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Border Defence in New Kingdom Egypt: The Use of Land Routes in the Strategy of Border Defence to the Northeast and Northwest of the Nile Delta

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Border Defence in New Kingdom Egypt:

The Use of Land Routes in the Strategy of Border Defence to
the Northeast and Northwest of the Nile Delta

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Abbreviations

AASOR	<i>Annual of the American Schools of Oriental Research</i>
ABSA	<i>The Annual of the British School at Athens</i>
MAoI	<i>Morris, The Architecture of Imperialism</i>
ASAE	<i>Annales du Service des Antiquités de l'Égypte</i>
ASAE	<i>Annales du Service des antiquités de l'Égypte</i>
BASOR	<i>Bulletin of the American Schools of Oriental Research</i>
BIFAO	<i>Bulletin de l'Institut Français d'Archéologie Orientale</i>
EA	<i>Egyptian Archaeology (Bulletin of the Egypt Exploration Society)</i>
IEJ	<i>Israel Exploration Journal</i>
JEA	<i>Journal of Egyptian Archaeology</i>
JAEI	<i>Journal of Ancient Egyptian Interconnections</i>
JAOS	<i>Journal of the American Oriental Society</i>
JARCE	<i>Journal of the American Research Center in Egypt</i>
JEMAHS	<i>Journal of Eastern Mediterranean Archaeology and Heritage Studies</i>
JNES	<i>Journal of Near Eastern Studies</i>
JSSEA	<i>Journal of the Society for the Study of Egyptian Antiquities</i>
KRI	<i>Kitchen, Ramesside Inscriptions: Historical and Biographical</i>
LÄ	<i>Helck, Otto and Westendorf, Lexikon der Ägyptologie</i>
MDAIK	<i>Mitteilungen des Deutschen Archäologischen Instituts in Kairo</i>
MHI	<i>Epigraphic Survey, Medinet Habu, Volume I</i>
MHII	<i>Epigraphic Survey, Medinet Habu, Volume II</i>
MHR	<i>Redford, The Medinet Habu Records of the Foreign Wars of Ramesses</i>
SSEA	<i>Society for the Study of Egyptian Antiquities</i>
Urk.	<i>Sethe, Urkunden der 18. Dynastie</i>
Wb.	<i>Erman and Grapow, Wörterbuch der ägyptischen Sprach</i>

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Introduction

In the last 100 years, the New Kingdom Egyptian fortifications of northern Sinai have been reasonably well documented, but this has mostly been in relation to their functions as a tool of empire rather than as part of a defensive strategy. There has been far less study into sites to the northwest of the Nile Delta, or their usage. While the New Kingdom (c.1539–1292 BCE) did see the rise and fall of the Egyptian empire, the extent to which the fortresses along the northeastern and northwestern approaches to the Delta had functions beyond imperial aims or defence of their locality, to a role in a network for the defence of the Egyptian borders, will be explored in this thesis.

The breaching of the borders during the Second Intermediate Period (c. 1700– 1539 BCE) prompted the doubling-down of border defences in the early New Kingdom, with border-fortresses at numerous entry points¹, as well as many fortifications beyond Egypt's borders built or strengthened. In a strategy to control and monitor key border points, Egypt lined the approaches with fortresses to act as deterrents. This method was utilised in the north, where land entry to the Nile Delta from east was closely controlled by a series of fortresses and fortified installations across northern Sinai, from Gaza to the *hym*-fortress of Tjaru. Another such chain of fortresses, less well-developed, may have been present to the northwest to deter the Libyan invasions and migrations which began to dominate Egyptian narratives in the 19th Dynasty.

This fortification of land approaches protected Egypt's borders and interests in a preventative manner, using a fourfold method of defence which included battles, fortresses, troops and a manipulation of the natural environment. Battles won weakened their enemy and entrenched Egyptian supremacy as well as cementing Egyptian control over an area. This control then allowed for the building of fortresses outside Egypt, which acted as a visible occupation of the landscape to remind any rebels of the power and resources available to their opponent. These fortresses were then manned with troops and staff who fulfilled a wide variety of roles, from scouting, monitoring, and recording the local surroundings and communications, to quelling any local resistance, forewarning the Egyptian border-proper in advance of any hostile approaches. Finally, all of these methods were built upon a scheme of utilising the natural environment in a way that most benefitted Egypt, be that using water systems to aid in the strategic placement of fortresses, to blocking off access to resources by occupying the sites through which they could be reached in an effort to hold absolute control in the areas adjacent to their border.

¹ For full list, see E.F. Morris, 2005. *The Architecture of Imperialism: Military Bases and the Evolution of Foreign Policy in Egypt's New Kingdom*. Leiden, 212 (hereafter MAOI)

Borders and New Kingdom expansionism

The borders of Egypt were set by the natural landscape of the country – the Nile is bracketed by deserts to the east and west and, to the south, the First Cataract forms a natural border, as does the Mediterranean to the north. The ‘black land’ of *Kmt* was clearly differentiated from the desert which surrounded it and this fertile black soil offered opportunities for cultivation and relative safety, making it a naturally attractive home for settlement when compared to the inhospitable *dšrt*, ‘red land’. This “river oasis in the desert”² was well protected by the natural barriers of sea and sand in all directions but the south, and safety from this direction was achieved by the subjugation of Lower Nubia to pharaonic rule at the beginning of the Middle Kingdom and the building of fortresses on the riverine approach to Egypt to stop all, except those carrying out trade or official messengers, from crossing the southern border into Egypt³.

Two of the most commonly used terms for border/boundary in Egyptian were *drw* and *t3š*. The first term, *drw*, ‘limits’, was used in reference to the immovable borders, as limited by the natural environment⁴. Although the *drw.w* did not necessarily demarcate state territories, they did make up the traditional borders in Egypt, the extent of *Kmt* as defined by the natural landscape, the land within them being that over which the king held direct dominion as *nb t3 r drw=f*, ‘the lord of the land to its limit’. These ‘limits’ were marked with stelae which both fixed the borders literally but also marked the limits of social or cosmic order⁵. The term was also often used in pharaonic statements of victory over Nubia, with Amenhotep III acquiring “its *drw.w*”⁶, for example, showing his direct dominion over the country.

The second term *t3š*, ‘boundary’⁷, can be associated with the outward actions of Egypt, their empire-building described as *swšh t3š(.w)*, ‘expanding the border(s)’⁸. These *t3š* were political boundaries⁹ to be made (*jrj t3š*) or expanded (*swšh t3š*) and the term has been interpreted as relating to political

² J. Baines and J. Malek, 1980. *Cultural Atlas of Ancient Egypt*. Oxford, 12

³ Berlin stela 14753: 1-6

⁴ L. Török, 2013. “Egypt’s Southern Frontier Revisited” in F. Jesse and C. Vogel (eds), *The Power of Walls: Fortifications in Ancient Northeastern Africa. Proceedings of the international workshop held at the University of Cologne, 4th-7th August 2011*, Köln, 54; Schlott-Schwab, A. 1981. *Die Ausmasse Ägyptens nach altägyptischen Texten*. Wiesbaden, 74

⁵ C.J. Eyre, 1990. “The Semna-Stelae: Quotation, Genre and Function of Literature”, in S. Israelit-Groll (ed.). *Studies in Egyptology: Presented to Miriam Lichtheim. Vol. I*. Jerusalem, 140

⁶ *Urk.* IV, 1292, 3; D. Lorton, 1974. *The Juridical Terminology of International Relations in Egyptian Texts through Dyn XVIII*. Baltimore, 74-75

⁷ R.O. Faulkner, R.O. 1962. *A Concise Dictionary of Middle Egyptian*. Oxford, 294

⁸ J.M. Galán, 1995. *Victory and Border: Terminology Related to Egyptian Imperialism in the XIIIth Dynasty*. Hildesheim, 6; cf. Török, “Egypt’s Southern Frontier”, 54

⁹ Török, “Egypt’s Southern Frontier”, 54

borders, to be drawn and manoeuvred by rulers¹⁰. It has also been translated as the ‘sphere of influence’¹¹, used to mark the extent of Egyptian sway. Under this interpretation they were movable boundaries, expanded via campaigns into foreign lands or political agreements with foreign leaders, and could similarly contract dependent on the political climate¹². Not all states within the Egyptian *t3š* need be directly under Egyptian subjugation – the limits of influence would be counted, by Egyptians, as the furthest point from which they received goods and thus countries which only had trade relations with Egypt could be included within the *t3š* under this interpretation¹³. Regardless of which interpretation one follows, the *t3š* were boundaries beyond Egypt’s traditional borders that marked the edges of the Egyptian sphere, and, ideally, the *t3š* would be pushed as far away as possible, “as far as the sun disk encircles” in commonly used phraseology, in order to bring *m3ʿt* to all regions¹⁴.

The distinction between these two terms, *t3š* and *ḏrw* is exemplified in an inscription of Thutmose I at Karnak in which he praises Amun as the one “who restores the borders (*ḏrw.w*) of the two lands ... who broadens its boundaries (*t3š.w*) and diminishes its bad”¹⁵. Here, Amun is restoring the natural borders of Egypt, as set by the landscape (*ḏrw.w*), and furthering political interests beyond them (*t3š*). Consequently, it was the duty of all kings to emulate those who came before them¹⁶ and campaign in order to reassert or further the *t3š*. As such, although the routes discussed here protected the *ḏrw.w*, they were themselves located outside of Egypt’s borders, within the *t3š.w*, and so it was essential that kings ensured that they were secured as they should not allow the retraction of the *t3š.w*, but more importantly, they should never compromise the safety of the *ḏrw.w*.

Northeastern Expansion

Following the turmoil of the Second Intermediate Period, Sinai and southern Canaan were secured as a buffer zone between Egypt and Syria-Palestine. A pattern of short campaigns into Syria-Palestine to destroy Hyksos towns and collect booty emerged in the reigns of early 18th Dynasty kings, designed to

¹⁰ M. Liverani, 1990. *Prestige and Interest: International relations in the Near East ca. 1600-1100 B.C.* Padova, 29

¹¹ A. Koontz, 2013. “State-Territory and Borders versus Hegemony and its Installations: Imaginations Expressed by the Ancient Egyptians during the Classical periods”, in F. Jesse and C. Vogel (eds). *The Power of Walls - Fortifications in Ancient Northeastern Africa. Proceedings of the International Workshop held at the University of Cologne 4th-7th August 2011.* Köln, 36

¹² Galán, Victory and Border, 118

¹³ J.M. Galán, 2000. “The Egyptian Concept of Frontier”, in L. Milano, S. de Martino, F.M. Fales and G.B. Lanfranchi (eds). *Landscapes: Territories, Frontiers and Horizons in the Ancient Near East. Papers Presented to the XLIV Rencontre Assyriologique Internationale Venezia, 7-11 July 1997. Part II: Cultural Landscapes. (History of the Ancient Near East: Monographs Vol. III/2).* Padova, 22

¹⁴ Galán, “The Egyptian Concept of Frontier”, 25

¹⁵ *Urk.* IV, 268:15–267:1

¹⁶ Senuseret III declared that any true son of the king would strengthen his boundary (*t3š*); J.M.A. Janssen, 1953. “The Stela (Khartoum Museum No. 3) from Uranarti”, *JANES* 12: 1, 54

weaken the area and make clear the consequences for any who dared challenge pharaonic might¹⁷, rather than having permanent occupation in mind¹⁸. During this first phase of New Kingdom activity in Syria-Palestine, it can be argued that Egypt was undertaking a policy of pro-active defence, pre-emptively striking to weaken a region they perceived as a threat by showing their dominance to deter any future ideas of invasion¹⁹. It was during this period that some of the installations of the northern Sinai route were founded, being in place by the time of Thutmose III's first campaign to Megiddo to aid in the swift passage of his army, although at this point, there is little evidence for heavy fortifications towards the eastern end of the road, so it is possible that many were little more than supply stations at this time (see below).

The tactic of pro-active defence to secure the borders soon changed as Egypt realised the boons of booty and tribute to be extracted from Syria-Palestine and desire for expansionism took over²⁰, with the pre-emptive strike at Megiddo under Thutmose III beginning the Egyptian claim to the area²¹. However, while the plunder collected in the early 18th Dynasty Egyptian campaigns into Syria-Palestine was sizable, much was non-renewable and this the rate of gain of luxury goods was unsustainable, with the annals of Thutmose III revealing that over 80% of the gold, silver and horses obtained as booty from his campaigns came from the first²². Therefore, imperial systems of administration needed to be put in place to secure a steady supply of goods, in the form of taxation and tribute, from these lands, although this was done in a rather ad hoc manner of responding to the needs rather than a strictly thought-out policy²³. In addition to taxation, control over Syria-Palestine gave the Egyptians control over the trade routes which ran through this region, granting further access to luxury goods to extract as tribute²⁴, as well as the ability to monitor communications passing along these routes²⁵. In the 19th Dynasty, more fortress sites appeared at strategic cities in Syria-Palestine²⁶, especially along the vital trade routes and harbour sites via which Egypt would receive its tribute²⁷ as Egypt fought to hold on to its empire.

¹⁷ D.B. Redford, 1979. "A Gate Inscription from Karnak and Egyptian Involvement in Western Asia During the Early 28th Dynasty", *JAOS* 99, 273

¹⁸ J.M. Weinstein, 1981. "The Egyptian Empire in Palestine: A Reassessment", *BASOR* 241, 7-8

¹⁹ D.B. Redford, 1992. *Egypt, Canaan and Israel in Ancient Times*. Princeton, 148

²⁰ S. Quirke, 2001. "State Administration", in D.B. Redford (ed.). *The Oxford Encyclopaedia of Ancient Egypt. Vol. 1*. Oxford, 16

²¹ Redford, *JAOS* 99, 273

²² E.F. Morris, 2018. *Ancient Egyptian Imperialism*. Hoboken, 128

²³ Redford, *Egypt, Canaan and Israel*, 199-200

²⁴ M. Müller, 2011. "A View to Kill: Egypt's Grand Strategy in her Northern Empire", in J.J. Shirley, D. Kahn and S. Bar (eds). *Egypt, Canaan and Israel: History, Imperialism, Ideology and Literature: Proceedings of a Conference at the University of Haifa, 3-7 May 2009*. Leiden; Boston, 237

²⁵ Morris, *Imperialism*, 197

²⁶ Redford, *Egypt, Canaan and Israel*, 203

²⁷ Morris, *Imperialism*, 197

Thus, the northern empire of Egypt was born out of a combination of pro-active defence by campaign and the building of a buffer zone between Egypt and powerful states further north, and the demands of paying for these campaigns and filling the coffers of Egypt in a sustainable way. Maintaining the northern Sinai route and its fortresses was essential for this empire but also for protecting Egypt from its northern neighbours, especially in the Ramesside Period, when growing restlessness in Syria-Palestine and the rise in power of the expansionist Hittites began to cause unease for imperial Egypt²⁸. This led to the battles with the Shasu under Seti I and his celebrated renewal of the installations of the route, as well as the careful maintenance of the route in order to ensure that it was able to perform a multitude of functions, be they offensive or defensive.

Northwestern Defence

To the west, Egyptian relationships with the Libyan groups changed in the New Kingdom as well, but not in the sense of Egyptian invasion and expansion. Prior to the 18th Dynasty, the two known groups of Libyans, the Tjemehu and the Tjehenu were mentioned infrequently in the Egyptian record. These groups occupied the region to the west of the Delta and that further south respectively²⁹, but were used generically by the New Kingdom, and even a bastardization of the two terms, “Tjemhenu” was used in a rhetorical text of Ramesses II, showing the lack of care of the Egyptians to keeping these terms straight³⁰. Egypt is presented as the aggressor in interactions, with the Libyan Palette depicting a royal conquest of settlements labelled Tjehenu on one side, while rows of animals and fruit trees line the verso, presumably showing the booty claimed by the king and the Narmer Palette similarly showing defeated Libyans, and these objects from the earliest periods of pharaonic Egypt set the tone for the nature of future interactions between Egyptians and Libyans.

Outside of this, Libyans did not make it into the Egyptian archaeological record as they were not of importance to the royal sphere. Positive trade relations are attested in the New Kingdom, with a jar label from Malqata signifying the presence of “fresh fat of the Meshwesh bulls”³¹, likely the bulls themselves present in Egypt at this time³². Further evidence of Libyans in Egypt comes in the form of captives or prisoners of war, forced to undertake royal construction projects³³ or integrated into the

²⁸ Weinstein, *BASOR* 241, 17-18

²⁹ A.J. Spalinger, 1979. “Some Notes on the Libyans of the Old Kingdom and Later Historical Reflexes”, *SSEA* 9(3), 143

³⁰ K.A. Kitchen, 1990. “The Arrival of the Libyans in Late New Kingdom Egypt”, in A. Leahy (ed.). *Libya and Egypt, c1300-750 BC*. London, 18

³¹ W.C. Hayes, 1951. “Inscriptions from the Palace of Amenhotep III”, *JNES* 10, fig. 10

³² Kitchen, “The Arrival of the Libyans”, 16

³³ Tjehenu captives were used during the construction of Amenhotep III’s mortuary temple at Thebes; *Urk*. IV, 1656:14.

army³⁴. However, by the end of the 18th Dynasty the easy dominance of Egypt over its western neighbours was waning, perhaps echoed in a highly fragmentary painted papyrus from Amarna³⁵ on which an Egyptian is being subdued by Libyan archers, held with a knife at his throat, while a wider battle scene occurs off to the left³⁶.

By the Ramesside Period, Libyans presented a formidable threat to Egypt and appeared on the same scale as other main enemies of Egypt rather than as a token member of the nine bows as the Libyans went from conducting occasional raids on Egypt to supplement their economy³⁷, to launching invasions. Several push and pull factors have been theorised as causing this change in behaviour, such as the appearance of groups like the Sea Peoples in Cyrenaica, pushing the other Libyan groups out³⁸ or the move to a more sedentary lifestyle³⁹ making the Nile Valley more desirable. Another possibility is famine, as Merenptah claimed that the Tjemehu had entered to find food, spending their time in the Delta roaming and filling their stomachs⁴⁰, although this factor is not present in the texts detailing the invasions under Ramesses III⁴¹.

In addition to the battles fought against various Libyan groups by Seti I, Merenptah and Ramesses III, it has been proposed that a system of fortifications was built to the west of the Nile Delta, along the Maryut Coast and on the western Delta fringes⁴². Using methods familiar from northern Sinai, Ramesses II many have responded to the increasingly hostile encounters with Libyan groups in a manner similar to the initial pro-active defence manoeuvres to the northeast by following the battles of his father with the building of fortresses to hold the buffer zone. With certainty, this threat led to the building of Zawiyet Umm el-Rakham⁴³, the westernmost known Egyptian fortress and extent of the *t3ꜥ*, and it is possible that a chain of fortresses ran from here to the Delta, acting as a visible Egyptian occupation of the landscape in the hopes of quelling the Libyan threat.

³⁴ Libyans appear in the personal guard of the king at Amarna; N. de Garis Davies, 1903. *The Rock Tombs of El Amarna Part I. – The Tomb of Meryra*. London, pl. 15

³⁵ EA 74100

³⁶ see L. Schofield and R.B. Parkinson, 1994. "Of Helmets and Heretics: A Possible Egyptian Representation of Mycenaean Warriors on a Papyrus from El-Amarna", *ABSA* 89, 161-163

³⁷ D.L. Johnson, 1973. *Jabal al-Akhdar, Cyrenaica: An Historical Geography of Settlement and Livelihood*. Chicago, 97

³⁸ O. Bates, 1914. *The Eastern Libyans*. London, 226-227; W. Helck, 1986. "Umm er-Raham", *LÄ VI*, 190; K.A. Kitchen, 1982. *Pharaoh Triumphant: The Life and Times of Ramesses II*. Warminster, 215

³⁹ D. O'Connor, 1990. "The Nature of Tjemehu (Libyan) Society in the Later New Kingdom", in A. Leahy (ed.). *Libya and Egypt, c1300-750 BC*. London, 65

⁴⁰ KRI IV, 4:14-15

⁴¹ O'Connor, "The Nature of Tjemehu", 92

⁴² L. Habachi, 1980. "The Military Posts of Ramesses II on the Coastal Road and the Western Part of the Delta", *BIFAO* 80, 13-30; Kitchen, *Pharaoh Triumphant*, 71-72

⁴³ Henceforth ZUR

Retraction of the *ḫš.w*

By the reign of Merenptah, Egyptian control over its northern empire and *ḫš.w* was waning, needing to recover vassal cities in Syria-Palestine from the Sea Peoples or rebellion⁴⁴. The situation got no better by the time of Ramesses III, when invasions and rebellions came from all directions, added to by weakening political certainty at home⁴⁵. The Sea Peoples launched invasions by both land and sea and sacked cities in Syria-Palestine while the Libyans attacked the Delta in waves of migration which could not be stopped. At this time, it seems that many of the fortresses of northern Sinai were abandoned ahead of the unrest in Syria-Palestine which accompanied the end of the Bronze Age⁴⁶ while the forts in Syria-Palestine itself met with a fiery end⁴⁷, and, in the west, ZUR had been abandoned early in the reign of Merenptah ahead of the Libyan invasion in Year 5⁴⁸. As such, the *ḫrw.w* of Egypt became vulnerable to attack.

⁴⁴ *KRI IV*, 12-19

⁴⁵ Weinstein, *BASOR* 241, 22

⁴⁶ Morris, *Imperialism*, 191, 216

⁴⁷ J.M. Weinstein, 1992. "The Collapse of the Egyptian Empire in the Southern Levant", in W.A. Ward, M.S. Joukowsky and P. Astrom (eds). *The Crisis Years: The 12th Century B.C.: From Beyond the Danube to the Tigris*. Dubuque, 143-145

⁴⁸ S. Snape, 2013. "A Stroll along the Corniche? Coastal Routes between the Nile Delta and Cyrenaica in the Late Bronze Age", in F. Förster and H. Riemer (eds). *Desert Road Archaeology in Egypt and Beyond*. Köln, 442

Defending the borders

At the outset of the New Kingdom, it was the *ḏrw.w* which needed to be secured. After the expulsion of the Hyksos, the restoration of Egypt's natural borders and the reestablishment of pharaonic control over the whole of Egypt and in Lower Nubia, these *ḏrw.w* were then protected by a fourfold system of defence: battles, fortresses, troops and the exploitation of natural resources.

