Landscapes of the Bashmur

Settlements and Monasteries in the Northern Egyptian Delta from the Seventh to the Ninth Century

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1. Introduction

The protective Delta marshes are a powerful motif of Egyptian religious and historical stories. From Isis attempting to keep Horus safe from Seth, Psamtek hiding from the Assyrians, the *boukoloi* of the Mendesian nome[1] and the Bashmurites using the trackless marshes from which to resist the Arab tax collectors,[2] the marshes of the Delta have traditionally offered a safe haven from persecution of different kinds. After the Bashmurite insurgency of 831 A.D., settlements and churches in the area were destroyed to remove the possibility of further revolts. Little is known, however, of the extent or nature of settlement in this area from the seventh to the ninth century or of the way of life in the remote areas at the apex of the Delta. Recent survey work, however, has begun to record information about the ancient sites which lie north of, inside and along

1 Blouin, 2014, p. 285–295.

2 Evetts, 1906–1915, III, p. 157, p. 487–494; Kennedy, 1998, p. 83–84; Mikhail, 2014, p. 118–127.

the southern fringe of Lake Burullus.[3] This paper describes some of those sites[4] in order to put the archaeological material obtained so far into the wider context of the landscapes of the north Delta and the political and social upheavals of the two centuries after the Arab invasion of Egypt. This preliminary discussion has the objective of demonstrating the potential of the archaeology of the area to explore the relationships between the towns and the environment, the settled and the wilderness and, despite a lack of papyrological or textual evidence, to illuminate the material culture and history of the north Delta.

2. The Geographical Setting

Heliodorus' novel *Aithiopika* from the fourth century A.D. evokes a Roman impression of the north of Egypt: "What shores are to seas, swamps are to lakes" (Book I, 5),[5] also the abode of brigands and pirates. This literary motif evokes the unknown, the strange and uncivilized world in the northern extremes of Egypt, and paints a desolate picture of the natural environment of the Nile mouths as they reached the Mediterranean Sea. The Nile Delta apex, however, has been a changing and volatile environment in geological terms. The northern Delta in the first millennium A.D. was characterized by a band of beach and coastal dune to the very north, brackish lagoons and marsh and wetland to the south before the floodplain and levee landscape of the central and southern Delta.[6] In the Roman period, from 30 B.C. to the fourth century A.D., the sea levels of the Eastern

3 The work of the Egypt Exploration Society's Delta Survey has been conducted in the Kafr el-Sheikh province by Jeffrey Spencer and Patricia Spencer in the 1990s and Penelope Wilson since 2000. EES Delta Survey website: http://www.delta-survey.ees.ac.uk/ and Delta Survey work http://www.dur.ac.uk/penelope.wilson/Delta/Survey.html.

4 I would like to thank Harco Willems and Jan-Michael Dahms for their invitation to take part in the conference and their patience. I also acknowledge the support of Jeffrey Spencer and the Egypt Exploration Society's Delta Survey project, Roger Dickinson for assistance with the map and Dimitrios Grigoropoulos, Rebecca Bradshaw, Fatma Keshk and Hind Ramadan, as well as the Ministry of State for Antiquities in Egypt and Kafr el-Sheikh office under Gamal Selim and Dr Mohamed abd el Rifaat.

5 Lamb, 1961, p. 5.

6 Stanley/Warne, 1993.

Mediterranean were around 1.5 m lower than at present.[7] Dated archaeological material on the Italian, Greek and Levantine coasts would have stood at or above the level of the sea, whereas now the sites are under or almost submerged by water.[8] As well as lower sea-levels, the lagoons of Burullus and Menzala were probably not as extensive as they were by the nineteenth century[9] and the northern belt consisted of a series of smaller lagoons or lakes, closed in by spits of land, caused by the various cuspate subdeltas. Agricultural possibilities would therefore have been good from the Ptolemaic to Roman periods.[10] With increasing subsidence behind the beach barrier, however, caused by various factors including earthquakes, the swamps and lagoons have spread since the fifth to tenth centuries.[11] The present Delta lakes were most likely created in their current form in 961 A.D. by a marine transgression.[12] In Lake Burullus, at the very north of Egypt, the islands that exist inside the Burullus lagoon now may have been standing within swampy, salty land for most of the year and a shallow freshwater lagoon at the time of the inundation. Although the waters of the lagoon are now brackish, that is a mixture of salt water and fresh water,[13] the annual inundation would have caused the levels of salinity to have changed during the year.[14] Marine and freshwater fish abounded in the lake and provided sustenance for local towns and larger cities at the end of the nineteenth century. Migratory and resident birds, saline and freshwater plants were abundant in the lagoonal areas,[15] with perhaps, in ancient times wild pigs and hippopotami. The natural resources were thus attractive, and required little husbandry. The lake was joined to the sea by an opening or *boghaze* of Arabic texts, less dangerous than the main river branch mouths, but still only navigable by vessels of shallow draught.[16]

