treated as an academic prop to encompass people with similar traditions, history or language. In a sense, Hellas was the Ancient abstraction of the Hellenic world (Hansen 2006: 33), and this world is what I call the Greek culture.

Ptolemies then, were Macedonians living in Egypt with Greek customs. For instance, the Greek tradition to protect trees is reflected in the Ptolemaic nation-wide planting projects taken in Egypt (Hughes 2014: 85). But similarities among different cultures are also important and they could explain processes of acculturation where new autochthonomies are created. For instance, in a world like [AE] where long distance communication was done primarily by water (Kemp and O’Connor 1974: 101–102) perhaps Macedonians found in Egypt a land that, despite the differences with the Aegean islands, still presented a fair resemblance to the Axios river and its Delta (see Strabo 1903: VII, Fragments 10–24) or even the

Aegean islands when the Nile flooded (see Braudel 2002: 260–262; Herodotus 1920: II.97). But even two cultures that share traditions can be very different, for instance, Romans and Greeks. To what extent the differences are reconcilable is hard to tell, but Strabo made an excellent point on the difference between Romans (Ῥωμαῖοι) and Greeks (Ἑλλήνων) and the way they built-up a city (πόλις) in the country (χώρος):

These advantages accrued to the city from the nature of the country; but the foresight of the Romans added others besides. The Grecian cities are thought to have flourished mainly on account of the felicitous choice made by their founders, in regard to the beauty and strength of their sites, their proximity to some port, and the fineness of the country. But the Roman prudence was more particularly employed on matters which had received but little attention from the Greeks, such as paving their roads, constructing aqueducts, and sewers, to convey the sewage of the city into the Tiber. In fact, they have paved the roads, cut through hills, and filled up valleys, so that the merchandise may be conveyed by carriage from the ports. (Strabo 1903:V.3.8)

As we can see, the landscape seems to impose some limitations and advantages; still, to do one thing or another is a question of choice. According to Hughes (2014: 180), the Greeks improved the way they built roads following the Persians' standards and, without replacing the donkey as a pack-animal (Kemp and O'Connor 1974: 101), they used camels as an alternative to the river routes (but see Adams 2007: 49–52; and especially Paprocki 2019: 66–71). Nevertheless, the Nile would have also impacted Ptolemaic policy outside Egypt. As suggested by Andrew Meadows (2013), Ptolemy Philadelphus, perhaps because of his Greek roots but already a Ptolemaic Egyptian, founded a festival called *Ptolemaieia* in honour of his father, around ca. 279/278 BCE. Arsinoe, his sister-wife —equated to Aphrodite—, was deified as a goddess for safety on the sea. For this purpose, Philadelphus requested the participation of Aegean islanders, creating in practice the Nesiotic League, a failed attempt to expand Ptolemaic dominion over the motherland. In this sense, the Pharos is not only one of the seven marvels, but perhaps a symbol of union between the Aegean and the Nile Delta (see Zamora Calvo 2017).

It was also, after or around [PE.FA], that coinage was introduced to Egypt with coins brought from Greece and Lydia. Coins were probably first used as a way to pay tribute to the Persians, interchanging grain per tetradrachm which meet the Aryandic silver standards, (see Colburn 2020: Ch. 6). Later on, during the Ptolemaic period, and even during [PE.LD, SA] coins were an intrinsic element of the administrative Egyptian system, although, I agree with Henry P. Colburn, that this was not a conscious and active Persian attempt to achieve (Colburn 2020: 244). After all, the link between Greeks and Egyptians was already established since [AE.LP] and Greeks were not particularly fond of Persians, as is attested by Herodotus. What is interesting is that Egypt and Greece supported each other to alleviate the Persian yoke.

Politically, things were adapted or adopted too. According to Aristotle, when Alexander became King of Egypt, kingship survived only in Sparta, among the Molossians, and in Macedonia (Aristotle 1944:V; Droysen 2012:53). Philip, Alexander's father, did not encourage democracy among the members of the Corinthian League; however, while Alexander created some democracies in Anatolia to gain allies against Persians, but at the same time acted as an absolute king and not the *hegemon* of the league (Bosworth 1993: 192–193). This is important to note to explain the fusion and ease of power transference from [PE] to [GR]. This could explain why the Ptolemies not only preserved kingship in Egypt but perpetuated it.

After 27 BCE, however, the political entity that constituted “Egypt”, the unified land, became two Roman provinces (Aegyptus and Thebaid). The city-state ideology and institutions were not unknown to Ptolemaic Egypt, but apart from the official city-state settlements, there no other *poleis* in Egypt. After the Romans, however, the *nomes* and their capitals, started to be treated as *poleis*, even though they were not granted this title officially (Bowman and Rathbone 1992: 108) it has been suggested that the Romans and not the Macedonians introduced some of the features of the Greek *poleis* (Bowman 1996: 37). Already during [AE.LP] the *sepaut* lost partially their apparent tribalistic/religious role (see

Jones 1971: 295); and became, by the end of the Ptolemaic period administrative divisions of a territory that functioned in practice like a Greek league of poleis or, more likely like a *chora* or *ge* (hinterland; country; countryside) where each nome capital became in practice an *apoikiai* (colonies), with Alexandria acting like a leader, became the mother city, the *metropolis* (mother-city) (see Hansen 2006: 34–36; Snape 2014: 124–128). I consider this important because the divisions of the country started to change from the sepat to the nome, not only as a mere name change, but as a political construct, defined and administered following Greek ways, albeit some adaptations (Bowman and Rathbone 1992: 108–109).

In my opinion, political reorganization is inevitable whenever a different political culture overruns the one that is conquered, while it tries to maintain political cohesion by retaining the general structure. In the case of the Ptolemies this is palpable because they retained as administrative centres the capitals of each sepat but changed the name of the sepat to the name of the capital, that is, the *nomes* were named after the *metropoleis* (Bowman and Rathbone 1992: 109). And, with the obvious shift of the country capital to Alexandria, there is no reason to suppose that the way taxes were transferred changed for political reasons, at least in the beginning of [GR.HE]. In the end, the communication among the capitals and from each capital to its *nome* domain would have been the most important thing to consider. During this process, from [GR.HE] to [GR.RO], the *nomes* were subdivided into smaller administrative units called *toparchies*, and these *toparchies* into *komarchies*. These subdivisions, might have been created to have a better control of the country and facilitate the collection of taxes; the local rulers were transformed into minor bureaucrats called *strategus*, which regardless its military background became civil officials (Jones 1971: 297; Bowman 1996: 58–59; Manning 2003: 52, 2009: 127).

Alexandria and Ptolemais had since their foundation a Greek-style system of organization (Bowman and Rathbone 1992). The expansion of the Hellas domain

involved a confrontation with their own thought and “the native culture of these colonized regions, which remained foreign to it” (Braudel 2002: 303).

Egyptians were trying to expel the powerful and undefeatable Persians when Alexander appeared on the Egyptian scene as liberator, and in an almost inexplicable loss (Braudel 2002: 280–283; Briant 2002: 867–871) the Achaemenid Persians fled from Egypt. Technically, the Macedonians under Alexander freed Egypt from Persian rule and, by doing this, the Macedonians took over Egypt almost as an indirect (yet, highly valuable) spoil of war for they did not fight against Egypt (Bosworth 1993: 234). Through a “Panhellenic” revenge against Persia for the sacking of Athens, an empowered Alexander, crowned as *hegemon* of the Corinthian League (Worthington 2004), became Pharaoh.

According to Arrian (1929: III.5) and Bosworth (1993: 234), Egypt was reunited again in two lands (although, not necessarily Lower and Upper Egypt) and for that, Alexander assigned two governors (ἄρχειν): Doloaspis and Petisis, the second, however, declined the office and as Arrian said, “Doloaspis took it all over” (Arrian 1929:III.5). For Libya, Alexander assigned Apollonios son of Khalkides and for Arabia, Cleomenes from Naukratis; Egypt or Aegyptus, or at least the Nile Delta, as we know it now, considered Libya (the land to West of the Canopic branch), Egypt (the land between the Canopic and the Pelusiac) and Arabia (the land to the East of the Pelusiac branch). According to the description of Egypt given by Herodotus or Strabo, the territory from the Canopic branch to the west was Libya, and from the Pelusiac to the east, Arabia, and Egypt proper, at least for the Ionians, was only the *big island* in between the two main branches after Cercasorus⁹ (Herodotus 1920:II.19; Strabo 1903:XVII.4). As for the Nile Valley, Herodotus called it the Theban Egypt (Θῆβαι Αἴγυπτος). Hence, for Greeks, Egypt was constituted by four parts: Libya, Egypt (Delta), Arabia and Thebes, and

⁹ Batn al-Baqar in Evliya Çelebi’s map (2018), *Ventre de la Vache* in CA (see Section 1.3 in Volume 1), near the modern Delta Barrages, in the intersection of the governorates of Kalyoubia, Menoufia and Giza.

Herodotus concludes that Egypt as a whole is “all that country which is inhabited by Egyptians” (Herodotus 1920:II.16), certainly reminding us of Castells’ definition of a city (see Section 3.2, in Volume 1).

It is interesting that Alexander gave Cleomenes a specific instruction to let the “district governors (νομάρχας) govern their own districts (νομῶν) as had been then way all along”, and to collect all the tribute himself (Arrian 1929:III.5). It would be hard to tell if by nomarchs he meant governors of the *sepaut* or it is more closely related to Greek law as described by Modrzejewski (1966). Whatever is the case, it seems that Cleomenes took over Egypt while Alexander went after Darius and acting, perhaps on Alexander’s behalf but without a title, as *de facto* satrap of Egypt controlling Egypt’s tribute (Bosworth 1993: 234–235, 242).

It is not clear, as well, whether Cleomenes was in charge of the whole country or just Arabia, but certainly was Arabia and not Libya or Egypt the most important region to control for it was the gate to the core of the Achaemenid Empire and therefore Cleomenes could have had a small, yet powerful army to command. Cleomenes is known as an over-empowered and wealthy ruler that was, in fact, instructed to supervise the construction of Alexandria (Bosworth 1993: 234). Nevertheless, as suggested by Badian, he acted as a quasi-satrap and his assignment as such would have been after Alexander returned from India and recognised his proficiency and loyalty (2012a: 141). The story of Cleomenes and Alexander’s policy in Egypt takes us to a different world. Arrian introduces us to what the Romans will do later in terms of administration. Apparently, Alexander was not happy with a single governor governing Egypt and he divided the government among many officers; and Arrian adds: “The Romans, too, I think, learnt a lesson from Alexander and keep Egypt under guard, and never send anyone from the Senate [βουλευς] as proconsul [ὑπαρχος] of Egypt, but only those who are enrolled among them as Knights [ἰππεύς]” (Arrian 1929: III.5).

It might be that through the eyes of some Egyptians, Macedonians were Greeks coming from the Hellas domain, already allies, friends and traders living

among Egyptians. Through the eyes of other Greeks, such as Apollonides of Chios in Upper Egypt (Winnicki 2009: 140) or Memnon of Rhodes, Persian mercenaries, Alexander's rule might have been a burden (Briant 2002: 1035–1037).¹⁰ Whatever is the case, the following years after Alexander's conquest of Egypt were years of continuation –albeit for a short period– of the Achaemenid rule; and this ultimately was an issue for it was what Egyptians wanted to avoid. Cleomenes was loyal to Alexander and efficient collecting taxes, but he could also have been “flagrantly oppressive” (Badian 2012c: 61).

What happened next, could have defined Egypt for the next centuries. The Macedonian conquerors needed to decide whether to keep acting as the previous unwanted *ethno-classe dominante* (see Briant 2017: 169–201) or adapting their own Greek system to the native customs (see Modrzejewski 1966). Eventually, the latter was chosen not without difficulties after Alexander's death; the satrapy was abolished and Ptolemy I Soter declared himself king of Egypt in 305 BCE founding the Ptolemaic Dynasty (Bowman 1996: 22; Freeman 2014: 329; Jones 1971: 298–297) and he moved the country's capital from Memphis to Alexandria, which also changed the settlement pattern in the Nile Delta (Pfeiffer 2010: 20–21), reconfiguring the hydrology of the Western Delta (see Section 6.3 in Volume 1).

The country was governed by a powerful Ptolemaic king, but a strict hierarchical administrative system was implemented with Greek as an official language (Katary 2012: 16). This system was constituted as a “moderate oligarchy”, as referred by Hansen, and it was based on Greek *poleis* (2006: 113). With the change of language, *sepat* started to be called *nomos* (nome), and with the adaptation of the system, each *nomos* was in practice, although not legally, a Greek polis (as a state, not as a “city”). This, however, is a question of debate for it has been pointed out that nome capitals “had no political autonomy” until 200 CE (Monson 2012: 11). Most nomes had the following structure within the *metropoleis*,

¹⁰ Even the “Greekness” of the Macedonians might be questioned. See Badian (2012b).

the capital of each nome: An Assembly (*ekklesia*), a Council (*boule*), a Senate (*gerousia*), courts (*dikasteria*) and magistrates (*archai*) (Bowman and Rathbone 1992: 108–109; Hansen 2006: 113). Below the king were the *strategoi*, originally military governors chosen by the Assembly to serve alongside the Egyptian ruler who was, in fact, a perpetual *strategos* (Hansen 2006: Ídem).

After the *strategoi*, the country was administered by three relatively minor officials to govern the nomes alongside the *strategoi*. From top to bottom: a) *nomarchs*. They did not necessarily have jurisdiction all over a whole nome, had little significance in the bureaucratic structure. The area where the nomarchs operated was called nomarchy, however, the nomarchy does not necessarily correspond to the administrative or geographical districts (e.g. old *sepaut* areas) (Samuel 1966); b) *toparchs*. A major figure in land management and occasionally as important as nomarchs. Their jurisdiction areas were called toparchies but were as flexible as the *nomarchies* (Jones 1971: 297; Samuel 1966: 228) and; c) *komarchs*. Officials appointed to small settlements, made for pre-existing and permanent administrative units (Samuel 1966: 228). According to Alan E. Samuel, during the 3rd century BCE, the assignation of officials would have been fluid due to lack of personnel, and “territories to be administered would be assigned as dictated by exigencies of the moment as the time of an appointment” (1966: 228). Each nome could have worked as a polis, or at least probably that was the objective, however, in practice Egypt was Alexandria’s *chora* (territory/hinterland/country), and only three other true (or truer), legally established Greek poleis existed: Naukratis (originally a trading post, *emporium*), Paraetonium (in Libya), and Ptolemais which was the only one with Ptolemaic origin (Jones 1971: 302,307). Outside these true Greek cities, Egyptians continued living according to their own laws and customs, while foreigners and other Greeks, develop new common ways of life (see Modrzejewski 1966: 150–151; Wolff 1966: 69 & 71; Jones 1971: 305,309; Manning 2003: 143; Monson 2012: 3).

In general, it seems that a dual legal tradition coexisted in Egypt for some of the Ptolemaic period: One for the Greeks, *dikasteria*, with Greeks and military settler judges, and one for the Egyptians, *laocritae*, composed by Egyptian priests called by their god name depending on the temple they serve or where they were based (Peremans 1982; Wolff 1966). As for the foreigners, their issues were addressed by a court of Greeks and Macedonians, possibly the *dikasteria*, and perhaps just as intermediaries trying to follow their own customs (Peremans 1982: 153–154). There was, however, another court, the *koinodikion*, which might be used when interethnic issues arose. At some point during the 2nd century BCE, the *dikasteria* and *koinodikion* disappeared but their roles were assumed by the main court of justice during the Ptolemaic period: the *chrematistes* (Modrzejewski 1966: 159; Peremans 1982: 158; Wolff 1966: 72).

Starting with the Augustan period, according to Bowman and Rathbone (1992), the process of Roman municipalization started immediately with the creation of “Hellenic landowning élites” governing the Egyptian population. Augustus and the following emperors preserved the system of nomes and their capitals, but the *strategoï* were transformed into civil officials rather than military men. Despite the lack of a council (*boule*) or even a formal decree, the *metropoleis* started functioning as true Greek cities. This implementation was accompanied by the creation of an Egyptian prefecture governed by a member of the equestrian order (*praefectus Aegypti*) rather than a member of the Senate as in other Roman provinces; this prefect served the position under the emperor’s orders for periods between three to five years. Altogether ensured that Egypt provided one-third of the annual supply of grain to the city of Rome, which was secured by a permanent set of military men (Bowman and Rathbone 1992: 110; Lewis 1983: 15–16).

Egypt lost sovereignty and the city-state approach was refined, and the irrigation works renewed (Jones 1971: 315). The collection of nomes, the whole country, was integrated within four geographical areas which at some point in history were almost entirely part of the Egyptian domain, named Aegyptus,

Thebaid, Arabia and Libya. All these regions became provinces of a much larger and much more powerful polity: the Roman Empire, an “aggregate of self-governing communities” (Bowman 1996: 70). The *metropoleis* became municipalites (*municipium*), and the nome its *territorium* after Septimus Severus in ca. 201 (Bagnall 1996: 55; Law 1979: 197; Lewis 1967: 29). Geographically, the nomes did not change much, but administratively became *de facto*, city-states with a capital settlement, the metropolis, organized under Roman municipalities (Bowman 1996: 37).

The local governor, acted as an administrative officer of the Roman empire, in charge of ensuring the flow of goods from the nome to Alexandria, and from there to Rome. The real political power was based in Rome, and there were governors in Egypt, but the figure of Pharaoh or king was lost. The *praefect* was not a real nation-wide governor, but an emperor’s deputy, who in turn delegate to the *epistrategoi* the governance of each of the sub-provinces (Jones 1971: 314). These sub-provinces changed continuously, either by aggregation or division.

In 298 CE, the Thebaid started to encompass the Hermopolite nome and was considered a separate province governed by its own civil administrator (*praeses*) (Ritner 1998: 24), and then further divided into two, the Upper and the Lower Thebaid. The nome of Libya (with Ammoniacae and Marmarice) also became a separate province. The nome Mareotis, which belonged to Libya during [GR.HE] is dissolved and integrated to Aegyptus (Lallemand 1959: 65). By 315 for about 10 years, Aegyptus was divided into two provinces: Aegyptus Herculiana with a *praeses* (including Heptanomia and the eastern Delta) and Aegyptus Jovia with a *praeses* (the rest of the Delta); between 322 and 324 CE another Aegyptus appears, Mercuriana, with a *praeses* (which might be what constituted Heptanomia); in 324, these provinces were combined again into Aegyptus with a *praefectus*. In 341 CE, the province Aegyptus was separated again into two: Augustamnica with a *praeses* (eastern Delta and possibly what briefly constituted Heptanomia) and Aegyptus with a *praefectus* (the central and western Delta). (Bowman 1996: 79; Jones 1971:

336; Lallemand 1959: 69; Palme 2007). Finally, the Egyptian diocese also included Cyrenaica (Jones 1964: 718). The reorganization of Egypt made the nomes lose their traditional significance as the main administrative unit and the *pagii* substituted them as such by 308 (Ritner 1998: 23). The nomes instead, were referred to as *civitates* and the *strategus* was substituted by the *exactor civitatis* (Jones 1964: 715).

By the end of the 4th century CE, Augustamnica was divided into Augustamnica with a *corrector* and Arcadia with a *praeses*, and a *praeses* was assigned to Aegyptus. Regardless these rearrangement, the nomes –converted in self-governing communities–, compete to each other under Roman rule, based amply in Greek institutions (Bowman 1996: 68–70). All the settlements, irrespective their trade connections, were working altogether for the Roman Empire.

Septimus Severus act for municipalization, brought to most *metropoleis*, and potentially to every settlement within the nome (*territorium*) the development of the full range of Greek-poleis buildings, such as agoras, stoas or the *gymnasium* –an “appurtenance” in every Greek settlement (Sanders 1992: 437) –, some things that technically were reserved only to true polis during [GR.HE] (Bowman 2000: 183). The primary significance of the Severus act, however, was financial (Law 1979: 197). On the one hand, by delegating the responsibility of tax collection to the local property-owing class (*bouleutic*) (Lewis 1967: 29), the central government ameliorate some of its responsibilities; on the other, by relieving the central government of this responsibility and making taxation and tax collection more efficient, it increased the burden of taxation in Egypt. At some point during the 3rd century CE, even greater responsibilities were given to the *bouleutic* class and a new set of officials appeared to collect direct taxes on land, the municipal liturgists (*dekaprotoi*) (Bowman and Rathbone 1992: 127; Jones 1971: 329). These liturgists were in charge of repairing hydraulic infrastructure, supervise irrigation

and sowing, collection of money, and tax revenue in kind (e.g. grain) or *annona*, supervise building works, festivals and public facilities (Bowman 1996: 69).

Despite these changes, according to Jones (1971: 327), the full municipalization of Egypt took place a century later and, *Constitutio Antoniniana*, formally eliminated distinctions throughout the Empire, and thus, by the 4th century all “provincials thought of themselves as Romans” (Jones 1964: 17). In the core of the empire and after Severus, there was a period of conflict among the senate, the successors of Severus and the military body. This is important to note from an urban perspective, because in urban terms, the military body is, perhaps, the most revolutionary urban actor in the Egyptian domain during the Roman period and it is quite likely that after Severus the presence of Roman soldiers increased. The army played important roles in Egypt during [GR.RO], and it is quite certain that they built forts or garrisons all over the country (Aja Sánchez 2008a; Milne 2013b) in as much as they had a “standing army of three legions [...], three alae of cavalry, and nine cohorts of auxiliaries” (Bowman and Rathbone 1992: 110–111), regardless of the lack of information about them in the Nile Delta, except for one that might be found just recently at Kom el-Gir (Schiestl et al. 2018). A military man was the governor of each province, but it was also the army in charge or supervising the mines production and redistribution of taxable goods, some of which constituted the *Annona militaris*, an irregular form of tax wielded by the army (Bowman 1996: 76). Nevertheless, they “were forbidden to acquire land [...] during their period of service” (Bowman and Rathbone 1992: 111).

To sum up, the people of Egypt could govern themselves electing their own officials, as long as a big part of the produce of land, goods and some money were dedicated to the empire and the army. In practice, the autonomy was a kind of illusion in as much as Egypt “was still governed by a centralized bureaucracy and its subdivisions were still departments of the central administration” (Jones 1971: 330).

After Severus and his successors, the Roman Empire entered a period of instability that has some similarities to [AE.1P] in that at least eighteen emperors struggled to find a balance of power in the core of the empire. This Roman *intermediate* period was also framed by wars against people from the east (the Sassanids) and from the north (the Alamanni) (Cameron 1993: 30; Drinkwater 2005; Freeman 2014: 562–563). The weakening of the Empire also had consequences in Egypt to the point that by the end of the 3rd century, the emperor himself, Diocletian, was in charge of suppressing a revolt in Alexandria (Pollard 2013: 4). The *intermediate* events during the 3rd century CE in Rome, made Egypt vulnerable to foreign invasion. In 270 CE, Egypt was taken –albeit temporarily– by Queen Zenobia, from the rebellious state of Palmyra, who was effectively resisting the Sassanids. As such, Zenobia and his son Vaballathus conquered the Nile Delta, via Pelusium, all the way to Memphis and then to Alexandria (Bowman 2005: 315; Pollard 2013: 4). In Upper Egypt, Blemmye or Nobatai (Nubian) raiders threatened Thebaid cities as north as Coptos and Ptolemais (Keenan 2001: 623–624; Pollard 2013: 7; Ritner 1998: 23).

Eventually, the Romans were capable to control the province and took it back. In a sense, Diocletian did the same thing that Mentuhotep II, obviously with all historical proportions and in an Imperial scale. In Group 3, these similarities will be covered more extensively, because the reorganization of the empire by Diocletian might have involved political changes with cosmological scopes and outcomes; the Romans were facing political problems in the core of the empire, but the subtleties related to people's antagonism to the imperial system reached a point where radical changes were necessary to regain power all over the empire. In this group, however, what is important to note is the immediate urban effect on Egypt regarding the Diocletian transformations and consequently the beginning of the Prefecture of the East.

Diocletian's answer to imperial issues, was to establish a system of power-sharing known as tetrarchy (Cameron 1993: 31). Ideally, the tetrarchy involved the government of the Empire by two Augusti, assisted by two Caesari that eventually

could replace the Augusti. The two halves of the Empire, East (governed by Diocletian Augustus and Galerius Caesar) and West (governed by Maximian Augustus and Constantius Chlorus Caesar), were subdivided into thirteen dioceses governed by vicars (*vicarii*), and all the provinces along the empire were subdivided into smaller units (Ritner 1998: 23).

In Egypt, the municipalization had another impulse or, so to speak, it was crystalized. The Imperial system was transformed completely and the process of municipalization in Egypt started by Severus made the transition easier. Before Diocletian, Egypt was divided by *epistrategiae*: the Delta (Aegyptus), Heptanomia with the Arsinoite, and the Thebaid.

According to Bowman (2005: 317), these changes had military implications, and while it is impossible to know the exact numbers, the military establishment in Egypt surely increased. There were more legionary units and perhaps, all the administrative fragmentation of the country responded to evenly disseminate smaller military units all over the country. Egypt and Thebaid, however, were considered a single military unit under a military governor (*dux*). The first one is attested in 308-309 CE as *dux Aegypti Thebaidos utrarumque Libyarum*, Aurelius Maximinus (Jones 1964: 44), which implies that also Libya was encompassed within the diocese.

1.3 Group 3:

1.3.1 Event

[BE].[Pretorian Prefect of the East] During the 4th century CE, Egypt was constituted into a diocese of six provinces (Aegyptus, Augustamnica, Arcadia, Thebais, Libya Superior (Pentapolis) and Libya Inferior (Libya Sicca) by ca. 371 CE (Bowman 2005: 316; Lallemand 1959: 76–77), which is also stated in the *Notitia Dignitatum* in ca. 401 CE. This diocese is administered by the prefect of Egypt, that about ten years later appears as an *augustal* prefect (Lallemand 1959: 77).

Traditionally, it is considered that the division of the Roman empire took place in 395 CE when Theodosius bestowed the empire on his sons Arcadius (in the east), and Honorius (in the west) (Cameron 1993: 76; Drijvers 2016), a practice that started with Diocletian but was not entirely followed by his successors. Jan Willem Drijvers, however, has argued that the process of division started precisely during the 3rd century CE. Despite the efforts to unify a very diversified empire by sharing power between other emperors to improve the management of this collection of polities under Roman hegemony, the truth is that the division already existed before 395 CE (Drijvers 2016). The point of inflexion following Drijvers should be set up in 364 CE, when not only two Augusti were proclaimed emperors but also decided to divide the empire into two separate semi-autonomous bodies of government, each one of them with its own military commanders and civil officials, language and also with a precise political division: the western Latin Roman Empire, controlling the Prefectures of Italy and Gaul and; the eastern Greek Roman Empire, controlling the Prefecture of the East. This year, is also the symbolic year when Group 3 starts with the Byzantine Empire, Pretorian Prefecture (of the East) [BE.PP].

Apart from the administrative changes that took place in Egypt, there are religious and political events that marked the 4th century CE. In 313 CE, Christian persecution came to an end with the Edict of Milan. These religious but also cosmological changes also marked the end of religious tolerance in Egypt

(officially in all the Eastern Roman Empire), to the point of forbidding the native Egyptian writing system in CE 391 by means of the edicts of Thessalonica (Freeman 2014: 616–620; Haas 1997: 161–162).

Before these edicts, the empowerment of the Christians and their territorial extent was shown in a series of councils where bishops had theological discussions about the nature of God and Jesus; in 320 a Council of Alexandria was celebrated reuniting bishops from the whole Diocese of Egypt, whose episcopacy was constituted by seventy sees (Meinardus 2002: 7). In 325 CE was celebrated the first Ecumenical Council of Nicea, where 318 bishops attended, among which Athanasius and fifteen other bishops represented the Egyptian Church (Meinardus 2002: 9). The figure of the bishops gained political presence beyond the ecclesiastical domain for they started to rule over public life sometimes overriding the Imperial rules or administrative scope. For instance, canon six of the Council of Nicea: “Let the ancient customs which are observed in Egypt, Libya, and the Pentapolis prevail, so that the Bishop of Alexandria may have jurisdiction over all these [nomes], since this is also customary with the Bishop at Rome” (Meinardus 2002: 46). In this council, also evident is the irreconcilable dichotomy between paganism and Christianity, which is a breaking point between primary and secondary religions (Assmann 2001: 18–20; Vasunia 2001: 4–5). The council ruled over Christian adepts, but it dictated rules against paganism. For instance, there cannot be friendship with sorcerers, nor a pagan be ordained unless they accept the Christian faith (Meinardus 2002: 47).

During these years, Christian Monastic life in Egypt gained importance all over the Roman world. In Egypt, during the 330s CE, different monastic communities were founded, such as Nitria, Kellia, and Scetis (Vivian 2002: 3). According to Freeman (2014: 601–603), Christianity could not survive without imperial support, and Jones (1964: 81) refers to Christians as a powerless minority; however, up to this point it is evident that the political power gained by Christianity was overwhelming even to the political structure of the Roman Empire.

Christian persecution is documented in 113 CE, when Trajan sent a letter to Governor of Bithynia (north of Anatolia) Pliny the Younger –who was already persecuting Christians by 110 CE (Sanders 1992: 443). Even so, as a schism of Judaism, the persecutions can be traced back to the 1st century CE (see Martin 1981: 39–40; Willy 2018: 90) and continued all the way until Diocletian’s Great Persecution. These years were so devastating for Christians that the Church of Egypt is also called the Church of the Martyrs; already instituted as a separate religion and already institutionalised, the Church of Egypt marks this conjuncture as a breaking point in its history. Diocletian’s accession as an Emperor, is called the *anno martyrorum*, and marks the beginning of the Coptic calendar (Vivian 2002: 3).

Christianism was tolerated officially after 313 CE during the reign of Constantine I, an Eastern Roman emperor from 306 to 337 CE, that officially accepted the Christian faith in his deathbed, where he was baptized. Constantine I, became the first Roman Emperor to become Christian and, symbolically, marked the beginning of the Christianization of the Roman Empire (Cameron 1993: 58–59), a process that started in the 1st century CE with the Jews Diaspora, the consolidation of the Christian faith and Hellenized Jews conversion, that reached a new milestone in 313 CE but which epitome was consecrated with the conversion of the head of the imperial hierarchy (see Sanders 1992 and; Stark 1991).

There was yet another edict in 380 CE, where Catholicism is established as the State Religion in the Empire (Ehler and Morrall 1988: 6–7; Ritner 1998: 29), and probably more than two thirds of new-borns in the Empire came from Christian families (Willy 2018: 99). Interestingly, from this point onwards, the differences between the two halves of the empire, also highlighted political and religious struggles between them. In a sense, Christianity compensated the lack of unity inasmuch as emperors “lost their status as a unifying symbol” (Drijvers 2016: 85). The imposition of a monotheistic religion constituted, perhaps, a final attempt to rebuild the sense of unity; it is even possible that the importance of the

Ecumenical Councils of the church, lies on their unifying power and the emperor lobbied in favour of the most popular or accepted opinion (see Cameron 1993: 59–60).

In 445 CE, a new “Edict of the Emperors Valentinian III and Theodosius II, recognizing the Pope as Head of the Western Church” (Ehler and Morrall 1988: 7–9), suggests that the empire was indeed divided for the sake of unification, supporting Drijvers hypothesis (Drijvers 2016). Politically, however, the division emphasized the religious differences because the churches in the east did not accept completely the western church supremacy and its idea of Christianity. And so, intertwined with these stories from [ER.RO] to [BE.PP] (roughly the 2nd and 3rd centuries), comes into scene the history of the Egyptian Church, better known as the Coptic Church. The implications of the development of this church, for the purposes of this research are fundamentally urban, and as such will be mentioned within the Urban features section of this Group.

The division of the empire, however, turns our attention to the Eastern half of the Empire, to which the fall of Rome in 476 CE, was relatively circumstantial, and consequently, almost trivial to the Diocese of Egypt.

Although paganism was still tolerated, it shifted its place relative to Christianity which turned against pagans and did what pagans did to Christians: persecuted them, destroyed their temples and finally imposed themselves over almost any other religious group, including Judaism. In 386 CE a Zeus temple in Syria was destroyed by a bishop, and just six years later, in 392 CE, the Serapeum in Alexandria was also destroyed. Both episodes were promoted by or at least happened with the acquiescence of the prefect of the east and the emperor himself (Cameron 1993: 75, 2007: 27). Years later, the famous philosopher and pagan Hypatia was killed by a Christian mob, an event that certainly had some impact in Alexandria, a place that was generally tolerant and cosmopolite, but with constant sectarian troubles (Bagnall 2007: 1; Ritner 1998: 30–31).

Among the hostile environment, some pagan cults survived, although native Egyptian religion started declining since [GR.RO], and temples ceased to be maintained, or they were transformed; a clear example of this is the temple of Luxor, transformed into a fortress (Bagnall 1996: 263; Pollard 2013). But after Theodosius, it was not only a question of neglecting native traditions, maintaining temples or a natural decline of paganism. Pagans were attacked physically, or accused of crimes by fanatical monks; they either invented stories about baby-eaters or worshippers of demons (Cameron 2007: 27), or invented arguments against paganism, such as the authority of oracles, the efficacy of sacrifice or the veracity of pagan miracles (Haas 1997: 170). Still, a religious Nile festival took place in 424 CE, and despite Hypatia's assassination, philosophy was practiced in Alexandria during the 5th and 6th centuries (Keenan 2001: 619; Kiss 2007: 193–195). In the north, Canopus was still an important hub for paganism and philosophy until Peter Mongus started a “full-scale antipagan pogrom” (Haas 1997: 169). In the south, Philae still received Blemmyan and Noubadian worshippers of Isis during the 6th century (Dijkstra 2004).

But the problems of Egypt were not only religious, as it has been pointed out since Group 1, peer polity interaction always has played an important role in the definition of Egypt. While Christianity was transforming the empire from within, the Eastern Roman Empire, fought a renewed, yet old, enemy: the Persians, under the Sassanids; who “revived the national pride of the Persian people, restoring the old faith of Zoroastrianism and recalling the glories of the Achaemenids” (Jones 1964: 25). Just after Diocletian finished the 296 CE's revolt in Egypt led by Domitius Domitianus, the Sassanid king Narseh tried to expel a Roman client-king from Armenia and expelled the first Roman attempt to regain the Armenian kingdom (Jones 1964: 39; Weber 2016). As time passed by, the advancement of the Sassanids over the Eastern Roman empire was clear. They reached the Nile Delta during the reign of Anastasius (491–518 CE). According to Eutychius of Alexandria, Kavad I, sent an army to the Nile Delta and fought against the Romans at the walls of Alexandria. The devastation caused famine, diseases

and death all over Egypt, and apparently Alexandria and Egypt felt to ruins (Euty chius 1905: p.192 (f. 120r), 1985: 24.244). The attack to Egypt took place within a larger war context. Kavad I “asked the emperor Anastasius I for money so the king could pay what he owed the Hephthalites, but Anastasius refused to help him” (Schindel 2013). Meanwhile, apparently there were Arab and Bulgar raids against Roman territories that might have slowed down Anastasius response to Kavad (Lee 2001: 58). The differences between the Byzantines and the Sassanids, was momentarily resolved years later after the death of Kavad. Khosrow I and Justinian I, agreed to sign a second peace treaty (Schindel 2013), which overran the “eternal” peace agreement signed by Kavad and that Khosrow broke (Cameron 2001: 75). But as momentarily as it was, the treaty was broken again; and new political actors were getting involved more actively in the disputes: the Arabs were used as mercenaries by both parties (Whitby 2001), just as the Greeks were used by Egyptians and Achaemenids between [AE.LP] and [PE]. On the Sassanids side, there were the Lakhmids (Shahîd 2012b); on the Byzantines side, there were the Ghassanid (Shahîd 2012a).

In 602 CE, despite his alliance with the Lakhmids, Khosrow II (Parviz), killed al-Numan (النعمان بن المنذر), the last Nestorian Christian Lakhmid king of al-Hira, perhaps the most important settlement of Mesopotamia at the time. Nevertheless, according to Irfan Shahid, what also killed Khosrow was a contention buffer against the Arabs of the peninsula (Shahîd 2012b).

Taxation is always a burden for people, but we should consider that Egypt suffered from famine and plague during the 6th century. The Byzantine system in Egypt still worked efficiently providing grain to Constantinople and food supply for the army (Palme 2007: 244), but there were social, political and religious struggles such as corrupt officials (Mayerson 2007: 170) or disagreements between Miaphysites and Melkites (Bowman 1996: 50–51; Meinardus 2002: 53). Also, there were complaints against the Byzantine rule and Greek cultural hegemony from monks (Cameron 2007: 39–41; Gabra 2002: 4–5; Keenan 2007). Amidst these

struggles, monks might have helped the neglected or abused villagers as accountants (see Choat 2009).

At the end of the 6th century CE, John of Nikiu described a revolt that took place in the Nile Delta (John of Nikiu 1916: XCVII, 1–30) during the conflict between Phocas and Heraclius. This revolt possibly started south of modern Kafr Dawar, in a town called Aikelah (modern Zawya; زاوية) (Amélineau 1893: 73–74; Jarry 1962: 197–198).¹¹ According to the story narrated by John of Nikiu, there was a group of brothers from Aikelah, appointed as governors of many cities in the Nile Delta, that apparently decided to revolt without a reason (Jarry 1962). The events occurred during this revolt had implications during the Sassanid conquest of Egypt years later (see below).

Two groups of people, or two factions, participated in the revolt: the so-called Blues and the so-called Greens. According to Liebeschuetz (2001: 225), in the course of the 5th century the system of liturgies was replaced in the east by a system that resembled that of the games at Rome and Constantinople. The Greens and Blues “factions” provided the people, animals, and equipment required during a game show. When this system started to be replicated in provincial settlements, people were inclined to support one or the other group; for Liebeschuetz, one can imagine this support as football hooligans, except that in antiquity these factions ended up being more political than any other thing. Since one of the duties of the factions was to acclaim and legitimate emperors, and succession to the throne depended on agreement, one must imagine the factions like primitive political parties. The emperors could have shown support for either colour, and the factions could have worked as “auxiliaries within opposing armies” (Booth 2012: 570–571, 592).

¹¹ There are at least five settlements named Zawya in this area. Amélineau suggests that the settlement referred by John Nikiu is Zawya Saqr (زاوية صقر); Jarry suggests that is somewhere along the Mahmoudiyah Canal, possible nearby Fuwa (Jarry 1962: 203). See also Section 6.3, Site 4, Kom el Magayir (i) and (iii) in Volume 1.

This is precisely the context of the Aikelah revolt during the reign of Maurice – supportive of the Green faction—, which in turn is a prelude of what was going to happen with Phocas and Heraclius. The Aikelah brothers attacked the Blue faction, and sacked Bena and Busir, “without the permission of the governor of the province” (John of Nikiu 1916: XCVII.4). The governor of Busir met Maurice in Constantinople to relate the events and, despite Maurice’s support of the Green faction, commanded the prefect John of Alexandria to dismiss the brothers from their offices. This event might have started as a local conflict but suddenly became an insurrection against the central government in the Diocese of Egypt and deprived Alexandria of grain (Jarry 1962: 196; John of Nikiu 1916: XCVII.7). To solve the contingency, several people met, including the Blue and Green factions, and took advice from the Chalcedonian patriarch of Alexandria. Meanwhile, the inhabitants of Aikelah, the insurgents, kept seizing grain and imperial taxes; at this point, an imperial response was imminent.