Battles

The campaigns by New Kingdom pharaohs into Syria-Palestine were undertaken, at first, as acts of pre-emptive defence of the borders, to ensure that none of its closest neighbours could match the might of Egypt by bringing them under the umbrella of the *ḏš*. However, closer to the Egyptian *ḏrw.w*, battles were fought to defend the borders. The finality of a battle won by the pharaoh was an ultimate sign of his authority over his foes and would act as a deterrent to all who thought about rising up in arms against Egypt in the future. This tactic carried various campaigning armies across Syria-Palestine, many cities surrendering peacefully after seeing the devastation of those before them, both to people and crops, inflicted by the Egyptian army to those who did not comply with the king's demands⁴⁹ and would work the same no matter the locale.

To both the northeast and northwest, battles were undertaken and recorded by Ramesside kings against Egypt's immediate neighbours. The Shasu war of Seti I, as recorded at Karnak, was probably not a response to a serious threat but rather a reassertion of the king's power, made to prevent any obstructions in the passage of later campaigns further north (see below). A similar put-down of Libyan groups by Seti I was also included on this wall at Karnak, the king defeating the much weaker enemy with ease⁵⁰. This, however, was not the case in the wars in the later Ramesside Period against the Libyans and the Sea Peoples. In these cases, it was not the king who had gone out to seek his enemies, but his enemies who had invaded Egypt and needed to be chased away in order to resecure the *ḏrw.w* and restore order to Egypt.

Fortresses

Fortresses are generally built for one of two purposes: defence in times of war or control in times of peace⁵¹. Egypt used them in these ways, employing fortresses throughout its empire to maintain the peace of their occupation. Beyond these basic reasons, fortresses fulfilled a wide range of functions

⁴⁹ Morris, *Imperialism*, 133

⁵⁰ A.J. Spalinger, 1979. "The Northern Wars of Seti I: An Integrative Study", *JARCE* 16, 36

⁵¹ C. Vogel, 2018. "Pharaoh's Might Walls – Egypt's Fortification System in the Third and Second Millennium BC", in A. Ballmer, M. Fernandez-Gotz and D.P. Mieke (eds). *Understanding Ancient Fortifications: Between Regionality and Connectivity*. Oxford, 25-26

in servicing and defending their state. Whether small or large, the existence of a nation's fortress on foreign soil was a tangible presence of their power, acting as a deterrent against unrest, with larger examples functioning as part of an "aggressive performance" rather than the practical application of military control⁵². In addition to being a visible reminder of overlordship, the fortress and its inhabitants would be vital in keeping abreast of the murmurings in their region, tapping into communications and able to report on movements of people and goods, both ordinary and extraordinary, in order to stay ahead of any rebellions. Acting as a sort of "early warning system"⁵³, the fortresses lining the roads to the northeast and northwest ensured that Egypt knew about oncoming hostilities long before they reached the *drw*-border.

More sustainable than constant fighting, the *drw.w* of Egypt were protected and defended by *htm*-fortresses, 'border-fortresses'; at Tjaru, Tjeku, Wadi Hammamat and Elephantine and more, *htm*-fortresses guarded and controlled entrance to the Nile Valley, fully equipped to monitor and record the movement of peoples and goods in and out of Egypt (see below). Meaning "to seal", the verb "*htm*" is used in the titles of New Kingdom border fortresses, signifying their usage as 'sealing' off the Egyptian borders from hostile forces⁵⁴. Alternatively, Valbelle⁵⁵ has suggested that the name originates in the regular use of *htm*-seals employed by the administrators present within these forts. This theory, however, does not explain the differentiation of this type of fort, found at borders or other Egyptian controlled boundaries, from every other fort where administrators were present⁵⁶.

Troops

As the men who fought in the battles of the pharaohs and ensured the functioning of the fortresses, the Egyptian troops were essential in the defence of its borders. The commanders of the host, overseers, Medjay and every other title known from these sites played a vital part in the successful running of the fortress and its surroundings to ensure that it could function correctly. Although the military troops were most important in any physical defensive action which took place, the civilian officials would be essential in ensuring logistical supply demands were met, and it was the scribes and administrative staff who would have carried out the extensive record-keeping processes.

The Border Journal⁵⁷ recorded various personnel movements from Syria-Palestine to the "place where the king (Merenptah) is" over a 10-day period. The location in which this journal had been compiled

⁵² Morris, *Imperialism*, 200

⁵³ Snape, "A Stroll along the Corniche?", 452

⁵⁴ MAol, 808

⁵⁵ D. Vallbelle, 1994. "La (Les) Route(s)-D'Horus," in N. Grimal, C. Berger el Naggar, G. Clerc, (eds), *Hommages à Jean Leclant. (Institut français d'archéologie orientale 106)*. Cairo, 384

⁵⁶ MAol, 808-809

⁵⁷ P. Anastasi III, 6:1-5:9; R.A. Caminos, 1954. *Late-Egyptian Miscellanies*. London, 108

is uncertain, some suggesting Tjaru⁵⁸, while others have argued against this in favour of another of the northern Sinai installations which would have recorded the comings and goings of people along the route⁵⁹. Nevertheless, the text gives information on the extent of Egyptian administration in Syria-Palestine in the early reign of Merenptah⁶⁰ but, more importantly in this context, it shows the extent to which the personnel of the installations in northern Sinai, beyond the *hṯm*-fortress of Tjaru, monitored and recorded everything in their region, every individual who passed was noted, from letter-bearers to emissaries to other imperial officials. It is presumable that this same monitoring and recording system would be in place at all Egyptian installations outside the *ḏrw.w*.

Natural defence

As Egypt's *ḏrw.w* were naturally set by its landscape, with inhospitable territories bordering the Nile Valley on all sides, exploiting the landscape for purposes of border defence was quite easy on many levels. To the east and west of the Nile, deserts rose above the valley, their lack of resources and the difficult terrain forming a natural barrier to any who wished to cross them to get to Egypt. To the north, the Mediterranean Sea prevented the development of communities who might challenge Egypt as was possible in the south. To the south, the First Cataract formed a semi-permeable barrier, bolstered by the fortress of Elephantine, and further fortresses lined the riverine approach from the Middle Kingdom, making penetration of the southern border impossible⁶¹. As such, Egypt was naturally isolated and/or protected in all directions.

In addition to the straight-forward natural defence by virtue of its location, Egypt utilised the way the landscape forced people to travel on the border approaches. Knowing, for example, that to the northeast and northwest, travelling along the coastal plain offered the easiest path to the Delta, the Egyptians placed additional defences along this route which could make travelling harder for any peoples that were not welcome in the Nile Valley. By blocking or monitoring routes at strategic points in the landscape, the Egyptians exploited the natural environment, either stopping hostile forces before they reached the borders, or weakening them by forcing them to take the harder desert route.

One of the most important functions of the fortresses along these routes was the protection and control of resources⁶². In northern Sinai especially, the control of water sources was an essential function of the fortresses and installations, ensuring Egyptian access to these whilst also denying those

⁵⁸ R.A. Caminos, 1977. "Grenzetaagebuch", *LÄ II*, 898

⁵⁹ *MAoI*, 480

⁶⁰ I. Singer, 1988. "Merneptah's Campaign to Canaan and the Egyptian Occupation of the Southern Coastal Plain of Palestine in the Ramesside Period", *BASOR* 269, 4

⁶¹ Vogel, "Pharaoh's Mighty Walls", fig. 4.4

⁶² Vogel, "Pharaoh's Mighty Walls", 27, 30

who were deemed hostile, thus denying them passage across Sinai⁶³. In addition to water, food and other supplies, such as fresh horses or a safe place to camp, would be provisioned at these installations for use by those on official state business to facilitate their travel through the region⁶⁴. Thus, Egypt was able to utilise the limitations of the surrounding environment in their defence, strengthening themselves by being adequately supplied and protected, and weakening any unsanctioned travellers who tried to use these coastal routes to the Delta.

⁶³ MAoI, 384

⁶⁴ Vogel, "Pharaoh's Mighty Walls", 37

Defence along the northeastern approach

Although it was the shortest land route to Canaan, the northern Sinai road was not widely used for the transportation of both good and people before the New Kingdom. The region lacks archaeological settlement evidence from the First Intermediate Period and Middle Kingdom⁶⁵, suggesting that sea travel favoured over this land route for trade and communications⁶⁶. This preference continued into the early 18th Dynasty⁶⁷, as campaigning armies travelled via the sea route, bypassing the hazardous, Shasu-ridden area of northern Sinai. Indeed, the ability to expand north-eastwards at such speed has been attributed to the Egyptian naval forces and their capabilities of moving “large numbers of men and material far north into Syria-Palestine without relying exclusively on the overland route”⁶⁸. Gaza, at the eastern end of the route, had already been subjected to Egyptian interference as early as the joint reign of Hatshepsut and Thutmose III⁶⁹ and, while sea travel had been preferred due to its comparative speed and low cost before⁷⁰, by the reign of Thutmose III, the land route was set become more popular.

By Year 22 of Thutmose III, the king’s army was able to cross the 240 km stretch of unfriendly desert between Tjaru and Gaza in just 10 days⁷¹. While the speedy crossing could have been undertaken with each soldier carrying foodstuffs for 10 days on their backs⁷², matching descriptions of the hardships of a soldier’s life in New Kingdom texts⁷³, it could alternatively indicate that at least some of the installations in northern Sinai were already operational by this reign⁷⁴. This would lessen the burden to both soldiers and donkeys as the installations were able to resupply the troops and offer safe water

⁶⁵ E.D. Oren, 1973. “The Overland Route Between Egypt and Canaan in the Early Bronze Age (Preliminary Report)”, *IEJ* 23, 200

⁶⁶ T. Säve-Söderbergh, 1946. *The Navy of the Eighteenth Egyptian Dynasty*. Leipzig, 33

⁶⁷ E.D. Oren, 2006. “The Establishment of Egyptian Imperial Administration on the “Ways of Horus”: An Archaeological Perspective from North Sinai”, in E. Czerny and M. Bietak (eds). *Timelines: Studies in Honour of Manfred Bietak. Vol. II*. Leuven, 285-286

⁶⁸ J.C. Darnell and C. Manassa, 2007. *Tutankhamun’s Armies: Battle and Conquest during Ancient Egypt’s Late 18th Dynasty*. Hoboken, 66

⁶⁹ Storage jars from Tell el-Ajjul bearing the joint cartouches of Hatshepsut and Thutmose III attest to Egyptian presence in Canaan; W.M.F. Petrie, 1932. *Ancient Gaza II: Tell el-Ajjul*. London, pl. VIII, 117; Oren, “Imperial Administration”, 279-280.

⁷⁰ C.J. Bergoffen, 1991. “Overland Trade in Northern Sinai: The Evidence of the Late Cypriot Pottery”, *BASOR* 284, 71

⁷¹ W.J. Murnane, 1989. “Rhetorical History? The Beginning of Thutmose III’s First Campaign in Western Asia”, *JARCE* 26, 188

⁷² Each man would have to carry 80 loaves of bread to sustain him for 10 days marching and, with an army of some 10,000 men, an accompaniment of 1,000 donkeys would be needed to carry the c. 200,000 jars of beer needed; D.B. Redford, 2003. *The Wars in Syria and Palestine of Thutmose III. (Culture and History of the Ancient Near East 16)*. Leiden, 201.

⁷³ P. Anastasi IV 5:5-6 describes a soldier travelling to Syria-Palestine while “his bread and his water are upon his shoulder like the load of an ass”; Caminos, *Miscellanies*, 169.

⁷⁴ E.D. Oren, 1979. “The Land Bridge Between Asia and Africa: Archaeology of the Northern Sinai up to the Classical period”, in B. Rothenberg (ed.). *Sinai*. Washington, 186; “Imperial Administration”, 279

sources. This is corroborated in the finding of evidence from the mid-18th Dynasty at some archaeological sites of northern Sinai (see below).

In addition to securing access to and providing resources to sanctioned travellers, the construction of this fortified approach to Egypt was a defensive move, to secure a buffer zone against attacks from the nomadic Shasu but, predominantly, against the threat of invasion from the strong northern states. This defensive function became slightly less important in the later 18th and 19th Dynasties with the creation of the northern empire so there was less chance of direct attack to the *ḏrw*-border of Egypt, but it would once again become a major factor in the 20th Dynasty.

Although it is common to find this road referenced as the 'Ways of Horus', this identification is by no means certain and remains a point of contention. This toponym, *w3(w)t hr*, 'Way(s) of Horus', is connected to the northeastern frontier region in the Middle Kingdom Tale of Sinuhe, in which the protagonist returns to Egypt from Retenu via *w3w.t hr* and is met there by a "*ts im nty m-s3 phrt*", "the commander in charge of the patrol"⁷⁵, implying the presence of a fortress. Similarly, the 18th Dynasty Instruction for Merikare⁷⁶ details securing the eastern border towns, including the Way of Horus, to deter migrating Asiatics from approaching Egypt, placing the toponym in the frontier zone. The exact nature of this toponym, however, is not universally accepted and seemingly can be used, with some ambiguity, to refer to a road, a region or a fortress-town. This uncertainty has led Valbelle⁷⁷ to argue that the term referred to a region in the eastern Delta rather than the route across northern Sinai, while other scholars believe that the Ways of Horus, at least by the New Kingdom period, could be used in reference to all three: the region on the northeastern frontier, the fortress at the beginning of the road, Tjaru, and the route across Sinai itself⁷⁸.

Battles

The most easily identifiable acts of defence of the northeastern border and Sinai buffer zone in the New Kingdom were battles, and evidence for these was recorded on monumental scale by the kings that won them. The clearest example was carved into the northern end of the exterior wall of the

⁷⁵ Sinuhe, B 242-247

⁷⁶ P. Leningrad 1116A: 87-90; M. Lichtheim, 1973. *Ancient Egyptian Literature, Vol. 1, The Old and Middle Kingdoms*. Berkley 97

⁷⁷ Valbelle, "La (Les) Route(s)-D'Horus", 379-386; 2021. "One More Time: The-Way(s)-of-Horus", in J. Kamrin, M. Bárta, S. Ikram, M. Lehner and M. Megahed (eds.) *Guardian of Ancient Egypt: Studies for Zahi Hawass III*. Prague, 1607-1612

⁷⁸ Oren, "Imperial Administration", 279; J.K.Hoffmeier and S.O. Moshier, 2014. "'The Ways of Horus': Reconstructing Egypt's East Frontier Defense Network and the Military Road to Canaan in New Kingdom Times", in J.K. Hoffmeier (ed.). *Tell el-Borg I: The 'Dwelling of the Lion' on the Ways of Horus*. Winona Lake, 37, 42

Hypostyle Hall of the Karnak Temple by Seti I⁷⁹. Set against a backdrop of the fortified installations in North Sinai, the Shasu war scene of the bottom left register is the first in the series of six war scenes and is dated to Year 1 of Seti I. Rather than celebrating the creation of fortifications along the route, the Karnak relief commemorated the battles with the Shasu and the renewal of infrastructure⁸⁰ (see below).

In the scene, Seti I and his army fight two battles, one outside of Gaza and another towards the middle of northern Sinai, if the background fortresses are to be read as an accurate reflection of the landscape. Although the relief presents Shasu rebellion as the impetus of the Egyptian engagement⁸¹, it is possible that this was only an excuse – that the battles were fought to clear out Sinai and reassert the Egyptian dominance in this buffer zone and transit region before continuing further north⁸². A connection of these battles with those in Syria-Palestine could be hinted at on the relief itself⁸³ and so, this war was not in response to a realistic threat to Egypt but was a pre-emptive act of ensuring the security of the northeastern border so that the king could march farther into foreign territory.

Instead of describing this as a war, it is perhaps better to refer to it as a series of skirmishes to defend Egypt's interests in Sinai. The Shasu enemy appear severely underprepared, fighting against chariots and archers with axes and spears, or fleeing before they share the same fate as their dying comrades⁸⁴. The battle in the middle of the Sinai road in particular seems to have taken the Shasu by surprise – they unsuccessfully attempt to escape the Egyptian onslaught by fleeing to the hills, the accompanying text portraying that the king had captured them “[down to] the very last one”⁸⁵. This statement is not surprising considering that the Shasu in this scene, while described as having attacked first, are depicted as having no weapons and few remain alive to be captured⁸⁶.

As they were only a minor enemy of Egypt⁸⁷, battles against the Shasu did not aim to protect Egypt from a serious threat but rather to clear the path to the much bigger goals of domination in the northeast – goals which had originally been borne out of a wish to ensure that Egypt would never be

⁷⁹ For full publication of the Seti I war reliefs, see Epigraphic Survey, 1986. *The Battle Reliefs of King Sety I. Reliefs and Inscriptions at Karnak IV. (Oriental Institute Publications 107)*. Chicago. (Hereafter *Battle Reliefs*)

⁸⁰ E.D. Oren, 1987. “The ‘Ways of Horus’ in North Sinai”, in A.F. Rainey (ed.). *Egypt, Israel, Sinai: Archaeological and Historical Relationships in the Biblical Period*. Tel Aviv, 71

⁸¹ KRI I, 9:3-4

⁸² Oren, “The ‘Ways of Horus’”, 71

⁸³ In an earlier phase of decoration, Asiatic prisoners were carved being escorted to the gates of Tjaru, perhaps hinting at the connection between this and more northern wars, before these prisoners became uniformly Shasu in the final version; *Battle Reliefs*, 17-18; W.J. Murnane, 1990. *The Road to Kadesh: A Historical Interpretation of the Battle Reliefs of King Sety I at Karnak*. Chicago, 42

⁸⁴ *Battle Reliefs*, pl. 3

⁸⁵ *Battle Reliefs*, 14, pl. 5

⁸⁶ *Battle Reliefs*, pl. 5

⁸⁷ Spalinger, *JARCE* 16, 30

invaded again. This reaffirmation of pharaonic control, by fighting and renewing fortifications, was the first phase of the increased military presence which was to act as a stabiliser in all zones of the northeastern empire in the Ramesside Period rather than a necessary defensive move against a threatening presence in Sinai itself.

Fortresses

As a backdrop to the battles in the Seti I scene at Karnak, twelve fortresses are depicted and labelled along with their respective water sources (Table 1), presenting the clearest iconographical evidence for their existence along the northern Sinai route. With the exception of Tjaru on the Egyptian border, these fortresses follow a pattern of square, with bastions and crenellations, and either single or double tiered, the latter used to visually designate *dmi.w*, towns. It has been suggested that the twelve sites in the scene could be evenly spaced across the c. 240 km between Tjaru and Gaza, about 15-20 km away from each other, which was one day's march⁸⁸, as was a common pattern for fortresses in the northern empire⁸⁹. This, however, does not concur with archaeological evidence in northern Sinai; there is a higher density of New Kingdom fortress sites in northwestern Sinai compared to further east (see below).

In addition to the Seti I relief at Karnak, the northern Sinai route is well documented in P. Anastasi I⁹⁰. In one of the lessons of this text, Hori, the purported author, details the land of Retjenu, ending by listing the installations of northern Sinai. Beginning: "Come, and [I] will describe [ma]ny things [to] you. Head toward(?) the fortress of the Way[s of Horus]"⁹¹, the text goes on to name the installations whilst berating the recipient's lacking knowledge of the local topography. Mostly, the text gives the name of each installation's region, which were perhaps used as the common names of fortresses⁹² and often align with the names of the wells given in Seti I's relief. In many instances, the installations named by Hori bear remarkable resemblance to those of the Karnak relief, in both name and relative position, with eleven installations identified and only two instances of no discernible relationship found between the name given in the two sources (Seb-el and Aiyanin) (see Table 1).

Archaeologically, Oren's North Sinai Survey identified over 230 sites in the region which could be dated to the New Kingdom by ceramics, 40 with architectural features remaining⁹³ (see fig. 1). These sites

⁸⁸ E.F. Morris, 2017. "Prevention through Deterrence along Egypt's Northeastern Border: Or the Politics of a Weaponized Desert", *JEMAHS* 5, 143

⁸⁹ *MAoI*, 198

⁹⁰ The corpus takes its name after the longest surviving example of the text, P. Anastasi I, and is a satirical letter used for teaching, thought to have been first composed in the reign of Ramesses II; *MAoI*, 403, nt. 168.

⁹¹ P. Anastasi I, 27: 2; E.F. Wente, 1990. *Letters from Ancient Egypt*. Atlanta, 109

⁹² *MAoI*, 432

⁹³ Oren, "The 'Ways of Horus'", 79

were distributed in clusters⁹⁴ and this settlement dispersion gives a rough guide to the course of the northern Sinai route in the New Kingdom. Unfortunately, beyond the northeastern frontier zone, few of these sites have been subjected to archaeological inquiry so little can be said with certainty about the eastern part of the route. Of Oren's sites, only those with fortification evidence, and therefore likely to have been part of the northern Sinai road's defensive capabilities, will be discussed here.

Northeastern frontier zone

The northeastern frontier zone was dominated by the *hnm*-fortress of Tjaru on the *drw*-border, through which all using the northern Sinai route must pass. Seti I's Karnak relief depicts Tjaru as a dual fortress spanning the crocodile-infested *ḥ3 dnit*⁹⁵ and evidence from its archaeological counterpart, Tell Hebua, supports this recreation – Tell Hebua I and II lay on either side of the New Kingdom Pelusiac Nile branch⁹⁶, a distributary which emptied into a paleolagoon, which then opened to the Mediterranean Sea⁹⁷ (see fig. 2). This dual nature echoed the strategy of bipartite fortresses spanning the Nile between the 1st and 3rd cataracts in the Middle Kingdom to prevent the penetration of any enemy ships into Egyptian territory⁹⁸ and many of these had been reoccupied in the early New Kingdom⁹⁹. The emulation of this defensive strategy at Tjaru was likely purposeful, to protect this border entry point via the Pelusiac Nile¹⁰⁰. The importance of this is proved by the title “commander of the river mouths”, given to Paramesses, a commander of Tjaru, on his statue from Karnak¹⁰¹.

The fortress of Tjaru was originally a Hyksos stronghold¹⁰², as proved by the appearance of Second Intermediate Period finds at Hebua¹⁰³. Once Tjaru had been taken by Egypt, the fortresses on either side of the waterway had two phases of New Kingdom fortifications, the first in the early 18th Dynasty and the second dated to the Ramesside Period¹⁰⁴, echoing the development of Egyptian architecture

⁹⁴ Oren, “Imperial Administration”, 280

⁹⁵ *Battle Reliefs*, pl. 6.