The Sebennytic Nile branch was the major waterway flowing north from Sebennytos (Samanud), to the east of the Burullus lagoon and debouching near modern El-Borg.[17] There were other distributaries to the west, changing

7 Stanley/Warne, 1993, p. 632.

8 Lambeck et al, 2010, p. 81–88; Flemming, 1992.

9 Toussoun, 1922, pl. 1 map of Bois Aymé from the Description de l'Égypte.

10 Butzer, 1959, p. 63.

11 Sestini, 1992, p. 568.

12 Kamel, 1926, Pt.4, p. 892 after Makhzumi; Frihy, 1992.

13 Ramdani et al, 2001, p. 291–292.

14 Birks/Birks, 2001, p. 474–476.

15 Dumont/El-Shabrawy, 2007.

16 Cooper, 2009, p. 114.

17 Arbouille/Stanley, 1991, p. 60–64.

over time and noted by different classical authors and geographers. Such waterways included the Pneptimi and Dioclus "false mouths" on the northern shore[18] the "Saitic" branch, perhaps debouching near Agnou (Ikhnu) or modern Mastarua.[19] The Bolbitine branch may have only reached the coast from the late first millennium B.C., having been canalized in its lower reaches and starting from the Canopic Branch.[20] The Bolbitine-Rosetta river branch and promontory only formed from about 2000 years ago,[21] resulting in the foundation of Rashid (Rosetta) as late as 870 A.D.[22] and a shift of the balance of water in the Delta to the Rashid and Dumyat branches with the silting up of the Canopic and Sebennytic branches by around seventh to the ninth century A.D. In addition, transverse canals such as the Butic canal, as recorded by Ptolemy and others also operated[23] and may have assisted both communication and drainage.

Within this changing and diverse landscape there are many north Delta archaeological sites, whose creation, development and abandonment do not fit the overall model of Ptolemaic and early Roman "boom" followed by decline into the Late Antique period,[24] instead they are part of a recently recognized pattern of Late Antique reconfiguration, wealth and continuation or displacement into the Islamic period.[25] The ideal scenario would be to take one site at a time and understand the individual internal dynamics of particular situations,[26] but in the northern Delta, however, the situation is still at an early stage, as this paper will show.

3. Historical and Archaeological Setting

David Hogarth visited the northern province of Kafr el-Sheikh in 1895 and 1903, reporting to the Hellenic and Egypt Exploration Societies on thirty one Late Roman, Byzantine and early Arab sites in the "Nile fens".[27] He identified Kom

18 As in Ptolemy, Toussoun, 1922, p. 43–52.

19 Arbouille/Stanley, 1991, p. 60, fig. 10.

20 Toussoun, 1922, p. 27.

21 Chen et al, 1998, p. 551.

22 Timm, 1984–1992, V, p. 2198–2203.

23 Ball, 1942, p. 128–130; Blouin, 2014, p. 32–33.

24 Based on the Fayum papyri, Rostovtzeff, 1926; van Minnen, 1995.

25 Pollard, 1998; Keenan, 2005.

26 Rathbone, 1997; Hartung, 2009 (for Buto); Blouin, 2014 (for Mendes).

27 By this time the area was semi-drained, but still not densely inhabited, Hogarth, 1904; 1910, p. 91–107.

el-Khanziri as Pachnemounis from an inscription found there and discussed the identification of sites, provinces and Nile branches. Further survey work by Pascale Ballet and Thomas von der Way[28] and then by the Egypt Exploration Society has shown that the archaeological prospects for the northern Delta are good, in the sense that there are many extant sites worth scientific study. The sites have been under threat since the end of the nineteenth century, however, as many have been levelled or built over (see figure 1). Out of 153 "sites" logged by the EES Delta Survey database, that is places designated with the name "kom" or "tell"[29] in the areas of Kafr el-Sheikh, Hamul, Biyala and Sidi Salem, 29 % have been levelled, 22 % have been built upon, 28 % mostly in the Hamul/Biyala area have not been researched, leaving only 21 % with useful scientific data.[30] Most of these 33 sites are in the area between Buto (Tell Farain) and Lake Burullus. Some of the sites are multi-period sites and of those 22 % have Ptolemaic-Roman material (third century B.C. to second century A.D.), 61 % Late Roman material (third to seventh century A.D.) and 17 % Islamic-medieval material (eighth to eleventh century A.D.). While the figures are rather crude and the data is incomplete, the information can be compared with the similarly weak amount of data from historical and textual sources, in order to show how much further work there is to do in the area but also the potential for looking at environmental and socio-economic interactions, particularly in the Late Roman and early Islamic periods.[31]

28 Ballet/von der Way, 1993.

29 The name may refer to naturally high places, such as mud hills or levees, but they are included here as places with the potential to find ancient sites of some kind. There is often too little information until a survey visit is made to a "kom" or "tell" to be certain that it was an older settlement.

30 The sites were collected from the EES database and allocated a status according to whether they had been investigated. After counting, the numbers in each category (leveled, built over, investigated, not investigated), the percentages were calculated.