Eventually, the insurrection was suffocated. This event is particularly interesting for it highlights the vulnerability and dependence of the empire on the Egyptian taxes, for it not only put under pressure the diocese but the capital of the empire. For Jarry, the Aikelah rebellion might have indirectly caused the uprising of the Byzantine army against Maurice and hence Phocas' empowerment (Jarry 1962: 205)

According to John of Nikiu, after Phocas ordered the death of Maurice and his children, he sent ambassadors to Khosrow I, but the king of Persia was aware of Maurice’s assassination and refused to receive them. This became the perfect pretext to initiate a Sassanid advancement over Byzantine territory inasmuch as Maurice was a friend and benefactor of the Persians (Frendo 2000: 28; John of Nikiu 1916: CIII.5-8).

A few years later, Heraclius the younger made his appearance and revolted against Phocas. It is not clear why Heraclius rebelled against Phocas, however, if we followed John of Nikiu’s story it seems that Phocas tried to abuse Fabia,

Heraclius' daughter. Nevertheless, the Blue and Green factions could come into play again. For instance, Crispus —son-in-law of Phocas— perceived something disturbing after some leaders of factions (presumably Green) were humiliated in public after they put a statue of him and his wife in the Hippodrome. This event might have pushed Crispus to send letters to Heraclius, encouraging him to rebel against his father-in-law (Butler 1902: 4; Liebeschuetz 2001: 227). There was some kind of Green resentment against Phocas since his first year of government, and the hostility of Phocas against them escalated very much by 609 CE (Cameron 1976: 281–282). It would not be surprising that when Heraclius managed to start a revolt against the emperor, paying several people to support his cause, and sent Nicetas to Egypt (John of Nikiu 1916: CVI–CVII), it was the Green faction the one that showed support to Nicetas' cause. As it is pointed out by Booth, the Blue faction remained faithful to Phocas not only in Egypt but also in the Levant. In turn, Phocas decided to turn against Bonosus as comes orientis and with it suppress the Green revolt (Booth 2012: 588).

Now, Nicetas won the battle for Heraclius in Egypt, but Phocas was far from losing the war, except that two things happened: 1) by taking Egypt, Nicetas repeated what the Aikelah brothers did and took over the shipments from Alexandria to Constantinople, and; 2) the Sassanids were advancing quickly towards Anatolia and the Levant. Phocas had a foreign enemy that was much more powerful than circus factions or insurgents (Butler 1902: 5–7; Frendo 2000: 28).

Nicetas, advanced to Egypt and took Alexandria, from which Bonakis was commanded to conquer the Delta, possibly starting from the south, taking the garrison towns of Manuf (=Minuf?) and Athrib (Tell Atrib?). While this proved to be a relatively easy task, there were people from the Blues that resisted Bonakis; such are the cases of the prefect Marcian in Athrib, or the prefect Paul and Cosmas in Samanud —the latter, a prisoner who was liberated to fight against the Aikelah brothers (Booth 2012: 591; Butler 1902: 14–16; John of Nikiu 1916: CVII).

John of Nikiu indicated that Bonosus approached Alexandria along the “Canal of Cleopatra” (see Jarry 1962: 201-202, footnote 1), after passing along Miphamomis (Momemphis?) and Dimkaruni (Karion=Al Karboun=Schedia?), a route that would have been followed by the Dilingat drain observed in the *Atlas of Egypt* of 1914. Before that, he congregated his army in Athrib and had a battle near Menuf, where Bonakis died. The following days are marked by the advancement of Bonosus to Alexandria and his eventual defeat by Nicetas (Butler 1902: 23-24; John of Nikiu 1916: CVII.30-49).

According to Butler, since the Council of Chalcedon Egypt became one of the most turbulent provinces of the empire, with a constant feud between Romans and Egyptians. The defeat of Bonosus in Egypt, and consequently the defeat of Phocas by Heraclius, did not stop the turbulence. Heraclius, immediately after defeating Phocas, sent ambassadors to the Sassanids but even though the assassin of Maurice was gone, it took less than a decade after the battles of the Delta for the Persians to take Egypt.

The situation in Egypt, however, did not change much; not with the Sassanids, nor with the Arabs. As has been pointed out by Bowman, administratively and economically, Egypt seems exactly the same. The weakening of the society was almost entirely rooted in political and military causes (Bowman 1996: 88). The Sassanids remained in charge of Egypt for ten years until a new peace treaty was signed between Kavad II and Heraclius (Altheim-Stiehl 2013; Frendo 2000: 37-38).

[EA].[Rightly-Guided Caliphs 'Rashidun'; Umayyad Caliphs] Eastern Romans lost Egypt against Shahrbaraz, a Sassanid under Khosrow II (Bosworth 1967; Wiesehöfer 2001: 221), just a decade later, Amr ibn al-As a Muslim under Umar of the Rashidun Caliphate, annexed Egypt to their domain approximately in 640 CE. In less than fifty years Egypt was exhausted with plagues, famine, revolts, insurrection, war, vandalism between the Blue and Green factions, religious disagreements, etcetera. All these issues could have made the society more

receptive to a change coming from people who were not as foreign as the Persians or Byzantine Romans, and possibly even more tolerant (see Bowman 1996: 52–53). Arab people were integrated among the Egyptian society since the 9th century BCE (see below, *Discussion. Arabs*) and, while not the same –and keeping all the proportions–, the Arabs from the Sinai Peninsula had the same advantage that the Macedonians of the second half of the 4th century CE had: they were more allies than enemies (see Sijpesteijn 2007: 441), and had more cultural affinities with Egypt than Byzantines (Daly 2005: 5–6). The Arabs, just like the Macedonians, did not immediately change the Byzantine administration, apart from the language and the head of government. The Byzantine system worked, regardless the tax burden, factions, religious differences, and the countryside oblivion; and the Umayyads took advantage of it.

The Muslim annexation of Egypt, as Okasha el Daly (2005: 20) prefers to refer to the Arab Conquest of Egypt, has been considered an impromptu and disastrous event, as if the Arabs suddenly appeared on scene from nowhere, invaded Egypt, and left behind the immediate past (see Cameron 2015: 250). But the Conquest of Egypt itself, according to Coptic writers such as John or Mena of Nikiu show us that Copts, considered themselves as the Native Egyptian population, were willing to help Muslim Arabs to get rid of the Byzantines (but see Kennedy 2004: 2–5). Specifically, Copts tried to get rid of the Melkite Patriarch and *de facto* governor of Egypt, Cyrus. The new archbishop persecuted the Copts for a decade right after Heraclius recovered Egypt, and this might have paved the way for a relatively easier Muslim conquest of Egypt (Butler 1902: 175). The Copts, according to Philip Schaff, as Christian Monophysites, were “the genuine descendants of the ancient Egyptian, though with an admixture of Greek and Arab blood” (Amélineau and Mena of Nikiou 1890: XV–XVII; Schaff 1997a: 668); according to Okasha El Daly, medieval Arab writers used the word *qipt* or *gypt* (قبط = Copt), to denote “both ancient and contemporary indigenous Egyptians” (Daly 2005: 21).

The first Muslim administrative office in Egypt had a military character, *diwan al-jund* (ديوان الجند) and was established by Abdallah ibn Sa'd (عبد الله بن سعد) in Fustat, the new capital of the country that was located near the fortress of Babylon (Duri et al. 2012; Severus of Al'Ashmunein 1904: 510). The capital settlement was called Al-Fustat, "the Tent", in reference perhaps of the first camp to siege the fortress of Babylon, perhaps because "This is the tent (fustâṭ) of the people, and their place of meeting" (Salih 1895: 74). The following years after the annexation were mostly years of pacification, but the old religious differences continued (see Mena of Nikiou and Bell 1988: 1–10). According to the *Life of Isaac*, the Umayyad caliph Marwan appointed his son Abd al-Aziz (عبد العزيز بن مروان), "The Emir", to the *diwan* of Egypt. During his government things seem to be fixed insofar as Abd al-Aziz participated actively in the election of the patriarchs of Alexandria, had two Christians in his office, and even could have become a polite acquaintance of the patriarch John III of Samanud (Mena of Nikiou and Bell 1988: 30; Severus of Al'Ashmunein 1910b: 10–49).

Abd al-Aziz built a nilometer on the Island of Rodah (مقياسا يقاس فيه زيادة ماء نيل) and some mosques in Helwan, from which he dispatched. He enhanced Helwan with palm trees and a glass pavilion next to his artificial lake filled with the Mukattam hills' water that flowed through the aqueduct built for that purpose (حسن 1954: 24). He built bridges to cross the *Khalig* (Cairo Canal), built churches or approved their construction, or in the worst case, repair them. He also tried to change the capital of the emirate, ordered the depopulation of Fustat and moved the treasury to Helwan (Euty chius 1905: 40–41, 163r–164r; Salih 1895: 155).

After the Islamic annexation, Egypt was restructured (administratively) five times between 640 CE and 1176 CE, which is the year when the Salahi Ruk (الروك الصلاحي) was established with the ascension to power of the Ayyubid Sultanate (حسن 1944: 341). For this metadata, only the first three are mentioned. The first restructuration took place in 715 CE, during the Umayyad Egyptian government of Abd al-Malik ibn Rifa'a al-Fahmi (عبد الملك بن رفاعة). According to Severus of Ashmunein (1910b: 67), it was a certain Usama who did the task and also Arabized

the *diwan* in 705 CE (see also Duri et al. 2012). The second restructuration took place a few years after the death of Abd al-Malik ibn Rifa'a, and his homonymous brother stayed in charge, in 729 CE. This restructuration, however, could have taken place from the centre of the Umayyad caliphate in Damascus, inasmuch as caliph Hisham ibn Abd al-Malik (هشام بن عبد الملك) appointed a new *sahib al-kharaj* (head of taxation) to Egypt, Ubayd Allah ibn al-Habhab (عبيد الله بن الحباب), which became the facto the Egyptian governor (Kennedy 1998: 74; 341 :1944 حسن).

The third restructuration took place under Ibn al-Mudabbir (بن المدبّر) in 867 CE. Abbasid Egyptian military governor (*wālī al-jaysh*) Yazid ibn Abdallah (يزيد بن عبد الله), also known as al-Turki, was unable to stop an uprising led by Jabir ibn al-Walid, an Alid rebel in Alexandria that had joined forces with Christians and other Muslim groups, against the taxing measures taken from the centre of the Abbasid caliphate in Baghdad, under caliph Al-Mutaz billah (المعتز بالله) (Kennedy 1998; Wissa 2020; 341 :1944 حسن).

This insurrection was one of a series of revolts started in the 8th century CE. Particularly, during the emirate of Musa ibn Mus'ab al-Khath'ami (موسى بن مصعب) due to consecutive tax increments, a policy that he implemented in al-Jazira not without causing troubles. He was killed trying to fight the rebels, a mix of Copts and Muslims. He was succeeded by Musa ibn Isa (موسى بن عيسى) for good; Musa ibn Isa, regained the trust of people and suffocated, albeit temporally, the insurrection (Kennedy 1998: 78; 27 :1954 حسن).

The *History of the Patriarchs* (Severus of Al'Ashmunein 1910c: 428) relates another revolt that occurred after the death of Harun al-Rashid (هارون الرشيد). Apparently, this revolt was caused due to a conflicts between his sons Al-Amin (الأمين) and Al-Ma'mun (المأمون) who wanted to succeed him. Al-Ma'mun killed Al-Amin, but the consequences of this war were reflected in Egypt. The roads between Egypt and the East were blocked, and Egypt ended up divided into three temporary governments taken by the revolted men:

وكان من جملتهم رجل يسمى عبد العزيز الجروي اخذ من شطنوف الى الفرما وشرقية مصر بلبيس واعمالها
ورجل اسمه السرى بن الحكم اخذ من مصر الى اسوان واستوليا على الخراج وقوم يسمون لخمًا وجذاما القبيلتين
اخذوا غربى مصر واعمال الاسكندرية ومريوط وملكوا البحيرة جميعها¹²

These events highlight the old major divisions of Egypt according to George of Cyprus right before the Islamic annexation: Augustamnica A and B Thebaid and Aegyptus A. Although, it is uncertain what was happening in the North Central region (Aegyptus B), we do have an idea. In 831 CE, another revolt began. Apparently, the Copts of the marshlands in the Northern Central region of the Nile Delta were desperate due to the incremental taxation; but despite their efforts, possibly garrisoned in monastic settlements in the uninviting wilderness, were defeated by Abbasid caliph al-Mamun. It is a common thought that after this revolt, a massive conversion of Copts to Islam took place in order to avoid or reduce the tributary load (Gabra 2002: 6; Wissa 2020: 252); but as pointed out by Okasha El Daly, this might neglect the fact that some people converted to Islam truthfully, and others just to avoid the theological nuisances and complexities that “bedevilled Christianity” way before the Islamisation process started (Daly 2005: 22).

Whatever is the case, an interesting story about the Bashmurites is that they were used to assist Marwan al-Ja’di, an Umayyad caliph, against the Abbasids. The story of Febronia, regardless of its veracity, or even if it is correctly translated (see Daly 2005: 190), indicates that the Bashmurites were allowed to attack convents, ransack them and take prisoners and murder. It is interesting that Bashmurites could attack Christian convents, implying that they could have been from a different Christian sect, for instance, the Acephali (see Amélineau and Mena of Nikiou 1890: XXIX; see also Schaff 1997a: 659).

¹² “Among them was a man called Abdel Aziz Al-Jarwi who took from Shatanuf to Al-Farma and Eastern Egypt Bilbeis and its districts, and a man called Al-Sari ibn al-Hakam who took [the country] from Egypt (Misr) to Aswan; and [they both] seized the Kharaj [land tax]; and the people called Lakhm and Jadma (Banu Lakhma and Banu Judham), the two tribes, took western Egypt, the districts of Alexandria and Mariout and all Beheira”. This is my translation and not Evetts. I have used Evetts as a guide, but I decided to translate the text myself because I noticed some inconsistencies.

In any case, years after the Bashmurite revolt and the anarchic days, the Abassids were able to regain the control of all the country under Al-Ma'mun (see Kennedy 1998: 80). During the second half of the 9th century CE, Al Mutaz sent Turkish soldiers to Egypt commanded by Muzahim ibn Khaqan (مزاحم بن خاقان) to take over the government of Yazid ibn 'Abdallah, but Muzahim died the next year in 868 CE. That year, Ahmad ibn Tulun (أحمد بن طولون) was appointed governor of Egypt under the Abbasid Caliphate of Al-Mutaz. Ahmad ibn Tulun and later, Muhammad ibn Tughj (محمد بن طغج), founded two autonomous dynasties in Egypt, the Tulunid and the Ikhshidid, respectively .

According to Thierry Bianquis (1998), the professionalisation of the Abbasid military institution had a similar outcome than the professionalisation of the Praetorian Guards at Rome: Empowered military members –mostly conformed by peripheral ethnic groups (e.g. Turkish military slaves)– acquired enough power within the caliphate to struggle for power among the Arab or Persian viziers, to the point of install or depose caliphs at their pleasure (Bianquis 1998: 89). Up to this point, in Egypt, the military governor had enough power to delay, hasten or even stop tribute to the Arabic Peninsula. This kind of power used to be exerted by the caliph himself. For instance, when the Abbasid Caliph Abu Jafr al-Mansur in 767 CE punished the cities of Mecca and Medina and closed the Canal of the Pharaohs (Wadi Tumilat) (Redmount 1995: 130).

[MA.TU] In this context, a renewed Turk-Egyptian polity, the Tulunid dynasty, was able to exert power against the Abbasids to maintain relative independence from foreign rule (Bianquis 1998; Kennedy 1998; Bosworth 1967). Even though it was not a native polity (e.g. governed by Copts), the autonomy exerted from Fustat relative to Baghdad created a new *ethno-classe dominante* with enough independence that it can be considered sovereign (Guest Introduction in al-Kindi and Guest 1912: 2).

Egypt did not change much after its annexation to the Muslim Arab domain, at least until the end of the 9th century. The Byzantine administrative apparatus

was preserved but Arabized. Socially, the inhabitants of the country maintained their ways of life in general. Culturally, some people converted to Islam, some remained Copts. Some Muslims adapted to the country and the new circumstances. For instance, Ahmad ibn Tulun, used to contemplate the Monastery of Al-Qusir (Al-Balawi in Daly 2005: 25) as well as the pyramids or the sphinx (Al-Balawi & Al-Idrisi in Daly 2005: 89). In fact, the appreciation for the past is perceived in Ahmad ibn Tulun, but it is also perceived as a representative of the political apparatus of Islamic Egypt; he regulated the activity of “treasure hunters”, mostly of [AE] monuments, and by doing it, these might be first archaeological excavations in the country (Daly 2005: 34).

1.3.2 Reference

Table 3. Group 3

<i>Culture</i>	<i>Term</i>	<i>Etymology</i>	<i>Type</i>	<i>Concept1</i>	<i>Concept2</i>	<i>Similitudes</i>	<i>Remarks</i>
<i>Byzantines</i>	thémas o themata (en griego, θέματα; singular θέμα, θέμα)		Area	Polity	Administrative division		Byzantinos: distrito? ciudad? Esto no lo entiendo muy bien, pero por ahora sólo pensaré que es una continuación del modelo romano, sólo que hacia otra parte del imperio/otro imperio con otros requerimientos, por lo tanto se modifica la economía de todo el "país" egipcio, y la geopolítica cambia. Qué pueblos son estratégicos o no para Bizancio. El poder del imperio es posiblemente menor y pueblos "abandonados" por ese interés imperial crean nuevas relaciones con otros pueblos y regiones, quizá nuevos aliados, quizá dejan de mirar hacia el mediterráneo.
<i>Byzantines</i>	Kastron; kastra (pl.)	Probably from the latin castrum	Urban	Settlement	Fort	Roman castrum derivative, but could have turn into a city	In Arabic the derivative represents both a palace and/or a fortress (drgonzaga; http://www.worldhistoria.com/the-byzantine-kastron-fort_topic124255.html).
<i>Byzantines</i>	Chorium; Choria (pl.)	Probably from the greek Khôra.					The village community that held a central place in the Byzantine tax system. Choria supplied the city-castles/"kastropoliteies".
<i>Arabs</i>	Balad; بلد						Country
<i>Arabs</i>	Medina, madīna		Urban	Settlement	City/Town		City

<i>Arabs</i>	Amsar	amṣār (Arabic: أمصار), singular miṣr	Urban	Settlement	Military camp, city		See Caetani (1911: 541); (Wensinck et al. 2012)
<i>Arabs</i>	Ribat	Ribat (Arabic: رباط ribāt, fortress) were founded					
<i>Arabs</i>	Ezbet		Urban	Settlement	Town		Town
<i>Arabs</i>	Qaria; قرية	Probably from Choria?	Urban	Settlement	Village		Village
<i>Arabs</i>	Qasbah, qaṣaba		Urban	Settlement	Fortress		Fort
<i>Arabs</i>	Al-qasr; alcázar (القصر)	Probably from castrum?	Urban	Settlement	Fortress		Like Babylon fortress, known as Qasr al Sham
<i>Arabs</i>	khīṭaṭ (خِطَط)	From khata (خَطَّ), outline/draw/demarcate	Area	District	Administrative / social division	Quarters for tribes	E.g. the quarters were assigned to different tribes after the foundation of Fustat. See Caetani (1911: 548) “Con il nome di khittah si definiva non solo il suolo occupato da una stirpe, ma anche tutte le suddivisioni minori dello stesso suolo fra le tribù facenti parte della stirpe e persino tra le famiglie e gl'individui.”
<i>Arab</i>	Iklīm	Probably from Greek, clime (klima), literally: “inclination”	Area	Region	Geographical feature (e.g. latitude)		See: Iklīm, Encyclopaedia of Islam, Second Edition

1.3.3 Urban Features

Archaeologically, after Diocletian, there are two types of urban features that will have protagonism up to the Turk-Egyptian government of Ahmad Ibn Tulun in the 9th century CE: the religious (e.g. monastic settlements, churches and later on mosques) and military (e.g. fortresses, military camps, fortified monasteries). We should consider that by the end of the 6th century CE, conflicts between religious groups, political groups, and wars between Sassanids, Byzantines and Arabs, were intermingled and were evolving dramatically all the way until the 860s CE revolts (Bianquis 1998: 93). It is a continuum that cannot be denied, albeit being violent most of the times. The internal conflicts of the Abbasid caliphate and its recurrent use of *Turkish* soldiers made them lost Egypt under a Turk (Kennedy 2004: 157–159).

But to really grasp the diversity of issues that can come together within a single event, and that can shed light on the complexity of a potential archaeological context with traces of occupation of this Group, let me quote a single story of the *History of the Patriarchs* during Mark III, the forty-ninth patriarch from 799 to 819 CE. (I have added the Arabic words in brackets for names and places wherever I consider it necessary):

"there was in the west of Alexandria a monastery, known as the monastery of Az-Zajâj [دير الزجاج], at which there was an aged hermit, [...] John. And he said to the Alexandrians prophetically: «[...] believe me, a nation will come from the west, and will destroy without mercy this people and this city [...]» And after he had said this, *Alexandria was invaded by a host of those who are called Spaniards* [Andalusians=الاندلسيين][...]”¹³
There was in the city of Alexandria in those days a governor of high lineage among the Muslims, named Omar son of Mâlik [عمر بن مالك]. But the tribes of Lakhm and Judhâm and Madlajah [اللكميين والجداميون والمدج]”¹⁴ rose against him and sought to slay him, that they might take possession of the city. [...] the Spaniards [الاندلسيين] joined the Lakhmites on the 10th. day of Ba'ûnah, in the

¹³ This sentence, in Arabic is different and it can be roughly translated like “After his statement, people entered to Alexandria, and with them, many things from Roman Algiers” = “كان بعد قوله هذا دخل الى اسكندرية قوم ومعهم شيء كثير من جزائر الروم يسمون الاندلسيين”.

¹⁴ The tribes are known today as Banu Lakhma, Banu Judham and Banu Mudlej.

year 530 of the Martyrs [...] Then they killed the governor and took possession of the city. [...] [the Spaniards [الاندلسيين] killed all the townsmen that they met, whether Muslims or Christians or Jews [المسلمين والنصارى واليهود]. And wherever the Spaniards [الاندلسيين] found one of their comrades who had been slain, they burnt that place with fire. Thus when they reached the church [البيعة] [...] and was rebuilt by our father Mark [ابونا مرقس], they found some of their nation lying at its doors [...] Then they set fire to the church [البيعة]; and the conflagration spread so far that it consumed buildings at a distance from the church [البيعة]. (Severus of Al'Ashmunein 1910c: 428-432)

In this sentence, there are several things to note: 1) different groups of people with different backgrounds coming together: Egyptians (at this point, one can only assume that the population consisted of a mix of “Native” Egyptians, Greeks, Persians, Arabs, Romans, Nubians, Libyans, and big etcetera, consisting of a varied mix of people from the Mediterranean), Arabs (Lakhmids, Judhamites and Mudlejites), and Andalusians; 2) At least three religions: Jews, Christians, Muslims; 3) Implicitly and explicitly different geographic areas: Egypt, Algiers, Spain (Andalusia), Arabic Peninsula; 4) at least two types of settlements and associated buildings. In this case a monastery and Alexandria as settlements, and a church and a hermit as buildings; 5) processes of construction, reconstruction and destruction of a single building. The church that Mark III helped to repair, already existed, but a few years later put to flames along with nearby buildings. 6) three ways of counting the time; one explicit, the Coptic, and two implicit, the Muslim and the Gregorian.

The basis of this story in words of his English translator, narrates a fascinating implicit story of social and language change (italics mine):

by Severus [also known as سوايرس بن المقفع], bishop of El-Eschmounein in upper Egypt, between Minieh and Asiout, based on Greek and Coptic documents which he found in the *monasteries* of his country, and which he translated with the help of some clerks. This history of the first centuries of the Coptic church is based above all on Eusebius and some primitive Acts, and Mr. Crum has discovered at the *Bibliothèque Nationale* in Paris some fragments of a Coptic translation of the *Historia Ecclesiastica* which seems to be the unfortunately incomplete original of the Arabic translation of Severus (Severus of Al'Ashmunein 1910a: 103)

The previous paragraphs try to show the diversity and complexity of the Egyptian society by the end of [MA.TU], but also to show that whenever

something seems stable, one must consider that stability is a very relative word: stability for whom, for what, where, when? And consequently, taking into consideration that history is obviously not monolithic, we do have to reduce this complexity and try to synthesise it.

During the 5th century CE, there was a relatively stable administrative organization in terms of the Egyptian provinces. The main changes appeared at the beginning of the 6th century. The governor of the province Aegyptus is now an *Augustalis*. Augustamnica is divided into two provinces, one with a *corrector* and one with a *praeses*. Also, Thebais is divided, Thebais inferior with a *praeses* and Thebais superior with a *dux*. Arcadia preserves its *praeses* up until the end of [BE.PP], nevertheless, during the last century of [BE.PP], from 539 to 619, there were changes in the other provinces. The provinces are referred to as eparchies by Hierocles in his *Synecdemus* (Ball 1942: 163). Aegyptus is divided in two, one with a *dux* and an *Augustalis*, and the other with a *praeses*. This same structure is applied to the two Augustamnica and the the two Thebais. By the end of [BE.PP], the provinces are combined again and only four provinces are recorded: Aegyptus, Augustamnica, Arcadia and Thebais, all of them with a *dux* and an *Augustalis*. (Bowman 1996: 79; Palme 2007). In general, following the work of George of Cyprus, *Description of the Roman World* (Georgii Cyprii 1890), written ca. 606 CE, and following Ball (1942: 176–179), the administrative/hydrological landscape of the diocese of Egypt can be described as follows.

There were seven river mouths in the Delta region, from west to east, Alexandria, Colynthin (=Canopic), Agnu (=Bolbitine), Paralos (=Sebennytic),

Chasmatos (=Pineptimi?),¹⁵ Tamiathe (=Phatmetic)¹⁶ and Tenese (=Tanitic?)¹⁷. According to Ball, the Pelusiatic might have silted up at this point for there is no reference to it in George of Cyrus.

The entire diocese of Egypt (Αιγυπτιακήσ Διοικήσεωσ) was divided into ten eparchies:

1. Augustamnica A, with Pelusium as Metropolis (capital or seat of government). It comprehended the north eastern delta and the north of Sinai up until Rinocorura (El-Arish).
2. Augustamnica B, with Leonto (T. Moqdam, EES 66) as Metropolis. It comprehended the south eastern delta from Heliopolis all the way east to the Sinai, presumably until Lake Timsah or the Great Bitter Lake from which Arabia started extending to the East.
3. Aegyptus A, with Alexandria as Metropolis under *Dux* and *Augustalio* (Υπο Δουκα Και Αυγουσταλιον). It comprehended the western most deltaic region as well as the desert region around Wadi El Natrun, from

¹⁵ This mouth might correspond to what Evliya Çelebi referred to as Yamani Canal (Evliya Çelebi et al. 2018: 172), which it might be an artificial drain that according to him originates as a tributary near Sammanud, in the *Atlas of Egypt* of 1914 or in the *Carte topographique de l'Égypte et de plusieurs parties des pays limitrophes* of 1826, this canal/channel is referred to as

¹⁶ This might be the first reference to what we now call Damietta.

¹⁷ Ball assigned this name to Kom Tennis (T. Tinnis, EES 153). This, however, could be a bit confusing phonetically and geographically, because the mouth could be indeed the Tanitic mouth, not the Tanitic channel, which refers to Tanis; historically, however, “Tenese” refer to the ancient port of Tenesos (Mouton 2012). For Cooper (2012) the river channel associated to the Tenesos mouth is Bahr el Saghir. The confusion increases if we take into consideration, for instance, Bietak’s map of the Eastern delta because according to this map the Tanitic channel passes right next to T. Tinnis and pours the Nile waters right into Port Said where there are no traces of any mouth prior to the construction of the Suez Canal. Also important is to note that the *Carte topographique de l'Égypte et de plusieurs parties des pays limitrophes* of 1826, assigns the Pelusiatic mouth to a mouth called “Tîneh”, then the Tanitic to a mouth called “Om Fâreg”, and then, closer to T.Tinnis, the mouth “Gemîlêh” with not particular assignation. Apart from this cartographic resource, I have not seen any other where a river channel next to Pelusium (Tell el-Farama) pours water in a mouth called “Tîneh”, with the exception of *Lower Egypt: in 4 sheets*, a map based on Jacotin, created by Mahmud Falaki in 1882, which corrects some of Jacotin’s failures (but keeps others); this map assigns the Pelusiatic to “Om Fâreg” and the Tanitic to “Gemîlêh”.

the delta apex, the south-central region of the delta (between the Damietta and the Rosetta branches; Menufia) and Sais.

4. Aegyptus B. Ball does not refer to any seat of government but it might be Cabasa (see Section 6.2, Site 9, Shaba (T. el-Daba) (332) in Volume 1). It comprehended the north central region of the Nile Delta, more or less the same area of the modern Kafr El Sheikh and Dakahlia governorates.
5. Arcadia, with Oxyrynchos as Metropolis. The territory comprehended what was called Heptanomia, which is the region of the Nile Valley from Memphis to Oxyrynchos, including the Fayoum.
6. Thebais (1), with Antino as Metropolis. The territory comprehended the region of the Nile Valley from Theodosiupolis (south of Oxyrynchos), to Panos (north of Ptolemais). The difference between this Thebais and the next one, apparently resides in the Metropolis since there is no difference between them.
7. Thebais (2), with Ptolemais as Metropolis. The territory comprehended the region of the Nile Valley from Ptolemais to Philae, the southern most frontier of the Roman Empire in Africa.
 - a. Above Thebais, a region comprehending the oases of El-Kharga, Dakhla and Bahariya. Ball calls it eparchy but George just mentioned it within Thebais (Georgii Cyprii 1890: 40)
8. Libya, with Darnieon as Metropolis. This province comprehended the Siwa Oasis, as well as all the northern most (mainly coastal) territory of Libya and Egypt, from Marsa Matruh to Derna.
9. Libya Pentapolis. This eparchy is not mentioned by Ball but it is included in Gelzer's edition of George of Cyprus, although without associated metropolis, but it might be presumed to be Cyrene which is mentioned (Κυρήνη). It comprehended the territory known as Cyrenaica.
10. Tripolitania. This eparchy is also not mentioned by Ball but it is also included as part of the Diocese of Egypt. Three settlements are

mentioned, Τοσιβων, Λεπτιδος and Ὑων, but none is referred to as metropolis.

Spread all over this territory, according to the *History of the Patriarchs*, during the patriarchate of Peter IV (567 - 569 CE) around or belonging to the patriarchate of Alexandria, were up to six hundred (600) “flourishing monasteries, like beehives in their populousness, all inhabited by the orthodox, who were all monks and nuns, besides thirty-two farms called Sakatinâ” (Gabra 2002: 5; Severus of Al’Ashmunein 1904: 472). It is hard to tell if this number comprehends all Egypt (the Diocese), Aegyptica (the province), or just the area of Alexandria. The same number is repeated during the patriarchate of Andronicus (616 - 622 CE), but it explicitly refers to a specific area near the city of Alexandria in “Henaton” (Enaton?):

And there were at Henaton near that city six hundred flourishing monasteries, like dovecotes; and the monks were independent, and insolent without fear, through their great wealth; and they did deeds of mockery. But the army of the Persians surrounded them on the west of the monasteries, and no place of refuge remained for them; and so they were all slain with the sword, except a few of them, who hid themselves, and so were safe. And all that was there of money and furniture was taken as plunder by the Persians; and they wrecked the monasteries, which have remained in ruins to this day. (Severus of Al’Ashmunein 1904: 485)

If this is the case, perhaps the number of 600 is too high, and it might refer to hermits/caves and not monasteries, hence the “dovecotes” (البراج الحمام). Whatever is the case, Abu Salih the Armenian, according to Evetts as well (Salih 1895: 347–352), reported 707 churches (including satellite churches or chapels) and 181 monasteries (assuming at least one church within their walls). Abu Salih, however, mentions sporadically only some churches and monasteries of the Delta, Cairo and Wadi Habib (Nitria) (see Hatch 1924: 93, n. 1).

There are several types of monastic urbanism and architecture related to them; from “single-roomed settlements [to] walled, multibuilding settlements”, either fortified or not. (Brooks Hedstrom 2017: 57). Then, we can have churches as “central apse basilicas [or] churches with three altars and covered with twelve domes” (idem: 58). Another thing to note is that according to Peter Van Minnen,

there are no remains of building that we could call churches in Egypt before the 4th century (Van Minnen 2007: 213) and therefore, a “formal” church could be a relatively well defined architectural feature for sites that could fall within Group 3, however, they have different styles, sizes, and forms, and some others copy architectural features of other buildings such as the *basilica forensis* (see Grossmann 2007). Before this period, meeting places for Christianity might have been domestic contexts, workshops, and so on. On the other hand, the use or disuse of mummification, for instance, has been described as “conflicting evidence” for it could appear in Christian contexts (Dunand 2007: 169).

Related to the protection of the country, there is a diverse vocabulary related to military units. The most common is the fortress, but its commonality does not mean that there are more of them dispersed in the country.

1.3.3.1 Military settlements

To understand, more or less, the dispersion of the military units in Egypt from [BE.PP] to [EA.RG] we should take a brief look to the *Notitia Dignitatum*. The *Notitia Dignitatum*,¹⁸ *pars Oriens*, is a document that describes the military units spread all over the Eastern part of the Empire. Anna Maria Kaiser compared the information in the *Notitia* with the Egyptian papyri. She proved that this document, although idealised, reflects the reality of the military distribution of permanent military garrisons among temporal ones (Kaiser 2015). Taking this document into consideration we are able to grasp the extent of the military power

¹⁸ I found two resources to explore the *Notitia* directly, one translated to Spanish by Antonio Diego Duarte Sánchez that can be found here, https://www.academia.edu/2901946/Notitia_Dignitatum_Traducci%C3%B3n_del_lat%C3%A9n_al_castellano, and a webpage created by Luke Ueda-Sarson where it is possible to explore the *Notitia* dynamically, along with the shields and the front cover depicting each unit, <http://lukeuedasarson.com/NotitiaPatterns.html>.

controlling the country by the end of the 4th century CE, and indirectly, the military urbanization process that took place during [ER.PP] that defined to some extent the Byzantine urban landscape.

The *Notitia* lists 65 garrisons and permanent units attached to *comes limitis Aegypti* and the *dux Thebaidis*, while the available papyri attest 32, three of which are uncertain (Kaiser 2015: 249). In the case of Egypt, small outposts and detachments whether mentioned or not in papyri are not mentioned in the *Notitia*. Also, archaeological information and papyri from the Delta is scarce or inexistent related to military units,¹⁹ and cannot refute nor confirm the validity of the *Notitia*; however, according to Kaiser, in as much as papyri always corroborate the information on the *Notitia*, the lack of papyri or archaeological data cannot nullify it.

There are several types of military settlements spread throughout Egypt. The larger ones, and better preserved (when preserved), are the so-called tetrarchic Roman fortress. Pollard (2013) describes them as very characteristic of the Late Roman period, but states that the distribution of military settlements points to a continuity and increase from previous periods (Pollard 2013: 33). After Augustus, there were 3 legions and 12 auxiliary units. By the time of Severus, there is a single legion with 15-16 auxiliary units. The *Notitia* lists for Aegyptus and Thebaid, 12 legionary units, 9 *equites*, 32 *alae*, 19 cohorts, 2 *cunei* and one *milites*. (Kaiser 2015; Pollard 2013: 28-29). The functions played by these military units are manifold, but in terms of functions per unit we can divide them into two categories: 1) protecting the province against foreign threats or policing against nomadic intrusions, duty related to the legionary and *equites* (cavalry) units, sometimes referred to as *sagittarii*, and; 2) policing and controlling the local population and taking part in “lower-level” provincial administration, a duty of the

¹⁹ With some exceptions like the fort recently found at Kom el-Gir (Schiestl et al. 2018), or Tell el-Herr (Magdolum), a site near Pelusium, in the eastern-most limit of the Nile Delta, where a Roman camp was found (see Valbelle 2000).

alae, and other minor units, mostly cavalry units and infantry cohorts (Pollard 2013).

Finally, according to the distribution of these military units (see Pollard 2013 Fig. 6), there is a big gap in the north-central region of the Nile Delta. The closest unit to our study area is a Cohort stationed at Busiris. It could be presumed, considering the distribution of the rest of the units all over the country with almost no gaps, that the newly created units (*nuper constituta* by the time the *Notitia* was created ca. 400 CE), Ala Theodosiana and Ala Arcadiana—also assigned under Aegyptus—, were stationed in the area, perhaps one in Aegyptus (covering the area north of Xoïs) and one in Augustamnica (covering the area north of Sebbenytos). Evidently, this is impossible to know, but two things can be considered. The first one is that when the *Notitia* was created, Christianity (Catholic orthodoxy) was already considered the official religion in the Empire after the Edict of the Emperors Gratian, Valentinian II and Theodosius I in 380 CE (Ehler and Morrall 1988: 6–7); and precisely, the north central region of the Nile Delta was an important area for Christian pilgrims due to foundational histories around the pilgrimage of the Holy Family (Meinardus 2002: 17–20). And secondly, the fact that a relatively large Roman fort has been found at Kom el Gir, “approximately 150x90m large on the inside, and is equipped with rectangular projecting towers at the corners and smaller rectangular bastions along the outside walls” (Schiestl 2019; Schiestl et al. 2018: 7). These features —“multiple towers projecting from their corners and curtain walls”— correspond to the features described by Pollard (2013) in Babylon, Thebes, Dyonisias or the auxiliary fort at ‘Abu Sha’ar, that he refer to as “‘typically’ late Roman and distinguish them from Roman fortifications of the Principate” (Pollard 2013: 9).

Whatever is the case, the military architecture sometimes is mixed, used or reused in religious structures and vice versa; the projected towers and curtain walls can be found in some monasteries, such as St. Catherine (Grossmann 2007: 127). On a different spectrum, the fortification in ca. 301 of the [AE] temple at Luxor, incorporated as a Roman legion (El-Saghir et al. 1986; for the Thebaid see

Golvin and Reddé 1986; Pollard 2013: 10–12), along with the five churches that have been identified (Brooks Hedstrom 2007: 372).

The shapes of these fortifications can also be adapted to the landscape or even historical circumstances, and then again, a fortress can be just one of many layers of accumulated history. From my perspective, the best example about this is the fortress of Babylon.

According to John of Nikiu (1916: Ch. LXXII.16-19), the “first” Babylon fortress was built by Nebuchadnezzar, or at least he put the foundations, and named it after his own city. Later on, Trajan built a fortress (it is not specified if on top, or next to the original) and a tower, and he brought water into it; adding some buildings to the fortress. John of Nikiu also indicates that he dug a small canal to carry water from “Gihon [the Nile]²⁰ to the city Clysma [Suez]²¹” and connect this canal with the Red Sea. Herodotus (II.158), on the contrary, indicates that it was Necho II who started the canal and that it was finished by Darius (see Briant 2002: 384). Diodorus (I.56) already talks about a colony founded by people from Babylon, and hence its [GR] name.