⁹⁶ S.O. Moshier, 2014. “The Geological Setting of Tell el-Borg with Implications for Ancient Geography of Northwest Sinai” in J.K. Hoffmeier (ed.). *Tell el-Borg I: The ‘Dwelling of the Lion’ on the Ways of Horus*. Winona Lake, 82

⁹⁷ M. Bietak, 1996. *Avaris: The Capital of the Hyksos*. London, 2

⁹⁸ C. Vogel, 2010. *The Fortifications of Ancient Egypt 3000-1780 BC*. Oxford, 12

⁹⁹ D. Welsby, 2001. *Life on the Desert Edge: 7000 Years of Settlement on the Northern Dongola Reach, Sudan*. London, 554

¹⁰⁰ J.K. Hoffmeier, 2013. “Reconstructing Egypt's Eastern Frontier Defense Network in the New Kingdom (Late Bronze Age)”, in F. Jesse and C. Vogel (eds). *The Power of Walls - Fortifications in Ancient Northeastern Africa. Proceedings of the International Workshop held at the University of Cologne 4th-7th August 2011*. Köln, 186

¹⁰¹ G. Legrain, 1914. “Au pylône d'Harmhabi à Karnak (Xe pylône)”, *ASAE* 14, 30

¹⁰² See the Rhind Mathematical Papyrus colophon; W. Helck, 1975. *Historische-Biographische Texte der 2. Zwischenzeit und Neue Texte der 18. Dynastie*. Wiesbaden, 78

¹⁰³ M. Abd el-Maksoud, 1998. *Tell Heboua (1981-1991)*, 115-116

¹⁰⁴ Abd el-Maksoud, *Tell Heboua*, 36, 35; M. Abd el-Maksoud and D. Valbelle, 2005. “Tell Héboua-Tjarou l'apport de l'épigraphie”, *Revue d'Égyptologie* 61, 2

in the northern empire at the time, and coinciding with the Seti I Karnak relief. At Hebua I, the second phase of fortification increased the enclosure wall thickness from 4-7 m to 14 m, enclosing an area of 120,000 m²¹⁰⁵, an increase to match the 18th Dynasty wall thickness at Hebua II, which enclosed 125,000 m²¹⁰⁶. These thicknesses clearly display the resources put in to Hebua, and subsequently the importance that Tjaru would remain strong in the face of any threat.

To the east of Tjaru lay a paleolagoon¹⁰⁷ (fig. 2), blocking the possibility of fortresses in this direction. Consequently, the next possible fortress placement was to the southeast, and this is where Tell el-Borg is to be found. Only 3.5 km away from Hebua II, it seems very close for the next installation of the route, but this short distance is made necessary by the landscape – a fortress was needed here to secure open land between the paleolagoon and the Ballah Lakes¹⁰⁸ and also the Nile distributary which ran through the site¹⁰⁹. Archaeologically, the fort at el-Borg also shows two phases of fortification, dated to the 18th and 19th Dynasties respectively¹¹⁰ and was c. 79 x 117 m² at its largest, with wall thickness of only 3.6-3.8 m¹¹¹, showing, perhaps, that such a need for strong defensive walls was not felt here as at Tjaru.

Of key interest, archaeological evidence from Tell el-Borg indicates an episode of fiery destruction. Measuring 13.5 m wide and 5 m deep¹¹², little of the Ramesses II gate remains *in situ*, but limestone blocks from its floor are blackened with cracked surfaces, signs of having been burnt¹¹³, perhaps caused by burning timbers from the roof and/or door falling upon them¹¹⁴. Further burnt gate blocks were found around the site¹¹⁵, making it likely that the gateway suffered significant damage by fire before it was dismantled and the blocks reused. Additionally, a fragmented pair of pink granite stelae of Ramesses II have been found, covered in ash and warped by heat¹¹⁶, the scorching pattern on fragments revealing that fire was used to break the stele apart¹¹⁷. Originally set at the end of a pair of

¹⁰⁵ Abd el-Maksoud, *Tell Heboua*, 111, 35

¹⁰⁶ Abd el-Maksoud and Valbelle, *Revue d'Égyptologie* 61, 1

¹⁰⁷ For full discussion of evidence for paleolagoon, see Moshier, "The Geological Setting", 60-82

¹⁰⁸ Hoffmeier, "Reconstructing Egypt's Eastern Frontier", 169

¹⁰⁹ Hoffmeier, "Reconstructing Egypt's Eastern Frontier", 171; J.K. Hoffmeier, J.E. Knudstad, R. Frey, R.A. Bull, and K.A. Kitchen, 2014. "The Fortification area", in J.K. Hoffmeier (ed.). *Tell el-Borg I: The 'Dwelling of the Lion' on the Ways of Horus*. Winona Lake, 119

¹¹⁰ Hoffmeier, "Reconstructing Egypt's Eastern Frontier", 169

¹¹¹ Hoffmeier et al., "The Fortification Area", 194, 207

¹¹² J.K. Hoffmeier J.E. Knudstad, R. Frey, G. Mumford and K.A. Kitchen, 2014. "The Ramesside Period Fort", in J.K. Hoffmeier (ed.). *Tell el-Borg I: The 'Dwelling of the Lion' on the Ways of Horus*. Winona Lake, 282

¹¹³ Hoffmeier et al., "The Ramesside Period Fort", 284

¹¹⁴ J.K. Hoffmeier, 2018. "A Possible Location in Northwest Sinai for the Sea and Land Battles between the Sea Peoples and Ramesses III", *BASOR* 380, 19

¹¹⁵ Hoffmeier, *BASOR* 380, 17

¹¹⁶ Hoffmeier et al., "The Ramesside Period Fort", 285-287

¹¹⁷ E. Brock, 2014. "Excursus I: The Inscribed Granite Stelae Fragments from the Ramesside Fort Gate Area" in J.K. Hoffmeier (ed.). *Tell el-Borg I: The 'Dwelling of the Lion' on the Ways of Horus*. Winona Lake, 329-330

parallel walls extending from the gate, the area surrounding the stelae emplacements also showed signs of burning, with ash found in the same strata as the majority of granite fragments¹¹⁸. Vogel¹¹⁹ has suggested that these stelae at el-Borg would have acted in that same way as stelae at up outside of Nubian fortresses would have done, marking its position as within the *ḥꜥ*. Rather than simply removing and reusing these valuable pink granite stelae, they were deliberately broken apart¹²⁰, showing that the burning of the gateway area was not likely to have been accidental, but was a targeted attack on the site. Further, by attacking these stelae, the perpetrators were directly assaulting the king's borders, destroying the inscriptions which may have claimed the land for Egypt.

Several locations have been suggested for the third fortress in Seti I's Karnak relief, the Migdol of Menmaatre¹²¹, or the Migdol at which Ramesses III celebrated his victory over the Sea Peoples¹²². A possibility is Oren's site T-211, placed at the southern tip of the paleolagoon¹²³ where any invading land forces would have had to pass to gain entry to Egypt¹²⁴. The site yielded New Kingdom pottery sherds on survey and satellite imagery revealed a rectangular feature c. 160 x 240 m² with a gate-like structure on its south side and a possible moat¹²⁵. However, the site is unavailable for excavation, so any theories cannot be confirmed. Regardless, the placement of a third fortress somewhere at the southern end of the paleolagoon would have created a series of three fortresses around the east and south of this water, defending this land route to the Delta, but also protecting access to the Delta from the sea¹²⁶. Hoffmeier¹²⁷ has argued that this network played a key part in the battles with the Sea Peoples in the reign of Ramesses III, both land and sea (see below).

¹¹⁸ Hoffmeier et al., "The Ramesside Period Fort", 288

¹¹⁹ C. Vogel, 2011. "This Far and Not at Step Further! The Ideological Concept of Ancient Egyptian Boundary Stelae", in J.J. Shirley, D. Kahn and S. Bar (eds). *Egypt, Canaan and Israel: History, Imperialism, Ideology and Literature: Proceedings of a Conference at the University of Haifa, 3-7 May 2009*. Leiden; Boston, 334; *Fortifications*, 29

¹²⁰ Brock, "Excursus I", 330

¹²¹ Tell Abyad had been suggested due to its placement on the eastern side of the paleolagoon, but a lack of ceramic evidence showing occupation after Ramesses II make it unlikely that this was the Migdol found in the Ramesses III victory scene at Medinet Habu and the excavators have suggested that the quality of construction and decoration lean more toward a royal residence than a fortress; F. Leclère and D. Valbelle, 2008. "Tell Abyad: A Royal Ramesside Residence", *EA* 32, 32; A. Minault-Gout, N. Favry and N. Licitra, 2012. *Une Résidence Royale Égyptienne: Tell Abyad à l'époque ramesside*. Paris, 113

¹²² *MHI*, pl. 42

¹²³ J.K. Hoffmeier and S.O. Moshier, 2006. "New Paleo-Environmental Evidence from North Sinai to Complement Manfred Bietak's Map of the Eastern Delta and Some Historical Implications," in E. Černý (ed.) *Timelines: Studies in Honour of Manfred Bietak. Vol. 2*. Leuven, 173

¹²⁴ Hoffmeier, *BASOR* 380, 9

¹²⁵ Hoffmeier, *BASOR* 380, 15

¹²⁶ Hoffmeier, "Reconstructing Egypt's Eastern Frontier", 186

¹²⁷ Hoffmeier, *BASOR* 380, 1-25

Eastern installations

There are many sites identified further east before Gaza, but only two certainly contained New Kingdom fortresses and they are significantly smaller than Tell Hebua and Tell el-Borg. The first is within the Bir el-ʿAbd site cluster, 75 km east of Tell Hebua and almost halfway across northern Sinai. With New Kingdom remains covering an area 10 times this size, a late 18th Dynasty, 1,600 m² fortress was found at the centre of site BEA-10, with 3 m thick walls and characteristic Egyptian architecture¹²⁸. Away from this central area, four huge grain silos were found, with a combined estimated capacity of 44,600 litres of grain, later replaced by magazines built nearby¹²⁹. This large grain capacity attests to external supply systems, as Bir el-ʿAbd is not located in an area which would have been able to produce such a quantity of grain¹³⁰. However, these storage magazines and granaries lay outside the fort's enclosure walls, implying that there was not much risk of outside attack at this site¹³¹.

The final site with evidence of New Kingdom Egyptian fortification before Tel el-Ajjul is the cluster of sites found at Haruba. An unfortified 18th Dynasty complex has been excavated at site A-345 and, while it is likely that a fortress existed in its vicinity¹³², the only certain fortress was constructed later, at site A-289. The site may have been built as an unfortified way station under Thutmose III¹³³ but by the reign of Seti I, a true fortress was needed¹³⁴. The fortress at A-289 was square, 50 x 50 m², with 4 m thick walls, bastions, and an eastern gateway flanked by towers¹³⁵, much like the forts depicted on the Seti I Karnak relief. One third of the interior of the enclosure was left unbuilt, possibly left for the pitching of tents and storing of travel paraphernalia, showing that the fort was ready to receive and house a travelling army¹³⁶. Of particular interest, skeletal remains were found buried under the floors of the fortress, both adults and children, and analysis revealed that these skeletons fit anthropomorphically with populations of northern Sinai and southern Canaan, rather than Egypt, possible evidence for local recruitment of troops or other staff¹³⁷.

These more eastern fortresses were abandoned ahead of the anticipated invasion at the closing of the northern empire, and this may have been a defensive strategy. The smaller fortresses and installations to the east would have presented little more than a speedbump to a large invading army, they could

¹²⁸ Oren, "The 'Ways of Horus'", 78

¹²⁹ Oren, "The 'Ways of Horus'", 80

¹³⁰ Oren, "The 'Ways of Horus'", 81

¹³¹ *MAoI*, 296

¹³² E.D. Oren, 1993. "Northern Sinai", in E. Stern (ed.). *The New Encyclopaedia of Archaeological Excavations in the Holy Land IV*. Jerusalem 1390-1

¹³³ Oren, "Northern Sinai", 1390

¹³⁴ *MAoI*, 302

¹³⁵ Oren, "The 'Ways of Horus'", 87; "Northern Sinai", 1390

¹³⁶ Oren "The 'Ways of Horus'", 89

¹³⁷ Oren, "The 'Ways of Horus'", 94-95

be easily overthrown and occupied by a large force¹³⁸. However, by abandoning them, and removing food supplies and disabling water sources, the Egyptians were denying any invading force access to these supplies, making their passage that much more difficult and hopefully weakening the army before it reached Egypt's borders, thus defending the border before they reached it.

Troops

The presence of fortresses in northern Sinai in turn implies the presence of garrisons and staff to man them, control supplies and patrol the desert, and various allusions to these troops and administrative staff are found throughout the New Kingdom. In terms of administration, the earliest known "overseer of the storehouse of the Ways of Horus" was appointed in the reign of Thutmose I¹³⁹ and it is presumed that this post referred to Tjaru as it is so named in P. Anastasi I¹⁴⁰. As the starting point of northeastern campaigns, the storehouses of Tjaru would contain grain supplies for any mustering army and the calculated total grain storage capacity of 178.35 tonnes at Tell Hebua I¹⁴¹ prove the enormity of the role of 'overseer of the storehouse' at this site. In addition to holding the food provisions for an army mustering on the border, Tjaru is also known to have been a weapons store, with P. Lansing 9 of the late 20th Dynasty recording the collecting of "weapons of war" from here by soldiers going on campaign¹⁴². Storage capability is one of the most basic defensive functions of a fortress, but at Tjaru, the supplies were needed for more than just the potential of siege, as mustering armies would also be reliant on the storehouses of Tjaru for their sustenance, and possibly their weaponry, so the title of overseer one of great import both within the fortress but also for the successful beginning of campaigns northwards.

Militarily, one of the most common titles found in conjunction with fortresses in Sinai was the *hry pdt*, "commander of the host". This title ranked second only to 'general' in the Egyptian army¹⁴³ and so it is of little surprise that these men would be trusted to serve on missions beyond their fortress, sent into Syria-Palestine as trusted envoys of the king as well as being in charge of a garrison of men¹⁴⁴. One of the best-known commanders of Tjaru is Neby, who held numerous titles at Tjaru in the reign of Thutmose IV, chief among which was as its mayor, as Neby chose to be remembered on all of his monuments¹⁴⁵. The longest list of Neby's titles at Tjaru is found on Leiden stela V 43, on which he is

¹³⁸ MAoI, 191

¹³⁹ Urk. IV, 547:4

¹⁴⁰ P. Anastasi I, 27:2

¹⁴¹ Abd el-Maksoud, *Tell Heboua*, 114

¹⁴² P. Lansing 9, 9:10

¹⁴³ A.R. Schulman, 1964. *Military Rank, Title and Organization in the Egyptian New Kingdom*. Berlin, 3

¹⁴⁴ KRI II, 79:15-80:1; as escorts to foreign princesses, KRI II, 248:5-253:5; as "royal messengers", Urk. IV, 1635:10-11

¹⁴⁵ G. Björkman, 1974. "Neby, the Mayor of Tjaru in the Reign of Tuthmosis IV", *JARCE* 11, 43

“commander of the host of Tjaru, overseer of the *h_{tm}*-fortress, overseer of the *h_n*-water, mayor of Tjaru” and “great one of the Medjay”¹⁴⁶. From this list, we can see that Neby held both civil and military titles at Tjaru, in charge of all divisions and members of the community here.

Neby emphasised his closeness to the royal court in his titles¹⁴⁷, as did Menna, a commander in the reign of Thutmose II¹⁴⁸. The military was a socially prestigious organisation and so attracted many powerful men who went on to take on nationally important roles, such as Huy, a former commander of Tjaru who became the viceroy of Nubia in the reign of Ramesses II¹⁴⁹, perhaps as a reward for services done when he was stationed at Tjaru. The high standing of these individuals posted to Tjaru also shows the perceived importance of this fortress, that powerful men were given charge of this vital site.

Most notably, future kings may have been commanders of the host at Tjaru. Paramesses, possibly the future Ramesses I¹⁵⁰, was a general under Horemheb and held a wide variety of military titles among which were “commander of the host,” “overseer of the *h_{tm}*-fortress,” and “overseer of the river mouths”¹⁵¹. While the *h_{tm}*-fortress is not explicitly named on his statue from Karnak, the title of “overseer of the river mouths” makes Tjaru a likely candidate. In addition to this, the 400-Year stela of Ramesses II describes Paramesses as “overseer of the *h_{tm}*-fortress of Tjaru”¹⁵² and, although it is not certain that this is the same Paramesses, the similarity of titles, the fact that that he has a son called Seti and that he is worthy of being mentioned on this stela of Ramesses II, it is generally assumed that this Paramesses is indeed Ramesses I¹⁵³. Along with Paramesses, a man named Seti is depicted next to the king Ramesses II on the 400-Year stela, bearing no explicit royal titles, but it is likely that this Seti is Seti I, who is recorded as holding many of the same titles as his father: “commander of the host, overseer of foreign lands, overseer of the *h_{tm}*-fortress of Tjaru, great one of the Medjay”¹⁵⁴.

Although most textual evidence refers only to the personnel of Tjaru, it should be expected that each fortress in northern Sinai had their own *h_{ry p_{dt}}* and garrison who carried out the same activities as

¹⁴⁶ *Urk.* IV, 1635:7-11; 1634:13-14

¹⁴⁷ Neby as “great one in the palace”, *Urk.* IV, 1635:7-11; “royal messenger to all foreign lands, overseer of the house of the king’s wife ... child of the royal nursery”, *Urk.* IV, 1634:6-9.

¹⁴⁸ Menna was a “the confidant of the lord of the two lands, child of the royal nursery” W.M.F. Petrie, 1935. *Shabtis*. London, pl. 8: U.C. 49

¹⁴⁹ *KRI* III, 79:15-80:1

¹⁵⁰ A.J. Spalinger, 2005. *War in Ancient Egypt: The New Kingdom*. Malden, 177

¹⁵¹ *Urk.* IV, 2175 7-16

¹⁵² *KRI* II, 288:8-9

¹⁵³ W.J. Murnane, 1995. “The Kingship of the Nineteenth Dynasty: A Study in the Resilience of an Institution”, in D. O’Connor and D. P. Silverman (eds). *Ancient Egyptian Kingship*. Leiden, 194; P. Brand, 2000. *The Monuments of Seti I: Epigraphic, Historical and Art Historical Analysis*. (*Probleme der Ägyptologie Bd. 16*). Leiden, 339

¹⁵⁴ *KRI* II, 288:7-8

Tjaru, perhaps on a smaller scale or under the supervision of larger fortresses¹⁵⁵. Commanders of the host of wells are also attested¹⁵⁶, suggesting that unfortified resource points were still monitored¹⁵⁷. Although known examples of this are not located along the northern Sinai route, it is likely that smaller, locally used wells were similarly overseen.

As seen above, one of the common titles held by *hry pdt* at Tjaru was that of *wr n Md3yw*, “great one of the Medjay”. By the New Kingdom, the term Medjay did not denote an ethnic group¹⁵⁸, and in the border regions, it was used for the specialised desert scouts who were stationed at fortresses like Tjaru where they monitored the surrounding regions, checking the movements of passers-by and tracking fugitives across the desert. P. Anastasi V contains various communications which mention the Medjay, mostly in reference to the *htm*-fortress at Tjeku, but it is likely that similar goings-on occurred at Tjaru and across the northern Sinai route. In one example, it is stated clearly that the Medjay were in command of the desert and all those who passed through it, “those who are in the desert belong to you ... you are the controller of the Medjay”¹⁵⁹. Another model letter of P. Anastasi V¹⁶⁰ documents the pursuit of two slaves from the palace by the commander of the host of Tjeku, who, upon reaching Tjeku, is told that they fugitives had already passed through and headed to Tjaru, then along the northern Sinai route to the Migdol of Seti Merenptah, where their tracks are found by a *maru*, translated as “groom” or “squire”¹⁶¹, but is likely to have actually been a Medjay-scout¹⁶². This text shows the ability of the desert scouts who could track individuals across large distances, but also the coordination of the different fortresses in their tracing and capture of fugitives.

In addition to titles directly attested, there are three instances of possible royal ship’s names found at sites along the route, stamped into amphorae or beer jars at Bir el-ʿAbd site BEA-10, Haruba site A-343 and Tell el-Borg¹⁶³. Although these could be instances of reuse of containers, their occurrence

¹⁵⁵ The Border Journal (P. Anastasi III, 6:4-9) lists commanders of the host and various officers who belonged to the district of Tjaru, presumably under its administration; Shulman, *Military Rank*, 55.

¹⁵⁶ P. Anastasi V (12:3-4) details the promotion of a commander of the host of an unnamed *hnmt*-well and similarly the title “commander of the host of the well of Ramesses Meryamun, Amenemope” is seen in an inscription at Serabit el-Khadim; A.H. Gardiner, T.E. Peet and E. Černý, 1955. *The Inscriptions of Sinai. Vol. II.* London, 178, 181 and 181.

¹⁵⁷ *MAoI*, 429

¹⁵⁸ T. Säve-Söderbergh and L. Troy, 1991. *New Kingdom Pharaonic Sites: The Finds and the Sites II-III. (The Scandinavian Joint Expedition to Sudanese Nubia). (Volume 5:2).* Uppsala, 209

¹⁵⁹ P. Anastasi V, 27:1-2; Caminos, *Miscellanies*, 270

¹⁶⁰ P. Anastasi V, 19:6-20:3

¹⁶¹ J.E. Hoch, 1994. *Semitic Words in Egyptian Texts of the New Kingdom and Third Intermediate Period.* Princeton, 133

¹⁶² *MAoI*, 242

¹⁶³ O. Goldwasser and E.D. Oren, 2015. “Marine Units on the “Ways of Horus” in the Days of Seti I”, *JAEl* 7, 31-34, figs 11-14

could also imply the presence of naval units along this military route¹⁶⁴, but not necessarily that they were actively carrying out naval activities. In the 18th Dynasty, titles which incorporate *hnyt*, “ship’s crew”¹⁶⁵ were also used in reference to personnel who were land-based, infantry or charioteers, and it is suggested that these were land soldiers who undertook special training that enabled them fulfil duties on an army ship¹⁶⁶. It was also possible in the New Kingdom to have titles which referred to both ships and personnel¹⁶⁷ so these labels could reference a ship’s crew, or a land-based contingent. The possible presence of these units in northern Sinai does not mean that naval ships were being deployed from here, although this is possible at sites like Tell el-Borg, which is known to have been close to several water systems, but it does offer additional insight into the variety of military units who were stationed, or passed, along the route.