31 Mikhail, 2014.

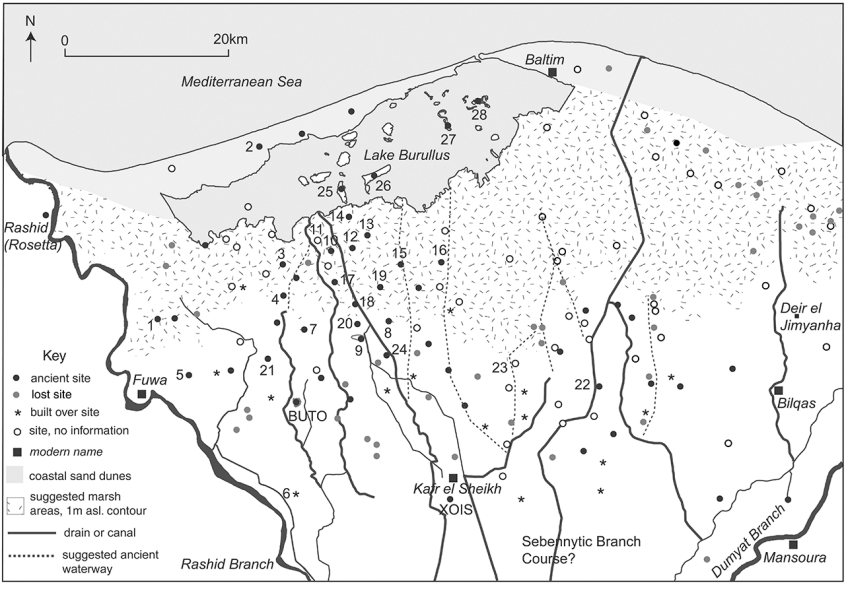

Figure 1. Map of the northern area of Egypt, with Late Antique sites and places named in the text. After Survey of Egypt maps (1997) by Roger Dickinson and Penelope Wilson.

Bashmur Map Key		
1 MUTUBIS (Kom el-Ahmar)	2 Mastaraua	3 Tell el-Aluwe
4 Kom el-Arab	5 KOPRET	6 Shabas Shuhada
7 Kom Sheikh Ibrahim	8 PHRAGONIS (Kom el-Khawalid)	9 Kom Sidi Selim
10 Tell Foqaa	11 Kom el-Meiteh el-Bahri	12 Kom el-Ahmar el-Ain
13 Tell el-Khubeiza	14 Tell el-Retabi	15 Nashawein
16 PACHNAMOUNIS (Kom el-Khanziri)	17 Haddadi	18 Kom Bunduq
19 Kom Khirbeh	20 Kom el-Misk	21 Kom Abu Ismail
22 Kom el-Tawil	23 Umm el-Gafar	24 Tida, Tell el-Daba
25 Gezira Dakhla	26 Gezira Kom el-Akhdar	27 Singar
28 Mehgareh		

It is possible that an agrarian development of the north Delta began in the Ptolemaic period similar to the settlement "boom" in the west Delta and Fayum during the Ptolemaic period,[32] but there is a limited amount of evidence due, in part, to the relative lack of archaeological work in the Delta in general and a specific lack of documentary material. Where papyri have survived, as at Thmouis in the eastern Delta they have been able to provide precise details about specific periods, in this case the second century A.D.[33] Ptolemaic levels are most likely to be buried under Delta sites and sediments, but during survey work around Buto,[34] limited sondages were made in some places and pottery was found that could be dated to the Ptolemaic period, for example at Kom el-Gir. Recent work at Kom el-Gir, north-west of Buto, has confirmed the Ptolemaic origins and Roman development of this site.[35] Similarly, excavations for the Egypt Exploration Society by Jeffrey Spencer at Kom Daba found standing remains and foundations from a tower-house, with Ptolemaic pottery at or under the foundations.[36] Surface survey from the EES Delta Survey, has only identified Ptolemaic material at a limited number of sites such as Kom el-Khawalid (Phragonis),[37] Kom el-Arab and Tell Mutubis,[38] while Ptolemaic coin hoards, town-houses and industrial quarters, as well as bath-houses have been identified at the large, urban centres of Buto and Xois (Sakha).[39]

The establishment of new provinces such as Metelis, Phtenetu, Cabasa and Helearchia from the Ptolemaic and Roman periods, suggest that the administration was effectively dealing with "new" settlements and agricultural lands as they came "on-stream". The exact location of these areas is, however, not certain. The Phthenetic and Cabasite nomes are first mentioned in the *Natural History* of Pliny and then described more fully in the *Geography* of Ptolemy.[40] Buto was the capital of the former and Cabasa of the latter, being somewhere north of Buto, perhaps to form a focus for the intensification of settlement due to the increased level of agricultural exploitation and to manage the changed waterway system. The Cabasa element may be represented in the modern toponym Shabas which