Before these events would have taken place, it is known that a little bit further north, the settlement *ἰwnw*, (Iunu), better known as Heliopolis, Ain Shams or Ôn (Amélineau 1893: 287–288; Caetani 1911: 191), was connected to a settlement called Kher-Âha (*ḥr-ḥ3*), “place of combat”;²² which lay to the east of Babylon, and might have been one of the most important religious centres in Egypt (Aja Sánchez 2008a: 378; Yoyotte 1954: 85). Associated to Kher-Âha there was a riverine settlement called Per-Hapy (*pr-ḥpy*), “the house of Hapy”, the last point of a three-days procession to invoke optimal flood in the name of Osoris-Sepa (Aja Sánchez 2012: 222–223).

²⁰ See Wolff (2003: 104)

²¹ See Worp (1991: 292)

²² Possibly referring to a mythical combat between Seth and Horus.

Apart from these sources about this Babylonian colony, Egyptian harbour, and possibly Greco-Roman fortress, that had a nearby connection to the river and a canal towards the Red Sea; no found traces of a fortified structure before Diocletian have been found (Sheehan 2010: Ch. 2). Nevertheless, the traces of the canal associated to Necho II, Darius or Trajan, show a recurrent and continuous use of this point of bifurcation point since [AE]. That the Romans had an Augustan legion stationed there (possibly III Cyrenaica; Aja Sánchez 2008a: 388), indicates that not only was this place important but that there were Roman efforts since then to connect it to a well-defined military structure (Pollard 2013: 13).

The Trajan's harbour (or perhaps a fortress) possibly served as a trading post or customs house²³ between Lower Egypt, Upper Egypt, and the Red Sea via the *amnis Traianus* (Trajan's canal) –also called Canal of the Pharaohs (see Redmount 1995; Sheehan 2010: Ch. 2, Introduction). The harbour was transformed definitely into a fortress after Diocletian, and since then considered a *castrum* or *castellum*, a military camp or fortress (Aja Sánchez 2008a: 390; Pollard 2013: 13–15). This fortress was divided into two sections, separated by a navigable canal that passed through two projecting towers. After Diocletian, not only a proper *tetrarchic* fortress was built but we do know that *legio XIII Gemina* had its base there (Kaiser 2015: 253). The south-west corner of the fortress was adapted to the Nile old river's east bank; and the length of the fortress followed the Trajan's canal (*amnis Traianus*) passing through the fortress longitudinally.

When the Amr ibn al As arrived to this point, the western access to the canal that ran along the fortress was called *Porta Nova*; the *castrum* itself is referred as *Qasr al Sham'* (Caetani 1911: 181,559–561; see Appendix, Section 1.4), whose meaning then, might be “the *castrum* of Egypt”.

²³ When Amr bin al As approached to Babylon he asked for reinforcements in Al-Maks (or Al-Maqs). Al-Maks, says Caetani, was a pre-Islamic settlement called Umm Dunayn, and refers to a customs post where the tithe (العشور) was levied (on Maks see Björkman 2012; Caetani 1911: 562).

1.3.3.2 Monasteries and mosques: Ma'at, Paganism, Christianity, and Islamism

The last group is perhaps one of the most complex of all. We have seen that the history of Egypt from [AE.NK] to [GR.RO] is also a history of conquering the fertile Nile Valley and Nile Delta; a trend of appropriation and reappropriation that might have started with the Hyksos, then followed by the Assyrians, the Persians, the Libyans, the Nubians, the Greeks, or the Romans. It seems that the Egyptians faded away during the struggle for power among all these groups fighting over their land, although, they were all the time maintaining each one of these systems. As we have seen, most of the native Egyptian population maintained their laws and customs due to political and cultural segregation, a kind of apartheid to keep native Egyptian people with as little power as possible.

Perhaps, due to a relatively long-term process where continuous succession of powers did not change drastically the role of the inhabitants, the Native Egyptian population got used to any new governor regardless their origin. At a low level, most people would have been living their lives, generation after generation, with the sole purpose of having a relatively nice life, perhaps having *ma'at* in mind (consciously or not), and maintaining the surplus required by whatever tax collector would ask for it, and maybe, embedded within the society since [AE], serving to an unreachable governor, whether it was a Pharaoh, a Satrap or an Emperor, regardless if it was living in Memphis or Thebes, Persepolis, Alexandria, Rome or Constantinople.

Another big challenge for this Group and the reason that it is shorter than the other two, is that the accumulation of histories can be overwhelming. On the one hand, we have the Roman Imperial history of a province narrated and explained by historians or politicians; on the other, this history supported or documented locally with literary sources (e.g. administrative documents or letters), some of which have resisted the pass of time and that we can have access to (e.g. *P. Oxy* or *P. Thmuis*). But we also have histories that intertwined with the

Roman history, which precede the Romans but that we can start tracing—for the sake of simplicity and synthesis—to the beginning of the 1st century CE, with the Jewish communities in Egypt and Judea, the rising of the Copts and Christianity and finally Islam. Intertwined stories that support each other or contradict themselves, with their own enemies or allies, or their explanations of the shape of things, and each of them with their foundational myths.

What is important here is how, and to what extent these stories shaped the landscape of Egypt and the Nile Delta. By the 3rd century CE, the Roman Empire not only struggled to find equilibrium of power in the heart of the empire but also to control one of its most important provinces which supplied between six million (6,000,000) of *modii* during the first century CE, “equal to that from Caesar’s Gallic conquests and more than twelve times that from the province of Judaea (Bowman 1996: 93–94) and up to eight million (8,000,000) *modii* of wheat to Constantinople by ca. 538 CE (Mayerson 2007). Native Egyptians revolted, Greeks were not happy, Jews revolted and a group of people that started to be called Christians, certainly with Jewish roots, were gaining power all over the empire. In Egypt, Romans were succeeding in bypassing the tax burden by empowering people at a small local level, precisely where Roman presence was weak, but nonetheless where they relied the most to keep the tax flux steady. Eventually the Romans persecuted and punished the Christians, but the power that they acquired during almost two hundred years, silently among neglected and angry people, turned against the Roman Empire to the point of not only accepting them, but to try to control them by incorporating them into the Roman domain until eventually the Empire needed to transform itself into Christian. At least this is how I see it, but my story is not the story of the Copts nor the Jewish or the Romans or several historians. The important thing to note here is to understand what created “city” in Egypt when the Christians took over the Roman Empire. It is not that the Christian fought the Romans and took Rome and conquered the land. We can say, however, that the Christians conquered the people of the Roman Empire; and by doing so, it also changed the urban pattern in the country.

Alston's book *The City in Byzantine and Roman Egypt* should be referenced here – though it is difficult to follow at times. There's a review of it by Bagnall, I think, which puts it into perspective.

Following Jan Assman (2001: 19), it could be possible to explain this urban change from a religious point of view. Primary religions (e.g. pagans), such as *ma'at* –if we do consider it as a religion–, but also Greek or Roman polytheistic religions, constituted a harmonious state of orderly relationships, among which the relationship with the gods is one of them. In paganism, “what is central is action, the cult. The religion is the sum of the dedications, the sacrifices, the rituals: the interaction of human and divine. In Egypt that interplay had been centered for millennia on the temples–small, medium, and large, urban and village, wealthy and poor” (Bagnall 1996: 261). Secondary religions, such as Judaism, Christianity, or Islamism, constitute a harmonious relationship with God, and social or political order can generate conflicts of loyalty if human actions diverge from this relationship (Assmann 2001: 19). Paraphrasing Frazer (1922: 50), while *ma'at*, or Greek-Roman religions revolve on practice without fear or love of God, in a state of orderly relationships between men and gods; secondary religions, revolve on faith based on fear or love of God, and practice based on God's relationship with humans. This difference made possible one of the main urban transformation in Egypt since [AE.MK], because a new urban landscape appeared based on faith to God: the monastic landscape and the Islamic city. These landscapes, contrary to previous urban developments, was not based on maintaining a balance with the gods and humans (*ma'at*) or based on moral or immoral actions (e.g. democracy vs tyranny; see Aristotle, *Politics*). These new types of settlements originated as antithesis, grievance, or contempt against the *metropoleis* or in general, the already inhabited places (Brooks Hedstrom 2017: 144–148; Gabra 2002: 10; Ramírez Méndez 2006: Parte III.1). As for the Arabs, according to Caetani, there are reasons to believe that during the first century

after the *Hijra* (الهجرة), the beginning of [EA.RG], “il soggiorno nella città rinsciva incomodo e sgradevole”²⁴ (Caetani 1911: 564).

In the case of the fortress of Babylon, we can see clearly how different stories are intertwined, but in the case of churches, monasteries, mosques and their appearance or development, the blend is more subtle. In the case of churches, there is an archaeological gap of information of almost three hundred years between the first and the fourth centuries until the appearance of the first churches –as a well-defined religious feature–, from which point there are evidence of churches of the reformed basilica type in the outskirts of settlements (Van Minnen 2007: 213), At a first glance, it can be suggested that about three hundred years is the time that took Christians to develop their institutions and evolve as a religious group different from Judaism. It could be argued, however, that perhaps we have not been able to find earlier churches or monasteries. In fact, the history of monasticism and even Christianity in general, can be traced back to the ascetic Jews, such as John the Baptist, the person that supposedly baptised Jesus. Jewish ascetism started in or around the beginning of the 1st century, and it might be considered an scission of Judaism that, with Jesus, evolved into Christianity. (Doering 2020; Freeman 2014: 582; Schaff 1997b: 60–61). But we can go back further inasmuch as “In seeking out locations outside of the normative urban environment, monastics were part of an older tradition first started by athletes, but developed fully by Hellenistic philosophers and other religious groups that found separation beneficial to their success in reaching disciplinary goals” (Brooks Hedstrom 2017: 145).

As for the monastic settlements, recognised as such, they can be dated after Diocletian and their origin can be placed in Egypt; monks appeared to be known by name (*monachos*) by the beginning of the 4th century CE (Dunn 2000: 1). However, there are two types of monastic settlements depending on how monks

²⁴ “Living in the city was uncomfortable and unpleasant” (My translation)

lived. The founder of the coenobitism or cloister-communal type, is Pachomius, taking as an example the Essenes and Therapeutae, ca. 323 CE (Krawiec 2002: 14; Schaff 1997a: 134). This type is recognised in Middle Egypt for their recurrent use of abandoned residences (Brooks Hedstrom 2017: 83). The eremitical monasticism, ascetic or anchorite, with the prophets Elijah and John the Baptist as role models (so, technically it can be traced back at the first years of the Common era), was founded by Paul of Thebes, who retired to a distant cave where supposedly lived ninety years after the Decian persecution in ca. 250 CE (Schaff 1997a: 153). Paul was relatively unknown until the Christian farmer Anthony found him and buried him and followed his steps; later, Anthony retreated to the uninhabited desert in the region of Karanis ca. 305 CE —and is considered the proper founder of this type of monasticism (Dunn 2000: 2; Gabra 2002: 3; Schaff 1997a: 134,153).

In the case of mosques, it is a similar situation to that of churches. There is a gap of archaeological or historical information within the first two hundred years of Islam in Egypt; the gap, however, is not necessarily because of lack of information, but because the events that followed the Muslim annexation of Egypt sometimes are neglected by Late Antique historians who finish their narratives in 640 CE. Alfred Joshua Butler, more than a century ago, wrote a book about “the Saracen conquest of Egypt” and he pointed out that the “subject [...] has been wrapped in profound obscurity” (Butler 1902: iii). As Leone Caetani put it just a few years later, “Ma nello studio dell'Islam, sarà bene non dimenticare quale triste spettacolo offrirono le condizioni morali e politiche dell'oriente bizantino alla metà del secolo VII dell'era nostra” (Caetani 1905: 5). And very recently, the Egyptian scholar, Okasha El Daly dedicated a complete book to prove that there is a neglected Arabic history from 640 CE to the French invasion of Egypt in the beginning of the 19th century, “Even when their interests go beyond the *pharaonic*, such scholars will still not include the archaeology of *Islamic Egypt*” (Daly 2005: 12).

After the Islamic annexation of Egypt, there was a reconceptualization of military places such as the Babylon fortress. Whenever the Muslims conquered a

new place, they settled a *misr* (pl. *amsar*). In early Islam, *amsar* denoted the settlements developing out of the armed encampments established in the conquered provinces outside Arabia (Wensinck et al. 2012: B). Amr ibn al As deployed a tent (فسطاط = *fustat*) next to Babylon and became the centre of the first *misr*. Originally, a *zirb* (زرب) was built, which it was like a barbed corral made out of reeds (Caetani 1911: 562; Guest 1907: 79; Salih 1895: 21b and p. 74). The *zirb* was built next to the Babylon fortress, known as Al-Qasr. Within the borders of this fence, Amr ibn al As built the *misr* and according to a story, he decided to keep it up when he went to conquer Alexandria because they found a dove nest, and hence the place was considered sacred which recalls a similar story when Uthman opposes to kill a dove in Medina (Caetani 1911: 555,557). During the siege of Babylon a garden next to the fortress was occupied and the Muslims decided to install the congregational mosque (مسجد جامع = *masjid al-gami*) there, which originally was very simple, possibly resembling the one in Medina, and by orders of the caliph Umar, without a minbar (منبر) or pulpit (see Caetani 1911: 563–570; Pedersen et al. 2012: I.2). Originally (Caetani 1905: 566). In their respective districts or *khutat* (خطة), surrounding the mosque and along the east bank of the Nile, there were the houses of circa forty three tribes that accompanied Amr and, possibly resembling Basra by Uthman orders, each tribe should have at least one mosque (Caetani 1911: 564, 570–573; Guest 1907).

Similar to [AE.1P], where has been suggested a democratization of afterlife and then during [AE.2P] when *ma'at* is used to punish, or at least blame, an abusive King; in the 1st century CE, the excesses of Roman elite and their clients, generated social conflicts that might have evolved into a different conception of life. It is not a coincidence, then, that in Christianity and Islam, humility is a virtue²⁵, whereas to be a *humilioris* in Roman times condemned you to a life of

²⁵ For Christianity see for instance Rufinus of Aquileia (2019: Prologue.2, 60, n. 4); also Benedicta Ward SLG, “humility and patience, the real virtues of the monastic life” (Ward Slg and Anonymous 2009: 42). For Islam, the background of the prophet is important “la povertà e la umile origine del futuro Profeta” (Caetani 1905: 131), but also eventually, some Surahs, such as (25.63):

suffering, literally, “universally liable to flogging and summary execution, and also, it would seem, to torture.” (Jones 1964: 17).

In this sense, it is also not a coincidence that “Monastic deserts” appear in remote areas, including the marshes of the Nile Delta, or further north along the sandbar towards the Mediterranean Sea. In the 4th century, monks from Rufinus of Aquileia’s monastery on the Mount of Olives, visited the monastic settlement of Diolcos, in Elearchia, which was supposed to be somewhere nearby or around the Sebennyitic mouth. In there, they found “a wonderful priest named Piammon, a man who was full of humility and kindness” (Rufinus of Aquileia 2019: Ch. 32, 210). In the same area but to the east, there was the Monastery of St. Demiana to the west of Izbat Jimyanah north of Belkas (بلقاس), a monastic settlement for women [DATE]. According to the story of its foundation, a Christian governor named Marcus had a daughter called Damiana that refused to be married and instead asked her father to build her a castle “where [she] can live and preserve [her] virginity and serve [her] Christ”. This happened during Diocletian’s reign and eventually both Damiana’s father, Damiana and her “forty virgins” were killed refusing to adore the emperor.

In the same way as the monasteries, the Islamic cities were settled and grew out of faith. While the arena of political struggle was based mostly in the Arabic Peninsula, pagans who refused to accept Islam or contradict his only prophet, disagreed with him and God; and since Islam was universal, the authority of the Muslim community (أمة الإسلام) created by the prophet Mohamed, should not be confined to the Arabs, but to the entire world. Eventually, the expansion of Islam started towards their immediate, historical neighbours (Kennedy 2004: 47–48).

“The servants of the Merciful are those who walk the earth in humility, and when the ignorant address them, they say, “Peace.”

Albeit these religious expansions and reconceptualization of space, the age of Muslim expansion is not precisely the history of the *jihad*, and at least in Egypt, there was an equilibrium between Christianity and Islamism, up until the ninth century (Brooks Hedstrom 2007: 107–109).

The Islamic city did not evolved fully within the period covered in this research, and it seems that most settlements were just adapted for Muslims and Arabs despite the urbanization programs and administrative reforms by the Tulunids. It has been suggested that the Islamic city reached its full until the Fatimid period, at least in Egypt (see Bloom 2007; Brooks Hedstrom 2017: 108–109). In fact, it was until 961 CE that the first congregational mosque in Gizah was built (Wensinck et al. 2012: 2.ii)

1.4 Μια macaronic histoire من Ägyptens: unintentional colonialist misunderstandings about Egypt?²⁶

"Αἴγυπτος [...] τε γῆ καὶ δῶρον τοῦ ποταμοῦ"
(Herodotus, 2.5)

Egypt, in fact, owes to the river not merely the fertility of the soil, but also the soil itself. It is a beautiful sight when the Nile has spread itself over all the fields. The plains are hidden, the valleys have disappeared; only the towns stand out like islands. In the interior of the country there is no communication except by boat. The people are overjoyed the more, the less they can see of their country.

Even when the river has resumed its normal course, it discharges into the sea by seven mouths, any one of them itself a sea. Moreover, it sends out many less famous arms toward either bank.

(Seneca 1910: [ca. 4BCE-65 CE] p. 171, IV.2.11,
translated by John Clark [1910])

I thought it was important to discuss briefly the “orientalist” view about Egypt that might have biased the perception about the country, and perhaps how these conceptions have guided some interpretations related to the relationship between the Nile River and the Egyptians (see Champion and Ucko 2003). In this section, I discuss the recursively *etic* approach that might have guided our discussion in understanding the urban phenomena in Egypt. The origins of this *etic*, and probably colonialist approach, might be traced back to the Greeks, and it seems to be extended up to the 20th century (Butler 1902: Preface, i-vi; Rathbone 1990: 110; Vasunia 2001: 75–76; Said 2003, especially Ch.1; Daly 2005: 1–4; Mendieta 2006: 71–72; Bennison 2007: 1–3; Buraselis 2013: 97; Blouin 2017). I have called this section “Μια macaronic histoire من Ägyptens” (“A macaronic history of Egypt”), which is just an ironic way to start this discussion. On the one hand, different

²⁶ The history of Egypt has been written in different languages, by people with different backgrounds and from different countries in the world. I became acquainted with the term macaronic when I was reading *Il nome della rosa* and was not able to understand Salvatore of Montferrat. In a sense, the history of Egypt is macaronic.

cultures other than Egyptians have monopolised the study of the history of Egypt; on the other hand, these different cultures have conquered the country and have superimposed their understanding of the world. In this sense, it is worth noting that the current Egyptian Constitution starts like this:

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

هذا دستورنا

مصر هبة النيل للمصريين، وهبة المصريين للإنسانية.

مصر العربية - بعقريّة موقعها وتاريخها - قلب العالم كله، فهي ملتقى حضاراته وثقافته، ومفترق طرق مواصلاته البحرية واتصالاته، وهي رأس أفريقيا المطل على المتوسط، ومصب أعظم أنهارها: النيل (جمهورية مصر العربية، 2014)²⁷

To what extent has this superimposition and imposition of ideas guided the way we understand Egypt or things related to Egypt? It is not the intention of this section to talk thoroughly about this matter. However, I think it is important to have this in mind because, at least in this research, it had an impact on the way I approached Egyptian civilization, not as a passive society that awaits the Nile to change it (see Blouin 2017), but as an active society that has had the power to transform the landscape and perhaps the river behaviour since the Old Kingdom (Volker 1982: 8; see Said 1993: 188; Bunbury et al. 2017; see also below, Reconstructing the Nile Delta hydrology).

We have different examples of these etic/colonialist views about the Nilotic country. For example, when Herodotus (2.19) referred to the nature of the Nile River, he said: "I could not learn anything either from the priests or from any others." This phrase could be interpreted in several ways, among which: 1) that the

²⁷ This is the official text in Arabic. The unofficial English translation provided by the Egyptian State Information Service (SIS) website (Arab Republic of Egypt and Egyptian State Information Service (SIS) 2014) reads as follows: "In the Name of Allah, Most Gracious, Most Merciful. This Is Our Constitution, Egypt Is the gift of the Nile for Egyptians and the gift of Egyptians to humanity. With its unique location and history, Egypt is the Arab heart of the world. It is the meeting point of world civilizations and cultures and the crossroads of its maritime transportation and communications. It is the head of Africa on the Mediterranean and the estuary of its greatest river: the Nile."

priests or someone else did not know anything about the nature of the River Nile or 2) that Herodotus was not able to find a good informant regarding the nature of the river or 3) that perhaps the priests knew precisely the nature of the river, and that the information required by Herodotus would have compromised the cosmological integrity of the Egyptian system, or simply 4) that that Egyptian were not interested at all in the “nature” of the river. It depends on the point of view.

For Mamdouh Shahin (1985:1) —a Water Resources Engineering Consultant, Fellow at the International Water Resources Association (IWRA) in the Netherlands—, “the naive conviction” of the common ancient Egyptians where “the Nile flows out of the full breasts of the Nile God, Hapi”, or the theological foundations of the priests' theory, who thought that the “'Celestial Nile' was beset by monstrous rocks and stones and that below this barrier rose Egypt's Nile”, are indicative that the ancient Egyptians knew nothing of the origin of the river as if they needed to. Does this confirm Herodotus statement and, therefore, we could conclude that Native Egyptians were ignorant of their own country, or at least about the river origins? Whether this is important or not, it is evident that different concepts are clashing. Herodotus (2.77) said that “Among the Egyptians themselves, those who live in the cultivated country are the most assiduous of all men at preserving the memory of the past, and none whom I have questioned are so skilled in history.” Therefore, it is possible that Herodotus cared about the philosophical issues, while the Egyptians did not; and possibly, Egyptians cared about the historical cycles, but Herodotus did not.

After all, Herodotus' account on Egypt, according to Vasunia (2001:75-76), lost the status he acquired in the Renaissance after Champollion deciphered the hieroglyphs. In this sense, we might ask, who were the Egyptians? (Hilliard 1992; Moret 1927: 38). Let us take examples of two common and daily used words such as ‘Egypt’ and ‘hieroglyph’. These two words are usually taken for granted when referring to the world of the Nile River. Both words are a Greek interpretation of a Native Egyptian term, but with a different development. The Greek “hieroglyph” (from Greek, ἱερός [hierós 'sacred'] and γλύφω [glýphō 'I carve, engrave'], “sacred

carvings”)²⁸ is supposed to be a translation of the Native Egyptian *mdw.w-nTr* “god’s words” (from *mdw* [S43, 𓄀, ‘words’] and *nTr* [R8, 𓄁, ‘god’]. Technically it is a translation and a Greek interpretation of the Native Egyptian term. In modern times, most people used the Greek word, hieroglyphs, to refer to the Native Egyptian writing; however, in modern times in Black Studies, they prefer to use the Native Egyptian phrase, Medew Netjer (Nehusi 2003) rather than Hieroglyphs.²⁹

Between the Egyptologists and Black Studies scholars, Medew Netjer, is a complicated concept for diverse reasons, starting from the word *nTr* and the ideogram/logogram used to express it. A relatively simple symbol with a very complex meaning, 𓄁 (*nTr*), defined as “god”, has been interpreted either as a tapering pennon-like ideogram (Allen 2014: 493; Arkell 1933; Nehusi 2008), as an axe (Budge 1903; Siame 2013) or simply as a 𓄁-pole (Newberry 1947: 90) without making further assumptions except that looks like a “flap or streamer”. Consequently, there have been several attempts to decipher it and still, there is not a conclusive definition (but see Baines 1991). Wallis Budge considered it an axe-like symbol that possibly meant “a being who has the power to generate life and to maintain it when generated” (1903:491). A different perspective with a different genesis, although like Budge’s conclusions, is found in Siame (2013: 262-264), who related the term *nTr* to Bantu or Akan languages, considering it as an axe, a tool for piercing, killing animals or people, that eventually could have empowered the proprietor, which in turn embodied ancestral knowledge of kingship; and the authority to rule. This idea might be supported by copper axes such as the one found in tomb 654 at Abydos from Dynasty 1 (UC16177, Petrie Museum). For Baines, however, richer explanations might be achieved if we

²⁸ Moret (1927), refers to three references for this, one to Herodotus (ii,36) “γράμματα ἱερά”, sacred letters; one to Diodorus (iii,3), “γράμματα ἱερογλυφικά”, sacred carved letters; and one to Clement of Alexandria.

²⁹ As a matter of fact, nowadays, the word hieroglyph could be applied to any writing system or symbol that is “Enigmatic or incomprehensible” (OED 2018).

explored the transition from a fetishist object –whatever this might be, although he considers it a flag-pole– to a restricted object for royal and divine conventions of decorum, a royal prerogative to display and legitimate power (Baines 1991: 30–32).

Having said this, from my perspective –as a Mexican archaeologist–, if I were using *Medew Netjer* to refer to the Native Egyptian writing, “god’s [divine/royal?] words”, I think I would always think of empowered people or a language created by gods, rather than the characters, symbols or pictograms used to build words and sentences of an ancient language. On the other hand, if I refer to *hieroglyphs*, “sacred inscriptions”, internally, I refer exclusively to the writing system, the material depiction of a language, created by humans, depicted with signs that *were* sacred in particular ancient domains, Ancient Egypt.

In the case of the word's origin to refer to the country of the hieroglyphs, we find similar issues (Griffith 1997a),³⁰ and some are related to the Nile Delta itself. In this case, it has been accepted that the name Egypt comes from the Greek Αἴγυπτος, which in turn is the corruption of ḥwt-kA-ptḥ, translated as “the house of the ka (soul or spirit) of (the god) Ptah”, a name for Memphis the ‘capital’ (*idem*). Semantically, while ḥwt-kA-ptḥ refers to a place or part of it (Memphis), for Greeks Αἴγυπτος, at least in Homer, “denotes, in the masculine, the river Nile (Od. 3. 300 etc.) and, in the feminine, the land of Egypt (Od. 17. 448 etc.)” (Griffith 1997a: 2). Also interesting is that for authors that made this distinction of gender, Νεῖλος, the River Nile, refers only to the Nile Delta river branches (Goedicke 1979: 70).

We cannot obviate that the Greeks had a particular understanding of Egypt, which could be radically different from the Egyptian concept. We can infer, based on Celoria (1966), Griffith (1997a: 2) and Vasunia (2001: 87–100), that the Greeks were not talking about the land or region as a natural or divine feature, but rather

³⁰ See also Drummond (1825: 41–57) and his long discussion about the ancient names of Egypt and the etymology of the name.

in political terms, as a territory, or even in geographical terms, as a geographical region different from others. Although, they were constantly referring to different realities: the country of the River Nile;³¹ or the country where the house of the ‘ka of Ptah’ resides; or the land with black soil (*kmt*), different from the sandy reddish soil from Libya, or the rocky and clayish from Arabia (*dSrt*) (Herodotus, 2.12.2) (see below, Group 1). Sometimes, the Greeks did not refer to the whole country because they talked only about Lower Egypt, the River Delta, basically, from Memphis to the Mediterranean (Griffiths 1966; Vasunia 2001), because this was the area they came to know better (Goedicke 1979: 71–72).

The issue here is: was this a misunderstanding? Goedicke (1979) and more recently Griffith (1997a) suggested that the name Νεῖλος (Nile) comes from the Egyptian word *nA ra.w hA.w(t)*, perhaps pronounced as *ne-ro-he*, or perhaps *ni-lo-he* in the Memphis area, eventually shortened to just *ni-ro* or *ni-lo* with an added *-s* mechanically attached. Interestingly, it is that granted that this might be true, *raw-hʿw(t)* is a term used since the late 18th Dynasty used to talk about the river mouths in the Delta and was never used for the Valley (Goedicke 1979: 71).

The thread of misunderstandings continues. We are continuously deceived and lost by translation from the Egyptian domain, passing through the Greek sieve and then to our current domain. For instance, the Egyptians, so we understand, called the River Nile, “the river”, *itrw*, and the River’s swelling, the annual flood, *hapy*, which was also the name of a minor god or a personification of a fertility figure, in this case, the flood (see Baines 1984; Hoffmeier 1989). These two concepts have impacted our perceptions and understanding of Egypt. It seems that we were expecting a proper name for a magnificent river —“the Nile had no name” (Griffith 1997b: 356, 1997a)—, or at least a cult dedicated to it (Aja Sánchez

³¹ Goedicke (1979: 70) says that “Homer does not use the term Νεῖλος; but has instead Αἴγυπτος; the designation of the country, though with masculine gender when applied to the river.”

2008b: 277), and more importantly, the annual flood, the very reason of existence of Egypt, being more than just a mere secondary god (Prell 2009).

There are features of an extended divine landscape that constitute the land where the Egyptians lived that we could explore to characterise *the gift of the Nile*, or “τε γῆ καὶ δῶρον τοῦ ποταμοῦ” (Herodotus 1920:2.15), “land and a gift of the river”; a land that could or could not constitute a country (or a state), or that was rationally different from other regions. Then, from the Nile River, we pass to the terrain, the ground, the arena where humans exist and coexist. According to Janet E. Richards, from a native Egyptian perspective (emic perspective), the landscape of the Nile should be understood as that black soil of the Nile plain (kmt) framed by the desert (dSrt), where the Sun (Re or Ra) transits every day. In that place, the “primaeval mound” emerged from the first flood, “the flood of the time”, and the pyramids or the mound (iAt) is evoked, which could also be re-conceptualised in the temple form, suggesting that the primaeval mound could signify a separation between the natural “chaos” and its domestication (see for instance Allen 2014: 160–161).

Some scholars have linked the Native Egyptian phrase/word kmt, or kemet, to just the “black land” or “black fertile earth [das schwarze Fruchland]” (Faulkner 1991: 286; Erman and Grapow 1971: 126). Also, kmt has been used as the native name for Egypt, the Black country (‘Pays noir’; Bilolo 1989). It has also been interpreted with a Greek mythological meaning found in Homer, relating it to the introduction of irrigation to Greece from Egypt; or “black” as an epithet of earth, as a homage to the Egyptian origin of this technology (Griffith 1996: 254). This conception, probably certain for the Greeks, stresses the fact that the blackness is related to the earth and nothing else, even though Plutarch (2003: 81; 364b) mentions that for Egyptians, the colour black was important at several levels and inherent to several things, including Osiris and the fact that water darkens everything, among other things the soil that is moisturised. If Plutarch is correct, kmt should be understood as “the land of blackness” or just “blackness” instead of looking for a specific black thing that kmt would have referred to (Bernal 1987; Nehusi 2003,

2008; Siame 2013). The blackness concept could work from an Ancient Native Egyptian point of view, but as Carruthers suggests, in modern contexts or extrapolating it to the whole of Africa might create issues and would be a misinterpretation (see Carruthers 1992: 473–474).

Suppose we agree with Griffith and suppose that Greeks were importing Native Egyptian words rationally and according to their language rules. How can we explain the reason of choice behind the translation of Medew Netjer as hieroglyphs but transliterating ḥwt-kA-ptḥ into Αἴγυπτος? We should keep this in mind because archaeologically, there are not true Egyptian, Greek, Roman or Arab contexts. We always have a palimpsest formed by the reconceptualization of concepts, ideas, shapes, or materials, and it could be tedious but helpful to discern concepts, ideas, shapes or materials from their temporal or geographical contexts.

Why did we call Egypt, Egypt, but not Kemet? Why do the Modern Egyptians, mostly Arabs, call it Misr, a popular name for Cairo's city? (Sheehan 2010: Ch. 4, n. 7; see Appendix. Metadata. Group 3. Urban features). Similarly, it is said that the fortress of Babylon (Βαβυλων Ντε Χημι= “Babylon of Egypt” in Coptic), also called Qasr al Sham’ (قصر الشمع) (Salih 1895: 72, see n. 4), might have been called Sham’ as a corruption of the Coptic name for Egypt (Χημι) which is (or was) also a common name to denote Cairo (for this see Amélineau 1893: 538–544). Another Ancient Native Egyptian word has been linked to the name of the country of Egypt. Apart from ḥwt-kA-ptḥ or even kmt, there was also tA nTr, “the land of the gods”, another way to represent and call a particular view of the land from a Native Egyptian perspective (Erman and Grapow 1971: 225; Faulkner 1991: 293).

As a unified territory, Egypt has had several names, with different historical, political, and mythical meanings related to different cultures, as we can see in Table 4.

Table 4. Egypt names through time.

Name	Writing	Possible meaning	Culture/language	Age
tA-nTr		Land of gods	Native Egyptian	Dynastic
tAwy		Two lands	Native Egyptian	Dynastic
kmt		Land of blackness	Native Egyptian	Dynastic
ḥwt-kA-ptḥ		The house of the ka of Ptah	Native Egyptian / Foreign	Dynastic
ḥikuptaḥ		The house of the ka of Ptah	Akkadian/Ugaritic	Dynastic
Ai-ku-pi-ti-jo ³²		The house of the ka of Ptah	Native/Mycenaean Greek	Dynastic / Mycenaean
Aiguptos	Αἴγυπτος	The house of the ka of Ptah	Native/Greek	Dynastic / Hellenistic / Ptolemaic
Aegyptus	Aegyptus	The house of the ka of Ptah	Native/Latin	Roman
Yarimuta ³³	-	-	Akkadian?	-

³² See Milani (1980: 80–81) or Cole (2018: 63)

³³ Proposed by Carsten Niebuhr [1733–1815], it was published in a posthumous article called *Das land Jarimuta* (Niebuhr 1896; see also Astour 1987: 70; or Hall 1916: 353). Nevertheless, according to Arno Poebel (1914: 225–226), Jarmuti or Jarimuta, is actually “somewhere along the Syrian or possibly the Sicilian coast [...] the plain of Antioch, along the lower course and the mouth of the Orontes river”.

mšrm, Misru/Misri/ Misek? ³⁴	𐎠 𐎢 𐎣 𐎤	Land, neighbour, border	Assyrian/Ugaritic	Dynastic
Mudrāya	𐎠 𐎢 𐎣 𐎤	Province, Land,	Old Persian	Persian
Misru/Mizraim	מצרים	Border, City or country	Hebrew/Semitic	-
Khēmi ³⁵	ΧΗΜΕ	Land of blackness	Native/Coptic	Dynastic
Misr ³⁶	مصر	City or country	Arabic/Semitic	Arabic

Now, talking specifically about the “delta”, we must also consider what it was. The modern concept of “delta” within the hydrology domain is applied to an apparent geo-hydrological shape resembling the Greek letter Δ and typical landscape and geomorphological features (humidity, flora and fauna, geomorphology, etc.). The word delta became self-explanatory, referring to the geomorphological feature describing a particular land formation where the river deposits sediment at the edge of a standing water body. It would be hard to know precisely when this happened (Seybold, Andrade and Herrmann 2007; see Section 4); as Thornbury’s *Principles of Geomorphology* states: “Not all rivers build deltas nor are deltas shaped like the Greek letter” (Thornbury 1968: 170–171). The origin

³⁴ See Carruba (1990) for a discussion on similar Hittite names. See Rawlinson (2014) for a discussion about Lower Egypt being Misr and Misek being Upper Egypt. See also Spalinger (1981), Pardee (1989: 411) or *The Assyrian dictionary* where *misru* also refers to a border, land or neighbour (1991: 113–117). On the use of *mšrm* in Ugaritic, see for instance Mynářová (2010: 366), Lipiński (1977: 216, n. 18) or Márquez Rowe (2004: 342, incl. n. 17).

³⁵ See Crum (2000: 110) or Černý (2010: 58).

³⁶ See *On the use of Misr in the Qur’an* (Islamic Awareness 2012) with thorough study on the use of Misr in the Islamic world including references to the *Amarna Letters*.

of this term was studied by Francis Celoria in 1966, who pointed out that the Greeks themselves did not live in a world where they could have coined technical terms with Greek roots (e.g. hydrology) apart from the term delta. This is ironic also considering that, apart from the Danube delta which technically does not form a Δ , it would be the only delta similar to the Nile known to Greeks before they went to Egypt, considering its proximity to the Aegean sea). In modern riverine contexts, the word delta could explicitly denote a reference to the Nile Delta, but, in general, it is used as a technical term for any other river formation. The Greek letter Δ was probably borrowed from a Phoenician character around 850 BCE. According to Celoria, would have been Aeschylus in the middle of the 6th century BCE one of the first persons to talk about the triangularity of the Nile Delta in *Prometheus Bound*; however, its modern use as a technical term was developed over the years comparing typical features in these kinds of landscapes such as the Indo Delta or the Danube Delta (Celoria 1966: 386–387).

In our days, the delta is a landform, a geomorphological feature defined from our current scientific perspective. Before the geomorphological concept, and from a historical human perspective, the delta was (and still is) considered a land with high agricultural potential, which firstly implies an understanding of what agriculture is about, and the purview of it, and then to recognise this place as an area with future human development. There are other ways to conceptualise this space between the two conceptions since humans tend to conceptualise their surroundings to understand them. We could inquire on the Egyptian Delta's cosmological and onomastic conception to understand its current use as a river-borne landform regardless of its shape. In Celoria's words (1966), this signifies the change from naming *the* delta to naming *a* delta, and eventually, the *Delta* (of the Nile). The same cognitive process might apply to other concepts found in Egyptian hieroglyphs.

Table 5 presents some hieroglyphic symbols that I consider are relevant to understand a primaeval Egyptian conception of space, which abstractly is our starting point from where the landscape would have evolved. These symbols are

grouped merely by shape and phonetic transliteration resemblance rather than meaning or a factual/objective representation of an object. This list is based on Gardiner's typology organised primarily in the way an object is represented and to "illustrate their uses" (Gardiner 1957: 438). This is important from a linguistic point of view (e.g. the rebus principle; see Collier and Manley 1998: 2), but also considering that standardised Middle Kingdom hieroglyphs are a mixed writing system that combines logograms, phonograms, semograms, morphemes, determinatives and so on (Moret 1927: 7-15; Gardiner 1957; Wilson 2003: 7; Allen 2014: 2-4) to build up a sentence.

Table 5. Some hieroglyphic symbols relevant to understand the long-term idealisation of the highly ruralised urban Egyptian landscape (H/S=Hieroglyph/Symbol; Trans.= Transliteration; Class.=Classification)

H/S	Trans.	Meaning	Class.	Notes based on Gardiner	Interpretation, derived from established meaning, shape and phonetics
	iw	island	N18		<i>Domain</i> ; in this case, it could have a meaning from an OO perspective, defined as a non-meronymic topological relation (e.g. a house is in <i>iw</i> , but a house is not <i>iw</i> , neither part of it). / <i>Island</i> in river seen from hillside / an island during the flood (it might be a levee or turtleback) / has settlement potential / a domain that encompasses something
	tA	(strip of) land, country	N16	Bilateral tA "land", "country", etc.	Land beside from river seen from boat / the points might refer to domains that constitute the "country" domain (water, agricultural land, settlements). It is like saying "a bunch of sub-domains" (member-bunch meronymic relationship).
	tAwy	two lands (2x N18)	N19	TAwy - in ḥrw tAš(w) tAwy "Horus who joins the two lands."	Double the latter / the two "country" domains
			N18A		Water domain / the river channels, canals, lakes, ponds, a perennial stream or water body.