Natural defence

Northeastern frontier zone

Paleoenvironmental studies of the northeastern frontier area have concluded that the New Kingdom landscape was very different to that of present day; the coastline was 3-5 m lower¹⁶⁸ and there was a large paleolagoon northeast of the Ballah Lake system, bordered by a dune ridge on the seaward side and open to the sea at the northern end¹⁶⁹ (fig. 2). The New Kingdom Pelusiac Nile branch also ran through this region¹⁷⁰. This watery landscape formed a good natural defence against foot-travellers from the northeast, funnelling them towards well-guarded access points to the Nile delta, but arrivals from the sea also had to be taken into account.

Most prominently, the *drw*-border of Egypt in this region was protected by the *t3 dnit*. Translated as “the dividing-waters” by Gardiner¹⁷¹, the *t3 dnit* dominated the depiction of Tjaru on the Karnak relief where it was filled with crocodiles, lined with reeds and crossed only at Tjaru via a wide bridge¹⁷². The

¹⁶⁴ Goldwasser and Oren, *JAEG* 7, 34

¹⁶⁵ *Wb.* III, 376:2-6

¹⁶⁶ Schulman, *Military Rank*, 19-20, 74

¹⁶⁷ E.g. “Sun of Rulers” in the reign of Ramesses II; see J.J. Clère, 1950. “Nouveaux documents relatifs au culte des colosses de Ramsès II dans le Delta”, *Kêmi: Revue de Philologie et d'Archéologie Égyptiennes et Coptes* 11, 43-44

¹⁶⁸ Hoffmeier and Moshier, “The Ways of Horus”, 44

¹⁶⁹ S.O. Moshier and A. El-Kalani, 2008. “Paleogeography along the Ancient Ways of Horus (Late Bronze Age) in Northwest Sinai, Egypt,” *Geoarchaeology* 23, fig. 1

¹⁷⁰ Bietak, *Avaris*, 2; Moshier and El-Kalani, *Geoarchaeology* 23, 459

¹⁷¹ Gardiner, *JEA* 6, 104

¹⁷² *Battle Reliefs*, pl. 6. The *t3 dnit* may also be depicted in the Tomb of Iwrhya at Saqqara. A block from the tomb shows a scene that depicts soldiers and chariots crossing a crocodile infested waterway, which the excavators have placed on the eastern border of Egypt. However, with little information as yet published, the link between this scene and the northeastern frontier zone and *t3 dnit* remains weak; see O.M. El Aguizy, M.M. Gobashy, A. Metwally, K.S. Soliman and N. El-Hassanin, N. 2020. “The Discovery of the Tomb of the Great Army

word “*dniit*” has been translated as “canal”¹⁷³, but Gardiner¹⁷⁴ translated the phrase as “the dividing-waters” due to the relation of “*dniit*” to the verb “to divide”. In reality, the *t3 dniit* was the Pelusiac Nile branch which ran between Tell Hebua I and II, the archaeological site of Tjaru, over which all passing through the border at this *h₁tm*-fortress would have to cross. As such, the water here is a cosmological boundary dividing Egypt from the chaos beyond, the Egyptian *drw* clearly marked.

The *t3 dniit* was important in the protection of the border, but it was also vital that it be protected itself. Being a distributary of the Nile, if breached, it would offer easy access to the Delta and beyond. To combat this, Egypt used tried and tested riverine strategies from further south to ensure that the mouth of the Pelusiac was adequately protected, preventing naval invasions penetrating the Delta. Further, the Karnak relief shows the waterway to have been teeming with crocodiles, and so by placing Tjaru at its head and undoubtedly monitoring all other official crossing points, Egypt used this natural environment to its fullest to aid them in defending the *drw*-border, using both the landscape and local fauna to deter all but the most desperate from making an illicit crossing for fear of becoming crocodile fodder¹⁷⁵.

Sinai

As a barren region, northern Sinai was another easily utilised layer to add to the defence of Egypt’s borders. Herodotus¹⁷⁶ recorded that the Persians had to “open up this way, by supplying the route with water” after their conquest of Egypt, showing that, without regular water stations, transport through the region was virtually impossible. Similarly, in his crossing of the Sinai, the Assyrian king Esarhaddon emphasised the vitality of wells as the only water source in northern Sinai as “there is no river (all the way)!”¹⁷⁷.

In both the Karnak relief of Seti I and P. Anastasi I, the water sources available at each toponym are emphasised and, further, it is likely that the placement of fortified installations in northern Sinai were partially dictated by the presence of a strategic water source in the vicinity, while other, smaller or less significant, sources were simply monitored¹⁷⁸. The necessity to control these water supplies was obvious, to both deny water to those who would harm Egypt and ensure access to it for those who were

General Iwrhya: A Quasi 3D Electrical Resistivity Tomography (ERT), Saqqara, Giza, Egypt”, *Contributions to Geophysics and Geodesy* 40, 441.

¹⁷³ *Wb.* V, 465:4

¹⁷⁴ Gardiner, *JEA* 6, 104

¹⁷⁵ Morris, *JEMAHS* 5, 136-137

¹⁷⁶ Herodotus, *The Histories III*: 7

¹⁷⁷ L. Oppenheim, 1969. “Babylonian and Assyrian Historical Texts”, in J.B. Prichard (ed.). *Ancient Near Eastern Texts Relating to the Old Testament*. Princeton, 292

¹⁷⁸ *MAoI*, 429

granted passage across Sinai¹⁷⁹, and this natural feature was exploited to its fullest by Egypt in the defence of their border.

As there is little water, the region of northern Sinai is unable to support an agriculture-based economy¹⁸⁰. As has been seen above, archaeological sites of the northern Sinai route were furnished with large facilities for grain supply, with sites such as BEA-10 able to store far more than the carrying capacity of their locality. This indicates that at least some of the subsistence of the communities at these sites relied on external supply, be it from Egypt or from taxed grain in Canaan¹⁸¹. Just as with water, these supplies would have been partly used to restore the stock of travellers along the road, especially campaigning armies, made easier by the presence of local industrial centres, such as that of Haruba site A-345, which could have produced Egyptian-style, standardised ceramic vessels to ease the partitioning of rations to troops¹⁸². Whilst helping some along the route, these provisions would, of course, be denied to any unsanctioned persons who travelled to or from Egypt. If they managed to avoid detection and detainment, single or small groups could probably cross northern Sinai with a few animals to carry the necessary supplies, but a larger force would need an extremely large number of donkeys to carry their supplies¹⁸³ and their crossing would be slow. By controlling access to food and water along this passage, Egypt in effect controlled who could utilise the road and therefore who could approach Egypt's border.

Defence in action

Although there is no certain evidence, it is possible that some of the fortresses of northern Sinai were directly involved in the battles with the Sea Peoples in the reign of Ramesses III, which would, if true, clearly display the defensive nature of the installations along the route, especially those closest to the Egyptian border. There were two battles with the Sea Peoples during the war in the reign of Ramesses III, as recorded on the exterior wall of the king's mortuary temple at Medinet Habu¹⁸⁴, one on land and one in the sea, in which the king battles to "trample down every foreign land who has transgressed his *ḥꜥ*"¹⁸⁵. While the locations and timings of these battles have long been debated, it is generally accepted that the naval battle took place somewhere in the eastern Delta, as it is described as having been at the *rw-ḥꜥ(w)t*, the "river mouths" on five occasions at Medinet Habu¹⁸⁶. The close proximity of the phrases "I organized my frontier in Djahy" and "I caused the Nile mouth(s) to be prepared",

¹⁷⁹ MAoI, 626

¹⁸⁰ Oren, "Imperial Administration", 289

¹⁸¹ Bergoffen, *BASOR* 284, 71

¹⁸² Oren, "Northern Sinai", 1391; MAoI, 301

¹⁸³ see Redford, *Wars in Syria and Palestine*, 201; Spalinger, *War in Ancient Egypt*, 36-38

¹⁸⁴ *MHI*, pls. 29-44

¹⁸⁵ *KRI* V, 30:5

¹⁸⁶ *KRI* V, 25:6; 32:7; 33:6; 40:8; 40:15-41:1

referring to land and sea respectively, in the Great Inscription of Year 8 has also prompted some scholars to place the land and sea battles in similar close proximity geographically¹⁸⁷.

The Pelusiac Nile branch was the most easterly distributary and so has long been thought of as the most likely entry point of the Sea Peoples' planned sea invasion¹⁸⁸. The northeastern frontier of Egypt was rife with water systems, with the Pelusiac Nile and other small distributaries, such as that at Tell el-Borg, emptying into a paleolagoon, which in turn was open to the Mediterranean. As such, these "river mouths" from which the Delta could be penetrated could only be accessed from the paleolagoon, which was itself surrounded protected by a series of New Kingdom fortresses¹⁸⁹. Consequently, it has been suggested that this paleolagoon was the location of the attempted naval invasion by the Sea Peoples¹⁹⁰.

This placement could be supported by the evidence of burning of the Ramesside gate at Tell el-Borg (see above). Although the majority of cartouches found on the inscribed blocks of the gateway belonged to Ramesses II, there were instances of Ramesses III¹⁹¹, who was the latest king on gate fragments¹⁹² and, similarly, ceramic and epigraphic evidence do not support that the fortress was occupied after the 20th Dynasty¹⁹³. This places the destruction of the gateway between the reign of Ramesses III and the end of the 20th Dynasty, making the battles with the Sea Peoples a candidate¹⁹⁴ if the paleolagoon is accepted as the location of the sea battle.

To destroy the gate, Hoffmeier¹⁹⁵ has posited that a hostile ship could have slipped into the Tell el-Borg distributary and struck at the fortress as part of the Sea Peoples naval battle. While the manoeuvre would not have been as simple as he described¹⁹⁶, this is by no means out of the realm of possibility. Another possibility is that a break-away group from the land battle targeted el-Borg, if the

¹⁸⁷ R. Stadelmann, 1984. "Seevölker", *LÄ V*, 817; M. Bietak, 1985. "Response to T. Dothan", in J. Amitai (ed.). *Biblical Archaeology Today: Proceedings of the International Congress on Biblical Archaeology, Jerusalem, April 1984*. Jerusalem 217; Hoffmeier, *BASOR 380*, 10

¹⁸⁸ Stadelmann, *LÄ V*, 817; D.B. O'Connor, 2000. "The Sea Peoples and the Egyptian Sources" in E.D. Oren (ed.). *The Sea Peoples and Their World: A Reassessment. (University Museum Monograph 108). (University Museum Symposium Series 11)*. Philadelphia, 100; D.B. Redford, 2000. "Egypt and Western Asia in the Late New Kingdom: An Overview", in E.D. Oren (ed.). *The Sea Peoples and Their World: A Reassessment. (University Museum Monograph 108). (University Museum Symposium Series 11)*. Philadelphia, 13; Hoffmeier, *BASOR 380*, 10-11

¹⁸⁹ Hoffmeier and Moshier, "New Paleo-Environmental Evidence", 173

¹⁹⁰ Hoffmeier, "Reconstructing Egypt's Eastern Frontier", 190; Hoffmeier, *BASOR 380*, 11

¹⁹¹ Hoffmeier et al., "The Ramesside Period Fort", 298-299

¹⁹² Hoffmeier, *BASOR 380*, 18

¹⁹³ Hoffmeier et al., "The Ramesside Period Fort", 326

¹⁹⁴ Hoffmeier, *JARCE 41*, 102

¹⁹⁵ Hoffmeier, *BASOR 380*, 20

¹⁹⁶ As the gateway of Tell el-Borg faced east-south-east, and the Nile distributary was located to the north and west of the fortress, a land party must have been involved to go around the side of the fortress to strike

sea and land battles with the Sea Peoples are to be located in the same vicinity¹⁹⁷. It is, of course, possible that a smaller attack was the cause of this destruction, perhaps the Shasu, who are known to have still been troubling in the reign of Ramesses III¹⁹⁸, especially due to the deliberate attacking of the granite stele which marked the Egyptian claim to the land (see above).

There are only two toponyms mentioned in texts concerning the battles with the Sea Peoples. The first is Djahy, a general term for the southern Levant region¹⁹⁹ which included northern Sinai up to the northeastern frontier of Egypt²⁰⁰. The second, the only specific term, is the “Migdol of Ramesses, ruler of Heliopolis”, where the king celebrated his victories after the battles²⁰¹. The lack of other geographical locators in the scene has been argued to be an indication that this fortress was used as a visual locator for the viewer²⁰², or even that it was located in the vicinity of the land battle²⁰³. As such, locating the “Migdol of Ramesses” would reveal the region in which the land battle took place. The third fortress of Seti I’s Karnak Shasu war scene is similarly labelled the “Migdol of Menmaatre” and it seems reasonable to associate this with the Migdol of the Medinet Habu scene if one accepts that the battles took place in and around the paleolagoon on the northeastern frontier. As seen above, the physical location of this fortress is uncertain, but was likely somewhere on the southern or eastern shores of the lagoon²⁰⁴ and as such, from a watch tower of the Migdol, the lagoon and the surrounding land could be monitored²⁰⁵. If Ramesses III was present at this fort during the battles, it would make this a suitable location for the victory celebrations also.

Summary

Egyptian control over northern Sinai was essential in the defence of its northeastern border and was maintained by means of direct and indirect defence, brought together in the multifunctional road which crossed the landscape between Tjaru and Gaza and employed multiple layers of defence in an effort to prevent hostile forces from reaching Egypt’s *ḏrw*-border at Tjaru. After using battles to clear out the region, to act as a buffer zone between Egypt and Syria-Palestine, the fortresses of the route facilitated the policy of pro-active defence, suppressing the region so that its people did not have the ability to launch any attacks or invasions on Egypt²⁰⁶. They were also a visible marker in the landscape,

¹⁹⁷ Stadelmann, *LÄ V*, 817; Bietak, “Response”, 217

¹⁹⁸ The Great Harris Papyrus 76:10 records raids undertaken by Ramesses III against the Shasu

¹⁹⁹ A.F. Rainey and S. Notley, 2006. *The Sacred Bridge: Carta’s Atlas of the Biblical World*. Jerusalem, 68-69

²⁰⁰ Hoffmeier, *BASOR 380*, 4

²⁰¹ *MHI*, pl. 42

²⁰² O’Connor, “The Sea Peoples and the Egyptian Sources”, 100

²⁰³ Redford, “Egypt and Western Asia”, 13

²⁰⁴ J.K. Hoffmeier, 2019. “The Curious Phenomenon of Moving Military Sites on Egypt’s Eastern Frontier”, *JSSEA 45*, 91-96

²⁰⁵ Hoffmeier, *BASOR 380*, 17

²⁰⁶ Redford, *Egypt, Canaan and Israel*, 148

acting almost as way markers, indicating the path of the road but also warning of the approach to the Egyptian border²⁰⁷. The staff within the fortresses acted as guards of this extended border zone, monitoring and recording anyone of interest and chasing down any who were not permitted across the border, in or out²⁰⁸.

By making use of the natural conditions of northern Sinai, Egypt was able to add further layers to its defences. Beyond controlling water sources and therefore who could access them, Egypt formed their defence of the border in the northeastern frontier zone around the natural environment itself, placing fortresses at strategic locations and ensuring that any vulnerabilities were well protected. The route as it approached this border made further use of the watery landscape by using the paleolagoon as a barrier to any using the land route, forcing them to circumnavigate the water and pass numerous fortresses which would present opposition. While the paleolagoon itself presented opportunities for penetration to the Nile delta by ship, as possibly seen in the reign of Ramesses III, these were sealed off by the provision of fortresses at any points of weakness.

²⁰⁷ see Vogel, "This Far and Not at Step Further!", 324

²⁰⁸ see P. Anastasi V, 19:6-20:3

Defence along the Northwestern approach

Before the Ramesside Period, Libya was considered by Egypt as an area largely “devoid of opportunity or threat”²⁰⁹ and the nature of Egyptian interaction with Libyan groups was of low-level trade with the occasional assertion of pharaonic dominance. Egypt felt no need to expand into Libya, nor to maintain a buffer zone between them²¹⁰; it lacked the resources or threatening presence of Nubia or Syria-Palestine to attract Egyptian attention and the Western Desert had held back any significant movements eastwards. The Egyptian data corpus relating to Egyptian-Libyan interactions is much smaller than that of Nubia or Syria-Palestine, simply because, before the 18th Dynasty, Libya did not appear on the Egyptian radar due to its lack of remarkability.

These circumstances, however, changed dramatically in the Ramesside Period, with Egyptian temple scenes now depicting not only the traditional smiting of Libyans, but battles of sizes comparable with those in south or northeast. In response to a rising threat level, it is thought that Ramesside kings, in particular Ramesses II, may have constructed a chain of fortresses to protect the northwestern entry to Egypt, allocating huge resources and manpower to build at sites such as ZUR, proving the seriousness of the threat level felt. Although there is little evidence to indicate this entry route’s usage in a defensive border strategy, what does remain could indicate what may once have been, or what would have become a unified chain had the route had the chance to flourish.

Battles

In the Ramesside Period, large-scale battles dominated the narrative between Egypt and Libya; the royal expressions of supremacy that had painted the Libyans as passive receivers of pharaonic punishments in both text and art fell to the wayside as the Mehwesh and Libu took centre stage and chaos ensued. This change marked the switch from occasional Egyptian offensives to the need to launch defensive action against Libyans encroaching on Egyptian territory, reaching far past the *ḏrw*-border and into the heart of Egypt.

On Seti I’s war relief series at Karnak, the second register on the right shows a campaign in which the king defeated Libyans (Tjemehu and Tjehenu) at an undisclosed location and brought them back as captives to present before the Theban Triad²¹¹. While this is the only war of Seti I not fought to the east of Egypt commemorated at Karnak, it offers little insight into the actual battle, lacking the

²⁰⁹ S. Snape, 2010. “Vor der Kaserne: External Supply and Self-Sufficiency at Zawiyet Umm el-Rakham”, in M. Bietak, E. Czerny and I. Forstner-Muller (eds). *Cities and Urbanism in Ancient Egypt: Papers from a Workshop in November 2008 at the Austrian Academy of Sciences*. Vienna, 271

²¹⁰ S. Snape, 2003, “The emergence of Libya on the horizon of Egypt”, in D. O’Connor and S. Quirke (eds). *Mysterious Lands*. London, 94

²¹¹ *Battle Reliefs*, pls. 27-32

individuality and descriptive nature of the other battle scenes²¹². Regardless, while it may not have had the same impact as the eastern wars, the appearance of this Libyan war under Seti I marked the beginning of large-scale hostilities between Egypt and Libya.

There were no overt references to battles with Libya under Ramesses II, only the capturing of Libyans, forcing them to resettle away from Libya²¹³, or to work as construction forces²¹⁴ or soldiers²¹⁵. Explicit references to Libyan wars appeared again in the reign of Merenptah, who faced an invasion in his fifth year. Although incomplete, the Great Karnak Inscription of Merenptah recorded a formal narrative of the wars with the Libyans and Sea Peoples of Year 5 of this king's reign on the inner eastern wall of the court before the 7th pylon at the Temple of Karnak. This war is known from three other sources, the Triumph Hymn of Merenptah, the Libyan war stela of Kom el-Ahmar and an inscribed fragmentary granite column in the Cairo Museum, and by combining all of these, a clearer picture of the events, from an Egyptian point of view, can be gleaned.

An alliance of Libyans and sea-raiding groups, led by the "wretched chief of the enemies of Libu, Merey"²¹⁶, was able to penetrate the Delta region, reaching the fields of Perire at the western border²¹⁷. Making up the Libyan forces alongside the Libu and sea-raiding allies, Meshwesh and Kehek are mentioned²¹⁸, although the former only in the taking of their bronze swords as booty by the Egyptians, which does not necessarily indicate the direct involvement of their warriors in this battle²¹⁹. The invaders are recorded as having come to Egypt to plunder the *mnw*-fortresses and became a threat to both Heliopolis and Memphis before the king responded with violence²²⁰. This threat to the Memphite area indicates that the invaders penetrated the heart of the Nile Valley, clearly displaying why defensive action was necessary to push them back outside the border.

The battle between the allied Libyan forces and Merenptah took place at Perire, *Pr-irr*, but no further indications are offered as to its geographical location, nor do any other known attestations of this

²¹² At one point in the text, Retjenu is mentioned rather than Libya, perhaps an indication of the lack of impact this war, and therefore this text, had on the scribes planning the text, lacking memorability. It could also be the case that this inclusion of Retjenu was a deliberate act to relatively date this episode, placing it after the in Syria-Palestine above it, as is seen elsewhere in the battle reliefs; *Battle Reliefs*, 101, 110, pls 32, 35; Spalinger, *JARCE 16*, 34; Murnane, *Road to Kadesh*, 99

²¹³ *KRI II*, 206:15-16

²¹⁴ *KRI III*, 95:10

²¹⁵ *KRI II*, 289:15-16; C. Manassa, 2003. *The Great Karnak Inscription of Merneptah: Grand Strategy in the 13th Century BC. (Yale Egyptological Studies 5)*. New Haven, 89 (hereafter Manassa, *GKIM*)

²¹⁶ *KRI IV*, 2:1-10

²¹⁷ Manassa, *GKIM*, 23

²¹⁸ *KRI IV*, 9:4; 9:1

²¹⁹ *MAoI*, 616, n. 794

²²⁰ *KRI IV*, 4:8-10

toponym. Likewise, the fortress of “Merenptah, contented-with-Maat, he-who-surrounds-Tjehenu”²²¹ located in Perire according to the records, is also unknown²²². Given that the prisoners captured were executed at a place “on the south of Memphis”, conclusions have been drawn that the battle was fought close to the capital²²³. That the battle may have taken place so close to the heart of Egypt again shows that this was a, somewhat late, defence of the Egyptian territory against those who had infringed on the border.

The battle itself took no more than six hours²²⁴, Merenptah attaining victory over the estimated Libyan army of over 30,500 men²²⁵ in this short time frame. The remaining Libyans then fled and were pursued as far as *wꜣt-ṯꜣ*²²⁶, the beginning of the land²²⁷. This toponym had been used to indicate the farthest reaches of Egyptian influence before true foreign land took over²²⁸ and could perhaps be equated with the western extent of the *ṯꜣš*. The chasing of the defeated Libyans this far, until they were outside of all land of Egyptian interest, shows the investment of Egyptian troops in making sure that no Libyans remained within their territory, defending Egypt to the extreme reaches of their control.