32 Butzer, 1976, p. 95–96.

33 Blouin, 2014.

34 Ballet/von der Way, 1993.

35 Schiestl, 2013.

36 Spencer, 2011.

37 Hogarth, 1904, p. 4–5; Timm, 1984–1992: II, p. 940–944.

38 Wilson/Grigoropoulos, 2009, p. 253–255, 473–475 and 454–462.

39 Christiansen, 2004, p. 46–54; Ballet et al, 2011; Trümper, 2009.

40 Ball, 1942, p. 72, 85.

was used of at least four towns south of Buto: [41] Shabas el-Shuhada, Shabas el-Umayyir, Shabas el-Mehl and, perhaps, Shabas Sanhur. Emile Amélineau and John Ball favoured Shabas el-Shuhada as Cabasa,[42] because it is in the centre of this group and there is indeed a 3 m high mound underneath the modern cemetery at the site with stratified burials and Roman-Late Roman pottery.[43] Campbell Edgar[44] also noted the Shabas element in a group of sites centred on the modern Tell el-Qabrit, a group which may also be a candidate for the new capital of Cabasa. This kind of problem in identifying main cities, even administrative centres, known from textual records, with remains on the ground exemplifies the wider problem of Delta archaeology. Similarly, the north-east Delta region seems to have been known as Helearchia,[45] which Hogarth was inclined to place near Abu Madi south-east of Baltim.[46] It is possible, however, that this was the earlier name for Bashmur, which was in the Christian period, the whole region north-east of Fuwwa and north of Dirkirnis – that is the area south of Lake Burullus.[47] The town of Pisharot (Coptic) or al-Bashrud (Arabic) is known from the third to the ninth century in tax lists and may have been located somewhere near a town called Sidi Ghazi, south of large tell called Kom Umm Jafar, 15 km south of Kafr el-Sheikh.[48] It is likely that some terms – especially for areas – were used rather vaguely and that strict equivalences between the different periods cannot be made. The mapping of toponyms to known sites is difficult to say the least, with remnants of different periods reflected in the modern landscape.[49]

4. The Late Antique Sites: Monasteries and Ports

The Late Antique period from the fourth to the seventh century A.D. represents a changing political and economic focus from Rome to Constantinople to Fustat (Cairo). During this period documentary evidence shows that agricultural land

41 Timm, 1984–1992, V, p. 2218–2222.

42 Amelineau, 1893, p. 419–421; Ball, 1942, p. 109, 122, 164, 178.

43 See http://www.dur.ac.uk/Penelope.Wilson/DeltaSurvey/

44 Edgar, 1911.

45 Maspero/Wiet, 1919, p. 29–30.

46 Hogarth, 1904, p. 13.

47 Timm, 1984–1992, I, p. 354–356.

48 Daressy, 1927.

49 Engsheden, 2008.

was owned by villagers and city dwellers alike, there were large "estates" such as that of Aurelius Appianus in the Fayum, and, by the sixth century A.D. the property holdings of the church and monasteries were substantial.[50] In this period, wheat was shipped out to Constantinople and other major Christian centres in the Levant such as Antioch, when trans-shipment took place through the northern lagoonal area and ports on Burullus. An account of boats dating to the fourth century A.D. mentions the home ports of boats in the following nomes of the north delta: Metelite, Prosopite, Phtenote, Lower Diospolite, Elearchia and Nilopolite.[51] The northern waterways would thus have aided the movement of goods in different directions from those of the Roman and Ptolemaic periods. In addition, the bishoprics in the north Delta were certainly active with involvement in significant economic activities. At Parallos, in the area of Baltim, a Bishop Nonnos is known from the year 339 A.D. and his successors up to the late sixth century A.D..[52] Forty-four bishoprics are recorded in the Delta out of around one hundred in the whole of Egypt, including Libya and the Pentapolis of Cyrenaica, perhaps not too surprising in view of the relative proximity to Alexandria.[53] Similarly, a Christian elite can be identified in cities and towns, who were responsible for church building and administration amongst other activities.[54]

In the countryside, however, a small amount of archaeological evidence implies a striking community of agricultural settlements, perhaps the source of wealth for some of the elite. Late Antique Period dated material predominates on those sites where pottery survey has been carried out in the Delta,[55] but the phenomenon has also been noted in Middle Egypt around Amarna[56] and now, also, in the Fayum.[57] Although the survey collections in the Delta included material from ditches around the sites, in order to obtain pottery that may have come from deeper strata, it is possible, however, that this material could also have been spread out from the central part of the sites and covered earlier

50 Bagnall, 1993, p.148–153, p. 289–293.

51 P. Oxy. XXIV 2415. Lobel et al., 1957, p. 176–179; dating after Sijpesteijn/Worp, 2011; Bagnall, 1998, p. 37.

52 Worp, 1994, p. 304.

53 Wipszycka, 1983, p. 183–186.

54 Mikhail, 2014, p. 37–50.

55 Wilson/Grigoropoulos, 2009, p. 276–281; Rowland/Wilson, 2006; Ballet/von der Way, 1993; Trampier, 2009.

56 Kemp, 2005; Parcak, 2005.

57 Kirby/Rathbone, 1996; Keenan, 2003.

material. The cultural units used in the survey combine the first century B.C. to the second century A.D. as a distinct Early Roman unit of material culture, reflecting the joint Hellenistic culture of the eastern Mediterranean, while Roman is second to the third century A.D. and Late Roman/Late Antique is the fourth to seventh century A.D. Often, however, cultural markers such as "Christian" or "Byzantine"[58] lag behind absolute chronology of periods and tend to move at slower rates. In effect, material from the sites could have been in use and reuse over many years before deposition so the survey methods used are necessarily only crude markers – a beginning. The following description and discussion highlights future directions for investigation of the north Delta arising from four selected sites.

