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PALEOGEOGRAPHY OF EGYPT ABOUT 2000 B.P.

Geospatial analysis and Cartographic Verification of the Journey of The Holy Family using GIS and Remote Sensing

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Declaration

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Eshak Gris

Gießen, July 2022

“Arise, and take the young child and his mother, and flee into Egypt,

and be thou there until I bring thee word: for Herod will seek the young child to destroy him”. anangel said

(Matthew 2:13)

“Out of Egypt I called my son”

(Hosea 11:1)

Acknowledgment

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List of general Abbreviations and Notations

AA	Abbas Ammar 1946[1]
AM	Ammianus Marcellinus 391 AD[2]
AWMC	Ancient World Mapping Centre
BA	Barrington Atlas of the Greek and Roman World[3]
BIt	Bordeaux Itinerary[4]
DARE	Digital Atlas of the Roman Empire[5]
DEAG	Description de l'Egypte, Atlas Géographique[6]
GA	Gardiner 1920[7]
HF	The Holy Family
HI	Hierokles 527/528 AD[8]
IO	Iosephos 75-79 AD[9]
ItA	Itineraria Antonini Augusti ca. 300 AD[10]
MA	Maspero 1894 AD[11]
MM	Madaba mosaic 500 AD[12]
MMS	MERCURY-MINERVA-SIMREC Project
MQ	Al-Maqdisi 947 AD[13]
Pap	Papyrus SB XXVI, 166075th century AD [14]
PI	Pliny 77 AD[15]
PT	Claudius Ptolemaios 90 AD[16]
QA	Qudama 1147- 1223 AD[17]
ST	Strabo[18] 24 B.C[19]
TAVO	Tübinger Atlas des Vorderen Orients[20]
TBA	Tübingen Bible Atlas[21]
TH	Theophanes 323 AD[22]
TP	Tabula Peutingeriana ca. 250 AD[23]

1 (Ammar 1946)
2 (Ammianus Marcellinus 22, 16, 3)
3 (Talbert 2000)
4 (Talbert and Elliott 2010: 282)
5 (Åhlfeldt 2012), DARE, Gothenburg University, Sweden: https://imperium.ahlfeldt.se/
6 (Jomard 1809)
7 (Gardiner 1920: 114)
8 (Hierokles 1893: 726, 4–727, 12; Honigmann 1939; Verreth 2006: 67)
9 (Josephus 4, 11, 5)
10 (Cuntz 1990; Miller 1916; Ball 1942, 2017)
11 (Maspero 1894: 416–427)
12 (Donner 1992: 77–86; Leal 2018: 123–143)
13 (Al-Maqdisi 1991)
14 (Perale 2016: 155–169)
15 (Pliny 5, 14, 68): https://tinyurl.com/337jxxcf
16 (Ball 1942: 104; Kornemann 1901: 51–146; Ptolemy 4, 5, 5-15): https://tinyurl.com/pe79nkey
17 (Qudama 1981)
18 See: List of Ancient Greek and Roman Historians, https://tinyurl.com/2p89krkd
19 (Strabo 16, 2, 28–33). See: LacusCurtius • Strabo's Geography: https://tinyurl.com/2p8epyhd
20 See: https://tinyurl.com/yt72csbw
21 (Mittmann 2001)
22 (Verreth 2006: 62–64)
23 (Ball 2017: 278; Parthey 1859; Talbert and Elliott 2010), Bibliotheca Augustana: https://tinyurl.com/3fw68sft Manuscriptumoriginale Cod. 3 2 4 (ÖN Wien) c a. 1 2 5 0.

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1 Introduction

The journey of the Holy Family is of great importance in modern history[24]. It differs from the journeys of the ancient travelers whose priorities were to explore the universe or observe the surface of the earth from natural or human phenomena. HF journey is an escape for refuge and shelter in Egypt, where the angel informed Joseph the Carpenter in a dream that *"Arise, take the young child and His mother, flee to Egypt, and stay there until I bring you word; for Herod will seek the young Child to destroy Him"* (MATTHEW 2:13).

The Holy Family's journey fulfilled some of the Old Testament prophecies mentioned in (HOSIA 11:1; NUMBERS 24:8) *"Out of Egypt I called My Son"*, as mentioned in (MATTHEW 2:19) when the angel appeared to Joseph the carpenter again to inform him, *"Arise, take the young Child and His mother, and go to the land of Israel, for those who sought the young Child's life are dead".* In addition, the existence of the five oldest written sources on the Holy Family Journey: The vision of Theophilus, 23rd Patriarch (385-412 AD), Sermon of Pope Timothy Ailurus II 26th (457-477 AD), Maymar Abba Zacharias Bishop of Sakha (ca. 693-730 AD), Maymar Abba Kyriacos, Bishop of al-Bahnasa (ca. 7th century AD) as well as, manuscript no. (20912 VIII 354) in the Köln Papyer collection dated between the fourth and fifth centuries AD, which states the period of residence of the Holy Family in Egypt[25]. In addition to the writings of some historians such as Sozmen[26], and others, which are considered the basis for verifying the journey's itinerary.

The path of the Holy Family and its development is, of course, not only of historical and religious importance but also of economic importance, as it is a destination for many countries of the Christian world and all researchers of all nationalities and other religions, especially after the blessing of His Holiness Pope Francis for the proposed project to develop the path and his invitation to pilgrims and delegations to visit Egypt and these holy places. Therefore, it was expected that the number of tourists on the path of the Holy Family would reach about 3 million tourists at the beginning of the proposed season, starting from the beginning of January 2018. It supports foreign tourism, which contributes about 20% of the foreign currency to Egypt, in

[24] The term "Holy Family" is applied to a group of four people: Jesus, Virgin Mary, Joseph the Carpenter and Salome (BUDGE 1886: 36; BUDGE 1922: 67–84; FORGET 1905b: 143; GREGORIUS 1992: 39; KENNEDY 1897: 351–357; MAKARI and AL-BARAMOUSI 2018: al-Difnar 8th Baouna; MINGANA 1931; NAU 1910; YOUHANNA 1983: 3; SINXARIUM 24th Bashans)

[25] (ATIYA 1991; BUTCHER 1900; COQUIN 1991; DEMETRIUS 2007; GRAF 1944; GUIDI 1917; GUIRGUIS 2010; HUNAYN 1902; IDRIS 2000; LYSTER et al. 2001; MINGANA 1931; SADEK 2011; SAID 2009; SAMAÁN AL SURIANY 2006; SARKIS 1936; SCHENKE 1997; SUCIU 2013a; SULAIMĀN 1916; WADIA 2002)

[26] (BAYNES 1948; SOZMEN 8–11)

addition to that foreign and local tourism contributes about 11% of Egypt's GDP[27]. In cooperation with various parties, the Egyptian Ministry of Tourism and Antiquities has developed only eight stations of the itinerary to receive international and local tourist delegations.

The Holy Family's path stations in Egypt are located within 12 governorates out of 26 governorates. The Holy Family resided in some of them for days and in others for several months, such as the Muharraq Monastery in Asyut. This distance is estimated at 2500 km (Escape ca. 1310 km and Return ca. 1190 km)[28], on foot, or using animals like donkeys or by sailing in the Nile River[29].

The HF did not take any of the distinguished roads while fleeing from Palestine to Egypt, for fear that Herod and his soldiers would pursue them, according to what several sources unanimously agreed upon[30], and that the city of Tal al-Farama was the first city the Holy Family entered into Egyptian lands at the time[31]. Hence, HF traveled up the middle and west of the Nile Delta. Consecutively, it traveled from the north of Egypt to the middle of the Nile Valley in the south, specifically to Asyut and its suburbs, which is the farthest point to which the path ended, as if the path of the journey drew a metaphor Cross on Egyptian lands until Joseph the Carpenter received a message to return to Palestine again.

The Paleogeography of the ancient Egyptian wonderland can only be formed with certainty through these combined elements: the original texts of papyri, ostraca, sculptures, etc.., in addition to what was mentioned by ancient writers and historians[32]. Therefore, one of the objectives of this study is to illustrate and clarify the confirmed and possible roads that HF traveled in Palestine and Egypt. Moreover, to verify the extension of the Roman road network at that time, especially in the areas where any of the itinerary stations mentioned in the sources and references are located. In addition to the spatial verification of the locations of the path stations near or far from the extension of the ancient road network at that time. In addition, verifying the number of ancient Nile branches that exceeded 16 branches and estuaries[33].

[27] Source: The Egyptian Central Agency for Public Mobilization and Statistics
[28] According to the researcher's calculations
[29] (GREGORIUS 1992: 39)
[30] (EVETTS 1892: 93; HOSNY 2003: 137)
[31] (AL-MAQRĪZĪ 1873: 21; EVETTS 1910: 93; GREGORIUS 1992: 49; HOSNY 2003: 137; JULLIEN 1889: 100; MEINARDUS 1977: 23; MONKS OF ST. MINA MONASTERY 2018: 21); The official page of the Coptic Museum - Posts | Posted on June 1, 2015·
[32] PARTHEY made an attempt to map classical writers, not only as depicted by the author, but also on the basis of what can be observed or inferred from these writings (PARTHEY 1859: 509–518)
[33] (PLINY 5, 14, 68)

Because of the incompatibility between many ancient sources and references, databases, and modern atlases on the locations of these branches' extensions, the study will provide an accurate map of these ancient Nile branches.

References, ancient classical sources, and their investigations will be used, especially the ancient atlases, which referred to the Paleo-geography of Egypt specifically at the time of the Holy Family. Egypt was at the beginning of its subjugation to the rule of the Roman state, after the decline of the Ptolemaic rule of Egypt in 31 BC. Therefore, it was also relied on the data of roads and cities mentioned by Antonine Itinerary and Tabula Peutingeriana, along with some investigations according to several atlases and digital databases, for instance, TAVO, DARA, Barrington Atlas, and Tübingen Bible Atlas, besides, AWMC and MMS databases, as well as the recent maps.

The study also discusses the influence of some natural and human spatial factors in shaping the itinerary, and the factors that prompted the Holy Family to choose these places as stops. These factors include, for example, the flooding of the Nile and some troubles that the Holy Family faced during their escape and stay in Egypt for about three years and 11 months[34].

Additionally, conducting the Geospatial analysis and Cartographic verification of the journey path stations through the spatial and cartographic analysis methods provided by the GIS environment and remote sensing to extract a high-resolution geographical and cartographic path for the journey. Besides, revealing the unknown places visited by the Holy Family in Egypt, which were mentioned by historical sources, then analyzing the spatial characteristics of the places where the Holy Family settled, attracted the members of the journey to settle there.

1.1 Research Gap

There are inconsistencies and discrepancies in the number of Stations the Holy Family stayed or passed through during its escape and return, starting from Bethlehem in Palestine until entering Egypt through North Sinai, passing through the Nile Delta and the valley until Asyut in Upper Egypt. According to the available sources of the Coptic Church in Egypt, the number of stations and historical places visited by the Holy Family reached about 25, in addition to some stations whose names are known only while the location is still unidentified. While many researchers, especially during the last century, added some other stations to the path, which sometimes contradict what has been approved, and agree at other times. In addition to many

[34] (SCHENKE 1997: 183–200)

popular novels and oral traditions, which affected the addition of many stations to the path as well.

1.2 Objectives of the study

- Analysis of the historical sources that contain geographical facts and a description of the path of the Holy Family in Egypt.
- Determining the true locations of the historical places that the Holy Family resided in or passed through in Palestine and Egypt.
- Studying the part of the escape and return journey that extends in Palestine, was rarely mentioned by researchers.
- Attempting to discover the geographical locations of the unknown road stations.
- Producing a base map to verify the itinerary, consisting of the ancient Roman road network and the network of waterways (ancient Nile branches, canals, ancient lakes, etc...).
- Detection of spatial change in some geographical phenomena that affected the formation of the itinerary.
- An inventory of all known and unknown places that have been referred to so far in sources and references.
- Refuting some claims or opinions that do not correspond geographically or cartographically with the itinerary.
- Redrawing an accurate documented cartographic path based on modern geographical techniques.
- In addition to a proposal for a road in the part extending between the stations of al-Ma'adi and Deir al-Garnous, which was not mentioned before.
- Shed light on the role of the Holy Family Path in pushing the process of tourist attractions, including the economic one.

1.3 Study Hypotheses and Questions

- Some stations have been recently added to the itinerary without sufficient documentation and evidence.
- What was the exact geographical path taken by the Holy Family in Palestine and Egypt two thousand years ago?
- What are the natural and human geographic factors that influenced the formation of the directions of this journey from its departure from Palestine until its return?

- What are the exact geographical locations of the ancient stations mentioned in the sources that chronicled the story of the Holy Family in Egypt?
- What are the places mentioned as stations that the Holy Family passed through in Egypt, but were not recognized?
- How can we discover missing places in the itinerary, and how can we predict their spatial position?
- What is the means of developing the stations of the Holy Family's path in Egypt, and how can an economic return be achieved?
- Geographical information systems and remote sensing play a role in achieving the tourism boom for the itinerary of the Holy Family's journey in Egypt.

1.4 Research Methodology

The study depends on the historical method of GIS to obtain Paleo geographical data at the time of the Holy Family, and on some geographical features of the journey, then the digitizing and the analysis process to elicit topographic and geographic features closer to that period.

The "*Geographic Gazetteer*" method will be used to obtain maps and records of ancient geographical place names and their coordinates, the road network and the ancient Nile branch network from ancient cartographic sources such as TP and IT, and the writings of ancient historians such as Strabo, Ptolemy, and Pliny. In addition to digital databases related to the period of the Roman State and Modern Atlases, for instance, TAVO, BA, DARA, AWMC, and MMS. In parallel, extracting all the itineraries of the Holy Family's journey that have been referred to in all sources and references, verifying their old and current names, and then building a complete and accurate geographical database of the Holy Family's journey. Consecutively, the implementation of the geospatial analysis of the locations of the track stations, the production of the exact geographical cartographic path of the journey, and its simulation with the path mentioned in the various other references show its accuracy.

1.5 Study Workflow

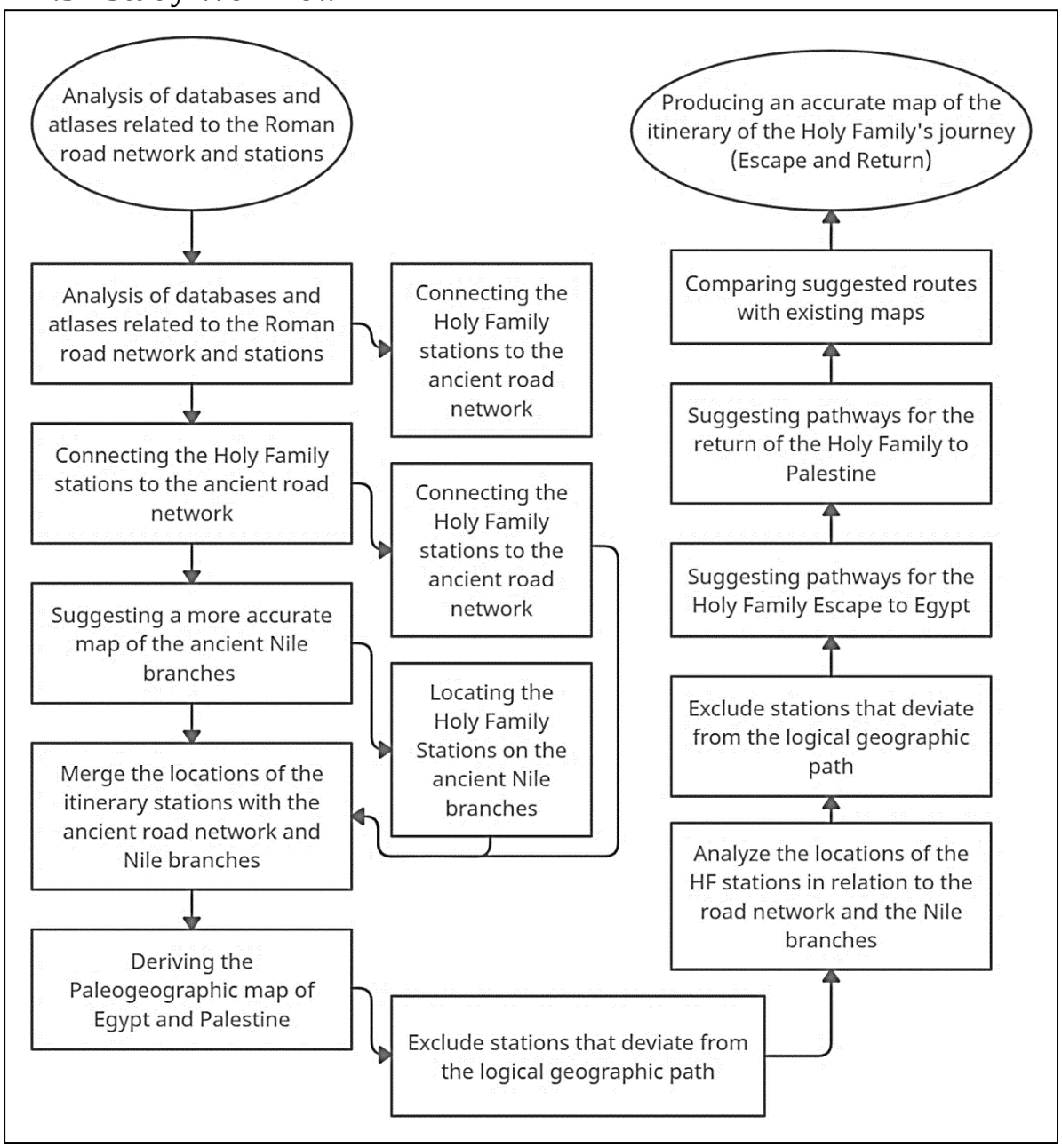

Fig. 1-1: The Study Workflow

1.6 Study difficulties

- This study faced several difficulties, including:
- The large number of references that dealt with the journey of the Holy Family, especially at the beginning of the twentieth century, resulted in some contradictions and inaccuracies at times and complete similarity in content at other times, due to the loss of primary sources such as manuscripts, books, etc...
- The reliability of some references for some researchers due to the age of their publication, regardless of the accuracy of their content, required an effort to refute them.

- The purely historical point of view prevailed in the references that dealt with the subject of the study, which took a great effort and time to delineate the foundations and geographical factors that affected the features of the study.
- The state of the Palestinian-Israeli war, in addition to the current Corona epidemic, factors that prevented the ability to complete a field study and visit the old libraries in Jerusalem - despite obtaining the necessary permits, which certainly contain important documents on the status of Palestine during the Roman Empire.
- The instability of the security situation in the North Sinai sector prevented the completion of a field study there.
- The cooperation lack of officials responsible for the file of the Holy Family's journey in Egypt in providing any kind of support during the completion of the study.

The study consists of five chapters, where the first chapter presents the Literature Review and all the historical and geographical sources that referred to the journey of the Holy Family. While the second chapter discusses the cartographic verification of the stations of the journey in Palestine and North Sinai, respectively, the third chapter explains the spatial verification of the flight path and its stations in the Valley and Delta region. The fourth chapter presents the ancient waterways network and ancient Nile branches at the time of the Holy Family. Finally, the fifth chapter uses the spatial analysis of the path stations and proposes multiple scenarios for the escape and the return journey, followed by a conclusion and recommendations.

1.7 The geographical and political conditions of Egypt during the time of the Holy Family

Egypt is located between latitudes 22°N - 32°N and longitude 24°E - 37°E. The area is about 1.010.408 km^2, but the populated area is only 68.303 km^2, which represents 6.8% of the total area. The Nile Valley and Delta region is less than 4% / about 33,000 km^2 of the total area. The Nile extends from the Egyptian border - north of Wadi Halfa - in the south to its estuaries in the Mediterranean with a length of about 1.532 km North of Cairo the Nile divides into two main branches: Damietta and Rosetta Branch, which surround the Delta (Fig. I).

Egypt was known in the Greek and Roman periods as *Aegyptus* about the town of Coptos, which its name was distorted until it became Egypt in modern languages[35]. The Mediterranean Sea was called *Mare Internum* in the Greek period, and *Mediterraneum* in the Roman period, as well, it had internal sections such as the Egyptian, the Great, Tyrrhenian, and Aegean Seas.

[35] (ABD AL-MALEK 2002: 8–20; MILLER 1916: 853, 879; TALBERT 2000: 1 J4)

While the Red Sea was known as Arabicus Sinus and was sometimes given to the Gulf of Suez only. During the Arab period, the Red Sea was called “Bahr al-Qalzam”, about the town of Clysma (32.57396 E 29.95462 N), which was located to the north of the current city of Suez[36].

Fig. 1-2: Administrative map of Egypt

The name of the river, was derived from the word "Nyaru", which means rivers in the ancient Egyptian language, then it changed to Nilus in the Greco-Roman period, and successively during the Arab period, the river was called "Nile", and the name "Egypt" became instead of Aegyptus, and the Mediterranean became called Bahr al-Rum, moreover, some of its internal sections were called Bahr Alexandria and Bahr al-Sham[37].

[36] (WAHIBA 1980: 44)

[37] "Egypt" is an Assyrian word and means in Arabic: rain or frost. See: (FARAH 2004: 43; WAHIBA 1980: 44)

Significantly, Strabo pointed out that his predecessor historians hardly mentioned any borders to Egypt except that they are the lands located within a narrow strip around the course of the Nile[38]. However, Pliny mentions that the eastern and western branches of the Nile, called Pelusiac and Canopic, respectively, were the borders of Lower Egypt/ Delta[39]. In addition, Pomponius Mela described Egypt as a part of Asia; its borders extend between Pelusium/ Tal al-Farama in the east and Catapathmos/ Salloum in the west, from the Mediterranean in the north to the island of Elephantine in the south[40]. Claudius Ptolemy set the southern borders of Egypt at Wadi Halfa, which is consistent with its current borders to the south. The Eastern Desert, North Sinai, and a part of the Western Desert were added to the valley and delta region, during the Greek Period until the middle of the first century BC[41].

Diodorus Siculus mentioned that the number of free men in Alexandria is about 300,000, moreover if women and children are added; the number will be approximately half a million people[42]. While the population of Egypt at the end of the first century AD was about seven and a half million people, except for Alexandria according to Josephus[43]. In addition, Butzer believes that the population of Egypt in the Greco-Roman period reached about 7,800,000 people, and began to decrease gradually until it decreased to approximately 2.5 million people in the late eighteenth century[44], however, the population of Egypt exceeded one hundred million people at the beginning of the third decade of the twenty-first century[45].

1.8 Administrative Divisions of Egypt during the time of the Holy Family

At the beginning of his conquest of Egypt, Augustus Caesar kept the administrative Divisions of Egypt "Nomos", each of which had a ruler, his job was called Strategos after he robbed them of political power and kept them only the administrative authority, while the

[38] (KAMEL 1953; WAHIBA 1980: 45)
[39] (PLINY 1855: 404)
[40] (AHMED 1988: 1–41; BALL 2017: 143)
[41] (BALL 2017: 189)
[42] (AL-ABADI 1999: 157; DIODORUS 1.1-98)
[43] (JOSEPHUS 16.4)
[44] (BUTZER 1960: 3; WAHIBA 1980: 162)
[45] (EL SAADANY 2000: 140–145); Source: Population census data according to the Egyptian Central Agency for Public Mobilization and Statistics.

military authority was in the hands of the Roman forces only[46]. He did not make changes in form but content[47].

By the first century AD, as mentioned by Strabo, Egypt has divided administratively into 36 Gaue/ "Prefectures" directorates, 10 directorates in the Delta, 10 directorates in Upper Egypt south of Asyut, and 16 directorates located between Middle Egypt and the Delta, in addition to the Mediterranean coast and the lowlands oases[48]. The enumeration of these areas runs incorrect order across the delta and then south along the river and valley of the Nile to the city of al-Bahnasa/ Oxyrhynchus in Central Egypt, after which all the regions of Upper Egypt suddenly disappear, where only 23 names are indicated instead of 37[49]. Memphis was then the second important city in the empire after Alexandria[50]. Pliny mentioned about 61 cities, and considered them the most famous of his time, out of 350 cities referred to by Artemidorus as all located in the delta, as well as, Ptolemy and Pliny mentioned the same number of the 47 districts, and that their names are derived from their capitals[51] (Fig. II).

The administrative division of Egypt remained close to stability for about 40 centuries, with a special pattern that did not change and did not undergo major changes throughout the Pharaonic eras until the issuance of Diocletian's decree on changing Egypt's administrative departments and management systems. Accordingly, Egypt was divided into seven Eparchies and its inner minor divisions called Pagi[52].

On the other hand, at the beginning of the Roman period, Alexandria was not considered a subsidiary of Egypt, but was located within its borders, where the governor was called "the governor of Alexandria and Egypt." This trend lies due to the isolation of the Nile branches of Alexandria from the rest of the lands of the delta, in addition to the swamps and bushes that covered the north of the delta until Alexandria, in which the delta turned into a semi-island area[53].

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[46] (LEWIS 1983: 19)
[47] (EL SAADANY 2000: 165–175; RITNER 1998)
[48] (STRABO 17.1.3, 24-40)
[49] Map and List of provinces ('nomes') of Egypt, see: (BOWMAN and RATHBONE 1992: 107–127; GRAVES 2017; HELCK 1974; MASPERO 1894: 75–78; SMITH 1865; SMITH 1854). For more: https://ancientegyptonline.co.uk/nomeslower/
[50] (PARTHEY 1859: 510)
[51] (BALL 2017: 163–232; PARTHEY 1859: 511; PLINY: 6.1-40; PLINY: 12.1-30; WAHIBA 1980: 145)
[52] (FAYEZ 2012: 116–117; OSGOOD 1886: 213–219). For more about Egypt Nomos see: Description de l'Egypte (JOMARD and JACOTIN 1818).
[53] (ABD AL-WAHAB 2002: 229; EL SAADANY 2000: 151–164; FAYEZ 2012: 55)

Egypt in the first century BC was in a state of chaos, so every station or port needed to be joined by soldiers and a fleet to protect and guard the travelers on the Nile. Moreover, the traffic protection system in the river remained unchanged as the same at the beginning of the Roman Period until the end of the century third century AD[54]. Despite the conflicts that existed between the Greek and Roman states, social life continued in the Egyptian villages by traditional methods, especially that far from the cities that serve as the seat of government. That was because the new ruler or emperor, who sometimes resides far from it, did not interfere in their lifestyle due to the external conflicts he faces[55].

1.9 The road network in the time of the Holy Family

Some roads were owned by the state itself - its revenues entered the state treasury - especially the main roads, as well as there are no roads owned by the private sector or individuals. As for the roads that passed in public places, they fell under the inheritance of the emperor and were owned by him. Moreover, all the roads were maintained and monitored by the state after collecting the cost from each province separately. So that it is the responsibility of the province in the end or the responsibility of the city in the case of repairs to the roads that extend inside[56].

According to the extreme points within the geographical range of the HF path, the roads network is divided as follows:

1. Roads in Palestine from Bethlehem to Rafah
2. Roads of the northern sector of the Sinai Peninsula (coastal and internal)
3. East and Central Delta Roads
4. West Delta Roads
5. Roads west of the Nile from Memphis/ Met Rahina to Lykoplis/ Asyut
6. The roads east of the Nile from Babylon/ Old Cairo to Sahel Selim/ Asyut.

[54] (FAYEZ 2012: 245; RITNER 1998)
[55] (LEWIS 1997: 18)
[56] (ADAMS 2007: 26; FAYEZ 2012)
* The term "***North Sinai***" used here to refer to the northern part of the Sinai Peninsula between the present-day Suez Canal in the west and the city of Rafah in the east. The area within the Port Said, al-Qantara and Tel el-Farama triangle was part of the delta in Roman times, and is now in fact artificially separated from its former natural continuation west of the Suez Canal. See:(VERRETH 2006: 10).

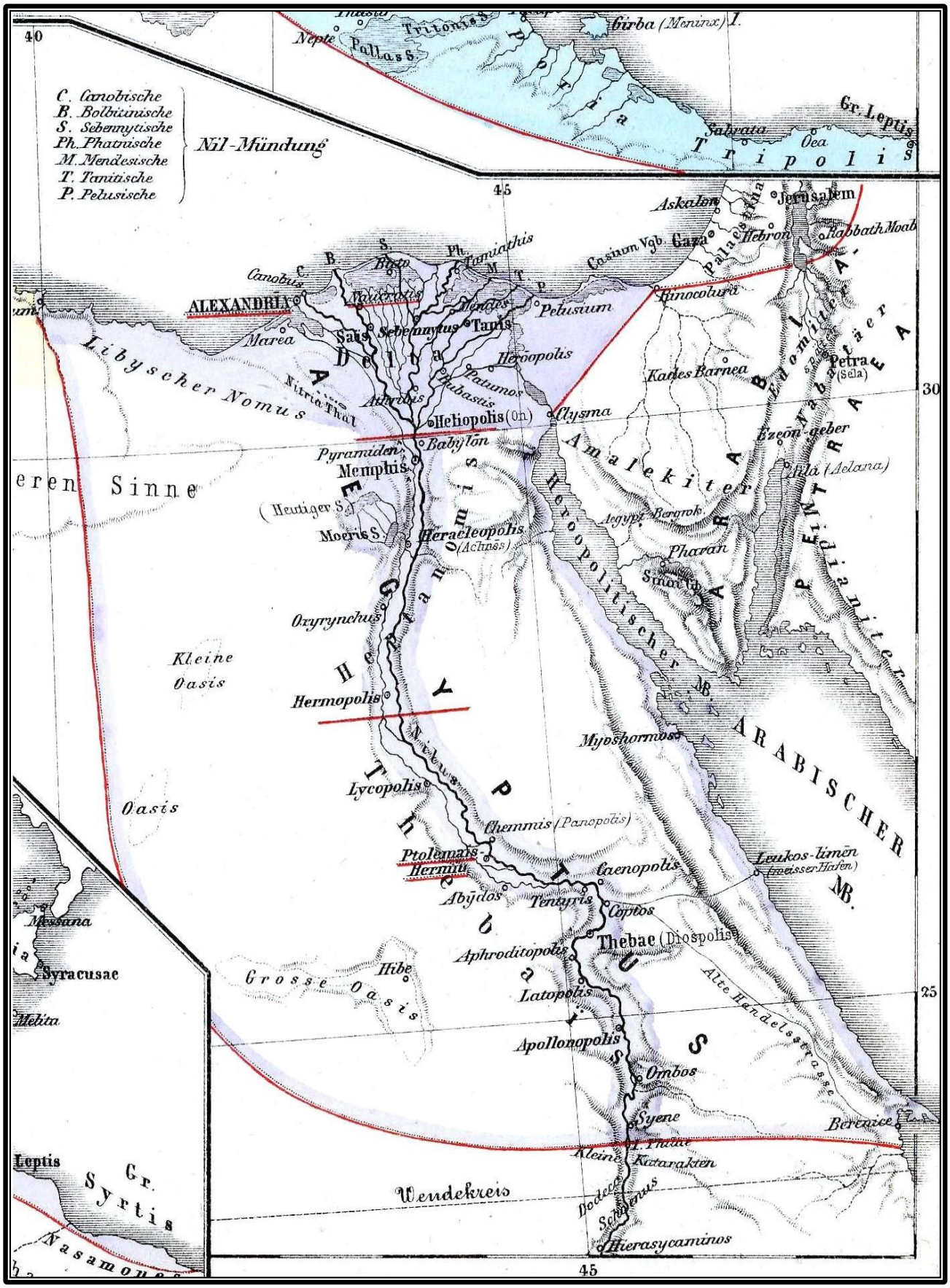

Fig. 1-3. Greco-Roman Egypt administrative map[57]; Source: Historischer Schulatlas, 1897 (PUTZGER et al. 1897: 3)

[57] Map Nomos of lower Egypt (MASPERO 1894: 75); For more: https://condor.depaul.edu/

2 The Holy Family's journey - Geographical Sources and Historical References

Preface

Numerous Geo-historical sources and references referred to the Holy Family's journey from Palestine and its refuge to Egypt at the beginning of the first century AD, for fear of the oppression of Herod, who wanted to kill the child Jesus. For that reason, Herod ordered the killing of Bethlehem children at the time from the age of two and under. These sources ranged from manuscripts preserved in international libraries in different countries, and references, as well to writings by historians on the various periods, especially historians of the early centuries.

This story has been of interest to many historians and researchers from the early centuries to the present, which has helped to diversify the sources and the diversity of their content, and the techniques in which they tell the escape story. Some of them presented this story in a general narrative of the event, including historically listed with a special subjective outlook, and some of them meditatively presented the story of escape, depending on the fact that the initial sources were heavenly visions. Additionally, other historians have not paid particular attention to the story of the escape, and the journey has been referred to as part of various historical events in their writings. The number and variety of content of these sources are that the original copies of the manuscripts that mentioned the story are hidden and only scattered fragments have yet to emerge, although many writers have quoted them or subsequent copies.

The sources did not indicate the geographical features of the places on the itinerary that characterize these places at the time, and therefore attracted the Holy Family to turn to them. Also, the number of places mentioned in these sources increased with the progress of time and varied from source to source depending on the circumstances of the time written in it, and because of the effect of the oral tradition inherited about this journey. Therefore, the research tries to review all the sources and references that referred to the journey of the Holy Family, especially the names of the geographical places that are located within the itinerary, and review what remains of them and what is unknown. Furthermore, since all sources contain stories and narratives related to the flight to Egypt, the research does not refer to those that do not mention geographical locations, nor is it exposed to the authenticity of these accounts.

The importance of extracting and knowing all the precise geographical places that are located within the Itinerary of the journey is due to an explanation of the origin and development of many urban places that have grown next to or on the ruins of some places, which the Holy Family inhabited or passed through. Therefore, it became a tourist attraction to blessed, in addition to developing well-known places within the path, which have been overlooked over

time. Moreover, searching for the extinct places whose names were changed to other spatial stations' names. Besides, the development of known places within the road but ignored over time, also searching for the unknown stations and their names.

The research deals with the Geo-historical sources and references in chronological order as follows:

2.1 The Gospel of Matthew (61-64 AD)

It is the oldest document referring to the journey of the Holy Family to Egypt, where Joseph the Carpenter saw the angel in a dream saying "*Arise and take the young child and his mother, and flee into Egypt, and be thou there until I bring thee word*" (MATTHEW 2:13), fearing them from Herod's violence. Therefore, Joseph and his family remained in Egypt until the angel also returned to him in a dream and ordered him to return to Palestine. As a result, Joseph and his family returned to Nazareth in Galilee (MATTHEW 2:13-23). In this brief text, MATTHEW does not refer to the details of the entire journey, because the gospel message is not purely historical, while its texts contain the message of salvation. Therefore, the news is taken from the Bible and tracked scientifically and historically according to later sources.

2.2 Texts of the Maymar [58]-Manuscripts and Visions by the Church's Ancient Saints

Graf referred to the texts of the Maymar-Manuscripts in Arabic, which mentioned the details of the journey of the Holy Family or part of it, which was also translated from the ancient Coptic language. besides copied and translated into Syriac and Abyssinian (GRAF 1944: 224–227). Additionally, he displayed copies of the Maymar according to the number of places mentioned in each of them, not according to chronological order, where he mentioned Maymar Zacharias Bishop of Sakha (7th- 8th century AD), Maymar Theophilus, Patriarch of Alexandria (385-412 AD) and Maymar Kyriacos, Bishop of al-Bahnasa (ca. 7th century AD). These Texts of Maymar, their authors, and their editions are as follows:

2.2.1 The vision of THEOPHILUS[59], 23rd Patriarch (385-412 AD)

[58] "Maymar *المیمر*" is a Syriac word meaning a Homily, Essay, Sermon, Poem, or Biography of an influential person. It is an Educational Story (AGPAN 2017: 71)

[59] Theophilus is the 23rd Patriarch of Alexandria, and his date of birth is unknown, but it is believed to have been born in the City of Manf (BUTCHER 1900: 301; IDRIS 2000; WADIA 2002: 87–104). Moreover, The Orthodox Church celebrates his memento on the 18th of The Month of Bābah.

One of Theophilus's writings entitled "*Maymar of The Holy Family is coming to Egypt*" has two texts and multiple translations as follows:

2.2.1.1 The Long Text manuscript

It is the oldest and reads in Synaxarium[60] on 21st Ṭūbah besides the oldest copy in Arabic (Vaticanus arabicus 698) dated to 1371 AD, translated from Coptic, and it is preserved in Vatican Library, besides there is no Greek origin as Guidi mentions (GUIDI 1917: 381–469). The places mentioned in this text are only six places: East of the city, Tal Basta, al-Mataryia, al-Ashmounein, Dairout al-Sharif, and Qusqam Mountain. As well, it is preserved in Vatican Library (AGPAN 2017: 71; DAWUD 2002: 48–69; GUIDI 1921: 274–309; GUIRGUIS 2010: 35; SADEK 2011: 107–111).

2.2.1.2 The Short Text manuscript

It is more recent than the long text and reads in Synaxarium on 6th Hātūr, as well as the oldest copy in Arabic (Vaticanus arabicus No. 57) dated to ca. 1400 AD and preserved in the Vatican Library (AGPAN 2017: 71). Besides GUIDI relies on his documentation of two Manuscripts: (Vatican Arabius No. 170) dated 1791 AD and (Vatican Arabius No. 1481) dated 1 AD, and both confirm the translation of the text from the Coptic language into Arabic by the monk Jacob, head of the Monastery of the Virgin Mary/ al-Muharraq. Moreover, this translation dated to 1285 AD (DEMETRIUS 1999: 66–73; GUIDI 1921: 217–237; MANUSCRIPT VAT.AR.170 FF. 195-219 2017; SAID 2009: 47). The places mentioned in this text are 13 places: Tal Basta, Mostorod/ al-Mahmma, Bilad al-Sibakh/ al-Magh`tas, Wadi al-Natroun[61], al-Mataryia, Fustat Misr, Abo Sarjah (Old Cairo), Gabal al-Kaf (Gabal al-Tair)[62], al-Ashmounein, Ighus, a Small village near Qusqam, a Small village before Qusqam (Meir) and Western Mountain of Qusqam.

On the other hand, GRAF and WADIA referred that, the second short text is a subsequent formulation of the first long text, with the addition of places that are not included in the long text (GRAF 1944: 224–227; WADIA 2002: 87–104). Moreover, one of the original texts of this Maymar considered a direct witness is a clip in Coptic Sai`di discovered in the Monastery of Abba Shenoute known as the White Monastery in Upper Egypt, undated and preserved in the National Library in Paris (PARIS, Bnf Copte 1318, fol. 80v) (SUCIU 2013a: 436–450).

[60] Synaxarium; Synaxarion, Συναξάριον which means the life of Prophets, Martyrs, Saints and etc.), also its content are arranged according to the days of the Coptic months during the whole year (AGPAN 2017: 75)
[61] Wadi: Valley
[62] Gabal: Mountain

2.2.1.3 The Syriac manuscripts

ALFONSO MINGANA published two manuscripts in the Syriac language dated 1479 AD, one for the long text and the other for the short, indicating that the copy provided distinctive Arabic words that crept into the Syriac text through an Arabic text (MINGANA 1931:1–92). This manuscript mentioned only three places: Tal Basta, al-Ashmounein, and Qusqam (Deir al-Muharraq).

2.2.1.4 The Abyssinian manuscripts

It is dated to the 15th century AD and was published by WALLIS BUDGE in 1933 AD (AGPAN 2017: 71). As well, BUDGE in 1900 AD edited and translated the Ethiopian text into English, besides, CARLO ROSSINI translated it into Italian in 1912 AD (SUCIU 2013a: 440). (Fig. 2-1).

2.2.2 Sermon of Pope TIMOTHY Ailurus II 26th (457 -477 AD)[63] *"the Homily of the Church of the Rock"*

The Sermon of Timothy titled "*Sermon of the Rock Church (Gabal al-Tair), a sermon given by Timothy during the consecration of St. Pachomius Monastery*", has three versions, where Boud'hors published a manuscript in Coptic language dated between the tenth and twelfth centuries AD. Besides, the two parts were found in the White Monastery and kept in the National Library in Paris (PARIS, Bnf Copte 131, f. 81), (COG 5491; CLAVIS COPTICA 0416). Additionally, two pages of the Coptic manuscript are preserved in the POUCHKINE Museum in Moscow (copt.30, (I.1.b.661/ 5686)).

On other hand, the publications of the PIERPONT MORGAN group contain several manuscripts that were found in Fayoum. Moreover, one of these manuscripts is written on parchment (LEUVEN, PIERPONT MORGAN LIBRARY M 665 (2)) within the catalog entitled *"Jesu, Narrative on The Infancy of His"*. Besides, this text corresponds to a whole paragraph of the Arabic copy. Furthermore, nine places mentioned in this text are: Tal Basta, Ebei Isous (Deir al-Garnous)[64], Bardounah, It'saa, Gabal al-Sakhra (Gabal al-Tair), al-Ashmounein, Dairout al-Sharif, Qusqam, and al-Mahmma (BOUD'HORS 2001:7–11; SAID 2009:43-46).

[63] Timothy is the twenty-sixth patriarch of Alexandria who wrote many of the works that translated into Syriac and Armenian, but only two of his manuscripts left in Coptic language. One of them refers to the Holy Family's journey titled "Sermon of the Rock Church (Gabal al-Tair), a sermon given by Timothy during the consecration of St. Pakhomius Monastery" (ATIYA 1991:2266; SAID 2009:21; SADEK 2011:129–135).

[64] Deir: Monastery

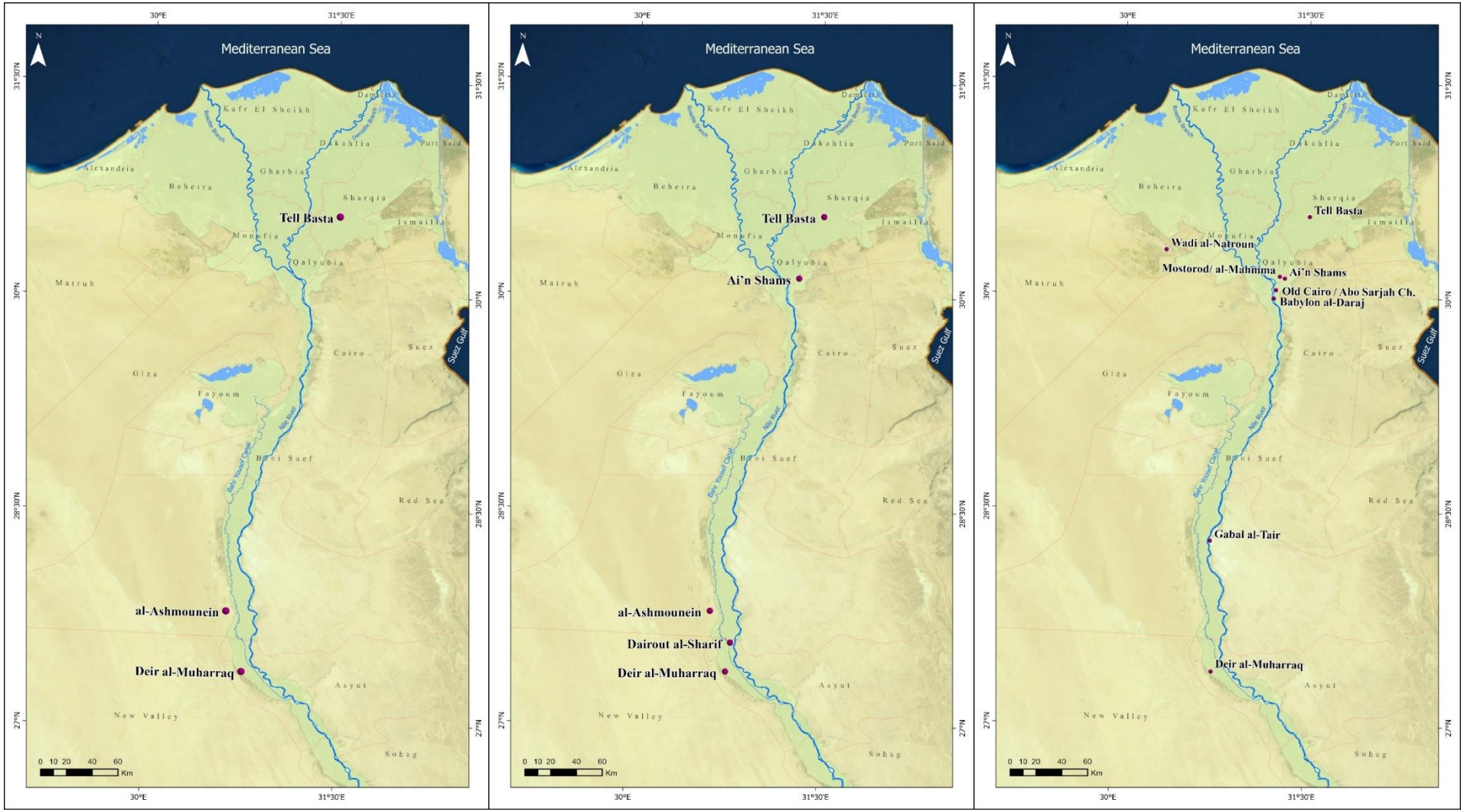

Fig. 2-1: Maps of the Places located in the Holy Family's itinerary based on the Vision of Theophilus; (a) the Syriac text, (b) the Long text stations, and (c) the Short text[65]

[65] All Maps designed using Arc GIS Pro 2.5.2 software based on the Egyptian Central Agency for Public Mobilization and Statistics data.

Additionally, BOTROS presented two texts in Arabic for Timothy`s Maymar. The first Text is apart from the St. Pula Monastery`s manuscript (14/14 hist) dated to the 14th century AD. It relates to the Long Maymar and it is translated into Abyssinian in the 17th century AD. While the Second text relates to the Short Maymar based on a manuscript copied in the Church of Gabal al-Tair and found in 1900 AD. Moreover, several studies relied on the Long Maymar because of the convergence of its content with the Abyssinian text, and the existence of further abbreviations in the Short Text. On other hand, SAID presented the Coptic originals and Arabic and Abyssinian translations with a comparative linguistic study of these texts (SAID 2009:9-49) (Fig. 2-2).

2.2.3 Maymar ABBA ZACHARIAS[66] Bishop of Sakha (ca. 693 -730 AD)

The manuscript of Zacharias`s Maymar reads in Synaxarium on 24th Bashans, entitled *"Jesus came with his virgin mother to the land of Egypt"*. The oldest copy preserved in Arabic in the Church of Abu Sarjah in Old Cairo (123/30 Theology/ Maymar (1+8) (123/30 Theology)) dated to 1372/1383 AD. Whereas GRAF mentioned only three confirmed manuscripts and three other unconfirmed manuscripts (GRAF 1944: 229). Nevertheless, WADIA referred to about 15 confirmed manuscripts and six unconfirmed manuscripts (WADIA 2002: 95–97).

Maymar Abba Zacharias is the richest by mentioning Stations or Places within the Itinerary, according to the manuscript (no. Hist. 477 (4), fol. 214r-230r), which preserved in the Coptic Museum mentioned ten places: Tal Basta, Minyat Ganah, Samannud, Burulus, Shagrat al-Tin, al-Matla'a, Bikha Isous/ Deir al-Magh'tas/ Tana, Gabal al-Natroun, al-Ashmounein and Qusqam/ Deir al-Muharraq (LYSTER et al. 2001: 154). Besides, several studies rely on printed text without the manuscript (SADEK 2011: 113–119). Furthermore, HUNAYN, SULAIMAN, and SARKIS mentioned this Maymar in their books *Mayāmir* (DEMETRIUS 1999: 55–65; HUNAYN 1902: 39–55; SAMAÁN AL SURIANY 2006: 26–37; SARKIS 1936; SULAIMĀN 1916: 54–123) (Fig. 2-3).

2.2.4 Maymar ABBA KYRIACOS[67], Bishop of al-Bahnasa (ca. 7th century AD)

Two Maymar-Texts attributed to Bishop Kyriacos are read in Synaxarium on 7th Baramūdah titled *"coming of our Lady and her beloved son in Mount al-Qussia"*. Besides, the

[66] Patriarch Abba Simon I (689-701 AD) chose Zakharia (Zakaria-Zacharias) as Bishop of Sakha city, and he remained as a Bishop for thirty years and died between 723 - 730 AD (WADIA 2002: 87–104). The Orthodox Church celebrates his memento on 15th and 21st Amshīr/ February 15 each year.

[67] The life of Kyriacos is marred by some mystery, as GRAF put the life of Kyriacos in the first half of the sixth century AD (GRAF 1944: 475), but WADIA put it in the seventh century AD, where Kyriacos was contemporary to the seventh-century biography of St. Augustus (WADIA 2002: 87–100). Moreover, COQUIN suggests another

oldest manuscript is in Arabic preserved in the National Library of Paris (263 Paris/Arabic, Maymar 11) and dated to the 15th century AD. While the second is read in Synaxarium on 25th Bashans and titled *"Coming of our Lady and her beloved son in the holy monastery"* now known as 'Ebei Isous (Deir al-Garnous) ' (SADEK 2011: 121–126). Furthermore, the oldest manuscript from the Second Maymar is in Arabic and preserved in the library of Abu Sarjah Church in old Cairo (107/4 theology, (Cairo, Abo Sarjah, 107, fols. 123–139)) dated to the 15th century AD (GRAF 1944: 224–227).

2.2.5 Subsequent Editions of the Maymar-Texts

HUNAYN mentioned the texts of these manuscripts in his book *"Kitāb Mayāmir wa-'aǧā'ib as-saiyida al-Aḏrā 'Maryam:' alā ḥasab mā waḍa'ahū ābā 'al-kanīsa al-urṯūḏuksīya" urṯūḏuksīya, كتاب ميامر وعجائب العذرا* except Maymar Patriarch Timothy. He mentioned 13 places in Maymar Theophilus, 15 places in Maymar Zacharias, and only 3 places in Maymar Kyriacos (HUNAYN 1902: 39–95). While Sarkis indicated in his book *"al-La'āli' al-sanīyah fī al-mayāmir wa-al-'ajā'ib al-Maryamīyah اللآلئ السنية في الميامر والعجائب المريمية"* to 16 places in Maymar Theophilus, 18 places in Maymar Zacharias, and four places in Maymar Kyriacos[68]. Both did not mention the sources they relied on for compiling these texts[69] (Table 2-1).

On other hand, SCHENKE investigated manuscript no. (20912 VIII 354) (See Fig. 4) in the Köln Papyer collection dated between the fourth and fifth centuries AD, and written in Fayoum-Coptic Dialect. Moreover, this papyrus titled "*The holy family's coming into Egypt*" mentioned that the Holy Family spent three-year and 11 months during their escape[70] (Fig 2-4).

reading of the name Kyriacos, which is Heraclius, and he believes that the current name has been distorted from it (COQUIN 1991: 157–161).