			N18B		Agricultural <i>domain</i> / the rural land that is flooded or is prone to be flooded
★	sb3 dw3 (tril.)-dw3 (tril.)-sb3		N14	Ideogram or det. for sba-(sb3), "star"; phonetic for dua-(dw3)(dua); (see Duat)	Visualisation of light from a star (twinkle)
	nwt or pt	sky – Nut, the goddess of the sky	N1	sky, (or heaven), and often used as God/Pharaoh XXXX, Lord of Sky/Heaven	Concept of 'roof' over the earth. A specific domain, similar to iw, but seen from aside. The little peaks below might indicate directionality (e.g. a domain above the human domain). In Faulkner (1991: 125,134), <i>nnt</i> , "lower heaven" appears as an upside-down <i>nwt</i> or <i>pt</i> symbol, and right before of it, a <i>niwt</i> symbol ( ); The little peaks might also emulate the feet and arms of Nut.
	niwt	City, town, capital, built-up area	O49		An urban domain / this could also be a symbol composite (see Error! Reference source not found.) that combines three different domains, the sky (<i>nwt</i>), the island (<i>iw</i>) and/or the mound (<i>iAt</i>).
×		Crossed diagonal sticks	Z9		Crossed diagonal sticks / potentially associated to <i>niwt</i> in the sense of "meeting point"?
	swA, sdj, ichbs, šbn, wp, wr		Z10		Same as above / Determinative for "break, divide" (<i>wpj</i>), "over load" (<i>djAj</i>), "cross, meet".
⊕	dwAt	underworld – world of the dead	N15	The realm of the stars	Stars domain / the domain of Nut
⊙	sp - sp (from spt)	threshing-floor	O50	Bilateral sp; (equal to Egyptian: "time"); see also "time", Gardiner no. O48, ⊙	Time domain / ground / terrain /the whole

	Sp	time	O48	Associated to Hierakonpolis.	Time domain / the beginning of time / the two lines inside the circle might refer to an abstract concept (e.g. time) but could also imply number “two”, then two “domains”
	Ra	sun	N5		Sun domain
		irrigation canal	N23	differentiation of N36	A plot of land bordered by canals / this might be a depiction of the field as seen from afar from a relatively high surface (e.g. the roof of a house). See Figure 2. / Ideogram for Geb.
	sepat	District?	N24	land with irrigation tunnels; "district, nome."	Service area, each square possibly representing a settlement / it could be a depiction of several agricultural fields one after another (like N23) / the “administrative” fields-land plots domain? / in earlier depictions seems more like a palisade ³⁷
		hills	N25	"hill-country, foreign land."	Any hilly morphology as seen from afar
	dw	mountain	N26		
	iAt	mound	N30	Mound; hill with shrubs	The mound / the emerging mound / the “island” emerging from the flood / what can be seen from afar when everything is flooded (see Redford 1997: 212 for iAt as a place for human settlement)

³⁷ See for instance a Naqada IIC sealing, unfortunately of unknown origin (Kantor 1952: Fig. 1, F; Regulski 2008: 993, Fig. 3). Also archaeological evidence of early wooden palisades (Naqada II-III) such as the one found in Hierakonpolis (Friedman 2009: 83–84) or in Armant (Ginter and Kozłowski 1994: 2,121). The palisade hypothesis is appealing because the palisade might be associated to an important ritual build-up area associated to a polity which could be a complex of several settlements (see Skarzynski 2017: 124), and hence representative of a region, or a “district” in later periods.

	t		X1	loaf of bread. Unilateral for "t"	A half loaf of bread a seen from aside
			X6	p3t (phoneme p3) loaf-with-decoration 1. Determinative for the 'decorated bread loaf', p3t; phoneme for p3; meanings of: stuff, matter, substance; for 'bread': dough, cake, bread, offering, food, product; 2. for the "primordial god(s)": "Pauti"	A loaf of bread that has been branded
	Khr, hr	(butcher's)-block	T28	1. Bil. (kh)r; 2. Ideas of items below (butchered, segmented, then 'owned'); and major use of 'below', or 'under', as a prepositional use	If it is a butcher's block and associated with the necropolis (below), it might be associated with the mortuary cult where animals are butchered as offerings. However, what if it represents a place rather than an object? How a "butcher's block" would be linked to a necropolis? What if it represents a mortuary workshop (e.g. w'b.t, see Coppens 2002) or a tomb complex [burial chamber/chapel-temple] (see Allen 2014)? (see also Wilson 1944; Fischer 1960: 172-173; Coppens 2002; Harer 2011: 228-229).
	hrt-ntr		R10	Necropolis: logograms necropolis; cemetery.	According to Allen (2014: 493), it represents R8 + T28 + N29. From my perspective, the basic shape without R8 is based on dw. The "butcher's block" could represent the mortuary cult. Whether this sign represents a building (e.g. w'b.t) or an object (a block), it could represent the place where the dead are prepared for the netherworld, which is associated with the gods (ntr). The shape resembling a mound could represent a hill in the eastern desert.



Figure 2. Kids playing with a kite among the agricultural fields in Timai el-Amdid. The red lines represent how the depiction of the sign for “agricultural field” (⌘, irrigation canal, N23) might have been formed.

2 Ixcitoca examples

The following two examples are clear and simple examples of the process of research. Both cases responded to different questions related to the study object.

Case 1: This is a straightforward case of looking for the source of a not adequately cited statement. I am using this case because I considered it very schematic and pedagogic, not because it was particularly difficult or relevant. The process seems tedious, but in reality, it took between 10 to 20 minutes to find the information I was looking for. In this case, it was important for me to know about historical events that could be linked to urban change in the Nile Delta.

For Section 5 (Volume 1), I read an article about *Egypt under Roman rule: the legacy of ancient Egypt* by Robert Ritner (1998). Almost at the end of the article, I read the following:

... and a treatise on the symbolic value of hieroglyphs.

In the reign of Anastasius (491–518), the Persians invaded the Delta but failed to occupy Alexandria and withdrew. Pagan authority over the Alexandrian university ended in 517, when John Philoponus assumed its leadership.¹⁴¹ Blemmye raids resumed against Upper Egypt, continuing under Justin I (520–527). In 529, during the reign of Justinian (527–565), the

The first step to find a clue is to have in mind your study object. I found interesting that the Persians invaded the Delta. What is odd about this text? If I want to know more about this Persian invasion, what would be the next step? As researchers, one of the first things to follow are the references. In this case, the obvious next step is to check what footnote 141 is telling me. The first thing I noted is that there were two different lines of information, one about Persians invading the Delta, and another about Pagan authority in Alexandria. How were these two events linked? This is the information that might be out of place (the small detail). Eventually, when I checked the reference, both things pointed to a single source.

¹⁴¹ Henry Chadwick, *The Early Church* (London, 1967), 172.

I had the opportunity to consult this book just to find that the reference only talks about John Philoponus but not about the Persian invasion during the reign of Anastasius. From this point onwards, it can be said that *icxitoca* starts, because you have a clear and definite objective: to find the original source. The clue is constituted by all the available pieces of information:

When: Between 491 and 518

What: Persians invaded the Delta.

Who: Persians/Sassanids; Anastasius

Now, following a clue with computers, databases, and Google makes the process much easier, fast and effective. To solve the mystery, the first thing I wanted to know is under which Persian king the Sassanids were attacking. This was done relatively easy using *Wikipedia* and the *Encyclopaedia Iranica*. And once it was done, I searched for the information using related keywords.

Keywords: Delta, Persians, Anastasius, Alexandria, Kawad I.

With a preliminary exploration with Google, and Google Books, using these keywords, I came up with the following reference: *History of the Coptic Orthodox People and the Church of Egypt* by Robert Morgan (2016). I was not able to consult this book entirely but fortunately it has a preview in Google Books and new information became available, although, also without a reference:

“During the reign of Anastasius precisely in 501 the Persians attacked the land of Egypt, a war with the Romans ensued, and the Persians soldiers overran the Delta up to the borders of Alexandria” (pp. 125)

How was it possible that such an event has so little attention in the history of Egypt? With no reference, and such interesting historical events. I found a book called *The Story of the Church of Egypt* by Edith Louisa Butcher from 1897, published in London by Smith, Elder, & Co. To my surprise, Robert Morgan copied almost identically what Edith Louisa Butcher said (page 318):

About 501 Egypt suffered from an invasion of Persian troops, who overran the Delta up to the very walls of Alexandria. The Byzantine troops defeated them in several battles, and finally drove them out of the country, but meanwhile the whole harvest of the year had been destroyed and the people suffered greatly from famine. A

Unfortunately, Edith Louisa Butcher did not add references either. But the information kept adding up and now I knew that the phrase was copied and that at least two modern authors were just paraphrasing it. I tried to find who said the phrase for the first time. I found other references using the phrases “overran the Delta up to the very walls of Alexandria”. One of these references appears in a book series of the Grolier Society (London) called *History of Egypt, Chaldæa, Syria, Babylonia and Assyria*, by Gaston Maspero. However, Volume 11 is called *History of Egypt From 330 B.C. To the Present Time* and was written by Angelo Solomon Rappoport (1904). In this book the phrase adds names and more details, but it does not include a reference:

In the tenth year of the reign of Anastasius, A.D. 501, the Persians, after overrunning a large part of Syria and defeating the Roman generals, passed Pelusium and entered Egypt. The army of Kobades laid waste the whole of the Delta up to the very walls of Alexandria. Eustatius, the military prefect, led out his forces against the invaders and fought many battles with doubtful success; but as the capital was safe the Persians were at last obliged to retire, leaving the people ruined as much by the loss of a harvest as by the sword. Alexandria

This book was published separately as another series in two volumes (in which case the quote appears in volume II, page 345), but it is a continuation of Maspero’s work. Judging by the date of publication, Rappoport seems to have copied Edith Louisa Butcher’s book, but she is not referenced nor is referenced the original source.

Finally, I found what appeared to be the original phrase in a book published in 1846 by Samuel Sharpe, called *The History of Egypt from the earliest times till the conquest by the Arabs A.D. 640. A new edition*, published by Edward Moxon (London) (pages 557-558):

By the tenth year of the reign of Anastasius, the
 Persians, after overrunning a large part of Syria and
 defeating the Roman generals, passed Pelusium and

Eutychii
 Annales.
 A.D. 501.

558

ANASTASIUS.

Ch. XVIII. entered Egypt. The army of Kobades laid waste the
 whole of the Delta up to the very walls of Alexandria.
 Eustatius the military prefect led out his forces against
 the invaders, and fought many battles with doubtful
 success; but as the capital was safe the Persians were
 at last obliged to retire, leaving the people ruined as
 much by the loss of a harvest as by the sword. Alex-

The original source, then, is the *Annales* of Eutychii, Chapter XVIII (Eutychius 1905, 1985), and the trace could conclude here. If we would like to keep going, we could compare the source of reference with the original source. Samuel Sharpe had already published *The early history of Egypt, from the Old Testament, Herodotus, Manetho and the Hieroglyphical Inscriptions* (1836), *The History of Egypt under the Ptolemies* (1838), and *The history of Egypt under the Romans* (1842). In the latter book, Samuel Sharpe used the quote about the Sassanid army invading the Delta for the first time. The main difference in respect to the phrase of 1846 is that he omitted the Chapter in Eutychii where he extracted the information. Regardless of that, it is the same. Now, what Eutychii said in reality?

Eutychii wrote originally in Arabic but there are two versions of his work: the Alexandrian recension and the Antiochian recension (Griffith and Elr 1998). Nowadays we can look for ancient works relatively easy using Google and book sources such as Hathi Trust, Gallica, or Archive.org. I found both versions, the Antiochian was published by Edidit L. Cheikho in Arabic, and is called *Eutychii patriarchae Alexandrini Annales* (Eutychius 1905), the Alexandrian recension was published by Michael Bredy, and is called *Das Annalenwerk des Eutychios von Alexandrien : ausgewählte Geschichten und Legenden kompiliert von Sa'id ibn Batriq um 935 A.D.* (Eutychius 1985).

In the Antiochian recension, in page 191 and 192 (fol. 120r), we can find the events about the invasion of the Nile Delta; whereas in the Alexandrian recension, we can find the events in page 82 [German translation] or page 98 [Arabic text]

(in both texts, Ch.24, paragraph 244, and the original manuscript is referred in fol. 106r). Both versions are almost identical, and they narrate that after Kawad I invaded Hama (حَمَاة) (in Syria), he sent an army to Alexandria and burned what was outside (فاحرقوا ما كان خارج). The war between Kawad army and Anastasius army left many deaths in both sides. It is said that after this, Alexandria and Egypt suffered from starvation and both Alexandria and Egypt (presumably, the Eparchy of Aegyptica; see Annex. Group 3. Urban features), were left in ruins and that the plague decimated the population (وخربت الاسكندرية ومصر ما نال الناس من الوباء والموت).

As we can see, following a clue using icxitoca depends on the information we are looking for, how far we would like to go are personal choices based on the purpose of the research or its objectives.

Case 2. The second case is an example of oblique georeferencing using a historical photograph and Google Earth to compare an old oblique image to a modern satellite image. New cartographic tools, especially globes such as Google Earth allow you to tilt, rotate, roll, and even change the field of view of the globe to imitate the perspective of an oblique aerial image. This case is also pedagogical because there are three elements that are easy to spot and therefore understand the location of the flight and the coverage area of the aerial photo. In this case, I wanted to geolocate this image not only for its invaluable historical use related to Nile annual flood, but also to understand what the current state of the two villages after the construction of the High Aswan Dam was. The *icxitoca* process described below was easy and quick (the identification of the settlements). The recreation of the scene, however, could take longer for it requires fine tuning, but this process is not related to *icxitoca* anymore.

For oblique georeferencing, one must look for recognisable features that can allow us to overlay an old image over a modern one. The first thing to consider is why we would like to overlay an old image over a modern one, and secondly to find out if it is even possible. How would you reference the following image over a modern one?



Figure 3. Kerdasa and Beni magdul (Matson and Matson 1932).

What are we looking for? When is it? Why is this image relevant to the research? Where is it? This image was acquired from the G. Eric and Edith Matson Photograph Collection, located in the Library of Congress Prints and Photographs Division Washington, D.C. This image was taken around 1932 according to the repository. The description of the image is as follows: “Air views of Palestine. Flight down the delta of the Nile to Alexandria. Villages in the Nile Valley. Surrounded with water and luxuriant gardens”. Apart from this, we do not have more information and, as we can notice, the description does not help much. From an icxitoca perspective we should look for the small details and be able to answer questions such as:

What are we looking for? – Urban fluctuations in the Nile Delta.

When is it? – According to the image description from the original repository, the image was taken around 1932.

Why is this image relevant to the research? – It shows an image of at least two villages surrounded by water. Presumably, the image was taken during or after the Nile flood. By overlaying this image to a modern one, it would be possible to evaluate how much the landscape changed from 1932 to our days (ca. 2010), and perhaps, evaluate the impact of the flood to this kind of settlements.

Where is it? – From the description it could be anywhere, but the pyramids of Giza are visible in the top left corner, which constrained the image around this area. The villages are unknown, but they are on the valley, close to the desert and apparently no other village is visible from these two settlements to the pyramids.

Now, we could use the pyramids' position to locate these two settlements. In a map oriented to the north, the pyramids of the Giza plateau from west to east are Menkaure's, Khafre's and Khufu's. In Figure 3, we can see that from left to right the pyramids are inverted judging by their relative sizes. This means that the photograph was taken from north to south; therefore, the villages are located north of the pyramids. Finally, using Google Earth, we could recreate the photo's perspective, identify the settlements, and overlay the photo over the modern satellite image, or we can try to identify them in a map from the early 20th century.

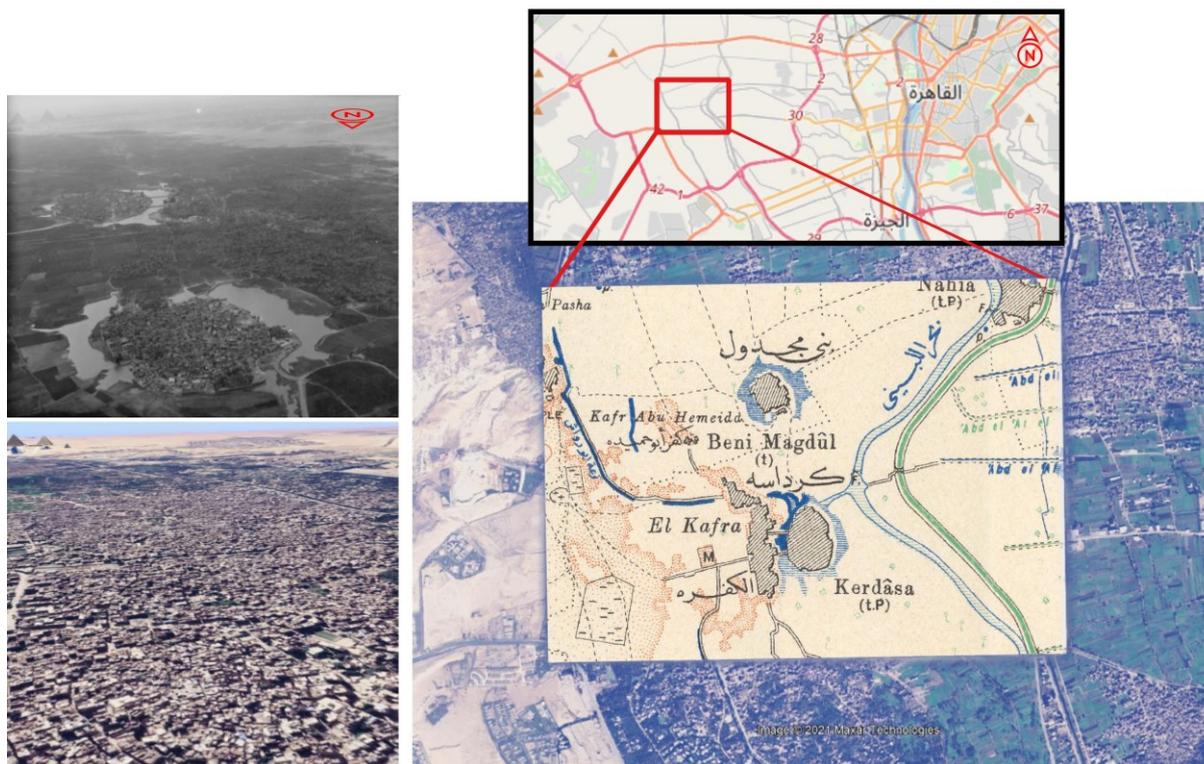


Figure 4. Image overlay with oblique georeferencing in Google Earth. Top left: Original image. Bottom left: Google Earth image from 2021 with corrected perspective (heading and field of view) to emulate the original photo. Top right: the localization of these villages relative to the city of Cairo (القاهرة) shown to the east. Bottom right: A map of Egypt from 1914 over a satellite image of Google Earth showing both villages. Note that the villages are depicted surrounded by water in this map.

3 PostgreSQL Database

The PostgreSQL database, apart from the tables with the data, comprehends a series of Triggers (specifications that execute a particular function whenever a certain type of operation is performed), Queries (commands to retrieve data from a database), Functions (procedures that perform certain recursive actions), and Relations and Mappings (links among tables and database structure; in PostgreSQL these relations are used to create Views, which are tables that are created dynamically based on these Relations and Mappings). In this Annex, I have added the code used to make the database work.

Triggers and functions

```

1  /*Create triggers and functions
2  .....:
3  If I fill a field and write the LonLat coordinates (EPSG:4326; but you it can be changed), it will use these coordinates
4  to populate the geom as a UTM (EPSG:32636) point, and then will populate the field Easting and Northing with the
5  proper coordinates. It works the other way around, if you fill the Easting and Northing, it will create a point in geom
6  and then populate latitude and longitude.
7  Israel Hinojosa Balino (2019)
8  .....*/
9
10 --Populate LonLat if input UTM, or conversely populate UTM if input LonLat
11 --Then create point geometry in UTM 36N WGS84 using input values OR
12 --Updates LonLat and UTM if Geometry changes
13
14 CREATE OR REPLACE FUNCTION f_ishiba_create_geom()
15 RETURNS TRIGGER AS
16 $BODY$
17 BEGIN
18 IF
19     (NEW.longitude IS DISTINCT FROM OLD.longitude OR NEW.latitude IS DISTINCT FROM OLD.latitude
20     )
21 THEN
22     NEW.geom =
23     (ST_Transform(ST_SetSRID(ST_MakePoint(NEW.longitude::float8,NEW.latitude::float8),4326),32636));
24     NEW.easting = (ST_X(NEW.geom));
25     NEW.northing = (ST_Y(NEW.geom));
26 ELSIF
27     (NEW.easting IS DISTINCT FROM OLD.easting OR NEW.northing IS DISTINCT FROM OLD.northing
28     )
29 THEN
30     NEW.geom = ST_SetSRID(ST_MakePoint(NEW.easting::float8, NEW.northing::float8), 32636);
31     NEW.longitude = (ST_X(ST_Transform(ST_SetSRID((NEW.geom),32636),4326)));
32     NEW.latitude = (ST_Y(ST_Transform(ST_SetSRID((NEW.geom),32636),4326)));
33 ELSIF
34     (NEW.geom IS DISTINCT FROM OLD.geom
35     )
36 THEN
37     NEW.longitude = (ST_X(ST_Transform(ST_SetSRID((NEW.geom),32636),4326)));

```

```

38     NEW.latitude = (ST_Y(ST_Transform(ST_SetSRID((NEW.geom),32636),4326)));
39     NEW.easting = (ST_X(NEW.geom));
40     NEW.northing = (ST_Y(NEW.geom));
41 END IF;
42 RETURN new;
43 END;
44 $BODY$
45 language plpgsql;
46 COMMENT ON FUNCTION f_ishiba_create_geom() IS 'This function populates LonLat if input UTM, or conversely
47 populate UTM if input LonLat. Then create point geometry in UTM 36N WGS84 using input values OR Updates
48 LonLat and UTM if Geometry changes';
49
50 CREATE TRIGGER t_ishiba_create_geom
51     BEFORE UPDATE
52         ON public.eessite
53     FOR EACH ROW
54 EXECUTE PROCEDURE f_ishiba_create_geom();
55 COMMENT ON TRIGGER t_ishiba_create_geom ON public."eessite" IS 'Populate LonLat if input UTM, or conversely
56 populate UTM if input LonLat. Creates point geometry in UTM 36N WGS84 per row using input values. Update
57 LonLat and UTM if Geometry changes';
58
59 --This update LanLon or UTM, if one or the other are corrected.
60 --This also updates the geometry
61
62 CREATE OR REPLACE FUNCTION f_ishiba_update_xy()
63     RETURNS TRIGGER AS
64 $BODY$
65 BEGIN
66 IF NEW.longitude IS NOT NULL THEN
67     NEW.geom =
68 (ST_Transform(ST_SetSRID(ST_MakePoint(NEW.longitude::float8,NEW.latitude::float8),4326),32636));
69     NEW.easting = (ST_X(NEW.geom));
70     NEW.northing = (ST_Y(NEW.geom));
71 ELSIF NEW.easting IS NOT NULL THEN
72     NEW.geom = ST_SetSRID(ST_MakePoint(NEW."easting"::float8, NEW."northing"::float8), 32636);
73     NEW.longitude = (ST_X(ST_Transform(ST_SetSRID((NEW.geom),32636),4326)));
74     NEW.latitude = (ST_Y(ST_Transform(ST_SetSRID((NEW.geom),32636),4326)));
75 end if;
76 RETURN new;
77 END;
78 $BODY$
79 language plpgsql;
80 COMMENT ON FUNCTION f_ishiba_update_xy() IS 'This function update LanLon or UTM, if one or the other are
81 corrected. This also updates the geometry';
82
83 CREATE TRIGGER t_ishiba_update_xy
84     BEFORE INSERT
85         ON public.eessite
86     FOR EACH ROW
87 EXECUTE PROCEDURE f_ishiba_update_xy();
88 COMMENT ON TRIGGER t_ishiba_update_xy ON public."EESsite" IS 'Update LonLat or E,N if one or the other are
89 corrected. Update geom';
90
91 --This populate LonLat and UTM if the point is added directly in a GIS program.
92
93 CREATE OR REPLACE FUNCTION f_ishiba_populatewith_geom()

```

```

94 RETURNS TRIGGER AS
95 $BODY$
96 BEGIN
97 IF NEW.geom IS NOT NULL THEN
98     NEW.longitude = (ST_X(ST_Transform(ST_SetSRID((NEW.geom),32636),4326)));
99     NEW.latitude = (ST_Y(ST_Transform(ST_SetSRID((NEW.geom),32636),4326)));
100    NEW.easting = (ST_X(NEW.geom));
101    NEW.northing = (ST_Y(NEW.geom));
102 END IF;
103 RETURN new;
104 END;
105 $BODY$
106 language plpgsql;
107 COMMENT ON FUNCTION f_ishiba_populatewith_geom() IS 'This function populate LonLat and UTM if the point is
108 added directly in a GIS program';
109
110 CREATE TRIGGER t_ishiba_populatewith_geom
111     BEFORE INSERT
112     ON public.eessite
113     FOR EACH ROW
114 EXECUTE PROCEDURE f_ishiba_populatewith_geom();
115 COMMENT ON TRIGGER t_ishiba_populatewith_geom ON public."eessite" IS 'Populate LonLat and UTM if the point
116 is added directly in a GIS program';
117
118 --This raises a warning if no name is written for the archaeological site
119 --This also raises a warning if no geometry is added.
120 --Geometry can be added by any of the mentioned methods above.
121
122 CREATE FUNCTION f_ishiba_exceptions_add()
123 RETURNS TRIGGER
124 AS $$
125 BEGIN
126 IF (NEW.name IS NULL) THEN
127     RAISE EXCEPTION 'You have to add at least the name of the site';
128 END IF;
129 IF (NEW.geom IS NULL) THEN
130     RAISE EXCEPTION 'For this database, you need a location, either add coordinates manually (LonLat or UTM) or
131 with a GIS program. Please note that the datum is WGS84, 36N.';
132 END IF;
133 RETURN NEW;
134 END;
135 $$
136 LANGUAGE plpgsql;
137 COMMENT ON FUNCTION f_ishiba_exceptions_add() IS 'Raise warning messages if no name or geometry is added
138 when creating new site';
139
140 CREATE TRIGGER t_ishiba_exceptions_add
141     AFTER INSERT
142     ON public.eessite
143     FOR EACH ROW
144 EXECUTE PROCEDURE f_ishiba_exceptions_add();
145 COMMENT ON TRIGGER t_ishiba_exceptions_add ON public."eessite" IS 'Trigger warning messages if no name or
146 geometry is added when creating new site';
147
148 --DONE! If you see an ERROR message just before this line there is something wrong
149 --If No error messages functions and triggers have been installed!

```

150 --Check your DB, you should have 7 tables, 2 views, 2 sequences, 4 triggers and 4 functions

Tables and Views

```

1  /*In Postgres, to add the tables to the database you have to create the table structure first, and then you can add data
2  to this table.
3  In general, these are the database components
4  6 tables, 2 views, 2 sequences, 4 triggers and 4 functions.
5
6  TABLES>
7  EESsite
8  LonPer
9  MedPer
10 ShortPer
11 Governors
12 Temporality
13
14 VIEWS>
15 MedArcheoMode
16 MedPeriodTime
17
18 SEQUENCES>
19 EESsite_ID_seq
20 Temporality_Id_seq
21
22 4 table triggers for EESSites:
23 t_ishiba_create_geom
24 t_ishiba_update_xy
25 t_ishiba_populatewith_geom
26 t_ishiba_exceptions_add
27
28 4 trigger functions:
29 f_ishiba_create_geom()
30 f_ishiba_update_xy()
31 f_ishiba_populatewith_geom()
32 f_ishiba_exceptions_add()
33 */
34
35 --in the following lines it is shown the tables structure.
36
37 --EES database -edited-
38 CREATE TABLE public.eessite (
39   id integer DEFAULT nextval('public.eessite_id_seq'::regclass) NOT NULL,
40   name character varying(254),
41   capital character(1),
42   nomant01 character varying(255),
43   nomant02 character varying(255),
44   location character varying(254),
45   extent character varying(254),
46   no_double precision,
47   notes text,
48   literature text,
49   latitudedm character varying(254),
50   longituedm character varying(254),
51   latitude double precision,
52   longitude double precision,

```

```
53 fieldsy character varying(25),
54 site character varying(50),
55 easting double precision,
56 northing double precision,
57 fieldsy2 character varying(255),
58 update character(1),
59 geom public.geometry(Point,32636)
60 )
61 WITH (autovacuum_enabled='true');
62 COMMENT ON COLUMN public.eessite.id IS 'consecutivo';
63
64
65 --Long period [LongPer].
66 CREATE TABLE public.lonper (
67   id integer NOT NULL,
68   idtext character varying(255),
69   idkey integer,
70   lonperiod character varying(255)
71 );
72
73 --Cycle [MedPer].
74 CREATE TABLE public.medper (
75   id integer NOT NULL,
76   idtext character varying(255),
77   idkey integer,
78   lonperiod character varying(255),
79   idmed character varying(255),
80   medperiod character varying(255),
81   idmedf character varying(255),
82   startdate date,
83   enddate date,
84   startdaypositive date,
85   enddaypositive date,
86   starcheo character(7),
87   enarcheo character(7)
88 );
89
90 --Centre of power/Dynasty [ShortPer].
91 CREATE TABLE public.shortper (
92   id integer NOT NULL,
93   idkey character varying(255),
94   lonperiod character varying(255),
95   idmedtext character varying(255),
96   idmedn integer,
97   idmedf character varying(255),
98   medperiod character varying(255),
99   idshort character varying(255),
100  shoperiod character varying(255),
101  idshortf character varying(255)
102 );
103
104 --Rulers [Governors]
105 CREATE TABLE public.governors (
106   id integer NOT NULL,
107   govid character varying(255),
108   shortper_id integer,
```

```
109 shortperids character varying(255),
110 lonperiod character varying(255),
111 medperiod character varying(255),
112 shoperiod character varying(255),
113 rulers character varying(255),
114 govtype character varying(255),
115 "advisor " character varying(255),
116 notes1 character varying(255),
117 year01 double precision,
118 year02 character varying(255),
119 notes2 character varying(255),
120 capital character varying(255),
121 notes3years character varying(255)
122 );
123 COMMENT ON COLUMN public.governors."advisor " IS 'cihuacoatl';
124 COMMENT ON COLUMN public.governors.year02 IS 'e.g. Hijr';
125
126 /*This table is the table that makes possible the temporality mapping of the sites
127 Each site has an ID, and each ID can be associated to n number of temporalities which also have an ID (one-to-many
128 relationship)*/
129 CREATE TABLE public.temporality (
130     idsite integer,
131     idlon integer DEFAULT 0 NOT NULL,
132     idmed integer DEFAULT 0 NOT NULL,
133     idshort integer DEFAULT 0 NOT NULL,
134     idgov integer DEFAULT 0 NOT NULL,
135     id bigint NOT NULL
136 );
137 COMMENT ON COLUMN public.temporality.id IS 'consecutivo';
138
139 /*
140 this is a VIEW, that is, a new table that is created using the others based on their relationships. This view in particular
141 was the one used in QGIS in combination to Time Manager
142 */
143
144 CREATE VIEW public.medarcheomode AS
145 SELECT temporality.id,
146     eessite.name,
147     lonper.lonperiod,
148     medper.medperiod,
149     medper.startdaypositive,
150     medper.enddaypositive,
151     medper.starcheo,
152     medper.enarcho,
153     eessite.geom,
154     eessite.id AS eesid
155 FROM public.eessite,
156     public.temporality,
157     public.lonper,
158     public.medper
159 WHERE ((eessite.id = temporality.idsite) AND (temporality.idmed = medper.id) AND (lonper.id = temporality.idlon));
```

4 PHP form coding

The PHP form to link the temporalities to the archaeological sites was created in PHP and Javascript. It was hosted in AlwaysData.com and it involves a series of interconnected webpages, functions and code snippets. I will start to show the Main webpage that connects the rest, then the functions that call the PostgreSQL database and create the Cascade-menu, which retrieve information from all tables and link it together in the Temporality table. Finally, the code snippets that were used to make everything work are shown.

MAIN WEBPAGE

```

1 <?php
2 // Initialize the session
3 session_start();
4
5 // Check if the user is logged in, if not then redirect him to login page
6 // Check user role, and redirects if necessary
7 if(!isset($_SESSION["loggedin"]) || $_SESSION["loggedin"] !== true){
8     header("location: login.php");
9 }
10 elseif(isset($_SESSION["loggedin"]) && $_SESSION["loggedin"] === true && $_SESSION["role"]=="2"){
11     header("location: query/index.php");
12 }
13 elseif(!isset($_SESSION["loggedin"]) && $_SESSION["loggedin"] !== true && $_SESSION["role"]!="1"){
14     header("location: ../welcome2.php");
15 }
16 ?>
17
18 <?php
19 require_once("dbcontroller.php");
20 $db_handle = new DbConnect();
21 $query ="SELECT * FROM lonper";
22 $results = $db_handle->runQuery($query);
23 ?>
24
25 <?php
26 require_once("dbcontroller.php");
27 $db_handle = new DbConnect();
28 $queryES ="SELECT * FROM eessite";
29 $resultsSet = $db_handle->runQuery($queryES);
30 ?>
31

```

```

32
33 <!DOCTYPE html>
34 <html>
35 <head>
36     <title> Temporalities input </title>
37 </head>
38
39 <!--jquery for Ajax see dbcontroller.php-->
40 <script src="scripts/jquery-3.5.1.min.js" type="text/javascript"></script>
41 <!--As used in https://www.youtube.com/watch?v=olTcgHlilhM
42 Chosen version https://github.com/harvesthq/chosen/releases/-->
43 <script src="scripts/chosen/chosen.jquery.min.js" type="text/javascript"></script>
44 <link href="scripts/chosen/chosen.min.css" rel="stylesheet"/>
45 <link href="scripts/styletemp.css" rel="stylesheet"/>
46 <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0/css/bootstrap.min.css" integrity="sha384-
47 Gn5384xqQ1aoWXA+058RXPxPg6fy4IWvTNh0E263XmFcJISAWiGgFAW/dAiS6JXm" crossorigin="anonymous">
48
49 <!--This code helps to create the cascade menu that links each lonper, to its corresponding medper, then each medper to its corresponding shortper, and finally each shortper
50 to its corresponding governors-->
51     <script type="text/javascript">
52
53         function getMedper(val){
54             $.ajax({
55                 type: "POST",
56                 url: "getMedper.php",
57                 data: 'id_lon='+val,
58                 success:function(data){
59                     $("#medperlist").html(data);
60                     getShortper();
61                 }
62             });
63         }
64         function getShortper(val){
65             $.ajax({
66                 type: "POST",
67                 url: "getShortper.php",
68                 data: 'id_med='+val,
69                 success:function(data){
70                     $("#shortperlist").html(data);
71                 }
72             });

```

```

73     }
74
75     function getGovernors(val){
76         $.ajax({
77             type: "POST",
78             url: "getGovernors.php",
79             data: 'id_sho='+val,
80             success:function(data){
81                 $("#govslist").html(data);
82             }
83         });
84     }
85
86     function getSite(val){
87         $.ajax({
88             type: "POST",
89             url: "getCoords.php",
90             data: 'id_site='+val,
91             success:function(data){
92                 $("#polka").html(data);
93             }
94         });
95     }
96 </script>
97 <body>
98 <h3> Temporalities </h3>
99 <nav class="navbar navbar-expand-lg navbar-dark bg-dark">
100 <!-- Navbar content -->
101 <a href="../../welcome.php" class="btn btn-danger">Menu</a-->
102 <button class="navbar-toggler" type="button" data-toggle="collapse" data-target="#navbarColor01" aria-controls="navbarColor01" aria-expanded="false" aria-label="Toggle
103 navigation">
104 <span class="navbar-toggler-icon"></span>
105 </button>
106
107 <div class="collapse navbar-collapse" id="navbarColor01">
108 <ul class="navbar-nav mr-auto">
109 <li class="nav-item active">
110 <a class="nav-link" href="#">Add temporality<span class="sr-only">(current)</span></a>
111 </li>
112 <li class="nav-item">
113 <a class="nav-link" href="query/index.php">Site query</a>

```

```

114     </li>
115     <li class="nav-item">
116         <a class="nav-link" href="../logout.php">Logout</a>
117     </li>
118 </ul>
119 </div>
120 </nav>
121 <!--This part retrieves the information of the site selected whose temporalities will be added. It uses a PHP code snippet called "action.php". This code search for the site
122 using the site's name or site EES ID, and once the site is selected, retrieves the site's data aiding in the process of recognition and avoid to add up data to a different site. This
123 information comes directly from the EES sites table, and is complemented with a map of the site that is generated using the coordinates of the selected site using Google
124 Maps,-->
125 <div class="divTable">
126 <form action="action.php" method="POST">
127     <div class="divTableBody">
128         <div class="divTableRow">
129             <div class="divTableCell">
130                 <label> Site: </label><br>
131                 <select name="name" id="searchddl" onchange="getSite(this.value);">
132                     <option> Select site</option>
133                     <?php
134                         foreach($resultsSet as $site) {
135                             ?>
136                             <option value="<?php echo $site["id"]; ?>">
137                                 <?php echo $site["no_"]; ?>, <?php echo $site["name"]; ?>
138                             </option>
139                             <?php
140                                 }
141                             ?>
142                     </select>
143             </div>
144 <!--this is the cascade menu -->
145             <div class="divTableCell">
146                 <label> Long period: </label><br>
147                 <select name="lonper" id="lonperlist" class="InputBox" onChange="getMedper(this.value);">
148                     <option value disabled selected> Select period</option>
149                     <?php
150                         foreach($results as $lonper) {
151                             ?>
152                             <option value="<?php echo $lonper["id"]; ?>">
153                                 <?php echo $lonper["lonperiod"]; ?>
154                             </option>

```

```

155                                     <?php
156                                     }
157                                     ?>
158                                 </select>
159 </div>
160     <div class="divTableCell">
161         <input type="submit" class="btn btn-primary" name="insert" value="INSERT DATA"/>
162     </div>
163 </div>
164 <div class="divTableRow">
165     <div class="divTableCell">
166         <label> Cycle: </label><br>
167         <select name="medper" id="medperlist" class="InputBox" onChange="getShortper(this.value);">
168             <option value=""> Select cycle</option>
169         </select>
170     </div>
171     <div class="divTableCell">
172         <label> Centre of power: </label><br>
173         <select name="shortper" id="shortperlist" class="InputBox" onChange="getGovernors(this.value);">>
174             <option value=""> Select centre</option>
175         </select>
176     </div>
177     <div class="divTableCell">
178         <label> Ruler: </label><br>
179         <select name="governors" id="govslist" class="InputBox" >
180             <option value=""> Select ruler</option>
181         </select>
182     </div>
183 </form>
184 </div>
185 </div>
186 </div>
187 </div>
188 <!--This is the map-->
189 <div id="polka"></div>
190
191
192 <script>
193     $("#searchddl").chosen();
194 </script>
195