5. Fives Sites: Form and Function

The site of Tell Mutubis (see figure 1, no. 1) (Kom el-Ahmar)[59] has been more intensively surveyed than others in the North Delta Survey in order to understand the development of the town from its origins to a period of floruit in the Late Antique Period and abandonment around the ninth to tenth century. The site, now surrounded by agricultural land, covers an area of around 25 ha, with a central mound rising to a height of 12 m above the field level. The mound height can be compared to the original mound at Sakha (Xois), which was estimated at 80 feet (c. 24 m).[60] Tell Mutubis is strategically located east of the Bolbitine (Rosetta) branch and west of the marsh zone of Lake Burullus. The town could conceivably have controlled access across the Delta and, in the Roman period, have formed a link to the Butic canal. The pottery found at the site overwhelmingly dated to the Late Roman period[61] and very little discernible material of earlier periods could be detected, except for one possible diagnostic sherd dated to the Ptolemaic period, a fragment of *tholos*-type bath-house and some Ptolemaic coins found in the 1970s.[62] Most of the glass also dated to the

58 On the problems of nomenclature Mikhail, 2014, p. 1–4.

59 SCA register number 090175.

60 By Percy Newberry in a letter to Gardner in 1947, quoted in Reeves/Taylor, 1992, p. 105.

61 Identifications by Aude Simony, Mikaël Pesenti and Penelope Wilson, for the Mutubis Project.

62 I am grateful to Dr. Ayman Wahby for this information from Cairo Museum.

fourth century onward and a few possible examples from the third century.[63] The geological investigation of the palaeo-landscape suggests that the site was founded on land emerging after a change in the fluvial regime, perhaps no earlier than the Late Ptolemaic to Early Roman period, depending upon the date of the pottery from the earliest features.[64] The latest material suggests that the site was already in decline in the seventh century at the time of the Arab conquest and perhaps was abandoned soon after that time. The abundance of Late Roman 1 type amphora fragments, African, Egyptian and Cypriot Red Slip Ware, and Roman cooking pots suggests a domestic occupation and consumer culture, which fits within the general pattern of the Late Antique period in North Africa as a whole.[65] Buildings are visible over the tell surface and in satellite imagery and one such building with limestone tile floors, columns on brick piers and plaster mouldings suggests some kind of wealthier structure. Large monumental walls made of mud-brick with fired-brick courses at the edge of current mound may suggest a more fortified set of structures at the site.

A different type of site is exemplified by Tell el-Khubeiza (see figure 1, no. 13)[66] situated amongst modern fish-farms. The site consists of one oval mound around 8.5 m above the fish-farms, with an outlying, lower and more circular mound to the west (see figure 2). The whole site is around 660 m in length from east to west and about 285 m, at its maximum extent, from north to south, thus covering around 18 ha. The colour of the main mound was red because the surface was covered in degraded pottery and red brick, some of which had been vitrified, as well as glass and some fragments of corroded bronze material. The surface varied from being hard underfoot to soft in places, the difference perhaps representing walls and internal features of buried structures. The western side of the mound seemed to have been cut away and large amounts of red brick, including square bricks 21 by 21 cm in size, and larger pieces of pottery from cooking vessels and amphorae, including Late Roman 1 types, lay at the bottom of the embankment on this side. Nearby, two kilns inside a brick surround were clearly visible and the ground surface around them was covered in slag. The pottery from the site showed a good range of Late Roman material, including painted wares, Cypriot and Egyptian Red Slip finewares, as well as amphorae with a bright orange fabric and white-cream wash over the surface. Corroded bronze coins and glass fragments also lay on the surface, the latter

63 Information from Daniela Rosenow for the Mutubis Project.

64 Information from Benjamin Pennington for the Mutubis Project.

65 Dossey, 2010, p. 62–97.

66 Supreme Council of Antiquities register number 090120.

in large numbers in places. There were three fragments of red granite lying on the surface of the mound, including two parts of grindstones, suggesting the presence of food processing facilities of some kind at the site. Building plans were clearly visible on the mound surface. The remoteness of this mound and perhaps the marshy environment that once surrounded it may be significant in determining the nature of the settlement here.

Figure 2. View up to the top of Tell el-Khubeiza (photograph by Penelope Wilson).