[68] (SARKIS 1936: 54–123)
[69] (LYSTER et al., 2001: 148)
[70] (SCHENKE 1997: 183–200)

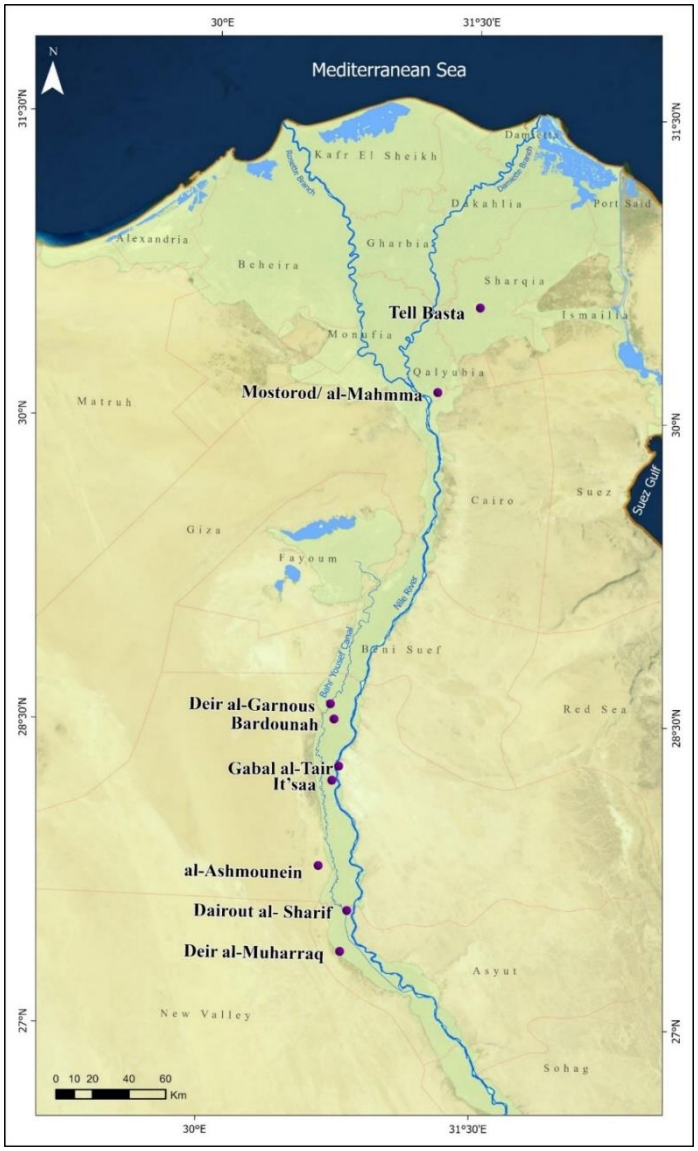

Fig.2-2: Map of the Holy Family stations based on Timothy Sermon

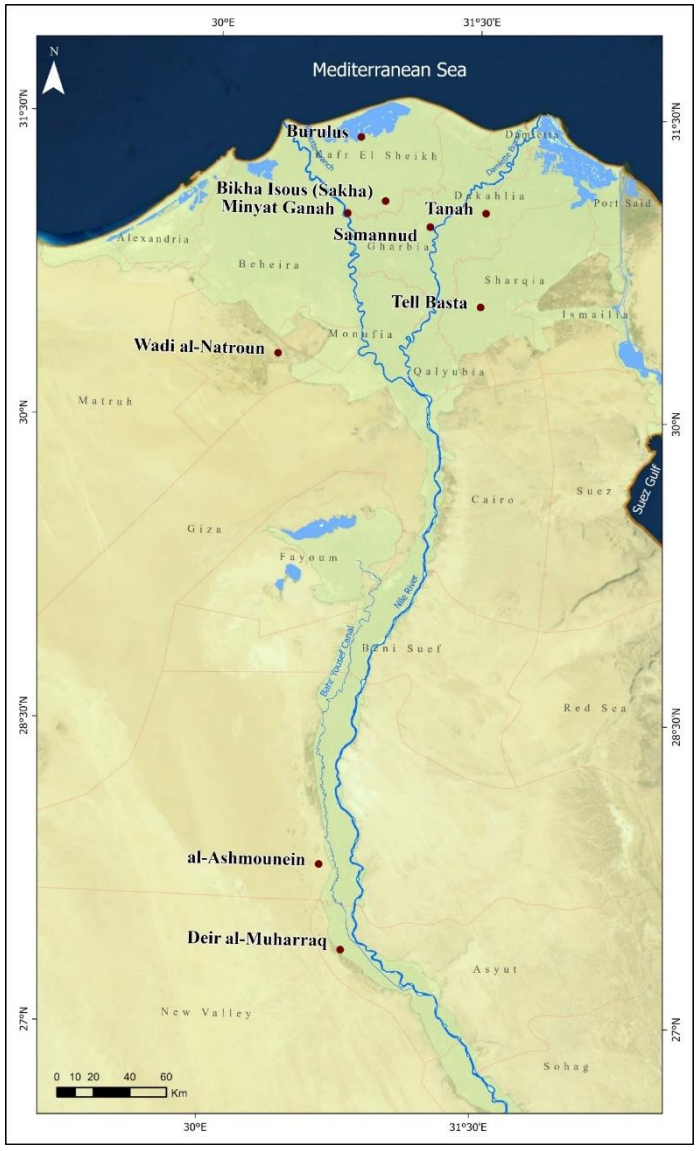

Fig.2-3: Map of the Holy Family stations based on Zacharias Maymar

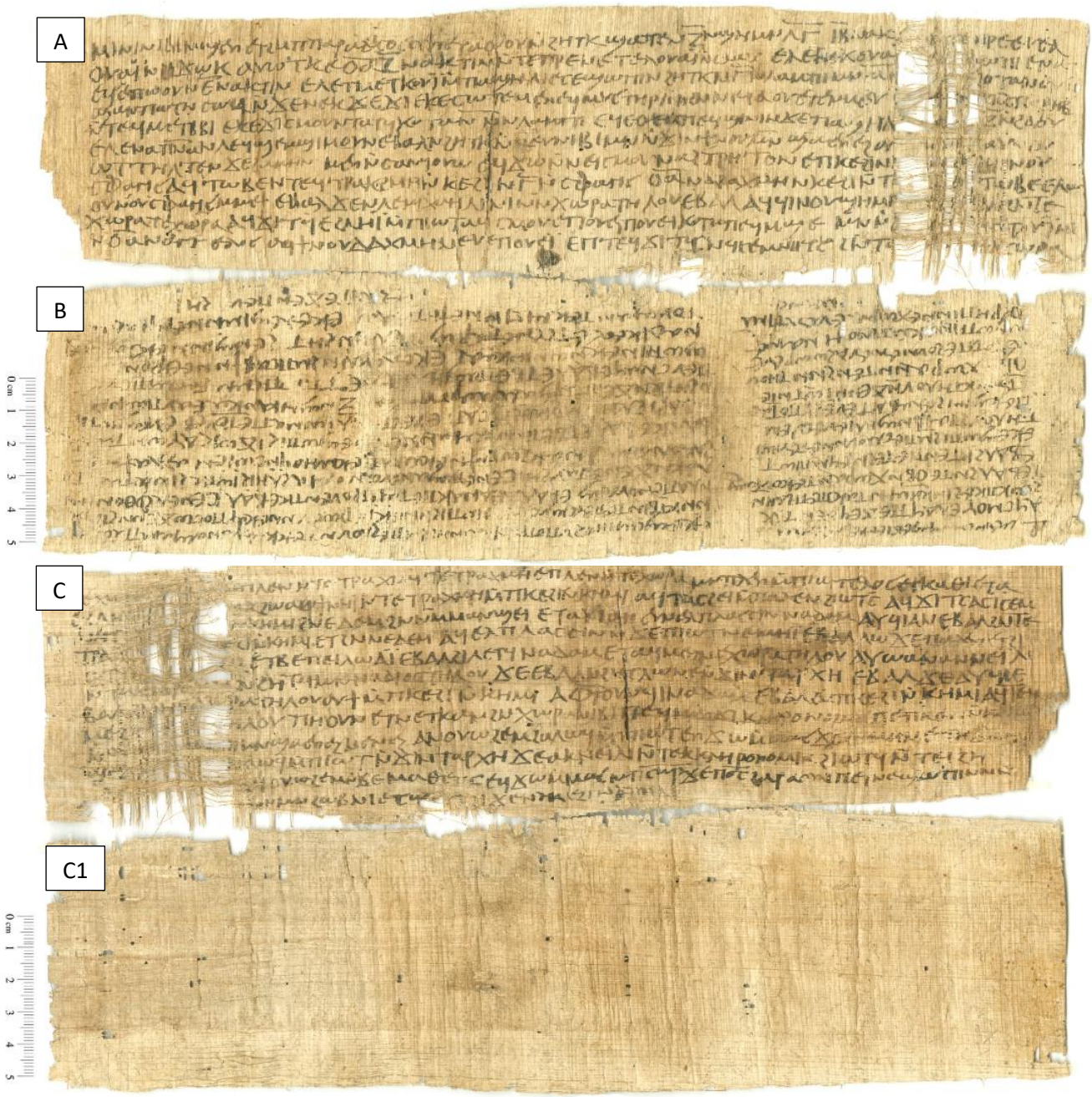

Fig.2-4: Egypt's special status over all other countries. Papyrus Köln 354/ Inv. Nr. 20912 A, B and C. Source[71]: (SCHENKE 1997).

[71] See: http://www.uni-koeln.de/phil-fak/ifa/NRWakademie/papyrologie/Karte/VIII_354.html

Table 2-1: The Places mentioned in the old Manuscripts and Visions by the Church's Saints

Nr.	References& Sources / Stations	Theo A L	Theo A S	Theo S S	Theo M[72]	Theo H	Theo K	Thimo A[73]	Zach CM	Zach H	Zach K	Cyri A	Cyri H	Cyri K
1	Phares													✠
2	Nazareth													✠
3	***East of the city***[74]	✠												
4	al-Farama										✠			
5	Tal Basta	✠	✠	✠	✠	✠	✠	✠	✠	✠	✠			
6	Mostorod / al-Mahmma				✠	✠	✠	✠		✠	✠			
7	Belbeis					✠	✠			✠	✠			
8	Minyat Tana								✠					
9	Minyat Ganah					✠	✠		✠	✠	✠			
10	Samannud					✠	✠		✠	✠	✠			
11	Burulus					✠	✠		✠	✠	✠			
12	al-Matla‘a					✠	✠		✠	✠	✠			
13	Belad al-Sebakh		✠			✠	✠			✠	✠			
14	Deir al-Magh’tas		✠						✠	✠	✠			
15	Bikha Isous (Sakha)								✠		✠			
16	***Shagrat al-Tin***								✠	✠	✠			
17	Wadi el-Natroun		✠			✠	✠		✠	✠	✠			
18	Ain Shams / al-Mataryia	✠	✠			✠	✠		✠	✠	✠			
19	Old Cairo		✠			✠	✠			✠	✠			
20	Abo Sarjah Ch.		✠				✠				✠			
21	Deir al-Garnous							✠					✠	✠
22	al-Bahnasa											✠	✠	✠
23	Bardounah							✠						
24	It‘saa							✠						
25	Gabal al-Tair		✠		✠			✠		✠	✠			
26	Ighous		✠											

[72] (GUIRGUIS 2010:92; LYSTER et al. 2001:154)

[73] (BOUD’HORS and BOTROS, 2001)

[74] The names of places written with ***bold-italic*** indicate unspecified general places.

27	al-Ashmounein	✠	✠	✠	✠	✠	✠	✠	✠	✠	✠		✠	
28	Dairout al-Sharif	✠						✠						
29	al-Qussia											✠		
30	Deir al-Muharraq/ Qusqam	✠	✠	✠	✠	✠	✠	✠	✠	✠	✠			✠
31	***A small village near Qusqam***		✠											
32	***A small village before Qusqam***		✠											

Abbreviations and symbols used in Table 2-1:

Theo. A L	Theophilus Arabic-long Text	**Zach. CM**	Zacharias / Coptic Museum
Theo. A S	Theophilus Arabic-Short Text	**Zach. H**	Zacharias / Hunayn
Theo. S S	Theophilus Syriac-Short Text	**Zach. K**	Zacharias / Sarkis
Theo. M.	Theophilus al-Muharraq Manuscript 1783	**Cyri. A**	Kyriacos Arabic Text
Theo. H	Theophilus / Hunayn	**Cyri. H**	Kyriacos / Hunayn
Theo. K	Theophilus / Sarkis	**Cyri. K**	Kyriacos / Sarkis
Thimo. A	Timothy Arabic Text		

2.3 Liturgical Church Books

The Orthodox Church uses some books in liturgical Prayers, which refer to the journey or related stories including:

2.3.1 Synaxarium

FORGET (1852-1933) published the book Synaxarinum Alexandrinum, compiled by MICHAEL, Bishop of Atrieb and Melig Cities, dated to the 13th century (FORGET 1905a). Furthermore, RENE BASSET (1855-1924) presented a translation of the Jacobite-Coptic Synaxarium manuscript compiled by Mikhail, Bishop of Atrieb city, and PETROUS AL-JAMIEL, Bishop of Melig, around the 13th and 14th centuries (BASSET 2003).

On the other hand, the two editions in the sixth of Hātūr mentioned only one place called "Qusqam/ Deir al-Muharraq" during Jesus Christ's meeting with his disciples, besides the first mass in the Church of Virgin Mary in Deir al-Muharraq at Qusqam[75]. While on the 24th of Bashans mentioned the Commemoration of the Advent of Christ into Egypt. As well, he mentioned nine places located in the Itinerary of the journey are Tal Basta, Minyat Samannud, Bikha Isous (Sakha), Gabal al-Natroun, al-Ashmounein, Deir al-Muharraq, Abu Sarjah Church, al-Mahmma, and al-Mataryia) (PO 1922 XVI:407-410). However, he mentioned on 25th Bashans the following Places: Tal Basta, al-Mataryia, Heliopolis, al-Bahnasa, Ebei Isous (Deir al-Garnous) (SADEK 2011: 279–307).

Moreover, on 8th Baʾūnah mentioned: *„The memorial of the consecration of the Church of the Virgin Mary"* in al-Mahmma city in 901 AD, which reads next to a source of surplus water since the Holy Family visited that four places: al-Mahmma, Old Cairo, Deir al-Muharraq and al-Mataryia (SADEK 2011: 148). Additionally, the statements in these editions are in line with what was approved by the Assembly Committee for the Rites and published by al-Sorian Monastery in 2012.

2.3.2 Al-Defnar[76]

Manuscript no. (*M575*)[77] in AL–HAMULI–MORGAN'S collection mentioned four paragraphs titled *"For the sake of our Savior's journey to Egypt"*. While in paragraph no. *(M575 f.64v)* mentioned the escape of the Holy Family from Palestine and the incident of idols falling due to their coming (MAKARI and AL-BARAMOUSI 2018: 10, 432–434).

Furthermore, al- Defnar al-Beheiri on the sixth of Hātūr refers to the apostles' meeting with the Savior on Mount of Qusqam and his sanctification. Besides, on the 24th of Bashans, mentioned that Jesus came to the land of Egypt with his mother Virgin Mary. While, the third indication is on the eighth of Baʾūnah, which mentioned the Holy Family coming to Mount of Qusqam (SADEK 2011: 149–153).

[75] (FORGET 1905:91–92; PO 1909:254-255)

[76] The readings mentioned in Al-Dafnar (Antifunarion in Greek) are in agreement with what was mentioned in Synaxarium, but the contents of the Al-Dafnar are ecclesiastical texts performed by the Chorus (Antifuna) (AGPAN 2017: 77).

[77] Copied between the ninth and tenth centuries AD and discovered in Fayoum in 1910 AD (MAKARI and AL-BARAMOUSI 2018: 10, 432–434).

2.3.3 Annual Psalmody[78]

Psalmody book contains a Psali, entitled *"Commemoration of the Feast of the Entry of Christ into the Land of Egypt" which* mentioned six places: Nimeshoti, Old Cairo, Ebei Isous, al-Bahnasa, al-Ashmounein, and Qusqam (LABIB 1908: 566–567; LYSTER et al. 2001: 155; o. A. 1975; Orthodox Coptic Diocese of Giza 2013: 742–753).

2.3.4 Biography of Saints

In the Biographies of ISSEY AND TAKLA, which reads on the eighth of Kiyāk, Abadir, and Irene, which reads on the 28th of ʾAmshīr. Also, the biography of Abba Shenouda (347-465 AD) which reads on the 7th of August, besides the biography of the martyr WADAMON AL-ARMANTI which reads on the 8th of Misrā mentioned only one place called al-Ashmounein and the coming of the Holy Family to it in Misrā (SADEK 2011: 157–162; YOUSEF 2002: 105–109) (Table 2-2).

Table 2-2: Places mentioned in Liturgical Church Books

Nr.	References & Sources / Stations	Alexandri. Synax. 1300 AD	Arabic Synax. 1922 AD	Ethiopian Synax. 1997 AD[79]	Psali Batos	Saints Biography	Al-Defnar al- Sai`di
1	Tal Basta	✠	✠	✠			
2	Mostorod/ al-Mahmma	✠	✠	✠			
3	Nimeshoti				✠		
4	Minyat Samannud	✠					
5	Samannud		✠	✠			
6	Bikha Isous (Sakha)	✠	✠	✠			
7	Wadi al-Natroun	✠	✠	✠			
8	Ain Shams/ al-Mataryia	✠	✠	✠			
9	Old Cairo	✠	✠	✠	✠		
10	Abo Sarjah Ch.	✠					
11	Deir al-Garnous (Ebei Isous)	✠		✠	✠		
12	al-Bahnasa	✠			✠		
13	al-Ashmounein	✠	✠	✠	✠	✠	
14	Deir al-Muharraq/ Qusqam	✠	✠	✠	✠		✠

2.4 Writings of Historians and Researchers

EUSEBIUS OF CAESAREA (263-339 AD) referred to the journey without giving any details about it; as well, he mentioned it while interpreting the prophecies of Isaiah (EUSEBIUS 1979:40–44; LYSTER et al. 2001:136). Furthermore, EGERIE PELERINE (384 AD) referred to Memphis City (Meit Rahina) and nearby as a place where the Holy Family lived (SADEK 2011:

[78] The word Psalmody derived from the Greek word ψαλμός (Psalmous). In addition, it is a liturgical book of daily praise means a Psalm or Anthem.
[79] (BUDGE 1928)

287). Additionally, Hermopolis City (al-Shikh Abada), where there is a temple of idols that fell during the holy family's arrival, is mentioned in Historia Monachorum in Aegypto, which chronicles the visit of seven monks who came from Palestine to Egypt around 394 AD (PAUL AL-BARAMOUSI 95 :؟؟؟؟). While SOZOMEN (400 – 450 AD) mentioned Hermopolis Magna city (al-Ashmounein) as the Holy Family passed through, thus Persis trees fell and prostrate to the ground (LYSTER et al. 2001: 141; SADEK 2011: 173–174; SOZMEN 8–11).

Around 570 AD, a group of Pilgrims of pleasure from the northern Italian city of Plaisance visited Egypt and they mentioned the city of Memphis (Meit Rahina), where a church was built on the site of a temple to commemorate the holy family's coming to Egypt (SADEK 2011: 287). Besides, BERNARD THE MONK ca. 867 AD mentioned that the city of al-Farama has a church, and next to it is the cave to which the Holy Family fled (REYNOLDS 2019: 263). Additionally, IBN-BATRIQ (940 -877 AD) and ABU AL-FARAJ AL-HEBREW (1226-1286 AD) mentioned that the holy family's escaped to Egypt and returned to Nazareth without giving details about the road of the journey. However, they referred to the age of Jesus, the visit of the Magi to him, and the story of the killing of the children of Bethlehem- The massacre of innocent children- by Herod (ABOU AL-FARAG 1994: 109–111; IBN BATRIQ 1905: 90–91). Besides, AL-TABARI (923 AD) and IBN AL-ATHEER (1252 AD) agree with them on the return of the Holy Family to Nazareth, furthermore, AL-TABARI added that they stayed in Egypt for 12 years. (AL-TABARI 1963: 595–606; IBN AL-ATHIR 1987: 240).

ABU AL-MAKAREM (1209 AD) mentioned approximately 19 Places where the Holy Family lived in Egypt with some related narratives without mentioning any geographical features related to it. These places are Tal Basta, al-Mahmma, Minyat Tana, Samosa, Minyat al-Surd, Mostorod/ al-Mahmma, Ain Shams / al-Mataryia, Harat el-Roum (Old Cairo), al-Ma'adi, Ebei Isous (Deir al-Garnous), Gabal al-Tair, Tah'a al-Madinah, Minyat Boufis (Minya), al-Ashmounein and Deir al-Muharraq (SAMUEL AL-SURIYANI 1999a: 24–121; SAMUEL AL-SURIYANI 1999b: 9–76). Besides, the historian MICHAEL AL-SURIYANI (ca. 12th century), mentioned the holy family's escape from Bethlehem to Egypt and their return to Nazareth, as well, he mentioned the date of Jesus' birth, his age, and the visit of the Magi (MICHAEL AL-SURIYANI 1996: 100).

On other hand, YAKUT AL-HAMAWI (ca. 1225 AD) noted that the Holy Family remained in The City of Ihnasia al-Madinah until Christ grew up, then they stayed in The City of al-Bahnasa for seven years (AL-HAMAWI 1977a: 284–517). Furthermore, he mentioned that they

lived in the Monastery of the Virgin Mary in Mount Ansana (al-Shikh Abada) (AL-HAMAWI 1977b: 500). As well, the Holy Family stayed in Deir al-Muharraq in Gabal Qusqam (AL-HAMAWI 1977b: 500–533). Moreover, he referred to the city of al-Mataryia and the holy family's use of the holy well and mentioned the balsam plant that grew next to it (AL-HAMAWI 1977c: 149). Similarly, AL-QAZWINI (ca. 1283 AD) mentioned the holy family's coming to al-Mataryia and the growth of the balsam plant (AL-QAZWINI 1894: 19).

In addition, AL-MAQRĪZĪ (1442 AD) listed the places where the Holy Family visited, dividing them into two journeys. As for the first journey, he mentioned that they left Beit al-Maqdis (Bethlehem), and then arrived in the first city of Egypt on the 24th of Bashans. Then they moved to the city of Samannud then they crossed the Nile River to the city of Gharbia. At that time, they continued the march to the city of al-Ashmounein, and when they left it they settled in a village called Phyllis (Dairout al-Sharif), then they went from Phyllis to Deir al-Muharraq and after six months and days, the journey back to Jerusalem began. As for the return, the journey began from Deir al-Muharraq to Meir and then headed north until it reached Qasr al-Shama' in Old Cairo. Subsequently, they stayed in the grotto of the Church of Abu Sarjah in old Cairo, and then they left for the city of Ain Shams, where they rested next to a water well, which grew next to it the Plants of Balsan (AL-MAQRĪZĪ 1999a: 230–231; 1999a: 641–643; 1999b: 811).

Furthermore, he mentioned some places related to the Holy Family without mentioning them explicitly in the itinerary. where he mentioned the village of Arjnous (Deir al-Garnous) and the sacred well in it, which celebrates annually on the 25th of Bashans (AL-MAQRĪZĪ 1999a: 570). Moreover, he mentioned that the Holy Family resided in al-Bahnasa during her flight to Egypt (AL-MAQRĪZĪ 1999a: 660). As well he noted that the journey back from Meir to Jerusalem and that they had returned to the village of Nazareth in Galilee, so Christians called ' Nazarenes' (AL-MAQRĪZĪ 1999b: 741–742).

In the year 1664 AD, MICHELE VANSLEBIO visited Egypt for the second time and wrote a report on Egypt's Physical Geography, especially the Nile flood, its political conditions, and details about Copts' life, beliefs, and way of life. Although he mentioned about 66 monasteries and 94 Orthodox churches. He did not refer explicitly to the journey of the Holy Family except in only eight places, namely Mostorod, al-Mataryia, Old Cairo, Abo Sarjah Ch., al-Ma'adi, Deir al-Garnous, Bouq, and Deir al-Muharraq/ Qusqam but he did not mention also any geographical features of these places. Furthermore, he mentioned three Coptic celebrations related to the

Holy Family, the first on the 24th of Bashans as a commemoration of the entry of the Virgin Mary into Egypt. Then the second celebration on the 25th of Bashans, which is a Commemoration that Jesus Christ, planted the dry stick of Joseph the Carpenter in Bouq, and then it bloomed. While the third celebration on the eighth of Baʾūnah is a commemoration of the explosion of spring to quench their thirst during the escape(VANSLEBIO 2006: 22, 136–161).

On other hand, AMÉLINEAU in 1893 AD mentioned in his book "*La géographie de l'Egypte à l'époque copte*" 12 places within the itinerary called Nasbirtah, Tal Basta, Mostorod/ al-Mahmma, Minyat Samannud, Samannud, Gharbia, Bikha Isous (Sakha), Wadi al-Natroun, Ain Shams/ al-Mataryia, Babylon al-Daraj, al-Ashmounein and Deir al-Muharraq/ Qusqam (AMÉLINEAU 2013; AMÉLINEAU 1893). Moreover, E. L. BUTCHER 1900 AD referred to the itinerary stations which are al-Qantara, Ain Shams, Babylon al-Daraj, al-Mataryia, and The Church of Abu Sarjah, which was located directly on the Nile at that time (BUTCHER 1975; BUTCHER 1900: 15–22). While FEKRI referred to al-Bahnasa where the Holy Family lived there. (FEKRI 1918: 128).

Uniquely, BASILI indicated that the Holy Family took an internal land road from Bethlehem until it reached al-Farama. Therefore, he indicated that the Holy Family traveled from Bethlehem to Hebron, then Beersheba, and from there it headed south to Birin and from there towards the southwest until Awja al-Ghafir. Immediately after that to al-Farama, as the first city in the Egyptian territories, without mentioning any stations in the middle between it and Awja al-Ghafir. BASILE also mentioned a lot that a divine force - Angels - accompanied the Holy Family in many of the events they faced (BASILI 1953a).

Additionally, OTTO MEINARDUS explained in some detail about the Holy Family's Journey where they lived and crossed about 30 Places from Palestine to Egypt. These places are Bethlehem, Ashkelon, Hebron, Gaza, Khan Yunis, Rafah, al-Arish, al-Farama, al-Mahmma, and Bubasta (Tal Basta) then Belbeis, Samannud, Sakha, Wadi al-Natroun, Ain Shams/ al-Mataryia, and Old Cairo. Then al-Ma'adi, Herakliopolis (Ihnasia al-Madinah), Ishnein al-Nasarah, Ebei Isous (Deir al-Garnous)-Written Fault as ***Deir al-Ganus***, al-Bahnasa, Gabal al-Tair (Gabal al-Kaf), Antinopolis (Ansana/ al-Shikh Abada), Hermopolis Magna (al-Ashmounein), Dairout al-Sharif, Sanabo, al-Qussia, Meir and Qusqam Deir al-Muharraq. As well, he mentioned only six places on the return journey called Dronkah, Abu Sarjah Church, and then they went to Mostorod/ al-Mahmma, Tal al-Yahodia (Lintopolis), then Nazareth in

Palestine. Furthermore, he referred to many narratives and stories that occurred in these places (MEINARDUS 2019: 26–40; 2002: 13–28; 1977: 601–649).

Furthermore, in 1992, al-Muharraq Monastery in Mount Qusqam issued a book entitled "*Ritual of the Celebration of the Consecration of the Church at Qusqam*" that mentioned 27 places: Pelusium al-Farama, Tal Basta, Mostorod/ al-Mahmma, Belbeis, Minyat Ganah, Minyat Samannud, Samannud, Burulus, al-Matla'a, Deir al-Magh'tas, Bikha Isous (Sakha), Wadi al-Natroun, Ain Shams/ al-Mataryia, Old Cairo/ al-Fustat, Babylon al-Daraj, Abo Sarjah Ch., and al-Ma'adi. Then Meit Rahina/ Manf, Deir al-Garnous, al-Bahnasa, Gabal al-Tair, al-Ashmounein, Dairout al-Sharif, al-Qussia, Meir, Deir al-Muharraq/ Qusqam, and Dronkah (AL-MUHARRAQ MONASTERY 1995; GREGORIUS 1992: 39–92). According to recent archaeological discoveries, Tal al-Makhzan station has been added to the road between al-Mahamdiyah and al-Farama (ABD AL-MALIK 1997: 66).

As for DEMETRIUS, Bishop of Mallawi and Girgis referred to the holy family's arrival in Kum Maria[80] and Deir Abo Hynis in Mallawi, although there is no indication of these places in ancient sources. GIRGIS also mentioned these stations: Rafah, al-Shikh Zowaied, al-Arish, al-Filusyiat, al-Qals, al-Mahamdiyah, al-Farama, Tel Basta, al-Mahmma, Belbeis, Daqadous, Samannud, Sakha, Wadi al-Natroun, Ain Shams and al-Mataryia, Haret Zwila, Babylon, Old Cairo, al-Ma'adi, Deir al-Garnous or al-Bahnasa, Gabal al-Tair, al-Ashmounein, Dairout Umm Nakhleh, Deir Abu Hynis, Kum Maria, Dairout al-Sharif, al-Qussia Meir and Deir Al-Muharraq. In contrast to what GIRGIS mentioned, DEMETRIUS added some other stations, which are: Bethlehem, Phares, Beersheba, Awja al-Ghafir, Minyat Ganah, al-Qantara, al-Shikh Abada, Beer al-Sahaba, al-Rawdah, al-Zeitoun, Nazareth (DEMETRIUS 1999: 108; GIRGIS 2018: 55–72). Moreover, DEMETRIUS presented an Arabic translation to the investigation of papyrus no. (20912 VIII 354) in the Köln Papyer collection published by SCHENKE in 1997 AD, where this papyrus contains some texts, some of which indicate that the Holy Family had come to Egypt in Bashans, others indicate that they stayed there for three years and eleven months. (DEMETRIUS 2007: 27–63; SCHENKE 1997: 183–200).

PHILLIPS pointed out that the Armenian tradition indicates that the Holy Family followed the ancient military road from al-Qantara through Phaqous to Belbeis (PHILLIPS 1999: 56). He also mentioned 39 stations as follows: Bethlehem, Ashkelon, Hebron, Gaza, Khan Yunis,

[80] Kum Maria: Maria Hill

Rafah, al-Arish, Ostrakini, al-Farama, al-Qasasein, al-Tal al-Kabeer, Belbeis, Samannud, Sakha, Wadi al-Natroun, Tel al-Yahodia, Ain Shams/ al- Mataryia al-Mahmma/ Mostorod, al-Zeitoun, Haret Zwila, Babylon Al-Daraj, Abu Sarjah Ch., al-Ma'adi, Ihnasia al-Madinah, Ishnein al-Nasarah, Deir al-Garnous, al-Bahnasa, al-Qiss, Gabal al-Tair, al-Ashmounein, Dairout Um Nakhla, Deir Abo Hynis, Beer al-Sahaba, Ansena, Kum Maria, Dairout al-Sharif, Sanabo, al-Qussia, Meir and Qusqam (PHILLIPS 1999).

Furthermore, LYSTER et al. provided a more detailed explanation about 47 locations in the itinerary. In addition to about 17 sites on the return. Among these sites, about 27 sites were mentioned according to the oral tradition, which was never mentioned in ancient written sources. (LYSTER et al. 2001: 34–128). On the other hand, 2016 AD NUNS OF THE CONVENT OF ST. GEORGE in Old Cairo and AGPAN 2017 AD indicated that the number of places in the itinerary is 38 stations (AGPAN 2017: 162; NUNS OF THE CONVENT OF ST. GEORGE 2016). Nuns of the Convent of St. George also referred to the Belqas station, where the monastery of St. Demiana is located, but this station has not been documented in historical sources (AMÉLINEAU 1893; MEINARDUS 1977; NUNS OF THE CONVENT OF ST. GEORGE 2016: 66–67).

While according to SADEK 2017 AD, there are 44 places within the itinerary (Table 3), in addition to five places called: Deir abo-Sayfain/ Tammoh, Deir al-Muharraqah, Deir al-Meimoun, Deir Abba Hour/ Sawada, and Beni Hassan according to an oral tradition (SADEK 2017). Moreover, GEORGI, MATTAOS, and the MONKS OF ST. MINA MONASTERY agreed with him on the same content (GEORGY 2017: 55–72; MATTAOS 2018; MONKS OF ST. MINA MONASTERY 2018).

In addition, FAWZI 2019 listed 28 places from Palestine to Egypt. Five Places located in Palestine are Bethlehem, Phares, Galilee, Beer Sheba, and Khan Yunis. As well, 23 places located in Egypt called Rafah, al-Arish, al-Farama, Tal Basta, Mostorod, Belbeis, Minyat Samannud, Sakha, Wadi al-Natroun, al-Mataryia, and Ain Shams, al-Zeitoun, Haret Zwila[81], Old Cairo (Abu Sarjah Church), al-Ma'adi, Ishnein al-Nasarah, Deir al-Garnous, al-Bahnasa, Gabal al-Tair, al-Ashmounein, Ansana (al-Shikh Abada), Dairout al-Sharif, Sanabo, al-Qussia, Meir and Mount Qusqam. While in one return journey he mentioned only six places: Dronkah, Old Cairo, al-Mataryia, al-Mahmma, Sinai, and Palestine (FAWZI 2019: 138–150). However, he did not refer to the sources on which he relied (Table 2-3).

[81] Haret Zwila: Zwila Alley

Table 2-3: The Places mentioned in the Writings of some Historians

Nr.	References& Years / Stations	EP 384	HM 394	SO 450	PP 570	HA 1147	MK 1209	MQ 1227	YH 1228	TM 1442	MV 1664	AM 1893	AB 1900	GH 1922	WB 1953	AA 1959	OM 1971	BG 1992	SS 1997	NG 2016	AS 2017
1	Nathereth									✠											✠
2	Jerusalem									✠											✠
3	Bethlehem														✠		✠				✠
4	Hebron														✠		✠				✠
5	Beersheba														✠						
6	Birin														✠						
7	Awja al-Ghafir														✠						
8	Ashkelon																✠				
9	Gaza																✠				
10	Khan Yunis																✠				
11	Rafah																✠		✠	✠	✠
12	al-Shikh Zowaied																		✠	✠	
13	al-Arish																✠		✠	✠	✠
14	al-Filusyiat (al-Zaraniq)																		✠	✠	✠
15	al-Qals																		✠	✠	
16	al-Mahamdiyah																		✠	✠	
17	Tal al-Makhzan																		✠		
18	Pelusium al-Farama														✠		✠	✠	✠	✠	✠
19	al-Qantara												✠	✠							
20	Tanis																				✠
21	Nasbirtah											✠									
22	Tal Basta						✠			✠		✠		✠	✠	✠	✠	✠		✠	✠
23	Mostorod/ al-Mahmma						✠				✠	✠		✠			✠	✠		✠	✠
24	Belbeis													✠			✠	✠		✠	✠
25	Minyat Tana						✠														
26	Minyat Ganah													✠	✠	✠		✠			✠

Nr.	References& Years / Stations	EP	HM	SO	PP	HA	MK	MQ	YH	TM	MV	AM	AB	GH	WB	AA	OM	BG	SS	NG	AS
		384	394	450	570	1147	1209	1227	1228	1442	1664	1893	1900	1922	1953	1959	1971	1992	1997	2016	2017
27	Minyat Samannud											✠						✠		✠	✠
28	Samannud									✠		✠		✠	✠		✠	✠		✠	✠
29	Gharbia									✠		✠									
30	Daqadous																			✠	✠
31	Burulus													✠				✠		✠	✠
32	al-Matla‘a													✠				✠			
33	Belad al-Sebakh													✠	✠						
34	Deir al-Magh’tas													✠	✠			✠			
35	Bikha Isous (Sakha)											✠				✠	✠	✠		✠	✠
36	Samnosa						✠									✠					
37	Minyat al-Surd/ al-Sirji						✠														
38	Wadi al-Natroun											✠		✠	✠		✠	✠		✠	✠
39	Ain Shams/ al-Mataryia					✠	✠	✠	✠	✠	✠	✠	✠	✠	✠		✠	✠		✠	✠
40	al-Zeitoun																			✠	✠
41	Old Cairo										✠			✠		✠	✠	✠		✠	
42	Haret al-Roum						✠														
43	Haret Zwila																			✠	✠
44	al-Ezbawyia/ Klout Be’K																			✠	✠
45	Babylon al-Daraj											✠	✠		✠			✠		✠	✠
46	al-Moa’laka Ch. **Hanging Church**																				✠
47	Qasr al-Shama’									✠											
48	Abo Sarjah Ch.									✠	✠		✠		✠		✠	✠		✠	✠
49	al-Ma’adi						✠				✠				✠		✠	✠		✠	✠
50	al-Lahoun					✠															
51	Meit Rahina/ Manf	✠			✠													✠		✠	
52	Ihnasia al-Madinah								✠								✠				

Nr.	References& Years / Stations	EP 384	HM 394	SO 450	PP 570	HA 1147	MK 1209	MQ 1227	YH 1228	TM 1442	MV 1664	AM 1893	AB 1900	GH 1922	WB 1953	AA 1959	OM 1971	BG 1992	SS 1997	NG 2016	AS 2017
53	Ishnein al-Nasarah																✠				✠
54	Deir al-Garnous						✠			✠	✠			✠		✠	✠	✠		✠	✠
55	al-Bahnasa					✠			✠	✠				✠	✠		✠	✠		✠	✠
56	al-Qiss														✠						✠
57	Gabal al-Tair					✠	✠							✠		✠	✠	✠		✠	✠
58	Taha'a al-A'meda						✠														
59	Minyat Boufis/ Minia						✠														
60	Beer al-Sahaba																			✠	✠
61	al-Shikh Abada/ Ansena		✠	✠					✠								✠			✠	✠
62	al-Ashmounein			✠			✠			✠		✠			✠	✠	✠	✠		✠	✠
63	Dairout Um Nakhla																			✠	✠
64	Deir Abo Hynis																			✠	✠
65	Kum Maria																			✠	✠
66	Dairout al-Sharif						✠			✠						✠	✠	✠		✠	✠
67	Sanabo						✠										✠				
68	al-Qussia														✠		✠	✠		✠	✠
69	al-Saraqna																				✠
70	Meir						✠			✠								✠		✠	✠
71	Bouq										✠										✠
72	Deir al-Muharraq/ Qusqam						✠		✠	✠	✠	✠			✠	✠	✠	✠		✠	✠
73	Dronkah																✠	✠			✠

Abbreviations and Notations used in Table 2-3:

EP	Egerie Pelerine	**YH**	Yaqout Al-Hamawi	**AA**	Aziz S. Atiya
HM	Historia Monachorum in Aegypto	**TM**	Taqī al-Dīn Al-Maqrizi	**OM**	Otto Meinardus
SO	Sozomen	**MV**	Michele Vanslebio	**BG**	Bishop Gregory
PP	The Pilgrim of pleasure	**AM**	Amélineau	**SS**	Sami S. Abd El Malek
HA	Al-Harawi	**AB**	A. L. Butcher	**NG**	Nuns of the Convent of St. George
Mk	Abu Al-Makarim	**GH**	Girgis Hunayn	**AS**	Ashraf and Bernadette Sadek
MQ	Muhammad Al-Qazwini	**WB**	William Basili		

2.5 The writings of Apocrypha[82]

Although the number of Apocrypha writings exceeded sixty (AL-TARAZI 2001: 45), only those writings that directly referred to the Holy Family's journey will be mentioned, especially the names of the geographical places located in the itinerary.

2.5.1 The Gospel of Thomas

HELMUT KOESTER points out that the Gospel of Thomas is dated to the end of the first century AD and its content is closer to the four legal gospels. While the earliest quote from this work belongs to St. Irinaos around 180 AD. Moreover, PAUL PEETERS translated this Gospel to French, entitled *'The Childhood of Christ'*, which contains some details about the Journey, where mentioned that the first city they came down to was Ashkelon, where they stayed for six months then they went to Tanis and stayed for another six months. As well, moved to an area with a palace and a large fort built by Alexander, where they have resided there for four months, it believes to be the city of Manf (Meit Rahina). Then they traveled to the south, where a city with high walls, with huge statues, in addition to its three doors, which have varied statues and sculptures on both sides and they stayed there for a whole year. This city is believed to be al-Ashmounein (ABD AL-SHADID, 2002: 110; PEETERS, 1914: 5-55).

2.5.2 The Gospel of the Arab Childhood: The Life of Jesus in Arabic[83]

This gospel mentioned the journey to Egypt in the form of detailed narrative stories that took place in 14 places (PEETERS 1914: 69). However, it did not explicitly mention the names of the places where these novels occurred, except for only three places, and they are two Egyptian cities: The first is al-Mataryia and the explosion of the water fountains and the Mary tree. While the second city is called Memphis (Meit Rahina) to meet the pharaoh. In addition, the third city is Nazareth in Palestine during the return (AL-TARAZI 2001: 118–125).

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[82] Apocrypha is a Greek word ἀπόκρυφοα which mean "muffled and hidden", and this word launched in 1546 AD about writings that the Church did not recognize either its authenticity or its legality and did not use it in its prayers (QAZI and KHALIFA 2004: 14). In addition, these writings mean that their authors have attributed them to well-known figures such as the Apostles of Christ or missionaries to give them credibility. Nevertheless, these books are used by many researchers, because they are historical books in their own right, and contain many and accurate details of the time in which they were written in particular. Moreover, the date of these writings is older than the approved manuscripts that refer to the journey of the Holy Family. Therefore, the rejected lived alongside the accepted as together forming part of heritage and history (AGPAN 2017: 81; QAZI and KHALIFA 2004: 13).

[83] The Gospel of the Arab Childhood is originally written in Syriac, dating between the 5th and 6th centuries AD and this is uncertain (QAZI and KHALIFA 2004: 49–63; VALENSI 2007: 29). Furthermore, Paul Peeters introduced the Arabic translation of this Gospel in 1914 AD (PEETERS 1914: 69).

2.5.3 The Infancy Gospel of Mathew

Matthew`s Pseudo Gospel differs from the Gospel of Mathew which is arranged at the beginning of the New Testament. Although it dated to the end of the sixth century and the beginning of the seventh century AD, the oldest evidence for the text wrote in Latin and dates to the ninth century AD (VALENSI 2007: 20). Moreover, the author presented the journey in the form of separate events that occurred while walking and moving from one path to another without specifying accurate locations. Otherwise, he mentioned the name of two Egyptian cities, the first called Sutin Hermopolis, where a temple of the god Jupiter called Capitol to offer sacrifices to 365 idols, and these idols fell because the Holy Family entered it, while The second city is Nazareth in Palestine While returning (AL-T`RZI 2001:100-102; QAZI & KHALIFA 2004:99–103).

2.5.4 The Gospel of the Boyhood

It is the manuscript no. (485/History) preserved in the Coptic Museum, which did not mention specific places during the journey, while the author focused on al-Ashmounein, and listed many of the events that occurred on it. Besides, it is complemented by manuscript no. (6417/ History), that mentioned the journey to Palestine starting from al-Ashmounein to al-Ma'adi then to Nazareth in Galilee – Palestine (ABD AL-SHADID 2002: 114; SIMIKA 1929: 50) (Table 2-4).

Table2-4: Places mentioned in the writings of Apocrypha

Nr.	References & Sources / Stations	Gospel of Thomas	Gospel of the Childhood	Infancy Gospel of Mathew	The Gospel of the Boyhood
1	Nathereth		✠	✠	✠
2	Ashkelon	✠			
3	Tanis	✠			
4	Ain Shams/ al-Mataryia		✠		
5	al-Ma'adi				✠
6	Meit Rahina/ Manf	✠	✠		
7	al-Ashmounein			✠	✠

2.6 The Holy Quran and the historians of Islam

Although the journey of escape to Egypt was not mentioned in the Qur'an in a clear sense, which was written between the 7th and 8th centuries AD, there are two chapters/ Surah (3 and 19) that talk about the Virgin Mary and the birth of Jesus. The first Surah No. 3 named "Surah a'l-Omran" mainly revolves around the birth of Mary, and the birth of Jesus. As for the second

Surah No. 19 named "Surah Mariam", the Virgin Mary is the main character in it and revolves around Mary's consecration, then the Annunciation of Birth, and finally the affirmation of her virginity (VALENSI 2007: 51).

Additionally, WAHAB IBN MOUNABH, (728 AD), the Islamic historian, in various passages of his writings, referred to the flight to escape to Egypt, where he mentioned that the Holy Family took refuge in the poor in the city of al-Bahnasa (MEINARDUS 1977: 23). As well, several historians relied on the writings of Wahab and they are AL-FARISI (902 AD), AL-TABARI (923 AD), AL-THA'ALABI (ca. the tenth century), AL-KISAE (ca. the twelfth century), and IBN KATHIR (ca. the fourteenth century), without mentioning any specific locations of these events and the stories they mentioned (VALENSI 2007: 57–75) (Fig. 2-5).

Fig. 2-5: Map of all Places located in the Holy Family's itinerary mentioned in the sources and references; Map (a) was designed using Arc GIS Pro 2.9.1 software based on the Egyptian Central Agency for Public Mobilization and Statistics data, while the map (b) was designed using Open Street Map (and) contributors, CC-BY-SA data.

2.7 Results

The ancient sources and references dealt with the Holy Family's journey from a purely historical point of view, without mentioning the geographical features of the aforementioned places, which are located in the Geo-Cartographic Itinerary of the journey.

The study exposed, depending on the availability of sources, starting from the fourth century AD until the end of the second decade of the twenty-first century, that the number of stations located in the itinerary is about **83 places**, **nine places** are located in Palestine, **62 stations** are located in Egypt, and **12 places** are unknown. The study did not consider the places indicated by oral tradition and undocumented.

During the past two thousand years, the number of places mentioned in the itinerary has increased from only three places mentioned in the oldest manuscript dating back to the fourth century AD (MINGANA, 1931) to more than 45 places mentioned in the most recent references at the end of the second decade of this century (SADEK 2017). In addition, some other recent references referred to more than 27 stations that were not mentioned at all in the old sources and references (LYSTER et al. 2001) (Fig. 2-6).

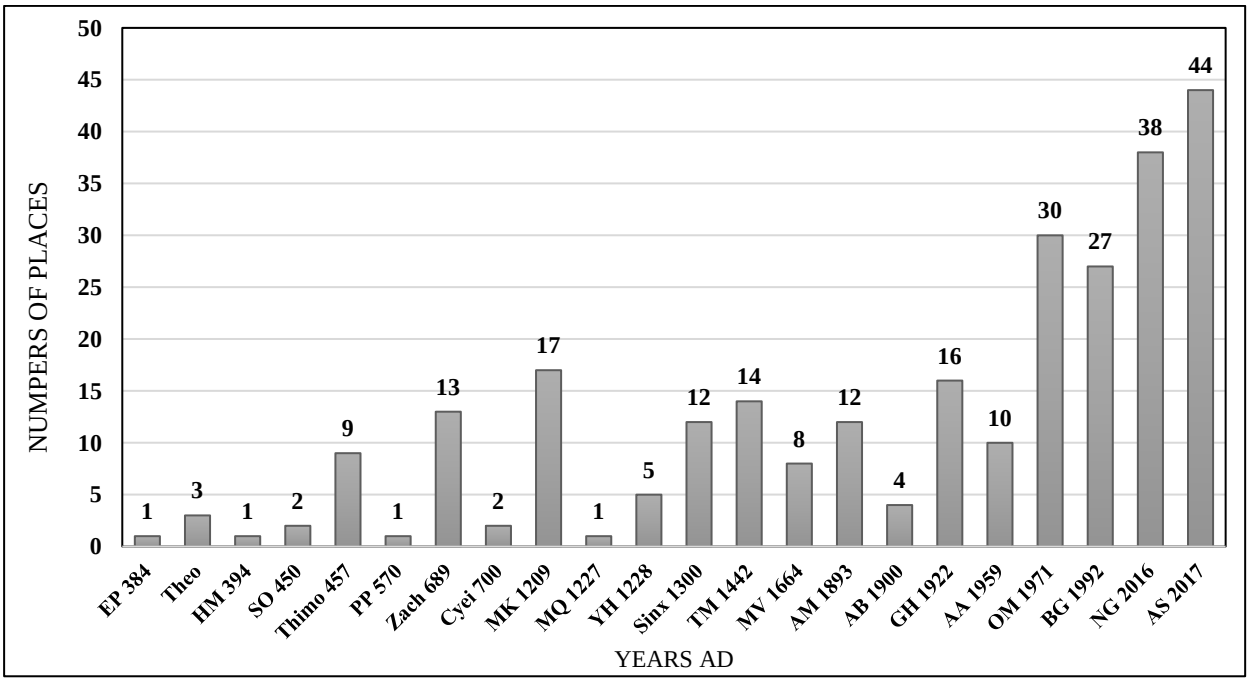

Fig. 2-6: The fluctuation of the number of HF stations mentioned in the writings of historians over the past two thousand years.

On the other hand, Historians rarely refer to the geographical features of these places located within the itinerary. Whereas some expressions referring to geographical features were mentioned automatically randomly, and inaccurately, including "that the Holy Family crossed

the Nile branch from the eastern side to the western side, and vice versa," without specifying any of the Nile branches that the Holy Family crossed at the time. Although the Nile had 7 estuaries and branches at that time (PENNINGTON et al. 2017: 212–231).

While these expressions may be acceptable to some extent when they are mentioned in the part of the Nile River located south of the city of Giza, as the Nile River is only one branch and not many branches from Aswan to this region. However, a few of them mentioned some geographical features such as the Holy Family crossing the Sybennytic branch to the city of Gharbia in the Nile Delta, or crossing the Mendesian branch from the east to the west, or that they crossed the Damietta branch, all of which are short, non-specialized terms (DEMETRIUS 2007: 16–17; GEORGY 2017: 38–39; GIRGIS 2018: 55–63; GREGORIUS 1992: 39–92; PHILLIPS 1999: 62–65).

It is also evident that there are differences in the writing and spelling of the names of the mentioned geographical places from one source to another, also from the oldest to the latest (PHILLIPS 1999: 5). Whereas, some sources mentioned the city of San Al-Hajar صان الحجر within the flight path, which is located in al-Sharqiyah Governorate, and its coordinates are 30°58′37′′ N, 31°52′45′′E. While others mentioned that the city of Sa Al-Hajar صا الحجر, which is located in al-Gharbia Governorate, its current coordinates are 30°58′ N, 30°46′ E, and it is located within the flight path. So, the question remains, which of them locates in the Geo-cartographic Itinerary of the journey (Fig. 2-7). On the other hand, perhaps the two Places are already within the Itinerary, and this requires spatial verification. It is also sometimes confused between the name of the station of al-Mahama, which is Mostorod, and the name of al-Mahsama, which located near al-Qasasein/ al-Tal al-Kebir in Ismailia Governorate (MEINARDUS 1977:601-649).

Fig. 2-7: The current location of San al-Hajar and Sa al-Hajar.

Additionally, some sources indicate that Deir al-Garnous is Ebei Isous[84], while some refer to the ancient city of al-Bahnasa as Ebei Isous (GIRGIS 2018: 67). Besides, there is no consensus on the names and numbers of places mentioned in the maps of the itinerary, which are produced by approved institutions such as the production of the Egyptian Ministry of Tourism and Antiquities, which approved only eight places to develop in the first phase of the development plan. As well as the Coptic Orthodox Patriarchate map in Egypt.

Furthermore, the disappearance of some geographical places from their real geographical locations, including, for example, the city of Burulus in the far north of the delta. Whereas this is due to many political and geographical factors such as the decline of the Nile flood and the disappearance of 5 branches from its seven estuaries at this time, in addition to Climate change and the rise in the level of the Mediterranean Sea. Which led to the sinking of many cities in the far north of the Egyptian Nile Delta (AMÉLINEAU 1893). This in turn led to an inaccurate prediction to determine some real locations of the mentioned places within the road, but it disappeared (Table 2-5).

[84] It means the house of Jesus, and it is one of the monasteries established by Abba Pachomius (NESSIM 1996: 101–102)

What drives the necessity of spatial and cartographic verification of places that locates within the Itinerary of the journey, because of many questions that arise themselves, and need accurate answers? For instance:

- Did all places mentioned in the writings of historians and ancient manuscripts exist two thousand years ago during that journey?
- Are these places mentioned in maps and atlases of the Roman dominant state at that time for instance Tabula Peutingeriana, Antonine Itinerary, and TAVO Atlas, or in the writings of classical geographers such as Strabo, Ptolemy, Pliny, and others?
- Are their many places recently included in the itinerary, based on oral tradition tales and narratives?
- Were these places located on the paths of the road network that link Palestine and Egypt and inside Egypt at that time?
- Moreover, what are the geographical factors that led to the staying of the Holy Family in these places or to resort to them? As well, what were the special geographical features that distinguished the mentioned places within the itinerary?

All of these inquiries lead to the necessity of the accurate spatial and cartographic verification of places located within the Itinerary. In turn, this supports the complete documentation of the stations of the track, which must be studied together by several disciplines, especially geographical studies, in addition to the studies not being only historical, as is prevalent.

Conclusion

This chapter pointed to a review of the historical and geographical sources that mentioned the geographical places located within the path of the Holy Family's journey from Palestine to Egypt. Moreover, to verify the Accurate Spatial Locations of these stations that they went through. For this reason, the Analytical Methodology was used to extrapolate all geographic locations from the Manuscripts, old sources, and references that refer to the journey from a narrative historical point only. Moreover, these sources did not refer in detail to the geographical characteristics of the places mentioned therein. Therefore, the chapter did not discuss the stories and narratives contained in these manuscripts and sources, as well as, does not discuss verification of their authenticity, as much as the focus is on all the names of the geographical places mentioned in each of them.

Table 2-5: Geographical coordinates of the Holy Family stations in Palestine and Egypt

Nr.	English Name	X-Coordinate	Y-Coordinate	Arabic Name
1	Nazareth	35,29725976	32,70455016	الناصرة
2	Bethlehem	35,21431127	31,70666569	بيت لحم
3	Hebron	35,09315429	31,52843404	الخليل
4	Beer Sheba	34,79224379	31,25369996	بئر سبع
5	Ashkelon	34,56250805	31,66033238	عسقلان
6	Gaza	34,44350155	31,51257898	غزة
7	Khan Yunis	34,29770000	31,35880722	خان يونس
8	Rafah	34,18813790	31,28003106	رفح
9	al-Shikh Zowaied	34,12003496	31,21336594	الشيخ زويد
10	al-Arish	33,80300823	31,13272949	العريش
11	al-Filusyiat (al-Zaraniq)	33,50594776	31,10331688	الفلوسيات الزرانيق
12	al-Qals	33,07566229	31,21139435	القلس
13	al-Mahamdiyah	32,65987830	31,04061235	المحمدية
14	Tal al-Makhzan	32,59720377	31,05564703	تل المخزن
15	Pelusium al-Farama	32,56640603	31,04872115	الفرما
16	al-Qantara	32,33417634	30,85841651	القنطرة
17	Tanah	31,53755831	31,03658291	طناح
18	Tanis (San al-Hagar)	31,87303666	30,97561173	تانيس صان الحجر
19	Minyat Samannud	31,26153655	30,95546255	منية سمنود
20	Samannud	31,21869211	30,96573973	سمنود
21	Bikha Isous (Sakha)	30,95910535	31,09138246	بيخا ايسوس/ سخا
22	St. Demiana Mon./ Belqas	31,38463394	31,30043242	دير القديسة دميانة بلقاس
23	Minyat Ganah	30,74316073	31,02847425	منية جناح
24	Burulus	30,81257087	31,40630379	البرلس
25	Wadi al-Natroun	30,36261870	30,32967478	وادي النطرون
26	Zagazig	31,50783026	30,58825825	الزقازيق
27	Daqadous	31,27649849	30,73048770	دقادوس
28	Tal Basta	31,51305837	30,57179669	تل بسطة
29	Belbeis	31,56450773	30,42490507	بلبيس
30	Tal al-Yahodia	31,34167021	30,29677591	تل اليهودية
31	Mostorod/ al-Mahmma	31,28509568	30,14492153	مسطرد / المحمة
32	Ain Shams	31,31822633	30,13877585	عين شمس
33	Shagrat Mariam/ al-Mataryia	31,29550460	30,11901380	شجرة مريم / المطرية
34	al-Zeitoun	31,31783342	30,09668064	الزيتون
35	al-Ezbawyia/ Klout Be'K	31.24900531	30.05626992	العزباوية/ كلوت بك
36	Haret Zwila	31.25777853	30.05210681	حارة زويلة
37	Haret al-Roum	31,25621713	30,08005884	حارة الروم
38	Old Cairo/ Abo Sarjah Ch.	31,24225154	30,05394411	مصر القديمة / ك. ابو سرجة
39	al-Moa'laka Ch.	31.23021800	30.00519200	الكنيسة المعلقة
40	Qasr al-Shama'	31,23923768	30,02179216	قصر الشمع
41	Babylon al-Daraj	31,23196190	29,99785315	بابليون الدرج
42	al-Ma'adi	31,25963901	29,95703674	المعادي
43	al-Lahoun	30,97847474	29,21055660	اللاهون
44	Meit Rahina/ Manf	31,25336282	29,85367625	ميت رهينة / منف

Nr.	English Name	X-Coordinate	Y-Coordinate	Arabic Name
45	Ihnasia al-Madinah	30,94092062	29,08845346	اهناسيا المدينة
46	Ishnein al-Nasarah	30,77338861	28,61259001	اشنين النصارى
47	Deir al-Garnous	30,70672580	28,61021729	دير الجرنوس
48	al-Bahnasa	30,66082706	28,53760322	البهنسا
49	Bardounah	30,72725388	28,52993685	بردونة
50	al-Qiss	30,78423024	28,47868716	القيس
51	Gabal al-Tair	30,75551426	28,29670208	جبل الطير
52	It'saa	30,72622208	28,22559374	إتصا
53	Tah'a al-A'meda	30,69819156	28,18911557	طحا الاعمدة
54	Minyat Boufis (Minia)	30,75507292	28,08778331	منية بوفيس / المنيا
55	al-Shikh Abada/ Ansena	30,87182122	27,80805593	الشيخ عبادة / انصنا
56	Beer al-Sahaba	30,91360090	27,78686217	بئر السحابة
57	Deir Abo Hynis	30,91928051	27,75134754	دير ابو حنس
58	Kum Maria	30,91649584	27,71570518	كوم ماريا
59	Tal al-Amarna	30,90824598	27,66423382	تل العمارنة
60	al-Ashmounein	30,80274681	27,78155824	الاشمونين
61	Dairout Um Nakhla	30,74627573	27,72900175	ديروط ام نخلة
62	Dairout al-Sharif	30,81634584	27,55677330	ديروط الشريف
63	Sanabo	30,78845320	27,49446965	صنبو
64	al-Qussia	30,82626425	27,44411365	القوصية
65	Meir	30,74790651	27,44067513	مير
66	al-Saraqna	30,77557385	27,41925035	السراقنة
67	Bouq	30.83495812	27.40018288	بوق
68	Deir al-Muharraq	30,77975459	27,38083897	دير المحرق / جبل قسقام
69	Dronkah	31,17038291	27,10988111	درنكة

3 The Spatial Cartographic analysis of the ancient road network in Palestine and the northern sector of North Sinai

Preface

The Roman authorities linked the provinces of Judea, Palestine, and Arabia, with a road network of about 2,500 miles, where the longitudinal axes of the network extended north to Syria and south to Egypt, while the transverse roads extended eastward as wild desert tracks[85]. The main axis of it extended from the south of the Arabian Peninsula in the north along the eastern hills of Asir and al-Hijaz to Petra then to the port of Gaza. Another road extended from Gadara until Decapolis, Basra, and Damascus, where it joined with the road network extending in the east. In addition, the main coastal road that connected Palestine with Egypt via Gaza[86]. It should be noted that the first part of the itinerary of the Holy Family's journey in Palestine extends entirely within the province of Judea. Rarely did researchers study the itinerary of the Holy Family's journey, starting from Bethlehem, which is the first station of the actual path. Moreover, many used to call the road the journey of the Holy Family in Egypt, given that the greater part of the road and the largest number of stations are all located in Egypt, which resulted in slight neglect of the first part of the road that extended in Palestine.