```

```

196 <script src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.12.9/umd/popper.min.js" integrity="sha384-
197 ApNbgH9B+Y1QKtv3Rn7W3mgPxhU9K/ScQsAP7hUibX39j7fakFPskvXusvfa0b4Q" crossorigin="anonymous"></script>
198 <script src="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0/js/bootstrap.min.js" integrity="sha384-
199 JZR6Spejh4U02d8jOt6vLEHfe/JQGiRRSQQxSfFWpi1MquVdAjUar5+76PVCmYI" crossorigin="anonymous"></script>
200 </body>
</html>

```

This is the code needed to display the site information once it is selected from the Sites menu

```

1 <?php
2     header("Location:index.php");
3
4         //--This form uses procedural programming but the database controller uses OO, therefore, we use the controller with
5         //require_once to connect a database called "temporalitytest" en el hos con el nombre de usuario y password
6         //or die("No se ha podido conectar: ' . pg_last_error());
7         //esto pasa si no se conecta
8         //https://www.php.net/manual/es/pgsql.examples-basic.php
9
10        require_once ("dbcontroller.php");
11        $db_handle = new DbConnect();
12
13        $name = $_POST['name'];
14        $lonper = $_POST['lonper'];
15        $medper = $_POST['medper'];
16
17        if(empty($_POST['governors'])){
18            $governors = '0';
19        }else{
20            $governors = $_POST['governors'];
21        }
22
23        if(empty($_POST['shortper'])){
24            $shortper = '0';
25        }else{
26            $shortper = $_POST['shortper'];
27        }
28
29        $query ="

```

```
30 INSERT INTO temporality(  
31     idsite,  
32     idlon,  
33     idmed,  
34     idshort,  
35     idgov  
36 )  
37 VALUES (  
38     '$name',  
39     '$lonper',  
40     '$medper',  
41     '$shortper',  
42     '$governors'  
43 );  
44  
45 //Y en lugar de usar este comando por procedimientos  
46 //$query_run = pg_query($dbconn,$query);  
47 //usamos el comando OO  
48 $query_run = $db_handle->runQuery($query);  
49  
50  
51 ?>
```

This is the database controller

```
1  <?php
2
3  //The code to generate the dropdown cascading menus and database controller was taken from
4  //https://www.youtube.com/watch?v=fE2O6ngJhzA
5  //Connection corrected for PostgreSQL
6  //https://www.php.net/manual/es/function.pg-pconnect.php
7  class DbConnect {
8      private $conn_string = "host=XXX.XXX.XXX port=XXXX dbname=XXXXX user=XXXXX password=*****";
9      private $conn;
10
11     function __construct(){
12         $this->conn = $this->connectDB();
13     }
14     function connectDB() {
15         $conn = pg_connect($this->conn_string);
16         return $conn;
17     }
18     function runQuery($query){
19         $result = pg_query($this->conn,$query);
20         while($row=pg_fetch_assoc($result)) {
21             $resultset[] = $row;
22         }
23         if(!empty($resultset))
24             return $resultset;
25     }
26     function numRows($query){
27         $result = pg_query($this->conn,$query);
28         $rowcount = pg_num_rows($result);
29         return $rowcount;
30     }
31 }
32 ?>
```

These are the code snippets that links everything with the database controller

```

1  /*Retrieves Cycle [MedPer], depending on selected Long period [LongPer].*/
2  <?php
3  require_once ("dbcontroller.php");
4  $db_handle = new DbConnect();
5  if (! empty($_POST["id_lon"])) {
6      $query = "SELECT * FROM medper WHERE
7          idkey = " . $_POST["id_lon"] . " order by medper asc";
8      $results = $db_handle->runQuery($query);
9      ?>
10 <option value disabled selected>Select Cycle</option>
11 <?php
12     foreach ($results as $medper) {
13         ?>
14 <option value="<?php echo $medper["id"]; ?>"><?php echo $medper["medperiod"]; ?></option>
15 <?php
16     }
17 }
18 ?>
19
20 /*Retrieves Centre of power/Dynasty [ShortPer], depending on selected Cycle [MedPer].*/
21 <?php
22 require_once ("dbcontroller.php");
23 $db_handle = new DbConnect();
24 if (! empty($_POST["id_med"])) {
25     $query = "SELECT * FROM shortper WHERE
26         idmedn = " . $_POST["id_med"] . " order by shoperiod asc";
27     $results = $db_handle->runQuery($query);
28     ?>
29 <option value disabled selected>Select centre</option>
30 <?php
31     foreach ($results as $shortper) {
32         ?>
33 <option value="<?php echo $shortper["id"]; ?>"><?php echo $shortper["shoperiod"]; ?></option>
34 <?php
35     }
36 }
37 ?>
38

```

```

39 /*Retrieves Rulers [Governors], depending on selected Centre of power/Dynasty [ShortPer].*/
40 <?php
41 require_once ("dbcontroller.php");
42 $db_handle = new DbConnect();
43 if (! empty($_POST["id_sho"])) {
44     $query = "SELECT * FROM governors WHERE
45     shortper_id = " . $_POST["id_sho"] . " order by year01 asc";
46     $results = $db_handle->runQuery($query);
47     ?>
48 <option value disabled selected>Select centre</option>
49 <?php
50     foreach ($results as $governors) {
51         ?>
52 <option value="<?php echo $governors["id"]; ?>"><?php echo $governors["rulers"]; ?></option>
53 <?php
54     }
55 }
56 ?>

```

Finally, a simple webpage connected to the main webpage to display the site information and the map. It also shows the temporality data already added to each site if any. This is useful to avoid duplicating fields or just to check the Temporalities associated:

```

1 <?php
2 require_once ("dbcontroller.php");
3 $db_handle = new DbConnect();
4 if (! empty($_POST["id_site"])) {
5     $query = "SELECT * FROM eessite WHERE
6     id = " . $_POST["id_site"] . " ";
7     $results = $db_handle->runQuery($query);
8     ?>
9
10
11     <table>
12         <caption>Site information</caption>
13         <?php
14             foreach ($results as $infosite) {

```

```

15     ?>
16     <tr>
17         <th style="width:10%"> ID</th>
18         <th style="width:20%"> NAME</th>
19         <th style="width:70%"> NOTES</th>
20
21     </tr>
22     <tr>
23         <td> <?php echo $infosite["no_"]; ?> </td>
24         <td> <?php echo $infosite["name"]; ?> </td>
25         <td> <?php echo $infosite['notes']; ?> </td>
26     </tr>
27     <tr>
28         <td colspan="2" style="font-weight:bold;"> Northing </td>
29         <td colspan="1" style="font-weight:bold;"> Easting </td>
30     </tr>
31     <tr>
32         <td colspan="2"> <?php echo $infosite['easting']; ?> </td>
33         <td colspan="1"> <?php echo $infosite['northing']; ?> </td>
34     </tr>
35     <tr>
36 <td colspan="3"><div id="googleMap" style="width:100%;height:250px;"></div>
37     <?php
38         // https://www.w3schools.com/graphics/google_maps_basic.asp
39     ?>
40     <script>
41         function myMap() {
42             var mapProp= {
43                 center:new google.maps.LatLng
44                 (
45                     <?php echo $infosite['latitude']; ?>,
46                     <?php echo $infosite['longitude']; ?>),
47                 zoom:16,
48                 mapTypeId: google.maps.MapTypeId.HYBRID,
49                 };
50     var map = new
51     google.maps.Map(document.getElementById("googleMap"), mapProp);
52     }
53     </script>
54
55

```

```

56                                     <script
57 src="https://maps.googleapis.com/maps/api/js?key=AIzaSyBRSe24NQ_NjvnasgDiEBa4Fm88qMNEONk&callback=myMap"></script>
58                                     </td>
59                                     <tr>
60
61                                     <?php
62                                     }
63                                     ?>
64     </table>
65
66     <?php
67 }
68 ?>
69
70 <?php
71     echo "The following cycles have been associated";
72
73     $dbconn = pg_connect("host=xxx.xxx.xxx port=xxxx dbname=xxxxxx user=xxxxxx password=*****")
74     //conectarse a una base de datos llamada "mary" en el host "sheep" con el nombre de usuario y password
75     or die('No se ha podido conectar: ' . pg_last_error());
76     //esto pasa si no se conecta
77
78     //https://www.php.net/manual/es/pgsql.examples-basic.php
79     // Realizando una consulta SQL
80     $query = "SELECT
81             ideasof,
82             name,
83             lonperiod,
84             medperiod,
85             starcheo,
86             enarcheo
87             FROM medarcheomodid
88             WHERE
89             idint = '" . $_POST["id_site"] . "' order by starcheo asc";
90     $result = pg_query($query) or die('La consulta fallo: ' . pg_last_error());
91
92     // Imprimiendo los resultados en HTML
93     echo "<table>\n";
94     while ($line = pg_fetch_array($result, null, PGSQL_ASSOC)) {
95         echo "\t<tr>\n";
96         foreach ($line as $col_value) {

```

```
97         echo "\t\t<td>$col_value</td>\n";
98     }
99     echo "\t</tr>\n";
100 }
101 echo "</table>\n";
102
103 // Liberando el conjunto de resultados
104 pg_free_result($result);
105
106 // Cerrando la conexión
107 pg_close($dbconn);
?>
```

5 Temporalities

Long period [*LongPer*]:

id	idtext	lonperiod
1	1	Ancient Egypt
2	2	Persian Egypt
3	3	Greco-Roman Egypt
4	4	Eastern Roman
5	5	Bizantine empire
6	6	Early Arabic
7	7	Medieval Arabic
8	8	Ottoman Arabic
9	9	Modern Arabic

Cycle [*MedPer*]:

id	idkey	lonperiod	idmed	medperiod	idmedf	starcheo	enarcho
1	1	Ancient Egypt	1	Early Dynastic Period	101	3150 BCE	2693 BCE
2	1	Ancient Egypt	2	Old Kingdom	102	2686 BCE	2210 BCE
3	1	Ancient Egypt	3	1st Intermediate Period	103	2181 BCE	2084 BCE
4	1	Ancient Egypt	4	Middle Kingdom	104	2046 BCE	1798 BCE
5	1	Ancient Egypt	5	2nd Intermediate Period	105	1794 BCE	1553 BCE
6	1	Ancient Egypt	6	New Kingdom	106	1550 BCE	1103 BCE
7	1	Ancient Egypt	7	3rd Intermediate Period	107	1069 BCE	0664 BCE
8	1	Ancient Egypt	8	Late Period	108	0664 BCE	0526 BCE
9	2	Persian Egypt	1	First Achaemenid Period	201	0525 BCE	0405 BCE
10	2	Persian Egypt	2	Late Dynastic	202	0404 BCE	0360 BCE
11	2	Persian Egypt	3	Second Achaemenid Period	203	0342 BCE	0336 BCE
13	3	Greco-Roman Egypt	1	Hellenistic	301	0332 BCE	0034 BCE
14	3	Greco-Roman Egypt	2	Roman	302	0030 BCE	0284 CE
15	4	Eastern Roman	1	Roman	401	0285 CE	0334 CE
16	4	Eastern Roman	2	Praetorian Prefect of the East	402	0337 CE	0364 CE
17	5	Bizantine empire	1	Praetorian Prefect of the East	501	0364 CE	0640 CE
18	6	Early Arabic	1	Rightly-Guided Caliphs 'Rashidun'	601	0640 CE	0657 CE
19	6	Early Arabic	2	Umayyad Caliphs	602	0658 CE	0750 CE
20	7	Medieval Arabic	1	Abbasid Egypt	701	0751 CE	0868 CE
21	7	Medieval Arabic	2	Tulunid	702	0868 CE	0905 CE
22	7	Medieval Arabic	3	Ikhshidid	703		
23	7	Medieval Arabic	4	Fatimid	704		
24	7	Medieval Arabic	5	Ayyubid	705		
25	7	Medieval Arabic	6	Mamluk	706		
26	8	Ottoman	1	Ottoman	801		
27	8	Ottoman	2	French occupation	802		
28	8	Ottoman	3	Muhammad Ali	803		
29	8	Ottoman	4	Khedivate	804		
30	9	Modern Arabic	1	British occupation	901		
31	9	Modern Arabic	2	Sultanate	902		
32	9	Modern Arabic	3	Kingdom	903		
33	9	Modern Arabic	4	Republic	904		

These periods are included in the database but were not considered in the research.

Centre of power/Dynasty [ShortPer]:

id	idkey	lonperiod	idmedn	idmedf	medperiod	idshort	shoperiod	idshortf
1	1	Ancient Egypt	1	101	Early Dynastic Period	1	Dynasty 0	10101
2	1	Ancient Egypt	1	101	Early Dynastic Period	2	Dynasty I	10102
3	1	Ancient Egypt	1	101	Early Dynastic Period	3	Dynasty II	10103
4	1	Ancient Egypt	2	102	Old Kingdom	1	Dynasty III	10201
5	1	Ancient Egypt	2	102	Old Kingdom	2	Dynasty IV	10202
6	1	Ancient Egypt	2	102	Old Kingdom	3	Dynasty V	10203
7	1	Ancient Egypt	2	102	Old Kingdom	4	Dynasty VI	10204
8	1	Ancient Egypt	3	103	1st Intermediate Period	1	Dynasty VII	10301
9	1	Ancient Egypt	3	103	1st Intermediate Period	2	Dynasty VIII	10302
10	1	Ancient Egypt	3	103	1st Intermediate Period	3	Ninth-Tenth Dynasties	10303
11	1	Ancient Egypt	3	103	1st Intermediate Period	4	Dynasty XI	10304
12	1	Ancient Egypt	4	104	Middle Kingdom	1	Dynasty XI	10401
13	1	Ancient Egypt	4	104	Middle Kingdom	2	Dynasty XII	10402
14	1	Ancient Egypt	5	105	2nd Intermediate Period	1	Dynasty XIII	10501
15	1	Ancient Egypt	5	105	2nd Intermediate Period	2	Dynasty XIV	10502
16	1	Ancient Egypt	5	105	2nd Intermediate Period	3	Dynasty XV "Hyksos"	10503
17	1	Ancient Egypt	5	105	2nd Intermediate Period	4	Dynasty XVI	10504
18	1	Ancient Egypt	5	105	2nd Intermediate Period	5	Dynasty XVII	10505
19	1	Ancient Egypt	6	106	New Kingdom	1	Dynasty XVIII	10601
20	1	Ancient Egypt	6	106	New Kingdom	2	Dynasty XIX	10602
21	1	Ancient Egypt	6	106	New Kingdom	3	Dynasty XX	10603
22	1	Ancient Egypt	7	107	3rd Intermediate Period	1	Dynasty XXI	10701
23	1	Ancient Egypt	7	107	3rd Intermediate Period	2	Dynasty XXII	10702
24	1	Ancient Egypt	7	107	3rd Intermediate Period	3	Tanitic	10703
25	1	Ancient Egypt	7	107	3rd Intermediate Period	4	Upper Egyptian Line	10704
26	1	Ancient Egypt	7	107	3rd Intermediate Period	5	Dynasty XXIII	10705
27	1	Ancient Egypt	7	107	3rd Intermediate Period	6	Dynasty XXIV	10706
28	1	Ancient Egypt	7	107	3rd Intermediate Period	7	Dynasty XXV	10707
29	1	Ancient Egypt	8	108	Late Period	1	Dynasty XXVI	10801
30	2	Persian Egypt	9	201	First Achaemenid Period	1	Dynasty XXVII or First Egyptian Satrapy	20101
31	2	Persian Egypt	10	202	Late Dynastic	1	Dynasty XXVIII	20201
32	2	Persian Egypt	10	202	Late Dynastic	2	Dynasty XXIX	20202
33	2	Persian Egypt	10	202	Late Dynastic	3	Dynasty XXX	20203
34	2	Persian Egypt	11	203	Second Achaemenid Period	1	Dynasty XXXI or Second Egyptian Satrapy	20301
35	3	Greco-Roman Egypt	13	301	Hellenistic	1	Macedonian Dynasty	30101
36	3	Greco-Roman Egypt	13	301	Hellenistic	2	Ptolemaic Dynasty	30102
37	3	Greco-Roman Egypt	14	302	Roman	3	Roman Emperors	30203
38	4	Eastern Roman	15	401	Roman	1	Diarchy	40101
39	4	Eastern Roman	15	401	Roman	2	Tetrarchy	40102
40	4	Eastern Roman	15	401	Roman	3	Diocese Oriens	40103
41	4	Eastern Roman	16	402	Praetorian Prefect of the East	1	Diocese Oriens	40201
42	5	Bizantine empire	17	501	Praetorian Prefect of the East	1	Diocese of Egypt	50101
43	5	Bizantine empire	22	501	Praetorian Prefect of the East	2	Sassanian rule (616-628) under Khosrow II	50102
44	5	Bizantine empire	23	501	Praetorian Prefect of the East	3	Diocese of Egypt (Last years)	50103
45	6	Early Arabic	18	601	Rightly-Guided Caliphs 'Rashidun'	1	Medina	60101
46	6	Early Arabic	19	602	Umayyad Caliphs	1	Damascus	60201
47	7	Medieval Arabic	20	701	Abbasid Egypt	1	Kufa	70101
48	7	Medieval Arabic	20	701	Abbasid Egypt	2	Baghdad	70102
49	7	Medieval Arabic	20	701	Abbasid Egypt	3	Raqqa	70103
50	7	Medieval Arabic	20	701	Abbasid Egypt	4	Baghdad (2nd time)	70104
51	7	Medieval Arabic	20	701	Abbasid Egypt	5	Samarra	70105
52	7	Medieval Arabic	20	701	Abbasid Egypt	6	Baghdad (3rd time)	70106
53	7	Medieval Arabic	21	702	Tulunid	1	Fustat	70201

Rulers [Governors]:

id	shortperiods	lonperiod	medperiod	shoperiod	Rulers	govtype	notes1	yearStart	Hijri	capital
1	10101	Ancient Egypt	Early Dynastic Period	Dynasty 0	Crocodile	Regional	IN	-3150	IN	Abydos
2	10101	Ancient Egypt	Early Dynastic Period	Dynasty 0	Iry-Hor	Regional	IN	-3120	IN	Abydos
3	10101	Ancient Egypt	Early Dynastic Period	Dynasty 0	Ka	Regional	IN	-3090	IN	Abydos
4	10101	Ancient Egypt	Early Dynastic Period	Dynasty 0	Scorpion	Regional	IN	-3060	IN	Abydos
5	10101	Ancient Egypt	Early Dynastic Period	Dynasty 0	Narmer	zm ⁱ -t ^{wj}	IN	-3030	IN	Abydos
6	10102	Ancient Egypt	Early Dynastic Period	Dynasty I	Aha	zm ⁱ -t ^{wj}	IN	-3000	IN	Saqqara
7	10102	Ancient Egypt	Early Dynastic Period	Dynasty I	Djer	zm ⁱ -t ^{wj}	IN	-2969	IN	Saqqara
8	10102	Ancient Egypt	Early Dynastic Period	Dynasty I	Djet	zm ⁱ -t ^{wj}	IN	-2938	IN	Saqqara
9	10102	Ancient Egypt	Early Dynastic Period	Dynasty I	Queen Merytneit	zm ⁱ -t ^{wj}	IN	-2906	IN	Saqqara
10	10102	Ancient Egypt	Early Dynastic Period	Dynasty I	Den	zm ⁱ -t ^{wj}	IN	-2875	IN	Saqqara
11	10102	Ancient Egypt	Early Dynastic Period	Dynasty I	Anedjib	zm ⁱ -t ^{wj}	IN	-2844	IN	Saqqara
12	10102	Ancient Egypt	Early Dynastic Period	Dynasty I	Semerkhet	zm ⁱ -t ^{wj}	IN	-2813	IN	Saqqara
13	10102	Ancient Egypt	Early Dynastic Period	Dynasty I	Qaa	zm ⁱ -t ^{wj}	IN	-2781	IN	Saqqara
14	10103	Ancient Egypt	Early Dynastic Period	Dynasty II	Hotepsekhemwy	zm ⁱ -t ^{wj}	IN	-2750	IN	Saqqara
15	10103	Ancient Egypt	Early Dynastic Period	Dynasty II	Raneb	zm ⁱ -t ^{wj}	IN	-2743	IN	Saqqara
16	10103	Ancient Egypt	Early Dynastic Period	Dynasty II	Ninetjer	zm ⁱ -t ^{wj}	IN	-2736	IN	Saqqara
17	10103	Ancient Egypt	Early Dynastic Period	Dynasty II	Sekhemib	zm ⁱ -t ^{wj}	IN	-2729	IN	Saqqara
18	10103	Ancient Egypt	Early Dynastic Period	Dynasty II	Peribsen	zm ⁱ -t ^{wj}	IN	-2722	IN	Saqqara
19	10103	Ancient Egypt	Early Dynastic Period	Dynasty II	Sened	zm ⁱ -t ^{wj}	IN	-2714	IN	Saqqara
20	10103	Ancient Egypt	Early Dynastic Period	Dynasty II	Weneg	zm ⁱ -t ^{wj}	IN	-2707	IN	Hierakonpolis
21	10103	Ancient Egypt	Early Dynastic Period	Dynasty II	Khasekhem	zm ⁱ -t ^{wj}	IN	-2700	IN	Hierakonpolis
22	10103	Ancient Egypt	Early Dynastic Period	Dynasty II	Khasekhemwy	zm ⁱ -t ^{wj}	IN	-2693	IN	Hierakonpolis
23	10201	Ancient Egypt	Old Kingdom	Dynasty III	Netjerkhet (Djoser)	zm ⁱ -t ^{wj}	IN	-2686	IN	Memphis
24	10201	Ancient Egypt	Old Kingdom	Dynasty III	Sekhemkhet	zm ⁱ -t ^{wj}	IN	-2669	IN	Memphis
25	10201	Ancient Egypt	Old Kingdom	Dynasty III	Khaba	zm ⁱ -t ^{wj}	IN	-2652	IN	Memphis
26	10201	Ancient Egypt	Old Kingdom	Dynasty III	Sanakht (Nebka ?)	zm ⁱ -t ^{wj}	IN	-2634	IN	Memphis
27	10201	Ancient Egypt	Old Kingdom	Dynasty III	Huni (Horus Qahedjet ?)	zm ⁱ -t ^{wj}	IN	-2617	IN	Memphis
28	10202	Ancient Egypt	Old Kingdom	Dynasty IV	Snefru	zm ⁱ -t ^{wj}	IN	-2600	IN	Memphis
29	10202	Ancient Egypt	Old Kingdom	Dynasty IV	Khufu	zm ⁱ -t ^{wj}	IN	-2581	IN	Memphis
30	10202	Ancient Egypt	Old Kingdom	Dynasty IV	Djedefre	zm ⁱ -t ^{wj}	IN	-2563	IN	Memphis
31	10202	Ancient Egypt	Old Kingdom	Dynasty IV	Khafre	zm ⁱ -t ^{wj}	IN	-2544	IN	Memphis
32	10202	Ancient Egypt	Old Kingdom	Dynasty IV	Nebka (Bikheris of later Greek-language sources)	zm ⁱ -t ^{wj}	IN	-2525	IN	Memphis
33	10202	Ancient Egypt	Old Kingdom	Dynasty IV	Menkawre	zm ⁱ -t ^{wj}	IN	-2506	IN	Memphis
34	10202	Ancient Egypt	Old Kingdom	Dynasty IV	Shepseskaf	zm ⁱ -t ^{wj}	IN	-2488	IN	Memphis
35	10202	Ancient Egypt	Old Kingdom	Dynasty IV	Thamthis (in later Greek-language sources)	zm ⁱ -t ^{wj}	IN	-2469	IN	Memphis
36	10203	Ancient Egypt	Old Kingdom	Dynasty V	Userkaf	zm ⁱ -t ^{wj}	IN	-2450	IN	Memphis
37	10203	Ancient Egypt	Old Kingdom	Dynasty V	Sahure	zm ⁱ -t ^{wj}	IN	-2433	IN	Memphis
38	10203	Ancient Egypt	Old Kingdom	Dynasty V	Neferirkare	zm ⁱ -t ^{wj}	IN	-2417	IN	Memphis
39	10203	Ancient Egypt	Old Kingdom	Dynasty V	Shepseskare	zm ⁱ -t ^{wj}	IN	-2400	IN	Memphis
40	10203	Ancient Egypt	Old Kingdom	Dynasty V	Neferefre	zm ⁱ -t ^{wj}	IN	-2383	IN	Memphis
41	10203	Ancient Egypt	Old Kingdom	Dynasty V	Niuserre	zm ⁱ -t ^{wj}	IN	-2367	IN	Memphis

42	10203	Ancient Egypt	Old Kingdom	Dynasty V	Menkawhor	zm ⁱ -t ^{wj}	IN	-2350 IN	Memphis
43	10203	Ancient Egypt	Old Kingdom	Dynasty V	Djedkare	zm ⁱ -t ^{wj}	IN	-2333 IN	Memphis
44	10203	Ancient Egypt	Old Kingdom	Dynasty V	Unas	zm ⁱ -t ^{wj}	IN	-2317 IN	Memphis
45	10204	Ancient Egypt	Old Kingdom	Dynasty VI	Teti	zm ⁱ -t ^{wj}	IN	-2300 IN	Memphis
46	10204	Ancient Egypt	Old Kingdom	Dynasty VI	Pepy I	zm ⁱ -t ^{wj}	IN	-2270 IN	Memphis
47	10204	Ancient Egypt	Old Kingdom	Dynasty VI	Merenre	zm ⁱ -t ^{wj}	IN	-2241 IN	Memphis
48	10204	Ancient Egypt	Old Kingdom	Dynasty VI	Pepy II	zm ⁱ -t ^{wj}	IN	-2211 IN	Memphis
49	10301	Ancient Egypt	1st Intermediate Period	Dynasty VII	Unknown	zm ⁱ -t ^{wj}	IN	-2181 IN	Memphis
50	10302	Ancient Egypt	1st Intermediate Period	Dynasty VIII	Netjerikare	zm ⁱ -t ^{wj}	IN	-2175 IN	Memphis
51	10302	Ancient Egypt	1st Intermediate Period	Dynasty VIII	Menkare	zm ⁱ -t ^{wj}	IN	-2175 IN	Memphis
52	10302	Ancient Egypt	1st Intermediate Period	Dynasty VIII	Neferkare	zm ⁱ -t ^{wj}	IN	-2174 IN	Memphis
53	10302	Ancient Egypt	1st Intermediate Period	Dynasty VIII	Neferkare Nebi	zm ⁱ -t ^{wj}	IN	-2174 IN	Memphis
54	10302	Ancient Egypt	1st Intermediate Period	Dynasty VIII	Djedkare Shemai	zm ⁱ -t ^{wj}	IN	-2174 IN	Memphis
55	10302	Ancient Egypt	1st Intermediate Period	Dynasty VIII	Neferkare Khendu	zm ⁱ -t ^{wj}	IN	-2173 IN	Memphis
56	10302	Ancient Egypt	1st Intermediate Period	Dynasty VIII	Merenhor	zm ⁱ -t ^{wj}	IN	-2173 IN	Memphis
57	10302	Ancient Egypt	1st Intermediate Period	Dynasty VIII	Neferkamin	zm ⁱ -t ^{wj}	IN	-2173 IN	Memphis
58	10302	Ancient Egypt	1st Intermediate Period	Dynasty VIII	Nikare	zm ⁱ -t ^{wj}	IN	-2172 IN	Memphis
59	10302	Ancient Egypt	1st Intermediate Period	Dynasty VIII	Neferkare Tereru	zm ⁱ -t ^{wj}	IN	-2172 IN	Memphis
60	10302	Ancient Egypt	1st Intermediate Period	Dynasty VIII	Neferkahor	zm ⁱ -t ^{wj}	IN	-2171 IN	Memphis
61	10302	Ancient Egypt	1st Intermediate Period	Dynasty VIII	Neferkare Pepyseneb	zm ⁱ -t ^{wj}	IN	-2171 IN	Memphis
62	10302	Ancient Egypt	1st Intermediate Period	Dynasty VIII	Neferkamin Anu	zm ⁱ -t ^{wj}	IN	-2171 IN	Memphis
63	10302	Ancient Egypt	1st Intermediate Period	Dynasty VIII	Qakare Ibi	zm ⁱ -t ^{wj}	IN	-2170 IN	Memphis
64	10302	Ancient Egypt	1st Intermediate Period	Dynasty VIII	Neferkawre Kha...	zm ⁱ -t ^{wj}	IN	-2170 IN	Memphis
65	10302	Ancient Egypt	1st Intermediate Period	Dynasty VIII	Neferkawhor Khuwihap	zm ⁱ -t ^{wj}	IN	-2170 IN	Memphis
66	10302	Ancient Egypt	1st Intermediate Period	Dynasty VIII	Neferikare	zm ⁱ -t ^{wj}	IN	-2169 IN	Memphis
67	10303	Ancient Egypt	1st Intermediate Period	Ninth-Tenth Dynasties	Khety (I)	zm ⁱ -t ^{wj}	IN	-2169 IN	Herakleopolis Magna
68	10303	Ancient Egypt	1st Intermediate Period	Ninth-Tenth Dynasties	Neferkare	zm ⁱ -t ^{wj}	IN	-2168 IN	Herakleopolis Magna
69	10303	Ancient Egypt	1st Intermediate Period	Ninth-Tenth Dynasties	Khety (II)	zm ⁱ -t ^{wj}	IN	-2168 IN	Herakleopolis Magna
70	10303	Ancient Egypt	1st Intermediate Period	Ninth-Tenth Dynasties	Senen...	zm ⁱ -t ^{wj}	IN	-2167 IN	Herakleopolis Magna
71	10303	Ancient Egypt	1st Intermediate Period	Ninth-Tenth Dynasties	Khety (III)	zm ⁱ -t ^{wj}	IN	-2166 IN	Herakleopolis Magna
72	10303	Ancient Egypt	1st Intermediate Period	Ninth-Tenth Dynasties	Khety (IV)	zm ⁱ -t ^{wj}	IN	-2166 IN	Herakleopolis Magna
73	10303	Ancient Egypt	1st Intermediate Period	Ninth-Tenth Dynasties	Shed...y	zm ⁱ -t ^{wj}	IN	-2165 IN	Herakleopolis Magna
74	10303	Ancient Egypt	1st Intermediate Period	Ninth-Tenth Dynasties	H...	zm ⁱ -t ^{wj}	IN	-2164 IN	Herakleopolis Magna
75	10303	Ancient Egypt	1st Intermediate Period	Ninth-Tenth Dynasties	Wahkare Khety	zm ⁱ -t ^{wj}	IN	-2163 IN	Herakleopolis Magna
76	10303	Ancient Egypt	1st Intermediate Period	Ninth-Tenth Dynasties	Se...re Khety	zm ⁱ -t ^{wj}	IN	-2163 IN	Herakleopolis Magna
77	10303	Ancient Egypt	1st Intermediate Period	Ninth-Tenth Dynasties	Nebkawre Khety	zm ⁱ -t ^{wj}	IN	-2162 IN	Herakleopolis Magna
78	10303	Ancient Egypt	1st Intermediate Period	Ninth-Tenth Dynasties	Meryibre Khety	zm ⁱ -t ^{wj}	IN	-2161 IN	Herakleopolis Magna
79	10303	Ancient Egypt	1st Intermediate Period	Ninth-Tenth Dynasties	Merykare	zm ⁱ -t ^{wj}	IN	-2161 IN	Herakleopolis Magna
80	10304	Ancient Egypt	1st Intermediate Period	Dynasty XI	Intef (I) Sehtawy	t ⁱ sm ^w	IN	-2160 IN	Thebes
81	10304	Ancient Egypt	1st Intermediate Period	Dynasty XI	Intef (II) Wahankh	t ⁱ sm ^w	IN	-2122 IN	Thebes
82	10304	Ancient Egypt	1st Intermediate Period	Dynasty XI	Intef (III) Nakhtnebtpefer	t ⁱ sm ^w	IN	-2084 IN	Thebes
83	10401	Ancient Egypt	Middle Kingdom	Dynasty XI	Mentuhotep II Nebhetepre	zm ⁱ -t ^{wj}	IN	-2046 IN	Thebes
84	10401	Ancient Egypt	Middle Kingdom	Dynasty XI	Mentuhotep III Sankhkare	zm ⁱ -t ^{wj}	IN	-1995 IN	Thebes
85	10401	Ancient Egypt	Middle Kingdom	Dynasty XI	Mentuhotep IV Nebtawyre	zm ⁱ -t ^{wj}	IN	-1983 IN	Thebes
86	10402	Ancient Egypt	Middle Kingdom	Dynasty XII	Amenemhat I Sehetepibre (1976-1947 BCE)	zm ⁱ -t ^{wj}	IN	-1976 IN	Thebes

87	10402	Ancient Egypt	Middle Kingdom	Dynasty XII	Senusret I Kheperkare (1956-1911/10)	zm ⁱ -t ^w j	IN	-1956 IN	Thebes
88	10402	Ancient Egypt	Middle Kingdom	Dynasty XII	Amenemhat II Nubkaure (1914-1879/76 BCE)	zm ⁱ -t ^w j	IN	-1914 IN	Thebes
89	10402	Ancient Egypt	Middle Kingdom	Dynasty XII	Senusret II Khakheperre (1882-1872 BCE)	zm ⁱ -t ^w j	IN	-1882 IN	Thebes
90	10402	Ancient Egypt	Middle Kingdom	Dynasty XII	Senusret III Khakaure (1872-1853 BCE)	zm ⁱ -t ^w j	IN	-1872 IN	Thebes
91	10402	Ancient Egypt	Middle Kingdom	Dynasty XII	Amenemhat III Nimaatre (1853-1806/05 BCE)	zm ⁱ -t ^w j	IN	-1853 IN	Thebes
92	10402	Ancient Egypt	Middle Kingdom	Dynasty XII	Amenemhat IV Maakherure (1807/06-1798/97 BCE)	zm ⁱ -t ^w j	IN	-1807 IN	Thebes
93	10402	Ancient Egypt	Middle Kingdom	Dynasty XII	Sobekneferu Sobekkare (1798/97-1794/93 BCE)	zm ⁱ -t ^w j	IN	-1798 IN	Thebes
94	10501	Ancient Egypt	2nd Intermediate Period	Dynasty XIII	Khutawyre	zm ⁱ -t ^w j	IN	-1798 IN	Avaris
95	10501	Ancient Egypt	2nd Intermediate Period	Dynasty XIII	Amenemhat (V) Sekhemkare	zm ⁱ -t ^w j	IN	-1795 IN	Avaris
96	10501	Ancient Egypt	2nd Intermediate Period	Dynasty XIII	Amenemhat	zm ⁱ -t ^w j	IN	-1791 IN	Avaris
97	10501	Ancient Egypt	2nd Intermediate Period	Dynasty XIII	Siharnedjheritef Hotepibre	zm ⁱ -t ^w j	IN	-1788 IN	Avaris
98	10501	Ancient Egypt	2nd Intermediate Period	Dynasty XIII	Iufni	zm ⁱ -t ^w j	IN	-1784 IN	Avaris
99	10501	Ancient Egypt	2nd Intermediate Period	Dynasty XIII	Ameny-Intef-Amenemhat (VI) Seankhibre	zm ⁱ -t ^w j	IN	-1781 IN	Avaris
100	10501	Ancient Egypt	2nd Intermediate Period	Dynasty XIII	Nebnun Semenkare	zm ⁱ -t ^w j	IN	-1777 IN	Avaris
101	10501	Ancient Egypt	2nd Intermediate Period	Dynasty XIII	Sehotepibre	zm ⁱ -t ^w j	IN	-1774 IN	Avaris
102	10501	Ancient Egypt	2nd Intermediate Period	Dynasty XIII	Sewadjkare	zm ⁱ -t ^w j	IN	-1770 IN	Avaris
103	10501	Ancient Egypt	2nd Intermediate Period	Dynasty XIII	Nedjemibre	zm ⁱ -t ^w j	IN	-1767 IN	Avaris
104	10501	Ancient Egypt	2nd Intermediate Period	Dynasty XIII	Sobkhotep Khaankhre	zm ⁱ -t ^w j	IN	-1763 IN	Avaris
105	10501	Ancient Egypt	2nd Intermediate Period	Dynasty XIII	Amenemhat-Ranisonb	zm ⁱ -t ^w j	IN	-1760 IN	Avaris
106	10501	Ancient Egypt	2nd Intermediate Period	Dynasty XIII	Hor Awibre	zm ⁱ -t ^w j	IN	-1756 IN	Avaris
107	10501	Ancient Egypt	2nd Intermediate Period	Dynasty XIII	Sedjefakare Kay-Amenemhat (VII)	zm ⁱ -t ^w j	IN	-1753 IN	Avaris
108	10501	Ancient Egypt	2nd Intermediate Period	Dynasty XIII	Sobkhotep Sekhemre-Khutawy	zm ⁱ -t ^w j	IN	-1749 IN	Avaris
109	10501	Ancient Egypt	2nd Intermediate Period	Dynasty XIII	Khendjer Weserkare	zm ⁱ -t ^w j	IN	-1746 IN	Avaris
110	10501	Ancient Egypt	2nd Intermediate Period	Dynasty XIII	Imyremeshaw Semenkare	zm ⁱ -t ^w j	IN	-1742 IN	Avaris
111	10501	Ancient Egypt	2nd Intermediate Period	Dynasty XIII	Intef Sehetepkare	zm ⁱ -t ^w j	IN	-1739 IN	Avaris
112	10501	Ancient Egypt	2nd Intermediate Period	Dynasty XIII	Seth Merybre	zm ⁱ -t ^w j	IN	-1735 IN	Avaris
113	10501	Ancient Egypt	2nd Intermediate Period	Dynasty XIII	Sobkhotep (III) Sekhemresewadjtawy	zm ⁱ -t ^w j	IN	-1732 IN	Avaris
114	10501	Ancient Egypt	2nd Intermediate Period	Dynasty XIII	Neferhotep (I) Khasekhemre	zm ⁱ -t ^w j	IN	-1728 IN	Avaris
115	10501	Ancient Egypt	2nd Intermediate Period	Dynasty XIII	Sihathor Menwadje	zm ⁱ -t ^w j	IN	-1725 IN	Avaris
116	10501	Ancient Egypt	2nd Intermediate Period	Dynasty XIII	Sobkhotep (IV) Khaneferre	zm ⁱ -t ^w j	IN	-1721 IN	Avaris
117	10501	Ancient Egypt	2nd Intermediate Period	Dynasty XIII	Sobkhotep (V) Merhotepre	zm ⁱ -t ^w j	IN	-1718 IN	Avaris
118	10501	Ancient Egypt	2nd Intermediate Period	Dynasty XIII	Sobkhotep (VI) Khahotepre	zm ⁱ -t ^w j	IN	-1714 IN	Avaris
119	10501	Ancient Egypt	2nd Intermediate Period	Dynasty XIII	Ibiaw Wahibre	zm ⁱ -t ^w j	IN	-1711 IN	Avaris
120	10501	Ancient Egypt	2nd Intermediate Period	Dynasty XIII	Aya Merneferre	zm ⁱ -t ^w j	IN	-1707 IN	Avaris
121	10501	Ancient Egypt	2nd Intermediate Period	Dynasty XIII	Sankhptahi Sehehenre	zm ⁱ -t ^w j	IN	-1704 IN	Avaris
122	10502	Ancient Egypt	2nd Intermediate Period	Dynasty XIV	Ini Merhotepre	zm ⁱ -t ^w j	IN	-1700 IN	Avaris
123	10502	Ancient Egypt	2nd Intermediate Period	Dynasty XIV	Sewadjtu Seankhenre	zm ⁱ -t ^w j	IN	-1699 IN	Avaris
124	10502	Ancient Egypt	2nd Intermediate Period	Dynasty XIV	Ined Mersekemre	zm ⁱ -t ^w j	IN	-1699 IN	Avaris
125	10502	Ancient Egypt	2nd Intermediate Period	Dynasty XIV	Hori Sewadjkare	zm ⁱ -t ^w j	IN	-1698 IN	Avaris
126	10502	Ancient Egypt	2nd Intermediate Period	Dynasty XIV	Sobkhotep (VII) Merkawre	zm ⁱ -t ^w j	IN	-1698 IN	Avaris
127	10502	Ancient Egypt	2nd Intermediate Period	Dynasty XIV	eight kings lost in the Turin kinglist	zm ⁱ -t ^w j	IN	-1697 IN	Avaris
128	10502	Ancient Egypt	2nd Intermediate Period	Dynasty XIV	Merkheperre	zm ⁱ -t ^w j	IN	-1696 IN	Avaris
129	10502	Ancient Egypt	2nd Intermediate Period	Dynasty XIV	Monthhotep (V) Sewadjare	zm ⁱ -t ^w j	IN	-1696 IN	Avaris
130	10502	Ancient Egypt	2nd Intermediate Period	Dynasty XIV	Ini Mershepesre	t ⁱ šm ^h w	IN	-1695 IN	Avaris
131	10502	Ancient Egypt	2nd Intermediate Period	Dynasty XIV	Neferhotep (II) Mersekhemre	t ⁱ šm ^h w	IN	-1695 IN	Avaris