A third site, Tell Nashawein,[67] (see figure 1, no. 15) was not too far to the west but was of a somewhat different character (see figure 3). The Arabic dual form of the name is confirmed by the topography of the site, as it has two main mounds, either side of an approximately 100 m wide band running from north to south through the middle of the site. The nature of the band running through the site is not clear, and the field patterns to the north and south are not very helpful in this regard, but the area seems to consist of hard, compact silt with only a few fragments of pottery lying on the surface. The flat areas may be the remnant of a waterway which ran through the area and which was "decommissioned" when the new irrigation system was completed or may have run dry of its own accord sometime in antiquity. The site at Nashawein is large, covering a maximum of around 1000 m in length by around 550 m in width and with a maximum elevation of the eastern mound of up to 10 m.

67 SCA register number 090144.

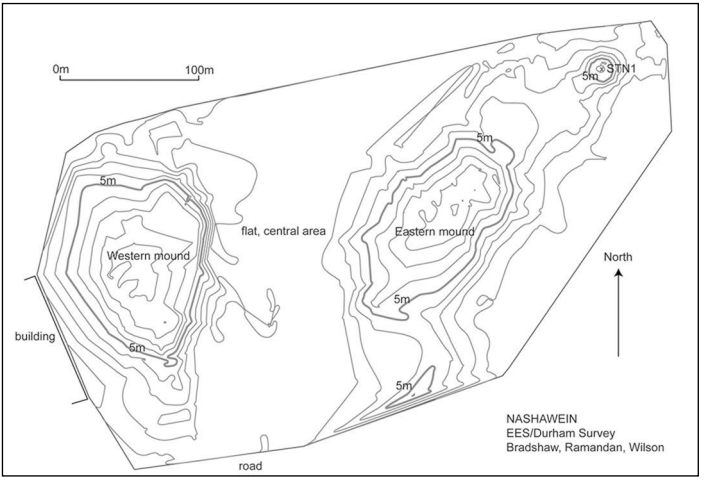

Figure 3. Plan of Nashawein (Bradshaw, Hind and Wilson see Wilson, *2014 p. 43).*

The western mound shows building plan traces on the surface, either as pale bands running along the ground or in the growth of small plants where water has collected usually in the inner part of a room of a building. The difference between the higher, more solid "walls" of the buildings and the softer, vegetation-filled room depressions can be easily seen and felt underfoot. A large rectangular building on the southern part of this mound, running from north-west to south-east, was clearly visible to the naked eye as well as on satellite images. The main eastern mound has a small mound further to its east and the two are separated by a depression between them. The southern sides of the eastern mounds were gently sloping, with water-cut gullies running through the sides. Building plans are also visible on the mound surfaces.

The mounds were covered in pottery and fired brick, including some vitrified brick fragments. There were also pieces of glass in specific places. The pottery studied dated mostly to the Late Roman period and included examples of the Late Roman 1 type of amphorae, cooking vessels with ledged rims, pie crust dishes and some with painted decoration on the inside, as well as ledged "bitronconique" AE3 amphora spikes. They all date to within the Late Roman period and perhaps Early Arab period for the painted pie crust dishes (fourth to ninth century).

Figure 4. View of Singar island (photograph by Penelope Wilson).

Tell Singar[68] (see figure 1, no. 27) now lies within Lake Burullus itself and is only accessible by boat (see figure 4). The archaeological zone was defined as a pottery and brick covered area on the south side of the island, which was bare of scrub and bushes. By contrast, the northern part of the island had an area of marshes and reed beds, along with harder, sandier surfaces and some vegetation. As a result it is used in modern times for cattle pasture. The pottery-covered area seemed to be very low-lying and covered an area of approximately 90 m by 140 m at its maximum extent. The maximum height of the tell was barely one metre above the level of the water. As the site had previously been occupied by fishermen in the not too distant past, the remains of their dwelling places were clearly visible on the island. In many places, hollows had been dug out of the island, leaving earth piled up alongside the hollows and the pottery and material from the holes lying beside them. The pottery dated from the Late Roman period through to the Islamic period and there were some red slip finewares along with the glazed wares and glass. Although the area was not very extensive the material seemed to occur in dense strata across the site and these were around one to two metres deep in places. The edges of the site were bordered by reed beds. Meinardus noted that Singar was known from the third until the thirteenth cen-

68 SCA register number 090150.

tury, had once been important as a safe haven for relics and had been accessible on foot.[69] Other sites comparable to Singar lie within Lake Burullus itself, such as those on the islands of Kom Dakhlah, el-Akhdar and Mehgarah. They may have been connected to the marsh area by causeways or dykes, standing proud of low-lying water and thus been similar to the more famous site of Tinnis in Lake Menzaleh to the east. [70]

Figure 5. Red granite column at Mastarua, length 1.80m (Photograph by Penelope Wilson).