It is vital always to emphasize that the path starts from Palestine because this explains what some researchers and sources indicated, "the Holy Family took an unknown path at that time"[87]. As all the stations of the path located in Egypt that were referred to in the aforementioned sources and references, they are all located on roads known at the time - as will be shown later. Therefore, it was necessary to verify the path starting from Bethlehem, which is its first station in Palestine. Perhaps there are some roads unknown to some or not, constantly used at that time, in that part of the path that extends in Palestine. Moreover, the Holy Family may have taken these roads as an exit to cross it to Egypt to avoid being tracked by any pursuers and to avoid being exposed to the Roman inspection stations on some other, more moving roads[88].

Therefore, this Chapter discusses the clarification of the confirmed road network, as well as the one that HF was likely to travel on, and the verification of the extension of the road network at that time, especially in the areas where any of the Path stations mentioned in the sources and references. In addition to the spatial verification of the locations of the Path stations

[85] (CUNTZ 1990; MILLER 1916; MOLINIER 1902; ROLL 2005: 107–118; ROLL 1995: 209; ROLL 1983: 136–161; ROLL and AVALON 1986: 113–134; THOMSEN 1917: 104–112)

[86] About 403-404 AD SULPICIUS SEVERUS, Dialogi, 1, 8, 1 mentions 16 palaces or road stations on his way from Alexandria to Bethlehem, while Halm points out that certainly some stations in North Sinai are included in this figure, but any further identification For his flight path is only a hypothesis (HALM 1866: 159; PERALE 2016: 155–169).

[87] (AL-MAQRĪZĪ 1873: 21; EVETTS 1910: 93; GREGORIUS 1992: 49; HOSNY 2003: 137; JULLIEN 1889: 100; MEINARDUS 1977: 23; MONKS OF ST. MINA MONASTERY 2018: 21)

[88] (AL-DABBAGH 1991: 681). For more on the geography of Palestine see: (RASMUSSEN 2010)

near or far from the extension of the old road network at that time in Palestine and the first part of the path extending inside the current Egyptian borders, starting from Rafah along the Mediterranean coast to al-Farama in the far northwest of Sinai, based on ancient cartographic sources, references, and specialized atlases[89].

3.1 The ancient Roads Palestine according to TP, ItA, and BIt [90]

IT is not an official publication of the road authorities, but a mandate by the travel agency to serve travelers, and cannot originate from government road building authorities, because the entire division of ItA does not adhere to provincial boundaries[91].

On the other hand, TP dates it to between the 2nd and 3rd centuries AD to clarify the Roman roads and the stations on which they were located in the 1st and 2nd centuries AD[92]. The roads are shown on this map in the form of red lines running peacefully to write the names of the stations on them, especially at the angles formed by these peaceful meanders, and each station's name is followed by the distance between it and the previous station measured in Roman miles[93]. Good relationships can be observed between ItA and TP, no matter how different they are at first glance, the spelling of the names is very similar in both sources. The author of TP lacked the necessary space, and so he neglected to mention whole sets of names[94].

As a result, the name of the station or the distance was often omitted or not mentioned in the first place. In addition, there is sometimes confusion about which station the distance refers: to the preceding one or the next? Moreover, the paths of some roads do not match what was mentioned in ItA[95]. Therefore, TP is completely inaccurate about the details you mentioned about Egypt. Talbert posits that the real purpose of the TP was not to aid travelers along the highways of Rome, but instead to celebrate the restoration of peace and order achieved by Diocletian[96]. Only three Roman roads were mentioned in TP, ItA, and BIt, located in Palestine, and linked them with the neighboring provinces as shown in (Tables 3-1, 3-2, 3-3).

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[89] PARTHEY made an attempt to map the classical geographers, not only as they imagined them, but also on what could be observed or inferred from these writings (PARTHEY 1859: 509–518).
[90] Based on (TALBERT and ELLIOTT 2010: 282)
[91] (BALL 1942: 249; MILLER 1916: 54–55; PARTHEY 1859: 516)
[92] For mor see: (PAULUS 1866; 1857) about the rules followed for the construction of ancient Roman roads; see also: https://tinyurl.com/2p8j7fxv
[93] For more see: (BALL 1942: 249; CUNTZ 1990)
[94] (MILLER 1916: 866)
[95] (MILLER 1916: 866)
[96] For more see: (TALBERT and ELLIOTT 2010)
* To investigate the names, MILLER 1916 and CUNTZ 1990 were relied upon.

Table 3-1: Stations of Ierusalem - Aelana road according to ItA

Road Name	Station Name in ItA	Distance Rm[97]	Current Name	Current Dis. km[98]	Geographical coordinates according to DARE
Ierusalem - Aelana	Ierusalem/ Hierosolyma	0	Jerusalem	0	35.23417 E 31.77667 N
	Elousa	71	Haluza	93.47	34.65421 E 31.09719 N
	Eboda	24	Avdat	35.57	34.77415 E 30.79432 N
	Lysa	48	Nahal Loz/ Wadi Lussan	58.43	34.35785 E 30.40996 N
	Gypsaria	28	Kuntillet Jirafi	55.97	34.68307 E 29.99243 N
	Rasa/ Gyrasa	16	Biq'at 'Uvdah	24.4	34.93384 E 29.96110 N
	Bossia/ Ossia/ Ad Dianam	16	Ras al-Naqb Yotvata	14.65	35.06104° E 29.88902° N
	Aelana/ Aila	16	Aqaba/ Eilat	40.28	35.0000° E 29.53068° N

ItA indicated one road as in the previous table, a mountain road of about 219 Rm/ 324.6 km, linking Jerusalem and Aqaba/ Eilat on the Gulf of Aqaba. The stations on this road are all known except for the Rasa/ Gyrasa station which has been identified as Biq'at 'Uvdah and lies between Gypsaria the previous station and the next Bossia.

According to AL-DABBAGH, this road started from Damascus until it reached Jerusalem and then Bethlehem, Hebron, Beersheba until Elousa, at which the road branched off until it reached Awja al-Ghafir, and from there to Sinai. Then it extends through the land road in North Sinai *(al-Darb al-Sultani)*, until it reaches the Timsah Lake area in western Sinai, where it connects with the Wadi al-Tumailat road until the Nile River. This road intersects with the Petra-Gaza road, which included the Petra station, Ain Hassab, Haluza, and then Gaza[99]. On the other hand, AL-HARAWĪ referred to the road that connects the city of Jerusalem with Hebron and stated that its stations are Rachel's Tomb, Bethlehem, Halhul, Ramah, Kafr Barik, and then Yaqin, and from there to Hebron[100] .

The part connecting Jerusalem and Haluza was called "*Road 60/ Al-Abaa Road/ Way of the Patriarchs*"[101], whose stations were Bethlehem, Hebron, ad-Dahiriya, Beer Sheva, and Gaza. ItA did not indicate the stations located at this distance, as their use was rather little,

[97] According to (BALL 2017: 147, 249; MILLER 1916: 48–49; PLINY 2. 23; VERRETH 2006: 71): Stadium = 625 Rm = 125 Roman steps; st = Stadion, ca. 185 m; Rm = 1.482 km = 8 Stadion = 0.921 English miles; Roman foot = 24/25 of the Greek foot = 0.2965 meters = 29.65 centimeters = 11.67 inches; 1°/ 60' E-W = 400 Stadia, ca. 74 km; 1°/ 60' N-S = 500 Stadia, ca. 92,5 km.

[98] (SHUKAIR 1916a: 279–280) calculated the distance between stations and cities in North Sinai on foot, then by camel caravans, where it equals: 1 hour/ 4 km/ two and a half miles. Current Calculated distance, bearing and more between Latitude/ Longitude points according to Movable Type Scripts https://www.movable-type.co.uk/scripts/latlong.html

[99] (AL-DABBAGH 1991: 681)

[100] (AL-HARAWĪ2002: 34–37) mentioned other additional stations, perhaps these are sub-stations located between the main stations.

[101] (FREEDMAN and MYERS 2000: 1133; ISRAEL and YOU 17.06.2020)

besides, the road was far from the eyes of Roman observation and inspection[102]. All the stations that Road 60 used to pass through are still the same old names.

Table 3-2: Stations of Berito - Gaza Road according to TP

Road name	Station name in TP	Distance Rm	Current name	Current Dis. km	Geographical coordinates according to DARE
Berito - Gaza	Berito/ Berytus/ Laodikeia en te Phoinike/ Iulia Augusta Felix	0	Beirut	0	35.50118 E 33.8979 N
	Sidona/ Aurelia Pia	30	Saida (Sidon)	39.42	35.37121 E 33.56024 N
	Tyro/ Tyrus/ Col. Septimia Severa/ Tiro	24	Tyre (Tyrus)	35.79	35.20936 E 33.26807 N
	Ptolomaidam/ Ake/ Ptolemais	32	Acre	40.79	35.06863 E 32.92074 N
	Sycamina/ Sykamina/ Hefa/ Porphyreon/ Calamon/ Castra Samaritanorum	24	Tal Shiqmona, Tal es-Samak	15.03	34.95564 E 32.82451 N
	Caesarea/ Stratonos Pyrgos	20	Caesarea	36.72	34.89127 E 32.49878 N
	Betaro Bethther/ Betthar	18	et Tire	29.57	34.95549 E 32.23848 N
	Diospoli/ Lydda/ Diospolis/ Georgioupolis	22	Lod	32.51	34.89307 E 31.95091 N
	Iamnia/ Iamneia	12	Yibna	17.2	34.73226 E 31.87807 N
	Ascalona	20	Ashkelon	29.51	34.54732 E 31.66426 N
	Gaza/ Kadytis	16	Gaza	19.75	34.46203 E 31.50396 N

The above table mentioned that, TP did not refer to any inland or mountainous roads, while it mentioned only one coastal road, about 218 Rm/ 324.2 km in length, that runs along the Mediterranean coast, linking Beirut and Gaza. Besides, AL-DABBAGH indicated that starting from Caesarea the coastal road was going inland passing Ras al-Ain and Lydda, then back and connected with the coastal road at Yibna/ Yavneh[103].

Moreover, AL-HARAWĪ also referred to an internal road linking Jerusalem with Ashkelon on the Mediterranean coast, and then to Gaza[104]. This road was called "Bethlehem - Beit Jibrin Road" and its stations were Bethlehem, Tal Azikah, Beit Jibrin, Ashkelon, and Gaza.

[102] (MANARIOS 2021)
[103] (AL-DABBAGH 1991: 681). For more see: ROLL 1983
[104] (AL-HARAWĪ2002: 34–37)

Table 3-3: Stations of Hierusolyma - Caesarea road according to BIt

Road name	Station name in BIt	Distance Rm	Current name	Current Dis. km	Geographical coordinates according to DARE
Hierusolyma - Caesarea	Hierusolyma	0	Jerusalem	0	35.23417° E 31.77667° N
	Nicopoli	22	Imwas	14.13	34.98966° E 31.83933° N
	Lidda	10	Lod	15.4	34.89307° E 31.95091° N
	Antipatrida	10	Tel Ras al-Ain	17.47	34.93078° E 32.10478° N
	Betthar	10	et Tire	15.05	34.95549° E 32.23848° N
	Caesarea	16	Caesarea	29.57	34.89127° E 32.49878° N

The foregoing table indicates another road ca. 68 Rm/ 96.33 km, connecting Jerusalem and Caesarea according to BIt[105]. This road extends in the northwest direction from Jerusalem, which is opposite the direction of the escape towards Egypt, so it is also unlikely to be an escape road. (Fig. 2-1) illustrates the main road network and Roman cities in Palestine, which was obtained from integrating multiple geographic and cartographic sources data such as TP, ItA, and BIt.

The ancient geographical and cartographic sources probably only indicated the main roads and did not pay much attention to the secondary roads connecting these roads. On the other hand, some atlases, specialized references[106], and databases were used, in addition to recent explorations, all of which referred to more sub-roads that were added and merged with the main roads (Fig.3-2).

3.2 The Holy Family Stations in Palestine

The sources and references indicated 10 stations located in Palestine within the path of the Holy Family in the two journeys of Escape and Return, which are Nazareth, Jerusalem, Phares, Bethlehem, Hebron, and Beersheba, then Birin, Ashkelon, Gaza, and Khan Yunis[107]. While not all references mentioned that, the Holy Family fled from Jerusalem, in addition to that, Phares is located in the countryside of Bethlehem, and therefore they consider the two as one station. Besides, the Holy Family could not have passed Ashkelon Station, as it is close to Ashdod, which has Roman-Herodian inspection checkpoints, in addition, Birin is located about 7 km southeast of Hebron, so it is far from Road 60, which includes the rest of the other six stations, so it will the four stations Jerusalem, Phares, Birin and Ashkelon are excluded from the proposed escape road in Palestine.

[105] For more see: (KAIZER 2022: 30–35)
[106] (AL-DABBAGH 1991; AVI-YONAH 1950; COTTON 2015; CUNTZ 1990; HEZSER 2010; ISAAC 1998; MILLER 1916; ROLL 2005; ROLL 1995; ROLL 1983; ROLL and AVALON 1986; SMITH 1897; STENSCHKE 2017; TALBERT 2000; TALBERT and ELLIOTT 2010; THOMSEN 1917)
[107] See Tables No. (1-1; 1-3; 1-4)

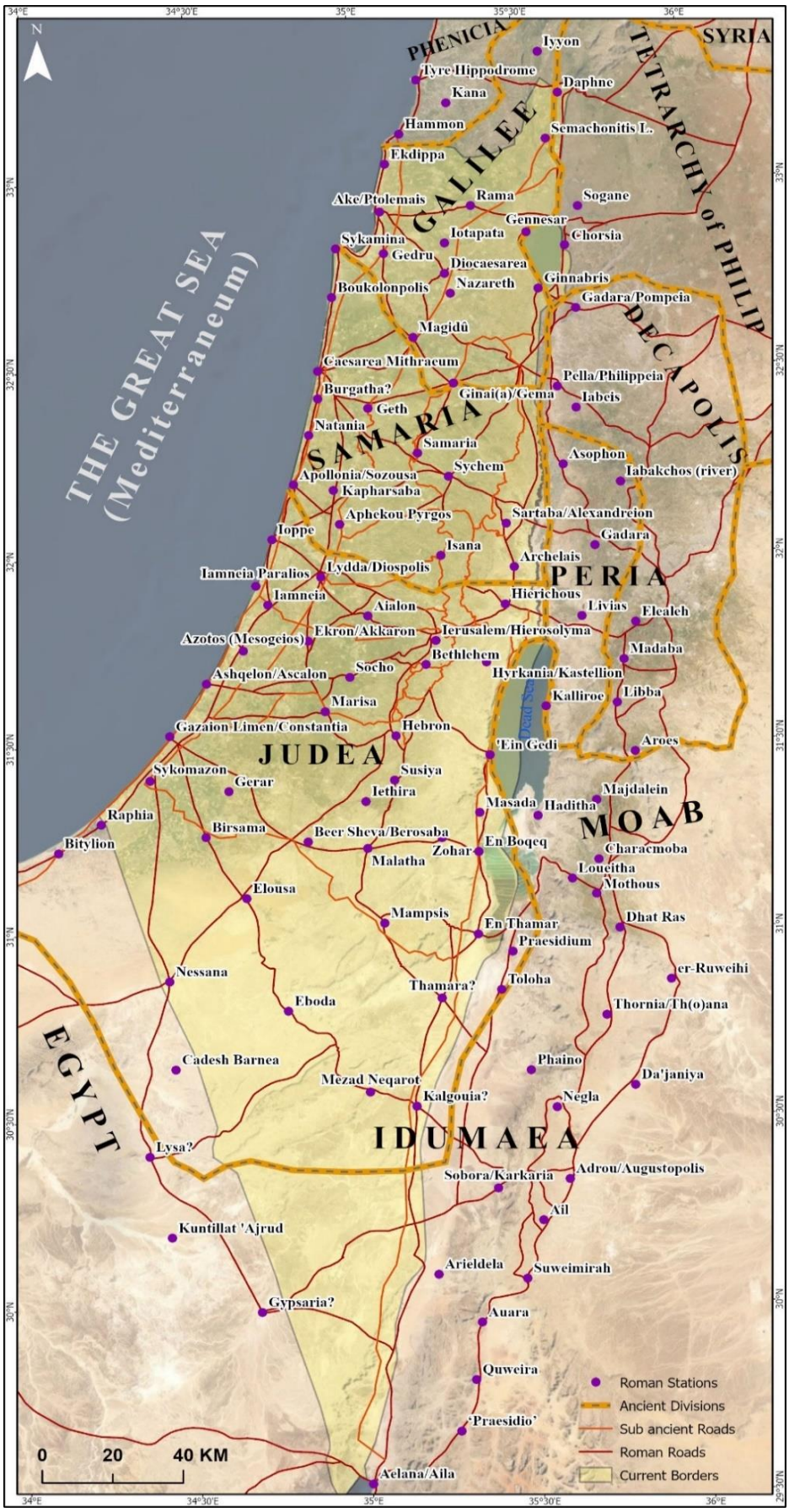

Fig. 3-1: Map of the main and secondary road network and the Roman cities in Palestine; where the orange lines indicate the secondary roads that were added to the main road network.

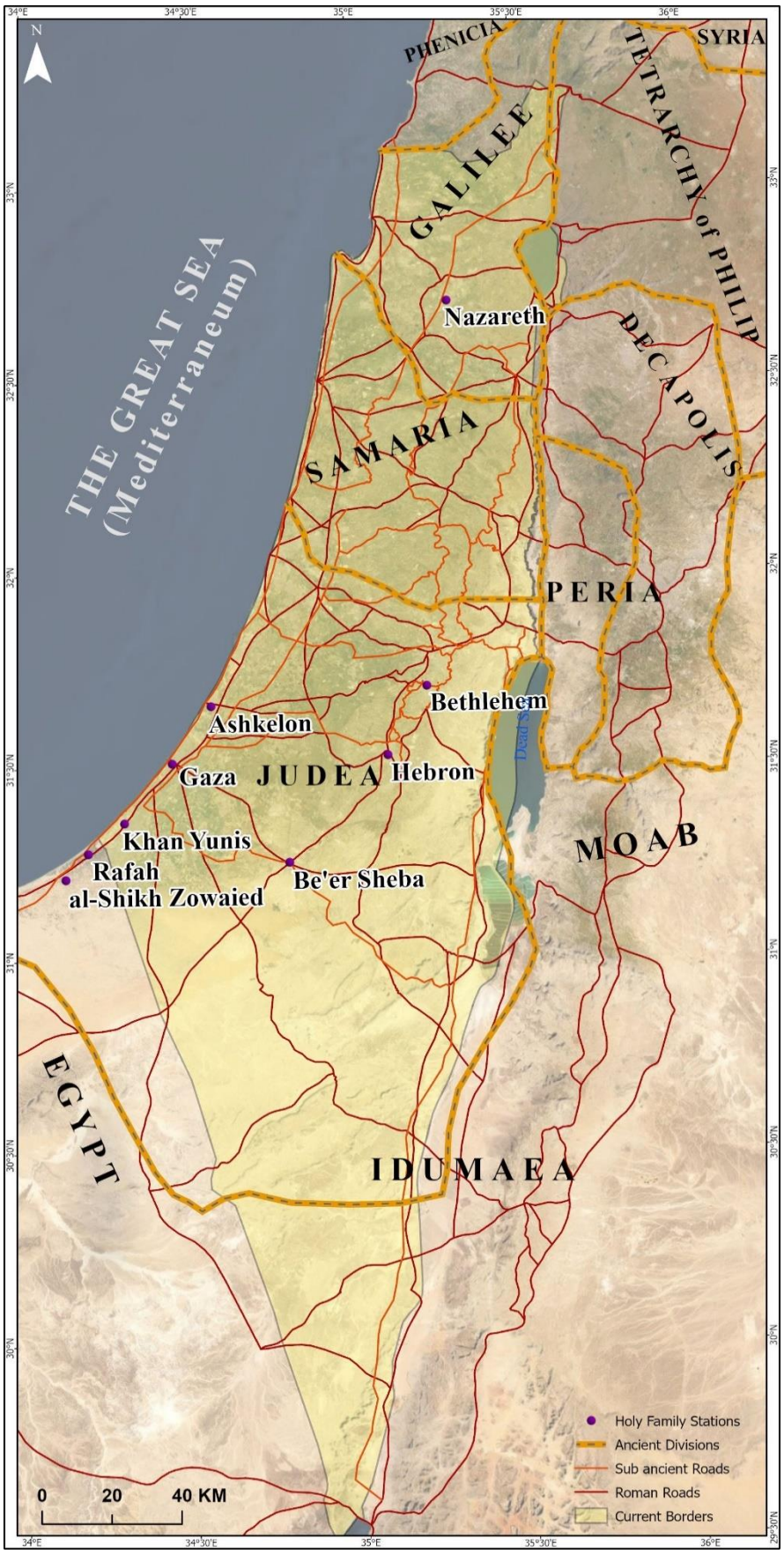

Fig. 3-2: Map of the Holy Family stations on the Roman road network in Palestine

3.3 The path of the Holy Family's escape in Palestine

The opinion of some historians that the HF took the coastal path of the Syrian territories in Palestine was excluded[108], because Bethlehem - Beit Jibrin road was difficult or even impossible to walk on this road, especially in the case of the HF's escape, as there were Roman Herodian inspection stations at the end of it. Because of its proximity to Ashdod, which had palaces for Herod[109], it was excluded that it was the escape road[110].

In the same context, there is another road called "Road 90": Jericho/ Eilat: It runs from the northern border with Lebanon, along the western side of the Sea of Galilee, across the Jordan River Valley, along with the West Bank of the Jordan River- Dead Sea until Eilat and the southern border with Egypt on the Red Sea. Road 90 used to pass near Jericho, where Herod had many palaces. Because of the many checkpoints along this road, in addition to being located to the east of the city of Bethlehem and separated by a mountainous area, which requires a circle around it for a distance of about 70 km in the direction north and then east from Bethlehem, so it is also very unlikely to be an escape road[111].

On the other hand, the Kings Road/ *Via Nova Traiana*[112], which used to pass east of the Jordan River, connects Damascus and Elat south of the Dead Sea, its stations are Damascus, Ramoth Gilead, Gerasa, Philadelphia, Heshbon, Dibon, Moab, and Elat. This road is also improbable to be the escape road of the Holy Family, as it is located east of the Jordan River, which is quite far from the direction in which the Holy Family should go towards Egypt, according to the divine announcement.

As a result, **Road 60/ Al-Abaa Road**, given that its specifications conform to what was mentioned in the ancient sources that the HF took a road unknown at the time, it is conceivable that this was the road that the HF took while escaping from Bethlehem. Then they passed through Hebron, Beersheba, Gaza, and Khan Yunis until Rafah, and then they continued the journey inside Egyptian territory[113].

Moreover, this refutes the opinion that HF continued the road from after the Beersheba station until it reached Awja al-Ghafir[114]. Because this means, they did not pass the stations of

[108] (MEINARDUS 1977; SADEK 2011; VALENSI 2007)
[109] (MANARIOS 2021)
[110] (GARDNER 1981: 177; MURPHY-O'CONNOR 2008)
[111] (ISAAC 1998; KAIZER 2022; MANARIOS 2021; ROLL 2005; ROLL 1995; ROLL 1983)
[112] (BECK 2015: 39; RIDLING O. J.: 103; BRISCO 1999; SMITH 1993; TRISTRAM 1881)
[113] (BRISCO 2004: 314)
[114] (BASILI 1953: 38–40; TRISTRAM 1881)

the coastal road in North Sinai, which were referred to in all sources - as it will become clear later. In addition, ItA has never been proven that there is any archaeological or historical evidence that indicates the passage of HF by the road of Awja al-Ghafir overland[115].

3.4 The northern sector roads of Sinai Peninsula (Coastal and Inland)

These are the roads that extend from east to west in the far north of Sinai (*Arabia Petraea*), linking Egypt mainly to the Levant and Syria, and have been described as the oldest roads in the world[116]. The first is the road adjacent to the Mediterranean coast, the second is the road that extends in the area of dunes south of the coastal road, and the third is the road that extends a little south of that on the borders of the dunes area and the north of al-Tiyh/ labyrinth plateau[117]. PLINY named the country of Arabia to the countries east of the mouth of the Pelusiac branch and along the Mediterranean Sea to the east[118].

3.4.1 Topography of the Coastal Road in North Sinai

North Sinai desert, especially its northern sector, consists mainly of Aeolian dunes fields and large areas separated from each other[119]. The dunes include Barchan dunes or longitudinal linear dunes oriented to the east and west, in addition to the transverse and stellar dunes[120]. Linear dunes are the main form in North Sinai[121].

The northern sector of North Sinai desert is characterized by severe climatic fluctuations[122]. In addition to the nature of its dunes, which certainly has effects along the roads, which makes it more difficult to move and move through sandy or paved roads. Moreover, in ancient times, especially the time of the flight of HF, when the means of transportation available at the time did not meet the comfort or sufficient safety for travelers[123].

Starting from Rafah, the coastal road runs in a land whose level is higher than the coastline up to al-Sheikh Zuweid, then to al-Maskar until al-Kharouba, descending to the north of the area of the dunes, crossing the mouth of Wadi al-Arish[124] to Tal al-Yazek, where the

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[115] (ABD AL-MALIK 1997)
[116] (FAYEZ 2012)
[117] (AL-DABBAGH 1991: 476; GARDINER 1920: 99; SHUKAIR 1916b: 205, 280)
[118] (PLINY 12. 36; 12.13; 6.29)
[119] (BUBENZER et al. 2020: 14–19)
[120] (HASSAN 2009: 26; STEWART et al. 2020: 1–27)
[121] (HERMAS et al. 2012: 51–60; STEWART et al. 2020: 1–27)
[122] For more see: (GAD and KHALAF 2015: 59–77; HASSAN 2009: 26; HERMAS et al. 2012: 51–60; HOFFMEIER and MOSHIER 2013: 494; HOSNY 2003: 49; STEWART et al. 2020: 1–27; WAHIBA 1980: 51)
[123] (DITTMANN 1990a; FAYEZ 2012)
[124] Al-Arish Valley and its tributaries originate from the Agama plateau and then cross the flat Tih plateau, descending from a level of 400 m, continuing to walk until it makes its way through an area of sand dunes until it

tomb of the Prophet YASSER is[125], passing by a well. Helpers. Then the road follows the Mediterranean coastline until the traveler crosses by boat to al- Zaraniq Protected Area at the beginning of the eastern coast of Bardawil Lake/ Serbonis Lacus[126]. Then the road takes the extension of the sandy tongue north of the lake, which separates it from the Mediterranean Sea to the mountain pool, then al-Kalikha, and here the traveler is forced to cross again by boat until he reaches Tal al-Qals/ the regurgitation dune, which is located in the middle of the lake coast[127]. Then the road continues to the west of this hill along the northern coast of the lake until it reaches its western edge, continuing along the seacoast until al-Mahamdiyah, then to Tal al-Faddah, and from there to Tal al-Farama[128].

3.4.2 Coastal road stations

The coastal road is considered the oldest and most important road between Egypt and Syria in that region, and many luxurious cities, towers, and castles were built along it to protect it, most of which date back to the Greek, Roman, and Byzantine periods, respectively, and it was called the al-Farama Road[129]. This road used to pass through Rafah in the far north-east on the border between Egypt and Palestine, passing by Bardawil Lake to reach Tal al-Farama in the far northwest of Sinai, where the mouth of the Pelusiac branch, which was passing east of the Delta. The Pelusiac branch from which the other branches of the Nile were branched to connect the eastern, central, and western delta up to the head of the delta in the south.

There is no dispute that the coastal road used to start in the past from Rafah on the eastern borders of Egypt, passing through al-Arish - they are located in the region of Bilad Idoum - as PLINY called it - until it reached Tal al-Farama at the mouth of the Pelusiac branch in northwest Sinai[130]. While the discrepancy lies in the accuracy of determining the geographical locations of these stations[131]. Although AMÉLINEAU does not agree that al-Arish is the locus of Rinokoroura, he does not specify an alternative location also[132].

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flows in the east of al-Arish, which is the largest dry valley in Egypt. Where is the amount of water discharged (HOSNY 2003: 47).

[125] (SHUKAIR 1916a: 212).

[126] Diodorus Siculus mentioned that Lake Bardawil is very narrow and deep, extending about 200 stadions/ 37 km from east to west, and with sharp and treacherous beaches, which resulted in the drowning of many travelers and armies when they deviated from the roads that pass by it (BALL 2017: 107; DIODORUS 17. 52. 16.); While PLINY mentioned that it is a small swamp (BALL 2017: 158; PLINY 1855: 29. 6.).

[127] Lake Serbonis Lacus was connected to the Mediterranean by a silted Akrigma (KAMEL 1953; STRABO 16, 2, 28–33).

[128] (AMMAR, 1946: 60; HOSNY, 2003: 103–107; SHUKAIR, 1916: 250–251)

[129] (AL-DABBAGH, 1991: 36; HOSNY, 2003: 107; SHUKAIR, 1916: 256, 280)

[130] (AMMAR 1946: 61)

[131] (AMMAR 1946: 34)

[132] (AMÉLINEAU 1893: 404)

In addition, MASPERO mentioned the city of Zalu, being located near Tal al-Farama, as a meeting point for the roads that cross the Sinai in the east, and that it may have preceded the station of Pelusium[133]. While DÜMICHEN referred to it twice, the first as Sile, and the second as Zalu, in addition to the fact that al-Qantara and Sile are located to the north of Zalu respectively, and all of them are not in their exact geographical position[134].

On the other hand, Zalu was referred to as Sile in Map (B III 1) in TAVO, currently is al-Qantara. As for Map (B IV 1) that, Tal Abu Saifa has been replaced by Zalu, in addition, Sile has been replaced by al-Qantara. Therefore, it can be inferred that they are two separate places and not one place if there is no overlap between the symbols and names of the map, which causes confusion and confusion in the interpretation of its symbols. Besides, in Map (BIV 2), Sile is indicated as Tal Abu Saifa and it is located to the north of al-Qantara. DUEMICHEN pointed out that Zalu and Sile and al-Qantara are three different locations (Fig.3-3). In addition, Prince YOUSEF KAMAL mentioned that Sile takes the position of Zalu on some maps and vice versa as well[135].

After the digging of the Suez Canal, the road started from al-Qantara instead of Zalu or Sile, passing Wadi Umm Karsh through the Pelusiac branch, Tal Harba, Tal al-Hayr, Tal al-Faddah, to the north of which lies the ruins of Tal al-Farama, Tal al-Qals, and al-Mahamdiyah. Subsequently, the traveler crosses by boat to al-Kleikha, the camel pond, then the mouth of al-Zaraniq Lake, and the traveler crosses by boat again to follow along the coast until Bir al-Masayed, al-Arish, Tal al-Yazak that contains the dome of the Prophet Yasser, Bir Asluj, then to Rafah[136] (Table 3-4).

[133] (AMMAR, 1946: 35; DUEMICHEN, 1894: 86; MASPERO, 1894: 416–427; SHUKAIR, 1916: 75)
[134] DUMICKEN mentioned two different places for this station, once as Sile and another time as far from it as Zalu (DUEMICHEN 1894: 86).
[135] (KAMAL 1926a)
[136] For more about the distance along al-Farama Road see:(SHUKAIR 1916a: 280–281)

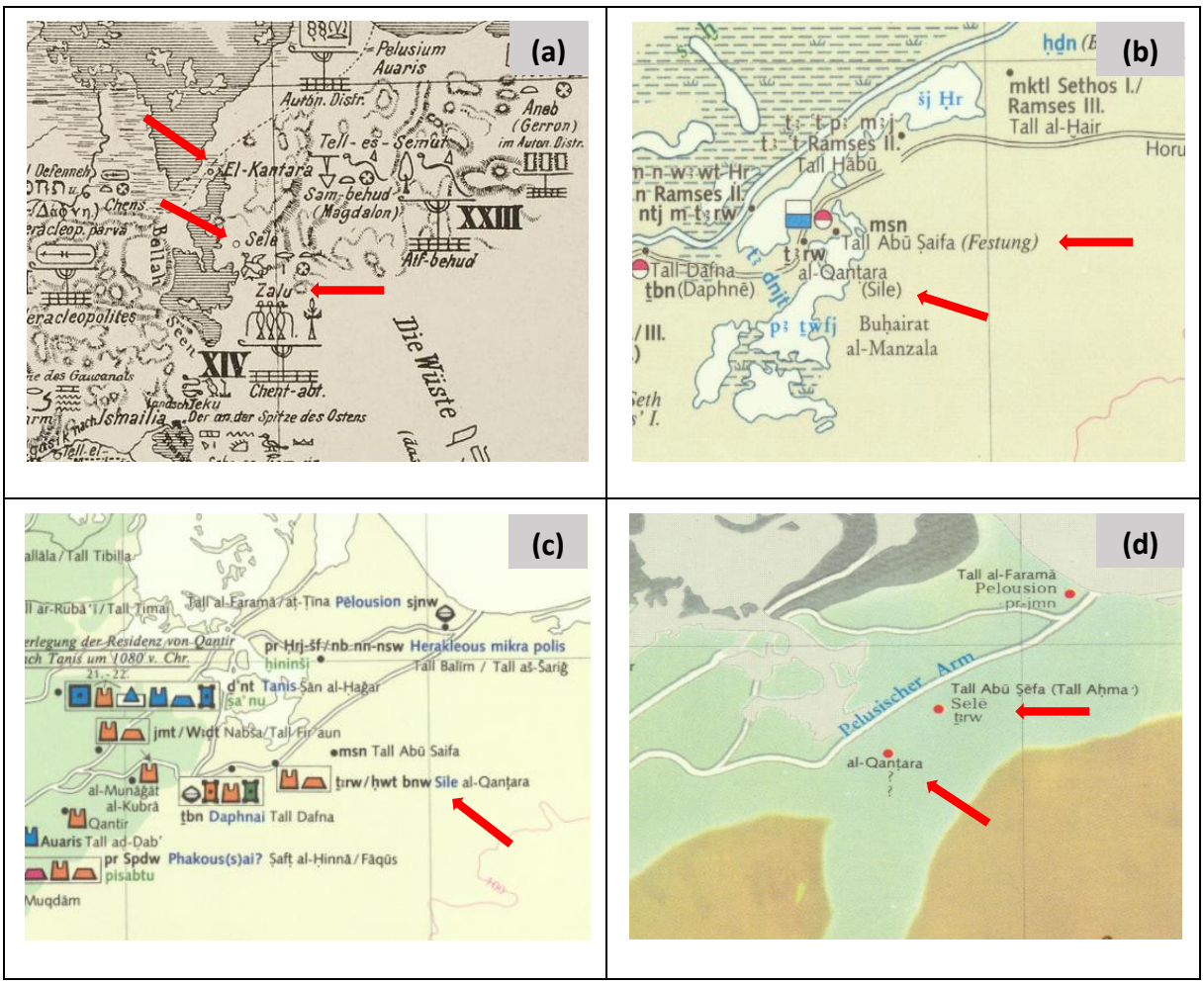

Fig. 3-3: Geographical positions of Zalu, Sile, and al-Qantara: (a) Geographical positions for Zalu, Sile, and al-Qantara (after DUMICKEN 1894); (b) the position of Zalu according to Map (B III 1/ TAVO); (c) Tal Abu Saifa replaced Zalu, and Sile replaced al-Qantara.

To decipher the abbreviations used in (Table 3-4), see page ii in the Introduction.

Table 3-4: The Coastal road stations in north Sinai based on historical sources from Different Periods.

Nr.	References & Sources / Stations	ST	PI	IO	PT	IT	TH	AM	TP	Pap	HI	MM	MQ	QA	MA	GA	AA	TB	BA	DARE	Current Coordinates
1	Rapihu/ Raphia/ Rhaphia/ Rafah	✠	✠	✠	✠	✠	✠		✠	✠		✠	✠	✠	✠	✠	✠	✠	✠	✠	34.25923 E 31.28395 N
2	Bitylion/ Bethapou/ Boutaphios/ Sheikh Zuweid						✠			✠		✠				✠		✠		✠	34.09702 E 31.22159 N
3	Rinokoloura/ Rinokoroura/ Rinokouroura/ Rhinocolura/ al-Arish	✠	✠	✠	✠	✠	✠	✠	✠	✠	✠	✠	✠	✠	✠	✠	✠	✠	✠	✠	33.79693 E 31.11176 N
4	Ostrakine/ Ostracine/ al-Mokhalsa/ al-Filusiyyat		✠	✠	✠	✠	✠	✠	✠	✠	✠	✠	✠	✠		✠	✠	✠	✠	✠	33.43086 E 31.11685 N
5	Bougas Lake Serbonis Lacus/ 34 km West of al-Arish, Serbonis Ekregma[137]	✠	✠		✠																----------
6	Casius Mons/ Casium/ Casion/ Casio/ Kasin/ Kasion Oros/ Dier el-Nasara/ Tal al-Qals/ al-Kasr/ Ras Qasrun/ Khatib al-Qals[138]	✠	✠	✠	✠	✠	✠	✠	✠	✠	✠	✠	✠	✠	✠	✠	✠	✠	✠	✠	33.0779 E 31.2116 N
7	Pentascino/ Pentascinum/ Pentaschoinon					✠ [139]	✠			✠	✠	✠									32.84500 E 31.10600 N
8	Gerra/ Gerrum/ al- Mahamdiyah	✠	✠		✠		✠		✠		✠					✠	✠	✠	✠	✠	32.66553 E 31.04731 N
9	Aphnaion[140]									✠	✠	✠									32.77831 E 31.08835 N

[137] Ekregma is located 10 km east of Kasion and about 31 km west of Ostrakine (PTOLEMY 17.1.30)

[138] Casion is a sandy, waterless mound that forms a steep outcrop (VERRETH 2006: 55)

[139] Remarkably, Pentaschoinon station, first witnessed around AD 300 in the It, is not mentioned in TP, since the Gerra station located between Kasion and Pelousion. This might be interpreted as an indication that this section of TP is older than IT data, but nothing is certain; For more see: (AMÉLINEAU 2013: 223; VERRETH 2006: 65)

[140] From the 5th century AD in Aphnion takes place between the Pentaschoinon and Gerra (VERRETH 2006)

Nr.	References & Sources / Stations	ST	PI	IO	PT	IT	TH	AM	TP	Pap	HI	MM	MQ	QA	MA	GA	AA	TB	BA	DARE	Current coordinates
10	Chabrias/ Chabrias Castra Camp	✠	✠																		32.61100 E 31.06000 N
11	Skenai[141]										✠										32.66550 E 31.04790 N
12	Barathra	✠																			----------
13	Pelousion/ Pelusium/ Pelus/ Pelusin/ Tal al-Farama	✠	✠	✠	✠	✠	✠	✠	✠	✠	✠	✠	✠	✠	✠	✠	✠	✠	✠	✠	32.54063 E 31.04227 N
14	Zalu/ Sile/ Selle/ Tcharou/ Tal Abu Saifa														✠			✠			32.40033 E 30.83591 N

[141] (HIEROKLES 1893: 726, 4–727, 12; HONIGMANN 1939; VERRETH 2006)

At the beginning of the 1st century AD, Rhinochlora appears to be the only major settlement in the eastern part of North Sinai. Lake Ecrigma was filled to the brim with Lake Serbonis, and one got the impression that the lake was getting smaller. A new feature in the description of the Cassion region is the presence of the tomb of Pompeius Magnus, who died in 48 BC, and Strabon is the first to mention a sanctuary of Zeus Cassius there. Between Kasion and Pelousion was the military settlement of Gerra, while it is not certain - until the time of Strabo - whether Chabrias and Alexander's camp were still in use. Ostrakine, somewhat midway through Rinokoloura and Kasion and possibly near the eastern edge of Lake Serbonis, probably appeared in the late 1st century BC. Especially that the western part of North Sinai became more densely populated later[142].

Around AD 75-79, JOSEPHUS gives the itinerary of Titus' journey. Where he disembarked at Thmouis and resumed his course, he spent the night in a small town called Tanis. His second station was Heraclius Polis, and the third was Pelosion. Having stopped there two days to supply his army, on the third day he crossed the Pelosiac mouth, advanced one-stop through the desert, and encamped near the temple of Zeus Cassius, and the next day at Ostraken; this station was without water. Residents use water brought from elsewhere. He then rested near Rinokoroura, and from there advanced to his fourth station, Raphaia; this city is the beginning of Syria[143].

Furthermore, the previous (Table 2-4), illustrated that there is complete agreement that Rafah is the first stop on the coastal road, followed by al-Arish until the road ends at Tal al-Farama. AMÉLINEAU also locates Ostracine/ al-Filusyiat as being 24-26 miles from Rinokoroura, and 16-23 miles from Tal al-Qals/ Casius Mons, and it is a significant difference, which suggests an inaccuracy in the latter measurement[144]. In addition, he indicated that this city had vanished, which prompted QUDAMA and AL-MAQDISI to mention the city of al-Mokhalsa as located between al-Kasr/ Dier al-Nasara and al-Arish. QUDAMA specified the distance between al-Mokhalsa and al-Arish at ca. 21 miles, and ca. 24 miles from al-Kasr[145], which is close to the estimation of the distances mentioned by AMÉLINEAU between Ostracine and al-Arish and Casius Mons. In addition, it is the only place where there are traces left

[142] (VERRETH 2006: 76)
[143] (JOSEPHUS 4, 11, 5; VERRETH 2006: 57)
[144] (AMÉLINEAU 1893: 288–289)
[145] (AMMAR 1946: 63)

between al-Arish and Tal al-Qals. As a result, al-Mokhalsa is itself Ostracine, which is located east of Pelusium about 65 Rm, and belongs to Arabia and Idumaea[146].

On the other hand, historians almost agree that Tal al-Qals is Casius Mons, while QUDAMA mentioned it as al-Kasr, sometimes as a distortion of the name al-Qals, and at other times as an attribute of the huge building that existed in that area until the middle of the fourth century AH[147]. This building contained the Temple of Jupiter and the tomb of Pompey the Great[148], which prompted some to call it Dier al-Nasara "*The Monastery of Christian*" on this station due to the practice of some rituals in this temple[149].

The remains of the fortress of the high building that was mentioned as Dier al-Nasara did not appear in Tal al-Qals or Ostracine area to the east of al-Mahamdiyah on the northern coast of Bardawil Lake[150]. These remnants may have disappeared from it under the waters of Bardawil Lake or because of the collision of seawater with the narrow sandy tongue on which this station is located. In addition to the absence of antiquities in the direction east of Tal al-Qals to the eastern edge of Bardawil Lake, where al-Zaraniq Protected Area is located, in which the al-Filusyiat/ Ostracine station is located[151]. In the Roman period, it was a capital and an important religious center, and the ruins of its church remain[152]. Moreover, Ostracine was of military importance, since it was a dividing point between the coastal road that runs north of Bardawil Lake along the Mediterranean coast, and the sandy road that runs south of it[153].

Around 300 AD the Pentaschoinon appears between Kasion and Gerra, and the military settlement of Skenai between Gerra and Pelousion; from the fifth century AD in Avignon occurs between the Pentaschoinon and Gerra. Around 322-323 AD, THEOPHANES traveled from Egypt to Antiochia and back. The specific mission or purpose of his trip is unknown. Probably THEOPHANES arrived at Pelosione, then the next day he went from Pelosion via Gerra to Pentashwinon; he continued his way to Cassion, the next day to Ostraken, Rhinocolura, and arrived via Boutaphios at Rafah[154] .

[146] (BALL 2017: 157; PLINY 5, 14, 68)
[147] (QUDAMA 1981)
[148] (BALL 2017: 158; PLINY 12, 1, 11)
[149] (AL-MAQDISI 1991: 214)
[150] (AL-HAMAWI 1906: 85; AMMAR 1946: 65)
[151] al-Filusyiat is a distorted word from the Latin Follis, which means money, due to the large number of coins found in the region antiquities (AL-DABBAGH 1991: 666)
[152] (AMÉLINEAU 1893: 288–289)
[153] (ABD AL-MALIK 1997: 61; CLÉDAT 1916a: 17; JARVIS 1938: 106)
[154] (VERRETH 2006: 62–64)

The points of contrast lie again in the stations mentioned between Casius Mons and Pelusium, where Strabo mentioned two stations, Gerra and Chabrias[155]. In addition, Pentascino is mentioned in IT[156]. Moreover, a little distance from the coastline, PLINY mentioned two stations, Gerron and Chabrias Castra[157]. TP, BA, TAVO, and TBA place Gerra at the western end of Bardawil Lake, between Casius Mons and Tal al-Farama, at the present position of al-Mahamdiyah.

On the other hand, AMMAR indicated that the distance between Casius Mons and Pelusium does not require it to have all these stations, so it may be that Pentascino, which is located inland near al-Mahamdiyah, due to the inundation of seawater on al-Mahamdiyah, which inundates the sea of its archaeological ruins[158]. Whereas, in contrast to AMMAR'S suggestion, there are remains of small mounds between Tal al-Farama and al-Mahamdiyah that may have been the remains of Pentascino and Chabrias[159].

GARDINER also indicated that M. CLIDAT put Tal al-Qals in the place of al-Mahamdiyah, besides; this does not match its correct placement between al-Mahamdiyah and al-Filusyiat [160] (Fig 3-4). Based on TBA-Map BV16.1, Tal al-Qals are placed adjacent to or instead of al-Mahamdiyah, which is inaccurate. According to TAVO - Map BV21 it was placed in the place of al-Mahamdiyah sometimes, and other times in its correct position on the same map (Fig. In contrast, according to TBA - Map BV22 it was again placed on the tongue north of Lake Sirbonis, which is its correct geographical position.

Barathron of Barathra names are quite common in Greek sources, but in Egypt, only the Barathra of Serbonis Lake and those of Pelousion are known[161]. It is also clear that the names of stations and places have changed greatly throughout history, so that, there is no similarity between the names of the ancient names and what they are now. Moreover, PTOLEMY does mention the Kasiotis region, which comprises the towns of Kasion, Ostrakine, and Rinokoloura, and the Ekregma of lake Serbonis, but it seems to be a purely geographical indication without

[155] (STRABO 16: 10)
[156] (MILLER 1916)
[157] (KAMAL 1926a: 98, 564)
[158] (AMMAR 1946: 37)
[159] (GARDINER 1920: 114)
[160] (GARDINER 1920: 115)
[161] (STRABO 16, 2, 33; 17, 1, 21), who is the only one to use the name Barathra for the well-known marshes near Pelousion.

administrative value[162]. Some ancient maps acknowledge that PTOLEMY indicated that this entire region is called Cassius[163] (Fig. 3-5).

"The sources giving descriptions of North Sinai are very disparate: geographers (Strabon, Pliny, and Ptolemy), historians and biographers (Iosephos, Ammianus Marcellinus, Sulpicius Severus, and Sozomen), paths and maps (Itinerarium Antonini, Tabula Peutingeriana, Madaba mosaic[164], personal accounts (Theophanes) and administrative lists (Hierokles, and Georgios). The most valuable information comes from Theophanes' detailed and direct travel notes, although other sources add valuable data" VERRETH: 2006.

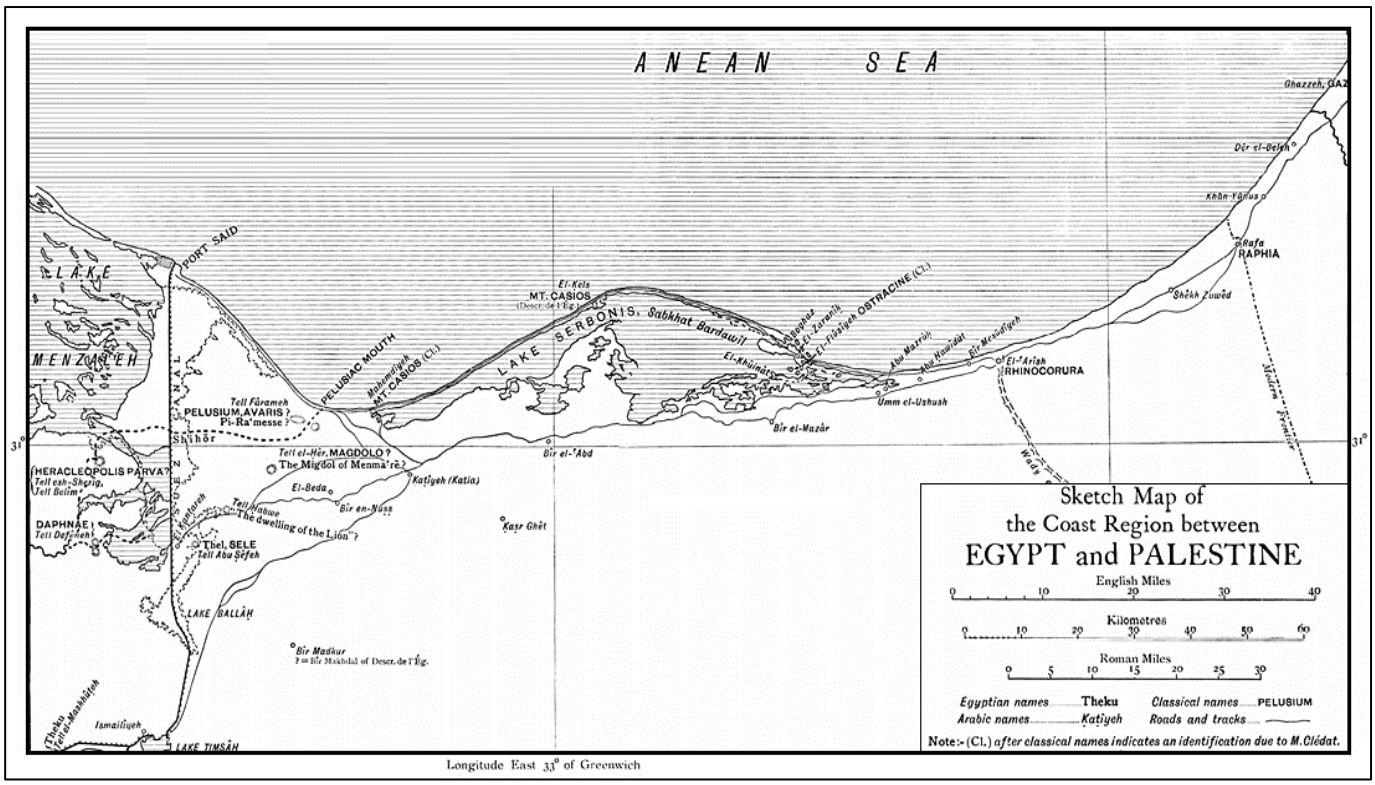

Fig. 3-4: Map of the coastal road in North Sinai according to Gardiner 1920.

[162] (VERRETH 2006: 109)

[163] Maps of Africa. Aegyptus, inferior sive delta, curante Christophoro Weigelio. cum P. S. C. M.. (1718). Retrieved from https://library.uta.edu/digitalgallery/img/20086482

[164] (DONNER 1992)

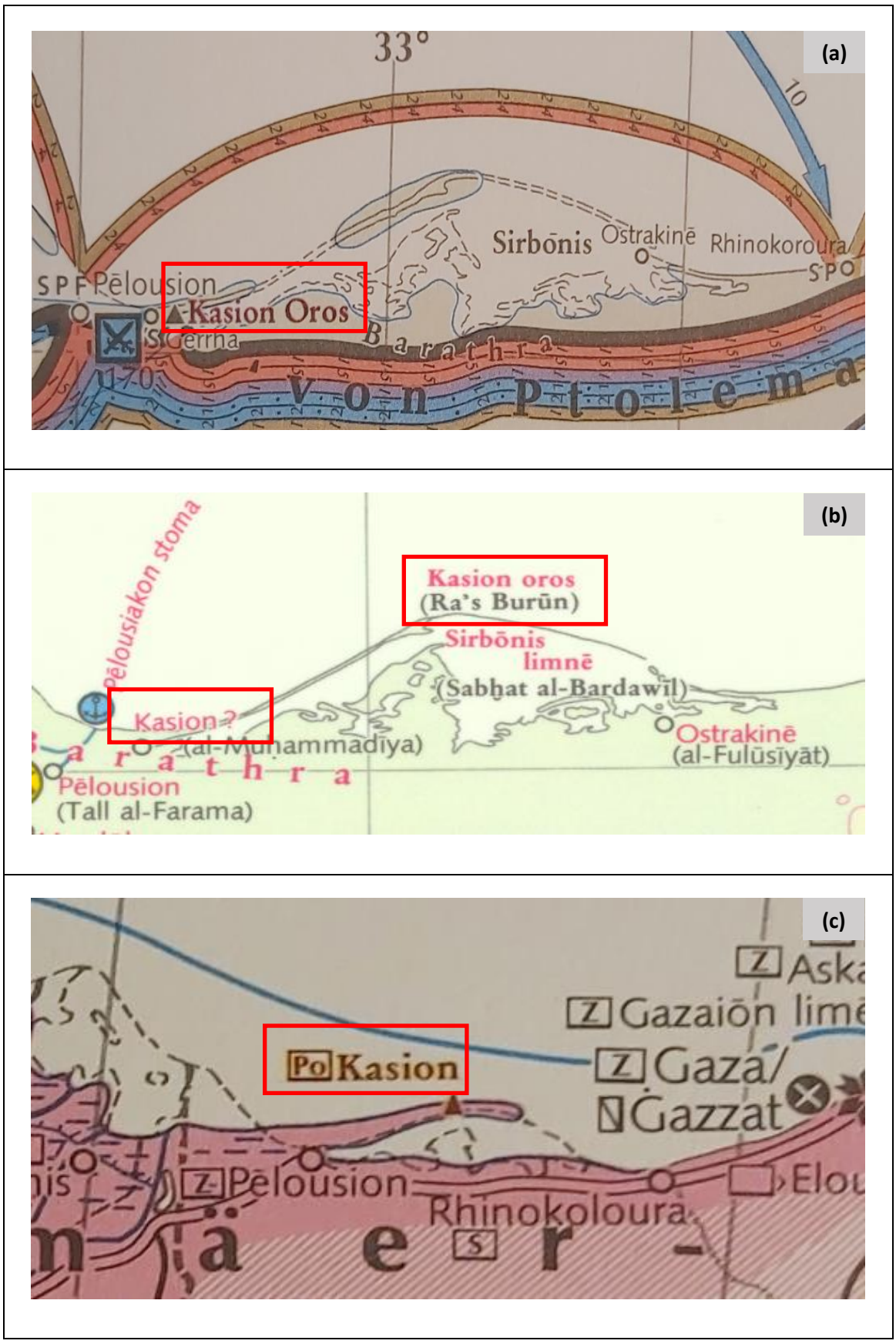

Fig. 3-5: Geographical positions of Tal al-Qals/ Casius: (a) Kasion Oros Adjacent to al-Mahamdiyah according to Map (BV16.1/ TB); (b) Two different positions for Kasion Oros on the same map (BV21/ TAVO); (c) Map (BV22/ TB) illustrate the correct position for Kasion.