132	10502	Ancient Egypt	2nd Intermediate Period	Dynasty XIV	Sonbmiu Sewahenre	ꜥꜥꜣw	IN	-1694	IN	Avaris
133	10502	Ancient Egypt	2nd Intermediate Period	Dynasty XIV	Sekhanenre ...re	ꜥꜥꜣw	IN	-1694	IN	Avaris
134	10502	Ancient Egypt	2nd Intermediate Period	Dynasty XIV	Djehuty	ꜥꜥꜣw	IN	-1693	IN	Avaris
135	10502	Ancient Egypt	2nd Intermediate Period	Dynasty XIV	Sobkhotep (VIII) Sekhemrenewesertawy	ꜥꜥꜣw	IN	-1692	IN	Avaris
136	10502	Ancient Egypt	2nd Intermediate Period	Dynasty XIV	Neferhotep (III) Iykhemofret Sekhemreankhtawy	ꜥꜥꜣw	IN	-1692	IN	Avaris
137	10502	Ancient Egypt	2nd Intermediate Period	Dynasty XIV	Nebiryraw (I) Sewadjenre	ꜥꜥꜣw	IN	-1691	IN	Avaris
138	10502	Ancient Egypt	2nd Intermediate Period	Dynasty XIV	Smenre	ꜥꜥꜣw	IN	-1691	IN	Avaris
139	10502	Ancient Egypt	2nd Intermediate Period	Dynasty XIV	Bebiankh	ꜥꜥꜣw	IN	-1690	IN	Avaris
140	10502	Ancient Egypt	2nd Intermediate Period	Dynasty XIV	Dedumose (I) Djedhotepre	ꜥꜥꜣw	IN	-1689	IN	Avaris
141	10502	Ancient Egypt	2nd Intermediate Period	Dynasty XIV	Dedumose (II) Djedneferre	ꜥꜥꜣw	IN	-1689	IN	Avaris
142	10502	Ancient Egypt	2nd Intermediate Period	Dynasty XIV	Montemsaf Djedankhre	ꜥꜥꜣw	IN	-1688	IN	Avaris
143	10502	Ancient Egypt	2nd Intermediate Period	Dynasty XIV	Monthotep (VI) Merankhre	ꜥꜥꜣw	IN	-1688	IN	Avaris
144	10502	Ancient Egypt	2nd Intermediate Period	Dynasty XIV	Senusret (IV) Seneferibre	ꜥꜥꜣw	IN	-1687	IN	Avaris
145	10502	Ancient Egypt	2nd Intermediate Period	Dynasty XIV	Wepwawetemsaf Sekhemrenerkhaw	ꜥꜥꜣw	IN	-1686	IN	Avaris
146	10502	Ancient Egypt	2nd Intermediate Period	Dynasty XIV	Pantjeny Sekhemrekhawtawy	ꜥꜥꜣw	IN	-1686	IN	Avaris
147	10502	Ancient Egypt	2nd Intermediate Period	Dynasty XIV	Snaaib Menkhawtawy	ꜥꜥꜣw	IN	-1685	IN	Avaris
148	10502	Ancient Egypt	2nd Intermediate Period	Dynasty XIV	Nebmaatre	ꜥꜥꜣw	IN	-1685	IN	Avaris
149	10502	Ancient Egypt	2nd Intermediate Period	Dynasty XIV	Rahotep Sekhemrewahkhaw	ꜥꜥꜣw	IN	-1684	IN	Avaris
150	10502	Ancient Egypt	2nd Intermediate Period	Dynasty XIV	Nehsy Aasehre	zmꜥꜥꜣw	IN	-1683	IN	Avaris
151	10502	Ancient Egypt	2nd Intermediate Period	Dynasty XIV	Merdjefare	zmꜥꜥꜣw	IN	-1683	IN	Avaris
152	10502	Ancient Egypt	2nd Intermediate Period	Dynasty XIV	Sekheperenre	zmꜥꜥꜣw	IN	-1682	IN	Avaris
153	10502	Ancient Egypt	2nd Intermediate Period	Dynasty XIV	Yakbim Sekhaenre	zmꜥꜥꜣw	IN	-1682	IN	Avaris
154	10502	Ancient Egypt	2nd Intermediate Period	Dynasty XIV	Ya'ammu Nubwoserre	zmꜥꜥꜣw	IN	-1681	IN	Avaris
155	10502	Ancient Egypt	2nd Intermediate Period	Dynasty XIV	Ammu Aahotepre	zmꜥꜥꜣw	IN	-1681	IN	Avaris
156	10502	Ancient Egypt	2nd Intermediate Period	Dynasty XIV	Sheshi Maaibre	zmꜥꜥꜣw	IN	-1680	IN	Avaris
157	10502	Ancient Egypt	2nd Intermediate Period	Dynasty XIV	Nuya	zmꜥꜥꜣw	IN	-1679	IN	Avaris
158	10502	Ancient Egypt	2nd Intermediate Period	Dynasty XIV	Sheneh	zmꜥꜥꜣw	IN	-1679	IN	Avaris
159	10502	Ancient Egypt	2nd Intermediate Period	Dynasty XIV	Shenshek	zmꜥꜥꜣw	IN	-1678	IN	Avaris
160	10502	Ancient Egypt	2nd Intermediate Period	Dynasty XIV	Wazad	zmꜥꜥꜣw	IN	-1678	IN	Avaris
161	10502	Ancient Egypt	2nd Intermediate Period	Dynasty XIV	Khamure	zmꜥꜥꜣw	IN	-1677	IN	Avaris
162	10502	Ancient Egypt	2nd Intermediate Period	Dynasty XIV	Yaqub-Har Merwesserre	zmꜥꜥꜣw	IN	-1676	IN	Avaris
163	10502	Ancient Egypt	2nd Intermediate Period	Dynasty XIV	Yakareb	zmꜥꜥꜣw	IN	-1676	IN	Avaris
164	10502	Ancient Egypt	2nd Intermediate Period	Dynasty XIV	Shamuqenu	zmꜥꜥꜣw	IN	-1675	IN	Avaris
165	10502	Ancient Egypt	2nd Intermediate Period	Dynasty XIV	Aper-Anati	zmꜥꜥꜣw	IN	-1675	IN	Avaris
166	10503	Ancient Egypt	2nd Intermediate Period	Dynasty XV "Hyksos"	Sakir-Har	ꜥꜥꜣmhw	IN	-1674	IN	Avaris
167	10503	Ancient Egypt	2nd Intermediate Period	Dynasty XV "Hyksos"	Salitis	ꜥꜥꜣmhw	IN	-1672	IN	Avaris
168	10503	Ancient Egypt	2nd Intermediate Period	Dynasty XV "Hyksos"	Bnon	ꜥꜥꜣmhw	IN	-1670	IN	Avaris
169	10503	Ancient Egypt	2nd Intermediate Period	Dynasty XV "Hyksos"	Apachnas	ꜥꜥꜣmhw	IN	-1668	IN	Avaris
170	10503	Ancient Egypt	2nd Intermediate Period	Dynasty XV "Hyksos"	Khayan	ꜥꜥꜣmhw	IN	-1666	IN	Avaris
171	10503	Ancient Egypt	2nd Intermediate Period	Dynasty XV "Hyksos"	Apophis or Apepi	ꜥꜥꜣmhw	IN	-1664	IN	Avaris
172	10503	Ancient Egypt	2nd Intermediate Period	Dynasty XV "Hyksos"	Khamudi	ꜥꜥꜣmhw	IN	-1662	IN	Avaris
173	10504	Ancient Egypt	2nd Intermediate Period	Dynasty XVI	Unknown	zmꜥꜥꜣw	IN	-1660	IN	Thebes/Abydos
174	10505	Ancient Egypt	2nd Intermediate Period	Dynasty XVII	Sobkemsaf (I) Sekhemreshedtawy	zmꜥꜥꜣw	IN	-1580	IN	Avaris
175	10505	Ancient Egypt	2nd Intermediate Period	Dynasty XVII	Intef (VI) Sekhemreweptmaat	zmꜥꜥꜣw	IN	-1576	IN	Avaris
176	10505	Ancient Egypt	2nd Intermediate Period	Dynasty XVII	Intef (VII) Nubkheperre	zmꜥꜥꜣw	IN	-1573	IN	Avaris

177	10505	Ancient Egypt	2nd Intermediate Period	Dynasty XVII	Intef (VIII) Sekhemreherhermaat	zm ⁱ -t ^{wj}	IN	-1569 IN	Avaris
178	10505	Ancient Egypt	2nd Intermediate Period	Dynasty XVII	Sobkemsaf (II) Sekhemrewadjkhaw	zm ⁱ -t ^{wj}	IN	-1565 IN	Avaris
179	10505	Ancient Egypt	2nd Intermediate Period	Dynasty XVII	Senakhtenre	zm ⁱ -t ^{wj}	IN	-1561 IN	Avaris
180	10505	Ancient Egypt	2nd Intermediate Period	Dynasty XVII	Seqenenre Tao	zm ⁱ -t ^{wj}	IN	-1558 IN	Avaris
181	10505	Ancient Egypt	2nd Intermediate Period	Dynasty XVII	Kamose Wadjkheperre	zm ⁱ -t ^{wj}	IN	-1554 IN	Avaris
182	10601	Ancient Egypt	New Kingdom	Dynasty XVIII	Ahmose Nebpehtire (1550-1525 BCE)	zm ⁱ -t ^{wj}	IN	-1550 IN	Thebes
183	10601	Ancient Egypt	New Kingdom	Dynasty XVIII	Amenhotep I Djoserkare (1525-1504 BCE)	zm ⁱ -t ^{wj}	IN	-1525 IN	Thebes
184	10601	Ancient Egypt	New Kingdom	Dynasty XVIII	Thutmose I Aakheperkare (1504-1492 BCE)	zm ⁱ -t ^{wj}	IN	-1504 IN	Thebes
185	10601	Ancient Egypt	New Kingdom	Dynasty XVIII	Thutmose II Aakheperenre (1492-1479 BCE)	zm ⁱ -t ^{wj}	IN	-1492 IN	Thebes
186	10601	Ancient Egypt	New Kingdom	Dynasty XVIII	Hatshepsut Maatkare (1479/1473-1458/57 BCE)	zm ⁱ -t ^{wj}	IN	-1479 IN	Thebes
187	10601	Ancient Egypt	New Kingdom	Dynasty XVIII	Thutmose III Menkheperre (1479-1425 BCE)	zm ⁱ -t ^{wj}	IN	-1458 IN	Thebes
188	10601	Ancient Egypt	New Kingdom	Dynasty XVIII	Amenhotep II Aakheperure (1428-1397 BCE)	zm ⁱ -t ^{wj}	IN	-1428 IN	Thebes
189	10601	Ancient Egypt	New Kingdom	Dynasty XVIII	Thutmose IV Menkheperure (1397-1388 BCE)	zm ⁱ -t ^{wj}	IN	-1397 IN	Thebes
190	10601	Ancient Egypt	New Kingdom	Dynasty XVIII	Amenhotep III Nebmaatre (1388-1351/50 BCE)	zm ⁱ -t ^{wj}	IN	-1388 IN	Thebes
191	10601	Ancient Egypt	New Kingdom	Dynasty XVIII	Akhenaten (Amenhotep IV) Neferkheperure-waenre (1351-1334 BCE)	zm ⁱ -t ^{wj}	IN	-1351 IN	Amarna
192	10601	Ancient Egypt	New Kingdom	Dynasty XVIII	Semenkhkare Ankhheperure (1337-1334 BCE)	zm ⁱ -t ^{wj}	IN	-1337 IN	Thebes
193	10601	Ancient Egypt	New Kingdom	Dynasty XVIII	Tutankhamun Nebkheperure (1333-1323 BCE)	zm ⁱ -t ^{wj}	IN	-1333 IN	Thebes
194	10601	Ancient Egypt	New Kingdom	Dynasty XVIII	Ay Kheperkheperure (1323-1319 BCE)	zm ⁱ -t ^{wj}	IN	-1323 IN	Thebes
195	10601	Ancient Egypt	New Kingdom	Dynasty XVIII	Horemheb Djoserkheperure-setpenre (1319-1292 BCE)	zm ⁱ -t ^{wj}	IN	-1319 IN	Thebes
196	10602	Ancient Egypt	New Kingdom	Dynasty XIX	Ramesses I Menpehtire (1292-1290 BCE)	Ramesside	IN	-1292 IN	Thebes
197	10602	Ancient Egypt	New Kingdom	Dynasty XIX	Sety I Menmaatre (1290-1279/8 BCE)	Ramesside	IN	-1290 IN	Memphis
198	10602	Ancient Egypt	New Kingdom	Dynasty XIX	Ramesses II Usermaatre-setpenre (1279-1213 BCE)	Ramesside	IN	-1279 IN	Pi-Ramesses
199	10602	Ancient Egypt	New Kingdom	Dynasty XIX	Merenptah Banenre (1213-1203 BCE)	Ramesside	IN	-1213 IN	Memphis
200	10602	Ancient Egypt	New Kingdom	Dynasty XIX	Sety II Userkheperure (1200/1199-1194/93 BCE)	Ramesside	IN	-1200 IN	Pi-Ramesses
201	10602	Ancient Egypt	New Kingdom	Dynasty XIX	Amenmesse Menmire-setpenre (1203-1200/1199 BCE)	Ramesside	IN	-1200 IN	Pi-Ramesses
202	10602	Ancient Egypt	New Kingdom	Dynasty XIX	Siptah Sekhaenre/Akhenre (1194/93-1186/85 BCE)	Ramesside	IN	-1194 IN	Pi-Ramesses
203	10602	Ancient Egypt	New Kingdom	Dynasty XIX	Tausret Satre-merenamun (1194/93-1186/85 BCE)	Ramesside	IN	-1193 IN	Pi-Ramesses
204	10603	Ancient Egypt	New Kingdom	Dynasty XX	Setnakht Userkhaure (1186/85-1183/82 BCE)	Ramesside	IN	-1186 IN	Pi-Ramesses
205	10603	Ancient Egypt	New Kingdom	Dynasty XX	Ramesses III Usermaatre-meryamun (1183/82-1152/51 BCE)	Ramesside	IN	-1183 IN	Pi-Ramesses
206	10603	Ancient Egypt	New Kingdom	Dynasty XX	Ramesses IV User/Heqamaatre-setpenamun (1152/51-1145/44 BCE)	Ramesside	IN	-1152 IN	Pi-Ramesses
207	10603	Ancient Egypt	New Kingdom	Dynasty XX	Ramesses V Usermaatre-sekheperenre (1145/4-1142/40 BCE)	Ramesside	IN	-1145 IN	Pi-Ramesses
208	10603	Ancient Egypt	New Kingdom	Dynasty XX	Ramesses VI Nebmaatre-meryamun (1142/40-1134/32 BCE)	Ramesside	IN	-1142 IN	Pi-Ramesses
209	10603	Ancient Egypt	New Kingdom	Dynasty XX	Ramesses VII Usermaatre-setpenre-meryamun (1134/32-1126/23 BCE)	Ramesside	IN	-1134 IN	Pi-Ramesses
210	10603	Ancient Egypt	New Kingdom	Dynasty XX	Ramesses VIII Usermaatre-akhenamun (1126/23-1125/21 BCE)	Ramesside	IN	-1126 IN	Pi-Ramesses
211	10603	Ancient Egypt	New Kingdom	Dynasty XX	Ramesses IX Neferkare-setpenre (1125/21-1107/03 BCE)	Ramesside	IN	-1125 IN	Pi-Ramesses
212	10603	Ancient Egypt	New Kingdom	Dynasty XX	Ramesses X Khepermaatre-setpenptah (1107/03-1103/1099 BCE)	Ramesside	IN	-1107 IN	Pi-Ramesses
213	10603	Ancient Egypt	New Kingdom	Dynasty XX	Ramesses XI Menmaatre-setpenptah (1103/1099-1070/1069 BCE)	Ramesside	IN	-1103 IN	Pi-Ramesses
214	10701	Ancient Egypt	3rd Intermediate Period	Dynasty XXI	Nesbanebdjed (Greek Smendes) (1070/69-1044/43 BCE)	zm ⁱ -t ^{wj}	IN	-1069 IN	Tanis
215	10701	Ancient Egypt	3rd Intermediate Period	Dynasty XXI	Amenemnisut (Greek Nephercheres) (1044/43-1040/39 BCE)	zm ⁱ -t ^{wj}	IN	-1044 IN	Tanis
216	10701	Ancient Egypt	3rd Intermediate Period	Dynasty XXI	Pasebakhenniut I (Greek Psusennes) (1044/43-994/93 BCE)	zm ⁱ -t ^{wj}	IN	-1043 IN	Tanis
217	10701	Ancient Egypt	3rd Intermediate Period	Dynasty XXI	Amenemipet (Greek Amenophthis) (996/95-985/84 BCE)	zm ⁱ -t ^{wj}	IN	-996 IN	Tanis
218	10701	Ancient Egypt	3rd Intermediate Period	Dynasty XXI	Osorkon (Greek Osochor) (985/84-979/78 BCE)	zm ⁱ -t ^{wj}	IN	-985 IN	Tanis
219	10701	Ancient Egypt	3rd Intermediate Period	Dynasty XXI	Saamun (979/78-960/59 BCE)	zm ⁱ -t ^{wj}	IN	-979 IN	Tanis
220	10701	Ancient Egypt	3rd Intermediate Period	Dynasty XXI	Pasebakhenniut II (Greek Psusennes) (960/59-946/45 BCE)	zm ⁱ -t ^{wj}	IN	-960 IN	Tanis
221	10702	Ancient Egypt	3rd Intermediate Period	Dynasty XXII	Sheshonq I (946/45-925/24 BCE)	Bubastites	IN	-945 IN	Bubastis

222	10702	Ancient Egypt	3rd Intermediate Period	Dynasty XXII	Osorkon I (925/24-about 890 BCE)	Bubastites	IN	-925 IN	Bubastis
223	10702	Ancient Egypt	3rd Intermediate Period	Dynasty XXII	Takehot I (about 890-877 BCE)	Bubastites	IN	-890 IN	Bubastis
224	10702	Ancient Egypt	3rd Intermediate Period	Dynasty XXII	Sheshonq II (about 877-875 BCE)	Bubastites	IN	-877 IN	Bubastis
225	10702	Ancient Egypt	3rd Intermediate Period	Dynasty XXII	Osorkon II (about 875-837 BCE)	Bubastites	IN	-875 IN	Bubastis
226	10703	Ancient Egypt	3rd Intermediate Period	Tanitic	Sheshonq III (about 837-798/785? BCE)	ṯ-mhw	IN	-837 IN	Tanis
227	10703	Ancient Egypt	3rd Intermediate Period	Tanitic	Sheshonq IIIa (about 798-785 ? BCE)	ṯ-mhw	IN	-798 IN	Tanis
228	10703	Ancient Egypt	3rd Intermediate Period	Tanitic	Pamui (about 785-774 BCE)	ṯ-mhw	IN	-785 IN	Tanis
229	10703	Ancient Egypt	3rd Intermediate Period	Tanitic	Sheshonq V (about 774-736 BCE)	ṯ-mhw	IN	-774 IN	Tanis
230	10704	Ancient Egypt	3rd Intermediate Period	Upper Egyptian Line	Horsiese (about 870-850 BCE)	ṯ šm ^h w	IN	-870 IN	Thebes
231	10704	Ancient Egypt	3rd Intermediate Period	Upper Egyptian Line	Takehot II (about 841-816 BCE)	ṯ šm ^h w	IN	-841 IN	Thebes
232	10704	Ancient Egypt	3rd Intermediate Period	Upper Egyptian Line	Padibast (about 830-80/800 BCE)	ṯ šm ^h w	IN	-830 IN	Thebes
233	10704	Ancient Egypt	3rd Intermediate Period	Upper Egyptian Line	Iuput I (about 816-800 BCE)	ṯ šm ^h w	IN	-816 IN	Thebes
234	10704	Ancient Egypt	3rd Intermediate Period	Upper Egyptian Line	Sheshonq IV (about 805/00-790 BCE)	ṯ šm ^h w	IN	-805 IN	Thebes
235	10704	Ancient Egypt	3rd Intermediate Period	Upper Egyptian Line	Osorkon III (about 790-762 BCE)	ṯ šm ^h w	IN	-790 IN	Thebes
236	10704	Ancient Egypt	3rd Intermediate Period	Upper Egyptian Line	Takehot III (about 767-755 BCE)	ṯ šm ^h w	IN	-767 IN	Thebes
237	10704	Ancient Egypt	3rd Intermediate Period	Upper Egyptian Line	Rudamun (about 755-735 BCE)	ṯ šm ^h w	IN	-755 IN	Thebes
238	10704	Ancient Egypt	3rd Intermediate Period	Upper Egyptian Line	Ini (about 735-730 BCE)	ṯ šm ^h w	IN	-735 IN	Thebes
239	10705	Ancient Egypt	3rd Intermediate Period	Dynasty XXIII	Padibast II (in Bubastis/Tanis) (about 756-732/30 BCE)	ṯ-mhw	IN	-756 IN	Bubastis/Tanis
240	10705	Ancient Egypt	3rd Intermediate Period	Dynasty XXIII	Iuput II (in Leontopolis) (about 756-724 (?) BCE)	ṯ-mhw	IN	-756 IN	Leontopolis
241	10705	Ancient Egypt	3rd Intermediate Period	Dynasty XXIII	Osorkon IV (about 732/730-722 BCE)	ṯ-mhw	IN	-732 IN	Sais
242	10705	Ancient Egypt	3rd Intermediate Period	Dynasty XXIII	Psammus (?) (about 722-712 BCE)	ṯ-mhw	IN	-722 IN	Sais
243	10706	Ancient Egypt	3rd Intermediate Period	Dynasty XXIV	Tefnakht (about 740-719/17 BCE)	ṯ-mhw	IN	-740 IN	Sais
244	10706	Ancient Egypt	3rd Intermediate Period	Dynasty XXIV	Bakenrenef (Greek Bocchoris) (about 722-712 BCE)	ṯ-mhw	IN	-722 IN	Sais
245	10707	Ancient Egypt	3rd Intermediate Period	Dynasty XXV	Kashta (before 746 BCE)	ṯ-mhw	IN	-746 IN	Sais
246	10707	Ancient Egypt	3rd Intermediate Period	Dynasty XXV	Piy (formerly read Piankhi) (about 746-715/713 BCE)	Kushites	IN	-746 IN	Napata
247	10707	Ancient Egypt	3rd Intermediate Period	Dynasty XXV	Shabako (715/713-700/698 BCE)	Kushites	IN	-715 IN	Napata
248	10707	Ancient Egypt	3rd Intermediate Period	Dynasty XXV	Shabirko (700/698-690 BCE)	Kushites	IN	-700 IN	Napata
249	10707	Ancient Egypt	3rd Intermediate Period	Dynasty XXV	Taharqo (690-664 BCE)	Kushites	IN	-690 IN	Napata
250	10707	Ancient Egypt	3rd Intermediate Period	Dynasty XXV	Tanutamani (664-about 655 BCE)	Esarhaddon	IN	-664 IN	Napata
251	10801	Ancient Egypt	Late Period	Dynasty XXVI	Nekau Menkheperre (local ruler, founder of Dynasty 26)	Ashurbanipal	IN	-664 IN	Sais
252	10801	Ancient Egypt	Late Period	Dynasty XXVI	Psamtek I Wahibre (664-610 BCE)	Saites	IN	-664 IN	Sais
253	10801	Ancient Egypt	Late Period	Dynasty XXVI	Nekau Wehemibre (610-595 BCE)	Saites	IN	-610 IN	Sais
254	10801	Ancient Egypt	Late Period	Dynasty XXVI	Psamtek II Neferibre (595-589 BCE)	Saites	IN	-595 IN	Sais
255	10801	Ancient Egypt	Late Period	Dynasty XXVI	Wahibre (Greek Apries) Haaibre (589-570 BCE)	Saites	IN	-589 IN	Sais
256	10801	Ancient Egypt	Late Period	Dynasty XXVI	Ahmoese (Greek Amasis) Khnemibre (570-526 BCE)	Saites	IN	-570 IN	Sais
257	10801	Ancient Egypt	Late Period	Dynasty XXVI	Psamtek III Ankhkaenre (526-525 BCE)	Saites	IN	-526 IN	Sais
258	20101	Persian Egypt	First Achaemenid Period	Dynasty XXVII or First Egyptian Satrapy	Aryandes	Cambyses (525-522 BCE)	IN	-525 IN	Persia/Sais
259	20101	Persian Egypt	First Achaemenid Period	Dynasty XXVII or First Egyptian Satrapy	Petubastis III	Petubastis III	IN	-522 IN	Sais
260	20101	Persian Egypt	First Achaemenid Period	Dynasty XXVII or First Egyptian Satrapy	Pherendates	Darius (522/21-486/85 BCE)	IN	-522 IN	Persia/Sais
261	20101	Persian Egypt	First Achaemenid Period	Dynasty XXVII or First Egyptian Satrapy	Achaemenes	Xerxes I (486/85-465/64 BCE)	IN	-486 IN	Persia/Sais
262	20101	Persian Egypt	First Achaemenid Period	Dynasty XXVII or First Egyptian Satrapy	Arsames	Artaxerxes I (465/64-424 BCE)	IN	-465 IN	Persia/Sais
263	20101	Persian Egypt	First Achaemenid Period	Dynasty XXVII or First Egyptian Satrapy	Xerxes II (424/23 BCE)	Xerxes II (424/23 BCE)	IN	-424 IN	Persia/Sais
264	20101	Persian Egypt	First Achaemenid Period	Dynasty XXVII or First Egyptian Satrapy	Sogdianus (424/23 BCE)	Sogdianus (424/23 BCE)	IN	-424 IN	Persia/Sais
265	20101	Persian Egypt	First Achaemenid Period	Dynasty XXVII or First Egyptian Satrapy	Darius II (423-405/04 BCE)	Darius II (423-405/04 BCE)	IN	-423 IN	Persia/Sais
266	20101	Persian Egypt	First Achaemenid Period	Dynasty XXVII or First Egyptian Satrapy	Artaxerxes II (405/04-401 BCE, in Persia till 359/58)	Artaxerxes II (405/04-401 BCE, in Persia till 359/58)	IN	-405 IN	Persia/Sais

267	20201	Persian Egypt	Late Dynastic	Dynasty XXVIII	Amyrtaeus (Greek form of Egyptian Amenirdis) (404-399 BCE)	t̄-mhw	IN	-404 IN	Sais
268	20202	Persian Egypt	Late Dynastic	Dynasty XXIX	Nefaarud (Greek Nepherites I) (about 399-393 BCE)	t̄-mhw	IN	-399 IN	Sais
269	20202	Persian Egypt	Late Dynastic	Dynasty XXIX	Hakor (Greek Achoris) (393-380 BCE)	t̄-mhw	IN	-393 IN	Mendes
270	20203	Persian Egypt	Late Dynastic	Dynasty XXX	Nakhtnebef (Greek Nectanebo I) (380-363 BCE)	t̄-mhw	IN	-380 IN	Sebennytos
271	20203	Persian Egypt	Late Dynastic	Dynasty XXX	Djedher (Greek Teos) (362-360 BCE)	t̄-mhw	IN	-362 IN	Sebennytos
272	20203	Persian Egypt	Late Dynastic	Dynasty XXX	Nakhthorhebyt (Greek Nectanebo II) (360-343 BCE)	t̄-mhw	IN	-360 IN	Sebennytos
273	20301	Persian Egypt	Second Achaemenid Period	Dynasty XXXI or Second Egyptian Satrapy	Pherendates II	Artaxerxes III (342-338 BCE)	IN	-342 IN	Persia
274	20301	Persian Egypt	Second Achaemenid Period	Dynasty XXXI or Second Egyptian Satrapy	Sabaces	Arses (338-336 BCE)	IN	-338 IN	Persia
275	20301	Persian Egypt	Second Achaemenid Period	Dynasty XXXI or Second Egyptian Satrapy	Mazaces	Darius III (336-332/330 BCE)	IN	-336 IN	Persia
276	20401	Persian Egypt	Hellenistic	Macedonian Dynasty	Nomarch and Satrap Cleomenes of Naucratis	Alexander the Great	IN	-332 IN	Alexandria
277	20401	Persian Egypt	Hellenistic	Macedonian Dynasty	Nomarch and Satrap Cleomenes of Naucratis	Philip Arrhidaeus	IN	-323 IN	Alexandria
278	20401	Persian Egypt	Hellenistic	Macedonian Dynasty	Nomarch and Satrap Cleomenes of Naucratis	Alexander IV	IN	-323 IN	Alexandria
279	30101	Greco-Roman Egypt	Hellenistic	Ptolemaic Dynasty	Ptolemy I Soter (332-282 BCE)	Pharaoh of Egypt	IN	-306 IN	Alexandria
280	30101	Greco-Roman Egypt	Hellenistic	Ptolemaic Dynasty	Ptolemy II Philadelphos (282-246 BCE)	Pharaoh of Egypt	IN	-282 IN	Alexandria
281	30101	Greco-Roman Egypt	Hellenistic	Ptolemaic Dynasty	Ptolemy III Euergetes (246-222 BCE)	Pharaoh of Egypt	IN	-246 IN	Alexandria
282	30101	Greco-Roman Egypt	Hellenistic	Ptolemaic Dynasty	Ptolemy IV Philopator (221-204 BCE)	Pharaoh of Egypt	IN	-221 IN	Alexandria
283	30101	Greco-Roman Egypt	Hellenistic	Ptolemaic Dynasty	Ptolemy V Epiphanes (204-180 BCE)	Pharaoh of Egypt	IN	-204 IN	Alexandria
284	30101	Greco-Roman Egypt	Hellenistic	Ptolemaic Dynasty	Ptolemy VI Philometor (180-145 BCE)	Pharaoh of Egypt	IN	-180 IN	Alexandria
285	30101	Greco-Roman Egypt	Hellenistic	Ptolemaic Dynasty	Ptolemy VII Neos Philopator (145-144 BCE)	Pharaoh of Egypt	IN	-145 IN	Alexandria
286	30101	Greco-Roman Egypt	Hellenistic	Ptolemaic Dynasty	Ptolemy VIII Euergetes Tryphon (170-164/3,145-116 BCE)	Pharaoh of Egypt	IN	-170 IN	Alexandria
287	30101	Greco-Roman Egypt	Hellenistic	Ptolemaic Dynasty	Ptolemy IX (116-107 BCE)	Pharaoh of Egypt	IN	-116 IN	Alexandria
288	30101	Greco-Roman Egypt	Hellenistic	Ptolemaic Dynasty	Ptolemy X Alexander (107-88 BCE)	Pharaoh of Egypt	IN	-107 IN	Alexandria
289	30101	Greco-Roman Egypt	Hellenistic	Ptolemaic Dynasty	Ptolemy XI (80-58 BCE, 55-51 BCE)	Pharaoh of Egypt	IN	-80 IN	Alexandria
290	30101	Greco-Roman Egypt	Hellenistic	Ptolemaic Dynasty	Ptolemy XII - Neos Dionysos (80-51 BCE)	Pharaoh of Egypt	IN	-80 IN	Alexandria
291	30101	Greco-Roman Egypt	Hellenistic	Ptolemaic Dynasty	Ptolemy XIII (47-44 BCE)	Pharaoh of Egypt	IN	-51 IN	Alexandria
292	30101	Greco-Roman Egypt	Hellenistic	Ptolemaic Dynasty	Ptolemy XIV (co-regent with Cleopatra VII)	Pharaoh of Egypt	IN	-47 IN	Alexandria
293	30101	Greco-Roman Egypt	Hellenistic	Ptolemaic Dynasty	Ptolemy XV Caesarion (34?-30 BCE co-regent with Cleopatra VII)	Pharaoh of Egypt	IN	-34 IN	Alexandria
294	30203	Greco-Roman Egypt	Roman	Roman Emperors	Gaius Cornelius Gallus	Octavian, (30 BCE to 14 CE)	IN	-30 IN	Rome
295	30203	Greco-Roman Egypt	Roman	Roman Emperors	Aelius Gallus	Octavian, (30 BCE to 14 CE)	IN	-26 IN	Rome
296	30203	Greco-Roman Egypt	Roman	Roman Emperors	Gaius Petronius or Publius Petronius	Octavian, (30 BCE to 14 CE)	IN	-22 IN	Rome
297	30203	Greco-Roman Egypt	Roman	Roman Emperors	Publius Rubrius Barbarus	Octavian, (30 BCE to 14 CE)	IN	-13 IN	Rome
298	30203	Greco-Roman Egypt	Roman	Roman Emperors	Gaius Turranius	Octavian, (30 BCE to 14 CE)	IN	-7 IN	Rome
299	30203	Greco-Roman Egypt	Roman	Roman Emperors	Publius Octavius	Octavian, (30 BCE to 14 CE)	IN	2 IN	Rome
300	30203	Greco-Roman Egypt	Roman	Roman Emperors	Quintus Ostorius Scapula	Octavian, (30 BCE to 14 CE)	IN	3 IN	Rome
301	30203	Greco-Roman Egypt	Roman	Roman Emperors	Gaius Iulius Aquila	Octavian, (30 BCE to 14 CE)	IN	10 IN	Rome
302	30203	Greco-Roman Egypt	Roman	Roman Emperors	Lucius Antonius Pedo	Octavian, (30 BCE to 14 CE)	IN	11 IN	Rome
303	30203	Greco-Roman Egypt	Roman	Roman Emperors	Quintus Magius Maximus	Octavian, (30 BCE to 14 CE)	IN	12 IN	Rome
304	30203	Greco-Roman Egypt	Roman	Roman Emperors	Lucius Seius Strabo	Tiberius (14-37)	IN	15 IN	Rome
305	30203	Greco-Roman Egypt	Roman	Roman Emperors	Aemilius Rectus	Tiberius (14-37)	IN	15 IN	Rome
306	30203	Greco-Roman Egypt	Roman	Roman Emperors	Gaius Galerius	Tiberius (14-37)	IN	16 IN	Rome
307	30203	Greco-Roman Egypt	Roman	Roman Emperors	Vitrasius Pollio (died in office)	Tiberius (14-37)	IN	23 IN	Rome
308	30203	Greco-Roman Egypt	Roman	Roman Emperors	Hiberus (Viceprefect)	Tiberius (14-37)	IN	32 IN	Rome
309	30203	Greco-Roman Egypt	Roman	Roman Emperors	Aulus Avilius Flaccus	Tiberius (14-37)	IN	33 IN	Rome
310	30203	Greco-Roman Egypt	Roman	Roman Emperors	Quintus Naevius Cordus Sutorius Macro	Caligula (37 -41)	IN	37 IN	Rome
311	30203	Greco-Roman Egypt	Roman	Roman Emperors	Gaius Vitrasius Pollio	Caligula (37 -41)	IN	38 IN	Rome