A fifth site at Mastarua (see figure 1, no. 2) lies on the northernmost sea-shore of Egypt. The site is situated amongst the coastal dunes where the scrubby grass shows undulations in the local topography. The differential growth of grass shows rectangular building traces buried underneath the sand, also visible from satellites, and green clumps of grass may represent the interior of buildings and individual rooms. Pottery of Late Antique and Islamic date litters the surface and a red granite column was seen during an exploratory visit in 2012 (see figure 5).[71] The presence of a local coastguard station at the site shows its continuing strategic importance, perhaps having been a monitoring station for shipping. In this case, the site most likely can be identified with a settlement from the Late Antique to Medieval period called Nastarawa, which is mentioned often in the

69 Meinardus, 1963–1966.

70 Butler, 1998, p. 350–356.

71 http://www.dur.ac.uk/penelope.wilson/Delta/Survey.html

Arabic Itineraries of travellers in the north.[72] For example, Idrisi (1154 A.D.) notes that Nastarawa al-Beheira Bashmur was between El-Mahagum (location unknown) and el-Burullus, while others suggest that it may have been an island approachable only by causeways, although it seems to be near the sea-shore (Abu el-Fida).[73] The importance of this site and of Burullus, along with other coastal sites such as Rashid (Rosetta), Tinnis and Dumyat (Damietta) is indicated when, under the Patriarch Kosmas (851-858 A.D.), walls were built there against Byzantine attacks.[74]

6. Discussion

The five sites described above could be used to construct a narrative framework for understanding the landscape changes which affected human settlement from the Ptolemaic through to the Islamic period in the northern Delta. Tell Mutubis, not yet identified with any place name from antiquity, seems to be a key strategic place for the management of the newly created Bolbitine canal to the sea and the western basin of Burullus lagoon. Through the Roman period, it became perhaps the seat of a bishop, but after the Arab conquest and the development of the new *boghaze* port of Rashid, it became less viable and was abandoned. In the case of Tell el-Khubeiza, the site could be connected with a group of four monasteries that Maqrizi noted were situated "in the region of the salt marshes near Lake al-Burullus" – two of them at Bilqas[75] and Dayr Jimyanah and Dayr al-Maghtis further north.[76] Tell Nashawein (see figure 1, no. 15) could have been the harbourage for the large settlements serving the central basin of Burullus, that was Kom el-Khanziri (see figure 1, no. 16) or Pachnemounis, the capital of the Lower Sebennyitic province. Such "lake" edge sites may have been once high-lying settlements on waterways exploiting the natural resources of the area, some continuing into the Islamic period, as for example Tell Foqaa (see figure 1, no. 10).[77] Tell Foqaa is one of a group of sites along the south edge of the marshes/Lake Burullus, including Meiteh el-Bahri (see figure 1, no. 11),[78] Kom

72 Amélineau, 1893, p. 275–276; Timm, 1984–1992, IV, p. 1739–1742.

73 Guest, 1912, p. 960–961.

74 Timm, 1984–1994, I, p. 450–451.

75 Ramzi, 1955, Vol. 2, p. 27.

76 Timm, 1984–1992, II, p. 731–732.

77 Wilson/Grigoropoulos, 2009, p. 233–236.

78 Known as Miyetain in 1903, Hogarth, 1904, p. 15, pl. 1.

el-Ahmar el-Ain (see figure 1, no. 12), Tell el-Retabi (see figure 1, no. 14) and Tell el-Khubeiza (see figure 1, no. 13) which are covered in fineware pottery and have granite grindstones on them. The sites could be service settlements (ports, warehouses), with nearby "satellite" villas, farmsteads or monasteries dotted along the lake shore, taking advantage of the lagoonal resources, but reliant upon the harborage. The sea incursion of the tenth century A.D. would have made life in this area almost impossible, so the Lower Sebennytic floodplain was abandoned. Sites now lying inside the lake such as Singar (see figure 1, no. 27), Dakhla (see figure 1, no. 25) Kom el-Akhdar (see figure 1, no. 26), Mehgareh (see figure 1, no. 28) and others could have had similar functions as the "lake-side" sites but at high-water would have made been places for low-draught boats to have moored before heading out to larger ships at sea.