Under Ramesses III, two wars with the Libyans were fought, in Year 5 and Year 11, as recorded at his mortuary temple at Medinet Habu. The scenes of the first Libyan war wrap around the external northwestern corner of the temple, the first three on the rear (west) side, the last three on the north side wall²²⁹. The Libyan groups of the Libu, Meshwesh and Seped had infringed upon the frontier of Egypt and so the king set out to repel this invasion²³⁰. After a battle in which the king emerged victorious, the plunder lists record hands and phalli, indicating more than 22,000 dead²³¹, which is likely an exaggeration²³², but gives an idea of the scale of the battle that took place.

²²¹ KRI IV, 8:3-4; 22:3-4

²²² Manassa, *GKIM*, 26-27

²²³ B.G. Davis, 2014. *Ramesside Inscriptions, Volume IV: Merenptah and the Late Nineteenth Dynasty, Translated and Annotated: Notes and Comments*. Malden, 6

²²⁴ KRI IV, 5: 13-6:4

²²⁵ O'Connor, “The Nature of Tjemehu”, 44

²²⁶ KRI IV, 22:3-4

²²⁷ Translated after *MAoI*, 631. The phrase was more commonly used in Nubia where it is translated as “äußerster Süden”; *Wb. I*, 298:3 or “top of the earth” L.H. Lesko, 2002. *A Dictionary of Late Egyptian (Second Edition) Vol. I*. Providence, 98.

²²⁸ J.H. Breasted, 1988. *Ancient Records of Egypt III. (Reprint 1906 publication)*. London, 248, nt. C; D.B. O'Connor, 1982. “Egypt. 1552-664 B.C.”, in J.D. Clark (ed.). *The Cambridge History of Africa. Volume 1: From the Earliest Times to c.500 B.C.* Cambridge, 921; *MAoI*, 631; cf. *Wb. I*, 298:4

²²⁹ *MHI*, pls. 13-28

²³⁰ KRI V, 12:3-10

²³¹ KRI V, 15:10-15

²³² O'Connor, “Egypt. 1552-664 B.C.”, 919

The Year 11 clash with the Libyans²³³ saw Ramesses III making a carnage of slaughtered Libyans across 8 *iteru*²³⁴, over 80 km²³⁵. This enemy was led by the Meshwesh chief Mesher, son of Kaper²³⁶, and was made up of Meshwesh, Libu and the smaller groups of the Isbetu, Qeqeshu, Sheytepu, Hesu, and Beqenu²³⁷. In the plunder list of this episode, alongside enemy warriors, wives, maidens and girls are included in the total of 558 women²³⁸ as well as over 40,000 animals²³⁹, offering a glimpse into the impetus of this invasion into Egypt – that of migration rather than straight-forward aggression²⁴⁰, especially when compared to the invasion in the reign of Merenptah, when the only women captured were the wives of Meresy²⁴¹.

The increased frequency and larger scale of hostile meetings of Egyptians and the Libyan groups marked the changing tide of relations and rise in threat to the west of Egypt. These battles were fought to maintain Egyptian dominance in the Nile Valley, often fought on Egyptian territory to try and push back the eastward encroachment of Libyan peoples, defending Egyptian *drw.w* in a very physical manner.

Fortresses

During the reign of Ramesses II, it is possible that a series of fortresses were erected along the edge of the western Delta and coastal plain out towards Libya²⁴². Perhaps motivated by his participation in the Libyan battle under his father²⁴³, it is supposed that Ramesses II thought it necessary to protect the western coastal approach to Egypt by fortifying this route in a manner similar to the road across northern Sinai²⁴⁴. After the Libyan war of Seti I, the area to the west of the Delta and along the coast had been cleared of opposition, in much the same way as the Shasu war did in northern Sinai. With the region under secure Egyptian control, it was then possible to build fortresses on this foreign

²³³ *MHII*, pls. 62, 68-86

²³⁴ *KRI V*, 43:10-12; 50:3-4

²³⁵ An *iter* was 20,000 cubits, about 10.5 km; M. Clagett, 1999. *Ancient Egyptian Science: A Source Book. (Vol. 3: Ancient Egyptian Mathematics)*. Philadelphia, 7.

²³⁶ *KRI V*, 50:1

²³⁷ Papyrus Harris I, 76:11-77:1

²³⁸ *KRI V*, 53:1-7

²³⁹ *KRI V*, 54:1-9

²⁴⁰ O'Connor, "Egypt. 1552-664 B.C.", 923

²⁴¹ *KRI IV*, 2:5-10

²⁴² Kitchen, "The Arrival of the Libyans", 18

²⁴³ Ramesses II inserted himself into the Karnak war scene of Seti I, possibly indicating his presence at the battle, and he is also seen smiting Libyans and described as having slain Tjehenu at the temple of Beit el-Wali, which he commissioned before he ascended to the throne²⁴³; *Battle Reliefs*, 87; *KRI II*, 196:14; W.J.f Murnane, 1975. "The Earlier Reign of Ramesses II and His Coregency with Sety I", *JNES* 34, 161-162; A.J. Spalinger, 1979. "Traces of the Early Career of Ramesses II", *JNES* 38, 272-274

²⁴⁴ *MAOI*, 615

land²⁴⁵, and it is likely that at least some sites had been planned under Seti I, but did not reach completion until the early years of Ramesses II²⁴⁶.

Textual fortresses

There is no equivalent scene to the Karnak relief of Seti I which clearly maps out a series of fortresses located to the northwest of Egypt, but several individual fortresses are mentioned and depicted throughout Ramesside reliefs. From these texts and reliefs, their usage in the defence of Egypt during the various battles is obvious, with archers depicted atop the walls of forts, firing on the enemy below (see below). Unfortunately, all of the fortresses and toponyms known lack geographically identifying information, so these names could belong to any of the archaeologically identified sites of the western Delta or coast, or, likewise, to undiscovered sites.

One of the motivations for the Libyan incursion under Merenptah identified in textual sources was to plunder the *mnnw*-fortresses²⁴⁷, presumably those in the western Delta, in the vicinity of Perire. The existence of this passages suggests that there were numerous *mnnw*-fortresses, interpreted as “fortress-towns” by Morris²⁴⁸, present in western Egypt, some of which must have still been operational in the reign of Merenptah (see below). To some extent, this could also be seen as a confirmation of the use of fortresses to defend the border, that the Libyans wanted to remove them to ease their passage westwards.

The clearest evidence for the building of multiple fortresses in response to the Libyan threat comes from ZUR, where an inscription from the gateway doorjamb gateway alluded to the existence of several “... *mnnw*-fortresses upon the hill country of the Tjemehu and the wells within them...”²⁴⁹. Whilst the surrounding context of this phrase is unknown, it does the existence of multiple *mnnw*-fortresses in Tjemehu, the land to the west of the Delta. Other inscriptions of the reign of Ramesses II mentioning *mnnw*-fortresses include that of the Tanis III stela which refers to “*mnnw*-fortresses, equipped with everything...”²⁵⁰ and, although *mnnw* had been used regularly as a term for Egyptian fortresses in Nubia at this time, Morris²⁵¹ believes that it is the western *mnnw* which are referred to on this stela, as the feat of provisioning them was more worthy of being commemorated in

²⁴⁵ Kitchen, “The Arrival of the Libyans”, 18

²⁴⁶ S. Snape and P. Wilson, 2008. *Zawiyet Umm el-Rakham I: The Temple and Chapels*. Bolton, 129 (hereafter ZUR I)

²⁴⁷ KRI IV, 4:8-10

²⁴⁸ MAOI, 623

²⁴⁹ KRI II, 475:10-14; S. Snape, 1998. “Walls, Wells and Wandering Merchants: Egyptian Control of Marmarica in the Late Bronze Age”, in C. Eyre (ed.). *Proceedings of the Seventh International Congress of Egyptologists, Cambridge 3-9 September 1995. (Orientalia Lovaniensia analectica 82)*. Leuven 1083

²⁵⁰ KRI II, 292:8-9

²⁵¹ MAOI, 628

comparison with Nubian examples. This, however, is not adequate proof for this assignment of location and very few confirmed fortress sites have been located archaeologically to support the existence of a fortified chain following the coast to the Egyptian border.

In addition to these general references to *mnw*-fortresses, two are specifically named in the records. The fleeing Libu leader, Merer, was spotted passing “the *mnw*-fortress of the west”, as reported back to the king by the fort’s commander²⁵². Some have equated the *mnw* of the west with ZUR, as this is the most westerly known fortress²⁵³. However, this theory is damaged by the lack of knowledge of the ancient name of ZUR beyond the general inscription of *mnw*-fortresses on its gate (see below) and by the absence of archaeological evidence of Egyptian occupation of the site after the reign of Ramesses; it was probably abandoned in the very early years of Merenptah²⁵⁴.

The records of the two Libyan wars of Ramesses III also contain references to fortresses. At the end of the first war, the captured Libu and Meshwesh were gathered “in the vicinity of this town (called) Usermaatre-Meryamun-repels-the-Tjemehu”²⁵⁵ and a fortress is depicted to the left of the scene²⁵⁶. This fortress is depicted in much the same manner as the *dmi.w* of the Seti I Shasu wars relief at Karnak, double-tiered with a central gateway, crenelated rooftops and towers at the centre and corners. In the second scene of this second Libyan war of Ramesses III²⁵⁷, the king engaged in battle with the Libyans, slaughtering the enemy in the land of the Meshwesh from “the town which is upon the mountain of *wpt*, to the town of *hwt-š*”²⁵⁸. Both of these towns are depicted as fortresses in the relief, appearing single-tiered with central gateways and crenelated tops, both housing archers who are engaged in shooting the enemy below them²⁵⁹.

Merenptah had also chased his Libyan enemies to “the mountain of the beginning-of-the-land (*wpt*)”²⁶⁰, though to indicate the furthest reaches of Egyptian dominion, and the second toponym of the phrase, *hwt-š*, the House-of-Sand, implies that the battle took place in a desert landscape. While the locations of both of these are unknown, it is likely they were to the west of the Delta²⁶¹. Redford²⁶² has suggested that the House-of-Sand could be located within the third Lower Egyptian nome, which

²⁵² KRI IV, 7:3-4

²⁵³ O’Connor, “Egypt. 1552-664 B.C.”, 921; Helck, *LÄ VI*, 845

²⁵⁴ Snape, “A Stroll along the Corniche?”, 442

²⁵⁵ KRI V, 14: 13; D.B. Redford, 2018. *The Medinet Habu Records of the Foreign Wars of Ramesses III. (Culture and History of the Ancient Near East 91)*. Leiden; Boston, 5 (Hereafter Redford, *MHR III*)

²⁵⁶ *MHI*, pl. 22

²⁵⁷ *MHI*, pl. 70

²⁵⁸ KRI V, 50: 3-4; Redford, *MHR III*, 62

²⁵⁹ *MHI*, pl. 70

²⁶⁰ KRI IV, 22: 3-4

²⁶¹ O’Connor, “Egypt. 1552-664 B.C.”, 921

²⁶² Redford, *MHR III*, 45

would place it close to Kom el-Hisn, *Pr-nbt-i3mw*, which was itself near the “Tjemehu-upland” according to P. Brooklyn 47.218.84²⁶³. Therefore, if Redford’s suggestion is to be used, the 8 *iteru* noted between *hwt-sct* and *wp-t3* in the Year 11 war of Ramesses III²⁶⁴ would place *wp-t3* around 80 km away from Kom el-Hisn, a far cry from ZUR.

Zawiyet Umm el-Rakham

Located 280 km west of Alexandria, the fortress site of ZUR presents the strongest evidence for Ramesside fortress building projects to the northwest of Egypt, especially with the allusion to multiple *mnnw*-fortresses upon its doorjamb²⁶⁵. The site was strategically placed on the coastal plain at the point where the narrow plain widened going eastward and so acted as a gatekeeper for this wider route to Egypt²⁶⁶. Possibly founded in the reign of Seti I but certainly finished under Ramesses II²⁶⁷, the 4.5-5 m thick mudbrick walls²⁶⁸ enclosed a space of 19,600 m², with only a single, heavily defended gateway breaking the wall, proving the seriousness of the threat this fortress was built to withstand²⁶⁹. Inside the walls, a wide variety of buildings were built – temples and chapels, storage magazines, production areas, occupation and a possible governor’s residence – testament to the planned longevity of this site²⁷⁰. This plan did not come to fruition however, with no evidence of Egyptian occupation postdating Ramesses II, the Egyptian garrison probably having abandoned the site before the invasion of Year 5 of Merenptah²⁷¹.

The defensive nature of the fortress of ZUR can be reinforced by the inscription which appears on the doorjamb of a chapel at the site, where Ramesses II is described as “destroying Libya”²⁷². In addition, various stelae from the site placed the king in a position of dominance over Libyans²⁷³ or presenting them as captives before a god²⁷⁴. These instances of violent imagery against Libya would tend to imply that ZUR was indeed built in response to the changing relations with Libya, and, being so far away

²⁶³ D. Meeks, 2006. *Mythes et Legends du Delta d’après le Papyrus Brooklyn 47.218.84*. Cairo, 143 nt. 495

²⁶⁴ KRI V, 50 3-4

²⁶⁵ It is not clear if ZUR is one of these *mnnw*-fortresses, but the size and form of ZUR are comparable to Ramesside *mnnw*-fortresses found in Nubia; MAOI, 627

²⁶⁶ Snape, “A Stroll along the Corniche?”, 446

²⁶⁷ Snape and Wilson, *ZUR I*, 129

²⁶⁸ While this wall thickness is not so great when compared to sites like Tell Hebua, it would have allowed for the building of walls up to 10 m tall, preventing attackers from being able to scale the walls and providing a high vantage point from which the fortress could command the area; S. Thomas, 2000. “Tell Abqa’in: A Fortified Settlement in the Western Delta. Preliminary Report of the 1997 Season”, *MDAIK* 56, 376, nt. 14

²⁶⁹ S. Snape, 1997. “Ramesses II’s Forgotten Frontier”, *EA* 11, 23; “A Stroll along the Corniche?”, 442

²⁷⁰ Snape, “A Stroll along the Corniche?”, 442

²⁷¹ Snape, “Vor der Kaserne”, 272

²⁷² Habachi, *BIFAO* 80, pl. V: A, 16

²⁷³ Habachi, *BIFAO* 80, pl. V: B

²⁷⁴ Snape and Wilson, *ZUR I*, fig. 5.6

from any other Egyptian installation, ZUR would have to have had defensive elements to protect itself even if there were no overt hostilities with Libya at the time.

While the fortress of ZUR was clearly built with defence in mind, with high walls and a single entryway, it was too big to have simply acted as an early-warning system²⁷⁵ but, at the same time, there would be little the 500-strong garrison of the fortress²⁷⁶ could do to stop an estimated Libyan army of over 30,588²⁷⁷ advancing past it towards Egypt. It was “superficially intimidating”²⁷⁸, implying that Ramesses II built ZUR on this large scale, a scale which “far outweighed the threat”²⁷⁹, as was a common practice in Nubia, because a more dominant and visible show of Egyptian strength was needed to quell the Libyans.

Other sites

Other sites which have been suggested as members of the Ramesses II series of fortresses to the west of Egypt are: El-Alamein and El-Gharbaniyat along the coast and El-Barnugi, Tell el-Abqa'in, Kom Firin, Kom el-Hisn and Kom Abu Billo along the western fringe of the Delta²⁸⁰ (fig. 3). Stone temple architecture dating to Ramesses II has been found at all of the sites, indicating a royal investment in these sites at this time²⁸¹, but this does not prove the presence of fortifications built by Ramesses II. Further, many of these sites have not received archaeological attention since these features were observed by Habachi²⁸² and much of the evidence is now gone²⁸³. Only those sites that have received archaeological attention and are likely fortified installations are highlighted below.

A series of monumental blocks and fragments of a granite stela were found at El-Alamein on the Mediterranean coast, with inscriptions which date them to Ramesses II²⁸⁴, one containing a very fragmentary text which refers to the king as having done something unknown to “the land of Libya (Tjehenu)”²⁸⁵. While the remains of the larger inscription do imply that some form of domination over the Libyans was conveyed by this text, the original context of these fragments is unknown, nor is there any archaeological evidence for the fortified settlement it is presumed to have come from²⁸⁶, making

²⁷⁵ Snape, “A Stroll along the Corniche?”, 452

²⁷⁶ As estimated from troop numbers on stelae; Snape and Wilson, *ZUR I*, 128

²⁷⁷ Estimated from figures reported in Merenptah's Year 5 battle; O'Connor, “The Nature of Tjemehu”, 44

²⁷⁸ Snape, “A Stroll along the Corniche?”, 452

²⁷⁹ S.T. Smith, 2003. *Wretched Kush: Ethnic Identities and Boundaries in Egypt's Nubian Empire*. London, 76

²⁸⁰ Kitchen, “The Arrival of the Libyans”, 18; *Pharaoh Triumphant*, 72

²⁸¹ Habachi, *BIFAO 80*, 19-26; Kitchen, “The Arrival of the Libyans”, 18

²⁸² Habachi, *BIFAO 80*, 13-30

²⁸³ Snape, “A Stroll along the Corniche?”, 445

²⁸⁴ Habachi, *BIFAO 80*, 19-23

²⁸⁵ *KRI II*, 475:10-13. Habachi translated this as “he (the king) captured the Libyans in the moment of his full power” whilst acknowledging the difficulty of this section of the text; Habachi, *BIFAO 80*, 20

²⁸⁶ Snape, “A Stroll along the Corniche?”, 445

it impossible to state with certainty that this site was a member of a fortified chain of sites under Ramesses II.

On the western Delta fringes, more archaeological work has been done and some of the sites have clear evidence of fortification. One of these is Kom Firin, a fortified town which the excavators have suggested could be equated with the House-of-Sand from Ramesses II texts due to the presence of a Pleistocene sandbank at the site²⁸⁷, but this is a very tenuous link due to the prevalence of such features in the Delta landscape and the lack of any other supporting evidence. Surrounded by water channels in the Ramesside Period, the site was dominated by its temple enclosure, measuring 225 x 199 m² and having a wall thickness of up to 8.25 m²⁸⁸. Although no inscriptions pertaining to Libyans have been found at the site, there are instances of military imagery, such as an inscription from a temple doorjamb which described Ramesses II as “giving command(s) as a fighter at the head of troops”²⁸⁹. Beyond this, the extensive Ramesside fortifications of the temple enclosure wall make it clear that this complex was built with defence in mind, having towers at each corner as well as a pair flanking the northern gate²⁹⁰ and walls up to 10 m tall²⁹¹.

Spencer²⁹² has argued that the fortification of this temple complex, and other fortified temple sites to the west of the Delta, served a two-fold purpose in the Egyptian fight against the Libyans: a practical defensive space from which troops could be deployed to defeat an attack, but also a space in which the fight would be symbolically won by the power of the gods and the king, as would be inscribed on the temple’s walls²⁹³. While Kom Firin does not provide proof of a chain of fortresses or fortified settlements along the western edge of the Delta, or even that this site’s enclosure was built against the Libyan threat, it does show that such strength of fortification was felt necessary at this site at this time. A serious threat was felt from some direction and, given the historical background, this threat was likely the Libyans.

Tell Abqa’in, 75 km southeast of Alexandria, is another of the proposed Delta fringe fortified sites²⁹⁴. At this site, Daressy²⁹⁵ and Habachi²⁹⁶ discovered the remains of a gateway with craved limestone blocks, and the latter also found the remains of mudbrick walls extending from this gateway. Further

²⁸⁷ N. Spencer, 2008. *Kom Firin I: The Ramesside Temple and the Site Survey*. London, 7

²⁸⁸ N. Spencer, 2014. *Kom Firin II: The Urban Fabric and Landscape*. London, 12, 17

²⁸⁹ Spencer, *Kom Firin I*, 51, fig. 34

²⁹⁰ Spencer, *Kom Firin II*, 17

²⁹¹ Spencer, *Kom Firin I*, 23

²⁹² Spencer, *Kom Firin I*, 52

²⁹³ Spencer, *Kom Firin I*, 52

²⁹⁴ K.A. Kitchen, 2003. *Ramesside Inscriptions: Translated and Annotated. Vol. IV*. Oxford, 261

²⁹⁵ M.G. Daressy, 1904. “Rapport sur Kom el-Abq’ain”, *ASAE* 5, 129

²⁹⁶ L. Habachi, 1954. “Khatâ’na-Qantîr: Importance (avec 38 planches)”, *ASAE* 52, 482-483

excavation has revealed that this decorated gateway was once the southern entrance to a walled town of significant size²⁹⁷. Although there were only few stone elements remaining *in situ*, such as the pedestals on which the doorjambs would have stood, the reuse of blocks elsewhere at the site confirmed that the gateway was once carved with names of Ramesses II²⁹⁸. A 4.6 m wide mudbrick wall was found to the west of the gateway, running east-west, and following its extent, and assuming a square plan, the excavators estimated that the site was over 50,000 m²²⁹⁹. In addition to these enclosure elements, three deep wells were uncovered at the site, one of which was decorated with 19 cartouches of Ramesses II³⁰⁰, confirming this reign as a date of occupation of this site. Again, there is nothing here to confirm that it was against the Libyans that these enclosure walls were built, but the historical setting makes this likely.

In terms of proving the existence of a series of fortresses, in addition to the lack of archaeological evidence, the great distance between sites identified is also an issue; El-Gharbaniyat is 80 km from the western Delta fringe, another 80 km stretches across to El-Alamein and then a further 240 km separates El-Alamein from ZUR. While the existence of further sites has been suggested, the distance between sites is vast for travelling troops, messengers, or supply caravans. A solution to this could be evidenced at ZUR.