312	30203	Greco-Roman Egypt	Roman	Roman Emperors	Gaius Vitrasius Pollio	Claudius (41-54)	IN	41 IN	Rome
313	30203	Greco-Roman Egypt	Roman	Roman Emperors	Lucius Aemilius Rectus	Claudius (41-54)	IN	41 IN	Rome
314	30203	Greco-Roman Egypt	Roman	Roman Emperors	Marcus Heius	Claudius (41-54)	IN	42 IN	Rome
315	30203	Greco-Roman Egypt	Roman	Roman Emperors	Gaius Julius Postumus	Claudius (41-54)	IN	45 IN	Rome
316	30203	Greco-Roman Egypt	Roman	Roman Emperors	Gnaeus Vergilius Capito	Claudius (41-54)	IN	48 IN	Rome
317	30203	Greco-Roman Egypt	Roman	Roman Emperors	Lucius Lusius Geta	Claudius (41-54)	IN	54 IN	Rome
318	30203	Greco-Roman Egypt	Roman	Roman Emperors	Tiberius Claudius Balbillus Modestus	Nero (54-68)	IN	55 IN	Rome
319	30203	Greco-Roman Egypt	Roman	Roman Emperors	Lucius Julius Vestinus	Nero (54-68)	IN	60 IN	Rome
320	30203	Greco-Roman Egypt	Roman	Roman Emperors	Gaius Caecina Tuscus	Nero (54-68)	IN	63 IN	Rome
321	30203	Greco-Roman Egypt	Roman	Roman Emperors	Tiberius Julius Alexander	Galba (68-69)	IN	66 IN	Rome
322	30203	Greco-Roman Egypt	Roman	Roman Emperors	Tiberius Julius Alexander	Otho (69)	IN	68 IN	Rome
323	30203	Greco-Roman Egypt	Roman	Roman Emperors	Tiberius Julius Alexander	Vitellius (69)	IN	69 IN	Rome
324	30203	Greco-Roman Egypt	Roman	Roman Emperors	Lucius Peducius Colo(nus?)	Vespasian (69-79)	IN	70 IN	Rome
325	30203	Greco-Roman Egypt	Roman	Roman Emperors	Tiberius Julius Lupus	Vespasian (69-79)	IN	71 IN	Rome
326	30203	Greco-Roman Egypt	Roman	Roman Emperors	Valerius Paulinus	Vespasian (69-79)	IN	74 IN	Rome
327	30203	Greco-Roman Egypt	Roman	Roman Emperors	[S]ept[imius?] Nu[...]	Vespasian (69-79)	IN	75 IN	Rome
328	30203	Greco-Roman Egypt	Roman	Roman Emperors	Gaius Aeterius Fronto	Vespasian (69-79)	IN	78 IN	Rome
329	30203	Greco-Roman Egypt	Roman	Roman Emperors	Gaius Tettius Cassianus Priscus	Titus (79-81)	IN	80 IN	Rome
330	30203	Greco-Roman Egypt	Roman	Roman Emperors	Lucius Laberius Maximus	Domitian (81-96)	IN	83 IN	Rome
331	30203	Greco-Roman Egypt	Roman	Roman Emperors	Lucius Julius Ursus	Domitian (81-96)	IN	83 IN	Rome
332	30203	Greco-Roman Egypt	Roman	Roman Emperors	Gaius Septimius Vegetus	Domitian (81-96)	IN	85 IN	Rome
333	30203	Greco-Roman Egypt	Roman	Roman Emperors	Marcus Mettius Rufus	Domitian (81-96)	IN	89 IN	Rome
334	30203	Greco-Roman Egypt	Roman	Roman Emperors	Titus Petronius Secundus	Domitian (81-96)	IN	92 IN	Rome
335	30203	Greco-Roman Egypt	Roman	Roman Emperors	Marcus Junius Rufus	Domitian (81-96)	IN	94 IN	Rome
336	30203	Greco-Roman Egypt	Roman	Roman Emperors	Gaius Pompeius Planta	Nerva (96-98)	IN	98 IN	Rome
337	30203	Greco-Roman Egypt	Roman	Roman Emperors	Gaius Minucius Italus	Trajan (98-117)	IN	100 IN	Rome
338	30203	Greco-Roman Egypt	Roman	Roman Emperors	Gaius Vibius Maximus	Trajan (98-117)	IN	103 IN	Rome
339	30203	Greco-Roman Egypt	Roman	Roman Emperors	Servius Sulpicius Similis	Trajan (98-117)	IN	107 IN	Rome
340	30203	Greco-Roman Egypt	Roman	Roman Emperors	Marcus Rutilius Lupus	Trajan (98-117)	IN	113 IN	Rome
341	30203	Greco-Roman Egypt	Roman	Roman Emperors	Quintus Rammius Martialis	Trajan (98-117)	IN	117 IN	Rome
342	30203	Greco-Roman Egypt	Roman	Roman Emperors	Titus Haterius Nepos	Hadrian (117-138)	IN	120 IN	Rome
343	30203	Greco-Roman Egypt	Roman	Roman Emperors	Petronius Quadratus	Hadrian (117-138)	IN	126 IN	Rome
344	30203	Greco-Roman Egypt	Roman	Roman Emperors	Titus Flavius Titianus	Hadrian (117-138)	IN	126 IN	Rome
345	30203	Greco-Roman Egypt	Roman	Roman Emperors	Marcus Petronius Mamertinus	Hadrian (117-138)	IN	133 IN	Rome
346	30203	Greco-Roman Egypt	Roman	Roman Emperors	Gaius Avidius Heliodorus	Hadrian (117-138)	IN	137 IN	Rome
347	30203	Greco-Roman Egypt	Roman	Roman Emperors	Gaius Valerius Eudaemon	Antoninus Pius (138-161)	IN	142 IN	Rome
348	30203	Greco-Roman Egypt	Roman	Roman Emperors	Lucius Valerius Proculus	Antoninus Pius (138-161)	IN	144 IN	Rome
349	30203	Greco-Roman Egypt	Roman	Roman Emperors	Marcus Petronius Honoratus	Antoninus Pius (138-161)	IN	147 IN	Rome
350	30203	Greco-Roman Egypt	Roman	Roman Emperors	Lucius Munatius Felix	Antoninus Pius (138-161)	IN	150 IN	Rome
351	30203	Greco-Roman Egypt	Roman	Roman Emperors	Marcus Sempronius Liberalis	Antoninus Pius (138-161)	IN	154 IN	Rome
352	30203	Greco-Roman Egypt	Roman	Roman Emperors	Titus Furius Victorinus	Antoninus Pius (138-161)	IN	159 IN	Rome
353	30203	Greco-Roman Egypt	Roman	Roman Emperors	Lucius Volusius Maecianus	Antoninus Pius (138-161)	IN	161 IN	Rome
354	30203	Greco-Roman Egypt	Roman	Roman Emperors	Marcus Annaeus Syriacus	Marcus Aurelius (161-180)	IN	161 IN	Rome
355	30203	Greco-Roman Egypt	Roman	Roman Emperors	Titus Flavius Titianus	Marcus Aurelius (161-180)	IN	164 IN	Rome
356	30203	Greco-Roman Egypt	Roman	Roman Emperors	Quintus Baienus Blasianus	Marcus Aurelius (161-180)	IN	167 IN	Rome

357	30203	Greco-Roman Egypt	Roman	Roman Emperors	Marcus Bassius Rufus	Marcus Aurelius (161-180)	IN	168	IN	Rome
358	30203	Greco-Roman Egypt	Roman	Roman Emperors	Gaius Calvisius Statianus	Marcus Aurelius (161-180)	IN	170	IN	Rome
359	30203	Greco-Roman Egypt	Roman	Roman Emperors	Gaius Caecilius Salvianus	Marcus Aurelius (161-180)	IN	176	IN	Rome
360	30203	Greco-Roman Egypt	Roman	Roman Emperors	Titus Pactumeius Magnus	Marcus Aurelius (161-180)	IN	176	IN	Rome
361	30203	Greco-Roman Egypt	Roman	Roman Emperors	Titus Taius (?) Sanctus	Marcus Aurelius (161-180)	IN	178	IN	Rome
362	30203	Greco-Roman Egypt	Roman	Roman Emperors	Titus Flavius Piso	Commodus (180-192)	IN	181	IN	Rome
363	30203	Greco-Roman Egypt	Roman	Roman Emperors	Decimus Veturius Macrinus	Commodus (180-192)	IN	181	IN	Rome
364	30203	Greco-Roman Egypt	Roman	Roman Emperors	Vernasius Facundus	Commodus (180-192)	IN	184	IN	Rome
365	30203	Greco-Roman Egypt	Roman	Roman Emperors	Titus Longaeus Rufus	Commodus (180-192)	IN	185	IN	Rome
366	30203	Greco-Roman Egypt	Roman	Roman Emperors	Pomponius Faustinianus	Commodus (180-192)	IN	185	IN	Rome
367	30203	Greco-Roman Egypt	Roman	Roman Emperors	Marcus Aurelius Verrianus	Commodus (180-192)	IN	188	IN	Rome
368	30203	Greco-Roman Egypt	Roman	Roman Emperors	Marcus Aurelius Papius Dionysius	Commodus (180-192)	IN	188	IN	Rome
369	30203	Greco-Roman Egypt	Roman	Roman Emperors	Tinius Demetrius	Commodus (180-192)	IN	189	IN	Rome
370	30203	Greco-Roman Egypt	Roman	Roman Emperors	Claudius Lucilianus	Commodus (180-192)	IN	190	IN	Rome
371	30203	Greco-Roman Egypt	Roman	Roman Emperors	Larcus Memor	Pertinax, proclaimed by the Praetorian Guard (193)	IN	193	IN	Rome
372	30203	Greco-Roman Egypt	Roman	Roman Emperors	Lucius Mantennius Sabinus	Didius Julianus, bought from the Praetorian Guard (193)	IN	193	IN	Rome
373	30203	Greco-Roman Egypt	Roman	Roman Emperors	Marcus Ulpius Primianus	Septimius Severus (193-211)	IN	193	IN	Rome
374	30203	Greco-Roman Egypt	Roman	Roman Emperors	Quintus Aemilius Saturninus	Septimius Severus (193-211)	IN	197	IN	Rome
375	30203	Greco-Roman Egypt	Roman	Roman Emperors	Quintus Maecius Laetus	Septimius Severus (193-211)	IN	200	IN	Rome
376	30203	Greco-Roman Egypt	Roman	Roman Emperors	Claudius Julianus	Septimius Severus (193-211)	IN	203	IN	Rome
377	30203	Greco-Roman Egypt	Roman	Roman Emperors	Tiberius Claudius Subatianus Aquila	Septimius Severus (193-211)	IN	206	IN	Rome
378	30203	Greco-Roman Egypt	Roman	Roman Emperors	Lucius Baebius Aurelius Juncinus	Caracalla (211-217)	IN	212	IN	Rome
379	30203	Greco-Roman Egypt	Roman	Roman Emperors	Marcus Aurelius Septimius Heraclitus	Caracalla (211-217)	IN	215	IN	Rome
380	30203	Greco-Roman Egypt	Roman	Roman Emperors	Aurelius Antinous	Caracalla (211-217)	IN	216	IN	Rome
381	30203	Greco-Roman Egypt	Roman	Roman Emperors	Lucius Valerius Datus	Caracalla (211-217)	IN	216	IN	Rome
382	30203	Greco-Roman Egypt	Roman	Roman Emperors	Julius Basilianus	Macrinus (217-218)	IN	218	IN	Rome
383	30203	Greco-Roman Egypt	Roman	Roman Emperors	Callistianus	Didumenianus (218)	IN	218	IN	Rome
384	30203	Greco-Roman Egypt	Roman	Roman Emperors	Geminius Chrestus	Elagabalus (218-22)	IN	219	IN	Rome
385	30203	Greco-Roman Egypt	Roman	Roman Emperors	Lucius Domitius Honoratus	Elagabalus (218-22)	IN	222	IN	Rome
386	30203	Greco-Roman Egypt	Roman	Roman Emperors	Marcus Aedinius Julianus	Severus Alexander (222-235)	IN	222	IN	Rome
387	30203	Greco-Roman Egypt	Roman	Roman Emperors	Marcus Aurelius Epagatus	Severus Alexander (222-235)	IN	224	IN	Rome
388	30203	Greco-Roman Egypt	Roman	Roman Emperors	Tiberius Claudius Herennianus	Severus Alexander (222-235)	IN	224	IN	Rome
389	30203	Greco-Roman Egypt	Roman	Roman Emperors	Claudius Masculinus	Severus Alexander (222-235)	IN	229	IN	Rome
390	30203	Greco-Roman Egypt	Roman	Roman Emperors	Marcus Aurelius Zeno Januarius	Severus Alexander (222-235)	IN	231	IN	Rome
391	30203	Greco-Roman Egypt	Roman	Roman Emperors	Maebius Honoratianus	Severus Alexander (222-235)	IN	232	IN	Rome
392	30203	Greco-Roman Egypt	Roman	Roman Emperors	Maebius Honoratianus	Maximin, proclaimed emperor by soldiers, (235–238)	IN	235	IN	IN
393	30203	Greco-Roman Egypt	Roman	Roman Emperors	Lucius Lucretius Annianus	Gordian III (238-244)	IN	240	IN	Rome
394	30203	Greco-Roman Egypt	Roman	Roman Emperors	Gnaeus Domitius Philippus	Gordian III (238-244)	IN	241	IN	Rome
395	30203	Greco-Roman Egypt	Roman	Roman Emperors	Aurelius Basileus	Gordian III (238-244)	IN	242	IN	Rome
396	30203	Greco-Roman Egypt	Roman	Roman Emperors	Gaius Valerius Firmus	Philip (244-249)	IN	245	IN	Rome
397	30203	Greco-Roman Egypt	Roman	Roman Emperors	Aurelius Appius Sabinus	Philip (244-249)	IN	249	IN	Rome
398	30203	Greco-Roman Egypt	Roman	Roman Emperors	Faltonius Restitutianus	Decius, proclaimed emperor by the soldiers (249–251)	IN	251	IN	Rome
399	30203	Greco-Roman Egypt	Roman	Roman Emperors	Lissenius Proculus	Gallus and Volusianus Gallienus (251-253)	IN	252	IN	Rome
400	30203	Greco-Roman Egypt	Roman	Roman Emperors	Septimius [...]5]	Gallus and Volusianus Gallienus (251-253)	IN	253	IN	Rome
401	30203	Greco-Roman Egypt	Roman	Roman Emperors	Lucius Titinius Clodianus	Gallus and Volusianus Gallienus (251-253)	IN	253	IN	Rome

402	30203	Greco-Roman Egypt	Roman	Roman Emperors	Titus Magnius Felix Crescentillianus	Marcus Aemilianus, military commander (253)	IN	253	IN	Rome
403	30203	Greco-Roman Egypt	Roman	Roman Emperors	Ulpius Pasion	Valeriano and Galieno	IN	257	IN	Rome
404	30203	Greco-Roman Egypt	Roman	Roman Emperors	Claudius Theodorus	Valeriano and Galieno	IN	258	IN	Rome
405	30203	Greco-Roman Egypt	Roman	Roman Emperors	Lucius Mussius Aemilianus	Valeriano and Galieno	IN	258	IN	Rome
406	30203	Greco-Roman Egypt	Roman	Roman Emperors	Aurelius Theodotus	Macrianus and Quietus (260)	IN	262	IN	Rome
407	30203	Greco-Roman Egypt	Roman	Roman Emperors	Gaius Claudius Firmus	Galieno	IN	264	IN	Rome
408	30203	Greco-Roman Egypt	Roman	Roman Emperors	Cussonius I[...]	Galieno	IN	266	IN	Rome
409	30203	Greco-Roman Egypt	Roman	Roman Emperors	Juvenius Genialis	Galieno	IN	267	IN	Rome
410	30203	Greco-Roman Egypt	Roman	Roman Emperors	Statilius Ammianus	Claudio II	IN	267	IN	Rome
411	30203	Greco-Roman Egypt	Roman	Roman Emperors	Tenagino Probus	Quintilo	IN	268	IN	Rome
412	30203	Greco-Roman Egypt	Roman	Roman Emperors	Julius Marcellinus	Aurelian (270-275)	IN	270	IN	Rome
413	30203	Greco-Roman Egypt	Roman	Roman Emperors	Gaius Claudius Firmus	Aurelian (270-275)	IN	273	IN	Rome
414	30203	Greco-Roman Egypt	Roman	Roman Emperors	Gaius Claudius Firmus	Tácito	IN	275	IN	Rome
415	30203	Greco-Roman Egypt	Roman	Roman Emperors	Gaius Claudius Firmus	Floriano	IN	276	IN	Rome
416	30203	Greco-Roman Egypt	Roman	Roman Emperors	Sallustius Hadrianus	Probus (276-282)	IN	280	IN	Rome
417	30203	Greco-Roman Egypt	Roman	Roman Emperors	Celerinus	Probus (276-282)	IN	283	IN	Rome
418	30203	Greco-Roman Egypt	Roman	Roman Emperors	Celerinus	Carus, proclaimed by the Praetorian Guard (282–283)	IN	283	IN	IN
419	30203	Greco-Roman Egypt	Roman	Roman Emperors	Pomponius Januarianus	Carinus, son of Carus, joint with Numerianos (283–285)	IN	284	IN	IN
420	30203	Greco-Roman Egypt	Roman	Roman Emperors	Marcus Aurelius Diogenes	Diocletian (284-305)	IN	284	IN	Rome
421	40101	Eastern Roman	Roman	Diarchy	Aurelius Mercurius	Diocletian (284-305)	IN	285	IN	Rome
422	40101	Eastern Roman	Roman	Diarchy	Peregrinus	Diocletian (284-305)	IN	286	IN	Rome
423	40101	Eastern Roman	Roman	Diarchy	Gaius Valerius Pompeianus	Diocletian (284-305)	IN	287	IN	Rome
424	40101	Eastern Roman	Roman	Diarchy	Titius Honoratus	Diocletian (284-305)	IN	292	IN	Rome
425	40101	Eastern Roman	Roman	Diarchy	Rupilius Felix	Diocletian (284-305)	IN	292	IN	Rome
426	40102	Eastern Roman	Roman	Tetrarchy	Aristius Optatus	Diocletian - Galerius	IN	297	IN	Rome
427	40102	Eastern Roman	Roman	Tetrarchy	Aurelius Achilles	Diocletian - Galerius	IN	297	IN	Rome
428	40103	Eastern Roman	Roman	Diocese Oriens	Aemilius Rusticianus	Diocletian - Galerius	IN	298	IN	Antioch
429	40103	Eastern Roman	Roman	Diocese Oriens	Aelius Publius	Diocletian	IN	298	IN	Antioch
430	40103	Eastern Roman	Roman	Diocese Oriens	Sossianus Hierocles	Diocletian	IN	303	IN	Antioch
431	40103	Eastern Roman	Roman	Diocese Oriens	Clodius Culcianus	Galerius (293-311)	IN	306	IN	Antioch
432	40103	Eastern Roman	Roman	Diocese Oriens	Eustratius	Constantine I and Licinius (311-324)	IN	306	IN	Antioch
433	40103	Eastern Roman	Roman	Diocese Oriens	Aurelius Ammonius	Constantine I and Licinius (311-324)	IN	312	IN	Constantinople
434	40103	Eastern Roman	Roman	Diocese Oriens	Silvanus	Constantine I and Licinius (311-324)	IN	314	IN	Constantinople
435	40103	Eastern Roman	Roman	Diocese Oriens	Pomponius Anoubianus	Constantine I and Licinius (311-324)	IN	316	IN	Constantinople
436	40103	Eastern Roman	Roman	Diocese Oriens	Aurelius Apion	Constantine I and Licinius (311-324)	IN	318	IN	Constantinople
437	40103	Eastern Roman	Roman	Diocese Oriens	-elius	Constantine I and Licinius (311-324)	IN	320	IN	Constantinople
438	40103	Eastern Roman	Roman	Diocese Oriens	Julius Julianus	Constantine I (324-337)	IN	324	IN	Constantinople
439	40103	Eastern Roman	Roman	Diocese Oriens	Septimius Zeno	Constantine I (324-337)	IN	328	IN	Constantinople
440	40103	Eastern Roman	Roman	Diocese Oriens	Magtianus	Constantine I (324-337)	IN	330	IN	Constantinople
441	40103	Eastern Roman	Roman	Diocese Oriens	Florintius	Constantine I (324-337)	IN	331	IN	Constantinople
442	40103	Eastern Roman	Roman	Diocese Oriens	Heginus	Constantine I (324-337)	IN	332	IN	Constantinople
443	40103	Eastern Roman	Roman	Diocese Oriens	Patirius	Constantine I (324-337)	IN	333	IN	Constantinople
444	40103	Eastern Roman	Roman	Diocese Oriens	Flavius Philagrius	Constantine I (324-337)	IN	334	IN	Constantinople
445	40201	Eastern Roman	Praetorian Prefect of the East	Diocese Oriens	Flavius Anthonius Tudurus	Constantine I (324-337)	IN	337	IN	Constantinople
446	40201	Eastern Roman	Praetorian Prefect of the East	Diocese Oriens	Flavius Philagrius	Constantine II, Constantius II, and Constans (337-340)	IN	338	IN	Constantinople

447	40201	Eastern Roman	Praetorian Prefect of the East	Diocese Oriens	Longinus	Constantius II (340-361)	Gregory	341 IN	Constantinople
448	40201	Eastern Roman	Praetorian Prefect of the East	Diocese Oriens	Paladius	Constantius II (340-361)	Gregory	344 IN	Constantinople
449	40201	Eastern Roman	Praetorian Prefect of the East	Diocese Oriens	Nestorius	Constantius II (340-361)	Gregory	345 IN	Constantinople
450	40201	Eastern Roman	Praetorian Prefect of the East	Diocese Oriens	Sebastianus	Constantius II (340-361)	George	352 IN	Constantinople
451	40201	Eastern Roman	Praetorian Prefect of the East	Diocese Oriens	Maximus	Constantius II (340-361)	George	355 IN	Constantinople
452	40201	Eastern Roman	Praetorian Prefect of the East	Diocese Oriens	Cataphronius	Constantius II (340-361)	George	356 IN	Constantinople
453	40201	Eastern Roman	Praetorian Prefect of the East	Diocese Oriens	(Hermogenes) Parnasius	Constantius II (340-361)	George	357 IN	IN
454	40201	Eastern Roman	Praetorian Prefect of the East	Diocese Oriens	Italicianus	Constantius II (340-361)	George	359 IN	IN
455	40201	Eastern Roman	Praetorian Prefect of the East	Diocese Oriens	Faustinus	Constantius II (340-361)	George	359 IN	Constantinople
456	40201	Eastern Roman	Praetorian Prefect of the East	Diocese Oriens	Gerontius	Constantius II (340-361)	George	361 IN	Constantinople
457	40201	Eastern Roman	Praetorian Prefect of the East	Diocese Oriens	Ecdicius Olympus	Julian (361-363)	IN	362 IN	Constantinople
458	40201	Eastern Roman	Praetorian Prefect of the East	Diocese Oriens	Hierius	Jovian (363-364)	IN	364 IN	Constantinople
459	40201	Eastern Roman	Praetorian Prefect of the East	Diocese Oriens	Maximus	Jovian (363-364)	IN	364 IN	Constantinople
460	50101	Bizantine empire	Praetorian Prefect of the East	Diocese of Egypt	Flavianus	Valentian I and Valens (364-375)	IN	364 IN	Alexandria & Constantinopla
461	50101	Bizantine empire	Praetorian Prefect of the East	Diocese of Egypt	Proculeianus	Valentian I and Valens (364-375)	IN	366 IN	Alexandria & Constantinopla
462	50101	Bizantine empire	Praetorian Prefect of the East	Diocese of Egypt	Flavius Eutolmius Tatianus	Valentian I and Valens (364-375)	Lucius	367 IN	Alexandria & Constantinopla
463	50101	Bizantine empire	Praetorian Prefect of the East	Diocese of Egypt	Olympius Palladius	Valentian I and Valens (364-375)	IN	370 IN	Alexandria & Constantinopla
464	50101	Bizantine empire	Praetorian Prefect of the East	Diocese of Egypt	Aellius Paladius	Valentian I and Valens (364-375)	Lucius	371 IN	Alexandria & Constantinopla
465	50101	Bizantine empire	Praetorian Prefect of the East	Diocese of Egypt	Aellius Paladius	Valens, Gratian and Valentin II 375-378)	Lucius	375 IN	Alexandria & Constantinopla
466	50101	Bizantine empire	Praetorian Prefect of the East	Diocese of Egypt	Hadrianus	Theodosius I the Great (378-395)	IN	379 IN	Alexandria & Constantinopla
467	50101	Bizantine empire	Praetorian Prefect of the East	Diocese of Egypt	(Julius) Julianus	Theodosius I the Great (378-395)	IN	380 IN	Alexandria & Constantinopla
468	50101	Bizantine empire	Praetorian Prefect of the East	Diocese of Egypt	Palladius (First Praef. Augustalis)	Theodosius I the Great (378-395)	IN	382 IN	Alexandria & Constantinopla
469	50101	Bizantine empire	Praetorian Prefect of the East	Diocese of Egypt	Hypatius	Theodosius I the Great (378-395)	IN	383 IN	Alexandria & Constantinopla
470	50101	Bizantine empire	Praetorian Prefect of the East	Diocese of Egypt	Antoninus	Theodosius I the Great (378-395)	IN	383 IN	Alexandria & Constantinopla
471	50101	Bizantine empire	Praetorian Prefect of the East	Diocese of Egypt	Optatus	Theodosius I the Great (378-395)	IN	384 IN	Alexandria & Constantinopla
472	50101	Bizantine empire	Praetorian Prefect of the East	Diocese of Egypt	Florentius	Theodosius I the Great (378-395)	IN	384 IN	Alexandria & Constantinopla
473	50101	Bizantine empire	Praetorian Prefect of the East	Diocese of Egypt	Eusebius	Theodosius I the Great (378-395)	IN	385 IN	Alexandria & Constantinopla
474	50101	Bizantine empire	Praetorian Prefect of the East	Diocese of Egypt	Paulinus	Theodosius I the Great (378-395)	IN	385 IN	Alexandria & Constantinopla
475	50101	Bizantine empire	Praetorian Prefect of the East	Diocese of Egypt	Flavius Ulpinus Erythrius	Theodosius I the Great (378-395)	IN	388 IN	Alexandria & Constantinopla
476	50101	Bizantine empire	Praetorian Prefect of the East	Diocese of Egypt	Alexander	Theodosius I the Great (378-395)	IN	388 IN	Alexandria & Constantinopla
477	50101	Bizantine empire	Praetorian Prefect of the East	Diocese of Egypt	Evagrius	Theodosius I the Great (378-395)	IN	389 IN	Alexandria & Constantinopla
478	50101	Bizantine empire	Praetorian Prefect of the East	Diocese of Egypt	Hypatius	Theodosius I the Great (378-395)	IN	392 IN	Alexandria & Constantinopla
479	50101	Bizantine empire	Praetorian Prefect of the East	Diocese of Egypt	Potamius	Theodosius I the Great (378-395)	IN	392 IN	Alexandria & Constantinopla
480	50101	Bizantine empire	Praetorian Prefect of the East	Diocese of Egypt	Evagrius (iterum)	Arcadius (395-408)	IN	395 IN	Alexandria & Constantinopla
481	50101	Bizantine empire	Praetorian Prefect of the East	Diocese of Egypt	Gennadius Torquatus	Arcadius (395-408)	IN	396 IN	Alexandria & Constantinopla
482	50101	Bizantine empire	Praetorian Prefect of the East	Diocese of Egypt	Remigius	Arcadius (395-408)	IN	396 IN	Alexandria & Constantinopla
483	50101	Bizantine empire	Praetorian Prefect of the East	Diocese of Egypt	Archelaus	Arcadius (395-408)	IN	397 IN	Alexandria & Constantinopla
484	50101	Bizantine empire	Praetorian Prefect of the East	Diocese of Egypt	Pentadius	Arcadius (395-408)	IN	403 IN	Alexandria & Constantinopla
485	50101	Bizantine empire	Praetorian Prefect of the East	Diocese of Egypt	Euthalius	Arcadius (395-408)	IN	404 IN	Alexandria & Constantinopla
486	50101	Bizantine empire	Praetorian Prefect of the East	Diocese of Egypt	Orestes	Theodosius II (408-450)	IN	414 IN	Alexandria & Constantinopla
487	50101	Bizantine empire	Praetorian Prefect of the East	Diocese of Egypt	Callistus	Theodosius II (408-450)	IN	422 IN	Alexandria & Constantinopla
488	50101	Bizantine empire	Praetorian Prefect of the East	Diocese of Egypt	Cleopater	Theodosius II (408-450)	IN	435 IN	Alexandria & Constantinopla
489	50101	Bizantine empire	Praetorian Prefect of the East	Diocese of Egypt	Charmosynus	Theodosius II (408-450)	IN	443 IN	Alexandria & Constantinopla
490	50101	Bizantine empire	Praetorian Prefect of the East	Diocese of Egypt	Theodorus	Marcian Dynasty of Leo (450-457)	IN	451 IN	Alexandria & Constantinopla
491	50101	Bizantine empire	Praetorian Prefect of the East	Diocese of Egypt	Florus	Marcian Dynasty of Leo (450-457)	Proterius	452 IN	Alexandria & Constantinopla

492	50101	Bizantine empire	Praetorian Prefect of the East	Diocese of Egypt	Alexander	Leo I (457-474)	\N	468	\N	Alexandria & Constantinopla
493	50101	Bizantine empire	Praetorian Prefect of the East	Diocese of Egypt	Alexander	Leo II (474)	\N	474	\N	Alexandria & Constantinopla
494	50101	Bizantine empire	Praetorian Prefect of the East	Diocese of Egypt	Boethus	Zeno (474-75)	\N	476	\N	Alexandria & Constantinopla
495	50101	Bizantine empire	Praetorian Prefect of the East	Diocese of Egypt	Boethus	Basiliscus (475-76)	Mongus	476	\N	Alexandria & Constantinopla
496	50101	Bizantine empire	Praetorian Prefect of the East	Diocese of Egypt	Anthemius	Flavius Marcian (479)	Mongus	477	\N	Alexandria & Constantinopla
497	50101	Bizantine empire	Praetorian Prefect of the East	Diocese of Egypt	Theoctistus	Flavius Marcian (479)	\N	477	\N	Alexandria & Constantinopla
498	50101	Bizantine empire	Praetorian Prefect of the East	Diocese of Egypt	Theognostus	Flavius Marcian (479)	John Talaia	479	\N	Alexandria & Constantinopla
499	50101	Bizantine empire	Praetorian Prefect of the East	Diocese of Egypt	Apollonius	Flavius Marcian (479)	\N	482	\N	Alexandria & Constantinopla
500	50101	Bizantine empire	Praetorian Prefect of the East	Diocese of Egypt	Pergamius	Flavius Marcian (479)	John Talaia	482	\N	Alexandria & Constantinopla
501	50101	Bizantine empire	Praetorian Prefect of the East	Diocese of Egypt	Theodorus	Illus and Leontius (484)	\N	487	\N	Alexandria & Constantinopla
502	50101	Bizantine empire	Praetorian Prefect of the East	Diocese of Egypt	Arsenius	Illus and Leontius (484)	\N	487	\N	Alexandria & Constantinopla
503	50101	Bizantine empire	Praetorian Prefect of the East	Diocese of Egypt	Eustathius	Anastasius I (491-518)	John Talaia	501	\N	Alexandria & Constantinopla
504	50101	Bizantine empire	Praetorian Prefect of the East	Diocese of Egypt	Theodosius	Anastasius I (491-518)	\N	516	\N	Alexandria & Constantinopla
505	50101	Bizantine empire	Praetorian Prefect of the East	Diocese of Egypt	Strategius (?) (Flavius?)	Anastasius I (491-518)	\N	518	\N	Alexandria & Constantinopla
506	50101	Bizantine empire	Praetorian Prefect of the East	Diocese of Egypt	Licinius	Justin I (Flavius Justinus) (518-527)	\N	520	\N	Alexandria & Constantinopla
507	50101	Bizantine empire	Praetorian Prefect of the East	Diocese of Egypt	Diuscorus	Justinian the Great (Flavius Justinianus) (527 (518)-65)	\N	535	\N	Alexandria & Constantinopla
508	50101	Bizantine empire	Praetorian Prefect of the East	Diocese of Egypt	Hephaestus	Justinian the Great (Flavius Justinianus) (527 (518)-65)	\N	536	\N	Alexandria & Constantinopla
509	50101	Bizantine empire	Praetorian Prefect of the East	Diocese of Egypt	Rhodon	Justinian the Great (Flavius Justinianus) (527 (518)-65)	\N	538	\N	Alexandria & Constantinopla
510	50101	Bizantine empire	Praetorian Prefect of the East	Diocese of Egypt	Petrus Macellinus Felix Liberius	Justinian the Great (Flavius Justinianus) (527 (518)-65)	\N	539	\N	Alexandria & Constantinopla
511	50101	Bizantine empire	Praetorian Prefect of the East	Diocese of Egypt	Johannes Laxamon	Justinian the Great (Flavius Justinianus) (527 (518)-65)	\N	542	\N	Alexandria & Constantinopla
512	50101	Bizantine empire	Praetorian Prefect of the East	Diocese of Egypt	Germanus Justinus	Justin II (Flavius Justinus) (565-78)	\N	565	\N	Alexandria & Constantinopla
513	50101	Bizantine empire	Praetorian Prefect of the East	Diocese of Egypt	Germanus Justinus	Tiberius II (Flavius Constantinus Tiberius) (578 (574)-82)	\N	574	\N	Alexandria & Constantinopla
514	50101	Bizantine empire	Praetorian Prefect of the East	Diocese of Egypt	Johannes	Maurice (Maurikios) (582-602)	\N	583	\N	Alexandria & Constantinopla
515	50101	Bizantine empire	Praetorian Prefect of the East	Diocese of Egypt	Paulus	Maurice (Maurikios) (582-602)	\N	587	\N	Alexandria & Constantinopla
516	50101	Bizantine empire	Praetorian Prefect of the East	Diocese of Egypt	Johannes (iterum)	Maurice (Maurikios) (582-602)	\N	592	\N	Constantinopla
517	50101	Bizantine empire	Praetorian Prefect of the East	Diocese of Egypt	Constantinus	Maurice (Maurikios) (582-602)	\N	596	\N	Constantinopla
518	50101	Bizantine empire	Praetorian Prefect of the East	Diocese of Egypt	Menas	Maurice (Maurikios) (582-602)	\N	600	\N	Constantinopla
519	50101	Bizantine empire	Praetorian Prefect of the East	Diocese of Egypt	Petrus Justinus	Phocas I (602-10)	\N	602	\N	Constantinopla
520	50101	Bizantine empire	Praetorian Prefect of the East	Diocese of Egypt	Johannes	Phocas I (602-10)	\N	609	\N	Constantinopla
521	50101	Bizantine empire	Praetorian Prefect of the East	Diocese of Egypt	Niketas	Heraclius I (610-41)	\N	610	\N	Constantinopla
522	50102	Bizantine empire	Praetorian Prefect of the East	Sassanian rule (616-628) under Khosrow II	Shahrbaraz	Khosrow	\N	619	\N	Constantinopla
523	50102	Bizantine empire	Praetorian Prefect of the East	Sassanian rule (616-628) under Khosrow II	Shahrallyozan	Khosrow	\N	621	\N	Constantinopla
524	50102	Bizantine empire	Praetorian Prefect of the East	Sassanian rule (616-628) under Khosrow II	Shahrbaraz	Khosrow	\N	626	\N	Constantinopla
525	50103	Bizantine empire	Praetorian Prefect of the East	Diocese of Egypt	Kyros 631-640 / Cantarelli Anastasius 629-641	Heraclius I (610-41)	\N	631	\N	Constantinopla
526	50103	Bizantine empire	Praetorian Prefect of the East	Diocese of Egypt	Theodorus	Heraclius I (610-41)	\N	640	\N	Constantinopla
527	60101	Early arabic	Rightly-Guided Caliphs 'Rashidun'	Medina	Zubayr ibn al-Awam	Abu Bakr 11/632	\N	640	11	Medina
528	60101	Early arabic	Rightly-Guided Caliphs 'Rashidun'	Medina	Amr ibn al-As (19)	Umar bin al-Khattab 13/634	\N	640	19	Medina
529	60101	Early arabic	Rightly-Guided Caliphs 'Rashidun'	Medina	Abdallah ibn Sa'd بن النبي (25)	Uthman bin Affan 23/644	\N	646	25	Medina
530	60101	Early arabic	Rightly-Guided Caliphs 'Rashidun'	Medina	Muhammad ibn Abi Hudhayfa محمد بن النبي حذيفة (25) (انتزاع)	Uthman bin Affan 23/645	\N	646	25	Medina
531	60101	Early arabic	Rightly-Guided Caliphs 'Rashidun'	Medina	Qays ibn Sa'd قيس بن سعد (37)	Ali bin Abi Talib 35-40	\N	657	37	Medina
532	60101	Early arabic	Rightly-Guided Caliphs 'Rashidun'	Medina	Malik Al-Ashtar الأشتر مالك بن احارت (37)	Ali bin Abi Talib 35-41	\N	657	37	Medina
533	60101	Early arabic	Rightly-Guided Caliphs 'Rashidun'	Medina	Muhammad ibn Abu Bakr Al-Sadiq (37)	Ali bin Abi Talib 35-42	\N	657	37	Medina
534	60201	Early arabic	Umayyad Caliphs	Damascus	Amr ibn al-As (iterum - 38)	41/661 Muawiya I bin Abi Sufyan	\N	658	38	Damascus
535	60201	Early arabic	Umayyad Caliphs	Damascus	Utba ibn Abi Sufyan عتبة بن النبي سفيان (43)	41/661 Muawiya I bin Abi Sufyan	\N	663	43	Damascus
536	60201	Early arabic	Umayyad Caliphs	Damascus	Uqbah ibn Amir عقبه بن عامر (44)	41/661 Muawiya I bin Abi Sufyan	\N	664	44	Damascus