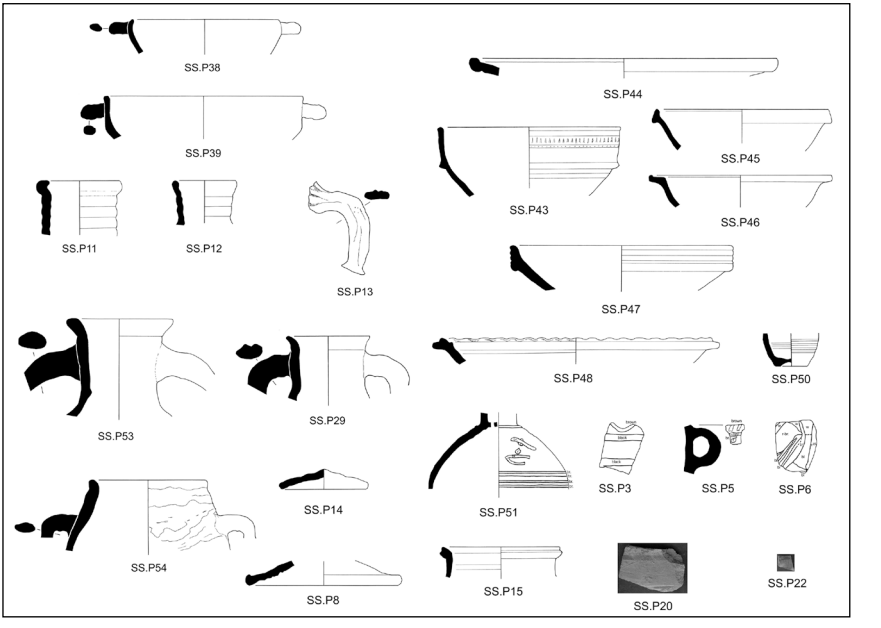

Figure 6. Pottery collected during survey work at Sidi Selim (D. Grigoropoulos).

Mastarua is the latest dated site in the medieval period of this small group, seaward and lakeward looking and only a short connection away to the south to Tell Foqaa and thence into the waterway network onward to al-Fustat or west to Alexandria. Other sites in the EES survey showed some continuation into the ninth and tenth century A.D., namely Sidi Selim (see figure 1, no. 9), Abu Ismail

(see figure 1, no. 21) and Foqaa (see figure 1, no. 10). The dating depended upon the appearance of specific types of material in the ceramic collections, namely glazed wares in kaolin fabrics (see figure 6). In addition, Late Antique, "Coptic", pottery such as white slipped forms and glass vessels, continue from the seventh century into the eighth and ninth century A.D., so that they are evidence of an underlying material culture continuity not of chronology.[79] It seems that, given the early Arab ceramics, there was some form of occupation well after the Arab expansion and into the Fatimid period, when the rural ar-Rif of the Delta was important for its produce and particularly flax and linen into the tenth century A.D.[80]

Ultimately, the changing northern environment also contributed to the decline in settlement. The Sebennytic branch had silted up by the early medieval period, perhaps with some earlier gradual problems such as sea incursions into the area, and it is possible that this led to the eventual real decline of the area as the focus of attention for the main arteries of transport switched to the Rosetta and Damietta branches of the river.[81] Both the Canopic and Sebennytic river branches had been the life blood of the areas through they flowed. So long as there were viable waterways, the towns beside or close to them offered transshipment points through the network of Delta waterways, ensuring fast movement of goods within Egypt and to ports for export. The settlements also offered high ground above the flood plain, upon which towns were situated purposely to sit out the inundation. Additional resources such as fish, reeds and papyrus could have ensured that the inundation months were not unproductive, so that there was the possibility of all-year-round exploitation of the delta environment. The end of the Byzantine boom may have been a gradual phenomenon, noticeable only two centuries into the Islamic period, as is also the case in other parts of the Islamic world.[82] The Islamic period also coincided with the increased unsustainability of the high mound settlements, when supplying them with water became too difficult and people moved down onto cleaner, less crowded sites on new levees. Such displacements of settlements from older mounds has also been noted in Upper Egypt at Tell Edfu[83] as well as Tebtunis-Tutun in the Fayum[84]

79 Grigoropoulos reflecting comments on the difficulty of dating late Antique to Early Arab pottery in general, in Wilson/Grigoropoulos, 2009, p. 282–286.

80 Sanders, 1998, p. 161–165.

81 Arbouille/Stanley, 1990: p. 59–63; Stanley/Warne, 1993.

82 King et al, 1994.

83 Gascoigne, 2005.

84 Keenan, 2003, p. 132–137.

and may be a general phenomenon for the early Islamic period. In the north, populations of old settlements were being displaced to or replaced in new, but nearby places, perhaps in the cases of Sidi Selim, Metoubas and Tell el-Daba-Tida.

7. Conclusion

A stark photograph of the monastery of Saint Damiana around 1903, shows the building standing in a salt-mud flat, with nothing else around it.[85] Flat expanses of water with labyrinthine reed beds of modern Lake Burullus (see figure 7),

Figure 7. The reed beds of Burullus, with a hidden entrance-track to an island in the lake (Photograph by Penelope Wilson).

hiding the remnants of ancient sites evoke a desolate marsh environment prone to human interference and natural stress. Much survives worth archaeological investigation but the prioritisation of that work is difficult due to the nature of the sites involved and modern agricultural and urban pressures. Classification of sites and zones of sites as urban, self-sufficient "monasteries"/farmsteads, military/customs outposts, industrial/warehousing, small scale farms and fisheries shows the diversity of production and activity of the north. The work discussed here presents a small, perhaps imperfect dataset, but set against the framing story

85 Hogarth, 1910, facing p. 100.

of the natural fluvial landscape and from the wider Eastern Mediterranean and North African perspective, it is worth teasing out the strong regional character and cultural context of life in the unique, north Egyptian Delta.

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