In an inscription on the back pillar of a statue of Neb-Re from his chapel at ZUR, there is mention of “...provisions from the many rooms of grain from the field and from the hold of the *menesh*-ship, ferrying more grain than sand, which is for the district. Being filled with water, filled with plenty of meat, and more wine than water, the storerooms are full...”³⁰¹. This inscription clearly implies that the fortress was supplied by *menesh*-ships, the sea-going, bulk cargo ships newly invented in the reign of Rameses II and used primarily for state purposes³⁰² as cargo ships³⁰³ or even troop carriers³⁰⁴. The very existence of these long-range, sea-going ships in the reign of Ramesses II may have been the advancement which allowed the building of this large Egyptian fortress so far from the Delta³⁰⁵, with the nearby natural harbour of Mersa Metruh allowing for the easy unloading of *menesh*-ships. This statue inscription, as well as giving details of how the site was supplied, could indicate that, rather than overland travel, the sites along the western coast were reachable by ship, making the large

²⁹⁷ Thomas, *MDAIK* 56, 374, fig. 2

²⁹⁸ Thomas, *MDAIK* 56, 373, 375

²⁹⁹ Thomas, *MDAIK* 56, 375

³⁰⁰ Habachi, *BIFAO* 80, 26

³⁰¹ Snape, “Vor der Kaserne”, 283

³⁰² Spalinger, *War in Ancient Egypt*, 255

³⁰³ P. Anastasi III, 7:2

³⁰⁴ Caminos, *Miscellanies*, 101

³⁰⁵ Snape, “A Stroll along the Corniche?”, 452

distances between fortresses more manageable for movements of troops, supplies and communications³⁰⁶.

Troops

Unfortunately, evidence for the presence and activities of individuals along this western route is limited mostly to one site, ZUR. Stelae from the site identify the individuals who erected them at the site's temple, giving insight into the numerous military titles present at ZUR, right up to the highest military rank, that of general³⁰⁷, which here belonged to a man called Panehesy³⁰⁸. There were also several holders of the title of 'standard-bearer' on stela found at the site, each in charge of their own 'company', such as "Ramose of the company Hetep-Amen-Re"³⁰⁹, who, along with another standard-bearers and company, would then be under the supervision of the 'commander of the host'³¹⁰.

The most well-known individual from ZUR is undoubtedly Neb-Re, whose name appears on so many inscriptions found that the discoverer of the site, Alan Rowe, originally interpreted ZUR as a temple-fortress built by Neb-Re himself³¹¹. Like the leaders of fortresses in northern Sinai, Neb-Re held the title of *hry-pdt*, commander of the host, and appeared on various monuments and architecture around the site, especially in the area of the temple and chapels. The back-pillar of a statue of Neb-Re recorded his provisioning the fortress with "many rooms of grain from the field"³¹² and the sheer number of monuments bearing his name attest that he had a key role in building the fortress. However, none of these monuments were found in their original context. For example, a carved lintel which is thought to have been part of a mortuary monument for either Neb-Re and/or his wife Mery-Ptah, was reused as a threshold, placed face-down, far removed from the burial area which it would likely have originally been set³¹³. This removal and reuse of monuments bearing Neb-Re's name at a fortress which was so short-lived gives the impression that this was a deliberate act to remove evidence of Neb-Re's presence, potentially implying a dramatic fall from grace for Neb-Re.

While not mentioned at ZUR, this fortress, and the other fortified sites to the west of the Delta, likely had a contingent of Medjay housed within who acted as desert scouts. At the "*mnmw*-fortress of the West", the Libyan leader Mery was tracked as he passed by after the battle with Merenptah³¹⁴, and it is likely that this was done by Medjay as this was their area of expertise. Another source which

³⁰⁶ Snape, "A Stroll along the Corniche?", 450

³⁰⁷ Schulman, *Military Rank*, Table 1

³⁰⁸ Snape and Wilson, *ZUR I*, 102, fig. 5.

³⁰⁹ Snape and Wilson, *ZUR I*, 112

³¹⁰ Schulman, *Military Rank*, 31

³¹¹ Snape and Wilson, *ZUR I*, 1

³¹² Snape, "A Stroll along the Corniche?", 450

³¹³ S. Snape, 2001. "Neb-Re and the Heart of Darkness", *Antiquity* 75, 19

³¹⁴ *KRI IV*, 7: 3-4

supports the presence of Medjay in the western *mnw*-fortresses is the Victory Stela of Merenptah, which recorded this reign's Libyan war and return to order after the king's victory. Described as a part of this restoration is that the "*mnw*-fortresses are left to their condition; *hmt*-wells are open (for) the activity of the messengers; fortified battlements are calm. It is the sunlight (only) that will wake their watchmen. The Medjay sleep, their forms stretched out."³¹⁵. Once again, the presence of multiple *mnw*-fortresses is suggested by this passage, but, of relevance here, the watchmen and Medjay are now able to sleep uninterrupted, implying that they had little opportunity to do so before as they had been very active during the period of unrest. There is, however, no direct evidence that the fortresses and Medjay mentioned here existed to the west of the Delta rather than elsewhere in the Egyptian sphere.

Natural Defence

The region to the west of the Nile Delta and coastal plain was a relatively hostile environment so, to some extent, Egyptian fortresses located there could exert control over those who chose to travel via the easier, coastal route through the strategic placement of installations. The main downfall of this route, however, was that it could be quite easily circumvented.

It has been suggested that one of the reasons for the foundation of ZUR would have been the necessity of providing safe water sources for the Egyptian garrison but also as a strategic move to ensure that all those passing through the area would have to go to the fortress in order to gain access to the wells it controlled³¹⁶. This could be supported by the specific mention of wells being placed within the walls of *mnw*-fortresses upon the doorjamb inscription of ZUR. However, while ZUR may have controlled the water sources within its walls³¹⁷, finding water in this region was relatively easy. A natural aquifer ran only 4 m under the Ramesside ground level³¹⁸. Consequently, even though the fortress wells were behind high walls, this was only a mild deterrent because those determined to avoid detection could bypass the fortress and simply dig for water themselves elsewhere. Having said this, on the Kom el-Ahmar stela, Merenptah forces the Libyans to be "[deprived of their] wells, parched with thirst, through what the Strong Bull has done, who fights on [his bound]ary"³¹⁹, perhaps implying that blocking of water sources was an effective tactic in this region.

³¹⁵ KRI IV, 18: 5-10

³¹⁶ W. Cooney, 2011. *Egypt's Encounter with the West: Race, Culture and Identity*. PhD Thesis. Durham Online, 156

³¹⁷ An estimated 7 wells of the same capacity of the temple well found at the site would be needed to provide the 10,000 litres of water per day needed to sustain the approximately 400-500 men stationed at the site; Snape and Wilson, *ZUR I*, 128; Snape, "A Stroll along the Corniche?", 446

³¹⁸ Snape, "A Stroll along the Corniche?", 446

³¹⁹ Kitchen, *Translated IV*, 17

In addition to fulfilling water needs, the area around the ZUR would allow for the growth of rain-fed winter barley³²⁰, which would have helped to fill the site's 56,000 litres of granaries³²¹. A relatively large area of structures at the site, 'Area K', is thought to have been used for food production, with all the apparatus for processing grain to make bread and beer provided³²². Alongside grain production, the comparatively high percentage of sheep and goat bones found at the site points towards exploitation of locally available resources, the garrison observing what animals could thrive in the environment and investing in them³²³. This again implies that controlling the supply of resources would not be an effective means of deterring unsanctioned approaches to Egypt via this route.

The main way in which ZUR utilised the natural environment was by its geographical placement, as dictated by a "combination of circumstances"³²⁴. Firstly, it was located at point of widening of the coastal plain, a naturally dominant site within the landscape that allowed to it act as gatekeeper to this easy route for mass travel towards Egypt. By placing the fortress here, and the promise of further installations along the route, any persons who knew that they would not be permitted would be pushed into the harsher desert environment. Secondly, the site was close to the area from which an overland route to Siwa Oasis would later become popular³²⁵, so if any such passages were already taking place at this time, these could be monitored as well, with desert scouts taking especial notice of large, non-trade groups gathering in the area that may journey on from Siwa to the Nile Valley.

Thirdly, although not a direct means of defence nor obvious exploitation of the natural environment, the placement of ZUR could indicate another tactic utilised by Egypt to suppress the rise of Libya – blocking international sea-trade access. Not far west of ZUR lay Mersa Matruh, a natural harbour which was a likely location for interaction with the sea-trading circuit of the Late Bronze Age. Libyan and foreign activity here is attested on Bates' Island, located in the eastern lagoon of Mersa Matruh, with a range of foreign ceramics found, mostly Cypriot³²⁶, proving at least seasonal occupation of the island by foreign mariners who were part of the sea-trading circuit who used the island as a refuge

³²⁰ D.P. Cole and S. Altorki, 1998. *Bedouin, Settlers and Holiday-Makers: Egypt's Changing Northwest Coast*. Cairo, 137

³²¹ Snape, "Vor der Kaserne", 285

³²² N. Nielsen, 2017. "Cereal Cultivation and Nomad-Sedentary Interactions at the Late Bronze Age Settlement of Zawiyet Umm el-Rakham", *Antiquity* 91, 1566

³²³ L. Bertini and S. Ikram, 2020. "Food for the Forces: An investigation of Military Subsistence Strategies in New Kingdom Border Regions", in R.E. Averbeck and K. Lawson Younger Jr. (eds). *"An Excellent Fortress for His Armies, a Refuge for the People": Egyptological, Archaeological, and Biblical Studies in Honor of James K. Hoffmeier*. University Park, PA 45

³²³ Kitchen, "The Arrival of the Libyans", 41, 45

³²⁴ Snape, "A Stroll along the Corniche?", 453

³²⁵ Snape, "A Stroll along the Corniche?", 452-453

³²⁶ D. White, 1990. "Provisional Evidence for the Seasonal Occupation of the Marsa Matruh Area by Late Bronze and Libyans", in A. Leahy (ed.). *Libya and Egypt, c1300-750 BC*. London, 3

between Crete and the Nile Delta³²⁷. The area around the island was occupied by Libyans, and interaction between the two is confirmed by the appearance of ostrich shells in all occupation levels on the island³²⁸. By building their fortress at ZUR, Egypt was guaranteeing for itself access to the sea-trading circuit at this site and securing the region so that these interactions could take place without the threat of local interference but, more importantly, it was blocking out any international trading opportunities for the Libyans here³²⁹. The Egyptian arrival in this area may even be the reason for the seemingly hasty abandonment of the foreign occupation on Bates' Island around this period, leaving a large cache of relatively valuable items in favour of avoiding confrontation with Egyptian troops³³⁰. In this example, we see Egypt claiming an advantageous feature of the natural environment and thus depriving the Libyans of easy access to international trade in the area.

Finally, Egypt used the landscape against the Libyans, not in the sense of manipulating the natural environment, but in the simple placement of fortresses upon Libyan land. The emphasis within the doorjamb inscription from ZUR that *mnw*-fortresses were built *upon Tjemehu land* implies that this placement was intended as an absolute display of dominance over Libya. To defend Egypt itself, it was not strictly necessary to build fortresses as far away as ZUR, so this was an act of defence by dominance over this foreign land in a visible display of pharaonic might. By placing an Egyptian fortress so far into Tjemehu land at ZUR, Egypt was asserting its strength and displaying its ability to coordinate such an undertaking, so far from its borders, a logistical effort that the Libyans could never organize or fund. It further entrenched the Libyan position as subservient to Egypt, adding a visible stamp on this Tjemehu landscape – a stamp that came equipped with soldiers who would monitor and report their every move. Thus, in addition to simply guarding this passage against threat, the *mnw*-fortresses of the Libyan coastal road would act as a deterrent to discourage Libyans from going up against Egypt, reminding them of the mighty power they approached.

Defence in action

In three instances, the Libyan wars fought by Ramesside kings took place close to or within the *drw*-border of Egypt and the Libyan aggressors had to be chased back to their own land. These acts clearly demonstrated the need for, and use of, battles in a strategy of border defence, and the textual fortresses located to the northwest of Egypt tell of their importance in these battles, their troops clearly playing major roles in the action and subsequent restoration to peace. In these cases, however,

³²⁷ D. White, 2003. "Multum in Parvo: Bates' Island on the NW Coast of Egypt", in N.C. Stampolodis and V. Karageorghis (eds). *Sea Routes...: Interconnections in the Mediterranean 16-6th c. BC*. Athens, 75

³²⁸ White, "Seasonal Occupation of the Marsa Martuh", 10

³²⁹ Snape, "A Stroll along the Corniche?", 453

³³⁰ White, "Seasonal Occupation of the Marsa Martuh", 8

Egypt was reacting to a threat, rather than pre-emptively taking the fight west so that the Libyans would not have the strength to present a threat. This second strategy was attempted by the building of fortresses and the fortification of towns, but, ultimately, it was too little too late by the Ramesside Period.

It could be that the effectiveness of a fortified route to the northwest in deterring Libyans from using this route can be seen in the increased use of the inter-oases routes into Egypt. Manassa³³¹ suggested that Meret and Libyan groups in Year 5 of Merenptah gained entry to the Nile Valley via the inter-oases routes long-traversed by the Libyans, and identified three potential routes: two beginning with a route between the Siwa to Farafra to Bahariya oases before entering Egypt, and a third involving a small raiding party from the Mediterranean. The land route entry routes could be supported by the timely abandonment of ZUR, that, overwhelmed by numbers, troops abandoned ZUR to forewarn Egypt as hostile Libyans gathered in the region before crossing to Siwa to begin their entry. This could be backed-up by the appearance of a short-lived, “squatter” occupation of ZUR following immediately after the Egyptian abandonment of the site³³², possibly signifying the take-over of local Libyans rather than an elective abandonment of ZUR.

That the advancing Libyans in the reign of Merenptah might have used the challenging oases approach to Egypt could show the success of a fortress chain that pushed the Libyans away from the easier coastal route and forced them to make a desert crossing to avoid the Egypt-controlled plain³³³. The hardships of choosing the inter-oases routes have been pointed out by Snape³³⁴, but, while the thousands of animals recorded as having been taken as booty by the triumphant Merenptah³³⁵ would have made travel via desert routes difficult, but it was certainly not impossible for these nomadic peoples. Indeed, it is possible that at this time in the 19th Dynasty, Libyans actually had control of the oases, as Egyptian evidence within the Southern Oasis and Oasis evidence in the Nile Valley is notably sparse in the 19th Dynasty compared to the periods before and after³³⁶.

The Libyan take-over of oases could be an indication that the fortification of the northern coastal route was successful, that Egypt forced the Libyans to take action in order to secure other passages to the Nile Valley. This would imply that the fortresses achieved their function of repelling the Libyans, but

³³¹ Manassa, *GKIM*, 94-103

³³² Snape, “The emergence of Libya”, 104-105

³³³ Snape, “A Stroll along the Corniche?”, 448

³³⁴ Snape, “A Stroll along the Corniche?”, 447-448

³³⁵ *KRI IV*, 9:7-8

³³⁶ For a summary of the evidence, see O.E. Kaper, 2019. “Temple Building on the Egyptian Margins: The Geopolitical Issues behind Seti II and Ramesses IX’s Activity at Amheida,” in R.S. Bagnall and G. Tallet, (eds). *The Great Oasis of Egypt: The Kharga and Dakhla Oases in Antiquity*. Cambridge, 221-236

that this had the adverse effect of pushing them only as far as further down the Egyptian border. This could be reflected in the fortification of five temples in Upper Egypt under Ramesses III in Papyrus Harris I³³⁷, two of which were at sites which stood at the beginning of roads leading to the Kharga Oasis³³⁸. This fortification shows that Upper Egypt was now feeling the brunt of the Libyan invasion. Further, the increased use of oases routes could have partially added to the abandonment of the chain of fortresses in general as they were no longer needed³³⁹, although it would seem unlikely that Egypt would abandon any fortifications that could be kept functioning in a time of active threat.

Summary

The textual evidence for a Libyan chain of fortresses similar to that across northern Sinai is ambiguous and, even with the archaeologically proven existence of fortified settlements along the western Delta fringes, there is no definitive confirmation of the existence of a purpose-built series of forts³⁴⁰. However, even though these discovered sites may not have been set up in the same manner, they still achieved much the same aims as their eastern counterparts – defending the border by deterrent and intimidation, starting well away from the border as a visible show of Egyptian strength to any who thought to approach with hostile intentions. Having the same types of personnel manning each emplacement and adapting methods from Sinai, these few installations could have still worked for the defence of the border in a well-documented manner.

The battles fought by Ramesside Kings against Libyans after Ramesses II were in direct response to infringements of the *drw*-border, and, while none of the fortresses identified in texts have been located archaeologically, their appearance clearly shows that fortresses remained at the centre of defensive strategies to the northwest, even after the abandonment of ZUR. The troops and staff within these fortresses, in addition to being directly involved in the battles, would have played major roles in the forewarning of invasions, and even tracking enemy forces as they entered and exited Egyptian territory. In terms of the use of the natural environment, the placement of ZUR was highly strategic; it was close to Marsa Matruh, and so controlled this harbour to the benefit of Egypt but was also in the region from which the route from the coast to Siwa oasis began, a possible beginning point for inter-oases routes to Egypt.

Much of the evidence, of course, is unique to ZUR, but this site offers a glimpse at a multifaceted reasoning behind the building of individual fortresses beyond simple defence of a locality. Presently,

³³⁷ P. Harris I, 7:11-12; 8:1-8

³³⁸ J. Winnicki, 2009. *Late Egypt and her Neighbours: Foreign population in Egypt in the first millennium BC.* (*The Journal of Juristic Papyrology*. Vol. 12). Warsaw, 31

³³⁹ Manassa, *GKIM*, 49

³⁴⁰ Snape, "A Stroll along the Corniche?", 445

there is a lack of concrete evidence for the construction of a chain of fortresses along the northwestern approach to Egypt under Ramesses II, but it is certain that individual sites were fortified at this time, likely against the threat of Libyan invasion³⁴¹. Unlike the northern Sinai road, this western route was never heavily trafficked by campaigning armies as there was never an Egyptian attempt to invade Libya beyond building fortresses on Tjemehu-land, and even troop movements to and from the fortresses along the coast may have been carried out by ship. As such, this coastal route was not as well-developed as its northeastern equivalent. While it cannot be stated certainly that the known fortifications erected by Ramesses II worked in a coherent, organised system in the defence of Egypt's northwestern border, evidence from individual sites does point towards defence as a motivating factor behind the construction of fortifications at this time. Thus, it is possible to speculate that the fortresses and fortified towns which lined this route would work together and communicate for the protection of all, emulating their eastern counterparts.

³⁴¹ Spencer, *Kom Firin I*, 52

Conclusions

In the New Kingdom, defence of Egypt's border was high on the agenda, firstly in the earlier 18th Dynasty in response to the Hyksos invasion of the Second Intermediate Period, and then again in the 19th Dynasty when Egyptian supremacy was waning, and it faced threats from all directions. In the north, to the east and west of the Nile Delta, Egypt engaged in various methods of securing their borders (*ḏrw*), starting with the pro-active defence move of building a buffer zone to the northeast and populating it with Egyptian fortresses, and then extending the *t3ꜥ* beyond this. This tactic, to a lesser extent, was later copied to the northwest.

In northern Sinai, after the turmoil of the Second Intermediate Period, Egypt quickly ensured the security of the *ḏrw* after the expulsion of the Hyksos by spending the 18th Dynasty securing a northern empire for themselves, expanding the *t3ꜥ* and establishing Sinai as a buffer zone – the most obvious use of this area as part of a strategy for border defence. When this buffer zone was threatened in the 19th Dynasty, Seti I quickly set this to rights, defeating the Shasu and renewing the fortifications along the northern Sinai route. There is no doubting the existence of a cohesive chain of fortresses across Sinai, as they are attested textually and archaeologically from this period. Further, various textual sources make clear that the staff of these fortresses would work together to monitor the road they protected, documenting all who passed through and communicating any issues along the chain, ultimately reporting back to Tjaru

The use of these fortresses in the defence of the border, while less obvious, is also clear once all evidence for their usage is put together. The supply of resources to campaigning troops or messengers further enabled the ease of maintaining the northern empire, which was itself first conceived as an act of defence. The denial of these resources to those not permitted on the path would hamper their travel, making journeys longer and more difficult. These features created an extended border zone in northern Sinai, not part of Egypt-proper but a liminal zone firmly under its control. At either end of this route, bracketing the inhospitable Sinai region, Tjaru and Gaza were the natural territorial limits their own state (*ḏrw*). This created the perfect environment for the creation of an Egyptian-controlled corridor, a no-mans-land with natural boundaries at either end, which none could enter, travel through, or exit without the knowledge and permission of Egypt. For the times when these land defences were circumvented, the *hṯm*-fortress at the border proper, Tjaru, was more than capable of defending this entry point to the Nile Delta, backed-up as it was by the clustering of fortresses around the paleolagoon, a plausible location naval defeat of the Sea Peoples by Ramesses III.

The western end of the northern Sinai route in particular clearly demonstrates a highly controlled border approach. The natural landscape offered a natural funnelling of movement towards Tjaru, and

this was exploited by Egypt, punctuating any vulnerabilities with further fortresses and ensuring that both the land and water entries to Egypt were impenetrable. The more eastern sites could then act as satellites of these, giving early-warning of any suspicious persons and working, together with other sites along the eastern Egyptian border, like Tjeku, to ensure that fugitives were captured. These smaller sites, even possibly unfortified wells, furthered their involvement in border protection by controlling access to the scarce water resources in the region, making it that much more difficult for any large force to arrive at the Egyptian border in a state in which they could expect to successfully launch an attack. By controlling water, and other resources, in the area, Egypt cemented their absolute control of the region and denied any opportunities for a hostile force to appear at the *drw*-border without warning.

To the northwest, there are more questions punctuating the use of a similar chain of fortresses as an extended border defence strategy, chief among them being whether such a chain ever existed. The scarcity of evidence makes conclusions uncertain, but the beginnings of a possible of a series can be seen in the presence of fortresses, fortified sites and royal investment along the northwestern coast and western Delta fringes, as well as attestations to their presence in iconography and texts of the Ramesside Period. Unfortunately, as the Libyan threat rose at a time when Egyptian supremacy was beginning to wane, so there was less time for the development of a network of fortress as seen in northern Sinai, where there was a defined route which had been used for centuries. While impossible to know, it would be interesting to speculate that this route could similarly have become a springboard for forays further west; that the route would become vital in a new imperial aim of extending the *t3š* westwards, beyond ZUR. Although the dearth of attractive resources of this region may make this unlikely, the short-lived nature of ZUR and any other western fortresses meant that this was never possible, whether it was desired or not.