3.4.2.1 Coastal road stations according to ItA, and TP

Twelve roads in Egypt were recorded by ItA that dated to Diocletian 285-305 AD[165], while PARTHEY mentions that some copies date to Antoninus Caracalla 211-217 AD[166]. It contains the names of the stations located on these roads, with a mention of the distance between them in Roman miles. The number of stations located in Egypt is 103 on a total road length of about 2,700 Rm, without mentioning any details about these stations themselves. The coastal road in North Sinai was not referred to as a complete road with a separate number, but according to ItA, the coastal road is the result of the confluence of two links of roads No. 151 and 152 (Tables 3-5, 3-6).

Table 3-5: Statins of the coastal road in North Sinai according to ItA

Road name	Stations names in ItA	Distance Rm	Current name	Current Dis. km	Geographical coordinates according to DARE
Rafia - Pelusium	Rafia	0	Rafah	0	34.25923 E 31.28395 N
	Rinocorura	22	al-Arish	47.96	33.79693 E 31.11176 N
	Ostracena	24	al-Filusiyyat	34.85	33.43086 E 31.11685 N
	Cassium/ Cassio	26	Tal al-Qals	35.2	33.0779 E 31.2116 N
	Pentascino	20	----------	41.6	32.74090 E 30.97352 N
	Pelusio	20	Tal al-Farama	20.56	32.54063 E 31.04227 N

In the previous table, according to ItA, it is clear that the coastal road used to start from Rafah and end at Pelusio. The current position of Pentascino is unknown, but its coordinates were determined based on PARTHEY 1856, VERRETH 2006, and GRAAUW 2022.

Table 3-6: Statins of the coastal road in North Sinai according to TP

Road name	Stations names in TP	Distance Rm	Current name	Current Dis. km	Geographical coordinates according to DARE
Rinokoroura - Pelusium	Rinocorura	0	al-Arish	0	33.79693 E 31.11176 N
	Ostracine	23	al-Filusyiat	34.85	33.43086 E 31.11685 N
	Casium / Cassio	----------	Tal al-Qals	35.2	33.07790 E 31.21160 N
	Gerra	23	al- Mahamdiyah	43.29	32.66553 E 31.04731 N
	Pelusium	8	Tal al-Farama	11.91	32.54063 E 31.04227 N

According to TP, the coastal road started from Rinocorura and ended at Pelusium, although the distance between Ostracine and Casium/Casio is missing. Besides, instead of the Pentascino station mentioned by ItA, Gerra is mentioned. Coordinates of Pentascino based on GRAAUW 2022. Tables no. (3-5, 3-6) illustrate that the coastal road in North Sinai according to

[165] (CUNTZ 1990; MILLER 1916: 854)
[166] (PARTHEY 1859: 515)

ItA and TP used to end at Pelusium. Moreover, after the geographical locations of the stations were determined with their geographical coordinates according to DARE, it also became clear that there is an agreement between ItA and TP in the names of the coastal road stations. However, ItA did not mention Gerra station and instead mentioned Pentascino, whose coordinates were determined based on PARTHEY 1856, VERRETH 2006, and GRAAUW 2022, and vice versa in TP. In addition to the existence of a discrepancy between them in the lengths of distances between stations, where the total of these lengths in ItA are 112 Rm. In addition, the distance between Ostracine and Casium/Casio is missing in TP, so the sum of the distances was less and equal to only 54 Rm.

The coastal road was safer, as it was easy to protect because of its military importance, so many castles and sea stations were built on it, the most important of which was Tal al-Farama. This road also enjoys a moderate climate, in addition to the remoteness of this road from the Bedouins, who have always been a source of threat to travelers[167].

Furthermore, in 155 AD the orator Aristeides praises emperor Antoninus Pius describing the benefits of his empire, travelers should no longer have fearsome dangerous paths such as the passages from Arabia to Egypt that is described as narrow and sandy[168]. Narrow Sand Trails" probably refer to the narrow paths that can be passed between Serbonis Lake, the Mediterranean Sea, and the huge dunes to the south. The text seems to indicate that the road through North Sinai was no longer a major obstacle in the second century DA [169].

On the contrary, this road was disadvantaged by the lack of freshwater, especially in the area between al-Arish and Tal al-Farama, which forced travelers to carry their need for water, which increased the burden of travel, and therefore there were also some water tanks in Positions of garrisons to provide travelers with some of their water needs[170]. In addition to the danger of walking on the narrow strip between Serbonis Lacus and the Mediterranean Sea, many travelers or armies perished, due to the turbulence of the sea and the rising waves of it until they overwhelm this narrow strip, which threatens the safety of travelers[171]. Besides, the encroachment of dunes, due to which some of the edges of the lake become covered with sand,

[167] For more on the Bedouins attacking and threatening travelers see: (AMMAR 1946: 59–60; MASPERO 1894: 416–427; NIEBUHR 1792: 50).
[168] (KEIL 1898: 121)
[169] (VERRETH 2006: 59).
[170] (AMMAR 1946: 41; DITTMANN 1990a).
[171] (FIGUERAS 2020: 7–11; HOFFMEIER and MOSHIER 2013: 487).

which gives passers-by the illusion that it is solid ground, and by walking on it, they are exposed to drowning[172].

It could certify - from the foregoing, - the ancient stations on the coastal road which are known currently, namely, Rafah, Rinokoroura/ al-Arish, Ostrakine/ al-Filusyiat, Tal al-Qals/ Cassius, Gerra/ al-Mahamdiyah, Gabrias/ Pentascino, West al-Mahamdiyah, and Pelusium/ Tal al-Farama which are located near East Port Said. The importance of these stations weakened with the decay and weakness of the policy of the Roman state, which in turn led to the withdrawal of many of the military garrisons that were stationed in those fortresses and placing them in Tal al-Farama instead. As a result, the armies of the Islamic conquest did not meet any resistance in any of the stations they passed through, which are located east of Tal al-Farama[173]. This does not mean that the road has diminished in importance, but rather it remained the main road until the Medieval[174].

3.4.3 The inland road south of Sabkhat/ al-Bardawil Lake

Along the inland road, on the path that extends from al-Arish in the east to the place where the road connects Tal al-Farama to al-Qantara in the west, there are about 140 geographical names known. Most of the names come from Arab itineraries[175]. The internal road did not have a fixed path from the Arab period to the present day.

The Inland road extends from the coast of Palestine to Rafah to run in the area of dunes south of the coastal road and Bardawil Lake, crossing the mouth of al-Arish Valley. The road continues to extend across an area of dense dunes called al-Djifar[176], until ends at the northwestern Sinai borders at Tal al-Farama or Qatiah[177]. Respectively, the road continues to the southeast of the delta until reaches al-Qantara and then ends at al-Salheya[178]. It is the road, which was mentioned in al-Karnak carvings[179].

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[172] (GARDINER 1920: 115).
[173] The Egyptian garrison consisted of 3 legions, 9 battalions, and 3 cavalry divisions (PARTHEY 1859: 518; STRABO 17.1.12; 17.30.53)
[174] (BUTLER 1902)
[175] (VERRETH 2006: 589–591)
[176] The name al-Djffar was given to the cities that lie to the east, starting from al-Farma to Rafah, and the duration of the journey in it was 7 days until Palestine (AL-HHAMAWI 1906: 144; AL-MAQRĪZĪ 1999b: 189, 313; IBN ZULAQ 1999: 58; SHUKAIR 1916a: 40) . For more on the Djifar see: (AL-DABBAGH 1991: 301–302)
[177] al-Farama remained at the end of the road until the 12th century, then it disappeared and Qatiah appeared in its place at the end of the 13th century AD. It is the station from which the road extends towards the southwest towards al-Salheya on the borders of al-Sharqia Governorate in the east. While DEAG mentioned Qatiah as Pentaschenon (JOMARD 1809: Carte_2).
[178] (AMMAR 1946: 59).
[179] (GARDINER 1920: 115).

The sandy road is called also al-Arish road[180], Ottoman road, Darb as-Sultani road[181], and Philistines road as it was the old caravan road, that is mentioned in the Old Testament[182]. AL-MAQRIZI identifies the date of its establishment in the twelfth century AD after the extinction of the Fatimid rule in 490 AH, and acknowledges that the current sandy road was not the old road between Egypt and the Levant[183], but appeared after the year 500 AH after the extinction of the Fatimid state[184].

While on the contrary, IBN KHORDADBEH (885 AD) and QUDAMA (1147-1223 AD) referred to this road more than four centuries before AL-MAQRIZI, which confirms that AL-MAQRIZI'S opinion on the date of the establishment of this road is improbable[185]. The road was modernized and repaired after 583 AH, after SALAH AL-DIN AL-AYYUBI regained Jerusalem, as a result, in the year 659 AH, the mail used to take only four days to reach Damascus from SALAH AL-DIN Castle/ al-Gabal Castle during the days of the rule of AL-ZAHIR BAYBARS[186].

3.4.3.1 The Topography of Inland/ sandy road

In the past, the Inland road had little importance due to its large sands and harsh climate, especially since camel caravans[187] avoided it during some summer and autumn months because of the spread of flies and mosquitoes that kill camels[188]. However, the geomorphological changes that occurred on the coastal road and the shore of the Mediterranean have led to an increase in the importance of the sandy road recently due to some factors. The most important of these influences, is the tyranny of the Mediterranean on the opposite coastal road as a result of the rise in sea level on the one hand and some tectonic factors in that region on the other hand, in addition to the threat of the Crusades to travelers at one time[189].

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[180] (SHUKAIR 1916a: 284).
[181] This Name mentioned in the TBA Atlas on Map No. BX12.
[182] (GARDINER 1920: 100; HOFFMEIER and MOSHIER 2013: 487).
[183] (AL-MAQRĪZĪ 1999b: 226).
[184] (IBN IYAS 1995a: 27)
[185] (IBN KHRDADHBH 1839: 19–22; QUDAMA 1981: 219–220)
[186] (AL-MAQRIZI 1999: 632–633; IBN IYAS 1995: 28)
[187] (PLINY 1855: 6. 102; PLINY 1855: 8.67; STRABO 17. 1. 45) they pointed out that the camel was one of the available means of transportation, and camels rarely appear in the Ptolemaic papyri, but there is an increase in reference to it in the Roman papyri, which indicates that it was one of the preferred means of travel. Although the use of donkeys in travel was economical because the cost of caring for them and meeting their needs was less than the cost of caring for camels or horses, in addition to the fact that donkeys can work in the desert climate for up to 60 hours continuously without water. As for horses, they were not used for transportation, but for chariot racing and hauling, and for delivering urgent mail parcels. For more see: (ADAMS 2007: 52–58)
[188] (SHUKAIR 1916a: 260)
[189] (AL-MAQRĪZĪ 1999b: 226; IBN IYAS 1995a: 28)

Another evidence of the increasing importance of the sandy road, beginning in the sixth century AD, is the advent of the Arab conquest of Egypt through this road and not through the coastal road. al-Djffar Road/ Darb as-Sultani became the main road of the armies later, and later the trade road between Egypt and Syria[190]. As a result of a large number of dunes, the lack of soil cohesion on this road, and the gusts of wind-carrying sand that push sand along the road, the Egypt-Palestine Railway was built along this road. An exception to this is two areas: one east of the Suez Canal, where the railway line runs north of the road to avoid an area of high dunes, some of which exceed 50 m[191], and the other area near al-Arish, where it parallels the coastal road east of Bardawil Lake for its solidity and the soil cohesion in this area[192].

On the other hand, often the traveler on this road towards Rafah encounters some areas of flat land where some weeds and weeds grow, and the closer we get to the eastern borders of Egypt, the areas are suitable for the cultivation of some crops such as wheat and barley, in addition to the dunes holding freshwater. Many wells were built on this road, which was dug every five or six miles[193]. The sandy road is far from the Mediterranean coast, and as a result, it escapes the dangers of rising sea levels and the tyranny of water, which is why many travelers prefer it. On the contrary, it is sometimes difficult to walk on this road due to a large number of dunes and the lack of soil cohesion in some parts, in addition to the blowing of winds loaded with dust and sand and the harsh climate. Besides, the lack of services that meet the needs of travelers in some areas.

On the other hand, the robbery of travelers by bandits, the looting of their luggage, and the disturbances and revolutions of the cities in which this road passes or is near, were all factors that increase the danger of land travel. In addition, the quality of the road infrastructure was a cause of constant concern for travelers[194]. The cost of land travel was also very expensive, depending on what came in the decree of Diocletian, which determines the cost of transportation and transportation and the maximum prices[195].

[190] (AMMAR 1946: 70; BUTLER 1902)
[191] (HOFFMEIER and MOSHIER 2013: 492).
[192] (AMMAR 1946: 79; HOFFMEIER and MOSHIER 2013: 487; MASPERO 1894: 420; SMITH 1897: 278–279).
[193] (GARDINER 1920: 144–145).
[194] (ADAMS 2007: 4, 20–21). For more on the bandits and some of the events that the Holy Family was exposed to as a result, see: (BASILI 1953a: 41; HUNAYN 1902: 63; MEINARDUS 2019: 30–31; PHILLIPS 1999: 59, 162; SARKIS 1936: 86).
[195] (ADAMS 2007: 11–12; LAVAN 2008: 167–191). For more: Calculating travel costs and time use ORBIS Model: The Stanford Geospatial Network Model of the Roman World. https://orbis.stanford.edu/orbis2012/#using.

3.4.3.2 Stations of the Inland/ sandy road

The Inland road in some of its parts flows the same road of 'Way-of- Horus' between Egypt and Palestine[196] whose stations were as follows: Tharu/ Tcharou Fort, which became Sile in the Greco-Roman period and located about 2.5 km east of al-Qantara at Tal Abu Saifi[197]. Then it heads north and passes near Tal al-Hayr to Bir Rummana near al-Mahamdiyah, followed by Qatiah, then Bir Mazar south of al-Bardawil Lake, near al-Filusyiat, heading east to al-Arish, al-Sheikh Zuweid, and Rafah[198].

Before the digging of the Suez Canal, the sandy road used to start from al-Salheya, which is located about 30 km west of al-Qantara. While, after the construction of the canal, it started from al-Qantara station. Then it extends east to Umm Karsh in a sandy area up to Qatiah, and from there to Bir al-Hassoun, at which the road divides into two paths: one of them goes north, passing through Nakhl al-Ghaba, then Nakhal Abu Hamra. Then to the archaeological station of Tal Bir Rummaneh until al-Mahamdiyah, from which a road was extended to Port Said after the opening of the Suez Canal, passing through Qala'a, Sahl/ al-Tina plain, and Qal'at al-Balah[199].

Additionally, the second path, which branches off from Bir al-Hassoun station, passes south of Bardawil Lake, passing Bir Abu al-Afin, Bir al-Abed, Thumilah Mabrouka, and Khoshum al-Adrab, from which the sandy road branches into three lanes in the direction of al-Arish. the first of which is Darb as-Sultani, which is directly adjacent from the south, to Bardawil Lake, passing through Bir al-Mazar and then Khirbet al-Ashush to al-Arish. This path is considered the longest, but it is the best. The second path called Darb al-Tawayat was the shortest, but it was flooded by the waters of Bardawil Lake in the nineteenth century AD[200]. Besides, the third path that cuts through saltwater between the first and the second paths, therefore it is called al-Wastaniyah/ the middle road. It was used as a road for telegraphs and mail. However, its importance has vanished, as well, only Darb as-Sultani is left[201].

On the other hand, the sandy road/ Darb as-Sultani, which passes in North Sinai did not stop at Tal al-Farama but rather continued to extend to Tal al-Hayr, and Tal Harba, heading

[196] The phrase "Way-of-Horus" in some writings denotes the northeastern region of Egypt, and the road that passes through it to Canaan. For more see: (BIETAK 1996: fig. 1; GARDINER 1920: 114–116; HOFFMEIER and MOSHIER 2013: 485–510; KEES 1961: 191; OREN 2006: 1).
[197] (GARDINER 1920: 112).
[198] (HOSNY 2003: 108). For more see: (GARDINER 1920: 99–116; OREN 1987: 69–120).
[199] (HOSNY 2003: 106; SHUKAIR 1916a: 253).
[200] (SHUKAIR 1916a: 285)
[201] (HOSNY 2003: 107; SHUKAIR 1916a: 256)

south, following the extension of the Pelusiac branch to Wadi Umm Karash, then to the west until al-Qantara and Tharo[202]. Some historians referred to some stations of the sandy road during successive events and periods, as illustrated in (Table 3-7). In addition, SHUKAIR calculated the distance in hours between the stations of the middle path[203].

The Notation used in (Table 3-7):

A	IBN KHORDADBEH 848 AD[204]
B	QUDAMA 930 AD, Ibn Haukal 977 AD and AL-MAQDISI 985 AD[205]
C	AL-IDRISI 1154 AD[206]
D	AL-HHAMAWI 13th century[207]
E	AL-MAQRĪZĪ and IBN IYAS [208]
F	IBN BAṬṬŪṬA (1377AD)[209]
G	EL-NABULUSI, 167l[210]
H	French Campaign Road[211]
I	BUTLER 1902[212]
J	SHUKAIR 1916[213]
K	AMMAR 1946[214]
L	ZAKKAR 1995[215]

[202] (AL-AYEDI 2006; GARDINER 1920: 114; HOSNY 2003: 107; SHUKAIR 1916a: 256)
[203] (SHUKAIR 1916a: 286)
[204] (IBN KHORDADBEH 1839)
[205] (AL-MAQDISI 1991; IBN HAUKAL and GOEJE 1873; QUDAMA 1981)
[206] (AL-IDRISI 1592)
[207] (AL-HHAMAWI 1906)
[208] (AL-MAQRĪZĪ 1999b: 631–632; IBN IYAS 1995a: 27–29; ZAKKAR 1995: 300)
[209] (IBN-BAṬṬŪṬA and DUNN 2005)
[210] EL-NABULUSI (mentioned in HARTMANN, 1910: 701); cf. VON KREMER, 1850b: 824; (FLÜGEL 1862: 627; SIRRIYA 1979)
[211] (CLÉDAT 1916b: 153–158; MICHELANT et al. 1882: 241–243; VERRETH 2006: 84)
[212] (BUTLER 1902)
[213] (SHUKAIR 1916a)
[214] (AMMAR 1946: 48–50)
[215] (ZAKKAR 1995: 306)

Table 3-7: The Inland road stations in North Sinai according to some historians

Nr.	References & Sources / Stations	A	B	C	D	E	F	G	H	I	J	K	L
1	al-Salheya						✠		✠			✠	
2	al-Qantara										✠		
3	al-Qusair								✠				✠
4	Wadi um Karash										✠		
5	Tal Hubwa										✠		
6	Bir al-Duwidar										✠		
7	Bir al-Nisf										✠		
8	Tal al-Farama	✠	✠	✠	✠	✠				✠			✠
9	al-Ghurabi								✠				
10	Qatiah				✠	✠		✠	✠		✠	✠	✠
11	Bir al-Abd							✠				✠	
12	al-Ma'n								✠				
13	al-Mutaileb								✠				
14	al-Sawada						✠		✠				
15	al- Azib	✠											
16	al- Tha´ama	✠											
17	Ras al-Adrab							✠					
18	Um al-Hasuwn							✠					
19	Bir al-Hasuwn										✠		
20	Barsat Maen										✠		
21	Bir al-Eafin										✠		
22	Thumaylt Mabruka										✠		
23	al-Khashum										✠		
24	Khashum al-Adrab											✠	
25	al-Burj											✠	
26	Qabr al-Saaei							✠					
27	Rojom Amoria										✠		
28	Sabkhat Abo Talool										✠		
29	Sabkhat al-Mokhyzan										✠		
30	Sabkhat Sabika										✠		
31	Tal Abu Mazrou										✠		
32	Bir al-Mazar											✠	
33	Um al-Arab					✠							✠
34	al-Qasr		✠										
35	al-Baqqara		✠										
36	al-Mokhlasa		✠										
37	al-Warrada	✠	✠	✠	✠	✠	✠		✠				✠
38	al-Mutilib						✠						
39	Rojom al-Bardawil										✠		
40	Bir al-Masaeid							✠			✠		
41	al-Arish	✠	✠	✠	✠	✠	✠	✠	✠	✠	✠	✠	✠
42	al-Kharouba						✠		✠		✠		
43	al-Za'aqa								✠				
44	al-Mesker										✠		
45	al-Sheikh Zuweid										✠		
46	Rafah	✠	✠	✠	✠	✠	✠	✠	✠	✠	✠	✠	

The previous table illustrates that the sandy road/ al-Djffar continued to start from Rafah on the eastern borders of Egypt until it passed through Tal al-Farama in the far northwest of Sinai until the twelfth century AD. Subsequently, historians of the later centuries referred to

Tal al-Farama as ruins of little importance, always describing the sandy road as running south of and far from Tal al-Farama[216]. In addition, those who dated the Ottoman conquest did not mention Tal al-Farama, nor did they mention that they encountered a branch of the Nile – the Pelusiac branch - extending to the east[217].

At the beginning of the thirteenth century AD, Qatiah (30°57'07"N, 32°44'51"E) became the heir to al-Farama/ Pelusium, which is located to the south of it along the sandy roads. That as a result of several factors, the most important of which is the dryness of the Pelusiac branch of the Nile, which Tal al-Farama was located at its mouth, which in turn led to the deterioration of al-Farama's importance, therefore the road turned to the south of it. Besides the effects of some of the tectonic processes that occurred in that region, which were referred to previously. On the other hand, medieval historians and geographers referred to al-Warrada a lot, suggesting its importance for its location on the southeastern edge of Bardawil Lake[218], in addition, AL-DABBAGH indicated that al-Warrada is the shrine. While al-Baqqara, was mentioned at the beginning of the third decade of the tenth century AD, it is located near Bir al-Abd[219].

The main sites in North Sinai from the Roman and Byzantine periods seem to be confined to the coastal region and the Roman tracks describe only this road. However, inland archaeological surveys show that another road was also likely to be used, along the edge of the desert south of the present-day Sabkhat al-Bardawil, some sites were identified as Roman or Byzantine but not confirmed [220].

The coastal road was gradually abandoned during the Arab period, and in its place, the old New Kingdom road was reused. In the ninth and tenth centuries AD, al-Baqqara was the main site between al-Warrada and Tal al-Farama, but it disappeared sometime later. In the thirteenth and fifteenth centuries AD, a network of stations appeared: Bir al-Qadi, Bousser, al-Sawada, al-Mutaileb, Nakhlat Ma'n, Qatiah, and al-Ghurabi. In the following centuries, Bir al-Masaeid, Qabr al-Sa'i, Mahall al-Baraqat, Nakhla, Umm al-Hasan, Arar, Ru'us al-Adrab, Bir al-Abd, Bir al-Duwaidar, and al-Aqula, replaced them all while only Qatiah remains in use under the same name. Most of these stations also disappeared during the eighteenth century,

[216] (ABU AL-FIDA 1848: 146; HUME 1918: 62–63)
[217] (AMMAR 1946: 64)
[218] (KAMAL 1926b: 633)
[219] (AMMAR 1946: 48)
[220] (OREN 1973: 198–205)

while a few are still found on modern maps[221]. IBN IYAS mentioned that there was a road extending between Tennis and Cyprus, and the water floated on it and it sank, more than a hundred years before the Arab conquest of Egypt[222] (Fig. 3-6).

Fig. 3-6: Map of the ancient roads (coastal and internal) in North Sinai. Where the stations appear in black with a white Halo, while the roads are the lines in red.

3.5 Confirmed stations for the itinerary of the Holy Family's journey in North Sinai

Although ancient sources agreed that HF did not take a well-known road at the time, this road was safer and was taken by Empress Helena, mother of Emperor Constantine, in 336 AD on her journey to Palestine, where she discovered the position of the Holy Cross. In addition, Saint Salvia on her journey from 385 to 388 AD also went down this path[223] and others took the same path in turn, in addition to Christian discoveries along with the cities of this coastal road[224].

[221] (VERRETH 2006: 590–591); For more on the Inland road see: (VERRETH 2006: 1021–1086); For more on the time periods that mentioned the coastal and sandy road, and at what time each station was mentioned, see also: (VERRETH 2006: 98–105).
[222] (IBN IYAS 1995b: 26)
[223] (AMMAR 1946)
[224] (AMMAR 1946; EVETTS 1910: 93; MALAN 1873: 21).

The archaeological discoveries, especially Christian ones, are concentrated along the coastal road in North Sinai in the following cities: Rafah, Sheikh Zuweid, al-Arish, al-Filusyiat, Tal al-Qals, al-Mahamdiyah, Tal al-Makhzan, and then Tal el-Farama[225]. However, all the stations mentioned in that region are old and most of them have not disappeared from old documents and sources, which facilitates determining their geographical location with great accuracy (Table 3-8).

On other hand, this, in turn, refutes the opinion that "because of the lack of clear written or oral evidence specifying the actual road taken by the HF, all the places mentioned are guesswork"[226]. On the contrary, some rejected the coastal road, following the idea of fearing the tyrant Herod from persecuting HF, but they did not offer an alternative road and were satisfied that it was unfamiliar[227]. In the same context, all agreed on the city of Tal al-Farama, which had a large Roman garrison. This leads to an important question: How is the fear of Herod and at the same time passing through the most important fortified city belonging to the Romans? Where STRABO mentioned that Egypt has a military garrison numbering about 22,800 soldiers[228], consisting of three divisions, nine companies, and three cavalry units[229]. One of these cavalry units was concentrated in Tal al-Farama[230].

Abbreviations and Notations used in (Table 3-8):

AB	BUTCHER 1900
GH	HUNAYN 1902
WB	BASILI 1953
OM	MEINARDUS 1977
BG	GREGORIUS 1992
SS	ABD AL-MALIK 1997
PH	PHILLIPS 1999
YH	HOSNY 2003
AS	SADEK 2017; SADEK 2011
NG	NUNS OF THE CONVENT OF ST. GEORGE 2016

[225] (HOSNY 2003: 139–143)
[226] (MEINARDUS 2019: 28–29)
[227] (GREGORIUS 1992; HUNAYN 1902; SARKIS 1936)
[228] (AL-ABADI 1999: 118,159)
[229] (STRABO 17. 1. 12.)
[230] (AL-ABADI 1999; FAYEZ 2012)

Table 3-8: The Stations of the Holy Family path in North Sinai.

Nr.	References & Sources / Stations	AB 1900	GH 1922	WB 1953	OM 1971	BG 1992	SS 1998	PH 1999	YH 2003	AS 2011	NG 2016
1	Rafah				✠		✠	✠	✠	✠	✠
2	al-Shikh Zowaied[231]						✠				✠
3	al-Arish				✠		✠	✠	✠	✠	✠
4	al-Filusyiat (al-Zaraniq)						✠		✠	✠	✠
5	al-Qals						✠		✠		✠
6	al-Mahamdiyah						✠				✠
7	Tal al-Makhzan						✠				
8	Pelusium al-Farama			✠	✠	✠	✠	✠	✠	✠	✠
9	al-Qanatra	✠	✠								

The previous table illustrated that the number of stations that were included in the itinerary of the Holy Family has increased with the end of the second millennium and the beginning of the twenty-first century. This is due to the large number of scientific research results presented in this regard, in addition to the archaeological discoveries at the sites of the mentioned stations, in addition to the manuscripts that are discovered successively occasionally. Moreover, along the Inland road, there was no archaeological or physical evidence associated with HF or indicating that it was on this road. **In Conclusion** of the foregoing, we can confirm that HF took the coastal road in North Sinai during the escape journey[232] (Fig. 3-7).

[231] It is considered because it replaced the port of Bytlion, which was located near it in its north, and because of the presence of some ancient monuments in it. For more see: (ABD AL-MALIK 1997)
[232] (MEINARDUS 2019: 39)

Fig. 3-7: The Confirmed stations for the Holy Family's itinerary in North Sinai

4 The Spatial Cartographic analysis of the ancient road network in the Nile Valley and Delta

Preface

The main stations that the Holy Family passed through in Palestine and along the coastal road in North Sinai during the previous chapter are illustrated. Accordingly, the current chapter brings us to the completion of the audit of the stations for the HF itinerary of the eastern and central Nile Delta. In addition, reviewing the track stations located west of the delta. Moreover, the chapter indicates the HF itinerary stations located between Babylon (Old Cairo) and Asyut, where, according to ancient sources, the last stations of the itinerary are located.

In parallel, the chapter analyzes the ancient road network extending from the east to the west of the Nile Delta, as well within the valley south until Asyut, according to ItA, TP, BA, TAVO, and DEAG as classic cartographic sources. In addition to how close the HF itinerary stations are to these roads. Moreover, suggesting a road for the journey in the part that lies between the stations of al-Ma'adi and Deir al-Garnous, which none of the researchers had ever mentioned before. Finally, the chapter illustrates the accurate locations of the Holy Family path stations in the Nile delta and valley.

4.1 The ancient road network in the Nile Delta

Significant discrepancy between HF path directions in the East and Central Delta region* because the Armenian tradition mentions that the HF took its way to the land of Goshen/ Sharqia Governorate, after passing through the plain of Tanis, they settled in Belbeis for some time and followed the ancient Roman military road to al-Qantara, Phaqusa, and Belbeis[233].

Additionally, Al-Harawī confirmed that by referring to stories about Jesus that occurred on Tanis Island, which is currently located near the Mediterranean Sea[234]. Whereas, on the contrary, Phillips suggests that it is unlikely that HF passed north to Tanis/ San al-Hagar, and states that it entered Egypt by way of Wadi al-Tumaylat, to Vithom whose ruins are now located in the ruins of Tal al-Maskhouta near al-Mahsama according to the discoveries of 1883 AD[235]. As well, they walked a distance of 15 km east of Vithom, al-Qasasin/ Sukkoth to Raameses/ Tal al- Kebir, then towards the west to Beysabt/ Saft al-Hinna, to Boubasta/ Vibesta, which according to the Coptic Synaxarium is the first city that HF entered the Delta[236].

* East of the delta specifically means all the stations that located east of the current Damietta branch up to al-Farama border, while the middle of the delta means the area between the current branches of Damietta and Rosetta.

[233] (PHILLIPS 1999: 1–8)

[234] (Al-Harawī, 2002, p. 46)

[235] (MEINARDUS 2019: 29–31; PHILLIPS 1999: 55–57)

[236] Synaxarium readings on 24th Bashans; seventh Hatur. Perhaps, it is because the area between two branches of the Nile is often called "Delta".

In addition, they walked in the south direction to Belbeis[237], Minyat Ganah, and Minyat Samannud. Later, they crossed the Damietta branch to Samannud, Burulus near the Mediterranean coast, and Sakha. Then they crossed the Rosetta branch towards the south, where they walked from Tirana to Wadi Natron[238]. Furthermore, most references indicated that the Holy Family traveled from al-Farama directly to Tal Basta[239]. Because of this confusion, it is necessary to verify the ancient road network in that area, to determine the places that were possible at that time to be linked together.

4.1.1 The ancient Roads in East and Central Delta

ItA mentioned three roads pass through the delta, namely no.124, 125, and 126 (Tables 4-1, 4-2, 4-3, 4-4). In addition, it has some short road connections from Thou to Serapeum, Pelusium to Clismo, and Cynon to Naucratis, which distinguishes ItA as being more detailed than TP (Table 4-5, 4-6). Road 124 extends from Pelusium to Babylon on the east bank of the Nile to the al Mohrraqa Monastery near Babylon. Besides Road 125 runs on the west bank of the Nile from Alexandria to Memphis, where it is also opposite al-Te'en Monastery. Meanwhile, Road 126 runs from Pelusium to Alexandria, crossing the delta region from east to west[240]. BA referred to those roads in map 74, as well as DEAG mentioned it in Carte-2[241].

Table 4-1: Stations of Pelusium - Serapium road according to ItA.

Road name	Station name in ItA	Distance Rm	Current name	Current Dis. km	Geographical coordinates according to DARE
Pelusium - Serapium	Pelusio	0	Tal al-Farama	0	32.54063 E 31.04227 N
	Magdolo[242]	12	Tal al-Hayr	11.99	32.44456 E 30.97269 N
	Sile	12	Tal al-Ahmar/ Tal Abu Saifi[243]	15.78	32.40033 E 30.83591 N
	Thaubasio/ Thaubasteos	28	--------	47.1	32,25657 E 30,54914 N
	Serapium/ Serapia/ Serapiu	8	Near Gabal Mariam south of al-Ismailia	21.08	32.32640 E 30.44432 N

The previous table illustrated that Magdolo is located at a distance of 20 km northeast of al-Qantara, and Sile is located at a distance of five km east of al-Qantara. Besides, the locations

[237] (PHILLIPS 1999: 60)
[238] (PHILLIPS 1999: 63)
[239] (GREGORIUS 1992; GUIDI 1917; HUNAYN 1902; MINGANA 1931; SARKIS 1936)
[240] (MILLER 1916: 851)
[241] (JOMARD 1809: Carte_2)
[242] It means watchtower, which indicates its function (BLOUIN 2007: 104).
[243] (BALL 2017: 255)

of Serapium and Thaubasio were determined based on WALLIS 1798[244], but the coordinates were based on DEAG 1809, PARTHEY 1859, and GRAAUW 2022.

Table 4-2: Stations of Pelusium - Alexandria road according to ItA

Road name	Station name in ItA	Distance Rm	Current name	Current Dis. km	Geographical coordinates according to DARE
Pelusium - Alexandria	Pelusio	0	Tal al-Farama	0	32.54063 E 31.04227 N
	Heracleo/ Heracleus/ Hiracleum/ Heracleum/ Eracleo/ Heracleopolis/ Eracleus Mikra	22	Tal Belim/ Tal Aiyed	35.6	32.17459 E 30.97843 N
	Tanis	22	San al-Hajar	27.77	31.88337 E 30.97500 N
	Thumuis/ Thmuis/ Thamum	22	Tami al-Amaded	35.2	31.51667 E 30.93889 N
	Cyno/ Kinopolis[245]	22	Abu Sir Bana	27.7	31.23480 E 30.91090 N
	Taua/ Taya Taba/ Tavam	30	Ezbet Towa/ Tuwa, Tanta	27.11	31.00693 E 30.76541 N
	Andro/ Andropolis	12	Kherbta	36.08	30.62946 E 30.77386 N
	Nitine/ Nithine/ Nethine	12	--------	16.3	30,55062 E 30,88486 N
	Hermupolis Parva/ Hermopolis Minor/ Hermupoli	24	Damanhour	16.07	30.44872 E 31.01705 N
	Chereu/ Chaireu	24	Creon	28.19	30.18971 E 31.13986 N
	Alexandria	20	Alexandria	27.86	29.90413 E 31.19537 N

The foregoing table displayed that there are missing distances between Pelusio and Heracleo in ItA according to Konrad, but it was mentioned by Cuntz[246]. In addition, it had located according to DARE. Moreover, Heracleo's next stop was supposed to be Thitv, which is 16 miles away, but was referred to as a ruin next to Tanis. Therefore, it was considered that it has the same location as Tanis because the translation of their name is similar together according to multiple translations[247]. Besides, there is another city with the same name and it is located near Qaroun Lake in Fayoum (31.0427N 29.3698E).

Similarly, Thitv's, the next station was supposed to be TMv, which is 16 km away. However, it was referred to as traces next to Thmuis, therefore, both were considered one place because the two names are similar in some translations together[248]. The Distance and the station are missing until Cyno on TP, while TALBERT mentioned it as 22 miles, in addition, the 25-mile

[244] The BL King's Topographical Collection: "Map of the Mouths of the NILE, with the scene of action in Egypt. https://www.flickr.com/photos/britishlibrary/50265602426
[245] It is located in front of Garrah, west of the Damietta branch.
[246] (CUNTZ 1990: 21; MILLER 1916: 857–870)
[247] (MILLER 1916: 870)
[248] (MILLER 1916: 870)

distance is from TMv, not from Thumuis according to TP[249]. Besides, the coordinates of Nitine are based on PARTHEY 1859 and it is an unknown city. Starting from Kenopolis, the road to Alexandria is branched and consists of the following stations (Tables 4-3, 4-4).

Table 4-3: Stations of Kinopolis - Alexandria road according to ItA

Road name	Station name in ItA	Distance Rm	Current name	Current Dis. km	Geographical coordinates according to DARE
Kinopolis - Alexandria	Cyno/ Kinopolis	--------	Abu Sir Bana	0	31.23480 E 30.91090 N
	Buto/ Buti	12	Tal al-Faraeen	56.6	30.74222 E 31.19556 N
	Ermupoli Mikra/ Hermopolis Minor	16	Damanhour	34.3	30.44872 E 31.01705 N
	Alexandria	44	Alexandria	55.5	29.90413 E 31.19537 N

There are two stations bearing the name Buto, the first is in the east of the delta (31.95395 30.87763), while the other is Tal al-Faraeen near Damanhour - mentioned in the previous (Table 4-3). The distance is not mentioned, but it was determined based on the mentioned distance from the Creon distance to Hermopolis and Alexandria and it is equal to 44 miles.

Table 4-4: Stations of Pelusium - Manf road according to ItA

Road name	Station name in ItA	Distance Rm	Current name	Current Dis. km	Geographical coordinates according to DARE
Pelusium - Memphis	Pelusio	0	Tal al-Farama	0	32.54063 E 31.04227 N
	Heracleo/ Heracleus/ Hiracleum/ Heracleum/ Eracleo/ Heracleopolis/ Eracleus Mikra	22	Tal Belim	35.6	32.17459 E 30.97843 N
	Dafno/ Daphno	16	Tal Defenneh	13.39	32.17917 E 30.85806 N
	Tacasarta[250]	18	----------	25.89	32.17599 E 30.77634 N
	Thou[251]	14	Tal al- Kebir	35.44	31.32078 E 30.66025 N
	Scenas	26	Shabin al-Qanater	56.33	31,74800 E 30.31231 N
	Vico Judaeorum	12	----------	26.57	31.61692 E 30.52279 N
	Scenas Veteranorum[252]	12	----------	21.99	31.48386 E 30.36172 N
	Helius/ Heliopolis	14	Ai'n Shams/ al-Mataryia	26.17	31.30518 E 30.12937 N
	Memphis/ Manf	24	Mit Rahina	31.49	31.25428 E 29.84967 N

[249] (TALBERT and ELLIOTT 2010: 224–226)
[250] (BALL 2017: 253). DEAG mention its location as al-Salahya (JOMARD 1809: Carte_2).
[251] (NAVILLE 1903: 36). DEAG mention its location as Abbaeeh (JOMARD 1809: Carte_2).
[252] (JOMARD 1818: 18,274,746)

Based on the foregoing table, the distance between Pelusio and Heracleo is missing in ItA[253], in addition, the distance was determined according to what was mentioned in Pelusium - Alexandria roads no. 152, 153, 154, and 155 mentioned above.

Furthermore, Tacasarta and Thou locations and their coordinates were determined according to WALLIS 1798 and PARTHEY 1859, but they are still unknown. The stations of *Vico Judaeorum* and *Scenas Veteranorum* are not mentioned, but only Scenas Veteranorum and its distance from Thou is 26 miles; to Heliis us 24 miles[254]. The coordinates are based on GRAAUW 2022. These stations are mentioned on Babylon - Qulzam road no. 169 and 170 according to Cuntz[255], which indicates that they did not follow here the path of Pelusium - Memphis, but they are still unknown. The distance has been measured up to Memphis from Thou, equal to 12 miles up to Babylon, and 24 miles up to Memphis. Moreover, the map of Aegyptus published by RIGOBERT BONNE in 1787[256] clearly shows the locations of these stations: Sile, Thaubasio, Tacasarta, Thou, Scenas, and Vico Iudaeorum (Fig. 4-1).

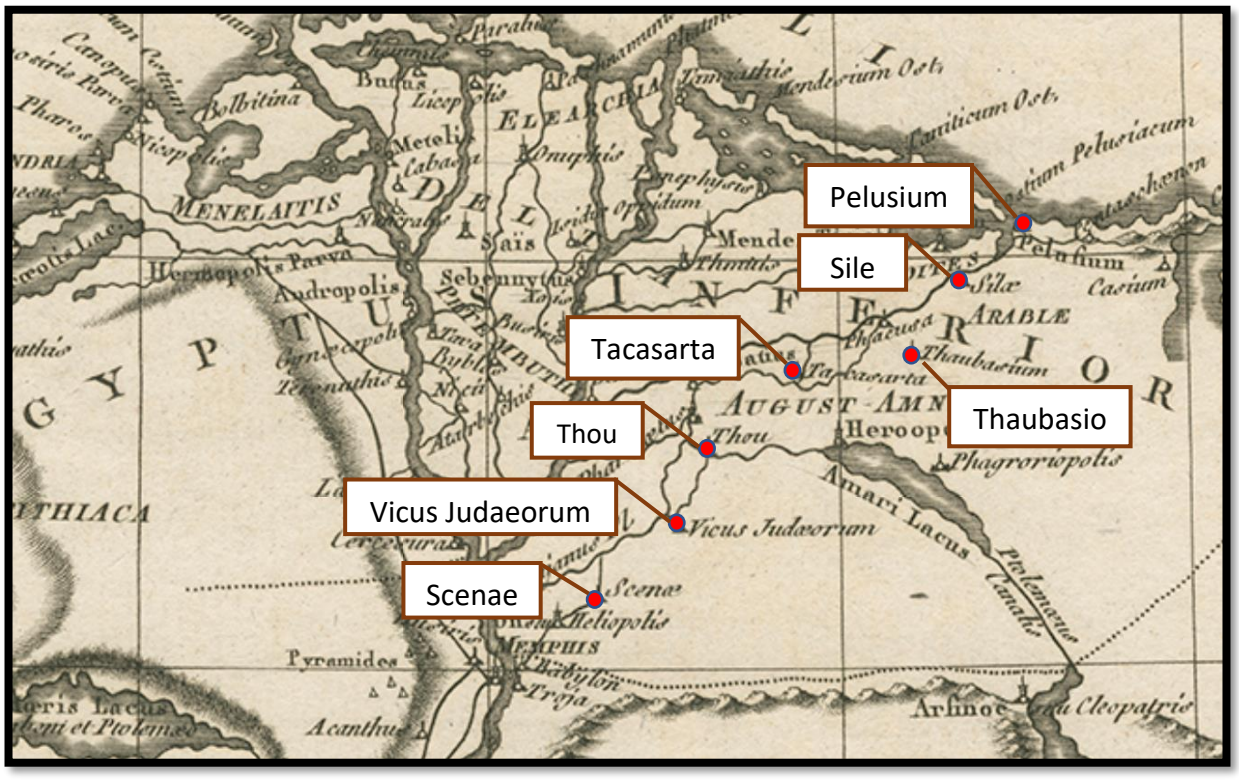

Fig. 4-1: Locations of some unknown stations, which are located in the north and east of the Nile Delta (after RIGOBERT BONNE 1787).

[253] (MILLER 1916: 857, 870); and it is not mentioned also in Road No. 163 in IT (CUNTZ 1990: 22).
[254] (CUNTZ 1990: 22)
[255] (CUNTZ 1990: 23)
[256] Map of Lower Aegyptus (1787); University of Texas at Arlington Libraries. Aegyptus. (1787). Retrieved from https://library.uta.edu/digitalgallery/img/20086273

Table 4-5: Stations of Pelusium - Hermopolis Minor road according to TP

Road name	Station name in TP	Distance Rm	Current name	Current Dis. km	Geographical coordinates according to DARE
Pelusium - Hermopolis Minor	Pelusium	0	Tal al-Farama	0	32.54063 E 31.04227 N
	Heracleo/ Heracleus/ Hiracleum/ Heracleum/ Eracleo/ Heracleopolis / Eracleus Mikra	22	Tal Belim	35.6	32.17459 E 30.97843 N
	Th...o	16	----------	99.52	31.14546 E 31.13271 N
	----------	12	----------	16.43	30.98085 E 31.17716 N
	Bouto/ Boutos	----------	Tal al-Faraeen	138.5	30.74222 E 31.19556 N
	Hermopolis Mikra	16	Damanhour	34.28	30.44872 E 31.01705 N

The previous Table illustrated that Thou and the next station are still unknown but their coordinates were determined according to DEAG 1809, PARTHEY 1859, and GRAAUW 2022. The distance until Bouto measured from Herakleopolis.

Table 4-6: Pelusium - Babylon road Stations according to TP

Road name	Station name in TP	Distance Rm	Current name	Current Dis. km	Geographical coordinates according to DARE
Pelusium - Babylon	Pelusium	0	Tal al-Farama	0	32.54063 E 31.04227 N
	Phacusi/ Phaguse/ Phakoussai/ Phakoussa	36	Phaqusa	77.6	31.81110 E 30.73390 N
	Senphu/ Semutis[257]	7	----------	11.84	31.74112 E 30.6461 N
	Simiati/ Simnati/ Simuatio	----------	----------	11.44	31.67730 E 30.55909 N
	Stratonicidi/ Stratonicidi [258]	23	----------	36.02	31.48838 E 30.27915 N
	Babylon	36	Old Cairo	39.13	31.23152 E 30.00618 N

Phaqousa was mentioned in the previous table, and from its location, a canal branched from the Nile to Arsinoe on the red sea. The canal began to be excavated during the reign of Sesostris, completed by Ptolemy, and rebuilt by Trajan, so it was called the Trajan canal. In addition, the coordinates of Senphu and Simiati have been determined according to PARTHEY 1859 and GRAAUW 2022. Moreover, PARTHEY and KONRAD interpreted Stratonicidi's name as a station located 36 miles from Babylon[259]. The coordinates are given based on PARTHEY, while

[257] DEAG mention Senphu location as Tal al-Ahmar and Simnati location as Tal Abrache (JOMARD 1809: Carte_2).
[258] Near 10th of Ramadan city, according to the coordinates for (PARTHEY, 1859).
[259] (MILLER 1916: 856)

Stratonicidi and Babylon are considered the same place having the same coordinates according to DARE. GRAAUW considered Stratonicidi to be a port for the city of Babylon, therefore associated with each other[260].

Table 4-7: Babylon - Clysmo road Stations according to ItA [261]

Road name	Station name in ItA	Distance Rm	Current name	Current Dis. km	Geographical coordinates according to DARE
Babylon - al-Qalzam	Babylon/ Babylon	0	Old Cairo	0	31.23152 E 30.00618 N
	Heliu/ Heliopolis	12	al- Mataryia	15.42	31.30518 E 30.12937 N
	Scenas Veteranorum	18	----------	31.02	31.48387 E 30.36172 N
	Vico Iudaeorum [262]	12	----------	21.99	31.61692 E 30.52279 N
	Thou	12	Tal al-Kebir	11.35	31.69615 E 30.59872 N
	Hero/ Heropolis/ Heroonpolis	24	Tal al-Maskhouta	38.95	32.09944 E 30.55278 N
	Serapiu/ Cerabium/ Serapieion/ Serapeum	18	Near Gabal Mariam south of al-Ismailia	24.87	32.32641 E 30.44432 N
	Clysmo/ Klisma/ Klysma/ Clysma / Clysmo /Ovilia	50	Qalzam	59.42	32.57396 E 29.95462 N

Hero is mentioned in the previous (Table 4-7) as in ItA, while it is mentioned as Patoumos/ Vithom in DARE, and as Heroonpolis in BA and TAVO. Despite what WALLIS and the others indicated in addition to what was referred to in the analysis of previous tables, DEAG was unique in referring to some of these unknown stations and their current names.

Perhaps not many stable connected roads were established here because of the swampy land. Where the total number of the main and secondary estuaries of the Nile branches reached about 16 estuaries along the coastline from the far east of the delta to the far west of it[263]. Therefore, Pelusium appeared east of the Delta as a point of convergence or branching of five important roads. Moreover, it was a fortified central point located in the far northwest of Sinai. Tal al-Farama was referred to five times in each ItA and TP, as a start and end station, or a crossroad station, which indicates the importance of its strategic location.

[260] (DE GRAAUW 2022: 3917)
[261] It is Road 65 verified by (CUNTZ 1990: 23; TALBERT and ELLIOTT 2010: 224–226)
[262] The most accurate "Vico Iudaeorum" that means "Ghetto" (BALL 2017: 255)
[263] (PARTHEY 1859: 516; PLINY: 6.1-40)

Strabo indicated that the distance from Pelusium to near Hiropolis/ Tal al-Maskhouta is about 1000 stadion/ 185 km and it extends in an arid desert area[264]. Pliny mentioned that travel from the Mediterranean to the Red Sea was usually done via three land roads: the first of which was about 125 Rm long. This road was starting from Pelusium to Arsinoe. It extended into an area of sand with some ground marks of reed sticks fixed in the ground, to help the traveler not to lose track of the right path. Because of the gusting winds and the encroachment of dunes that erase the trails of walking.

The second road begins at a point about two Roman miles from Mount Cassius, until it meets the Pelusium Road after a distance of 60 Rm. In addition, the third and last road starts from Gerrum, which is shorter than the previous one by about 60 Rm, although it is more difficult to use because of its extension through a rugged and water-free mountainous area. The second and third roads also ended in Arsinoe[265]. Gerrum, which is the site of al-Mahamadiyah, now, was located between Pelusium and Cassius as Ptolemy mentioned, about 15 km east of Pelusium Tal al-Farama[266] (Fig. 4-2).

AL-HARAWĪ mentioned that there is a road from Tal al-Farama to Ain Shams[267]. Then Hof Bliss, which has a village called Saft, then Bahtit and Ghifa near Belbeis, and from there to al-Mataryia, which has an orchard from which the elderberry is extracted, which grows next to the well in which Jesus washed, then to Ain Shams. In addition, JOHNSON mentioned a road from Pelusium to Gerrha and another road from Pelusium to Arsinoe on the red sea[268].

Accordingly, it is possible to refute here the claim of PHILIPS, based on the Armenian tradition, without all other sources, that the Holy Family entered Egypt from the road to Wadi al-Tumailat through al-Mahsama. Where the sources did not refer to any of the ancient roads that passed through this region.

Based on the sources and the references, the HF Itinerary stations located east and center of the delta are al-Farama, Tanis, Minyat Tanah, Belqas, Burulus, Sakha, Minyat Ganah, Minyat Samannud, Daqados, Zagazig, Tal Basta, Belbeis, Tal al-Yahodia, Mostorod/ al-Mahama, Ain Shams, al-Mataryia, al-Zeitoun, Old Cairo and al-Ma'adi (Fig. 4-3).

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[264] (BALL 1942: 138)
[265] (BALL 1942: 159; PLINY 6. 29)
[266] (BALL 1942: 159)
[267] AL-HARAWĪmentioned that al-Farama contained the tomb of Galen the Wise (AL-HARAWĪ2002: 37–38), although in Sicilia there is said to be the tomb of Galen (AL-ISTAKHRI 1927: 53)
[268] (AL-ISTAKHRI 1927: 54; FAYEZ 2012: 49)

Fig. 4-2: HF stations in East and Central of Delta

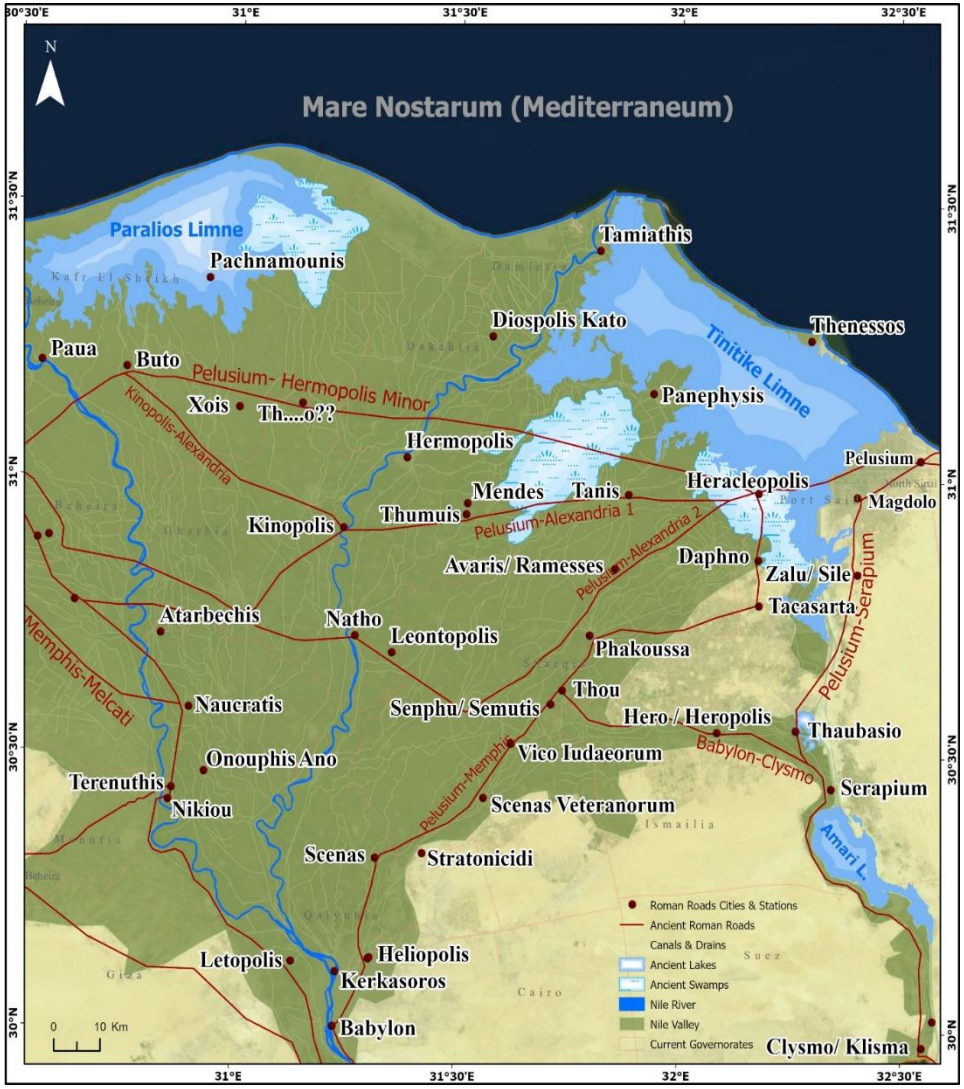

Fig. 4-3: Ancient Roads and stations in East and Central of Delta

4.1.2 The ancient Roads in West Delta

Two roads were running west of the delta from north to south. The first is the road that connects Alexandria and Memphis, which, according to ItA, consists of two connections of the road no. 155 and 159. While the second road – based on ItA, connects Memphis in the south of the delta and Melcati in the north (Tables 4-8, 4-9). Besides, the road that extends from Alexandria along the Mediterranean coast towards Salloum in the west.