537	60201	Early arabic	Umayyad Caliphs	Damascus	Maslama ibn Mukhallad al-Ansari (47)	41/661 Muawiya I bin Abi Sufyan	IN	667	47	Damascus
538	60201	Early arabic	Umayyad Caliphs	Damascus	Sa'id ibn Yazid سعيد بن يزيد بن علقمة (62)	60/680 Yazid I	IN	682	62	Damascus
539	60201	Early arabic	Umayyad Caliphs	Damascus	Abd al-Rahman ibn Utba al-Fihri (64) عبد الرحمن بن عتبة بن جحدم	Abd Allah ibn al-Zubayr عبد الله بن الزبير (683)	IN	684	64	Damascus
540	60201	Early arabic	Umayyad Caliphs	Damascus	Abd al-Rahman ibn Utba al-Fihri (64) عبد الرحمن بن عتبة بن جحدم	64/683 Muawiya II	IN	684	64	Damascus
541	60201	Early arabic	Umayyad Caliphs	Damascus	Abd al-Aziz ibn Marwān ibn al-Hakam (65) عبد العزيز بن مروان	64/684 Marwan I bin al-Hakam	IN	685	65	Damascus
542	60201	Early arabic	Umayyad Caliphs	Damascus	Abdallāh ibn 'Abd al-Malik ibn Marwān (76)	65/685 Abd al-Malik	IN	695	76	Damascus
543	60201	Early arabic	Umayyad Caliphs	Damascus	Qurra ibn Sharīk قررة بن شريك (90)	86/705 al-Walid I	IN	709	90	Damascus
544	60201	Early arabic	Umayyad Caliphs	Damascus	Abd al-Malik ibn Rifa'a al-Fahmi (96) عبد الملك بن رفاعة	96/715 Sulaiman	IN	715	96	Damascus
545	60201	Early arabic	Umayyad Caliphs	Damascus	Ayyub ibn Sharhabil أیوب بن شرحبیل الأصمعي (99)	99/717 Umar bin Abd al-Aziz	Hijri years	718	99	Damascus
546	60201	Early arabic	Umayyad Caliphs	Damascus	Bishr ibn Safwan al-Kalbi (101) بشر بن صفوان الكلبي	101/720 Yazid II	IN	720	101	Damascus
547	60201	Early arabic	Umayyad Caliphs	Damascus	Khanthala ibn Safwan (102) حنظلة بن صفوان	101/720 Yazid II	IN	721	102	Damascus
548	60201	Early arabic	Umayyad Caliphs	Damascus	Mohamed ibn al-Malik (105) محمد بن عبد الملك	105/724 Hisham	IN	724	105	Damascus
549	60201	Early arabic	Umayyad Caliphs	Damascus	Alhar ibn Yusuf (105) الحر بن يوسف	105/724 Hisham	IN	724	105	Damascus
550	60201	Early arabic	Umayyad Caliphs	Damascus	Hafs ibn al-Walid (108) حفص بن الوليد	105/724 Hisham	IN	727	108	Damascus
551	60201	Early arabic	Umayyad Caliphs	Damascus	Abd al-Malik ibn Rifa'a II (109) عبد الملك بن رفاعة الثانية	105/724 Hisham	IN	728	109	Damascus
552	60201	Early arabic	Umayyad Caliphs	Damascus	Al-Walid ibn Rifa'a (109) الوليد بن رفاعة	105/724 Hisham	IN	728	109	Damascus
553	60201	Early arabic	Umayyad Caliphs	Damascus	Abd al-Rahman ibn Khaled (117) عبد الرحمن بن خالد	105/724 Hisham	IN	735	117	Damascus
554	60201	Early arabic	Umayyad Caliphs	Damascus	Khanthala ibn Safwan II (119) حنظلة بن صفوان الثانية	105/724 Hisham	IN	737	119	Damascus
555	60201	Early arabic	Umayyad Caliphs	Damascus	Hafs ibn al-Walid II (124) حفص بن الوليد الثانية	105/724 Hisham	126/744 Yazid III	742	124	Damascus
556	60201	Early arabic	Umayyad Caliphs	Damascus	Hassan ibn Atahia (127) حسان بن عتاهية التجيبي	127-132/744-750 Marwan II al-Himar	IN	745	127	Damascus
557	60201	Early arabic	Umayyad Caliphs	Damascus	Hafs ibn al-Walid II (127) حفص بن الوليد الثانية	Army consensus (إجماع الجند)	IN	745	127	Damascus
558	60201	Early arabic	Umayyad Caliphs	Damascus	Huthrah Bin Suhail (128) الحوثر بن سهيل	127-132/744-750 Marwan II al-Himar	IN	746	128	Damascus
559	60201	Early arabic	Umayyad Caliphs	Damascus	Mughira ibn Obaidullah (131) المغيرة بن عبيد الله	127-132/744-750 Marwan II al-Himar	IN	749	131	Damascus
560	60201	Early arabic	Umayyad Caliphs	Damascus	Abdul Malik bin Marwan bin Musa bin Nusair (132) عبد الملك بن مروان بن موسى بن نصير	127-132/744-750 Marwan II al-Himar	IN	750	132	Damascus
561	70101	Medieval Arabic	Abbasid Egypt	Kufa	Salih ibn 'Ali (133) صالح بن علي	132/749 as-Saffah	IN	751	133	Kufa
562	70101	Medieval Arabic	Abbasid Egypt	Kufa	Abu 'Awn (133) ابو عون	132/749 as-Saffah	IN	751	133	Kufa
563	70101	Medieval Arabic	Abbasid Egypt	Kufa	Salah ibn Althania (136) صالح بن علي الثانية	132/749 as-Saffah	IN	754	136	Kufa
564	70101	Medieval Arabic	Abbasid Egypt	Kufa	Abu Awan Althania (137) ابو عون الثانية	136/754 al-Mansur	IN	755	137	Kufa
565	70101	Medieval Arabic	Abbasid Egypt	Kufa	Musa ibn Ka'b (141) موسى بن كعب	136/754 al-Mansur	IN	759	141	Kufa
566	70101	Medieval Arabic	Abbasid Egypt	Kufa	Mohamed ibn al-Ash'ath (141) محمد بن الاتعث	136/754 al-Mansur	IN	759	141	Kufa
567	70101	Medieval Arabic	Abbasid Egypt	Kufa	Humayd ibn Qahtba (143) حميد بن قحطبة	136/754 al-Mansur	IN	761	143	Kufa
568	70101	Medieval Arabic	Abbasid Egypt	Kufa	Yazid ibn Hatham (144) يزيد بن حاتم	136/754 al-Mansur	IN	762	144	Kufa
569	70101	Medieval Arabic	Abbasid Egypt	Kufa	Abd Allah ibn Abd al-Rahman ibn Mu'awiya ibn Hudayj (152) عبد الله بن عبد الرحمن بن معاوية بن حديج	136/754 al-Mansur	IN	769	152	Kufa
570	70101	Medieval Arabic	Abbasid Egypt	Kufa	Mohamed ibn Abd al-Rahman ibn Mu'awiya ibn Hudayj (155) محمد بن عبد الرحمن بن معاوية بن حديج	136/754 al-Mansur	IN	772	155	Kufa
571	70101	Medieval Arabic	Abbasid Egypt	Kufa	Musi ibn Ali (155) موسى بن علي	136/754 al-Mansur	IN	772	155	Kufa
572	70102	Medieval Arabic	Abbasid Egypt	Baghdad	Isa ibn Luqman (161) عيسى بن لقمان	158/775 al-Mahdi	IN	778	161	Baghdad
573	70102	Medieval Arabic	Abbasid Egypt	Baghdad	Wadih Mula Albi Jafar (162) واضح مولى النبي جعفر	158/775 al-Mahdi	IN	779	162	Baghdad
574	70102	Medieval Arabic	Abbasid Egypt	Baghdad	Mansur ibn Yazid ibn Mansur (162) منصور بن يزيد بن منصور	158/775 al-Mahdi	IN	779	162	Baghdad
575	70102	Medieval Arabic	Abbasid Egypt	Baghdad	Yahya ibn Sa'id al-Harashi (162) يحيى بن داوود (ابن محدود)	158/775 al-Mahdi	IN	779	162	Baghdad
576	70102	Medieval Arabic	Abbasid Egypt	Baghdad	Salim ibn Sawada al-Tamimi (164) سالم بن سواده	158/775 al-Mahdi	IN	781	164	Baghdad
577	70102	Medieval Arabic	Abbasid Egypt	Baghdad	Ibrahim ibn Salih ibn Abdallah ibn al-Abbas (165) ابراهيم بن صالح	158/775 al-Mahdi	IN	782	165	Baghdad
578	70102	Medieval Arabic	Abbasid Egypt	Baghdad	Musa ibn Mus'ab (167) موسى بن مصعب	158/775 al-Mahdi	IN	784	167	Baghdad
579	70102	Medieval Arabic	Abbasid Egypt	Baghdad	Asama ibn Amr (168) عسامة بن عمرو	158/775 al-Mahdi	IN	785	168	Baghdad
580	70102	Medieval Arabic	Abbasid Egypt	Baghdad	al-Fadl ibn Salih ibn Ali al-Abbasi (169) الفضل بن صالح	158/775 al-Mahdi	IN	786	169	Baghdad
581	70102	Medieval Arabic	Abbasid Egypt	Baghdad	Ali ibn Salman al-Abbasi	158/775 al-Mahdi	IN	786	169	Baghdad

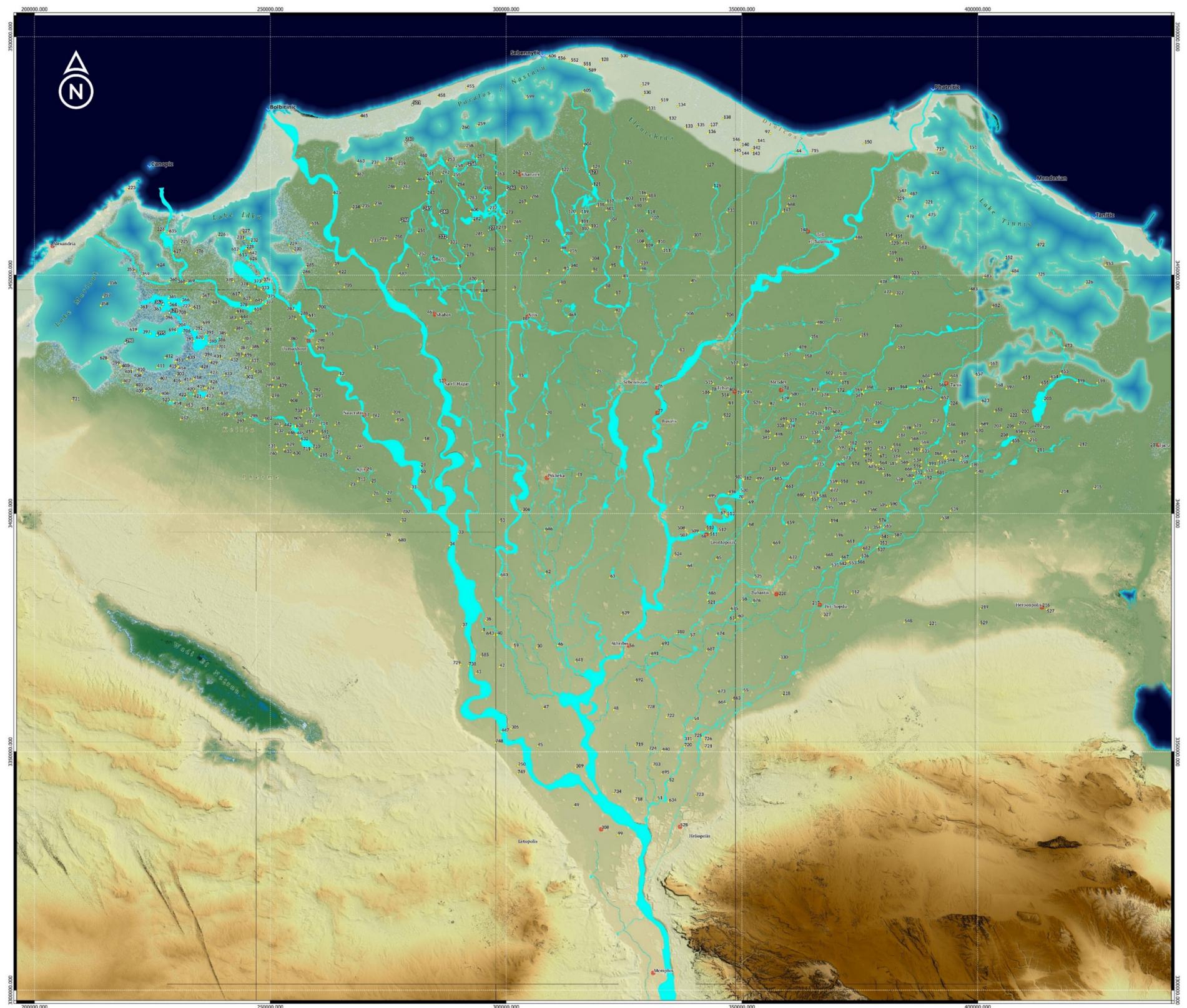
582	70103	Medieval Arabic	Abbasid Egypt	Raqqa	Musa ibn Isa ibn Musa al-Abbasi	170/786 Harun ar-Rashid	IN	788	171	Raqqa
583	70103	Medieval Arabic	Abbasid Egypt	Raqqa	Maslama ibn Yahya al-Bajali	170/786 Harun ar-Rashid	IN	789	172	Raqqa
584	70103	Medieval Arabic	Abbasid Egypt	Raqqa	Muhammad ibn Zuhayr al-Azdi	170/786 Harun ar-Rashid	IN	790	173	Raqqa
585	70103	Medieval Arabic	Abbasid Egypt	Raqqa	Dawud ibn Yazid ibn Hatim al-Muhallabi	170/786 Harun ar-Rashid	IN	791	174	Raqqa
586	70103	Medieval Arabic	Abbasid Egypt	Raqqa	Musa ibn Isa ibn Musa al-Abbasi	170/786 Harun ar-Rashid	IN	792	175	Raqqa
587	70103	Medieval Arabic	Abbasid Egypt	Raqqa	Ibrahim ibn Salih ibn Abdallah ibn al-Abbas	170/786 Harun ar-Rashid	IN	793	176	Raqqa
588	70103	Medieval Arabic	Abbasid Egypt	Raqqa	Abdullah Ibn Al-Maseeb Ibn Zohair Al-Dabii	170/786 Harun ar-Rashid	IN	793	176	Raqqa
589	70103	Medieval Arabic	Abbasid Egypt	Raqqa	Ishaq ibn Sulayman	170/786 Harun ar-Rashid	IN	794	177	Raqqa
590	70103	Medieval Arabic	Abbasid Egypt	Raqqa	Harthama ibn A'yan	170/786 Harun ar-Rashid	IN	795	178	Raqqa
591	70103	Medieval Arabic	Abbasid Egypt	Raqqa	Abd al-Malik ibn Salih	170/786 Harun ar-Rashid	IN	795	178	Raqqa
592	70103	Medieval Arabic	Abbasid Egypt	Raqqa	Abdallah ibn al-Masib al-Abbasi	170/786 Harun ar-Rashid	IN	796	179	Raqqa
593	70103	Medieval Arabic	Abbasid Egypt	Raqqa	Musa ibn Isa ibn Musa al-Abbasi	170/786 Harun ar-Rashid	IN	796	179	Raqqa
594	70103	Medieval Arabic	Abbasid Egypt	Raqqa	Abdallah ibn al-Mahdi al-Abbasi	170/786 Harun ar-Rashid	IN	797	180	Raqqa
595	70103	Medieval Arabic	Abbasid Egypt	Raqqa	Ismail ibn Salih al-Abbasi	170/786 Harun ar-Rashid	IN	798	181	Raqqa
596	70103	Medieval Arabic	Abbasid Egypt	Raqqa	Ismail ibn Isa al-Abbasi	170/786 Harun ar-Rashid	IN	799	182	Raqqa
597	70103	Medieval Arabic	Abbasid Egypt	Raqqa	al-Layth ibn al-Fadl	170/786 Harun ar-Rashid	IN	799	182	Raqqa
598	70103	Medieval Arabic	Abbasid Egypt	Raqqa	Ahmad ibn Ismail ibn Ali ibn Abdallah al-Abbasi	170/786 Harun ar-Rashid	IN	803	187	Raqqa
599	70103	Medieval Arabic	Abbasid Egypt	Raqqa	Abdallah ibn Muhammad al-Abbasi	170/786 Harun ar-Rashid	IN	805	189	Raqqa
600	70103	Medieval Arabic	Abbasid Egypt	Raqqa	al-Hussayn ibn Jamil	170/786 Harun ar-Rashid	IN	806	190	Raqqa
601	70103	Medieval Arabic	Abbasid Egypt	Raqqa	Malik ibn Dalham al-Kalbi	170/786 Harun ar-Rashid	IN	808	192	Raqqa
602	70103	Medieval Arabic	Abbasid Egypt	Raqqa	al-Hasan ibn al-Takhtakh	170/786 Harun ar-Rashid	IN	809	193	Raqqa
603	70104	Medieval Arabic	Abbasid Egypt	Baghdad	Hatim ibn Harthamah ibn A'yan	193/809 al-Amin	IN	810	194	Baghdad
604	70104	Medieval Arabic	Abbasid Egypt	Baghdad	Jabir ibn al-Ash'ath al-Ta'i	193/809 al-Amin	IN	811	195	Baghdad
605	70104	Medieval Arabic	Abbasid Egypt	Baghdad	Abbad ibn Muhammad ibn Hayyan	198/813 al-Mamun	IN	812	196	Baghdad
606	70104	Medieval Arabic	Abbasid Egypt	Baghdad	Al-Muttalib ibn Abdallah al-Khuza'i	198/813 al-Mamun	IN	813	197	Baghdad
607	70104	Medieval Arabic	Abbasid Egypt	Baghdad	Al-Abbas ibn Musa ibn Isa al-Abbasi	198/813 al-Mamun	IN	813	197	Baghdad
608	70104	Medieval Arabic	Abbasid Egypt	Baghdad	Al-Muttalib ibn Abdallah al-Khuza'i	198/813 al-Mamun	IN	815	199	Baghdad
609	70104	Medieval Arabic	Abbasid Egypt	Baghdad	Al-Sari ibn al-Hakam	198/813 al-Mamun	IN	816	200	Baghdad
610	70104	Medieval Arabic	Abbasid Egypt	Baghdad	Sulayman ibn Ghalib ibn Jibril al-Bajali	Tahir ibn Husayn طاهر بن حسين (201)	IN	817	201	Baghdad
611	70104	Medieval Arabic	Abbasid Egypt	Baghdad	Al-Sari ibn al-Hakam	198/813 al-Mamun	IN	817	201	Baghdad
612	70104	Medieval Arabic	Abbasid Egypt	Baghdad	Abu Nasr ibn al-Sari	198/813 al-Mamun	IN	821	205	Baghdad
613	70104	Medieval Arabic	Abbasid Egypt	Baghdad	Khalid ibn Yazid ibn Mazyad	198/813 al-Mamun	IN	822	206	Baghdad
614	70104	Medieval Arabic	Abbasid Egypt	Baghdad	Ubaydallah ibn al-Sari	198/813 al-Mamun	IN	822	206	Baghdad
615	70104	Medieval Arabic	Abbasid Egypt	Baghdad	Abdallah ibn Tahir al-Khurasani	198/813 al-Mamun	IN	827	211	Baghdad
616	70104	Medieval Arabic	Abbasid Egypt	Baghdad	'Isa ibn Yazid al-Juludi	198/813 al-Mamun	IN	828	212	Baghdad
617	70104	Medieval Arabic	Abbasid Egypt	Baghdad	'Umayr ibn al-Walid	198/813 al-Mamun	IN	830	214	Baghdad
618	70104	Medieval Arabic	Abbasid Egypt	Baghdad	'Isa ibn Yazid al-Juludi	198/813 al-Mamun	IN	830	214	Baghdad
619	70104	Medieval Arabic	Abbasid Egypt	Baghdad	'Abdawayh ibn Jabalah	198/813 al-Mamun	IN	831	215	Baghdad
620	70104	Medieval Arabic	Abbasid Egypt	Baghdad	'Isa ibn Mansur al-Rafi'i	198/813 al-Mamun	IN	832	216	Baghdad
621	70105	Medieval Arabic	Abbasid Egypt	Samarra	Kaydar Nasr ibn 'Abdallah	198/813 al-Mamun	IN	832	217	Samarra
622	70105	Medieval Arabic	Abbasid Egypt	Samarra	Muzaffar ibn Kaydar	218/833 al-Mutasim	IN	834	219	Samarra
623	70105	Medieval Arabic	Abbasid Egypt	Samarra	Musa ibn Abi al-'Abbas	Abu Ja'far Ashinas (أشناس)	IN	834	219	Samarra
624	70105	Medieval Arabic	Abbasid Egypt	Samarra	Malik ibn Kaydar	Abu Ja'far Ashinas (أشناس)	IN	839	224	Samarra
625	70105	Medieval Arabic	Abbasid Egypt	Samarra	Ali ibn Yahya al-Armani	Abu Ja'far Ashinas (أشناس)	IN	841	226	Samarra
626	70105	Medieval Arabic	Abbasid Egypt	Samarra	'Isa ibn Mansur al-Rafi'i	Abu Ja'far Ashinas (أشناس)	IN	844	229	Samarra

627	70105	Medieval Arabic	Abbasid Egypt	Samarra	Harthamah ibn al-Nadr al-Jabali	Aytākh or Ītākh al-Khazarī (إيتاخ)	IN	848	233	Samarra
628	70105	Medieval Arabic	Abbasid Egypt	Samarra	Hatim ibn Harthamah ibn al-Nadr	Aytākh or Ītākh al-Khazarī (إيتاخ)	IN	849	234	Samarra
629	70106	Medieval Arabic	Abbasid Egypt	Baghdad	Ali ibn Yahya al-Armani	Aytākh or Ītākh al-Khazarī (إيتاخ)	IN	849	234	Baghdad
630	70106	Medieval Arabic	Abbasid Egypt	Baghdad	Ishaq ibn Yahya ibn Mu'adh	247/861 al-Muntasir	IN	850	235	Baghdad
631	70106	Medieval Arabic	Abbasid Egypt	Baghdad	Khut 'Abd al-Wahid ibn Yahya	247/861 al-Muntasir	IN	851	236	Baghdad
632	70106	Medieval Arabic	Abbasid Egypt	Baghdad	'Anbasa ibn Ishaq al-Dabbi	247/861 al-Muntasir	IN	852	237	Baghdad
633	70106	Medieval Arabic	Abbasid Egypt	Baghdad	Yazid ibn 'Abdallah al-Hulwani	248/862 al-Mustain	IN	857	242	Baghdad
634	70106	Medieval Arabic	Abbasid Egypt	Baghdad	Muzahim ibn Khaqan	252/866 al-Mutazz	IN	867	253	Baghdad
635	70106	Medieval Arabic	Abbasid Egypt	Baghdad	Ahmad ibn Muzahim ibn Khaqan	Muzahim ibn Khaqan	IN	868	254	Baghdad
636	70106	Medieval Arabic	Abbasid Egypt	Baghdad	Azjur al-Turki	Ahmad ibn Muzahim ibn Khaqan	IN	868	254	Baghdad
637	70201	Medieval Arabic	Tulunid Egypt	Fustat	Ahmad ibn Tulun	252/866 al-Mutazz	IN	868	254	Fustat
638	70201	Medieval Arabic	Tulunid Egypt	Fustat	Khumarawayh	Egyptian Army (جند مصر)	IN	884	270	Fustat
639	70201	Medieval Arabic	Tulunid Egypt	Fustat	Abu 'l-Asakir Jaysh	Unauthorised (المنضد)	IN	896	282	Fustat
640	70201	Medieval Arabic	Tulunid Egypt	Fustat	Harun	Unauthorised (المنضد)	IN	897	283	Fustat
641	70201	Medieval Arabic	Tulunid Egypt	Fustat	Shayban	Egyptian Army (جند مصر)	IN	905	292	Fustat

6 Delta map

The following map includes the complete EES delta sites and presents in detail the Palimpsestual River Network. The EES site number corresponds to the numbers shown in the map and the numbers used in the thesis.

This map also includes an overview map with the current governorates divisions in Egypt from Lake Nasser in the south (Upper Egypt) all the way along the Nile until the Nile Delta (Lower Egypt).



25 0 25 50 km

● Settlements / Archaeological sites
● Septat/Nome/Country capital
● EES Sites
● Sites Surveyed in
● Kafr Dawar
● Kafr el Sheikh

— Palimpsestral River Network (PRN)
— River Mouths in 1882 (Mahmoud Bey & Jacotin)
— Palimpsestral hydrological reconstruction copy
— Lagoons / Lakes
— Sea

Digital elevation models
 Overflown basins depth
 -2m
 -5m

Modified terrain for flood modelling
 Altitud
 95m
 -5m



ID	Name	ID	Name	ID	Name	ID	Name	ID	Name	ID	Name	ID	Name	ID	Name						
1	Ahmar, K. el	71	Ishkiya, K.	141	Daba, K. el	211	Abu Akim, T (Zirah B Bahr el-Baqar)	281	Asfar, K.	351	Geiret el Faras, T	421	Rafwan, K.	494	Daba, Tel. el	564	Sarat, T	634	Benasa, K.	704	Hasan III, K.
2	Nasr, K. el	72	Tamhat, T (Hambal)	142	Shereh, T. el	212	Dafara, T	282	Said Salem, K.	352	Abu Salim, T	422	Qaid, K.	495	Abu el-Hadi, T	565	Gawara, El	635	Duhak, K. el	705	Magadela, El
3	Abu Zabit, K.	73	Nur, K. el	143	Qar el-Banat, T	213	Abu Seif, T (Ahmar)	283	Bunduk, K.	353	Maghat, T el (Farah)	423	Wao, T. el (Kadoul)	496	Mimhat Sabhara	566	Gawra Sineha (Sunaysh, T. el)	636	Sherr Khalaf, T	706	Taran, K.
4	Fara'n, Tel.	74	Shatayeh, K. el	144	Bastamada el-Agiza, K	214	Hazub, T	284	Haddak, K. el	354	Gindiya, T. el (Shih)	424	Abu el-Afrifa el-Kadul, T	497	Baramak, T	567	Abu Aziz, T	637	Awad, K.	707	Alhar, El K. el
5	Ahmar, K. el	75	Ahmar, K. el	145	Umm Hadid, T	215	Umm Hadid, T	285	Nus el-Saghr, K. el	355	Beida, K. el	425	Rimrat, T. el	498	Tarasi el-Arab	568	Umm Agram, T	638	Hamrik, K.	708	Desir Kanayis
6	Samaha, K. el	76	Sammanud	146	Bayaha, T. el	216	Mashuta, T. el	286	Nus el-Kabr, K. el (Ahmar)	356	Liman, K.	426	Tin, K. el	499	Qatat, T. el	569	Gawra Umm Agram	639	Qawra	709	Kolbet el-Banat
7	Tawit, El K. el	77	Abou Rana	147	Habbous, T	217	Saf el-Harar	287	Sakha, K. el	357	Iba, K.	427	Khatra, K. el	500	Bela, T. el	570	Ummawa, T. el	640	Sawana	710	Gulba, K.
8	Bishaha, K. el (Shawah)	78	Umm Gatah, T	148	Bahman, T. el	218	Ghanta	288	Asara, K. el	358	Haga, K. el	428	Blurik, K. el	501	Mastah	571	Control el-Nuf	641	Sabah el-Dahak	711	Moshina
9	Dabaha, K.	79	Baqiya, T	149	Zaba, T	219	Robah, T. or	289	Asara, K. el	359	Nasa, K. el	429	Khalig, K.	502	Ahla, T.	572	Abu Douad, T	642	Hakim, K.	712	Shahadi, El
10	Saha, K.	80	Ahmar, El Tel.	150	Deir, T. el	220	Basra, T	290	Yahid, K. el	360	Khatra, K. el	430	Grit, T. el	503	Hanan, T	573	Hanan, T	643	Abu Zaid, K. (I)	713	Qanba
11	Kawada, T	81	Duah, T. el	151	Buhankha, T. el	221	Kaf Hassan Oudud	291	Nasara, K. el	361	Birka, K. el	431	Ibn, K. el	504	Mimhat Ezzat	574	Moh. Abu Hasan, T	644	Gerafat, El	714	Prakarya, K. el
12	Dumhat, K.	82	Hama, T. el	152	Awad Ismail, T	222	Mehar el-Abu Omar	292	Abu el-Humar el-Kabr, K	362	Chauk, K. el	432	Zapan, K.	505	Fatama, El	575	Cherret, T (Qarar)	645	Saba, K. el	715	Ahmar III, K. el
13	Sa el-Hagar	83	Behbel el-Hagar	153	Timis, T	223	Samad, T	293	Abu el-Humar el-Saghr, K	363	Khatra, K. el	433	Al-Hadir, K. el	506	Nabaweh	576	Siyad, T. or	646	Kaf Hamam	716	Kham, K. el
14	Naggar, K. el	84	Derbi, K. el	154	Ghuz, T. el	224	Taraya, K. el	294	Firik, K.	364	Ra, K. el	434	Abu Hirak, K.	507	Dundit, T	577	Mashala, T. el	647	Sid Yusef	717	Elbet el-Saif
15	Sai Zaid	85	Dima, K.	155	Arab, T. el	225	Qulehik, K	295	Arab, T. el	365	Masqat el-Tak	435	Ruhayim, K.	508	Sheikh Naareddin, T	578	Kifriya, el	648	Gumrah, T	718	Mahgaya, T. el
16	Kortak, K.	86	Hamam, K. el	156	Bila, T	226	Chitas, K	296	Barrag, El	366	Lugin, T	436	Abu Aggar, K.	509	Mir el-Faraway	579	Efret Helin	649	Bihara, T	719	Ahmar, El K. el
17	Qar, K.	87	Gama, T. el	157	Son-Hiras, K	227	Tahk, K. el	297	Alqama, T. el	367	Hakha, K.	437	Abu el-Rakib, K.	510	Gawra, T. el	580	Kawsh, Ezzat	650	Belman, T. el	720	Chana, T
18	Sa el-Hosha	88	Tada, T	158	Tadik, K. el	228	Masr, T. el	298	Masr, T. el	368	Ham, K. el	438	Iwan, K. el	511	Amir, K. el	581	Sain-Cher, El	651	Bakarya, T	721	Chirah el-Batal
19	Qamar, El K.	89	Isban	159	Tarka, T. el	229	Gharat, K. el	299	Umm Ghuzan, T	369	Giza, K. el	439	Arank, K. el	512	Bahwaya (Bana)	582	Kabil, K. el	652	Madaik, T. el	722	Qayra Nawal (Kom el-Ahmar)
20	Al, K.	90	Bowela, T	160	Medina, K	230	Medina, K	300	Nelida	370	Tuqak, K.	440	Ahmar, El K. el	513	Hawabir, El	583	Duwahat	653	Ruhban, T. or	723	Marg, El: 23 July
21	Dlingat, K.	91	Ennan, T	161	Abayr, K. el	231	Abayr, K. el	301	Dimitis, K	371	Abu Tahun, T	441	Shoka, K. el	514	Umm, El	584	Ruka, K. el	654	Faran, T. el	724	Abu Zabit El-Sharwah el-Madaniya
22	Abiad, El K. el	92	Hamam, K. el	162	Umm el-Lahm (I), T	232	Azla, K. el	302	Dafah, K. el	372	Abid, K. el	442	Shabwa, K. el	515	Sebakha, T. el	585	Shubaha, T. el	655	Firas, T. el	725	Deir, El
23	Khansa, K. el	93	Dabaha, T	163	Bas, T. el (Ghar)	233	Qair, T.	303	Sungra, K.	373	Hawa (I), K.	443	Hawa (II), K.	516	Daba, T	586	Arabi el-Sheikh Mubarak	656	Masyud, T. el	726	Samman, T. el
24	Hus, K. el	94	Maada el-Diba, T	164	Qiras, Tel.	234	Mutabib, T	304	Tawil, K. el	374	Nahla el-Bahariya, K	444	Saadya, K. el	517	Bina, T	587	Sidi Ahmed el-Tawil	657	Munaga, T. el	727	Kheisa Senhawa
25	Zarq, K. el	95	Sida, K. el	165	Umm el-Lahm (S), T (Abu Arida)	235	Sida, K. el	305	Arbata Ahsa, K. el	375	Arbata Ahsa, K. el	445	Abu ez-Zariz, T	518	Billal	588	Fagi, T	658	Kulaba, K. el	728	Arab el-Sawah (Gharbi)
26	Iba, T	96	Sultan, K.	166	Sav el-Hagar	236	Abu Adma, K.	306	Karasa, T. el	376	Karasa, T. el	446	Mahla, K. el	519	Masabrat, T. el	589	Ghawet, T. el	659	Habah, T. el	729	Arab el-Elsat el-Bahariya
27	Wajidi, K. el	97	Hamama, K.	167	Chiga, T	237	Ramot, K. el	307	Kawra W. Yukur, K.	377	Gushay, K. el	447	Maqia, K. el	520	Sahana, el	590	Sahana, el	660	Tawrin Ibrah Area	730	Arab el-Elsat el-Bahariya
28	Zawara, K.	98	Gama, T. el	168	Chiga, K. el	238	Asay, K. el	308	Sawak, K.	378	Sawak, K.	448	Qawra, K. el	521	Asim, K.	591	Chahak, K.	661	Rakha, T. el	731	Mahakher
29	Sa el-Amar	99	Ahmar, El K. el	169	Deir el-Hama, T. or	239	Kira, K. el	309	Stutafur	379	Daba, K. el	449	Behara, K. el (Zohr)	522	Shbara Har	592	Sangha, Gez.	662	Salamat	732	Abu Bilas, K.
30	Ahmar, El K. el	100	Thufa, T. el	170	Thufa, T. el	240	Dishona, K.	310	Abahya, T. el	380	Abahya, T. el	450	Buta, K. el	523	Bat el-Kom, T	593	Abbasuya, T. el	663	Awlad Daoud, T	733	Blith, K.
31	Hamada, K.	101	Kharf, K. el	171	Dahab, T. el	241	Alawi, K.	311	Yahyia, T. el	381	Zawya, K. el	451	Nigli, K. el	524	Sahrag	594	Awad, T. el (S)	664	Kafr Abdu	734	Efret el-Jazal
32	Mashqa, K. el	102	Fawara, K. el	172	Daba, T	242	Adal es-Shirawa, T	312	Shon Yusef	382	Kom Sawan, T	452	Kom Sawan, T	525	Nashariya, El	595	Abu Ummam, Gez.	665	Chawq, T. el	735	Efret el-Naggar
33	Birka, K. el	103	Qiras, T. el	173	Qiras, T. el	243	Arak, K. el (Wah)	313	Shay, K. el	383	Shay, K. el	453	Abu el-Sitan	526	Mir Chirah	596	Awaya, T. el	666	Grift, T. el	736	Ahmar, El K. el
34	Shira, K.	104	Quleh, T. el	174	Kherba, T. el	244	Sheikh Barhan, K.	314	Haddad, T.	384	Farahat, K.	454	Abu el-Mutamir, K.	527	Sahaba, T. el	597	Bey, T. el	667	Ahmar, T. el	737	Shakgan
35	Ahmar, El K. el	105	Qahil, K.	175	Senara, T	245	Quleh, K (Kaf)	315	Umm Arab, Gez. (Mantigat An-Nawafih)	385	Qawrat, K. el	455	Maqbia, K.	528	Matariya Helopolis	598	Abu Mtwak, Gezira	668	Hahmadya, El	738	Halya, T. el
36	Sheikh Ihsid, K. el	106	Malak, K. el	176	Ahmar, T. el	246	Atala el-Khadra, K.	316	Awlad Mousa, T	386	Sawana, K. el	456	Yusif el-Barud	529	Shaqafiya, T. el	599	Sangar, T	669	Natura, T	739	Taab, K.
37	Tawil, El K. el	107	Gama, T. el	177	Mah, K. el	247	Mah, K. el	317	Amman er-Rouman	387	Amman er-Rouman	457	Kalafat Shaly	530	Shahabya, El	600	Mouk, T. el	670	Chirqa, T	740	Kodwa, K.
38	Abu Zaid, K. el	108	Tarka, K. el	178	Qair, T.	248	Qawrat, K. el	318	Kafra, T. el	388	Abu Khafra, K.	458	Masabrat, T.	531	Alqama, El	601	Nama, T	671	Umm Iqbiyah, T	741	Hak, K. el
39	Ahmar, El K. el	109	Shagara, K. el	179	Tamal el-Awad	249	Amva, T.	319	Khodori, T. el	389	Rita, K.	459	Shagaa	532	Abu el-Saba, T	602	Khatma, K. el	672	Birka, El	742	Gila, K.
40	Ashiri, K. el (Barhan)	110	Nagla, K.	180	Matyur, T	250	Matyur, T	320	Barahya, T. el	390	Kawrat, T. el	460	Sarah, K. el	533	Abu Shaht, T	603	Sehor, T	673	Shahabulum	743	Zumran, K.
41	Shubaha, K. el	111	Daba, K. el	181	Rak, T.	251	Sheikh Ismail, K. el (K. Abu Ismail)	321	Bakrag, K.	391	Bakrag, K.	461	Dahab, K. el	534	Abu Qidan, T	604	Masara, T. el	674	Qarqas, T. el	744	Nezarah, El
42	Mashqa, K. el	112	Raq Salim	182	Gindha, T (Gindha)	252	Abu Tahun, K.	322	Barun, T (Sidi)	392	Ahaz, K. el	462	Kadwet el-Kula	535	Ibrahim Awad, T	605	Kafri Abu Helal, T	675	Kafr Gama	745	Hagga, T. el
43	Marwan, K. (Zawra Razin)	113	Iqah, K. el	183	Mahla, T. el	253	Mahyut el-Bahr, K.	323	Abu el-Nahs, T	393	Abul K.	463	Qawra, K. el	536	Sawad el-Gama, T	606	Sawad el-Gama, T	676	Bihar Qawil	746	Narwan
44	Ahmar, El K. el	114	Sheikh el-Arab, K.	184	Tawil, T (I)	254	Fasa, K. el	324	Zawra, T (Sawlin)	394	Abu Mansur, K.	464	Esk, K. el	537	Tawil, Gezira el	607	Khaliga, K. el	677	Khaliga, K. el	747	Samara, T. el
45	Umm, K.	115	Qar el-Khalifa, K.	185	Raya, T	255	Atal es-Sit, T	325	Ibn Salama, K.	395	Abu Mansur, K. el	465	Masab	538	Abu el-Ras, T	608	Umm el-Laban, K.	678	Qalqa, El	748	Qatta, El
46	Daba, K. el	116	Saha, K.	186	Gumayyima, T	256	Qair el-Gaha, K (Ahmar el-Ain)	326	Mehedi, T	396	Kaf, K. el	466	Shubban esh-Shubaha	539	Hilalya, T. el (Aiyad el-Qiblaya)	609	Ghuz, K. el	679	Sheikh Sali, T. el	749	Morinda Abu Ghulib
47	Awad, K.	117	Zila, K. el	187	Faran, T	257	Khabibza, K. el	327	Sawa	397	Nagi, K.	467	Mahud, Kaf	540	Abad, T. el	610	Saba (I), K. el	680	Tuhaj, El	750	Magadela, El
48	Samra, K. el	118	Sawaya, K. el (Dahwan)	188	Hirah, T. el (Gah)	258	Rehad, K. el	328	Amman el	398	Amman el	468	Amman el	541	Sawad, T. el	611	Saba (II), K. el	681	Magadela, El	751	Magadela, El
49	Zal el-Kom	119	Kharf, K. el	189	Abu Khayra, T (Zawra)	259	Ahmad, El K. el	329	Sakhira, T. el	399	Sakhira, T. el	469	Lapin, T	542	Shat, T. el	612	Daba el-Bahari, K. el	682	Mimhat Sabhara	752	Mimhat Sabhara
50	Ahmar, El K. el	120	Salaat Ghabat, K. el (Sala)	190	Ahmar, el-T. el	260	Geiret el-Dakhla	330	Shagabna	400	Honak, K. el (Magadela)	470	Zici, T	543	Zaid, T	613	Daba el-QBil, K. el	683	Deir el-Hama, T. el (I)	753	Deir el-Hama, T. el (I)
51	Ishki, K.	121	Manour, T	191	Umm el-Hagar, T	261	Filas, K. el	331	Gir, T. el	401	Soleia, T. el	471	Gassa, T. el	544	Umm Khadra, T	614	Qarawi, El	684	Kaf el-Deir	754	Kaf el-Deir
52	Samr, K. el	122	Tin, K. el	192	Qandir	262	Khanziri, K. el	332	Daba, T. el	402	Mah, K. el	472	Zawya, T. el	545	Sebakha, T. el	615	Nefwa, El	685	Kaf el-Deir	755	Kaf el-Deir
53	Ahmar, El K. el	123	Nil, K. el	193	Kafr Higm	263	Nawwim, K. el	333	Binimark, K.	403	Abu el-Ira, K.	473	Dumalik, T. el	546	Atrah, T. el	616	Zabeha, K. el (Beni Helal)	686	Ahmar el-Sadiyyin	756	Ahmar el-Sadiyyin
54	Beni Tama, T	124	Nub, K. el	194	Abu Yasin	264	Qair, K. el	334	Umm el-Zayyat, T	404	Abu Naama, T	474	Hama, T. el	547	Qawra, T. el	617	Masra, K.	687	Masra, T. el	757	Masra, T. el
55	Qair, T. el	125	Kobit, El Tel.	195	Horbat	265	Raif, K. el	335	Daba, T. el	405	Matariya, T. el	475	Berimbat	548	Shaqafiya, T. el	618	Sidi Agaba	688	Azwa, T.	758	Azwa, T.
56	Asir, T	126	Bashahis, K.	196	Sak el-Qarawa	266	Mishzein, T	336	Daba, T. el	406	Abu el-Gabur, T	476	Tarah	549	Hanara, T	6					

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