Interestingly, there is no known mention of a *htm*-fortress for this northwestern frontier, as was found to the northeast and other border entry points, and instead the western Delta fringe was protected by fortified towns. This could suggest that there was no significant transit route which entered Egypt via the western Delta at this time and therefore no need to build a fortress to monitor and control the movement of people and goods into Egypt. It could also be due to the lack of a funnelling water-system or other natural feature on this border which meant that those travelling from the west could enter the Nile Delta at any point they chose, so putting resources into building one large *htm*-fortress would be wasteful, like blocking one hole in a sieve. By spacing these fortifications out, Ramesses II was increasing the chances of preventing Libyan penetration, or at least ensuring that entrants would be noticed.

Due to the lack of evidence, the theory of a duplicate of the northern Sinai route on this northwestern approach is impossible to prove, and the notion that there was a series of fortresses along the coast located at an estimated 80 km apart³⁴² seems particularly unlikely at present. Outside of being the beginning of a chain of fortresses leading back to the border, it is possible that ZUR did not denote the limit of Egyptian control but was an outlier, strategically placed to monitor its region as a far-flung defensive outpost. This would make it separate to any series of fortresses, which could then have started closer to home, potentially explaining the lack of evidence found between ZUR and El-Alamein. This would place *wꜥ-tꜥ*, the edge of Egyptian dominion and so likely associated with the *tꜥꜥ*-boundary, closer to Redford's³⁴³ setting of only 80 km away from the region of Kom el-Hisn, rather than the three-times more distant ZUR. It is also possible that ZUR was the first in a chain of fortresses that would have tracked back to the Egyptian border, but which never had the chance to materialise, Ramesses II wishfully overextending the *tꜥꜥ* and beginning the chain at its furthest extent in the hopes that this would announcement of his intentions would deter the oncoming Libyans. In any case, with no close support, Egypt simply could not uphold this thrust deep into Tjemehu and so ZUR was very quickly abandoned in the wake of the advancing Libyans. While there may not have been a cohesive fortified approach on this northwestern side extending so far into Tjemehu, this does not mean that the fortified sites that were present did not have had the capability to function in a very similar way to those in northern Sinai and defend the borders of Egypt, using battles, fortresses and their troops and natural defence via the strategic placement of sites to maximise their efficacy in the endeavour to defend the northwestern border.

Overall, although one route is far more certain than the other, both clearly displayed elements that can be linked to border defence, using similar strategies of battles, fortresses, troops and the manipulation of the natural environment to achieve their protective aims. Even if this was not the original intention of individual sites, the culmination of installations of the northeast and northwest effectively acted as a major deterrent to any hostile forces who saw them or knew that they would have to pass by them on their route to Egypt. The northeastern route furthered its use in defence in that it facilitated the speedy response of the Egyptian army to more northern conflicts, ensuring that the northern empire stayed firmly under Egypt's thumb and so would not present a threat. To the northwest, while not as obvious as this, ZUR visibly thrust Egyptian presence far into Libyan lands and blocked-off easy access to international trade, intimidating and limiting the growth of the groups who lived there in the hope that they would not continue to look eastwards for expansion. Unfortunately, neither of these routes could prevent the retraction of the *tꜥꜥ* back to the natural borders of Egypt,

³⁴² Kitchen, "The Arrival of the Libyans", 18-19

³⁴³ Redford, *MHR III*, 45

the *drw*, after the fall of the northern empire and onslaught of Libyan migrations, depriving Egypt of its buffer zones and leaving it vulnerable to the chaos that marked the closing of the Bronze Age.

Figures

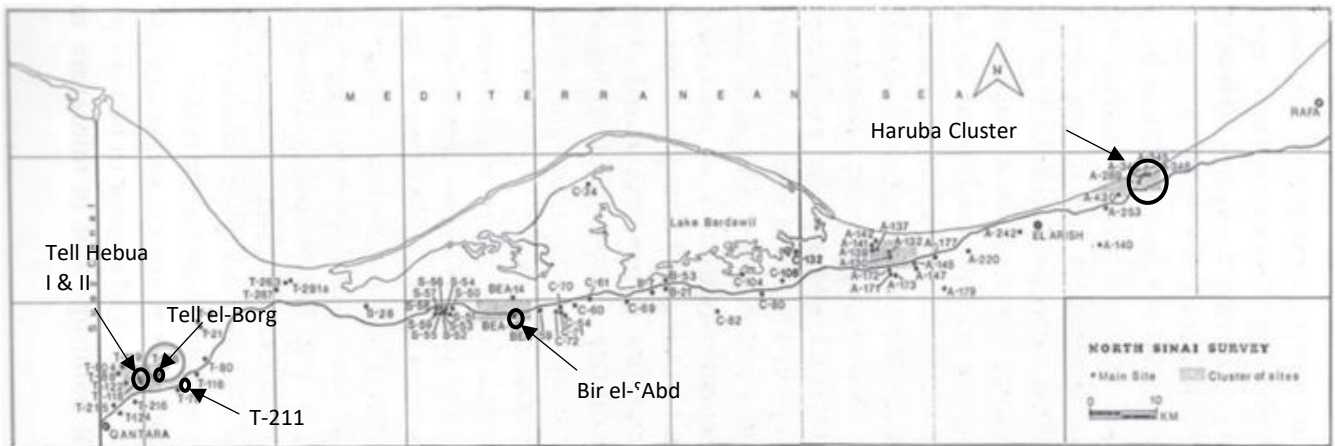


Fig. 1: Map of sites identified by Oren's North Sinai Project (adapted after Oren, "Imperial Administration", fig. 1)

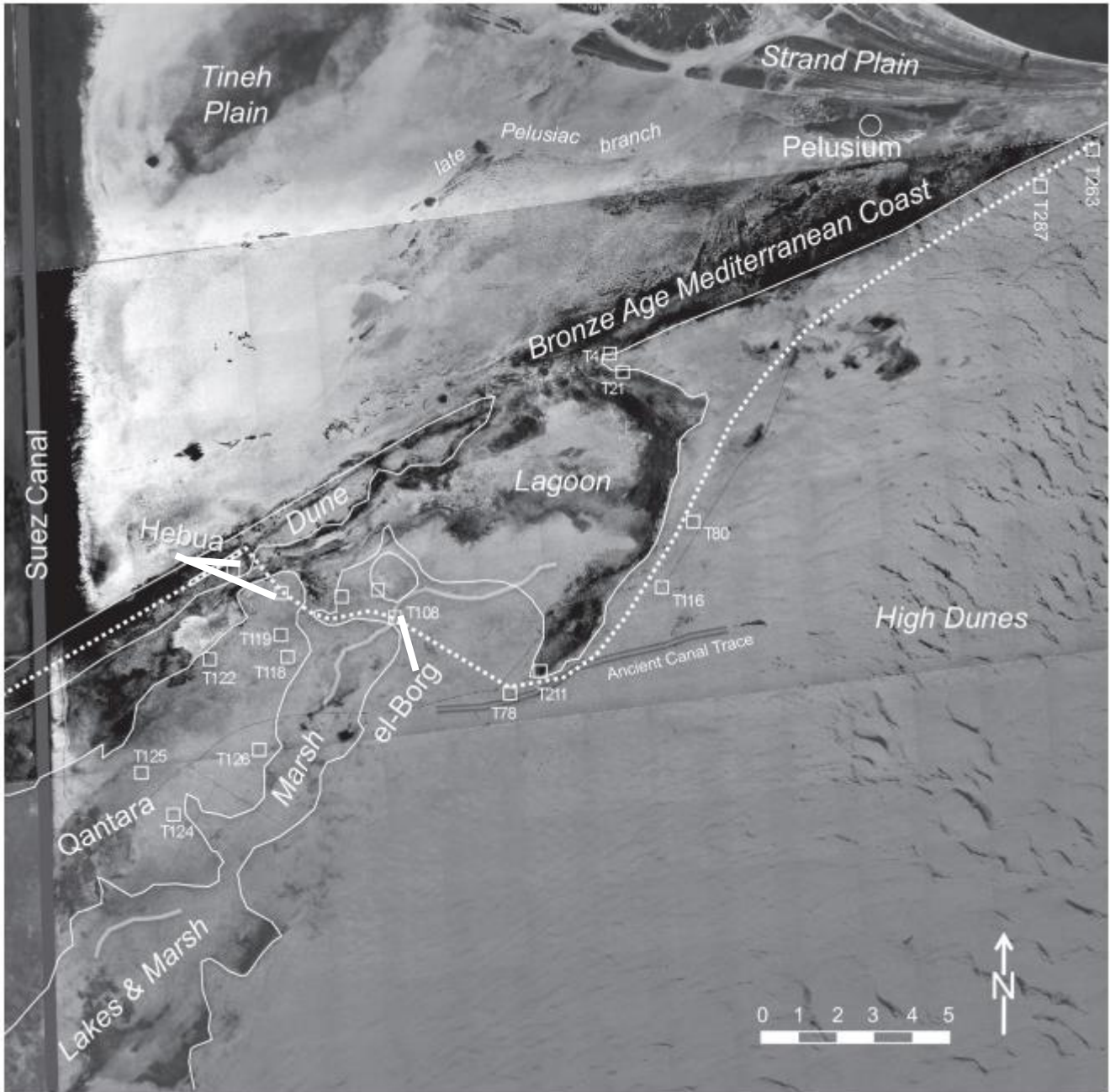


Fig. 2: Recreation of the western end of the northern Sinai route, showing the ancient coastline, paleolagoon and sites and possible path of the route (adapted after Moshier, "The Geological Setting", fig. 55)

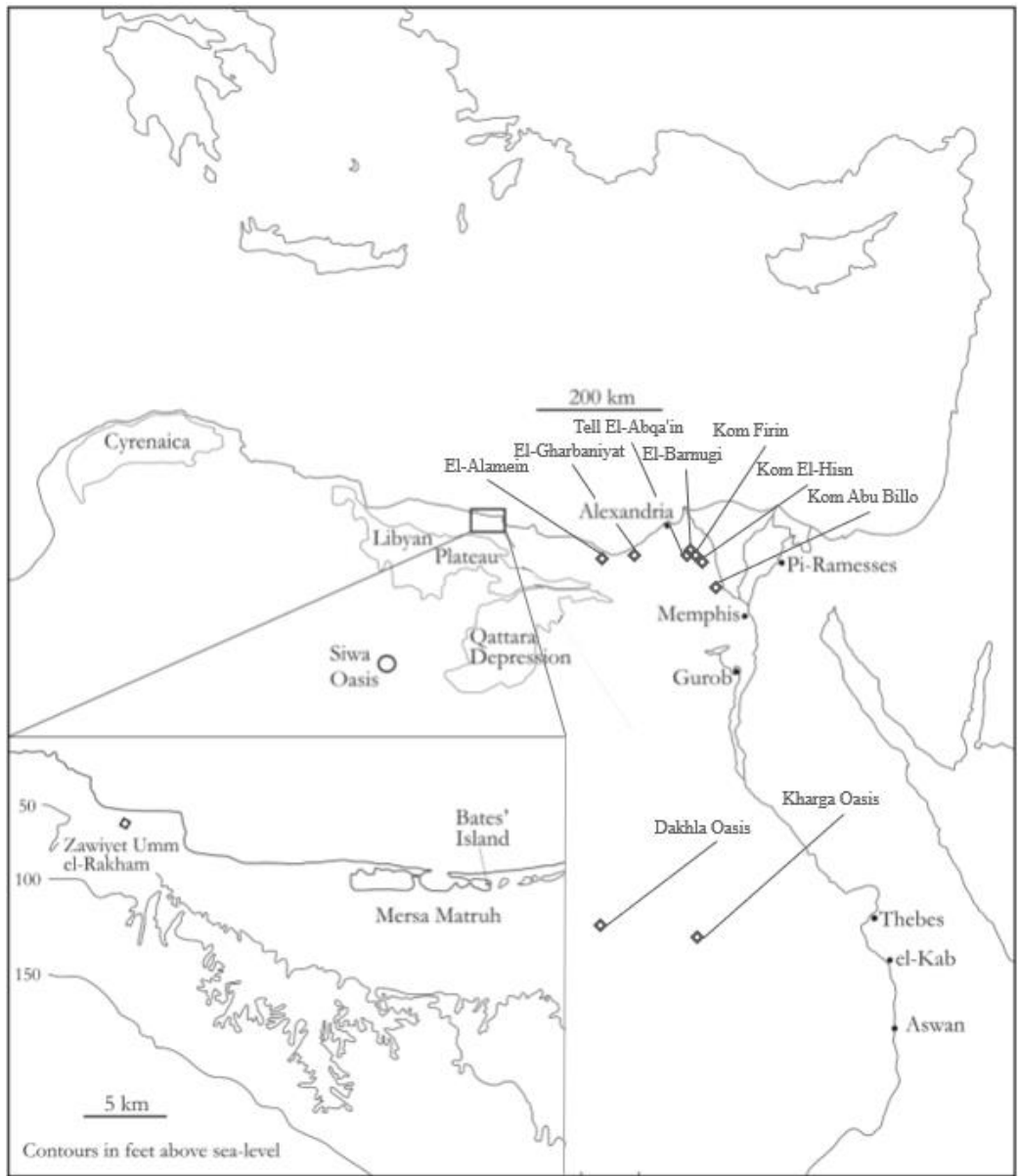


Fig. 3: Map of the northwestern approach to the Nile Delta showing the proposed sites of this route (adapted from Snape and Wilson, *ZUR I*, xii)

Tables

Table 1: The toponyms of the northern Sinai route on the Karnak relief of Seti I, P. Anastasi I and other sources

Position	Karnak Relief - Fortress name	Karnak Relief - Water source	P. Anastasi I - Toponym	Archaeological Site	Notes
1	<i>p3 htm n t3rw</i> (KRI I, 8:8-9) The <i>htm</i> -fortress of Tjaru	<i>t3 dnit</i> (KRI I, 9:15) The dividing-waters	<i>p3 htm n w3[wt-hr]</i> (27:2) The <i>htm</i> -fortress of the Ways of Horus	Tell Hebua	
2	<i>t3 t p3 [m3i]</i> (KRI I, 10:1) The Dwelling of the Lion	No label	<i>t3 t n ssw</i> (27:2-4) The Dwelling of Sese	Tell el-Borg	P. Anastasi V - The Dwelling of Ramesses Meryamun (24:8-25:1)
3	<i>p3 mktr n mn-m3t-r</i> (KRI I, 10:1) The Migdol of Menmaatre	The <i>hnmt</i> -water of <i>h-p-n</i> (KRI I, 10:1)	<i>...h-t-y-n p3y.s htm r-tnw</i> (27:4) ...Husayin. Where is its <i>htm</i> -fortress?	Oren's site T-211(?)	P. Anastasi V – The Migdol of Seti Merenptah (20:1-3)
4	<i>w3dyt n sthy mr-n-pti</i> (KRI I, 10:2) Wadjet of Seti Merneptah	The <i>hnmt</i> -water in the region of Imy- ^{sa} (KRI I, 10:3)	<i>nhtw wsr-m3t-r</i> (27:5-6) The <i>nhtw</i> -stronghold of Usermaatre		
5	<i>p3 bhñ n mn-m3t-r t3 i3(?) . . . s3.f</i> (KRI I, 7:5) The <i>bhñ</i> -fortress of Menmaatre, (called) the la.... -is-his-protection	No label	<i>sb-i3r</i> (27:6) Seb-el		
6	<i>p3 [nhtw n] sthy [mr-n-pti]</i> (KRI I, 7:5) The [<i>nhtw</i> -stronghold of] Seti Merneptah	The well of Ibesqeb (KRI I, 7:6)	<i>ibskb</i> (27: 6) Ibesqeb		
7	<i>dmi [kd.n] hm[fm m3wt]</i> (KRI I, 7:6) The town, [which his] majesty [built newly]	The <i>hnmt</i> of Seti I Merneptah (KRI I, 7:7)	<i>3ynn</i> (27: 6) Aiyenin		
8	<i>n-h-s n p3 wr</i> (KRI I, 8:4) Nekhes of the Ruler	The <i>hnmt</i> of Menmaatre, great of victories (KRI I, 8:1) The <i>hnmt</i> (called) sweet water (KRI I, 8:1)	<i>nhs</i> (27:6-7) Nekhes		Fort 8 has no name of its own in the Karnak relief, one is taken from that next to it so that the toponym of Heberet matches with P

9	<i>dmi kd.n hm.f m m3wt m t3 hnm̄t hw-[. . .]-t</i> (KRI I, 8:2) The town, which his majesty built newly at the well of Hu . . . t	“?-b(?)̄)-r-b-t” (Gardiner, <i>JEA</i> 6, 112) [y]m rbt, ‘wide pool’ (KRI I, 8:3)	<i>hb̄rt</i> (27:6-7) Heberet		Anastasi I. Fort 9 is then given one of the 2 fort names given for 10 (<i>MAoI</i> , 437)
10	<i>nhtw [n] mn-m3̄t-r̄c iw̄c w r̄c</i> (KRI I, 8:3) The <i>nhtw</i> -stronghold [of] Menmaat̄re, heir of Re	The <i>hnm̄t</i> -water of Menmaat̄re (KRI I, 8:3)			
11	<i>dmi n...</i> (KRI I, 8:5) The town of ...	No water source	<i>tnw r-ph</i> (27:7–8) Raphia	Raphia	Gardiner reconstructs the Karnak relief as “the town of [Raphia]” (<i>JEA</i> 6, 113)
12	<i>dmi n p3 kn̄n</i> (KRI I, 8:16) The town of Pa-Canaan	No label	<i>kd̄t</i> (27:7–8) Gaza	Gaza	

Bibliography

Abd el-Maksoud, M. 1998. *Tell Heboua (1981-1991)*. Paris.

Abd el-Maksoud, M. and Valbelle, D. 2005. "Tell Héboua-Tjarou l'apport de l'épigraphie," *Resèches d'Égyptologie* 56: 18-21.

Abd el-Maksoud, M. and Valbelle, D. 2011. "Tell Héboua II. Rapport préliminaire sur le décor et l'épigraphie des éléments architectoniques découverts au cour des campagnes 2008–2009 dans la zone centrale du Khétem de Tjaro", *Revue d'Égyptologie* 61: 1-39.

Baines, J. and Malek, J. 1980. *Cultural Atlas of Ancient Egypt*. (Revised Edition). Oxford.

Bates, O. 1914. *The Eastern Libyans*. London.

Bergoffen, C.J. 1991. "Overland Trade in Northern Sinai: The Evidence of the Late Cypriot Pottery", *Bulletin of the American Schools of Oriental Research* 284: 59-76.

Bertini, L. and Ikram, S. 2020. "Food for the Forces: An investigation of Military Subsistence Strategies in New Kingdom Border Regions", in R.E. Averbeck and K. Lawson Younger Jr. (eds). *"An Excellent Fortress for His Armies, a Refuge for the People": Egyptological, Archaeological, and Biblical Studies in Honor of James K. Hoffmeier*. University Park, PA: 29-49.

Bietak, M. 1985. "Response to T. Dothan", in J. Amitai (ed.). *Biblical Archaeology Today: Proceedings of the International Congress on Biblical Archaeology, Jerusalem, April 1984*. Jerusalem: 215-219.

Bietak, M. 1996. *Avaris: The Capital of the Hyksos*. London.

Björkman, G. 1974. "Neby, the Mayor of Tjaru in the Reign of Tuthmosis IV", *Journal of the American Research Center in Egypt* 11:43-52.

Brand, P. 2000. *The Monuments of Seti I: Epigraphic, Historical and Art Historical Analysis*. (*Probleme der Ägyptologie Bd. 16*). Leiden.

Breasted, J.H. 1988. *Ancient Records of Egypt III*. (Reprint 1906 publication). London.

Brock, E. 2014. "Excursus I: The Inscribed Granite Stelae Fragments from the Ramesside Fort Gate Area" in J.K. Hoffmeier (ed.). *Tell el-Borg I: The 'Dwelling of the Lion' on the Ways of Horus*. Winona Lake, IN: 329-345.

Caminos, R.A. 1954. *Late-Egyptian Miscellanies*. London.

Caminos, R.A. 1977. "Grenzetagebuch", W. Helck and W. Westendorf (eds). *Lexikon der Ägyptologie II*: 898.

Clagett, M. 1999. *Ancient Egyptian Science: A Source Book*. (Vol. 3: *Ancient Egyptian Mathematics*). Philadelphia.

Clère, J.J. 1950. "Nouveaux documents relatifs au culte des colosses de Ramsès II dans le Delta", *Kémi: Revue de Philologie et d'Archéologie Égyptiennes et Coptes*, 11: 24-46.

- Cole, D.P. and Altorki, S. 1998. *Bedouin, Settlers and Holiday-Makers: Egypt's Changing Northwest Coast*. Cairo.
- Cooney, W. 2011. *Egypt's Encounter with the West: Race, Culture and Identity*. PhD Thesis. Durham Online.
- Daressy, M.G. 1904. "Rapport sur Kom el-Abq'ain", *Annales du Service des Antiquités de l'Égypte* 5: 129-130.
- Darnell, J. C., Manassa, C. 2007. *Tutankhamun's Armies: Battle and Conquest during Ancient Egypt's Late 18th Dynasty*. Hoboken, NJ.
- Davis, B.G. 2014. *Ramesseid Inscriptions, Volume IV: Merenptah and the Late Nineteenth Dynasty, Translated and Annotated: Notes and Comments*. Malden, MA.
- de Garis Davies, N. 1903. *The Rock Tombs of El Amarna Part I. – The Tomb of Meryra. (Archaeological Survey of Egypt 13)*. London.
- El Aguizy, O.M., Gobashy M.M., Metwally, A., Soliman, K.S. and El-Hassanin, N. 2020. "The Discovery of the Tomb of the Great Army General Iwrhya: A Quasi 3D Electrical Resistivity Tomography (ERT), Saqqara, Giza, Egypt", *Contributions to Geophysics and Geodesy* 40(4): 425-446.
- Epigraphic Survey. 1930. *Medinet Habu, Volume I. Earlier Historical Records of Ramesses III. (Oriental Institute Publications 8)*. Chicago.
- Epigraphic Survey. 1932. *Medinet Habu, Volume II. Later Historical Records of Ramesses III. (Oriental Institute Publications 9)*. Chicago.
- Epigraphic Survey. 1986. *The Battle Reliefs of King Sety I. Reliefs and Inscriptions at Karnak IV. (Oriental Institute Publications 107)*. Chicago.
- Erichsen, W. 1931. *Papyrus Harris I*. Brussels.
- Erman, A. and Grapow, H. 1982. *Wörterbuch der ägyptischen Sprach. Band I*. Berlin.
- Erman, A. and Grapow, H. 1982. *Wörterbuch der ägyptischen Sprach. Band III*. Berlin.
- Erman, A. and Grapow, H. 1982. *Wörterbuch der ägyptischen Sprach. Band V*. Berlin.
- Eyre, C.J. 1990. "The Semna-Stelae: Quotation, Genre and Function of Literature", in S. Israelit-Groll (ed.). *Studies in Egyptology: Presented to Miriam Lichtheim. Vol. I*. Jerusalem: 134-165.
- Faulkner, R.O. 1962. *A Concise Dictionary of Middle Egyptian*. Oxford.
- Galán, J.M. 1995. *Victory and Border: Terminology Related to Egyptian Imperialism in the XIIIth Dynasty. (Hildesheimer Ägyptologische Beiträge 40)*. Hildesheim.
- Galán, J.M. 2000. "The Egyptian Concept of Frontier", in L. Milano, S. de Martino, F.M. Fales and G.B. Lanfranchi (eds). *Landscapes: Territories, Frontiers and Horizons in the Ancient Near East. Papers Presented to the XLIV Rencontre Assyriologique Internationale Venezia, 7-11 July 1997. Part II: Cultural Landscapes. (History of the Ancient Near East: Monographs Vol. III/2)*. Padova: 21-28.