Table 4-8: Alexandria - Memphis road Stations according to ItA

Road name	Station name in ItA	Distance Rm	Current name	Current Dis. km	Geographical coordinates according to DARE
Alexandria - Memphis	Alexandriam	0	Alexandria	0	29.90413 E 31.19537 N
	Chereu	24	Creon	27.86	30.18971 E 31.13986 N
	Hermupoli / Hermopolis Mikra	20	Damanhour	28.19	30.44872 E 31.01705 N
	Andro/ Andron / Andropolis	21	Kherbta	32.07	30.62946 E 30.77386 N
	Niciu/ Niqiou	31	Zawit Razin	45.49	30.85167 E 30.41222 N
	Letus/ Olio/ Letus/ Auleu/ Letopolis	29	Ausim	42.22	31.13461 E 30.12158 N
	Memphi / Memphis/	20	Mit Rahina	32.36	31.25428 E 29.84967 N

Chereu was mentioned in the previous table, but two distances are mentioned between it and Alexandria, these distances are 20 and 24 miles. There is no difference between it and Hermupoli, where distances of 24 and 20 miles were mentioned, although it was mentioned that one road connects them both.

Table 4-9: Memphis - Melcati road Stations according to TP

Road name	Station name in TP	Distance Rm	Current name	Current Dis. km	Geographical coordinates according to DARE
Memphis - Melcati	Memphis/ Memphisin/ Memphetum	0	Mit Rahina	0	31.25428 E 29.84967 N
	Letus/ Auleu/ Letopolis	24	Ausim	32.36	31.13461 E 30.12158 N
	Niciu/ Niqiou	36	Zawit Razin	42.22	30.85167 E 30.41222 N
	Naucrati/ Naucratis/ Naucratim/ Naukratis/ Naucratis [269]	43	Kom Jaif	59.35	30.59250 E 30.89722 N
	Melcati/ Milcadin/ Melcatim [270]	32	---------	48.15	30.08782 E 30.89733 N

[269] The port of Naucratis was the leading customs and shipping center for the import of Greek goods, and was located on the Right/ East bank of the Canopic branch (DE GRAAUW 2017; WITTKE and SALAZAR 2010).
[270] It is located to the west of Abu al-Matamir, at a distance of about 20 km, where some agricultural reclamation villages have been re-cultivated.

Naukratis mentioned in the previous (Table 4-9), which is existing as Kum Jaif, near Naqrash on the western shore of the Canopic branch, is located 35 miles southeast of Alexandria, and was established between 615-610 BC[271]. In addition, Melcati is unknown, and its coordinates are according to PARTHEY.

Memphis - Melcati road was used when the river overflowed the country, and when the rest of Egypt became a sea, only the cities and places built on the highlands would appear. This situation prevailed for a long time[272]. Meanwhile, the Egyptians do not travel with their boats down the river, but in the middle of the plain. The traveler from Naucratis walks towards Memphis adjacent to the pyramids, which is not the usual way that goes from Naucratis to the head of the delta and the city of Carcassaurus/ al-Warraq[273]. In addition, if the traveler's path is through the Mediterranean and the Canopic branch to Naucratis, must cross the delta plain and pass through the city of Anthila, which lies between both Canopus/ Kom Samadi, and Naucratis/ Kom Ge'if, and then passes through Archandos, which is near Anthila[274].

On the other hand, PTOLEMY mentioned in more detail the stations that are located directly on or near the Mediterranean coast. He mentioned their geographical coordinates according to the longitude assumed by him, which bears the number zero. Therefore, according to Ptolemy, Alexandria is located at a longitude of 60° 30` (Current Coordinates 29° 30`)[275]. The number of these stations was 13 stations, starting from Canop/ Kom Samadi near Abu Qir to the Great Aqaba/ Salloum, which is located in the far northwest of Egypt*[276].

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[271] (GILL 2010: 279–280; SCHLOTZHAUER and VILLING 2006; SHENOUDA 1976)

[272] For more see: Amr ibn al-Aa's message to Umar ibn al-Khattab about his description of Egypt prior to the Arab conquest (AL-HARAWĪ2002: 50; HERODOTUS 1966).

[273] (HERODOTUS 1966; LLOYD 1975: 89)

[274] (BALL 1942: 17; HERODOTUS 1966: 98,211)

[275] (STÜCKELBERGER and MITTENHUBER 2009: 282)

* The names of the stations in this area were not mentioned, because they are outside the itinerary of the Holy Family's journey, and it is sufficient to indicate their number.

[276] It should be taken into account that the author of the stadiasmus of the Great Sea pointed out that, the ancient geographers such as Strabo, Pomponius Mela, Pliny and Dionysius, in addition to the Fourth Book of Ptolemy, were not sufficiently familiar with the regions inland from the African Mediterranean coast in particular and Africa in general (KAMAL 1928: 188–193). It is clearly shown in the number Maps of Africa compared to other continents and locations - and if it comes to the density of settlements and the population of each continent separately, the area of Africa is about three times that of Europe. In spite of this, it can be noted that there are 10 maps of Europe, and 12 maps of Asia, while only four maps of Africa, and out of about 6,300 places mentioned by Ptolemy, only 964 places can be found related to Africa. In addition, the number of stations and geographical locations mentioned by Ptolemy in Egypt is equal to 167 locations/ 17.32% of the total number of stations in Africa, which led to the description of Egypt in some detail compared to the rest of the neighboring regions on the Mediterranean coast. Moreover, perhaps this indicates that Ptolemy had the right to access administrative files in the Roman state, and this helps explain why ancient writers did not mention many of the stations inland from the coast, for more refer to: (STÜCKELBERGER and MITTENHUBER 2009: 282). In addition, John Ball also indicated that the author of the Book of The Stadiasmus of the Great Sea, was probably an expert Alexandrian sailor, therefore probably he had =

Furthermore, IBN HAWQAL and AL-IDRISI mentioned another road starting from Tarnout, as they called it. It is the village of at-Tarranah or Tarnoutis in Greek. It used to have a storeroom to store the Natron salt that is brought through the road connecting it with the Wadi al-Natroun region in the western desert, especially the area where some Orthodox monasteries are located, including four complete monasteries remaining so far, in addition, the ruins of some monasteries. This area is called *the Empty Sea*. The road branched off from there heading north until it reached Alexandria and Mariot. Another branch extends until the Siwa Oasis in the west, and a third branch heads south until it reached Fayoum[277] (Fig. 4-4). The stations of HF itinerary that located West of Delta is only Wadi al-Natroun - according to the previously mentioned sources (Fig. 4-5).

Fig. 4-4: Ancient Roads and stations in West of Delta

= more knowledge of the relative positions on the coast compared to what Strabo and Ptolemy mentioned (BALL 2017: 193; BALL 1942) .

[277] (FEKRI 1918: 84)

Fig. 4-5: HF stations in West of Delta

According to the sources and Literary References, which were previously explained - HF has passed some stations located east, central, and west of the delta as shown in (Table 4-10).

Table 4-10: The Holy Family path stations in the Delta region

Nr.	Stations names	The Position in Delta	Nr.	Stations names	The Position in Delta
1	East of the city	East	**19**	Deir al-Magh'tas	Central
2	Tal al-Farama	East	**20**	Bikha Isous (Sakha)	Central
3	al-Qantara	East	**21**	Samnosa	Central
4	Tanis	East	**22**	Minyat al-Surd	Central
5	Nasbirtah	East	**23**	Shagrat al-Tin	Central
6	Tal Basta	East	**24**	Minyat Ganah	Central
7	Mostorod/ al-Mahmma	East	**25**	Wadi al-Natroun	West
8	Nimeshoti	East	**26**	Ain Shams/ al-Mataryia	East
9	Belbeis	East	**27**	al-Zeitoun	East
10	Minyat Tana	East	**28**	Old Cairo	East
11	Zagazig	East	**29**	Haret al-Ruom	East
12	Minyat Samannud	East	**30**	Haret Zwila	East
13	Samannud	Central	**31**	al-Ezbawyia/ Klout Be'K	East
14	Gharbia	Central	**32**	Babylon al-Daraj	East
15	Daqadous	East	**33**	al-Moa'laka Ch.	East
16	Burulus	Central	**34**	Qasr al-Shama'	East
17	al-Matla'a	Central	**35**	Abo Sarjah Ch.	East
18	Belad al-Sebakh	Central	**36**	al-Ma'adi	East

It is clear from the previous table that the delta region, with its three divisions (East, Central, and West), has acquired about 36 stations, ca. 61% of the Holy Family path stations in Egypt. East Delta region acquired 24 stations, Central Delta acquired 11 stations, and West Delta acquired only one station, which represents a percentage of ca. 40.7%, 18.6%, and 1.7% for each sector, respectively.

4.2 The ancient roads west and east of the Nile Valley

The Holy Family moved from the south of the Delta to the middle of the valley, specifically Asyut, according to ancient sources. In the same context, the classic cartographic sources referred to an ancient road network that extended east and west of the valley, which will be clarified to verify the itinerary of the journey.

Undoubtedly, a similarity appears in the spelling of the names in ItA and TP, about the two roads. The first road runs on the west bank of the Nile from Memphis to opposite Hiracekamenos, while the other extends on the east bank from Babylon to Hiracekamenos itself. Lycopolis/ Asyut is the last station on the HF itinerary. Therefore, only the roads that end there on the west bank of the river, or that located opposite it on the other east bank of the river, are indicated.

4.2.1 West Nile Roads between Memphis/ Meit Rahina and Asyut/ Lykopolis based on ItA and TP

According to ItA, 10 stations were mentioned located in the distance from Memphis/ Mit Rahina West Nile to Lycopolis/ Asyut. While TP indicated at that distance to only six stations. TP only mentioned some stations as being west of the Nile, although their correct location is east of the Nile (Tables 4-11, 4-12).

Table 4-11: Memphis - Lycopolis road stations based on ItA

Road name	Station names in ItA	Distance Rm	Current name	Current Dis. km	Geographical coordinates according to DARE
Memphis - Lycopolis	Memphi	0	Mit Rahina	0	31.25428 E 29.84967 N
	Peme	20	Bamha	29.6	31.24029 E 29.58860 N
	Isiu[278]	20	near Meidum	24.79	31.17198 E 29.37376 N
	Caene/ Cena[279]	20	Near Bani Afaan/ Ihnasia	31.11	30.99885 E 29.13831 N

[278] Isiu is al-Zawiya (JOMARD 1818: 66, 299, 746)
[279] Caene is Bani Yousef (JOMARD 1818: 66, 299, 746)

	Tacona/ Takona[280]	20	Nag al-Kom al-Ahmar/ Mazura	35.86	30.78550 E 28.87528 N
	Oxirincho/ Ocserincus/ Oxyrhynchus/ Oxyrynchopolis/ Iustinopolis/ Nea Ioustinou Polis/ Pemje	24	al- Bahnasa	39.23	30.65172 E 28.54257 N
	Ibiu/ Jbiu	30	----------	51.37	30.73747 E 28.08677 N
	Hermupoli/ Hermpolis Magna	24	al-Ashmounein	35.4	30.80808 E 27.77457 N
	Chusis/ Koussai/ Koskam/ Cusae	24	al-Qussia	37.63	30.82038 E 27.43630 N
	Lyco/ Lykopolis/ Siout	35	Asyut	45.51	31.17849 E 27.17883 N

In the previous table, the coordinates of Meidum were mentioned instead of the unknown Isiu, as it is the closest. Based on PARTHEY the coordinates of Caene have been determined, but it is expected that it is Qai/ Kos (30.95915° E 29.15602° N) in the province of Herakleopolis. Besides, Ibiu is unknown, and its coordinates are determined according to PARTHEY, while it is potential that it is Tallah in Minia[281].

Table 4-12: Memphis - Lykopolis road stations based on TP[282]

Road name	Station names in TP	Distance Rm	Current name	Current Dis. km	Geographical coordinates according to DARE
Manf - Lekopolis Asyut	Memphis	0	Mit Rahina	0	31.25428 E 29.84967 N
	Tasdri	؟؟	Near Dahshur/ Takyris	10.97	31.23955 E 29.75181 N
	Talmi	41	Near Tamia/ Fayoum	40.58	30.95275 E 29.48534 N
	Acori / Acorim/ Akoris/ Hakoris	90	Tihna al-Gabal	146.1	30.77583 E 28.18083 N
	Antino/ Antinoy/ Antinoopolis/ Antinoe/ Hadrianopolis/ Neoi Hellenes	17	Sheikh Abada/ Ansena	42.67	30.87932 E 27.80813 N
	Tekunpoli	12	In Asyut	77.76	31.22373 E 27.17913 N

In the foregoing table, the coordinates of Tasdri and Talmi were determined based on PARTHEY. Accordingly, the first is located near Dahshur/ Takyris, while the second is located near Tamia/ Fayoum. Moreover, Acori and Antinoe lie east of the river rather than west, and this is the situation prevailing in most of the stations mentioned in TP west of the Nile.

[280] (MUNIER 1943: 58)
[281] Tallah located about 4 km west of Minia.
[282] (MILLER 1916: 866)

4.2.2 East Nile Roads between Babylon and Lykopolis/ Asyut

The two roads extending east and west of the river appear to some extent complete in ItA and TP. Fortunately; as a result, we can complete the shortcoming of TP. In addition, the road stations in TP appear upside down, as some stations or places are often mentioned along the western road of the river when they are located east of the river rather than west. Pieces of evidence are the positions of Tahna al-Gabal and Sheikh Obada, and vice versa in most of the stations that were mentioned south of the city of Lycopolis/ Asyut, as most of the stations are located east of the Nile in the map of TP and not west [283] (Tables 4-13, 4-14).

Table 4-13: Babylon - Lycopolis Road Stations according to ItA

Road name	Station names in ItA	Distance Rm	Current name	Current Dis. km	Geographical coordinates according to DARE
Babylon - Lycopolis	Babylon/ Babilonia	0	Old Cairo	0	31.23152 E 30.00618 N
	Scenas Mandras	12	Tal al-Minia/ al-Shurafa/ south of Heluan	30.88	31.31867 E 29.73899 N
	Afrodito/ Aphroditopolis	20	Atfih	37.32	31.25167 E 29.40842 N
	Thimonepsi/ Thmoinepsi[284]	24	Bani Sulaiman al-Sharqiya	44.84	31.07804 E 29.03468 N
	Alyi	16	Nag´ al-Moddel al-Qibli	40.02	30.06253 E 29.02869 N
	Hipponon/ Hipponos Kastra/ Phylake Hipponos	16	Qarara	45.16	30.87713 E 28.65647 N
	Musae	30	al-Sarirya	41.13	30.75083 E 28.30361 N
	Speos Artemidos/ Speus Artemidos	34	Istabl Antar/ south of Bani Hasan	46.01	30.87306 E 27.90417 N
	Antinoopolis/ Antinoe/ Hadrianopolis/ Neoi Hellenes	8	al-Shikh Abada	10.7	30.87931 E 27.80810 N
	Pesla/ Pescla Ano/ Pesla Ano[285]	24	Tal al-Hagg Qandil	20.2	30.90242 E 27.62761 N
	Hieracon/ Hierakion	28	Deir al-Gebrawi	42.66	31.14952 E 27.31281 N
	Isiu/ Iseum	20	Abnub	37	31.15487 E 27.26225 N
	Muthis/ Mutheos	24	Nag´ Wisa	39.47	31.43369 E 27.00847 N
	Anteu/ Antaiopolis/ Antaeopolis/ Tkoou/ Anteupolis	8	al-Etmanya /Qaw al-Kebir	14.82	31.51822 E 26.89857 N
	Selino/ Silili	16	Nazlet al-Haridi/ Sahel Selim/ Asyut	14.5	31.55304 E 26.77608 N

[283] For more see: (MILLER 1916: 853–882)

[284] located near Bayad (JOMARD 1818: 68,299,746)

[285] Jomard in Nomos of Aphroditepolis states that Pesla is the city/ Deir al- Qusayer (BALL 2017: 258; JOMARD 1818: 9,299,746)

Alyi was referred to in the previous table, and the coordinates were determined according to KONRAD, where it was mentioned that it is located opposite Gaziert al-Wakliya, so it is located in Nag´ al-Moddel al-Qibli[286]. Musae is not indicated in BA, although its coordinates are given according to the DARE. In addition, Speos Artemidos is Istabl Antar/ south of Bani Hasan. JOHN BALL suggested that Pesla is Deir el-Kosseir, but this is inaccurate, as the coordinates of Deir al-Kosseir are (30.87823 27.4752).

Table 4-14: Babylon - Lykopolis road stations according to TP[287]

Road name	Station names in TP	Distance Rm	Current name	Current Dis. km	Geographical coordinates according to DARE
Babylon - Antinoe	Babylon	0	Old Cairo	0	31.23152 E 30.00618 N
	Peme/ Hypsele[288]	72	Bamha	46.44	31.24029 E 29.58860 N
	Sinottun	6	Near Seila/ Fayoum	35.98	30.98431 E 29.35405 N
	Ptolomaidonar	؟؟	al-Lahoun/ Fayoum	16.37	30.97799 E 29.20695 N
	Herakleopolis/ Heracleo/ Herculis Oppidum/ Hanes	6	Ihnasia al-Madinah	14.14	30.93455 E 29.08554 N
	Fenchi	25	al-Fant	37.3	30.88217 E 28.75566 N
	Tamenti/ Taampemou	20	Tanbu	38.55	30.76017 E 28.50927 N
	Antinoopolis/ Antinoe/ Hadrianopolis/ Neoi Hellenes	24	al-Sheikh Abada/ Ansena	78.83	30.87932 E 27.80812 N

The above table mentioned Peme, Sinottun, and Ptolomaidonar, all of which are stations located west of the river, not east, and vice versa in Antinoopolis, which lies east of the river and not west. Moreover, Sinottun is identified as Near Seila/ Fayoum, and Ptolomaidonar is al-Lahoun/ Fayoum. Besides, the coordinates of both are according to Parthey. As for Tamenti, it cannot be Matai, Where Parthey mentioned that it is located south of Antinoe, which is not in its exact location, as it is Taampemou/ Tanbu[289], which is located to the north of Matai and its coordinates are (30.76017 E 28.50927N) (Fig. 4-6).

[286] (MUNIER 1943: 51)
[287] (MILLER 1916: 866)
[288] It located west of the river, not east. The distance is 72 miles wrongly written on TP (BALL 2017: 280; MILLER 1916: 866).
[289] (JOMARD 1818: 243; MUNIER 1943: 54)

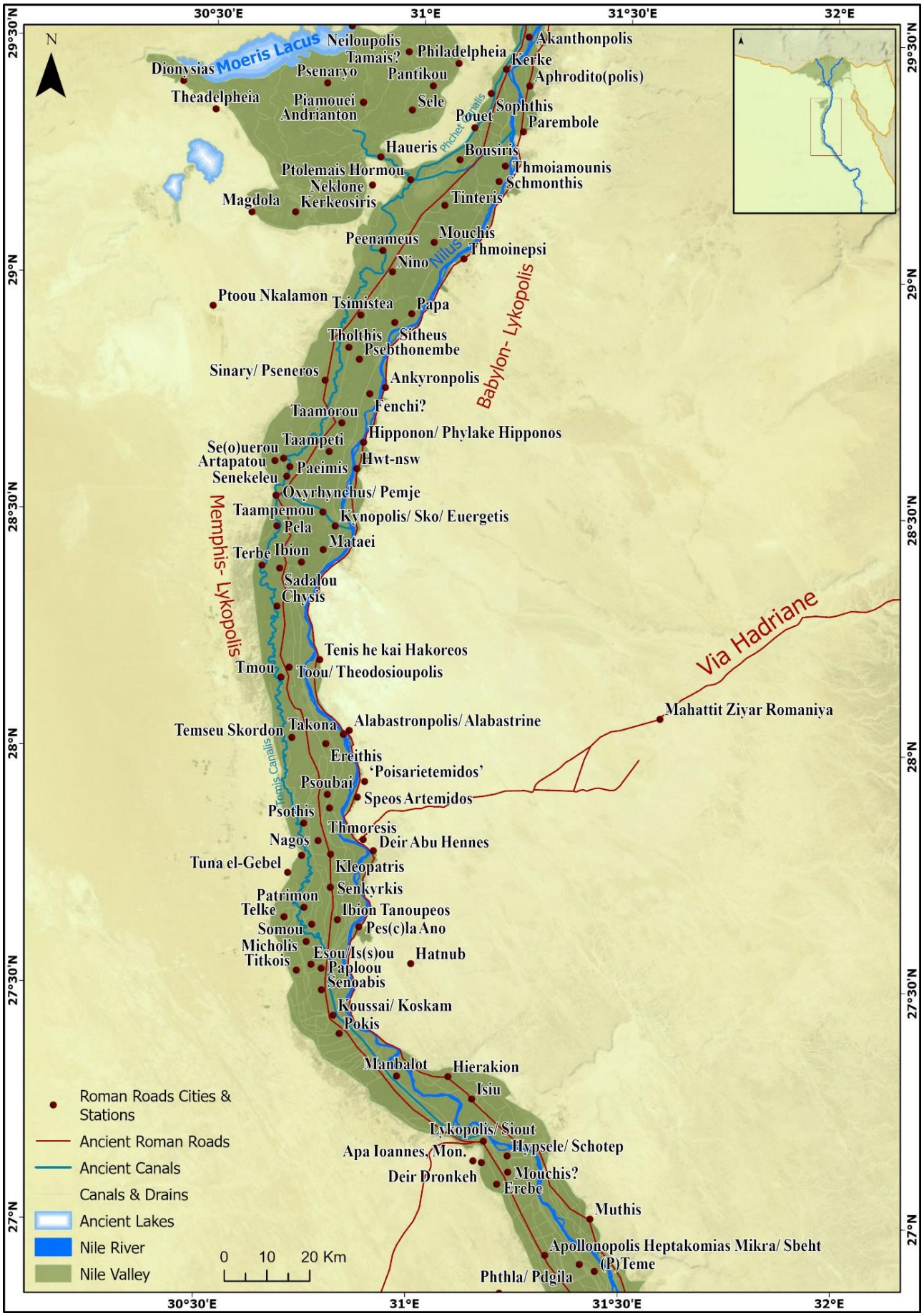


Fig. 4-6: Roman Stations and Roman Roads along the Nile Valley

4.3 HF itinerary west of the Nile from Memphis to Asyut

The traveling plan usually has a stepping stone towards a predetermined destination and goal, for travel in general and river travel in particular. While it is clear that HF did not have a specific destination, motivating the use of less dangerous river travel roads - as well as paved roads if necessary. In addition, like travelers or backpackers, they are not in a hurry. This is evident from the path swaying in a semi-helical shape, according to the sources, and in their movement from one city to another or from one village to another until they reached Asyut[290]. Certainly, other factors influenced the change of direction of the itinerary.

4.3.1 The river transportation network between Fayoum and al-Bahnasa

An effective way to reduce the time taken to navigate the upper Nile and to avoid the potential dangers of encountering its currents or the difficulty of navigating it—even with the northerly winds that slightly limit this encounter—was to use the Canals branching from the main river course. Besides, the Canals of less capacity and width, where the water current is less strong, in addition to its slight slope compared to the main river. Because of the narrow course of these Canals, it is a little easier to navigate due to the lack of water currents, and sometimes their absence.

There is no doubt that traveling through the canals was of great importance at the local level, especially in the Bahr Yousef Canal[291]. In addition to the network of parallel or intersecting roads along these Canals, that appeared in BA, map 74. On the other hand, due to the difficulties of night navigation, there were laws to be written into the shipping contracts that ships anchor at night in these safe harbors to avoid robbery by bandits and pirates on the ships' cargo at late night. In addition, traveling at night increases the difficulty of river rescue if any damage occurs to ships or passengers[292].

There were regular stopping points for travelers that were indicated in the itinerary of one of the journeys that were recorded on one of al- Bahnasa papyri[293]. It mentioned that the travelers sailed from Nicopolis to Shedia until they reached Babylon and Memphis, from which they could have sailed south until they reached Bahnasa. However, they took the Nile to Aphroditopolis/ Atfih, which had a river port. The port may have taken Aphroditopolis's name

[290] One of the results of that was also the fulfillment of some divine prophecies that were mentioned in the Old Testament, such as the prophecies of (Hosea 11:1) and (Isaiah 19).
[291] (DITTMANN 1991; DITTMANN 1989)
[292] (FAYEZ 2012)
[293] al-Bahnasa/ Oxyrynchus, which means a type of fish called "Qunuma", and "Bimazite" in Pharaonic (FAYEZ 2012: 34; NOS`HI 1998: 384–387).

because it is located 1.5 km from the river inland[294]. Then they sailed in Fayoum and Bahr Yousef Canals, where they stopped at Tacona, Kaine, and Porto of Ptolemais Hormous until they had finally reached Oxyrinchus/ al-Bahnasa. This is evidence of the importance of Fayoum and Bahr Yousef canals at that time as an important means of transportation.

It was common for travelers to sail through Bahr Yousef Canal, not for traveling for the long term, this was the case for HF. Compared to traveling by the main course of the Nile, and commercial ships sail with grain, animal feed, which required a wider and faster course. This sheds light on an important aspect of travel in Egypt at the time of HF escape, which is the use of canals, especially in the Delta region, in which the canals connected the branches of the Nile directly with each other, as well as linking the valley lands with the river.

4.3.2 Bridging the gap in HF itinerary between Memphis and al-Bahnasa

Sailing in these canals, and using their banks as paths, is an idea that bridges the gap of not referring to any HF stations in the distance along the course of the Nile River between al-Ma'adi district in the south of Cairo until the stations of Ihnasiya al-Madina and Deir al-Garnous based on the ancient sources. Ihnasiya al-Madina is about 200 km from al-Ma'adi, while Deir al-Garnous is about 270 km to the south of al-Ma'adi, and is located in the north of Minia[295].

This is puzzling because based on the transportation that was available at that time, none of these distances can be cut directly without stopping, whether it is walking, riding animals, or sailing in the river or its canals. In addition to the absence of any archaeological evidence to support the path of HF at this distance mentioned that they traveled across the course of the river. Rather, it is only written historical evidence.

An important piece of evidence that increases the difficulty of the case is that Deir al-Garnous (30.70667 E 28.61 N), which was referred to in most sources as the next station after al-Ma'adi, was not located directly on the course of the Nile. Rather, it is located about 18 km to the west of the current course of the Nile. As well, Ihnasiya al-Madina (30.93455 E 29.08554 N) is located about 20 km to the west of the river.

In contrast, Ihnasiya al-Madina and Deir al-Garnous stations are only about one km and two km east of Bahr Yousef Canal, respectively. Consequently, the extensions of the canals, and

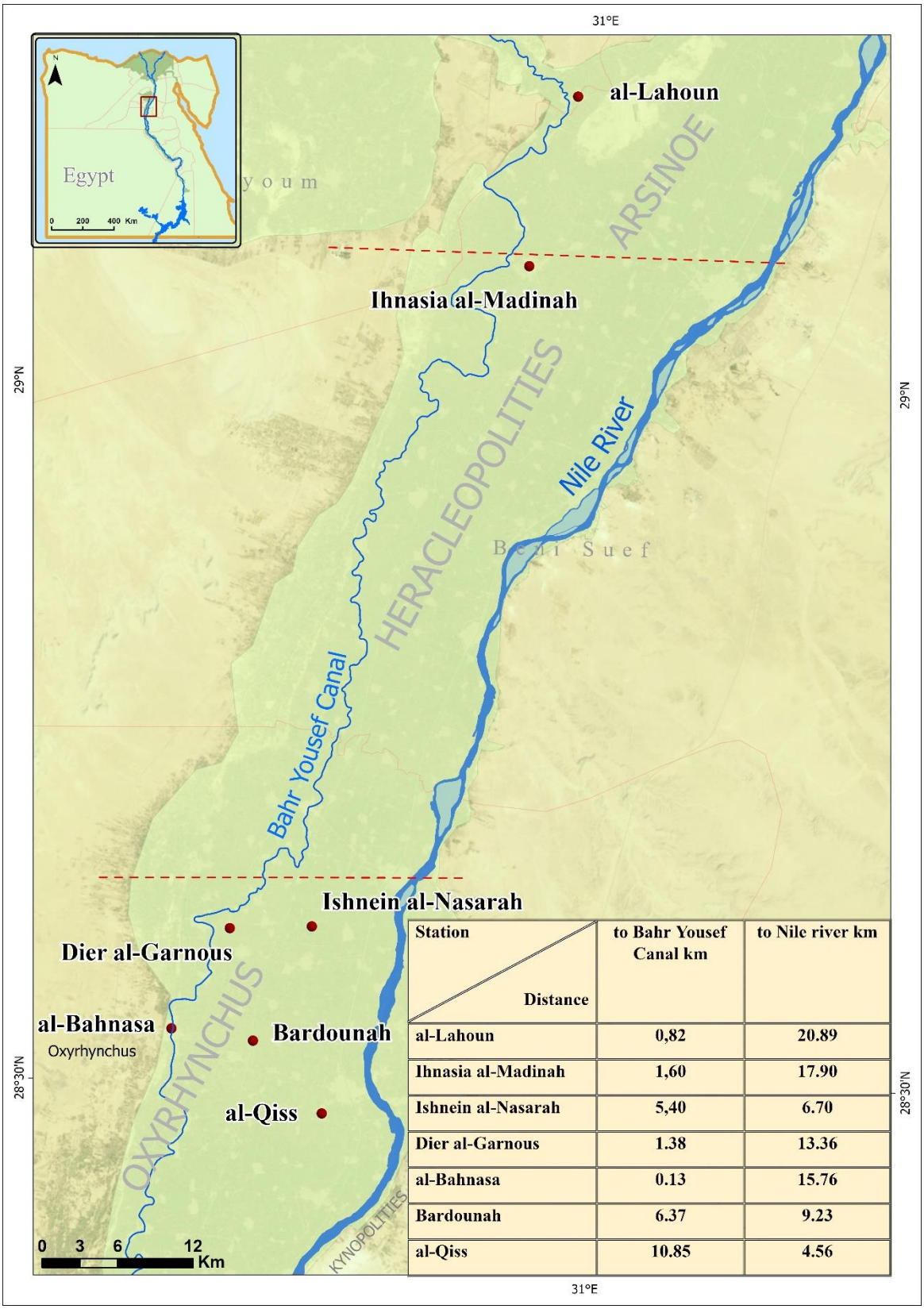
[294] It seems that they would have joined the Canopic branch of the Nile, which would have led them beyond Minor Hermopolis (FAYEZ 2012: 197,252).
[295] (MUNIER 1943: 61)

the names of the stations that were mentioned in the sources, it can be asserted that the HF did not sail in the main course of the Nile in the distance between al-Ma'adi and Deir al-Garnous, or the distance between al-Ma'adi and Ihnasiya city. Rather, the Holy Family sailed and crossed the Nile from al-Ma'adi to the western bank of the Nile until reaching the opposite side of the port of Aphroditopolis/ Atfih[296].

On the other hand, AL-HARAWĪ clearly stated that HF lived in al-Lahoun (30.97799 E 29.20695 N)[297], which is located west of Heraclionia Nomi, and about 0.82 km east of Bahr Yousef Canal, which increases the possibility of HF using the proposed road. Therefore, it can also be emphasized that HF sailed in the river to the entrance of Fayoum Canal, or after crossing to the West Bank, walked on paved roads parallel to the West Bank of the Nile. These roads could be the west banks until the beginning of Fayoum Canal west of the river and opposite the port of Aphroditopolis. Sequentially, they sailed in Fayoum Canal then through Bahr Yousef Canal, which passes near about seven stations, all located within the HF path in that area between Fayoum and al-Bahnasa (Fig. 4-7).

Accordingly, it can be confirmed that the phrase *"The Holy Family sailed down the Nile to al-Bahnasa"* which was mentioned in many sources did not mean the present-day city of al-Bahnasa rather was meant to mean HF entry into "al-Bahnasa province/ region" which was called Oxrynchous Nomos (Fig. 4-8).

[296] The current city of Atfih is located to the east of the river, from which it is difficult to cross to the West Bank at that time without a boat.
[297] (AL-HARAWĪ 2002: 123; BLACHÈRE 1958: 206–208; VALENSI 2007: 92)



Station / Distance	to Bahr Yousef Canal km	to Nile river km
al-Lahoun	0,82	20.89
Ihnasia al-Madinah	1,60	17.90
Ishnein al-Nasarah	5,40	6.70
Dier al-Garnous	1.38	13.36
al-Bahnasa	0.13	15.76
Bardounah	6.37	9.23
al-Qiss	10.85	4.56

Fig. 4-7: The locations of HF stations located between Fayoum and al-Bahnasa

A logical explanation to answer the question of why these stations were mentioned in particular and not the other stations where HF rested or stayed, is that most of these stations were anchoring ports for ships, or rest stations as mentioned previously. In addition, some

stations were reached via paved roads. For the reason that the river course or the canals were not usable throughout the year. Consequently, the increase in flood levels at times, or during periods of shallow and water shortages in the waterways. That hinders the movement of ships and river navigation at other times (Fig. 4-9).

Regardless of the influence of the geomorphological factors that changed the course of the Nile's flow, thus the stream moved away, it cannot be assumed that Deir al-Garnous and Ihnasia al-Madinah stations were located directly on the course of the Nile, because currently they are located at a distance of 14 and 20 km respectively to the west of the Nile (Fig. 4-10).

Conclusion:

The chapter presented the ancient Roman road network in the valley and delta, based on what was referred to in the ancient cartographic sources, especially ItA and TP, and also based on databases for everything related to the Roman state such as BA, DAFG, TAVO, DARA, Bible Atlas and other. The result is the production of a complete map of the Roman road network in the valley and delta regions at the time of the Holy Family, to serve as a basis for the verification stage of the itinerary. In parallel, the chapter presented a proposal for a part of the Holy Family's itinerary, which extends between al-Ma'adi and Deir al-Garnous, as none of the sources or references indicated that the Holy Family passed this area. Therefore, with research and scrutiny, the aforementioned proposal was presented with evidence that supports the proposed path. In conclusion, the stations of the itinerary were positioned on the map of the ancient road network in the valley and the delta.

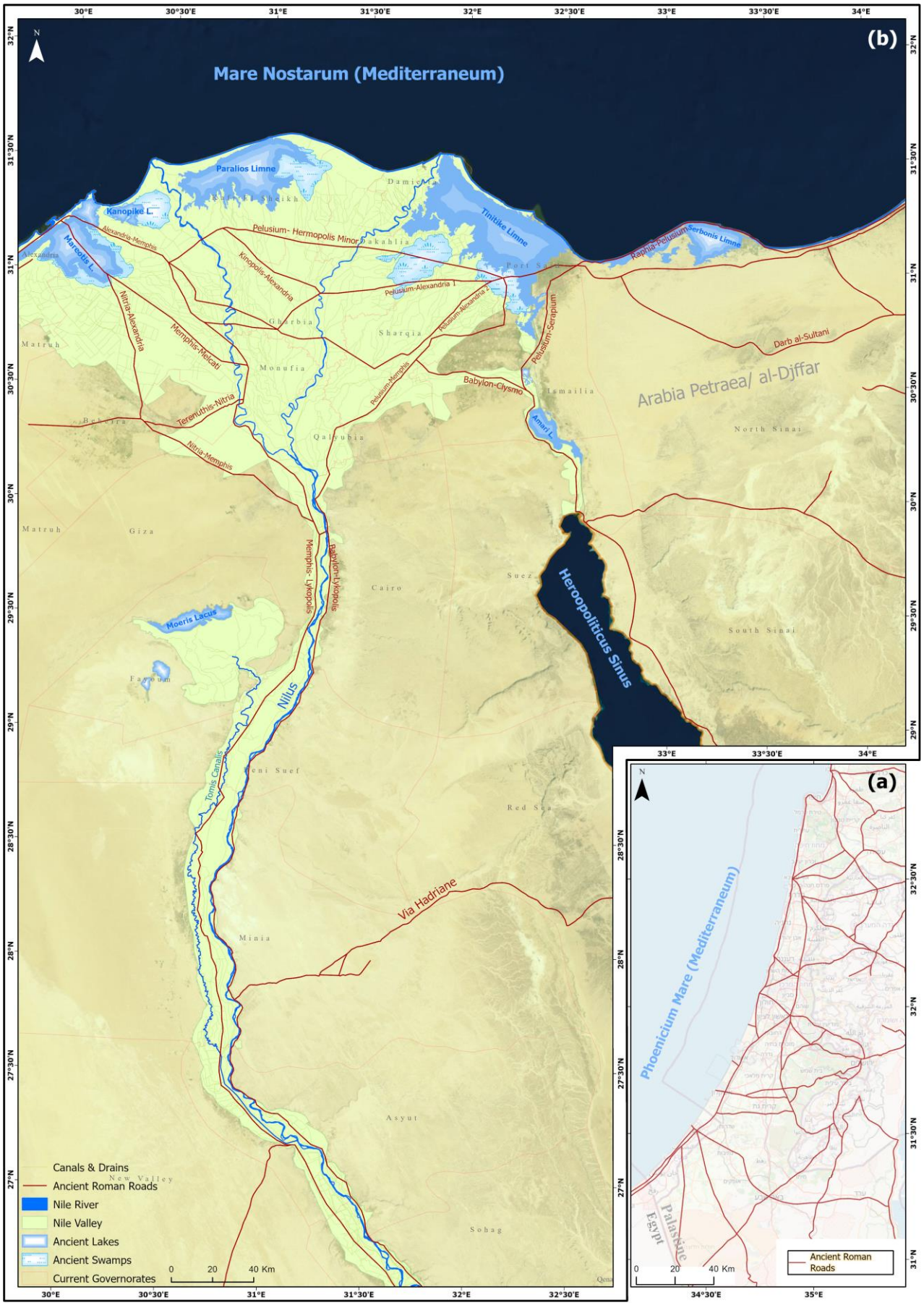


Fig. 4-8: Map of Roman Roads network in Egypt and Palestine

Fig. 4-9: HF stations in Delta with Ancient Road Network

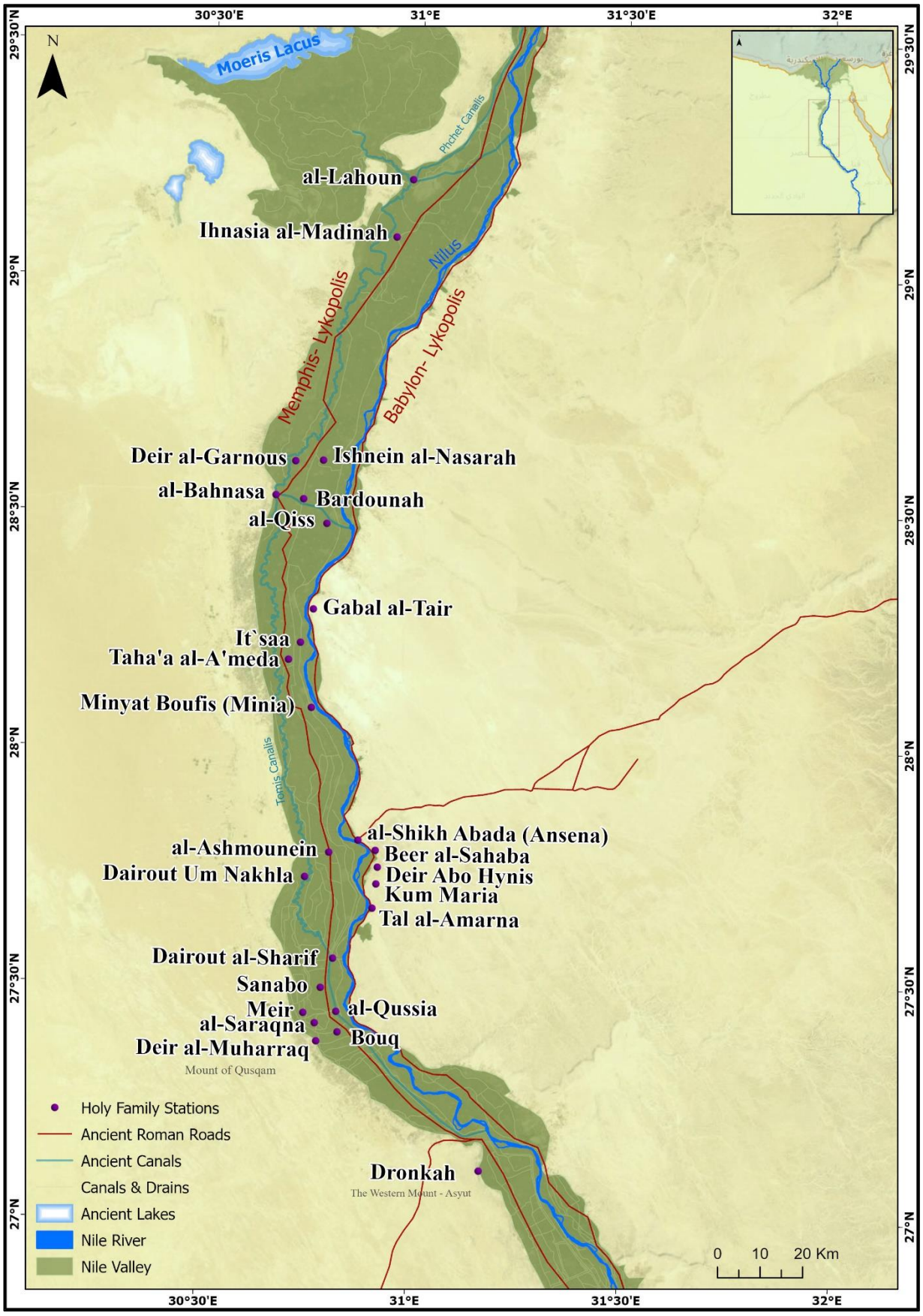


Fig. 4-10: HF stations in Nile Valley with Ancient Road Network

5 The ancient Nile branches at the time of the Holy Family

Preface

> "*The Holy Family crossed the Mandisian branch from the eastern side to the western side*"[298]; "*crossed the Damietta branch, crossed to the West Bank from the Rosetta branch*"[299]; "*crossed the Nile to Samanoud inside the delta*"[300], "*crossed the Nile to the eastern side*"[301]; "*sailed in the Pelusiac branch that connects Rafah and al-Arish to the Babylonian/ Fustat region, it was a path after crossing the eastern borders of Egypt*"[302]; "*crossed many of the Canals extending in the Nile Valley*"[303].

These are some of the brief and scattered quotations in the sources and references that referred to the Nile River and some of its branches during the flight of the Holy Family to Egypt. They are general expressions, many of which do not give sufficient accuracy to determine exactly which branches of the river the Holy Family has crossed or sailed through? How many branches were there at that time? Although BOTROS was subjected to a semi-detailed study (archaeological and geographical) about Gabal al-Tair station[304].

In addition, the lack of sufficient geographical background for some researchers on the path of the Holy Family, thus, leads to more errors, especially in the geographical description of the path. For example, Angelos indicated that al-Farama was the last land station inside Egypt before the Holy Family sailed on the Pelusiac branch of the Nile, and why not sail in the Pelosi branch starting from Rafah, where it extended there as he also indicated!?. This indicates confusion, given that the River Egypt (Wadi al-Arish), is a branch of the Pelusiac Nile[305].

It is also worth noting that the study of the itinerary of the Holy Family's journey presents a description of the journey and its path in the geomorphological and topographical form of the current Nile Delta, which has two branches, Damietta and Rashid. In addition to not being exposed to what went through the delta and the coastline from geomorphological and geomorphometric changes that led to the extinction of the river branches, which numbered between 3 to 16 branches at the beginning of the first century AD[306]. In addition to not linking

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[298] (GREGORIUS 1992)
[299] (DEMETRIUS 1999: 16–17; GEORGY 2017: 38; PHILLIPS 1999: 52–65)
[300] Georgy referred to a word within the delta, as if the delta is only the area that lies between the two branches of Rashid and Damietta (BASSET 2003; GEORGY 2017: 37).
[301] (GEORGY 2017: 39)
[302] (GIRGIS 2018: 25, 55–63)
[303] (PHILLIPS 1999: 83)
[304] (BOTROS 2002: 120–143)
[305] (PHILLIPS 1999: 41)
[306] (BALL, 1942: 148; SAID, 1981: 80; TORAB, 2007: 28–34; PLINY: 6.1-40; PTOLEMY, 4.5.; STRABO 17.1)

the migration of the riverbed to its location along the valley with the current geographical locations of the path stations, which, although they remained fixed in their positions, however, does not apply to the course of the river itself. Certainly, the river and its branches at the same time affected the course of the journey and changed its directions from time to time.

This indicates the lack of a specialized geographical study in this context that links the geography of the valley and the delta and its impact on the itinerary, as the available studies are mostly historical and archaeological only. This is what will be clarified in this chapter, to derive a map of the ancient Nile River branches and waterways at the time of the Holy Family, based on the writings of classical geographers, ancient cartographic sources, and some modern atlases, both digital and printed, that attempted to revive classical cartography, in addition to some other recent studies[307]. This map will be the basis of the desired goal, which is the spatial verification of the HF path.

5.1 Geomorphological changes along the Mediterranean coast in North Sinai

During the first millennium BC, the coastline infiltrated north until it extended just north of Tal al-Farama in the early Roman period. In the first century AD, the hydrography of the area changed, and the siltation continued in the northwest direction until the coastline reached its present location between Port Said and Tal al-Farama[308]. Lake Sirbonis (*Sabkhat al-Bardawil)* appears on modern maps east of al-Mohamadiyeh, a large lake separated only from the Mediterranean by a narrow strip of land. This strip was not inhabited before the sixth century BC, and Herodotus first mentioned the lake in the fifth century BC[309].

Significantly, the geomorphological evidence shows a clear landslide in al- Mahmadiyeh ruins, which are located on the western edge of Bardawil Lake[310], where seawater is partly submerged, while the remaining parts are located along the coastline directly. In contrast, evidence of elevation appears in the Tal al-Farama area southeast of Port Said[311] (Fig. 5-1).

[307] (ATIYA 1954: 356; HASSAN 1997: 66–68; SAID 1981: 48; STANLEY et al. 2004: 920–930; TORAB 1996: 21–35)
[308] See: (GOODFRIEND and STANLEY 1999: 147–150; STANLEY et al. 2008: 599–602)
[309] (HERODOTUS 1966; VERRETH 2006: 10)
[310] For more on Bardawil Lake and its dangers, see: (SHUKAIR 1916b: 42, 282)
[311] (AMMAR 1946: 60; HOFFMEIER and MOSHIER 2013: 487); see also: (GOODFRIEND and STANLEY 1999; STANLEY et al. 2008).

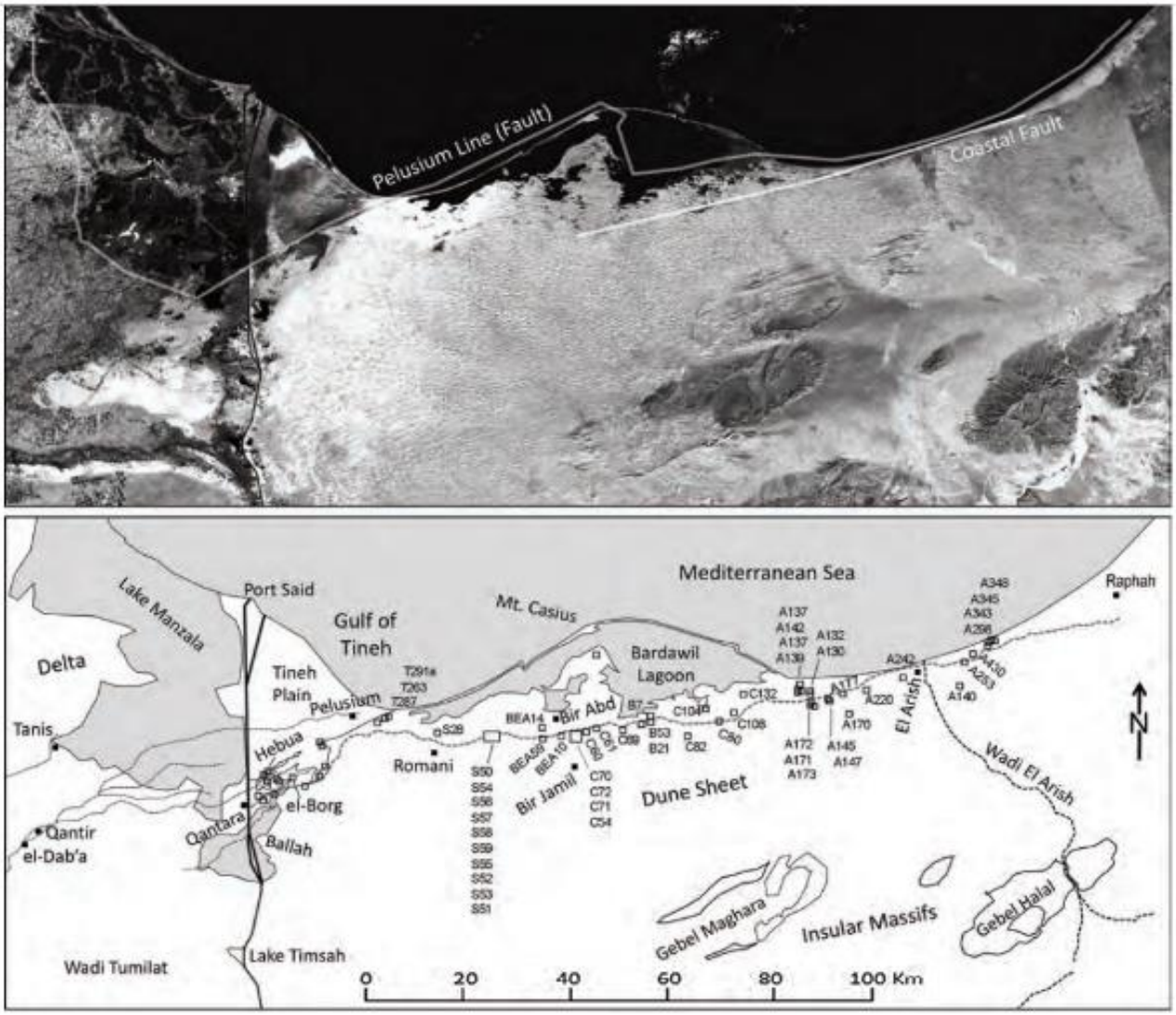

Fig. 5-1: Geomorphological and tectonic influences along the Mediterranean coast in North Sinai; (after HOFFMEIER 1999; HOFFMEIEr and ABD EL-MAKSOUD 2003; HOFFMEIER and MOSHIER 2013). Top: Landsat satellite images that show the impact of the coastal rift (after NEEV et al. 1987), which is in line with the northeastern coast of Sinai and extends south of the city of Bir al-Abed. Below: a chart of the satellite image, illustrates the locations of some geomorphological features, archaeological sites, and modern cities; a modern road between al-Qantara to Rafah (dashed line); effects of the extension of the extinct Pelusiac branch east of the delta (after BIETAK 1996, 2000).

One of the reasons for these geomorphological changes in that region is the drying up of the Pelusiac Nile branch and the inability of water to reach its mouth, which led to its extinction and the disappearance of the city of Tal al-Farama/ Pelusium, which was located at the mouth of the Pelusium branch. As a result, the population abandoned al-Farama, and it lost its importance, which it retained until the thirteenth century AD[312].

[312] There was a customs collection station there, according to a papyrus dating back to the year 259 BC; For more see: (FAYEZ 2012: 202-203,373; SHUKAIR 1916b: 205)

On the other hand, human interventions played an important role in shaping the topography of the region. An important piece of evidence is that the Mediterranean coast was cut near Tal al-Farama and a Canal was built from it, extending in a southwest direction for a distance of about 30 km to the north of al-Qantara, to defend and protect the Suez Canal during the First World War. In addition to digging the Suez Canal itself, which began in 1859 AD and lasted 10 years until it was opened in 1869 AD, all this, in turn, brought about a change in the natural landscape of the North Sinai and East Delta regions[313]. The North Sinai region has been of military importance, as it has undergone many military campaigns, and its roads were of great importance to the armies during successive periods[314].

Civilian human settlements were scarce before Roman times along the coastal strip, partly because of the military threat from the east, but mainly because the area was inhospitable, with huge dunes lying next to the treacherous marshes of Serbonis Lake. In the early Roman era when the lake began to shrink, conditions changed for the better, and gradually more settlements and villages appeared in northern Sinai. In periods of political and military superiority such as the third century BC, Egypt succeeded in occupying Palestine and southern Syria, bringing the entirety of northern Sinai under Egyptian control. By the late, third century, the actual boundary line between Egypt and Syria had shifted to the eastern end of North Sinai, at a point somewhat halfway between Rhinocolora- al-Arish and Rafia. In the following centuries, the boundary line changed again, but certainly, since AD 70 North Sinai became part of the Roman province of Aegyptus[315]

5.2 Geomorphological units of the delta and the Nile Valley, beginning of the first century AD

Some geomorphological elements form the delta, whose morphometrics have changed over successive periods. These main elements are:

5.2.1 Ancient Nile River Branches

No agreement on the number of branches of the Nile River, nor on the morphometric form of the correct positions through which these branches extend across the delta, according to the sources of classic cartography and geography, and according to the geomorphological changes in the delta. Therefore, the number of Nile branches ranged from more than 16 branches at the beginning of the first century AD to only two at present, which prompted

[313] (AMMAR 1946: 60; DUEMICHEN 1894; MACMUNN 1928: 25)
[314] (DITTMANN 1990a; DITTMANN 1988; VERRETH 2006: 30–49)
[315] (DITTMANN 1990b; DITTMANN 1990a; VERRETH 2012: 405)

PARTHEY to redraw TP in which the delta appeared as a chess piece (Fig. 5-2)[316]. This is consistent with what Strabo indicated that the branches of the river formed so many streams and islands that the entire delta became navigable[317].