Gardiner, A.H. 1920. "The Ancient Military Road between Egypt and Palestine", *Journal of Egyptian Archaeology* 6(1): 99-116.

Gardiner, A.H., Peet, T.E. and Černý, E. 1955. *The Inscriptions of Sinai. Vol. II.* London.

Goldwasser, O., and Oren, E. D. 2015. "Marine Units on the "Ways of Horus" in the Days of Seti I", *Journal of Ancient Egyptian Interconnections* 7 (1): 25-3.

Habachi, L. 1954. "Khatâ'na-Qantîr: Importance (avec 38 planches)", *Annales du Service des Antiquités de l'Égypte* 52(2) : 443-562.

Habachi, L. 1980. "The Military Posts of Ramesses II on the Coastal Road and the Western Part of the Delta", *Bulletin de l'Institut Français d'Archéologie Orientale* 80: 13-30.

Hayes, W.C. 1951. "Inscriptions from the Palace of Amenhotep III", *Journal of Near Eastern Studies* 10: 35-56; 82-112; 156-183; 231-242.

Helck, W. 1975. *Historische-Biographische Texte der 2. Zwischenzeit und Neue Texte der 18. Dynastie.* Wiesbaden.

Helck, W. 1986. "Umm er-Raham", W. Helck and W. Westendorf (eds). *Lexikon der Ägyptologie VI*: 845.

Hoch, J. E. 1994. *Semitic Words in Egyptian Texts of the New Kingdom and Third Intermediate Period.* Princeton.

Hoffmeier, J. K. 2004. "Tell el-Borg on Egypt's Eastern Frontier: A Preliminary Report on the 2002 and 2004 Seasons", *Journal of the American Research Center in Egypt* 41: 85-111.

Hoffmeier, J.K. 2013. "Reconstructing Egypt's Eastern Frontier Defense Network in the New Kingdom (Late Bronze Age)", in F. Jesse and C. Vogel (eds). *The Power of Walls - Fortifications in Ancient Northeastern Africa. Proceedings of the International Workshop held at the University of Cologne 4th-7th August 2011.* Köln: 163-194.

Hoffmeier, J.K. 2018. "A Possible Location in Northwest Sinai for the Sea and Land Battles between the Sea Peoples and Ramesses III", *Bulletin of the American Schools of Oriental Research* 380: 1-25.

Hoffmeier, J.K. 2019. "The Curious Phenomenon of Moving Military Sites on Egypt's Eastern Frontier", *Journal of the Society for the Study of Egyptian Antiquities* 45: 105-134.

Hoffmeier, J.K. and Moshier, S.O. 2006. "New Paleo-Environmental Evidence from North Sinai to Complement Manfred Bietak's Map of the Eastern Delta and Some Historical Implications," in E. Černý (ed.) *Timelines: Studies in Honour of Manfred Bietak. Vol. 2.* Leuven: 167-76.

Hoffmeier, J.K. and Moshier, S.O. 2014. ""The Ways of Horus": Reconstructing Egypt's East Frontier Defense Network and the Military Road to Canaan in New Kingdom Times", in J.K. Hoffmeier (ed.). *Tell el-Borg I: The 'Dwelling of the Lion' on the Ways of Horus.* Winona Lake, IN: 34-61.

Hoffmeier, J.K. and van Dijk, J. 2010. "New Light on the Amarna Period from North Sinai", *Journal of Egyptian Archaeology* 96: 191-205.

- Hoffmeier, J.K., Knudstad, J.E., Frey, R., Bull, R.A. and Kitchen, K.A. 2014. "The Fortification Area", in J.K. Hoffmeier (ed.). *Tell el-Borg I: The 'Dwelling of the Lion' on the Ways of Horus*. Winona Lake, IN: 119-206.
- Hoffmeier, J.K., Knudstad, J.E., Frey, R., Mumford, G. And Kitchen, K.A. 2014. "The Ramesside Period Fort", in J.K. Hoffmeier (ed.). *Tell el-Borg I: The 'Dwelling of the Lion' on the Ways of Horus*. Winona Lake, IN: 207-345.
- Janssen, J.M.A. 1953. "The Stela (Khartoum Museum No. 3) from Uranarti", *Journal of Ancient Near Eastern Studies* 12: 1: 51-55.
- Johnson, D.L. 1973. *Jabal al-Akhdar, Cyrenaica: An Historical Geography of Settlement and Livelihood*. Chicago.
- Kaper, O.E. 2019. "Temple Building on the Egyptian Margins: The Geopolitical Issues behind Seti II and Ramesses IX's Activity at Amheida," in R.S. Bagnall and G. Tallet (eds) *The Great Oasis of Egypt: The Kharga and Dakhla Oases in Antiquity*. Cambridge: 221-236.
- Kitchen, K.A. 1975. *Ramesside Inscriptions: Historical and Biographical. Vol. I*. Oxford.
- Kitchen, K.A. 1979. *Ramesside Inscriptions: Historical and Biographical. Vol. II*. Oxford.
- Kitchen, K.A. 1980. *Ramesside Inscriptions: Historical and Biographical. Vol. III*. Oxford.
- Kitchen, K.A. 1982. *Pharaoh Triumphant: The Life and Times of Ramesses II*. Warminster.
- Kitchen, K.A. 1982. *Ramesside Inscriptions: Historical and Biographical. Vol. IV*. Oxford.
- Kitchen, K.A. 1983. *Ramesside Inscriptions: Historical and Biographical. Vol. V*. Oxford.
- Kitchen, K.A. 1990. "The Arrival of the Libyans in Late New Kingdom Egypt", in A. Leahy (ed.). *Libya and Egypt, c1300-750 BC*. London: 15-28.
- Kitchen, K.A. 2003. *Ramesside Inscriptions: Translated and Annotated. Vol. IV*. Oxford.
- Koontz, A. 2013. "State-Territory and Borders versus Hegemony and its Installations: Imaginations Expressed by the Ancient Egyptians during the Classical periods", in F. Jesse and C. Vogel (eds). *The Power of Walls - Fortifications in Ancient Northeastern Africa. Proceedings of the International Workshop held at the University of Cologne 4th-7th August 2011*. Köln: 33-52.
- Leclère, F. and Valbelle, D. 2008. "Tell Abyad: A Royal Ramesside Residence", *Egyptian Archaeology* 32: 29-32.
- Legrain, G. 1914. "Au pylône d'Harmhabi à Karnak (Xe pylône)", *Annales du Service des antiquités de l'Égypte* 14: 13-44.
- Lesko, L.H. 2002. *A Dictionary of Late Egyptian (Second Edition) Vol. I*. Providence, RI.
- Lichtheim, M. 1973. *Ancient Egyptian Literature, Vol. 1, The Old and Middle Kingdoms*. Berkley, CA.
- Liverani, M. 1990. *Prestige and Interest: International relations in the Near East ca. 1600-1100 B.C. (History of the ancient Near East. Studies Vol. 1)*. Padova.

- Lorton, D. 1974. *The Juridical Terminology of International Relations in Egyptian Texts through Dyn XVIII*. Baltimore, MD.
- Manassa, C. 2003. *The Great Karnak Inscription of Merneptah: Grand Strategy in the 13th Century BC*. (*Yale Egyptological Studies* 5). New Haven, CT.
- Meeks, D. 2006. *Mythes et Legends du Delta d'après le Papyrus Brooklyn 47.218.84*. Cairo.
- Minault-Gout, A. Favry, N. and Licitra, N. 2012. *Une Résidence Royale Égyptienne : Tell Abyad à l'époque ramesside*. Paris.
- Morris, E.F. 2005. *The Architecture of Imperialism: Military Bases and the Evolution of Foreign Policy in Egypt's New Kingdom*. (*Probleme der Ägyptologie Bd. 22*). Leiden.
- Morris, E.F. 2017. "Prevention through Deterrence along Egypt's Northeastern Border: Or the Politics of a Weaponized Desert", *Journal of Eastern Mediterranean Archaeology and Heritage Studies* 5(2): 133-147.
- Morris, E.F. 2018. *Ancient Egyptian Imperialism*. Hoboken, NJ.
- Moshier, S.O. 2014. "The Geological Setting of Tell el-Borg with Implications for Ancient Geography of Northwest Sinai" in J.K. Hoffmeier (ed.). *Tell el-Borg I: The 'Dwelling of the Lion' on the Ways of Horus*. Winona Lake, IN: 62-83.
- Moshier, S.O. and el-Kalani, A. 2008. "Paleogeography along the Ancient Ways of Horus (Late Bronze Age) in Northwest Sinai, Egypt," *Geoarchaeology* 23: 450-73.
- Müller, M. 2011. "A View to Kill: Egypt's Grand Strategy in her Northern Empire", in J.J. Shirley, D. Kahn and S. Bar (eds). *Egypt, Canaan and Israel: History, Imperialism, Ideology and Literature: Proceedings of a Conference at the University of Haifa, 3-7 May 2009*. Leiden; Boston: 236-251.
- Murnane, W.J. 1975. "The Earlier Reign of Ramesses II and His Coregency with Sety I", *Journal of Near Eastern Studies* 34: 153-190.
- Murnane, W.J. 1989. "Rhetorical History? The Beginning of Thutmose III's First Campaign in Western Asia", *Journal of the American Research Center in Egypt* 26: 183-189.
- Murnane, W.J. 1990. *The Road to Kadesh: A Historical Interpretation of the Battle Reliefs of King Sety I at Karnak*. Chicago.
- Murnane, W.J. 1995. "The Kingship of the Nineteenth Dynasty: A Study in the Resilience of an Institution", in D. O'Connor and D. P. Silverman (eds). *Ancient Egyptian Kingship*. Leiden: 185–220.
- Nielsen, N. 2017. "Cereal Cultivation and Nomad-Sedentary Interactions at the Late Bronze Age Settlement of Zawiyet Umm el-Rakham", *Antiquity* 91 (360): 1561-1573.
- O'Connor, D. 1990. "The Nature of Tjemehu (Libyan) Society in the Later New Kingdom", in A. Leahy (ed.). *Libya and Egypt, c1300-750 BC*. London: 29-114.
- O'Connor, D.B. 1982. "Egypt. 1552-664 B.C.", in J.D. Clark (ed.). *The Cambridge History of Africa. Volume 1: From the Earliest Times to c.500 B.C.* Cambridge: 830-940.

- O'Connor, D.B. 2000. "The Sea Peoples and the Egyptian Sources" in E.D. Oren (ed.). *The Sea Peoples and Their World: A Reassessment. (University Museum Monograph 108). (University Museum Symposium Series 11)*. Philadelphia: 85-101.
- Oppenheim, L. 1969. "Babylonian and Assyrian Historical Texts", in J.B. Prichard (ed.). *Ancient Near Eastern Texts Relating to the Old Testament*. Princeton: 265-317.
- Oren, E.D. 1973. "The Overland Route Between Egypt and Canaan in the Early Bronze Age (Preliminary Report)", *Israel Exploration Journal* 23(4): 198-205.
- Oren, E.D. 1987. "The 'Ways of Horus' in North Sinai", in A.F. Rainey (ed.). *Egypt, Israel, Sinai: Archaeological and Historical Relationships in the Biblical Period*. Tel Aviv: 69-119.
- Oren, E.D. 1979. "The Land Bridge Between Asia and Africa: Archaeology of the Northern Sinai up to the Classical period", in B. Rothenberg (ed.). *Sinai*. Washington: 181-191.
- Oren, E.D. 1993. "Northern Sinai", in E. Stern (ed.). *The New Encyclopaedia of Archaeological Excavations in the Holy Land IV*. Jerusalem: 1386-1396.
- Oren, E.D. 2006. "The Establishment of Egyptian Imperial Administration on the "Ways of Horus": An Archaeological Perspective from North Sinai", in E. Czerny and M. Bietak (eds). *Timelines: Studies in Honour of Manfred Bietak. Vol. II*. Leuven: 279-292.
- Petrie, W.M.F. 1932. *Ancient Gaza II: Tell el-Ajjul*. London.
- Petrie, W.M.F. 1935. *Shabtis*. London.
- Quirke, S. 2001. "State Administration", in D.B. Redford (ed.). *The Oxford Encyclopaedia of Ancient Egypt. Vol. 1*. Oxford: 13-16.
- Rainey, A.F. and Notley, S. 2006. *The Sacred Bridge: Carta's Atlas of the Biblical World*. Jerusalem.
- Redford, D.B. 1979. "A Gate Inscription from Karnak and Egyptian Involvement in Western Asia During the Early 28th Dynasty", *Journal of the American Oriental Society* 99: 270-287.
- Redford, D.B. 1992. *Egypt, Canaan and Israel in Ancient Times*. Princeton.
- Redford, D.B. 2003. *The Wars in Syria and Palestine of Thutmose III. (Culture and History of the Ancient Near East 16)*. Leiden.
- Redford, D.B. 2018. *The Medinet Habu Records of the Foreign Wars of Ramesses III. (Culture and History of the Ancient Near East 91)*. Leiden; Boston.
- Redford, D.B. 2000. "Egypt and Western Asia in the Late New Kingdom: An Overview", in E.D. Oren (ed.). *The Sea Peoples and Their World: A Reassessment. (University Museum Monograph 108). (University Museum Symposium Series 11)*. Philadelphia: 1-20.
- Säve-Söderbergh, T. 1946. *The Navy of the Eighteenth Egyptian Dynasty. (Uppsala Universitets Arsskrift 6)*. Leipzig.

- Säve-Söderbergh, T. and Troy, L. 1991. *New Kingdom Pharaonic Sites: The Finds and the Sites II-III. (The Scandinavian Joint Expedition to Sudanese Nubia). (Volume 5:2)*. Uppsala.
- Schlott-Schwab, A. 1981. *Die Ausmasse Ägyptens nach altägyptischen Texten*. Wiesbaden.
- Schofield, L. and Parkinson, R.B. 1994. "Of Helmets and Heretics: A Possible Egyptian Representation of Mycenaean Warriors on a Papyrus from El-Amarna", *The Annual of the British School at Athens* 89: 157-170.
- Schulman, A.R. 1964. *Military Rank, Title and Organization in the Egyptian New Kingdom*. Berlin.
- Sethe, K. 1914. *Urkunden der 18. Dynastie IV*. Leipzig.
- Shea, W.H. 1977. "A Date for the Recently Discovered Eastern Canal of Egypt", *Bulletin of the American Schools of Oriental Research* 226: 31-38.
- Simpson, W.K. 2003 "The Story of Sinuhe", in W.K. Simpson (ed.). *The Literature of Ancient Egypt: An Anthology of Stories, Instructions, Stelae, Autobiographies, and Poetry*. New Haven/London: 55-66.
- Singer, I. 1988. "Merneptah's Campaign to Canaan and the Egyptian Occupation of the Southern Coastal Plain of Palestine in the Ramesside Period", *Bulletin of the American Schools of Oriental Research* 269: 1-10.
- Smith, S.T. 2003. *Wretched Kush: Ethnic Identities and Boundaries in Egypt's Nubian Empire*. London.
- Snape, S. 1997. "Ramesses II's Forgotten Frontier", *Egyptian Archaeology* 11: 23-24.
- Snape, S. 1998. "Walls, Wells and Wandering Merchants: Egyptian Control of Marmarica in the Late Bronze Age", in C. Eyre (ed.). *Proceedings of the Seventh International Congress of Egyptologists, Cambridge 3-9 September 1995. (Orientalia Lovaniensia analectica 82)*. Leuven: 1081-1084.
- Snape, S. 2001. "Neb-Re and the Heart of Darkness", *Antiquity* 75(287): 19-20.
- Snape, S. 2003, "The emergence of Libya on the horizon of Egypt", in D. O'Connor and S. Quirke (eds). *Mysterious Lands*. London: 93-106.
- Snape, S. 2010. "Vor der Kaserne: External Supply and Self-Sufficiency at Zawiyet Umm el-Rakham", in M. Bietak, E. Czerny and I. Forstner-Muller (eds). *Cities and Urbanism in Ancient Egypt: Papers from a Workshop in November 2008 at the Austrian Academy of Sciences*. Vienna: 271-288.
- Snape, S. 2013. "A Stroll along the Corniche? Coastal Routes between the Nile Delta and Cyrenaica in the Late Bronze Age", in F. Förster and H. Riemer (eds). *Desert Road Archaeology in Egypt and Beyond*. Köln: 439-454.
- Snape, S. and Wilson, P. 2008. *Zawiyet Umm el-Rakham I: The Temple and Chapels*. Bolton.
- Spalinger, A.J. 1978. "A New Reference to an Egyptian Campaign of Thutmose III in Asia", *Journal of Near Eastern Studies* 37: 35-41.

- Spalinger, A.J. 1979. "Traces of the Early Career of Ramesses II", *Journal of Near Eastern Studies* 38(4): 271-286.
- Spalinger, A.J. 1979. "Some Notes on the Libyans of the Old Kingdom and Later Historical Reflexes", *Society for the Study of Egyptian Antiquities* 9(3): 125-162.
- Spalinger, A.J. 1979. "The Northern Wars of Seti I: An Integrative Study", *Journal of the American Research Center in Egypt* 16: 29-47.
- Spalinger, A.J. 2005. *War in Ancient Egypt: The New Kingdom*. Malden, MA.
- Spencer, N. 2008. *Kom Firin I: The Ramesside Temple and the Site Survey*. London.
- Spencer, N. 2014. *Kom Firin II: The Urban Fabric and Landscape*. London.
- Stadelmann, R. 1984. "Seevölker", in W. Helck and W. Westendorf (eds). *Lexikon der Ägyptologie V*. Wiesbaden: 814-822.
- Thomas, S. 2000. "Tell Abqa'in: A Fortified Settlement in the Western Delta. Preliminary Report of the 1997 Season", *Mitteilungen des Deutschen Archäologischen Instituts in Kairo* 56: 371-374.
- Török, L. 2013. "Egypt's Southern Frontier Revisited", in F. Jesse and C. Vogel (eds), *The Power of Walls: Fortifications in Ancient Northeastern Africa. Proceedings of the international workshop held at the University of Cologne, 4th-7th August 2011*, Köln: 53-70.
- Valbelle, D. 1994. "La (Les) Route(s)-D'Horus," in N. Grimal, C. Berger el Naggar, G. Clerc, (eds), *Hommages à Jean Leclant. (Institut français d'archéologie orientale 106)*. Cairo: 379-386.
- Valbelle, D. 2021. "One More Time: The-Way(s)-of-Horus", in J. Kamrin, M. Bárta, S. Ikram, M. Lehner and M. Megahed (eds.) *Guardian of Ancient Egypt: Studies for Zahi Hawass III*. Prague: 1607-1612.
- Vogel, C. 2010. *The Fortifications of Ancient Egypt 3000-1780 BC*. Oxford.
- Vogel, C. 2011. "This Far and Not at Step Further! The Ideological Concept of Ancient Egyptian Boundary Stelae", in J.J. Shirley, D. Kahn and S. Bar (eds). *Egypt, Canaan and Israel: History, Imperialism, Ideology and Literature: Proceedings of a Conference at the University of Haifa, 3-7 May 2009*. Leiden; Boston: 320-341.
- Vogel, C. 2018. "Pharaoh's Mighty Walls – Egypt's Fortification System in the Third and Second Millennium BC", in A. Ballmer, M. Fernandez-Gotz and D.P. Mieke (eds). *Understanding Ancient Fortifications: Between Regionality and Connectivity*. Oxford: 25-41.
- Warburton, D. 2001. *Egypt and the Near East. Politics in the Bronze Age*. Paris.
- Waterfield, R., Dewald, C. 2008. *Herodotus, The Histories. (Oxford World's Classics)*. Oxford; New York.
- Weinstein, J.M. 1981. "The Egyptian Empire in Palestine: A Reassessment", *Bulletin of the American Schools of Oriental Research* 241: 1-28.
- Weinstein, J.M. 1992. "The Collapse of the Egyptian Empire in the Southern Levant", in W.A. Ward, M.S. Joukowsky and P. Astrom (eds). *The Crisis Years: The 12th Century B.C.: From Beyond the Danube to the Tigris*. Dubuque, IA: 142-150.

Welsby, D. 2001. *Life on the Desert Edge: 7000 Years of Settlement on the Northern Dongola Reach, Sudan*. London.

Wente, E.F. 1990. *Letters from Ancient Egypt*. Atlanta, GA.

White, D. 1990. "Provisional Evidence for the Seasonal Occupation of the Marsa Martuh Area by Late Bronze and Libyans", in A. Leahy (ed.). *Libya and Egypt, c1300-750 BC*. London: 1-14.

White, D. 2003. "Multum in Parvo: Bates' Island on the NW Coast of Egypt", in N.C. Stampolodis and V. Karageorghis (eds). *Sea Routes...: Interconnections in the Mediterranean 16-6th c. BC*. Athens: 71-82.

Winnicki, J. 2009. *Late Egypt and her Neighbours: Foreign population in Egypt in the first millennium BC (The Journal of Juristic Papyrology. Vol. 12)*. Warsaw.