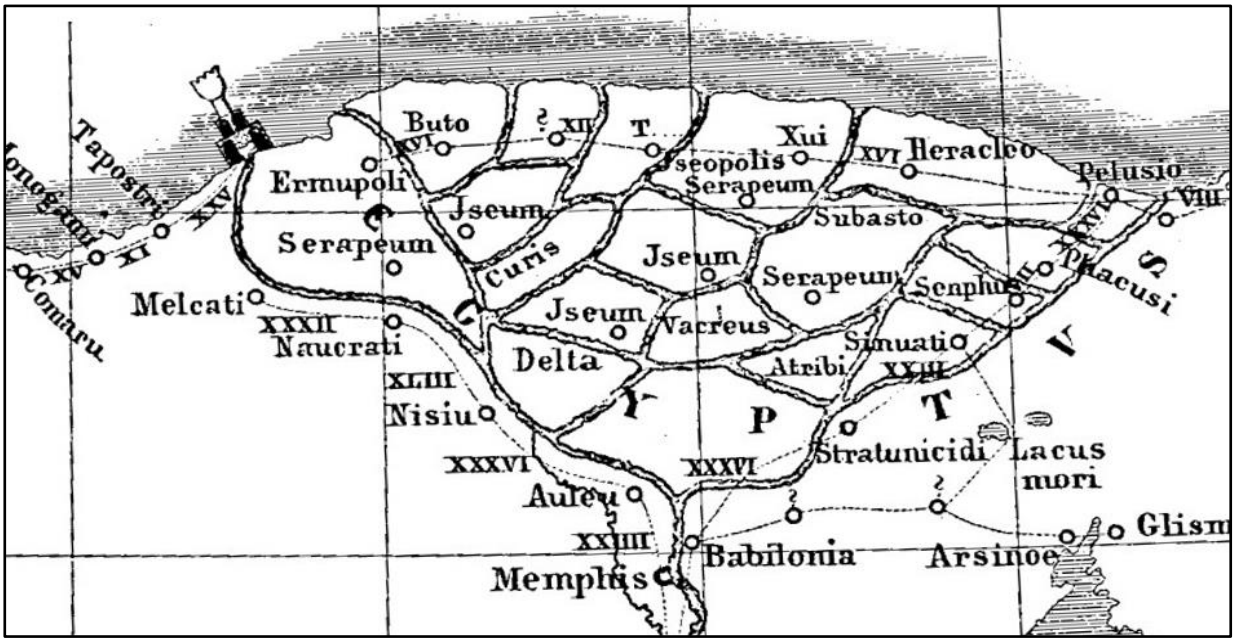

Fig. 5-2: Map of the Nile Delta in the TP map (after PARTHEY 1854 AD)

On the other hand, HERODOTUS ca. 450 BC classified these branches into major, pseudo, and minor branches as canals[318], while STRABO ca. 25 BC that these canals were the main branches of the time, and that the criterion for classifying the false branches is that they are suitable for small boats only because their mouths are shallow with swamps[319]. In addition, Strabo sometimes mentions the name of the branch followed by the word Mouth and sometimes without, and so he did not differentiate between whether these names were for branches, estuaries, or both[320].

Furthermore, PTOLEMY ca. 150 AD although he gave the branches names and gave their estuaries other names, which increases the confusion, he was more detailed in an attempt to determine the geographical coordinates of the locations of these estuaries even if they were not accurate enough, in addition to that he divided the delta into three from east to west They are (Small Delta, Third Delta and Large Delta)[321] (Table 4-1).

[316] (PARTHEY 1859)
[317] (STRABO 17.1.4)
[318] (HERODOTUS, 2.17)
[319] (STRABO, 17.1.4)
[320] (STRABO, 17.1.18)
[321] (DE GRAAUW 2020; KAMAL 1928; LITINAS 2015: 44–57; PTOLEMY 4.5.10-44)

It seems difficult to identify the point of the branching of each new branch[322], but it is not difficult to determine the mouth of each branch. Besides, it is possible to identify the main branch point, which is located at the head of the delta, which is Kerkasoros/ Rod al-Farag, which is located north of Memphis.

Table 4-1: Ancient Nile branches and its estuaries after some classical geographers

Nr.	River Branch	Herod.	Stra.	Diodo.	Ptol.	River Mouth
1	Pelusiac	*	*	*	*	Pelusiac
2	Boubastic				*	Pelusiac
3	Tanitic		*	*		
					*	Tanitic
4	Mendesian	*	*	*		
					*	Mendesios
5	Bousiritic,		*			
6	Bousiritikos		*		*	Pathmitic
7	Bucolic canal	*				Fake mouth
8	Pathmitic		*	*		
					*	Diolkos pseudo-mouth
9	Saïtic	*	*			Thermouthiac branch
10	Boutic/ Boutikos				*	Sebennytic (Pineptimi pseudo-mouth)[323]
11	Athribitic, Sebennytic	*	*	*	*	Sebennytic/ Boutic
12	Athribitikos				*	Pineptimi pseudo
13	Thermouthiakos/ Phermouthiakos				*	Sebennytic
			*			Bolbitic
14	Bolbitic canal	*	*	*		Fake mouth
15	Taly				*	Bolbitic
16	Canopic	*	*	*	*	Canopic/ Herakleotic
17	Agathos daimon[324]				*	Herakleotic

It appears from the previous table that there is some confusion in determining the actual name of each branch of the ancient river. The evidence is that Herodotus classified these branches into main, pseudo, and secondary branches as canals[325], and called each branch and its estuary by the same name, which from east to west are as follows: Pelusiac, Mendesian, Saïtic, Sebennytic/ Athribitic, Canopic/ Herakleotic, in addition to the fact that between them

[322] There are some attempts by Graauw to determine the exact geographical locations of the River forks based on the coordinates mentioned by Ptolemy, but they are still incomplete. For more see: (DE GRAAUW 2022)
[323] This branche flows into all the rivers it intersects because it serves as a link between Thermouthiac, Athribitic, Bousiritic, and Boubastic.
[324] For more see: (BLOUIN 2009)
[325] (HERODOTUS, 2.17)

there are two branches that he considered to be as artificial or fake secondary branches, namely Bucolic and Bolbitic.

While Strabo considered that these canals were the main branches of the time and that the criterion for classifying the false branches is that they are valid for small boats only because their mouths are shallow with swamps[326]. In addition, Strabo in the same context added some branches, which are Tanitic, Bousiritic, and Pathmitic, and gave the branch of Bousiritic a different name from its mouth, which is Pathmitic.

Strabo sometimes also mentions the name of the branch followed by the word Mouth and sometimes without, so he did not differentiate between whether these names were for branches, estuaries, or both[327]. In addition, he sometimes mentions the branch by his name, then calls the same name at the mouth of the same branch as well, which here corresponds to what Herodotus mentioned, while he did not name the Saïtic branch by the same name, but rather indicated that that name is Nome called Nome Saïtic. In addition to Diodorus, where he fully agrees with what Herodotus and Strabo mentioned, in addition to that he indicated the existence of some estuaries, but did not indicate their names. In addition, he pointed out that at the end of each estuary, a city is divided into two halves[328] .

On the other hand, Ptolemy, although he gave the branches names, gave their estuaries other names, which increases the confusion, but he was more detailed in an attempt to determine the geographical coordinates of the locations of these estuaries, even if they were not accurate enough, besides that he divided the delta into three of East to West, namely (Small Delta, Third Delta and Large Delta)[329]. In addition, he mentioned that the branch of Pelusiac is a branch of Boubastic and that its mouth is the one that bears the name of Pelusiac. In addition, he agreed with Strabo that the branch of Bousiritic has a mouth called Pathmitic, and he also considered that Tanitic and Mendesios are the mouths of branches.

Moreover, he added three branches to what Strabo mentioned, namely, Thermouthiakos or Phermouthiakos, and its estuary is called Sebennytic, the second branch is Taly, and its estuary is called Bolbitic, and the third is the branch of Athribitikos, and its estuary is called Pineptimi pseudo, which is a false estuary. Besides, he mentioned another false estuary, which is called Diolkos pseudo, in addition, he called the Canopic branch Agathos daimon and it has

[326] (STRABO, 17.1.4)
[327] (STRABO, 17.1.18)
[328] (DIODORUS 1.30.; JEWELL 2011)
[329] (LITINAS 2015: 44–57; DE GRAAUW 2022; PTOLEMY 4.5.10-44)

an estuary called Herakleotic. GRAAUW suggested that the branch of Athribitikos is the same as the branch called Sebennytic of Herodotus and Strabo and that the false estuary called Pineptimi pseudo is the Sebennytic estuary.

It is worth noting that the period between Strabo and Ptolemy is interspersed with about 5 climatic cycles, which means that this period may have witnessed many climatic fluctuations such as drought and humidity and many torrents and floods[330], and this led to the frequent severing of the delta, and the increase in the number of branches during the days of Ptolemy. Therefore, a great deal will be relied on what Strabo mentioned about the ancient branches of the Nile as a morphological basis for the spatial verification map of the path of the Holy Family's journey, as he is the closest in time to the time of the escape journey.

5.2.2 Shoreline

The subsidence of the delta and the sediments resulting from the ancient branches of the Nile and its dams, sediment supply by valleys and from windblown sand, and the change in sea level[331] are the factors responsible for the apparent changes in the geomorphology of the delta, and also affected the distribution of waterways, and the occurrence of Erosion and Accretion in the coastline of the delta During successive periods (Fig. 5-3)

Additionally, the climatic fluctuations may have led to the disappearance of some old branches, especially in dry periods, such as the case of the Pelusiac branch, where the sedimentation factor was more active than it was during the wet periods, as TORAB indicated[332]. In addition to some tectonic factors that affected the delta, for example, the AD 365 Tsunami earthquake, which SOZMEN described as having a magnitude of more than 8.5 degrees, and whose height was around 8 meters in the Alexandria area[333]. All these and other factors certainly led to changes in the morphology of the delta coastline, which is illustrated by (Fig. 5-4).

[330] (BELL 1970: 569–573)
[331] The sea level was two meters lower than the current surface at the beginning of the first century AD. For more see: (BLOUIN 2007: 66)
[332] (TORAB 2007: 32)
[333] (HAMOUDA 2010: 687–704; JELÍNEK et al. 2009; STIROS 2010: 54–63)

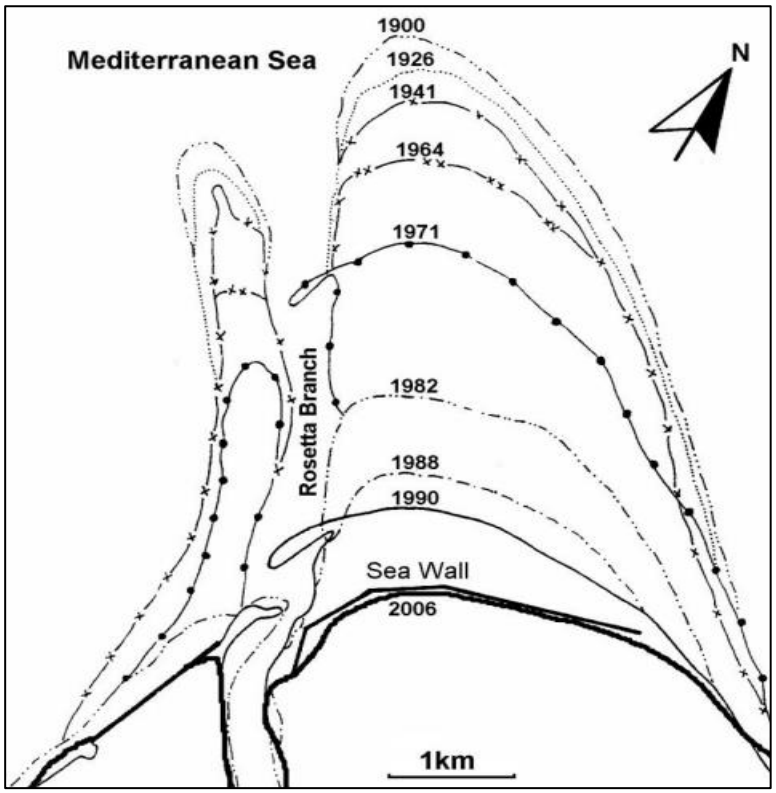

Fig. 5-3: Morphological changes of Rosetta's mouth from 1900 to 2006; (after TORAB and AZAB 2007)[334], concentrated erosion is evident in the area that forms the mouth of the Rosetta branch.

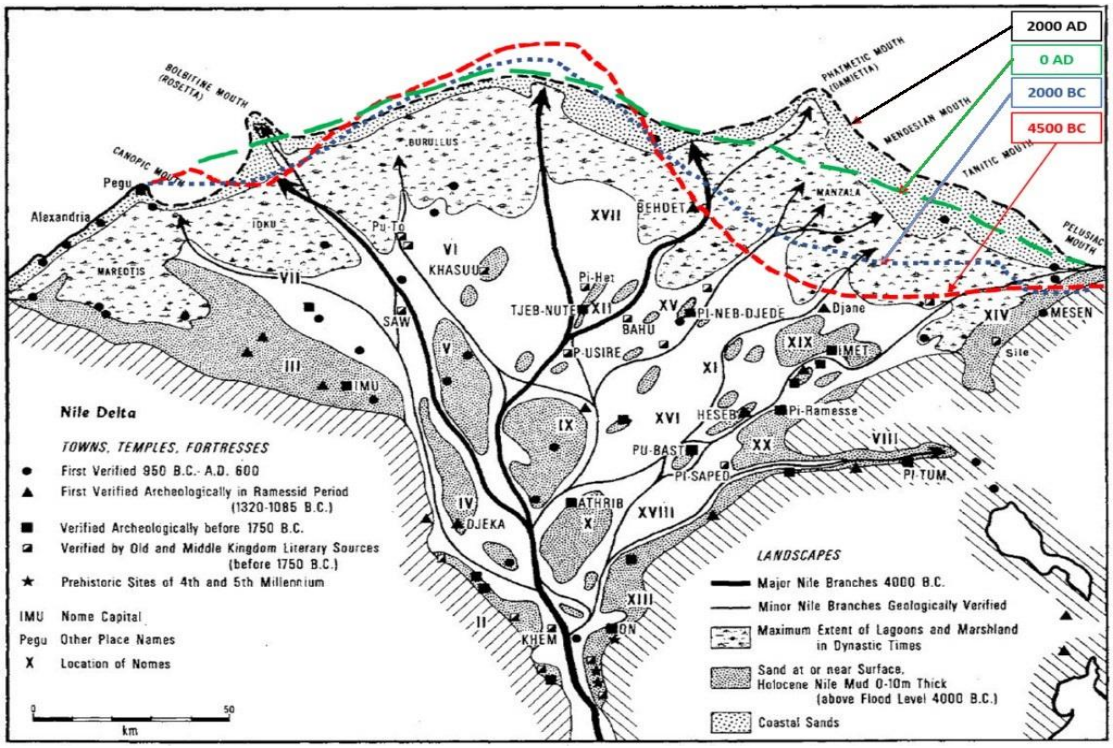

Fig. 5-4: The shape of the Nile Delta and the morphology of the coastline from 4500 BC. to 2000 AD (based on BUTZER 1976, with coastlines after GRAAUW 2022 based on STANLEY 1998)[335].

[334] (TORAB and AZAB 2007: 69–76)

[335] (BIETAK 1975; BUTZER 2002; DE GRAAUW 2022; STANLEY and WARNE 1993)

The figure illustrates the stages of the coastline's advance toward the sea, where the red dashed line indicates the coastline around 4500 BC, the blue dashed line indicates the coastline around 2000 BC, and the green dashed line indicates the coastline in HF period, while the black dashed line indicates the coastline around 2000 AD. The rate of sedimentation in the east of the Delta is more than in the west, especially in the Pelusiac estuary region, where GRAAUW mentioned that the weakness of sedimentation in the northwest of the delta could be due to the direction of the northwest sea waves towards the Alexandria sector, which is accompanied by erosion[336].

These geomorphological changes also led to the extinction of many cities located along the coastline in the delta, or they were submerged under the scattered lakes north of the delta[337], where the discoveries indicated that some Greco-Roman settlements lie under the surface at a depth of 1 to 2 meters[338]. For instance, Pimaendjoili and Tanis, which were submerged under the waters of Manzala Lake/ Tanitik Limne, and Nestrawa and Tanis II, which disappeared under the waters of Lake Burulus[339]. There are even settlements at depths more than that, such as the submerged city of Heraklion, near the city of Alexandria[340], and the city of Bouto, which was submerged in silt in the swamps near Damanhour[341]. The remaining ancient cities are that were built on ground levels higher than the valley and the delta[342].

5.2.3 Ancient Lakes

Currently, there are only four lakes located the north of the delta, which is from east to west: Manzala, which is the largest in area, Burulus Lake, Edku Lake the smallest, and Mariout Lake. While Strabo has indicated that, the north of the delta is full of swamps, lakes, and muddy ponds, which indicates that there were many other small lakes at that time[343] (Fig. 5-5). These lakes were also affected by geomorphometric changes as a result of the changes that occurred in the coastline, in addition to some human factors, such as the drilling of the Suez Canal, which reduced the extension of Lake Manzala to the east, after it had reached Pelusium (Fig. 5-6).

[336] (DE GRAAUW 2022)
[337] (AMÉLINEAU 1893; RAMZY 1953; STANLEY et al. 2004: 293–294)
[338] (HASSAN 1997: 51)
[339] (AMÉLINEAU 1893: 303)
[340] (BALL 1942; HAMOUDA et al. 2015)
[341] (GINAU et al. 2019; IBRAHEM 2015; JELÍNEK et al. 2009; WILSON 1955)
[342] (HASSAN 1997: 68)
[343] (STRABO, 17.1.18-22)

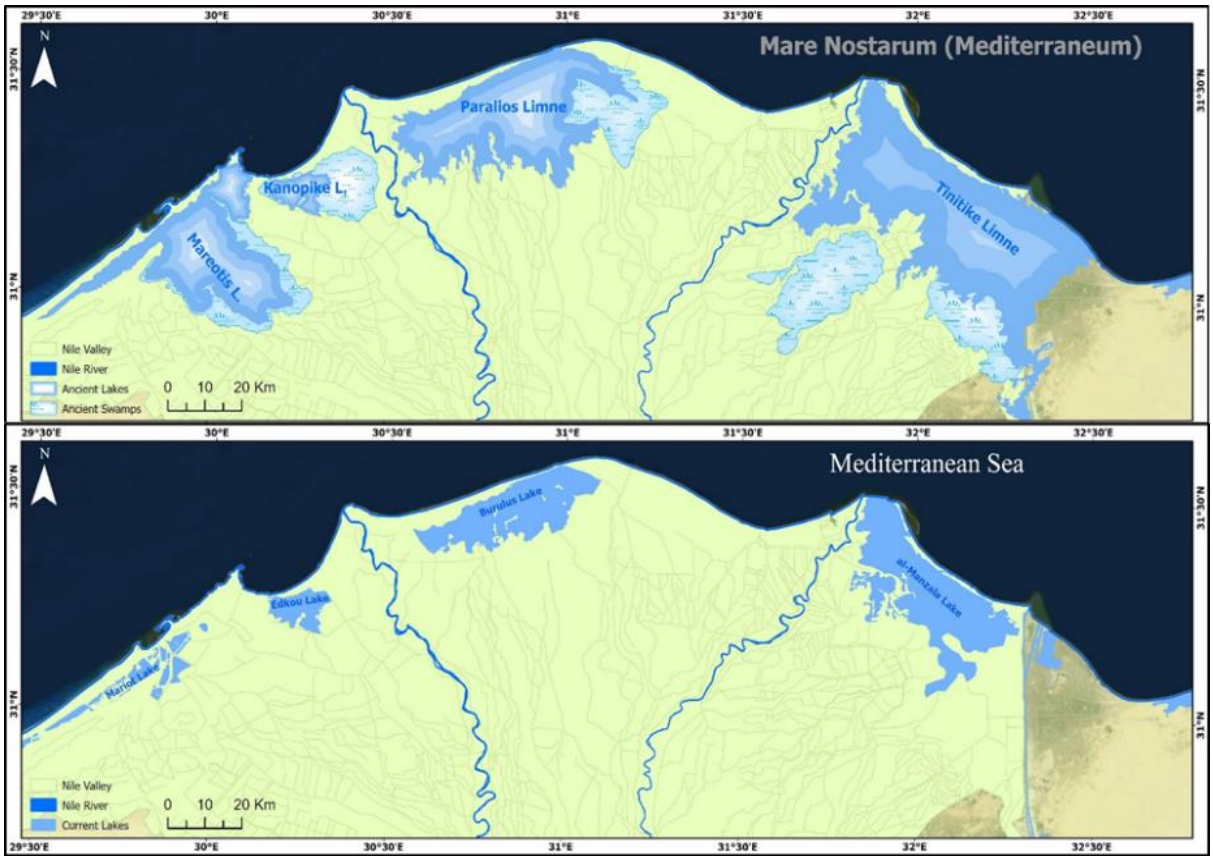

Fig. 5-5: The change detection in the extension of lakes north of the delta; The upper map shows the area of the lakes at the beginning of the first century AD, while the lower map shows the current shape of the lakes.

5.2.1 The Ancient Canals network

Strabo mentioned that there are many canals in the delta, but he did not indicate their names, while PTOLEMY referred to the river or the Boutic canal and that it extends from the west of the delta to the east, intersecting with the branches of Thermouthiac, Athribitic, Bousiritic, and Boubastic. It led to the justice distribution of water due to the accumulation of silt on the banks of the main branches, besides, to Excess discharge of floodwater[344]. SCHIESTL also noted that this canal was dug between 70 AD and the middle of the second century AD, and was the largest artificial waterway in Egypt at that time; in addition to that, it was a seasonal alternative to the sea road across the Mediterranean, which was to be avoided in winter[345]. The map of TP also indicated this canal, as the Pelusium-Alexandria road runs parallel to it[346].

[344] (BALL 2017: 230; PTOLEMY4.5.10)
[345] (SCHIESTL 2021: 29–38)
[346] (TALBERT and ELLIOTT 2010)

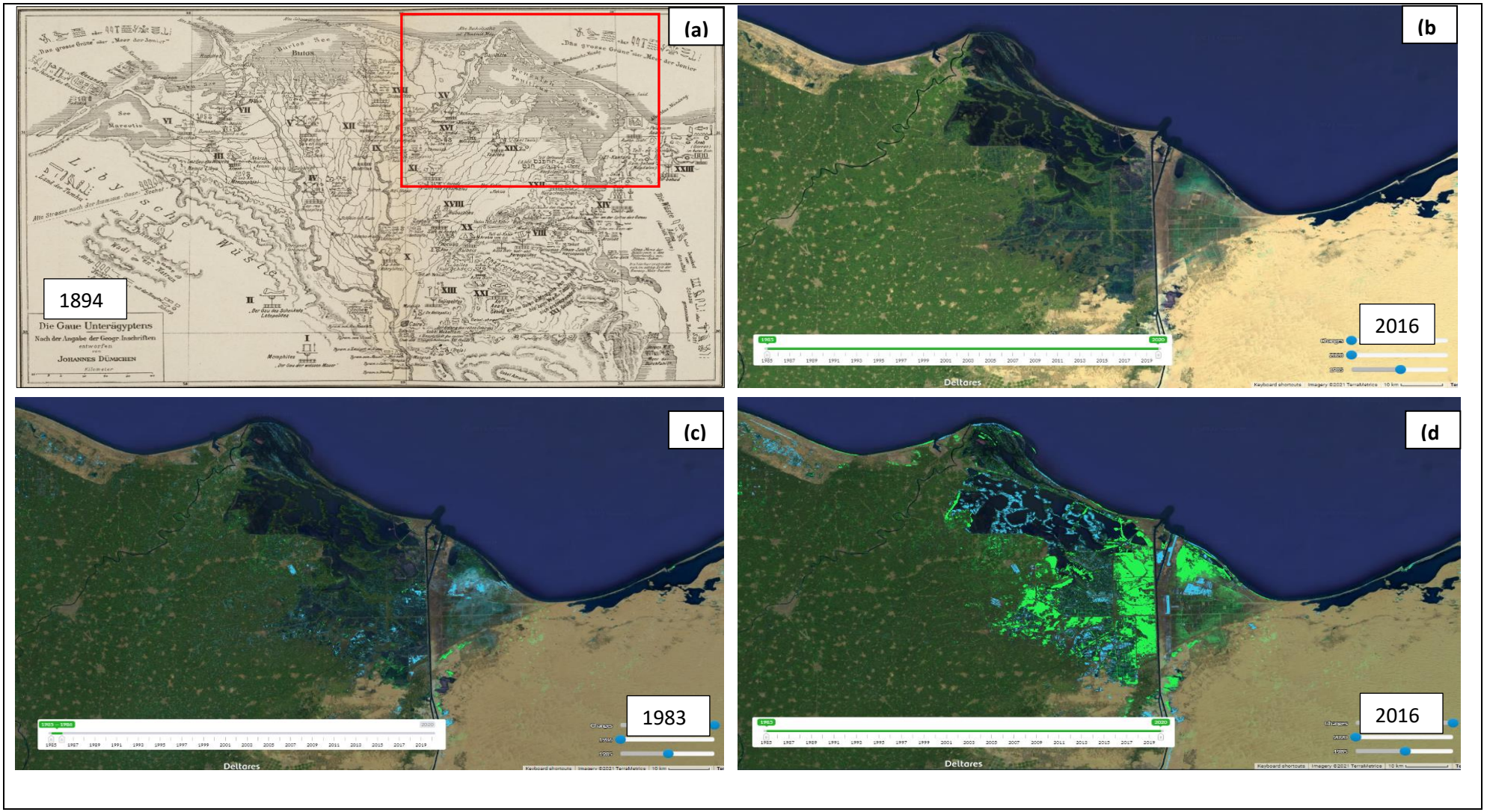

Fig. 5-6: Change Detection in Manzala Lake.: (A) Manzala Lake in 1894 before digging the Suez Canal, about (Duemichen 1894:86) . (b,c,d) Changes in the surface water area of the lake from 1983 to 2020. The green color show where the surface water has turned into land (accumulation, reclamation, and drought); The Blue color show where the land has been changed to surface water (erosion, reservoir creation), using GEE, about (DONCHYTS et al. 2016:810–13).

According to the databases and atlases referred to earlier, there are some other ancient Canals of importance in river navigation, although they did not rise to the level of the ancient river branches at that time. Some of these canals ran across the delta, including the Trajan Canal, which connected the Nile to the Red Sea, passing through the Tumailat valley to the city of Klysma/ Suez[347]. SCHÖRNER indicated that it branched off from the Pelusiac branch at a distance of about 60 km north of Babylon, specifically near Belbies, before Trajan renovated and changed its course[348]; therefore, BA indicated that it branches off from the Nile starting from the south of Babylon[349].

Furthermore, Alexandria Canal, which used to connect freshwater from the Canopic branch/ Heraklion to Alexandria to Portus Eunostus[350]. Besides, the Phecht Canal[351], which used to extend west of the Delta from Fayoum, passed through al-Lahoun, which had a port[352], until Memphis and then to Alexandria[353]. AMÉLINEAU also mentioned that there was a lake near Memphis called Phkhit[354]. Moreover, some canals used to extend across the Nile Valley in the south. The most important of which is the Tomis Canalis/ Bahr Yousef, which still exists today, which branches off from the main river course near the Manqabad area in Asyut, parallel to the Nile, extending westward until it reaches the region of Fayoum, and then to Moiris Lake/ Qaroun[355].

According to its geographical coordinates and calculations, Ptolemy indicated a canal branch near al-Qiss[356], at a coordinate point (61° 60` E, 28° 45` N) (current coordinates 31° 25` E, 28° 45` N). It heads to the west and then northwest until it represents the western boundary of the island on which the Heraclius Nome is located, separating it from Arsinoe/ Fayoum. Then the canal turns around the island taking a north-eastern direction until it joins again with the main course of the

[347] (JOMARD 1818: 469,746)
[348] (SCHÖRNER 2000: 28–43)
[349] (TALBERT 2000)
[350] (HAMOUDA 2010; STIROS 2010; TUSUN 1925: 10)
[351] (TALBERT 2000)
[352] (BUTZER 1960)
[353] (ABU BAKR 1997: 180; FAYEZ 2012: 193; WAHIBA 2006: 236)
[354] (AMÉLINEAU 1893: 384)
[355] (KOTB 2017: 206–2019)
[356] After an extensive study of the papyri, Litinas clarified that Ko/ al-Qiss was not the metropolis of Kinopolian Nomos, but rather was just a Litoparchian metropolis/ an administrative section lower than the Nomos in Heliopolis Nomos, so that Ptolemy was confused about it, and that Kinopolis was the Kinopolitan metropolis throughout the ages, and that she is not Sheikh Fadl, because the papyrus evidence indicates that it is on the western side of the Nile Valley, and therefore this canal branched from it, which went to the west and northwest (BALL 2017: 142; LITINAS 1994: 157–164).

Nile River south of Aphroditepolis/ Atfih at a coordinates point (61° 60` E, 29° 45` N) (current coordinates 31° 25` E, 29° 45` N) as determined by Ptolemy[357]. This canal corresponds in large part to the course of the Bahr Yousef Canal[358].

On the other hand, Strabo, while talking about the Tiba police station, which served as a station for collecting customs duties, also indicated that it is located near the canal (Bahr Yousef) leading to Tanis/ Tuna al-Gabal. It can be concluded that Bahr Yousef Canal has not changed the place of its branching from the Nile[359]. In addition to the Ptolemais Horumos Canal, which was located southeast of Fayoum at al-Lahoun, and Batsuntios Canal, which was the main Canal that flooded Kranis/ Usim with water, and passed the villages of Bacchias/ Umm al-Athal, Philadelphia, New Ptolemaic, Dimi, and Skopionisos, linking many Fayoum villages. Perhaps it was called Bahr al-Wardan, which was branching off from Bahr Yusef Canal[360].

Moreover, there are many harbors and mooring stations scattered on both sides of the Bahr Yousef Canal and the Fayoum Canal, which used to connect the Nile River with Fayoum[361]. These ports include Tacona, Kaine, Ptolemais Hormous, and Philadelphia[362]. Bahr Yousef Canal and its subsidiary canals were all used to transport goods and agricultural land products, in addition to linking the Fayoum region and the West River region with the main course of the Nile River until the city of Asyut[363]. Some of these ports were used to store grain, including the port of Kirke on Fayoum Canal, which had a shipyard (also called a dockyard) for the construction and repair of ships and boats[364], besides some other important ports such as Tennis and Asyut[365].

[357] (BALL 2017: 203; PTOLEMY 4, 5)
[358] (BALL 2017: 140; STRABO 1.17.4-30)
[359] (FAYEZ 2012: 333; KOTB 2017: 206–219; STRABO 17.4)
[360] (AL-RUBI 1986: 142–143; FAYEZ 2012: 193)
[361] (STRABO 17.4-30)
[362] (ADAMS 2007: 21)
[363] It was called *Arsinoe*, one of the regions of Middle Egypt, and its former name was *Krocodilopolis*, which means Crocodile city, and the Egyptian name for it was *Schtet* (FAYEZ 2012: 115; NOS`HI 1998: 384)
[364] (FAYEZ 2012: 115; HAMMER 1943: 70–81; NOS`HI 1998: 384; ROSTOVTZEFF 1926: 314–315)
[365] (WAHIBA 1980: 236)

5.3 Branches of the Nile River derived from the databases

According to BA, DARA, and Strabo Database issued by DARMC, WMAC, and Harvard University database on the Romanian state, in addition to TP map, along with some maps of recent studies that are rarely free from errors (Fig. 5-7). It has been noted that the branches of the Nile River have not been cartographically represented in line with their being natural waterways, and therefore they are free from many of the meanders and bends that characterize any natural waterway[366].

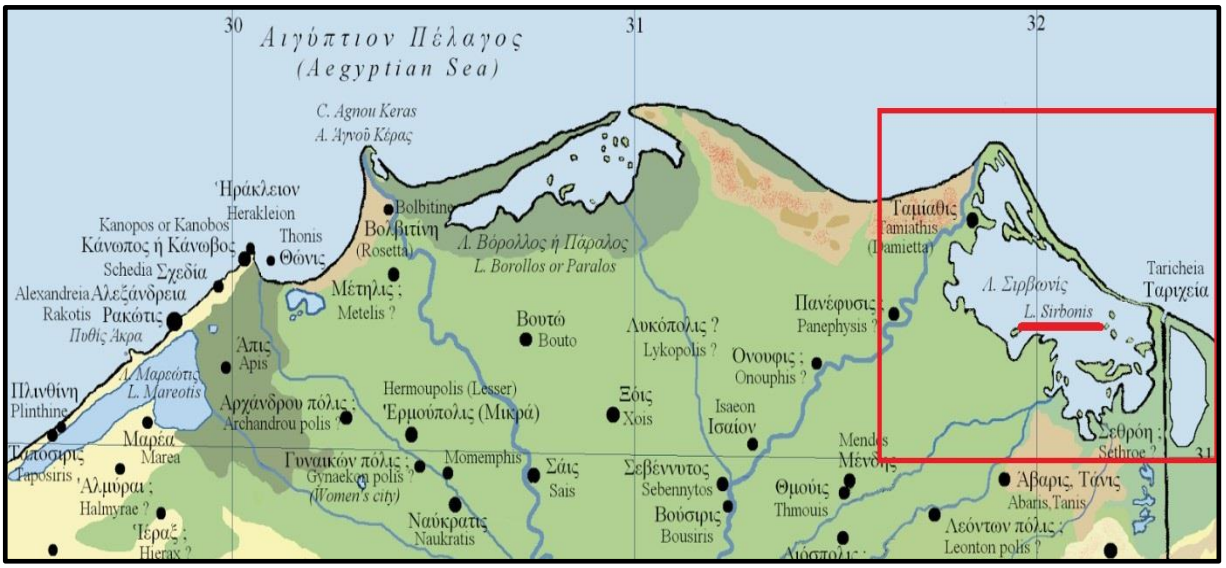

Fig. 5-7: Toponymy error in linking the ancient phenomena with its current name and geographical location; ANGELOPOULOS considered that Serbonis Lake/ al-Bardawil is located in the north of the delta, therefore it was placed in the place of Manzala Lake/ Tanitic, although Lake Srebonis is located along The Mediterranean coastline in North Sinai[367].

On the other hand, the ancient branches that were cartographically represented in some mentioned sources - did not follow the paths of the current canals extending in the delta from south to north. It is characterized by its natural curves, and whose morphology is similar to the current branches of Damietta and Rosetta, except for their widening only. Although these canals are similar to the branches of the Nile in that they collected many cities and villages on their sides, which is the prevailing situation in all branches of rivers, Especially the Nile River and its branches, on both sides of which the Egyptian civilization has grown since ancient times (Fig. 5-8).

[366] For more see: (PENNINGTON et al. 2017; TORAB 1996; TUSUN 1925)
[367] (ANGELOPOULOS 1999; 2016)

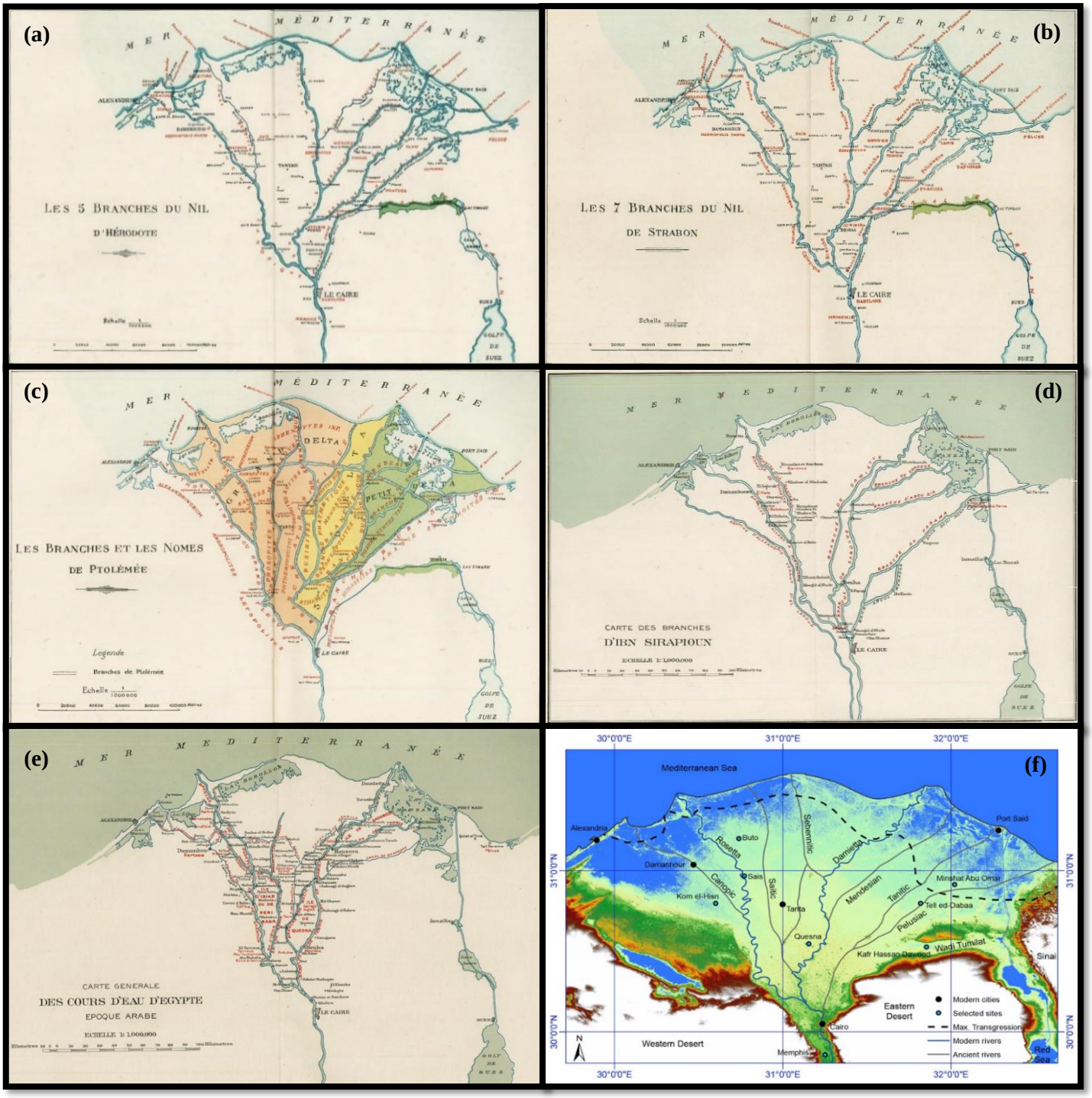

Fig. 5-8 :Generalized maps of the Nile delta showing the ancient Nile Branches and Canals during the times of (a) Herodotus, (b) Strabo, (c) Ptolomy, (d) Ibn Serapion, and (e) al-Idrisi (after TUSON 1925); (f) Map of the Nile Delta (SRTM data). The locations of ancient river branches are (after BIETAK 1975; BUTZER 2002); the extent of maximum transgression is as given by STANLEY and WARNE 1993 based on (PENNINGTON et al. 2017: 170,0212-231).

As a consequence, after all the above-mentioned databases were combined and compared, along with the ancient cartographic sources related to the Nile and its branches at the beginning of the first century AD (Fig. 5-9), the map of the ancient Nile branches was deduced considering the addition of some old canals. Besides, some of these branches follow the paths of the current canals that are very similar to the current two branches of the river, which were not considered before, bearing in mind the characteristics of meandering river branches, which gives a more realistic cartographic dimension (Fig. 5-10, 5-11, 5-12, 5-13).

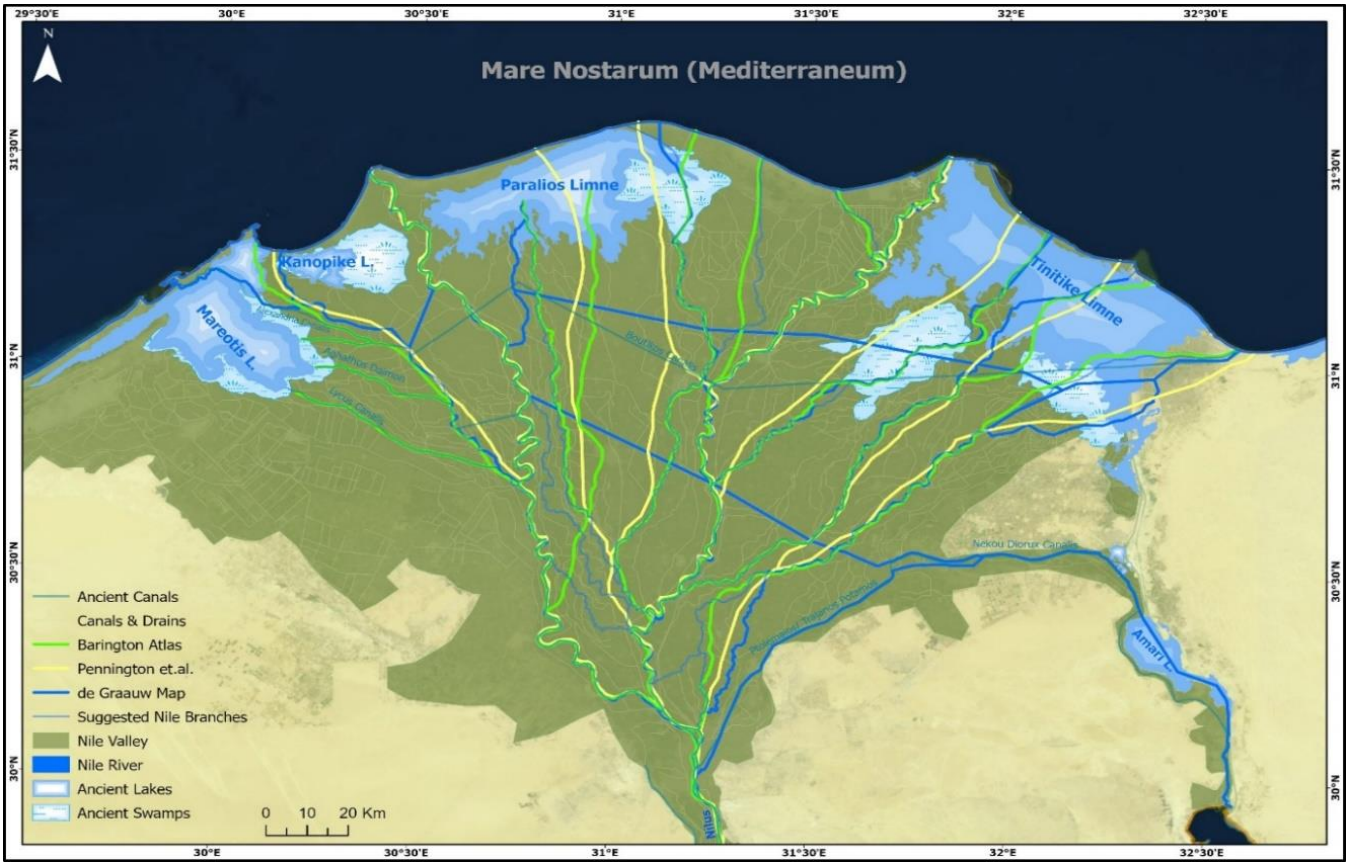

Fig. 5-9: Map of the discrepancy in the extension of the ancient Nile branches network, according to some references and databases.

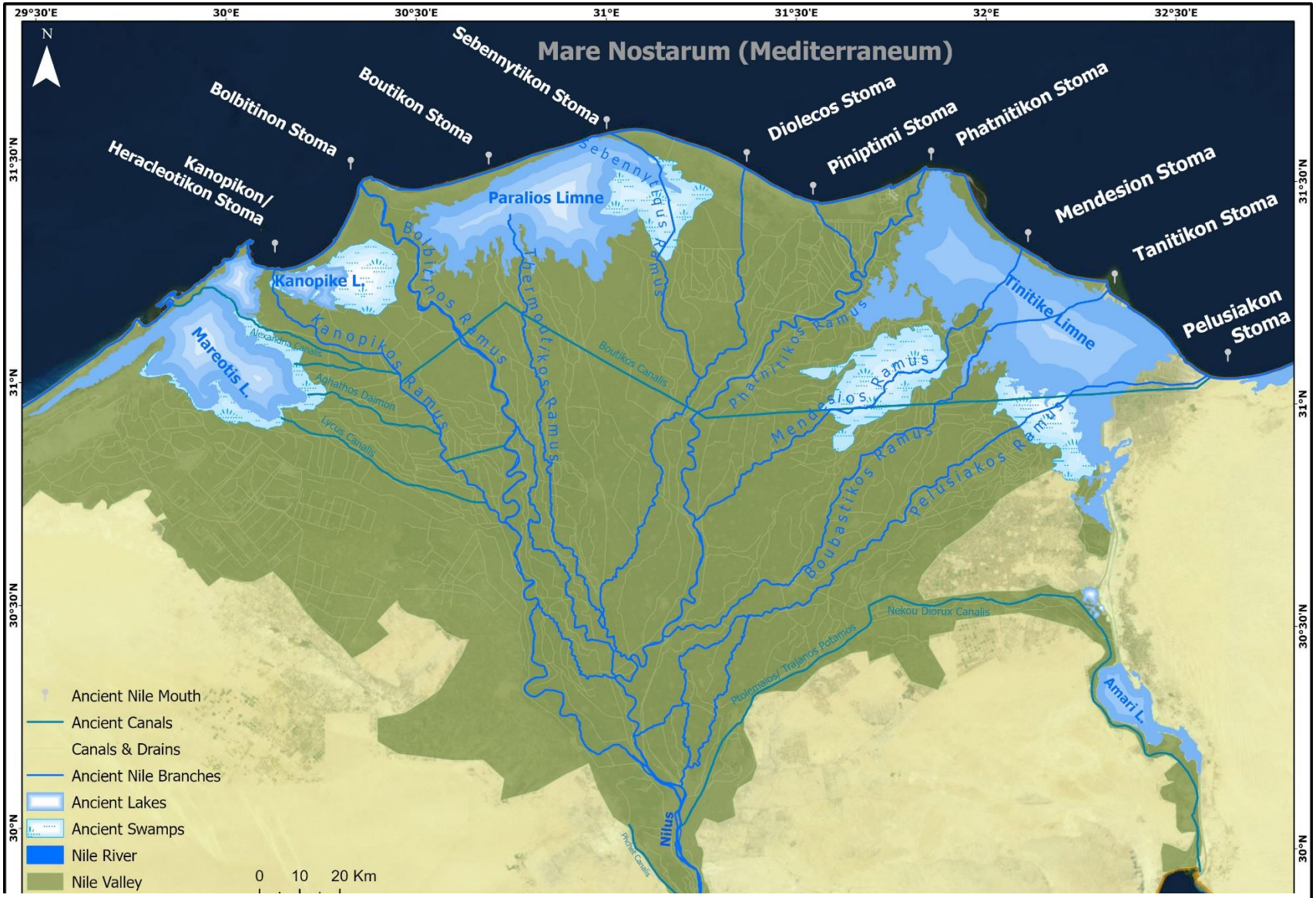

Fig. 5-10: Map of the proposed ancient Nile branch network; It is based on the extension of some of the current water Canals Canals, which bear the same topographic features of the branches.

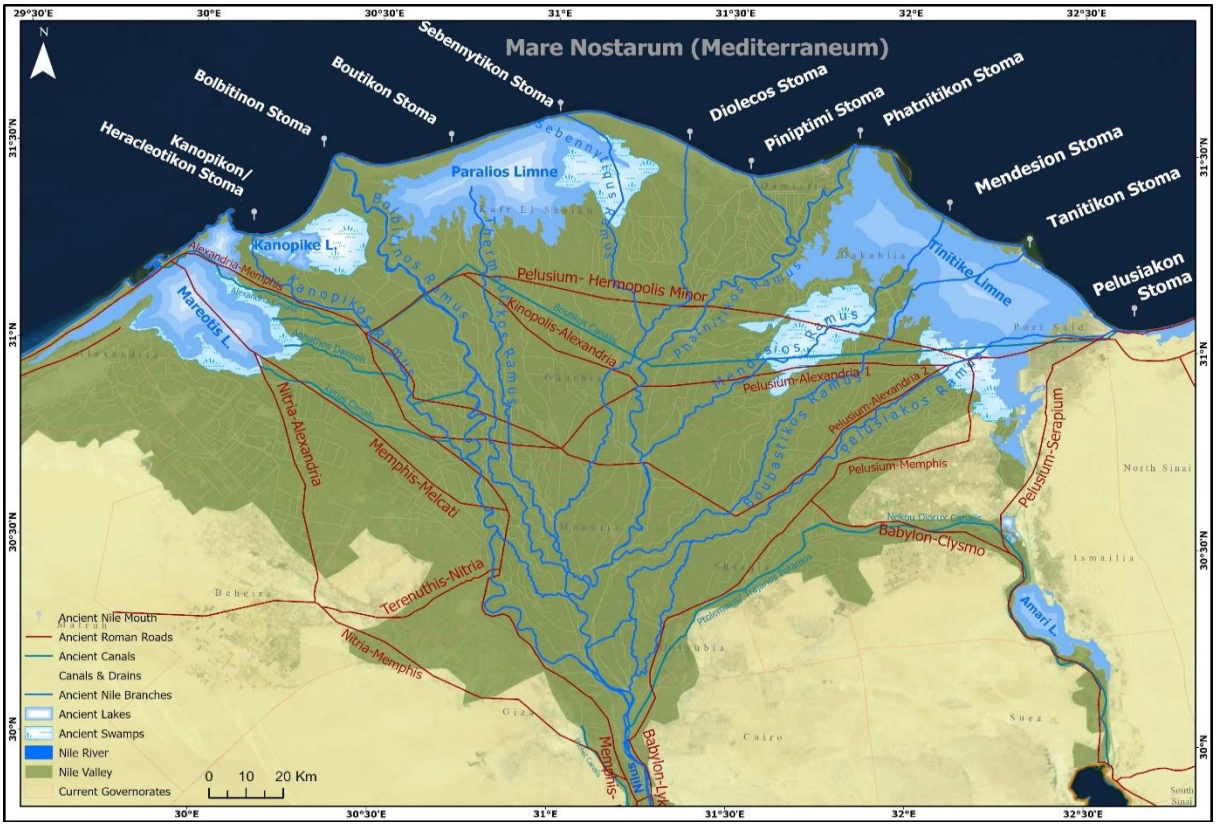

Fig. 5-11: Ancient Roads and Nile Branches in Delta

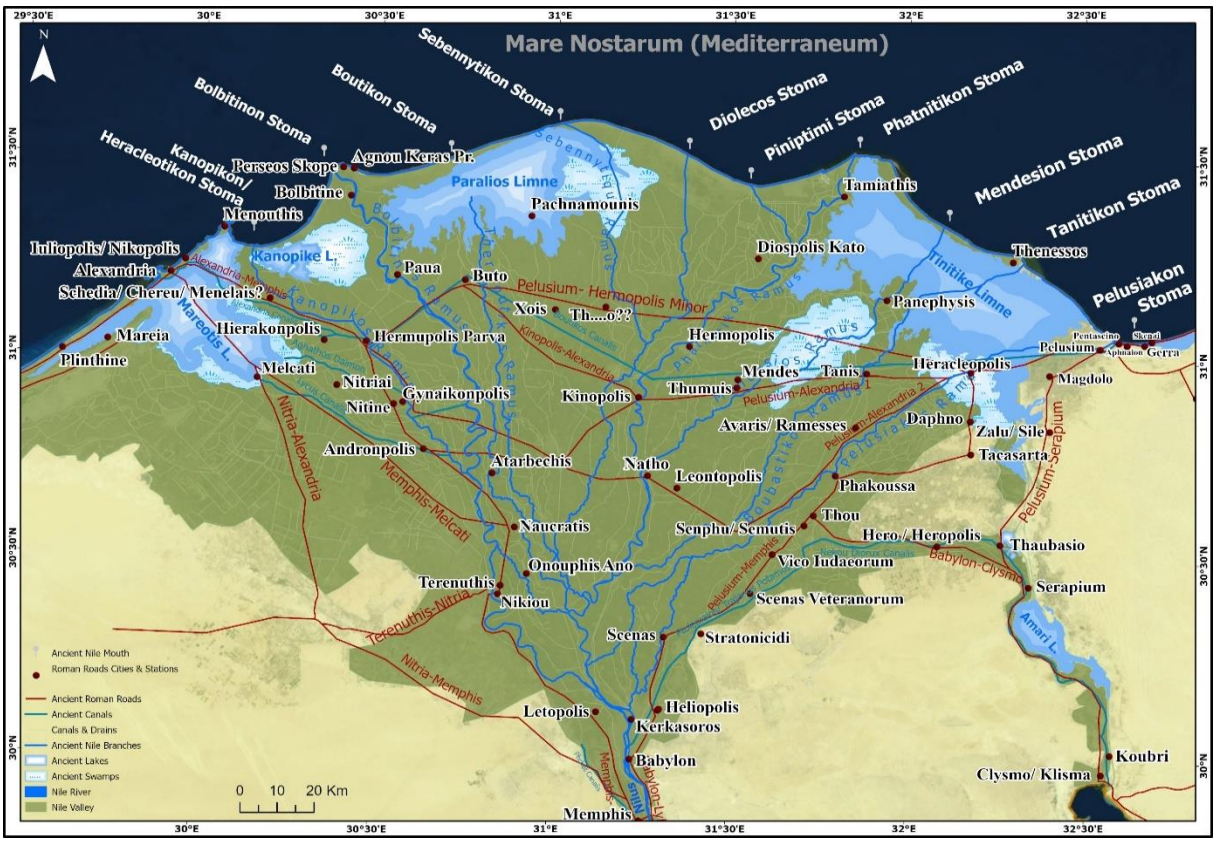

Fig. 5-12: The Ancient Roads, Nile Branches, and Roman Stations in Nile Delta

Fig. 5-13: The Holy Family Itinerary stations in ancient Nile Delta

5.3.1 The Canal banks, Drains, and Waterways - as paths for roads

The bridges were built of mud, with a height of about 3.5 meters and a width of about six meters, to protect the lands and facilities from the tyranny of the Nile flood. The bridges and their bases built of stones and rocks were used as roads when filling the basins that separated them. In addition to using the banks of the waterways (canals or branches of rivers)[368].

The transportation, especially the local, was the use of donkeys to walk on the roads extending between the fields and public places and housing in the village[369], which run on the bridges and the elevated banks of these waterways[370].

Considering that the waterway banks were used as paths for roads, all banks and sides of the ancient canals and river branches would be roads. Thus, the roads map will be as (Fig. 5-14). Accordingly, the ancient road network expanded, especially those linking HF stations together (Fig. 5-15). It is clear that the locations of the Holy Family stations, if they do not intersect with the road network, may intersect with the banks of waterways that are road tracks as well.

[368] (MORET 1927: 33–34; ROLFE 1917: 153; WAHIBA 1980: 101)

[369] The highlands called islands are areas with extensions not covered by the annual floods of the Nile that were located within the valley. On top of these constantly dry areas, the Egyptians established villages and towns from historical times, located within the valley and near the main riverbed (HERB 2007: 96–99).

[370] (ABU KRISHA 1979: 215; FAYEZ 2012: 35–37; FAYEZ 2012: 19; HASAN 2000: 321; LEWIS 1997: 145)

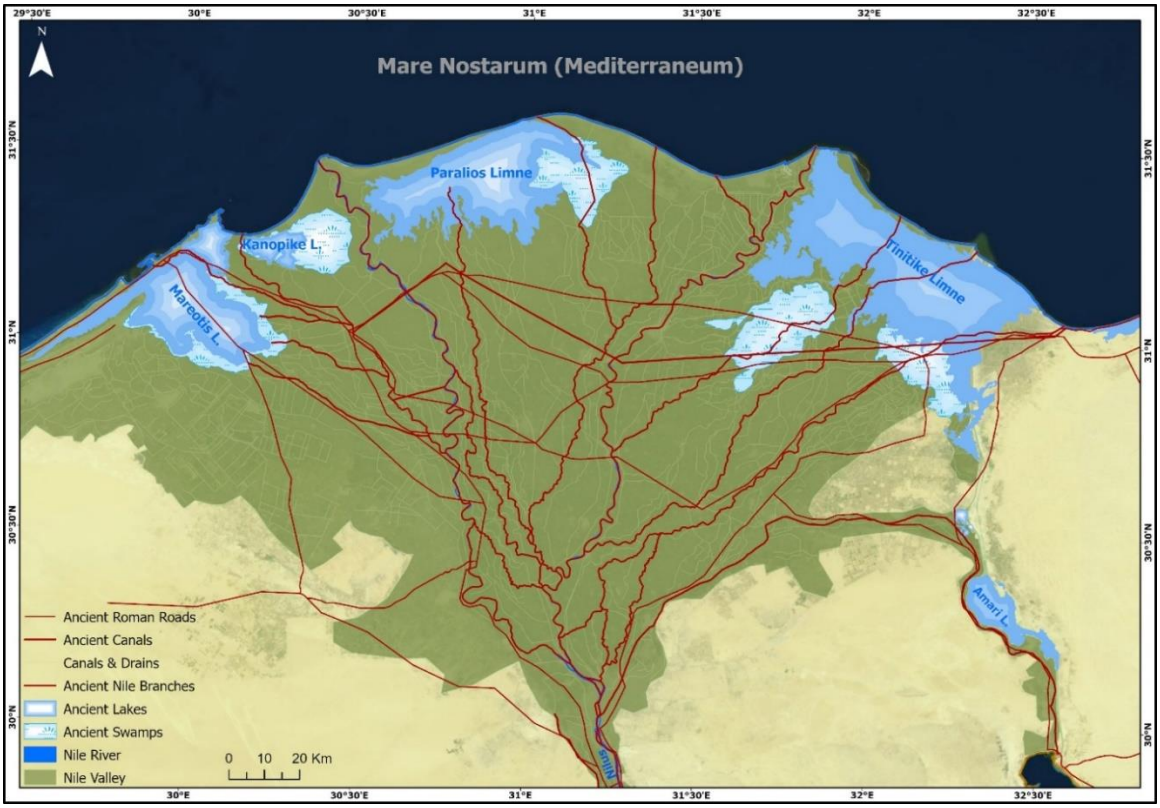

Fig. 5-14: The waterways' banks as roads within the road network.

Fig. 5-15: HF Stations on the waterways' banks within the road network.

5.4 The change of the Nile River course through the valley:

The course of the Nile River through its valley was distinguished by the state of instability and the migration of the course of the river to its location in multiple locations. The Nile course was also affected by the same factors that affected the Geomorphometric shape of the delta, as explained previously. The side-migration of the meandering course of the Nile into the floodplains of the river was described by BUTZER, who indicated that the Nile is abandoning its position throughout the land of Egypt at a rate of about 2 km/ 1000 years[371].

In addition, the rate of change in the Nile course is about 1 km/ 5000 years towards the east[372]. The Nile abandoned its position since the Pharaonic era until today between Achmim/ Sohag and Cairo about 3 km to the east due to sedimentation processes[373]. The other extreme at Old Cairo, where its location was abandoned to the west, due to the development of managing water resources and successive urban development, the Nile course was stabilized and its migration was limited at Cairo and Giza[374] (Fig. 5-16).

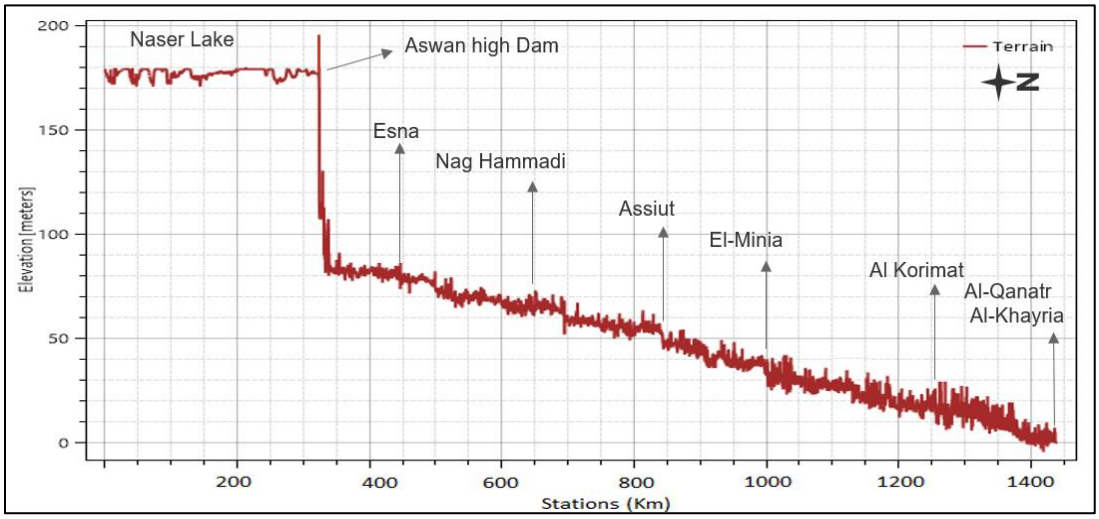

Fig. 5-16: A longitudinal section of the Nile course from Nasser Lake to al-Qanatir al-Khayria[375].

The average slope of the river course ranges from 1 m/ 15 km at Qena to 1 m/ 11.4 km at Beni Suef[376]. These changes appeared clearly along the course of the river in many sites, especially

[371] (BLOUIN 2009: 33; BUTZER 1976a; LUTLEY and BUNBURY 2008: 119; SAID 1981: 62–63)
[372] (BALL 1939)
[373] (BLOUIN 2009: 33)
[374] (BLOUIN 2009: 34)
[375] (GRIS 07.02.2020)
[376] (BALL 1939; BLOUIN 2009: 33; BUTZER 1976a; LUTLEY and BUNBURY 2008: 119; SAID 1981: 62–63)

in 4 of them located in the distance in which the path of the Holy Family extends from Babylon at the head of the Delta to Asyut, where the last station of the Holy Family's path is located. These four sites are Babylon Fortress (Qasr al-Shama'), Memphis, al-Qiss, and al-Ashmounein.

5.4.1 At Babylon Fortress (Qasr al-Shama'):

Three divisions of the Roman legions were camped in this fortress, as Strabo mentioned[377]. The course of the Nile River was passing under the walls of the western Babylonian fortress[378]. AL-NAQIUSI also mentioned that Babylon has a neighborhood called Tendounyas, which is located directly on the river bank[379]. There was a gauge for the Nile at Qasr al-Shama', and it was called the Copt gauge or the Roman gauge[380]. In addition to some Canals, they were extended from the river to the inside of the fort, due to the presence of the river berth under the towers of the fortress, according to recent discoveries[381]. It also had a berth for ships[382]. Currently, the fort is located about 500-meter east of the Nile River (Fig. 5-17).

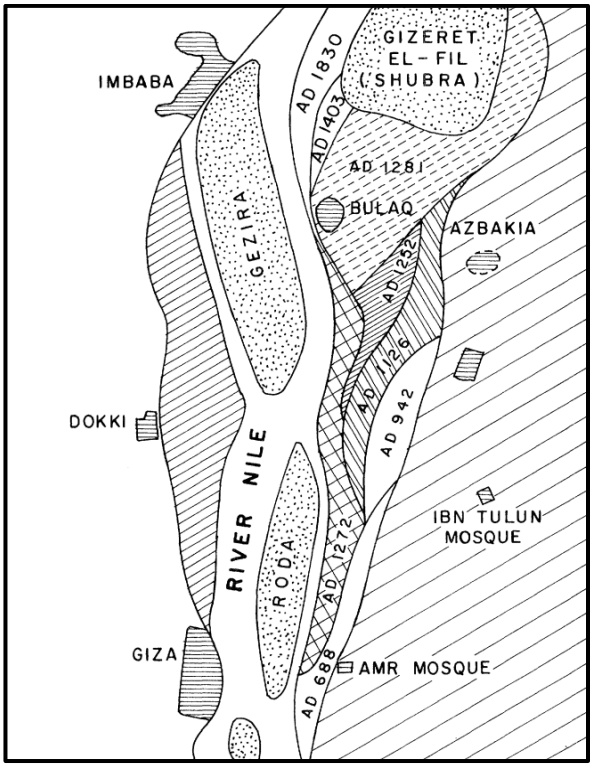

Fig. 5-17: The movement of the course of the Nile near Old Cairo between the tenth and thirteenth centuries AD; Areas of land were added to Old Cairo and its suburbs, affected by the low levels of flooding in that period (after HASSAN 1997: 61).

[377] (STRABO 17.1.29)
[378] Rufins and Jerome mentioned that in front of Babylon there were anchorages for ships (BLOUIN 2009: 33; BUTCHER 1900; GIRGIS 2018; HABIB o. J.: 5; IBN IYAS 1995a: 80)
[379] (AL-NAQIUSI 2003: 207–208)
[380] (AL-SUYUTI 1967: 51; IBN ZULAQ 1999: 78–79)
[381] (GIRGIS 2018: 8)
[382] (AL-RUBI 1986: 93–94)

5.4.2 At Memphis:

According to BUNBURY et. al. 2017, in the Memphis region, there has been a large eastward migration of the Nile River through the floodplains during the past 6000 years[383]. Memphis is currently located about 3.4 km west of the current riverbed[384] (Fig. 5-18).

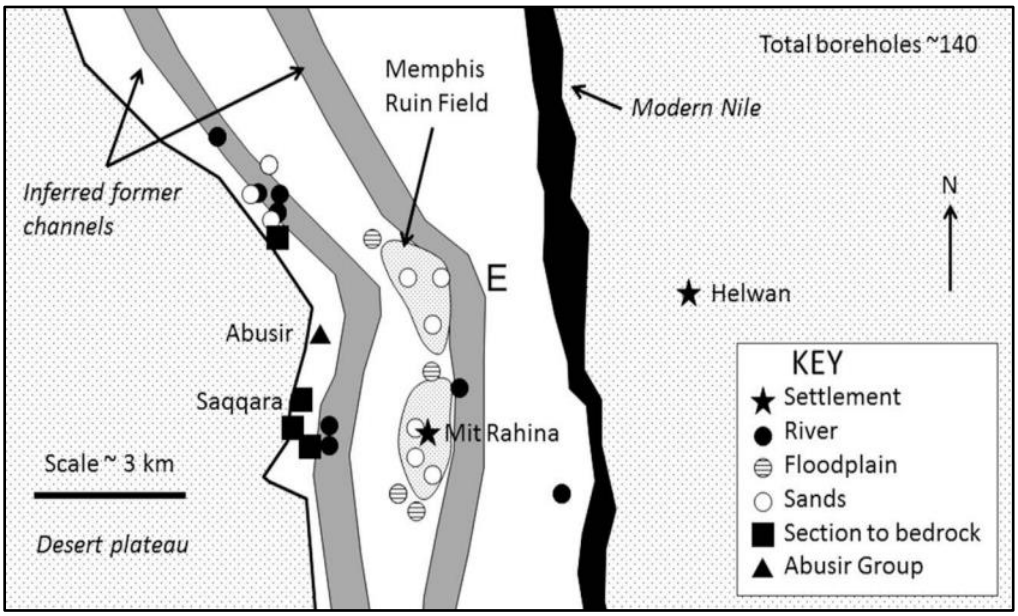

Fig. 5-18: Map of the Memphite Floodplain showing erstwhile river positions (grey) and the current Nile location (black) (after BUNBURY et al. 2017).

5.4.3 At al-Qiss:

On the other hand, al- Qiss was one of the anchorages of river ships located on the western side of the Nile[385], and an important river Canal branched from it, which PTOLEMY referred to with his geographical coordinates[386]. It was connected to the Nile for a second time south of Aphroditopolis/ Atfih. al-Qiss is currently located to the west of the current Nile course, about 4.5 km.

5.4.4 At al-Ashmounein:

In succession, Ashmounein, which, according to AMÉLINEAU, and the survey of TOONEN et .al 2021 based on what was provided by BUNBURY and MALOUTA, 2012, al- Ashmounein was

[383] (BUNBURY et al. 2017: 71–96)
[384] For more see: (PARK and RENNELL 1799)
[385] PHILLIPS indicated that the Holy Family sailed a distance of 35 km in a boat from al-Qiss/ Kinopolis to Gabal al-Tair (PHILLIPS 1999: 88).
[386] (BALL 2017: 203; PTOLEMY 4,5)

located to the west of the course of the Nile in the Graeco-Roman period about 6 km, while today the course has abandoned its location to the east of it, about 8.5 km[387] (Fig. 5-19).

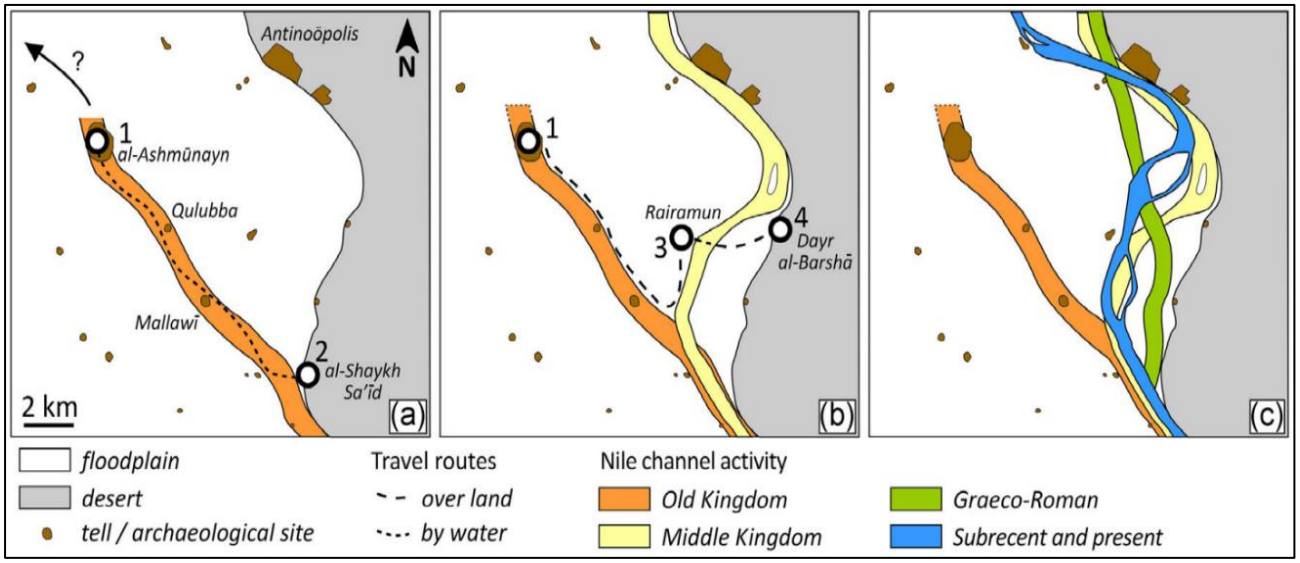

Fig. 5-19: The Nile Valley landscape in the al-Ashmounein region, during the Old Kingdom, New Kingdom, Greco-Roman, and the last millennium. It appears that the course of the river moved to the east of al-Ashmounein by about 8 km (after VERSTRAETEN et al. 2017; WILLEMS et al. 2017).

5.5 **Ancient Nile Floods**:

The Nile floods in Egypt went through many fluctuations in their levels during multiple periods, which led to many famines during periods of drought due to low levels of flooding, or natural disasters during periods of high floods[388]. This is evident from what was recorded in the pharaonic temples and the Nilometer in Rawda[389] - Cairo (Fig. 5-20) from the seventh century AD[390] and the writings of historians during several centuries AD[391] (Fig. 5-21). PLINY mentioned that the lowest flood level was about five cubits (1.15 m) in the year 48 BC. According to the Aswan Scale, the highest flood level was about 24 arms, 4 paws, and one finger (ca. 13.2 m) around the year 5 BC[392].

[387] (AMÉLINEAU 2013: 167; BUNBURY and MALOUTA 2012: 119–122; TOONEN et al. 2021: 1–17)
[388] (AL-MAQRĪZĪ 1873; BELL 1970; BUNBURY 2019)
[389] IBN ZULAQ mentioned that there were Akhmim Nilometer, Qasr al-Sham'a (the Copts or the Romans Gauge), Helwan (Abdul Aziz bin Marwan Gauge), and al-Rawda (Osama bin Yazid Gauge) (IBN ZULAQ 1999: 78–79). Ibn Iyas also indicated Ansena Nilometer (IBN IYAS 1995a: 21).
[390] (AMIN 1916)
[391] (SAID 2013)
[392] (PLINY 1855)

The rise in flood levels is probably a result of the abundance of rain during the Greco-Roman era when the desert was bustling with movement, the roads were full of caravans, the mining of gold, and emeralds, besides the cutting of stone was flourishing at that time[393]. The floods of the Nile River certainly affected the formation of the itinerary of the Holy Family's journey, as it will become clear later. (Fig. 5-22) shows the maximum extent of the flood in the Nile Delta.

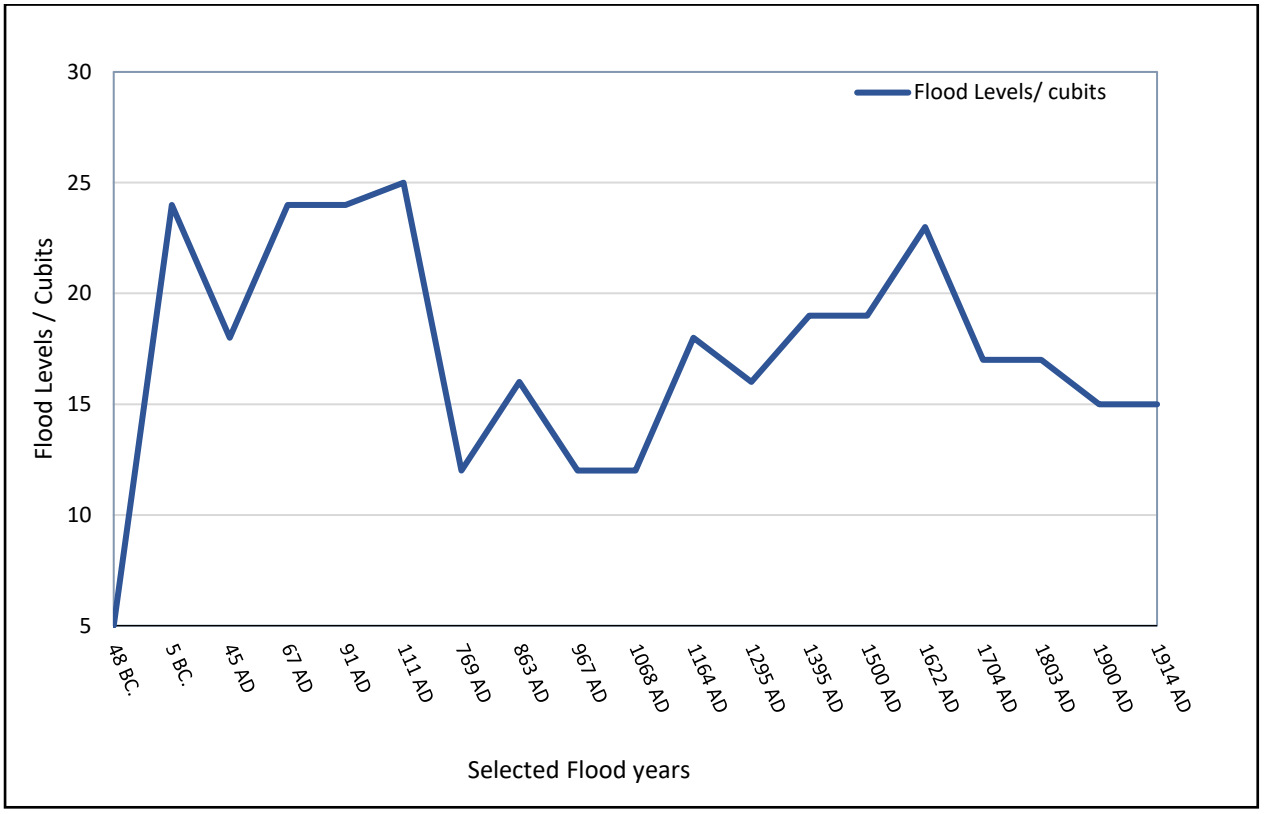

Fig. 5-20: Nile Flood levels according to Nilometer al-Rawda and the writings of historians (based on (ALLEN et al. 1994; AMIN 1916; EVANS et al. 1994; SAID 2013)[394]; The figure shows the fluctuations of flood levels, as the first half of the first millennium AD, was characterized by the presence of high-level floods that reached about 25 cubits, then the flood levels declined until they reached only 10 cubits at the beginning of the second millennium AD, and rose again at the end of the second millennium to the levels of about 15 cubits.

[393] (SAID 1981: 172)
[394] (GRIS 07.02.2020)

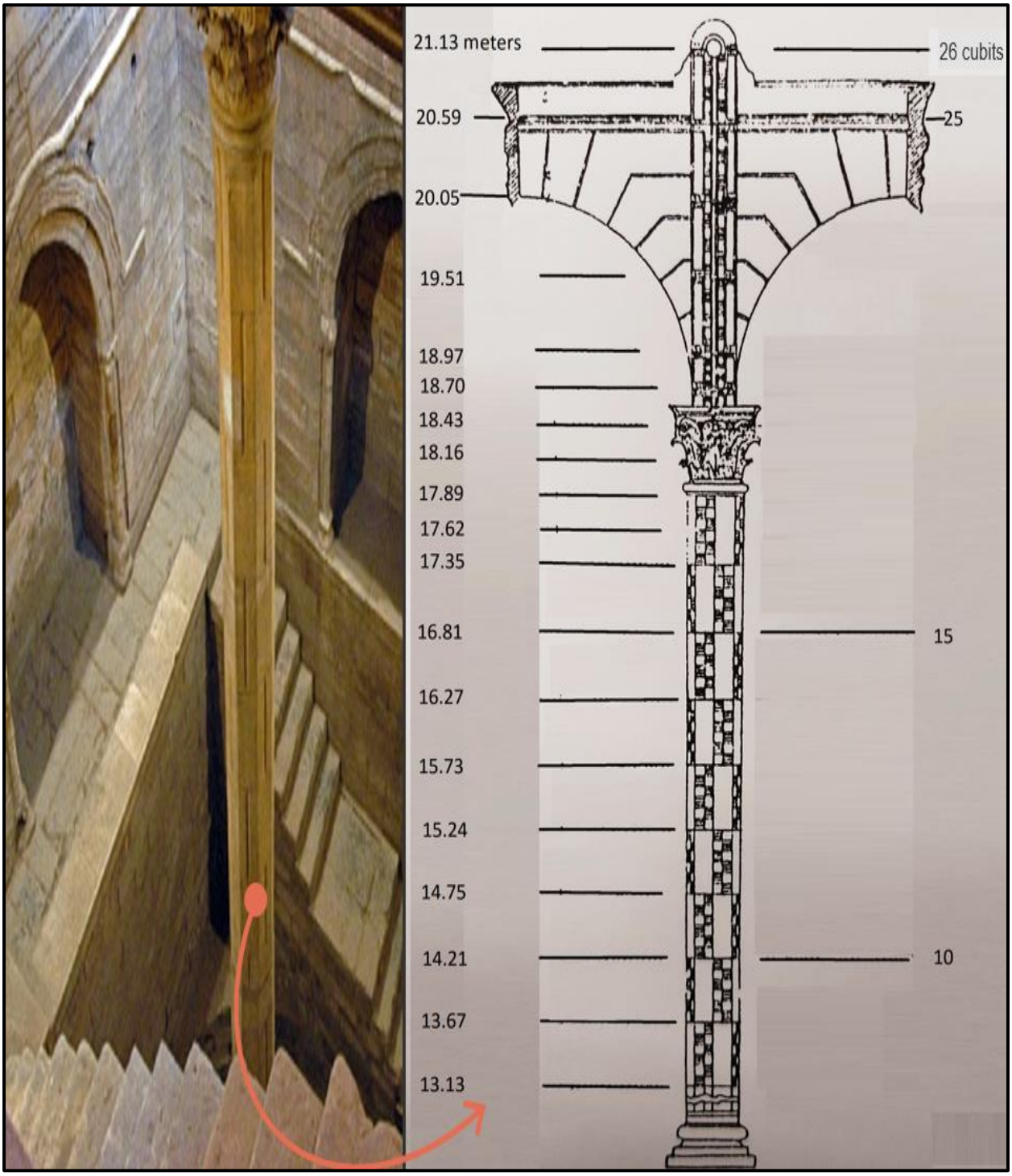

Fig. 5-21: Grading Nilometer (Gauge) in Roda Island, Cairo (after (ZEKRY 2012: 97)[395]

[395] Source: https://tinyurl.com/5n8wmzh5

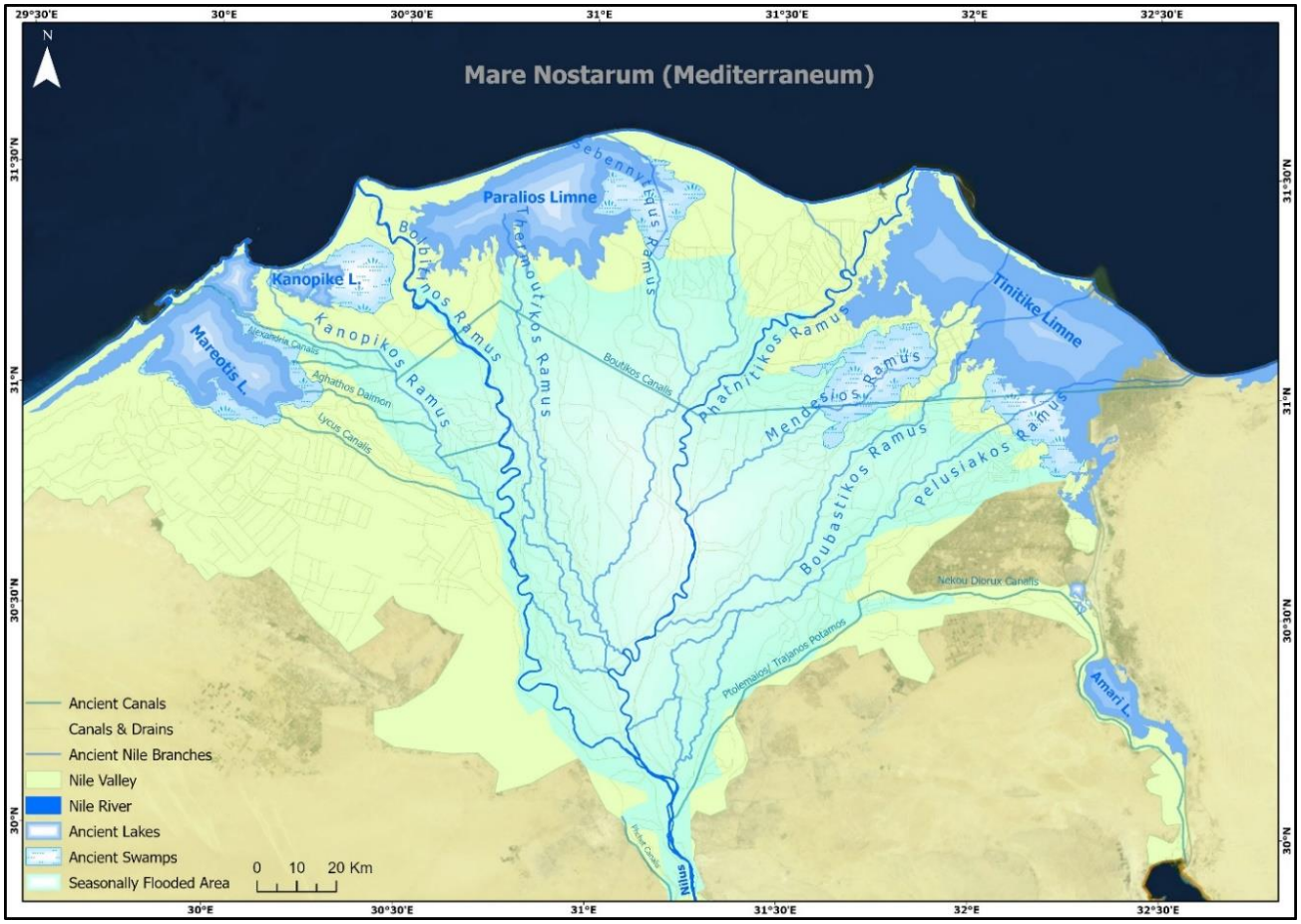

Fig. 5-22: Map of the maximum coverage of the flood in the delta; it is clear that the flood covered an area of about 60% of the area of the current delta. The flood layer was merged on the map of the ancient Nile branches that were derived[396].

5.5.1 Simulation of the ancient Nile's Flood Levels on the current Surface of Egypt[397]:

This part simulates how the current situation will be in the event of high-level floods as happened as in previous times. In addition to the extent of the impact of the current surface manifestations in the valley and delta regions in determining the direction of surface runoff of the flood along the Nile that ends at the mouth of the river with only two branches, after it was branching into seven estuaries[398]

[396] Data source: https://condor.depaul.edu/sbucking/extra/321images.html
[397] This content was submitted as a poster contribution at the annual meeting of the working group "Desert Margin Research" German Society of Geography (7./8. Feb.2020, Rauischholzhausen).
[398] (PENNINGTON et al., 2017)

5.5.1.1 Methods

- Extraction of the Flood levels from the records of the Nilometer scale, Rawda Island, Cairo.
- Extraction of the average level of the water surface along the length of the waterway of the Nile (AW3D30 File).
- Calculation of flow velocity and flow direction along the river at different stations (using Hec-GeoRas).
- The coefficient of Filtration and evaporation (using WMS).
- Calculation of the surface area of the Nile Valley and Delta (using ArcGIS and Global Mapper).
- Calculation of the flooded area at multiple flood levels and the volume of water at these levels (using ArcGIS and Global Mapper).
- Using the SRTM digital surface model DSM.

5.5.1.2 Results and Discussion

- The period required for flood runoff at its highest levels from Aswan to Cairo is about 6 days only, while it is 11 days at the lowest flood levels (Fig. 5-23).

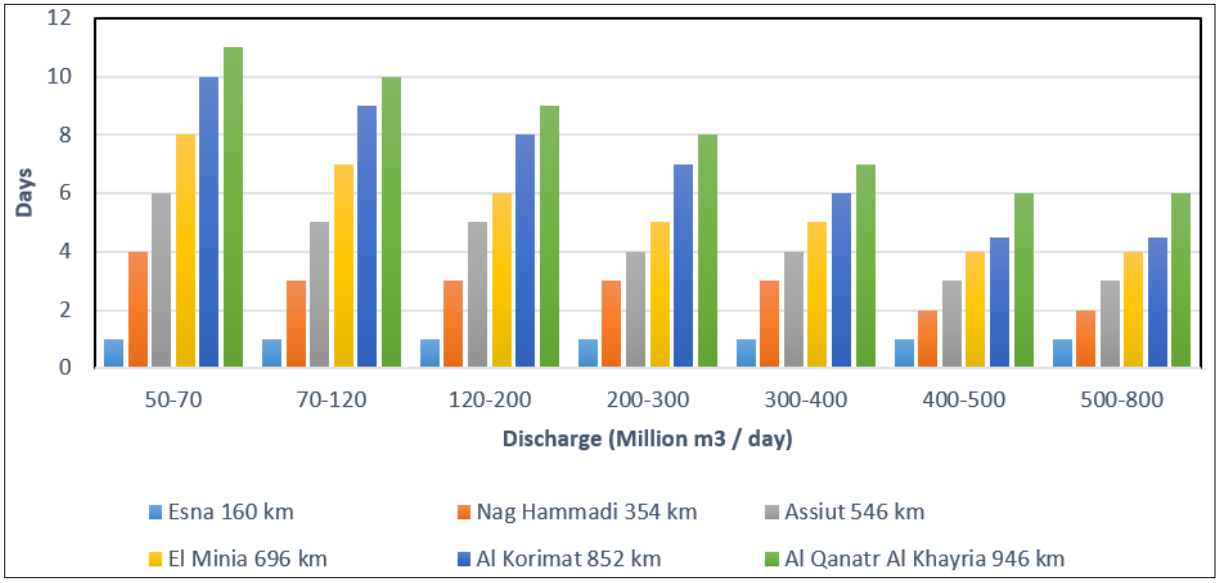

Fig. 5-23: Flood runoff period, depending on the amount of discharge from Aswan.

- During the first century AD, the flood Level increased to 24 cubits (64.32m) at the Nilometer[399], based on the level of 16 cubits (8.3 meters) at the Nilometer`s floor equals 16.4m based on the sea level[400].
- If the flood level rises only 1 meter from the current level of the river's surface, the immersion area will reach about 36.31% of the total area of the Nile Valley and the Delta, which is ca. 33,000 km^2, and about 65.5% at the flood level of 8m, about 70% at the level of 10m, and ca. 73.75% at the level of 13m (Table 5-2).

Table 5-2: The Water volume and submerged area at multiple flood levels

Flood Levels m	Area km2	Water Volume billion m3
1 m	16,949.9	32.4
2m	17,029.2	33.1
5m	18,767.6	40.0
8m	21,616.6	42.1
10m	22,954.4	43.2
13m	24,309.6	45.1

- Human activities, such as highway constructions, protect some areas and change the direction of the flood flow in others, such as the flooding of Fayoum depression, where floods flowed from the northern direction (Figure 7), due to the presence of obstacles that prevented the flow from the southern direction. Likewise, in the Qena region, where some highways have prevented flood flows to the west (Fig. 5-24, 5-25, 5-26). In addation, (Fig. 5-27) shows the complete Map of the ancient waterways network of the Nile Valley and Delta. SRTM Data[401] processing and map production was done using Global Mapper and Arcgis Pro 2.9.

[399] (AL-MAQRĪZĪ 1873; PLINY 1855)
[400] (SAID 1981)
[401] Source: https://www.usgs.gov/

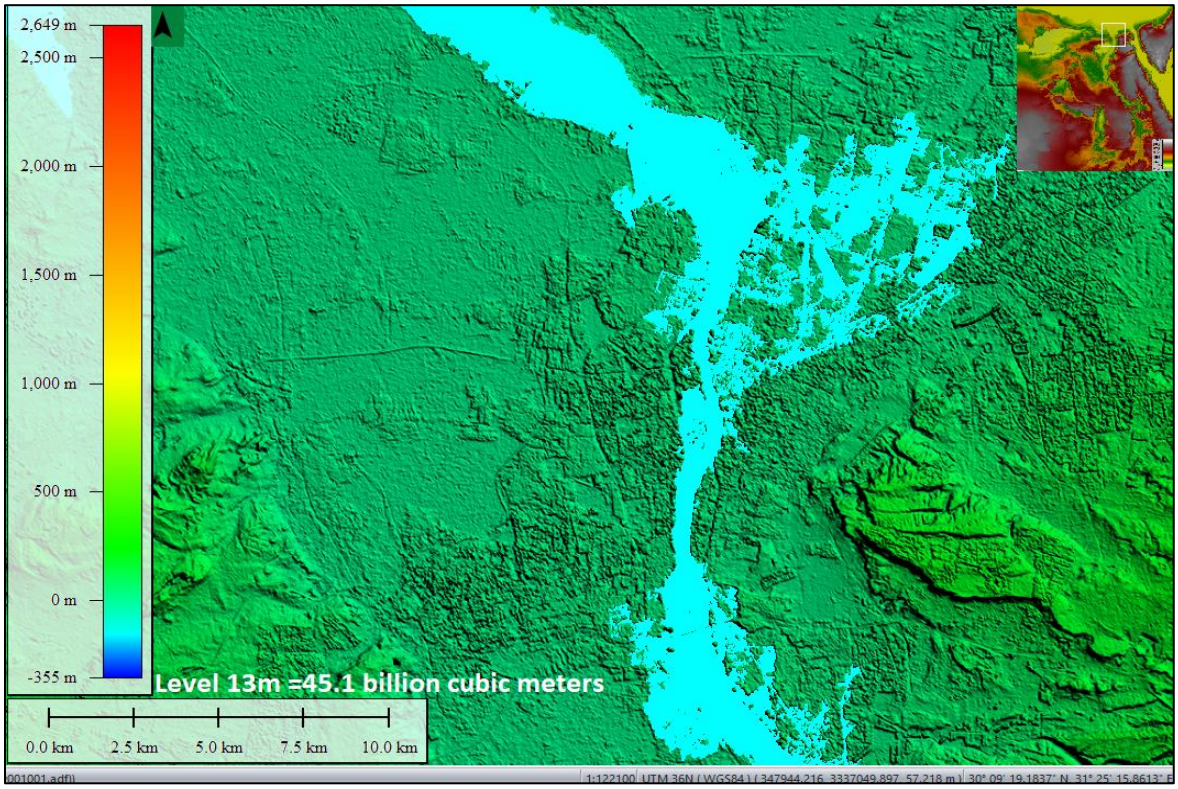

Fig. 5-24: Map of Flood Levels Scenario at Cairo; whereat a level of 13 m, the volume of the flow will be ca. 45.1 billion m^3/ 17030 km^2 of the Nile valley and delta (SRTM data).

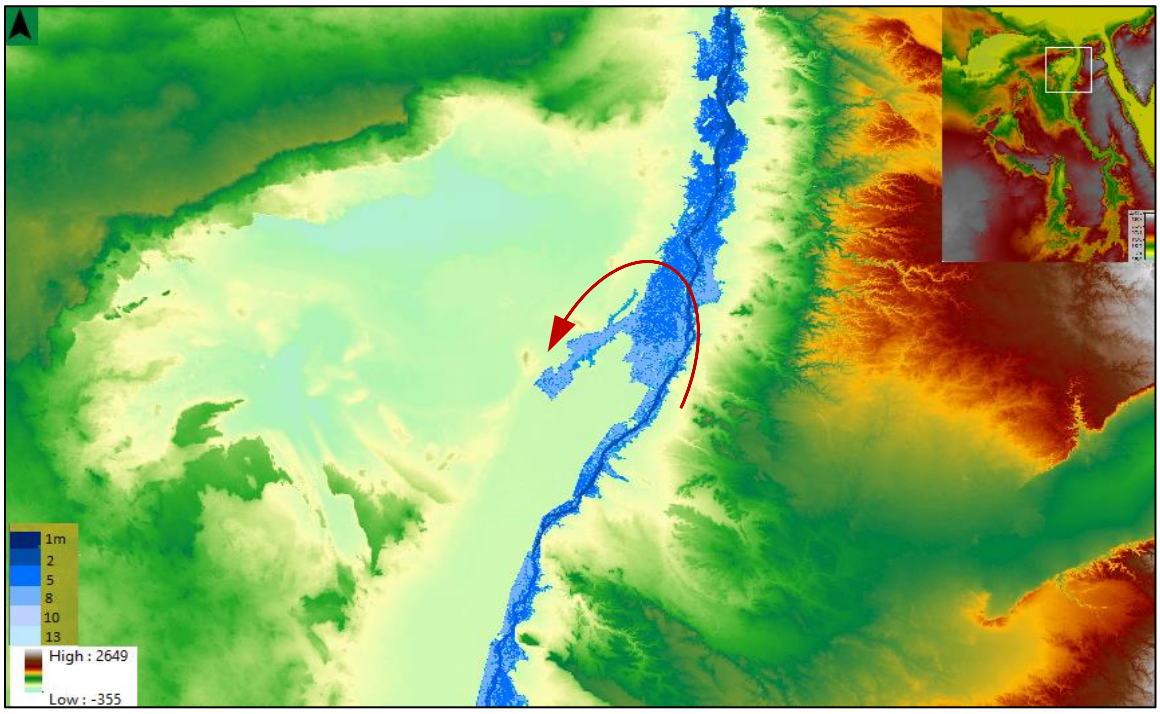

Fig. 5-25: The effect of constructions on changing the flood flow direction at Fayoum. (SRTM data); the figure also simulates flood scenarios at levels between 1m and 13m.

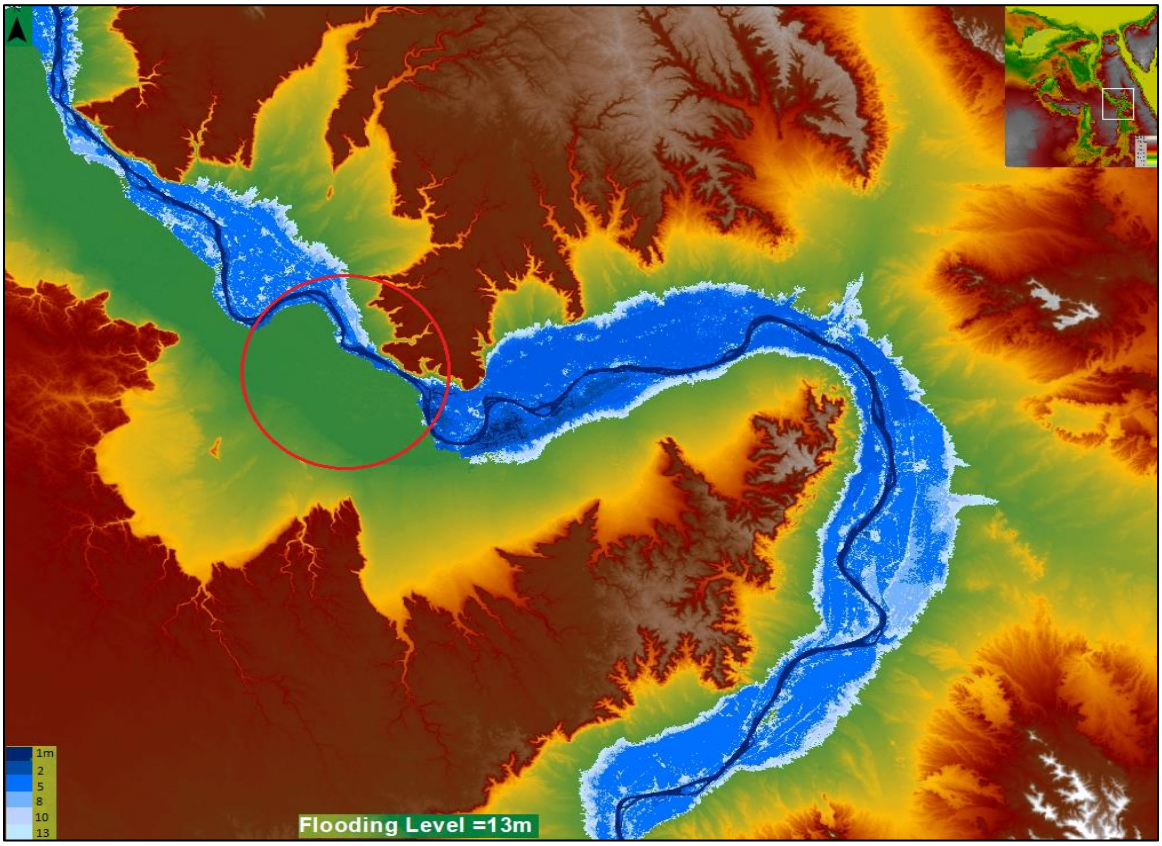

Fig. 5-26: Obstacles of infrastructure to extend the flood to the west at Qena (SRTM data); The figure also simulates flood scenarios at levels between 1m and 13m.

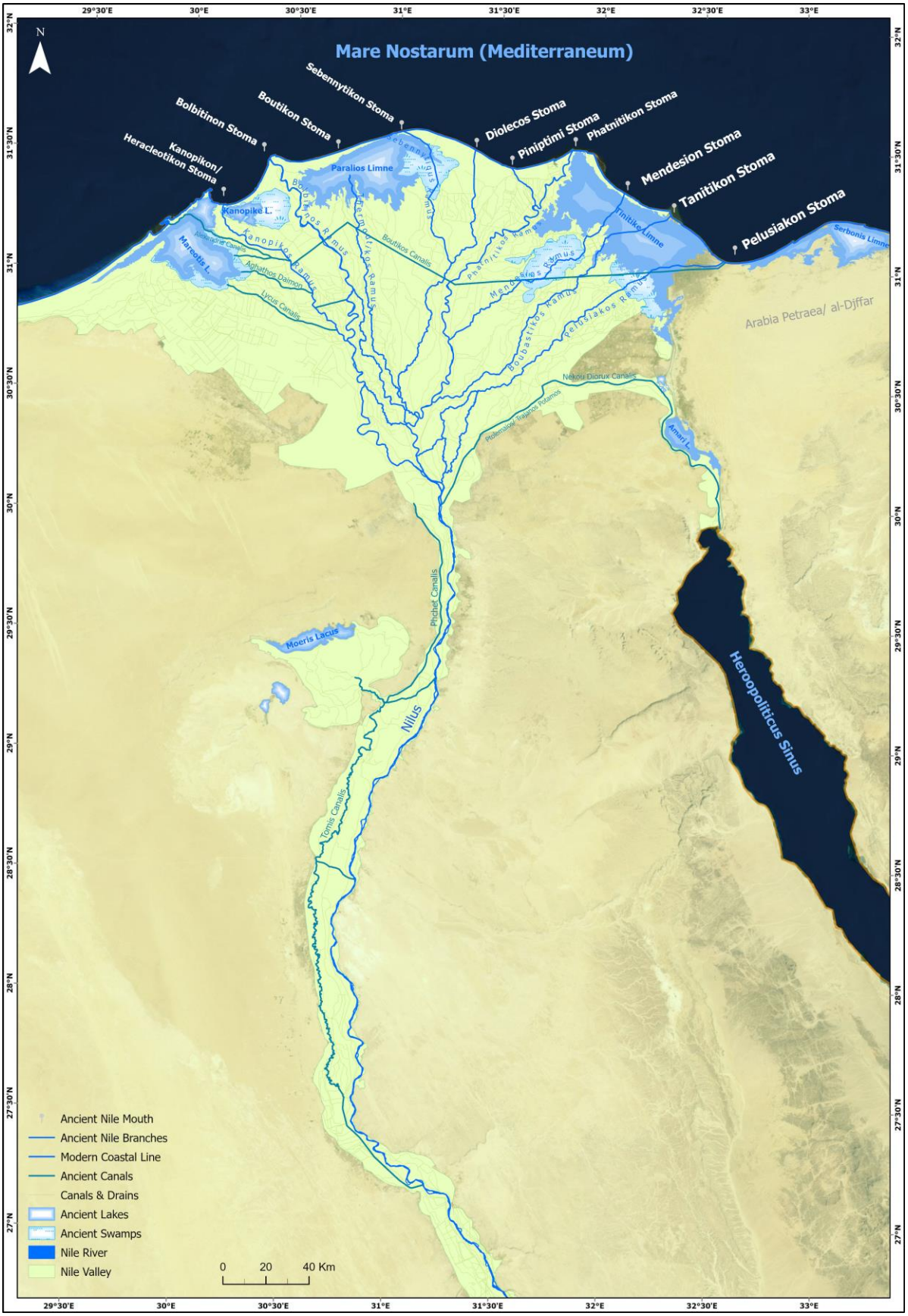

Fig. 5-27: Full Map of the ancient waterways network of the Nile Valley and Delta.

Conclusion:

The chapter discussed the ancient branches of the Nile River, its estuaries, and their different names, especially at the time of the Holy Family journey. In addition to combining what was written by the classical geographers such as Strabo, Ptolemy, and others, with the digital databases and modern atlases that dealt with information related to the Roman state. It resulted in a proposal for a map of ancient Nile branches and canals, which will be combined with the map of the Roman roads referred to in the previous chapter, to form a base map for verifying the family's itinerary Holy Family in Egypt.

In succession, the chapter discussed the levels of ancient floods, with an attempt to predict what the current situation would be if these floods occurred again at the same levels, because of the climatic fluctuations or the collapse of dams, etc.

It is clear that if severe flooding occurs, the Nile valley and Delta region will be inundated with less than 50% of the volume of water in a severe flood in ancient times. Likewise, human activities change the formation of surface manifestations and affect the flow direction.

Accordingly, because of the unprecedented fluctuations and climate change that the world is currently witnessing, it is recommended to consider the quality of the infrastructure in Egypt, which is dominated by the infrastructure systems of warm environments. Nevertheless, the past few years have proven that this pattern should be changed to adapt to the current climatic fluctuations because some cities such as Ras Ghareb, Hurghada, and Alexandria were submerged due to high-level torrents. Moreover, raising the efficiency of government measures in how to drain and benefit from the surplus of floodwaters, instead of causing many material and human losses, as occurred in some villages of the eastern desert in Asyut.

There is no doubt that the ancient flood levels played an important role in forming the itinerary of the Holy Family's journey in Egypt, which will be explained later.

6 The Geospatial analysis of the Holy Family Itinerary stations and suggested roads for the Escape and Return journey

Preface:

The paths of the ancient roads and the exact paths of the ancient branches of the Nile have been verified, so it remains to be verified how close or far the spatial positions of the Holy Family´s stations are from these ancient paths. To achieve this goal, the spatial analysis will be used in the GIS environment, which is the spatial Buffer analysis to demonstrate the spatial distance at which the path stations, each station separately, near or far, converge with the paths of the Nile branches, canals, and ancient roads. In addition, extracting the frequency from the number of times referring to each station separately in the sources and references. The result is an attempt to plot accurate spatial cartographic paths of the journey (escape and return), with a geospatial interpretation of the locations of stations that may deviate from the proposed road.

6.1 The Geospatial Buffer analysis of HF stations:

The Geospatial Buffer analysis was conducted after choosing five standard distances, which are as follows 2, 3, 4, 5, and 6 km. The distance starts from the geographical position of each station, which is the center of the circle (standard distance). The criterion used for selecting these particular distances is the rate of migration of the course of the Nile at the fortress of Babylon, Memphis, al-Qiss, and al-Ashmounein, as previously explained. (Fig. 6-1) illustrates the result of the Buffer analysis. The content of this figure is analyzed in (Table 6-1).

Fig. 6-1: Buffer's Spatial Analysis of the Geographical Positions of the Holy Family Stations; (a) shows the stations of the path in Palestine, and (b) indicates the stations of the path in Egypt.

Table 6-1: Intersection distances of HF stations with the road network (R) and waterways (W).

No.	Buffer Distance / Station Name	2 km		3 km		4 km		5 km		6 km	
		R	W	R	W	R	W	R	W	R	W
1	Nazareth									✠	
2	Bethlehem					✠		✠		✠	
3	Hebron	✠		✠		✠		✠		✠	
4	Beersheba	✠		✠		✠		✠		✠	
5	Ashkelon	✠		✠		✠		✠		✠	
6	Gaza	✠		✠		✠		✠		✠	
7	Khan Yunis	✠		✠		✠		✠		✠	
8	Rafah	✠		✠		✠		✠		✠	
9	al-Shikh Zowaied	✠		✠		✠		✠		✠	
10	al-Arish	✠		✠		✠		✠		✠	
11	al-Filusyiat (al-Zaraniq)	✠		✠		✠		✠		✠	
12	al-Qals	✠		✠		✠		✠		✠	
13	al-Mahamdiyah	✠		✠		✠		✠		✠	
14	Tal al-Makhzan	✠		✠		✠		✠		✠	
15	Pelusium al-Farama	✠	✠	✠	✠	✠	✠	✠	✠	✠	✠
16	al-Qantara									✠	
17	Tanis	✠	✠	✠	✠	✠	✠	✠	✠	✠	✠
18	Tal Basta	✠	✠	✠	✠	✠	✠	✠	✠	✠	✠
19	Zagazig	✠	✠	✠	✠	✠	✠	✠	✠	✠	✠
20	Mostorod/ al-Mahmma	✠	✠	✠	✠	✠	✠	✠	✠	✠	✠
21	Belbeis	✠	✠	✠	✠	✠	✠	✠	✠	✠	✠
22	Tal al-Yahodia	✠		✠	✠	✠	✠	✠	✠	✠	✠
23	Minyat Tana	-	-	-	-	-	-	-	-	-	-
24	Minyat Ganah		✠		✠		✠		✠		✠
25	Minyat Samannud		✠		✠		✠		✠		✠
26	Samannud		✠		✠	✠	✠	✠	✠	✠	✠
27	Daqadous		✠	✠	✠	✠	✠	✠	✠	✠	✠
28	Belqas				✠		✠		✠		✠
29	Burulus										✠
30	Bikha Isous (Sakha)		✠		✠		✠		✠		✠
31	Minyat al-Surd/ al-Sirji	✠	✠	✠	✠	✠	✠	✠	✠	✠	✠
32	Wadi al-Natroun	✠		✠		✠		✠		✠	
33	Ain Shams/ al-Mataryia	✠	✠	✠	✠	✠	✠	✠	✠	✠	✠
34	al-Zeitoun			✠	✠	✠	✠	✠	✠	✠	✠
35	Old Cairo		✠	✠	✠	✠	✠	✠	✠	✠	✠
36	Haret al-Roum		✠	✠	✠	✠	✠	✠	✠	✠	✠
37	Haret Zwila		✠	✠	✠	✠	✠	✠	✠	✠	✠
38	al-Ezbawyia / Klout Be'K		✠	✠	✠	✠	✠	✠	✠	✠	✠
39	Babylon al-Daraj	✠	✠	✠	✠	✠	✠	✠	✠	✠	✠
40	al-Moa'laka Ch.	✠	✠	✠	✠	✠	✠	✠	✠	✠	✠
41	Qasr al-Shama'	✠	✠	✠	✠	✠	✠	✠	✠	✠	✠
42	Abo Sarjah Ch.		✠	✠	✠	✠	✠	✠	✠	✠	✠
43	al-Ma'adi	✠	✠	✠	✠	✠	✠	✠	✠	✠	✠

No.	Buffer Distance / Station Name	2 km		3 km		4 km		5 km		6 km	
		R	W	R	W	R	W	R	W	R	W
44	Meit Rahina/ Manf	✠	✠	✠	✠	✠	✠	✠	✠	✠	✠
45	al-Lahoun		✠		✠		✠		✠		✠
46	Ihnasia al-Madinah		✠	✠	✠	✠	✠	✠	✠	✠	✠
47	Ishnein al-Nasarah					✠		✠		✠	✠
48	Deir al-Garnous		✠	✠	✠	✠	✠	✠	✠	✠	✠
49	al-Bahnasa	✠	✠	✠	✠	✠	✠	✠	✠	✠	✠
50	al-Qiss		✠		✠		✠		✠		✠
51	Bardounah		✠		✠		✠		✠		✠
52	Gabal al-Tair	✠	✠	✠	✠	✠	✠	✠	✠	✠	✠
53	It´saa				✠	✠	✠	✠	✠	✠	✠
54	Tah'a al-A'meda	✠		✠	✠	✠	✠	✠	✠	✠	✠
55	Minyat Boufis (Minia)		✠	✠	✠	✠	✠	✠	✠	✠	✠
56	al-Shikh Abada/ Ansena	✠	✠	✠	✠	✠	✠	✠	✠	✠	✠
57	Beer al-Sahaba	✠	✠	✠	✠	✠	✠	✠	✠	✠	✠
58	Al- Ashmounein	✠		✠		✠		✠	✠	✠	✠
59	Dairout Um Nakhla		✠		✠		✠		✠	✠	✠
60	Deir Abo Hynis	✠		✠		✠	✠	✠	✠	✠	✠
61	Kum Maria					✠	✠	✠	✠	✠	✠
62	Tal al-Amarna	✠	✠	✠	✠	✠	✠	✠	✠	✠	✠
63	Dairout al-Sharif	✠	✠	✠	✠	✠	✠	✠	✠	✠	✠
64	Sanabo	✠		✠	✠	✠	✠	✠	✠	✠	✠
65	al-Qussia	✠	✠	✠	✠	✠	✠	✠	✠	✠	✠
66	al-Saraqna					✠		✠		✠	
67	Meir									✠	
68	Deir al-Muharraq/ Qusqam	-	-	-	-	-	-	-	-	-	-
69	Bouq	✠		✠	✠	✠	✠	✠	✠	✠	✠
70	Dronkah							✠		✠	

The previous table indicates the results of the spatial Buffer analysis, which was conducted on five standard distances between 2km and 6km from the geographical position of each station separately. Based on the total number of known stations of the Holy Family path of 62 stations located in Egypt[402] and 7 stations located in Palestine, which were reached through the research the results of the analysis were as follows:

At a Buffer distance of 2 Km:

There are 39 stations (55%) intersected with the path of the ancient roads, and 37 stations (52.1%) intersected with at least one of the ancient Waterways. In addition to 20 stations (28.2 %)

[402] Old Cairo stations were considered as each station individually, so the number of stations increased from 59 in Egypt to 62.

that intersected with both. Besides, 14 (19.7%) did not inter with them at all. Some stations of the path were not located on or near the ancient roads network and the ancient waterways at Buffer 2 km. These stations are al-Qantara, Minyat Tana, Belqas, al-Burulus, al-Zeitoun, Ishnein al-Nasarah, It`saa, Kum Maria, Meir, al-Saraqna, Bouq, Deir al-Muharraq, and Dronkah. Each of these stations occupied 5%, 5%, 2.5%, 20%, 5%, 5%, 2.5%, 5%, 17.5%, 2.5%, 72.5%, and 7.5%, respectively, of the total percentage referring to each of them separately in the sources and references as well.

At a Buffer distance of 3 Km:

There are 44 stations (62%) intersected with the path of the ancient roads, and 44 stations (62 %) intersected with at least one of the ancient Waterways. In addition to 33 stations (46.5%) that intersect with both. Moreover, 11 stations (15.5%) did not intersect with them at all. The number of stations that were not located on or near the ancient roads network and the ancient waterways has been reduced by three stations to become 11 stations at Buffer 3km. These stations are Nazareth, al-Qantara, Minyat Tana, Burulus, Ishnein al-Nasarah, Kum Maria, Mir, al-Saraqna, Deir al-Muharraq, and Dronkah.

At a Buffer distance of 4 Km:

There are 55 stations (77.5%) intersected with the ancient roads. In addition, 46 stations (64.8%) intersected with at least one of the ancient Waterways. Besides, 37 stations (52.1%) intersected with both. in addition to that seven (9.9%), stations did not intersect with them at all. Successively, the number of stations that were not located on or near the ancient road network and the waterways network was reduced by seven stations, bringing the number to only 7 stations at Buffer 4 km. These stations are Nazareth, Bethlehem, al-Qantara, Minyat Tana, al-Burulus, Meir, Deir al-Muharraq, and Dronkah.

At a Buffer distance 5Km:

There are 56 stations (78.9%) intersected with the ancient roads. Besides, 47 stations (66.2%) intersected with at least one of the ancient Waterways. In addition, 38 stations (53.5%) intersected with both. Moreover, 6 stations (8.5%) did not intersect with them at all. The number of stations that were not located on or near the ancient road network and waterways network, is still constantly decreasing at Buffer 5 km, as it became six stations, with a difference of seven stations from Buffer

2 km. These stations are Nazareth, al-Qantara, Minyat Tana, al-Burulus, Meir, and Deir al-Muharraq.

At a Buffer distance of 6 Km:

There are 60 stations (84.5%) that intersect with the ancient roads. Moreover, 49 stations (69%) intersected with at least one of the ancient Waterways. In addition, 40 stations (56.3%) intersected with both. Besides, only two stations (2.8%) did not intersect with them at all. Finally, only two stations remain, Minyat Tana and Deir al-Muharraq, which were not located on or near the ancient road network and the waterways network at Buffer 6 km (Fig. 6-2, 6-3, 6-4).

Fig. 6-2: The Holy Family stations at Buffer 6 km

Fig. 6-3: The Holy Family stations at Buffer 2 km to 6 km

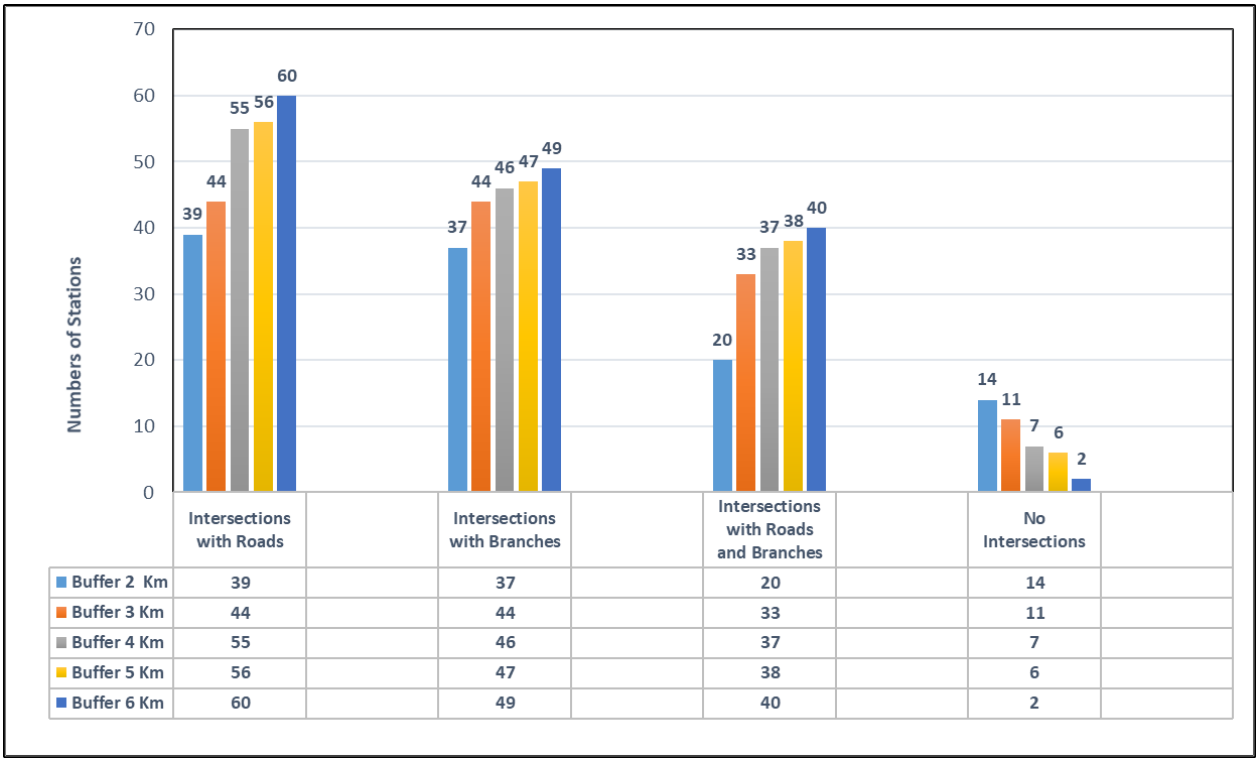

Fig. 6-4: Summarize the results of the Buffer analysis.

It is clear from the previous figure that there is an inverse relationship between the Buffer distance and the number of stations that did not intersect with the ancient road network and the ancient waterways network also, the greater the Buffer distance, the fewer these stations conversely.

6.2 The Relative Frequency rate (RFr) of stations in sources and references:

In addition to verifying whether or not the locations of the stations are close to the road network and the old waterway network, the Relative Frequency rate of the frequent mention of each station in sources and references was taken into consideration. This is due to the historical and archaeological importance of some stations that, although they do not intersect with the old road networks and waterways, are considered major stations in the itinerary according to the percentage of reference to them in the documented sources. Moreover, some stations are mentioned because in some areas the logical geographic path has to be passed. (Table 6-2) displays the Relative Frequency rate of each station in the documented sources.

Table 6-2: The Relative frequency rate (RFr) of HF stations in sources

Station	RFr	Station	RFr
Rafah	7.5 %	al-Moa'laka Ch.	**57.5 %**
al-Shikh Zowaied	2.5 %	Qasr al-Shama'	**57.5 %**
al-Arish	7.5 %	Abo Sarjah Ch.	**57.5 %**
al-Filusyiat (al-Zaraniq)	5 %	al-Ma'adi	22.5 %
al-Qals	2.5 %	Meit Rahina/ Manf	10 %
al-Mahamdiyah	2.5 %	al-Lahon	2.5 %
Tal al-Makhzan	2.5 %	Ihnasia al-Madinah	7.5 %
Pelusium al-Farama	15 %	Ishnein al-Nasarah	5 %
al-Qantara	7.5 %	Deir al-Garnous	**42.5 %**
Tanis	2.5 %	al-Bahnasa	**40 %**
Tal Basta	**60 %**	al-Qiss	5 %
Zagazig	2.5 %	Bardounah	2.5 %
Mostorod/ al-Mahmma	**47.5 %**	Gabal al-Tair	**37.5 %**
Belbeis	22.5 %	It´saa	2.5 %
Tal al-Yahodia	5 %	Tah'a al-A'meda	2.5 %
Minyat Tana	5 %	Minyat Boufis (Minia)	2.5 %
Minyat Ganah	**30 %**	al-Shikh Abada/ Ansena	20 %
Minyat Samannud	17.5 %	Beer al-Sahaba	7.5 %
Samannud	**42.5 %**	al- Ashmounein	**70 %**
Daqadous	5 %	Dairout Um Nakhla	10 %
Belqas	2.5 %	Deir Abo Hynis	5 %
Burulus	20 %	Kum Maria	5 %
Bikha Isous (Sakha)	**30 %**	Tal al-Amarna	2.5 %
Minyat al-Surd/ al-Sirji	2.5 %	Dairout al-Sharif	22.5 %
Wadi al-Natroun	**45 %**	Sanabo	5 %
Ain Shams/ al-Mataryia	**65 %**	al-Qussia	20 %
al-Zeitoun	7.5 %	al-Saraqna	2.5 %
Old Cairo	**57.5 %**	Meir	17.5 %
Haret al-Roum	**57.5 %**	Deir al-Muharraq/ Qusqam	**72.5 %**
Haret Zwila	**57.5 %**	Bouq	5 %
al-Ezbawyia/ Klout Be'K	**57.5 %**	Dronkah	4.5 %
Babylon al-Daraj	**57.5 %**		

According to the foregoing table, about 27.5% of stations accounted for only 2.5% of **RFr** based on its mention in sources and references, as well as about 16% of stations acquired only 5% of **RFr**. Both categories of these stations intersected with the ancient road network or with the ancient waterway network or both. In addition, some of these stations are considered a link between a previous and a subsequent station because it is located in the logical geographical path that must be passed through. Furthermore, ca. 31% of stations acquired ca. 30% of RFr or more based on its mention in sources and references.

6.3 Suggested scenarios for the itinerary of the Holy Family's journey (Escape and Return):

As a result of what has been previously verified, especially the locations of the Holy Family's journey stations about the ancient road and waterway networks, in addition to the weight of the position of each station about its frequency in the various sources and references, Scenarios that approximate and fulfill the predetermined criteria will be developed. It should be noted that the many speculations led to the deviation of the path in an abnormal way in some sections of the path, as follows:

Some researchers believed that Burulus itself was one of the stations of the path, although Burulus was the name of a region similar to the governorate today in the administrative division, which included some track stations such as Tana, Belqas, and Sakha. Burulus had a governor named Markos, the governor of Burulus and al-Zafaran in the valley of Sisban[403]. Synaxarium mentioned on the 13th day of Tuba[404] that Markos is the father of the martyr Demiana, which a monastery was built in her name at the beginning of the fourth century AD in the district of Burulus, specifically in Belqas. Today, it bears the name "The Monastery of the Martyr Demiana in Barari-Belqas." As this monastery was ancient, some attributed it to being sanctified by the visit of the Holy Family, therefore some referred to it as a station on the path of the Holy Family. It should be noted that al-Burulus station was referred to in the period 1922 - 1999 by 20% of the references, although, it was located in Buffer 6km. Moreover, Belqas was mentioned only in 2016 (2.5%), besides, it did not locate in Buffer 2km.

Respectively, **Minyat Tana** station did not locate within the five Buffer distances that were previously identified. Besides, it did not intersect with any of the ancient road networks or waterways, as it is located ca. 8.7 km from the nearest branch of the Nile, and about 7.2 from the ancient road network. Moreover, it was mentioned only two times, in 1209 and 1972, by 5% of references. Therefore, the three stations (**Minyat Tana, Belqas, and Burulus**) will be excluded from the Holy Family's itinerary.

[403] The region was called al-Zafaran, as this region was famous for the cultivation of rare types of saffron and the valuable and aromatic herbs. In addition, al-Zafaran is the name of a plant called in the Greek and Latin term Sispan. Currently, Burulus region is located in the north of the delta. The name of the area "al-Barari" is due to the fact that large parts of this area were barren lands devoid of agriculture, and some of them were lands lower than sea level, and were covered with water and covered with aquatic plants.

[404] (BASSET 2003; FORGET 1905a)

Tanis station, although it intersected with the ancient road network and waterways, at Buffer 2km, it was only mentioned by 2.5% of references starting in 2017. In addition, it was not located on the Pelusiac branch of the Nile that connects between al-Farama and its next station, Tal Basta, according to all sources and references; therefore, it will be excluded from the path stations as well.

al-Qantara station was mentioned by about 7.5% in the references between 1900-1998, but it is located only within Buffer 6km, as it is located at ca. 5.5 km from the nearest ancient Roman road, and about 20km from the Pelusiac branch. In addition, it did not locate within the scope of any of the ancient roads or waterways that connect al-Farama to Tal Basta directly. Thus, it will be excluded as a station in the itinerary of the escape journey, but perhaps it may be one of the stations of the return path, as some sources indicated[405]. This will be clarified later.

Zagazig is a station that may be adjacent to Tal Basta, or that was built on the ruins of Tal Basta. The current site of Tal Basta follows Zagazig administratively, so whoever describes Tal Basta, describes Zagazig and vice versa, so reference will be made only to the station of Tal Basta, which is a major station on the road.

al-Zeitoun is a station that was added recently in the period 2017-2019 with about 7.5% of references. Perhaps what increased its importance is the luminous spiritual appearance of the Virgin Mary in her church in al-Zeitoun on April 2, 1968, which some considered as a sign that the Holy Family passed this place. It is located in Buffer 3km, so staying within the path stations or excluding it, does not lead to abnormal deviations in the path. Nevertheless, according to the documentation, it will be excluded.

al-Lahoun, acquired only 2.5% of the mentioned rate in sources because it was referred to in 1147 only. However, it is a central station in the proposed road, as it is located in the area of the connection of the Bahr Yusef Canal with Phchet Canalis and the Fayoum Canal that connects them to the course of the Nile at Fayoum.

al-Bahnasa was considered by most of the sources and references as the main station in the itinerary, which was referred to by about 40% of the sources and references. As in the case of the province of al-Burulus, it was called Oxrynchous Nomos/ Pemdji, which was bordered by the

[405] (YOUHANNA 1983: 7); Depending on the Armenian tradition, PHILLIPS refers to the entry of the Holy Family from Wadi al-Tumaylat and al-Qantara (PHILLIPS 1999: 56–58).

Herakliopolis Nomos/ Ihnasia to the north, and Hermopolis Magna Nomos/ al-Ashmounein to the south. al-Bahnasa region includes about nine stations of the Holy Family Path, which are: Ishnein al-Nasarah, Deir al-Garnous, al-Bahnasa, Bardounah, al-Qiss, Gabal al-Tair, Taha al-A´meda, It`saa and Minyat Boufis/ Minia.

This prompts us to consider the mention to the entry of the Holy Family into al-Bahnasa means entering the region of al-Bahnasa in general, and then the Holy Family began to move within the villages of this region. It is logical because there are two stations, Ishnein al-Nasarah and Deir al-Garnous, which are located to the north of the al-Bahnasa station. Therefore, the Holy Family passed through these two stations inside the region before reaching the al-Bahnasa station itself. This is fully consistent with the proposed path in the area between al-Bahnasa region and al-Ma'adi station in the north. It also refutes the opinion that the Holy Family sailed in the Nile from al-Ma'adi until Bani Mazar city, which parallels to al-Bahnasa, then headed to al-Bahnasa, which is located more than 15km west of the Nile[406].

Ishnein al-Nasarah, located in the north of the province of al-Bahnasa/ Oxrynchous, was mentioned twice by about 5% in the references in 1971 and 2017. In addition, it did not locate within Buffer 2km and 3km, which leads to a deviation of the journey path from the proposed road in that area, so it is not considered a station on the road.

Deir al-Garnous referred to as a spot located east of al-Bahnasa is Ebei Isous, which refutes the claim that al-Bahnasa is Ebei Isous. This station acquired a percentage of about 42.5% in the sources and references, and it is a major station in the itinerary, as there is a specific source to this station only, which is the Maymar Kyriakos from the seventh century AD[407].

al-Saraqna, mentioned only once in the references in 2017, is located within Buffer 4km. Keeping this station within the path stations does not cause a deviation in the general direction of the itinerary.

Deir al-Muharraq, this station was referred to by 72.5% of the sources and references as a major station to which the itinerary ended, and the Holy Family stayed there for more than 6 months, then from there the journey, back to Palestine began again. Although, it was not located

[406] (AL-HOUMI 04.06.2021)
[407] (DEMETRIUS 1999; GREGORIUS 1992; HUNAYN 1902; SARKIS 1936)

on any of the ancient main road paths or near any major watercourse. Accordingly, it cannot be ignored or not placed within the stations of the itinerary, even if it does not intersect with the ancient road network or waterways, due to its documented historical value. Deir al-Muharraq station is located about 9.6km from the Nile branch, and about 6.5km from the nearest ancient Roman road.

Dronkah, which is referred to as one of the path stations in the period 1971-2017, accounted for about 7.5% of references. Some researchers indicated that the Holy Family descended from Deir al-Muharraq station to the south, about 50km until they reached Dronkah in the Western Mountain in Asyut, where it is close to the marina, from which the Holy Family can sail a river again towards the north. The current monastery of the Virgin Mary/ Dronkah is located in the far west of the valley, at about 8km to the west of the Nile River[408].

Moreover, others said the Holy Family descended further south until it reached Deir al-Ganadla and al-Quseir, which is about 85km from Deir al-Muharraq after they received the angelic message to return to Palestine again where the river ships anchored from which they would sail north across the Nile.

Logically, this is excessive because if it is accepted that the Holy Family moved to the south of Deir al-Muharraq during its return. It would have been logical that the Holy Family to sail from the port of Lykopolis/ Asyut[409] which is located only about 50km south of Deir al-Muharraq and about 35km to the north of Deir al- Ganadla to reduce the travel distance. In addition, the fact that Deir al- Ganadla is located about 9km west of the Nile River, so how was there a marina for ships there? In addition, if the assumption is that the Nile flood at that time was reaching this area, this does not motivate that it has a river anchorage as well. Therefore, these stations will be excluded from the journey path.

Maymar Zacharias is considered the richest in mentioning the stations that the Holy Family went through. It is noted that the printed text in the books of Maymar has differences from the manuscript text, and this is due to the attempt to revise the text and add the modern names of the stations compared to the old name. For instance, when the name "al-Farama" is mentioned, the

[408] (GIRGIS 2002: 70–86)
[409] (FAYEZ 2012)

printed text adds, "belongs to al-Arish", and when "Minyat Ganah is near Samannud" is mentioned, the printed text adds, "It is known as Minyat Ganah" etc.

This text or the additions that were made to it fell into error, which is to consider that Minyat Ganah is Minyat Samannud itself, even though Minyat Samannud was mentioned by the same name in the works of al-Murthiya within the villages that IBN MAMATI counted in the Book" *Kitab qawanin aldawawin* " 12 century AD[410]. It was also mentioned in the name of "Minyat Samannud" in the works of Dakahlia and al-Mrtahiya within the villages of Al-Ruk Al-Nasiri, which was enumerated by IBN AL-JAIAN in the book " *altuhfa alsuniya bi'asma' albilad almisria* " 15 century AD[411]. It should be recognized that Minyat Samannud is a village affiliated with the Aja district in Dakahlia governorate, while Minyat Ganah village is affiliated with Desouq district in Kafr al-Shikh governorate. Many researchers have relied on this imitation in its printed text[412].

6.3.1 The first Escape Scenario:

The result of this error in combining two places, from two different places, and considering them as one station, leads to the assumption that there is also some error in the arrangement of the journey path stations in the texts and primary sources of the journey. The impetus for this assumption is the acrobatic shape in which the path rotates in the south of the delta. Where after the Holy Family had arrived at Mostorod/ al-Mahama, which is located five km from Babylon, which had the largest Jewish gathering outside Palestine at that time, the path is heading north again and then flowing the direction of the northwest, away from Old Cairo area. The Holy Family returns to it after they roamed the delta from Belbeis in the east of the delta to Sakha in its north, then to its west to Wadi al-Natroun. Finally, to the south of the delta, where the station of Ain Shams and al-Mataryia, which is near al-Mahama again as mentioned and described by most of the sources.

Therefore, if there was an error in the arrangement of the stations, or that the Mostorod/ al-Mahamah station was mentioned twice, then if this error vanished, the result would be that the Holy Family, after being expelled from Tal Basta, did not go south to al-Mahama, but rather headed to the northwest, where Daqadous station, to complete its path. Since the direction of the path towards the stations of Belbeis and Tal al-Yahodia, after al-Mahamah, would be contrary to the

[410] (IBN MAMATI 1991)
[411] (IBN AL-GAIAN 1898)
[412] (DEMETRIUS 1999: 16; GEORGY 2017: 37; GREGORIUS 1992; MONKS OF ST. MINA MONASTERY 2018; WASFI 2012: 28)

logical direction in the escape path, they will be considered as two stations on the return path, as they are located in a sequential geographical path, as will be explained later. The stations of Belbeis and Tal al-Yahodia have located within Buffer 2 km.

The same situation coincides with the stations located in al-Ashmounein area, where the course changes its direction for a distance of about 20 km from the east of the Nile to its far west, and returns to its east, even though this area is completely flat, with no geographical obstacles calling for this change. Therefore, this may be an inaccuracy in the arrangement of the stations that were referred to, and this will be considered.

As a consequence, in the previous interpretation, there is a geographical reason that may be one of the reasons for the decision to change the direction of the path starting from Tal Basta station, and in al-Ashmounein region, which is the flood of the Nile at that time. According to sources, especially the Köln manuscript, which refers that the Holy Family entered Egypt on the 24th of Bashans. Since they were resting in some places for varying periods, the flood season probably began in Egypt when they arrived at the Tal Basta station.

Moreover, because they are strangers, and because there are no such floods in Palestine, their original homeland, they were not aware of how to adapt to or confront these floods only distanced themselves from them, which prompted them to flee from the Nile flood. which prompted them also to turn around the delta, until they reached the Nitria desert and the station of Wadi al-Natroun, which is far from the flood, which also had Jewish worship centers between 143 -116 BC[413]. Then, as soon as the flood level decreased, they returned to the Babylon region, which, according to all sources, it has been their destination since the beginning[414].

In confirmation of this assumption, and by merging the maps of the ancient roads and the ancient branches of the Nile with the levels of the ancient floods, it produced (Fig. 4-21), which refers to the submerged area in the delta.

Numerous researchers believe that the Holy Family, when it arrived at the station of Mostorod/ al-Mahama, had received a threat that Herod's soldiers would follow them[415], thus, because of their fear that they would be arrested in the Jewish gathering in Babylon, they changed

[413] (ABDELALIM 1968: 90)
[414] (GIRGIS 2018: 55–58)
[415] (GEORGY 2017; GIRGIS 2018; GREGORIUS 2010; HUNAYN 1902; PHILLIPS 1999; SARKIS 1936)

the path away from this area until the atmosphere calmed down[416]. In the same context, it is unreasonable for the soldiers of the Kings of Judea to cross its borders to a strong Roman state like Egypt with rulers and a strong army, otherwise military clashes would have occurred, and thus Al-Houmi contradicts this opinion[417]. In addition, as previously mentioned, there was a Roman military garrison stationed at the city of al-Farama, to protect its eastern borders[418], as well as another in the Babylon region, which supports the opinion of Al-Houmi.

On the other hand, some questions and inquiries can be asked in the same context as follows: Did Herod have sufficient powers to pursue the Holy Family even inside Egypt? In addition, was Herod aware that the Holy Family had fled to Egypt?[419] If the answer is **yes**, why did he kill the children of Bethlehem?[420] If the answer is No, how did the soldiers know that the Holy Family had fled to Egypt? Although some sources indicate that the Holy Family has taken unknown paths, where divine providence led them[421]! Moreover, if Providence leads and protects them, why did they choose to flee from the beginning? Is not divine providence able to protect them from the brutality of Herod and his soldiers?

On the contrary, these same sources indicate that the Holy Family traveled in convoys, as was the custom of that time, to gain some safety from the attack of thieves and bandits[422]. How did they go on unknown roads, and at the same time with convoys? Were all the convoys going in unknown ways? Alternatively, were they also on the run, similar to the Holy Family? Moreover, Was Joseph an expert in these unknown paths? According to his blessed biography[423], Joseph never came to Egypt before the Holy Family's flight, and therefore he is not an expert in Egypt's subsidiary roads. Besides, if he had come to Egypt before, none of the references mentioned that he had come on the run to have prior experience and adequate knowledge of these hidden sub-roads.

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[416] GREGORIUS mentioned the story of Yossi, a relative of HF who joined them in Egypt, who told them what happened with the children of Bethlehem, and Herod's soldiers have been followed HF, but it should be noted that Yossi met the Holy Family in Qusqam in Assiut and not near al-Mahama (GREGORIUS 2010: 25–27).

[417] (AL-HOUMI 04.06.2021)

[418] (FAYEZ 2012)

[419] Based on Theophilus, the Devil appeared to Herod and informed him that the Holy Family had fled to Egypt. (PHILLIPS 1999: 134)

[420] (MATHEW 2: 1-23); Mimer Zacharias notes that the escape was the night Herod made the decision to kill all the children. (PHILLIPS 1999: 157)

[421] (GIRGIS 2018; GREGORIUS 2010; MONKS OF ST. MINA MONASTERY 2018)

[422] (MONKS OF ST. MINA MONASTERY 2018: 20); as was indicated previously, many references mentioned that HF was robbed and bandits.

[423] (ALCOCK 2012: 1–32; EUSEBIUS 1979; GREGORIUS 1992: 87; MORENZ 1951; SUCIU 2013b: 93–104; VAN AARDE 1998)

Finally, how did the Holy Family know when they are in Mostorod/ al-Mahama, where there are no Jews or acquaintances that Herod's soldiers are following them[424]? Although they are strangers to the state, in addition, they may not know its language[425] (Fig. 5-5).

6.3.2 The second Escape Scenario:

If there was indeed a threat to the Holy Family due to Herod's soldiers tracking them, how did the Holy Family know that the threat in the Babylon region had ended, while it was in Wadi al-Natroun? Moreover, if the threat still exists, then what is the motive for their relocation from Wadi al-Natroun to the Babylon region and not to another place?

Consequently, there is another scenario for the escape of the Holy Family and its movement starting from Wadi al-Natroun. The gist of this scenario is as follows:

The Holy Family did not reach the area of Ain Shams and Babylon, but rather they moved from Wadi al-Natroun via the Nitria-Memphis road until they reached the north of Memphis, where al-Ma'adi station was, from which they sailed across the Nile to the south. This assumption leads to considering that, the stations of Old Cairo and Ain Shams region are all located in the path of the return journey only. As a result of the fact that there is no definitive confirmation in the sources and references that there are certain stations that follow the escape path and others follow the path of return in this specifically mentioned area (Table 6-3) the Escape and Return Stations).

As a result of the previous clarification, (Fig. 6-5) clarify the proposed road for the entire Holy Family's journey, including the proposed road in the distance between al-Ma'adi and Deir al-Garnous, which was not previously mentioned in any of the aforementioned sources and references (Fig. 6-6).

[424] GREGORIUS mentioned the story of Yossi, the relative of HF, who followed them until he joined them in Asyut and not in al-Mahama, then informed them about the massacre of the Children of Bethlehem and that Herod's soldiers followed them, and then he died there.(GREGORIUS 2010: 25–27)
[425] (GIRGIS 2018: 55–59)

Fig. 6-5: Map of the proposed roads for Holy Family's Escape on the Nile Branches and the ancient road network.

Fig. 6-6: Final Map of the proposed roads for the Holy Family's Escape

6.4 The proposed scenarios for the return of the Holy Family to Palestine:

According to the sources and references that indicated the itinerary of the journey, and some assumptions or speculations, some stations were mentioned within the escape path to Egypt, this is the first stage of the journey. In addition, some stations were mentioned in the second phase of the journey, which is the return path to Palestine. Moreover, some stations were mentioned in both phases. Besides, some stations were not indicated as being on the escape or return, but according to their geographical position, their status was determined, as they took the symbol (✶) as shown in (Table 6-3).

Table 6-3: Classification of the Holy Family's itinerary stations as Escape and Return stations

Road / Station	Escape	Return	Road / Station	Escape	Return
Rafah	✠	✠	al-Moa'laka Ch.	✠	
al-Shikh Zowaied	✠	✠	Qasr al-Shama'	✠	
al-Arish	✠	✠	Abo Sarjah Ch.	✠	✠
al-Filusyiat (al-Zaraniq)	✠	✠	al-Ma'adi	✠	✠
al-Qals	✠	✠	Meit Rahina/ Manf	✠	✠
al-Mahamdiyah	✠	✠	al-Lahon	✶	
Tal al-Makhzan	✠	✠	Ihnasia al-Madinah	✶	
Pelusium al-Farama	✠	✠	Ishnein al-Nasarah	✠	
al-Qantara	✠		Deir al-Garnous	✠	
Tanis	✶		al-Bahnasa	✠	
Tal Basta	✠	✠	al-Qiss	✶	
Zagazig	✶		Bardounah	✶	
Mostorod/ al-Mahmma	✠	✠	Gabal al-Tair	✠	
Belbeis	✠	✠	It´saa	✶	
Tal al-Yahodia		✶	Tah'a al-A'meda	✠	
Minyat Tana	✶		Minyat Boufis (Minia)	✶	
Minyat Ganah	✶		al-Shikh Abada/ Ansena	✠	
Minyat Samannud	✠		Beer al-Sahaba	✠	
Samannud	✠		al-Ashmounein	✠	✠
Daqadous	✠		Dairout Um Nakhla	✠	
Belqas	✠		Deir Abo Hynis	✠	
Burulus	✠		Kum Maria	✠	
Bikha Isous (Sakha)	✠		Tal al-Amarna	✠	
Wadi al-Natroun	✠		Dairout al-Sharif	✠	
Ain Shams/ al-Mataryia	✠	✠	Sanabo	✶	
al-Zeitoun	✠	✠	al-Qussia	✠	
Old Cairo	✠	✠	al-Saraqna	✶	
Haret al-Roum	✠		Meir	✠	
Haret Zwila	✠		Deir al-Muharraq/ Qusqam	✠	✠
al-Ezbawyia/ Klout Be'K	✠		Dronkah		✠
Babylon al-Daraj	✠	✠	Deir al-Ganadla		✠

In the previous table, Memphis was mentioned on the way to escape and return[426], but what motivates the Holy Family to cross Memphis, which lies to the west of the Nile? In addition to being close to al-Ma'adi, the station that they will reach by the river? Therefore, it can be ruled out that they passed through Memphis again during the return. The repetition of Memphis in the return is likely due to the affiliation of everyone surrounding her with her, and that is because of her fame at that time, which facilitates description[427].

The sources did not mention any other stations that the Holy Family passed through on the way back after al-Mahama station[428]. Rather, most of the references were content to indicate that the Holy Family took the same escape road during its return[429], and this logically calls for some questions as follows:

- How does the Holy Family take the same road and pass through Tal Basta station again, which is the station whose people, according to ancient sources, refused to host the Holy Family during their escape journey, and in which the idols were destroyed as soon as the Holy Family entered its temples ?
- Some researchers have pointed out that the Holy Family took Awja al- Ghafir's way on the journey to escape[430]. If they return from it once more to Palestine according to this opinion, it will pass through Awja al- Ghafir, then Beersheba, Galilee, then Bethlehem again!!! This is contrary to what was referred to in the Gospel of Matthew and the sources that the Holy Family has returned to Nazareth, because of Joseph's fear of Archelaus, son of Herod[431].

  Even though the map of the New Testament and Palestine, published by Hardesty in 1881, indicated the same way, back through Awja al-Ghafir, but without entering the Judea province. Where the Holy Family followed the King's Road south of the Dead Sea and then headed northeast of the Jordan River until they bypassed the province of Samaria, which is not they could cross, because of the enmity between the Jews and Samaria[432], until they

[426] (DEMETRIUS 1999; GIRGIS 2018; MONKS OF ST. MINA MONASTERY 2018)
[427] For more: see (AMÉLINEAU 2013: 170), the reasons for giving the name Memphis to ancient Egypt.
[428] Phillips indicated that the Holy Family went to al-Mahama for the first time only on its return (PHILLIPS 1999: 125).
[429] Al-Difnar in 8th Baounah, also PHILLIPS indicated that the Holy Family returned to Palestine from Wadi al-Tumaylat, passing through Tal al-Yahodiya/ Lentopolis (MAKARI and AL-BARAMOUSI 2018; PHILLIPS 1999: 114–139).
[430] (BASILI 1953b; DEMETRIUS 1999; YOUHANNA 1983)
[431] (BASILI 1953b; DEMETRIUS 1999; YOUHANNA 1983)
[432] (2 KINGS 17:29)

reached Nazareth in Galilee[433]. Accordingly, there are three proposed return scenarios as follows:

6.4.1 **The First Return Scenario:**

This road begins where the Holy Family sets off from Deir al-Muharraq until it sails in the Nile River to al-Ashmounein, al-Ma'adi, Babylon al-Daraj in Old Cairo, which includes al-Moa'laka Ch. and Qasr al-Shama', and Abo Sarjah Ch., passing through Harat al-Roum, Haret Zwila, al-Ezbawyia/ Klout Be'K, al-Mataryia and Ain Shams until Mostorod/ al-Mahama. After al-Mahama, the Holy Family took the land road Pelusium-Memphis or the waterway adjacent to it, which is the Ptolemaios/ Trajanos Potamos canal through Tal al-Yahodia and Belbeis. Then heading east through Babylon-Clysmo road or the waterway adjacent to it, which is Nekou Diorux Canalis, passing through Tal al-Kebir.

Respectively, al-Mahsama, including Tal al-Maskhouta/ Vithom, then heading north through Pelusium- Serapeum road, passing through al-Qantara until al-Farama. Therefore, the stations of the first road of return will be Mostorod/ al-Mahama, Tal al-Yahodia, Belbeis, Tal al-Kebir, al-Mahsama, Tal al-Maskhouta, al-Qantara, al-Farama. Then the Holy Family took the overland road (al-Darb al-Sultani) to Awja al- Ghafir, Nessana and Elousa, Eboda until Petra. At that point, they headed southeast until they followed the Kings Road/ Via Nova Traiana, south of the Dead Sea, then heading north and east of the Jordan River until they crossed the Samaria Province until they crossed the Jordan River from its north until reaching Nazareth in Galilee.

The Roman stations along this road are Babylon, Heliopolis, Scenas, Stratonicidi, Scenas Veteranorum, Vico Iudaeorum, Senphu/ Semutis, Thou, Hero/ Heropolis, Thaubasio, Zalu/ Sile, Magdolo, and Pelusium.

6.4.2 The Second Return Scenario:

This road follows the same stations as the first road until Mostorod/ al-Mahama station. Then, the Holy Family passed the land road Pelusium-Memphis, passing through Tal al-Yahodia and Belbeis to Herakliopolis Mikra/ Tal Belim and al-Farama, then the coastal road to Gaza. The Roman stations along this road are Babylon, Heliopolis, Scenas, Stratonicidi, Scenas Veteranorum,

[433] New Testament Map Palestine Holy Land 1881, Hardesty Publisher, Chicago https://za.pinterest.com/pin/155303887202519858/

Vico Iudaeorum, Senphu/ Semutis, Thou, Phakoussa, Tacasarta, Daphno, Herakleopolis Mikra, and Pelusium.

6.4.3 The Third Return Scenario:

This path extends in the same direction as the previous second path in its stations until Mostorod/ al-Mahama. At that point, they took a river path through the Pelusiac branch from Mostorod/ al-Mahama to al-Farama, then completes the return through the coastal road to Gaza, Elousa, Eboda, and Petra to the Kings road.

As well, the return path from Deir al-Muharraq will be by sailing by the river, as it is easier and faster in contrast to BAHR's opinion[434]. Due to the sailing will be in the direction of the river flow from south to north from Asyut/ Deir al-Muharraq, al-Ashmounein, until al-Ma'adi, then through Babylon/ Old Cairo, al-Mataryia, Ain Shams, and al-Mahama (Fig. 6-7, 6-8). To compare the proposed paths, (Fig. 6-9), approved by the Committee, shows the Synodal Committee for the Celebration of the Third Millennium, which bears the signature of Pope Shenouda III, Patriarch No. 117. Clear differences appear between the path on this map, and the paths presented by this study.

[434] BAHR indicated that the Holy Family did not take the Nile River road during the return, but took a land road: al-Qusiyah, Meir, Sanabo, Dalja, al-Ashmounin, al-Bahnasa, Memphis, al-Ma'adi, Old Cairo, al-Mataria, Belbeis, Tal Basta, they crossed the Pharaohs Canal, al-Qantara, Sinai, Nazareth (BAHR 1969: 33).

Fig. 6-7: Final HF Escape and Return Roads in Palestine

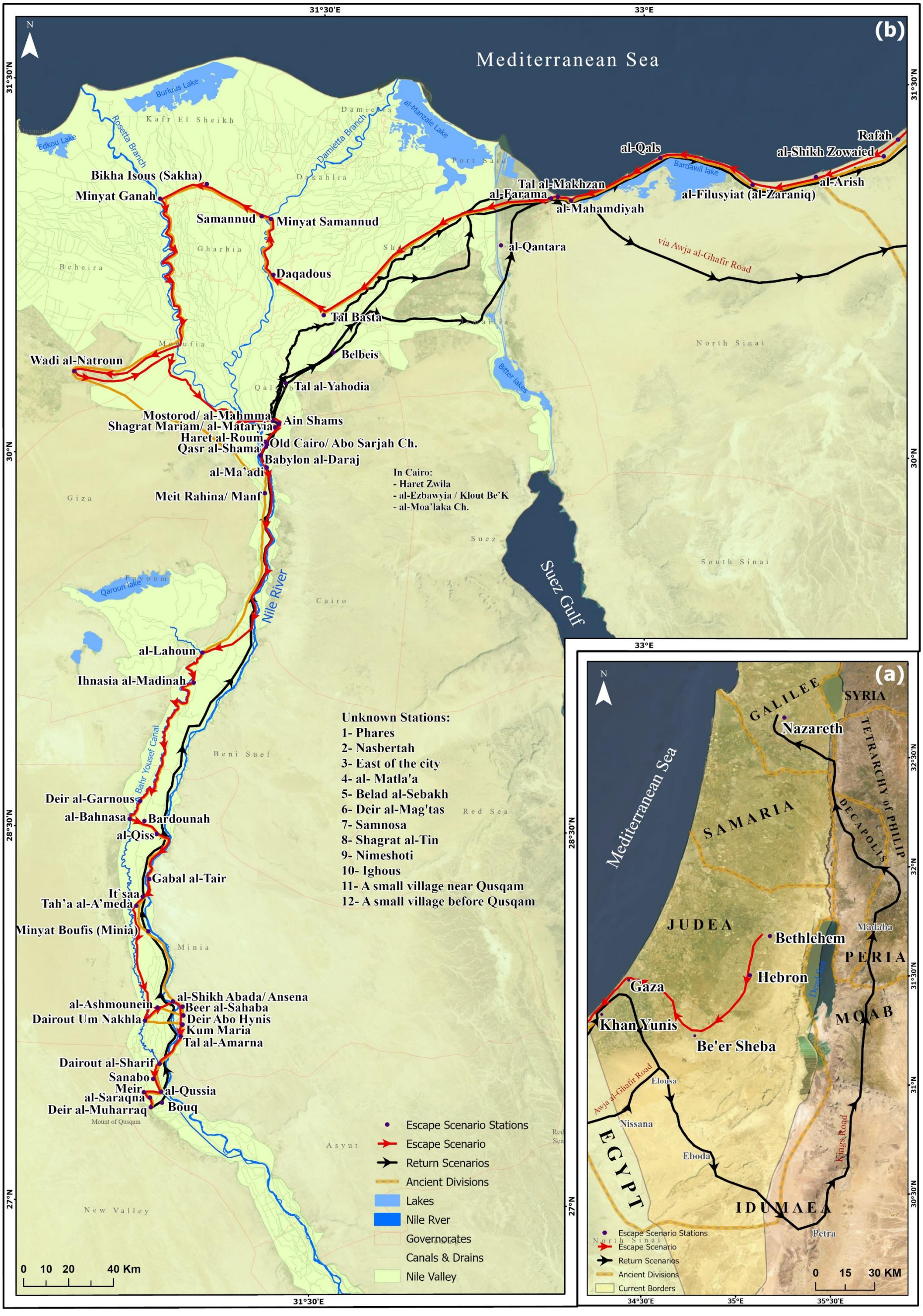

Fig. 6-8: The final map of The Holy Family's journey in Palestine and Egypt (Escape and Return)

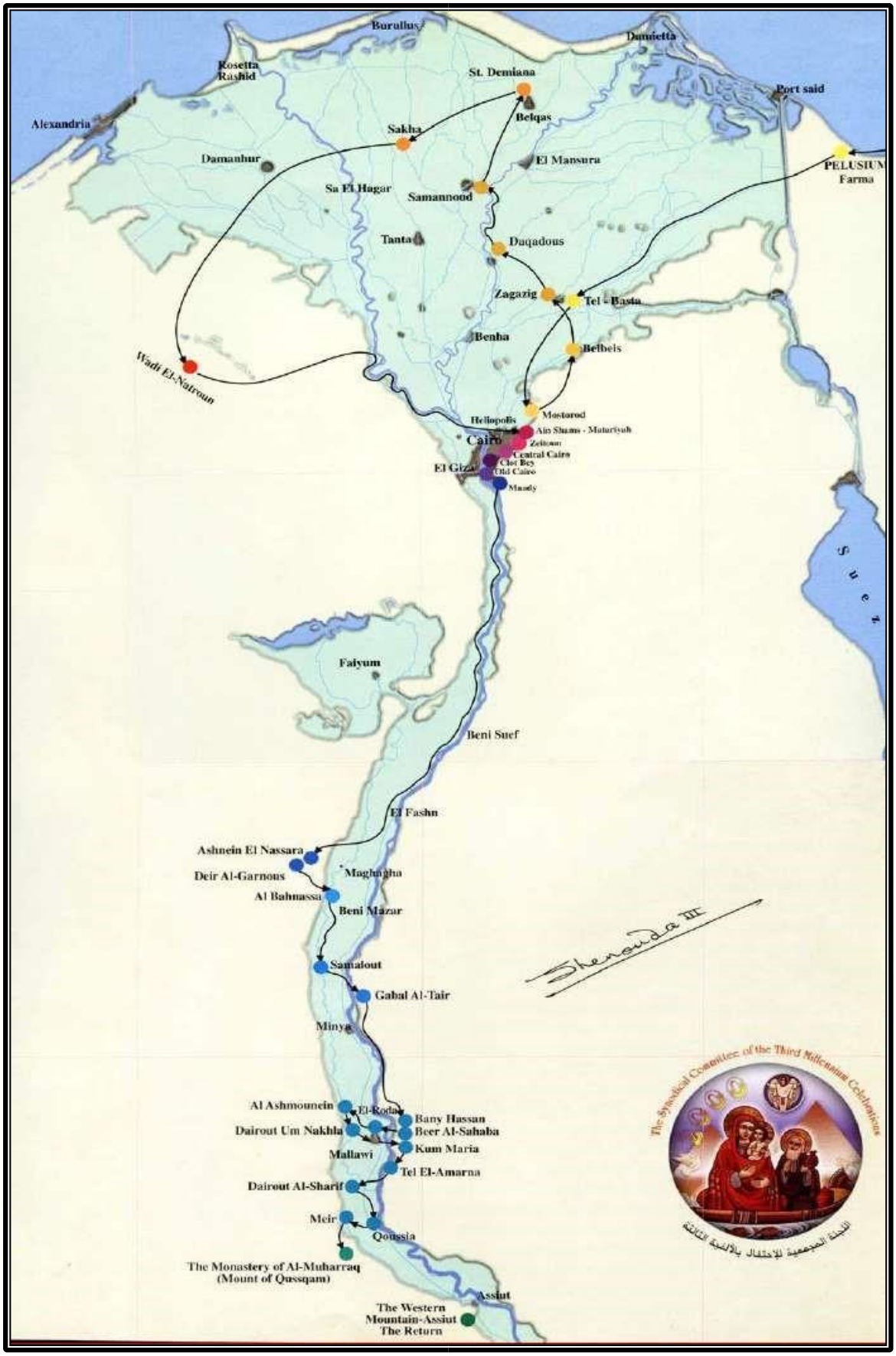

Fig. 6-9: The current Map of the Holy Family's journey. Source: The Coptic Synodal Committee[435]

[435] For more different Maps about the Holy Family see: Eshak Gris | Flickr, https://www.flickr.com/photos/182057462@N07/

6.5 Refuting the claim of traveling HF across the Red Sea coast and the Eastern Desert roads:

All roads coming from the red seaports to the Nile converged at three points: Apollonius Magna/ Edfu, Coptos/ Qeft, or Kinopolis/ Qena[436]. This negates the claim that HF returned to Palestine after crossing the Nile eastward at the Asyut station. Then, they headed east to the red sea, along the coast of the red sea, and then across Sinai, where there were no roads at the same time linking Asyut to the red sea. As for Hadrian's Road, which extends between al-Sheikh Abada/ Mallawi and the coast of the red sea, it was built dating back to 137 AD[437].

On the other hand, the previous analysis also refutes the saying that the Holy Family resided in Alexandria[438]. Because, neither this results of the research or any of the ancient and modern sources refer to this opinion at all.

In Conclusion, the previous chapter presented and suggested two paths for the Holy Family's journey from Palestine to Egypt, in addition to three paths to return, as some people rarely mentioned the escape path, while attention is always focused on the escape path. Finally, the chapter presented a complete final map of the Holy Family's journey (escape and return).

[436] (FAYEZ 2012: 139–192)
[437] (DITTMANN 1990c; SIDEBOTHAM and ZITTERKOPF 1995)
[438] (FORD 1923: 68)

7 Recommendations:

The study recommends the following:

- Producing a multilingual spatial atlas (printed and digital) of the itinerary of the Holy Family's journey.
- Designing a website in multiple languages, to promote tourism with interactive maps of the itinerary, and the facilities available to visit it. In addition, the website contains documents and sources documenting the journey.
- Designing integrated Web GIS apps to serve tourists of all nationalities.
- Establishing an institute or department that is specialized only in studies of the path of the Holy Family, its effects, and research related to it, so that it's focusing core: How to develop these tourist and spatial stations. In addition to training tour guides on how to display the path's stations, develop plans and future proposals. The institute should have its budget private, from the Church or the Government, or cooperate between them. Besides, hiring and attracting researchers from different countries who contributed studies on the journey.
- Attempting to collect manuscripts of the itinerary, various sources, and references, or copies of them for preservation in the library of the proposed institute.
- Expanding the development plan for the path to include all stations, while allocating a permanent budget for this purpose.
- Increasing the cultural and environmental awareness of the local population who live near the path stations, preserving this heritage, and treating visitors well.

8 Summary:

English Summary:

This thesis, entitled "***PALEOGEOGRAPHY OF EGYPT ABOUT 2000 B.P. Geospatial analysis and Cartographic Verification of the Journey of The Holy Family using GIS and Remote Sensing***", aimed to redraw the path of the Holy Family from its escape from Bethlehem to Egypt, until its return to Nazareth again. In addition to the spatial verification of the locations of the itinerary stations.

The thesis consists of five chapters, each of which deals with multiple aspects, in addition to 62 figures and 32 tables. The first chapter discusses all the sources and references that referred to the names of the stations of the Holy Family's journey from the first century AD to 2022 which the researcher was able to obtain. The chapter ends with a map of the locations of all known stations, 62 in Egypt and 9 in Palestine, in addition to 12 unknown stations.

While the second chapter presented the cartographic spatial verification of the path stations that were referred to in the first chapter, which are located in Palestine and the northern sector of North Sinai. the old road network was checked. That is after verifying the ancient Roman road network and its stations as part of a base map for these two regions. The chapter concluded with a map of the confirmed itinerary, which extends through these two mentioned regions.

In the same context, the third chapter presented the ancient Roman road network in Egypt, especially in the Nile Delta and the valley until Asyut in the south, where it is the last stop for which the itinerary extended according to the documents. The chapter also presented a proposed result for a part of the path that was not previously mentioned in any of the references, which extends from al-al-Ma'adi in the south of Cairo to Deir al-Garnous, which is located in the north of Minia. The chapter ended with a presentation of the confirmed path stations in the Nile Valley and Delta region.

To complete a geographical base map to verify the path of the Holy Family's journey, it was necessary to verify the extension of the network of the Nile River branches and the ancient canals at the time of the Holy Family, which is what was presented in the fourth chapter. The chapter also presented a proposal for a map of the ancient river branches and their extension, and the spatial changes of some of the geomorphological units that make up the delta, according to what was obtained from databases and atlases specific to that period. A simulation of the

ancient Nile flood levels on the current topographic surface in Egypt was presented, to remedy the current climatic changes and fluctuations. The chapter concluded with the locating of the stations of the Holy Family's journey path on the map of the ancient Nile branches.

The spatial analysis was carried out using GIS in the fifth chapter, to elicit the extent of congruence and spatial compatibility between the stations of the itinerary and the two networks of old roads and Nile branches. The reasons that led to the deviation of some stations from the logical cartographic geographical extension of the flight path were explained. As a result, 2 roads were proposed for the Holy Family's flight from Palestine to Egypt, and 3 roads for its return to Nazareth again. Accordingly, the main objective of the thesis has been reached, which is to verify the road and its stations, after the proposed final map of the Holy Family's journey (Escape and Return) was produced.

Deutsch Zusammenfassung:

Die vorliegende Dissertation mit dem Titel "***PALEOGEOGRAPHY OF EGYPT ABOUT 2000 B.P. Geospatial analysis and Cartographic Verification of the Journey of The Holy Family using GIS and Remote Sensing***" zielt darauf ab, den Weg der Heiligen Familie von ihrer Flucht aus Bethlehem Palästina nach Ägypten bis zu ihrer Rückkehr nach Nazareth neu zu zeichnen.

Die Dissertation besteht aus fünf Kapiteln, die jeweils mehrere Aspekte behandeln, sowie 62 Abbildungen und 32 Tabellen. Das erste Kapitel behandelt alle Quellen und Hinweise, die sich auf die Namen der Stationen der Reise der Heiligen Familie vom ersten Jahrhundert n. Chr. bis 2022 beziehen und die der Forscher beschaffen konnte. Das Kapitel endet mit einer Karte der Standorte aller bekannten Stationen, 62 in Ägypten und 9 in Palästina, zusätzlich zu 12 unbekannten Stationen.

Im zweiten Kapitel wird die kartographische räumliche Überprüfung der im ersten Kapitel erwähnten Wegstationen vorgestellt, die sich in Palästina und im nördlichen Teil des Nord-Sinai befinden. Dies erfolgten nach der Verifizierung des alten römischen Straßennetzes und seiner Stationen als Teil einer Basiskarte für diese beiden Regionen. Das Kapitel endet mit einer Karte der bestätigten Reiseroad, die sich durch diese beiden genannten Regionen erstreckte.

Im gleichen Zusammenhang stellt das dritte Kapitel das alte römische Straßennetz in Ägypten vor und fokussiert dabei insbesondere das Nildelta und das Tal bis Asyut im Süden, der letzten Station der Reiseroad, so wie sie sich laut den Dokumenten zufolge erstreckte. Das Kapitel präsentiert neue Erkenntnisse und schlägt dementsprechend teilweise eine Anpassung des Streckenverlaufes vor. Der ermittelte Streckenverlauf wurde zuvor in noch keiner der Referenzen erwähnt und erstreckt sich von al-Ma'adi im Süden von Kairo bis nach Deir al-Garnous, das sich im Norden von Minia befindet. Das Kapitel endete mit einer Präsentation der bestätigten Wegstationen im Niltal und in der Deltaregion.

Um eine geographische Basiskarte zu vervollständigen und damit den Weg der Reise der Heiligen Familie zu verifizieren, war es notwendig, die Ausdehnung des Netzes der Nilarme und der alten Kanäle zur Zeit der Heiligen Familie nachzuvollziehen, was im vierten Kapitel präsentiert wird. Das Kapitel präsentiert auch einen Vorschlag für eine Karte der alten Flussarme und ihrer Ausdehnung sowie der räumlichen Veränderungen einiger geomorphologischer Einheiten, aus denen das Delta besteht, entsprechend der Erkenntnisse aus

Datenbanken und Atlanten für diese Zeit. Eine Simulation der Hochwasserstände des alten Nilverlaufs auf der aktuellen topographischen Oberfläche in Ägypten wird vorgestellt, um die aktuellen klimatischen Veränderungen und Schwankungen zu beheben. Das Kapitel endet mit der Verortung der Stationen des Reiseweges der Heiligen Familie auf der Karte der alten Nilarme.

Die räumliche Analyse wird im fünften Kapitel mittels GIS durchgeführt, um das Ausmaß der Kongruenz und räumlichen Kompatibilität zwischen den Stationen der Reiseroad und den beiden Netzen aus alten Straßen und Nilarmen zu eruieren. Die Gründe, die dazu führten, dass einige Stationen von der logischen kartographisch-geographischen Verlängerung der Flugbahn abwichen, werden erläutert. Als Ergebnis werden 2 Roadn für die Flucht der Heiligen Familie von Palästina nach Ägypten und 3 Roadn für ihre Rückkehr nach Nazareth vorgeschlagen. Damit ist das Hauptziel der Forschungsarbeit erreicht, die Road und ihre Stationen zu verifizieren, nachdem die vorgeschlagene endgültige Karte der Reise der Heiligen Familie (Rundreise) erstellt wurde.

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