PITHOM AND RAMESES (EXODUS 1:11): HISTORICAL, ARCHAEOLOGICAL, AND LINGUISTIC ISSUES (PART I)

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ABSTRACT
This paper examines the historical and archaeological background to the toponyms Pithom and Rameses in Exodus 1:11 as a counterargument to those who deny the traditional understanding that they refer to sites attested in the Ramesside era and favor the theory that they reflect 7th BCE (and even later) geopolitical realities. Recent excavations at Tell el-Retaba and Tell el-Maskhuta have helped clarify the situation and militate strongly against this redating. Linguistic issues will be addressed in the forthcoming second part of this article.

INTRODUCTION
Nineteenth-century pioneer Egyptologists were interested in Bible history. Indeed, in 1882 the Egypt Exploration Fund (EEF), later to become the Egypt Exploration Society, expressed a goal “to make surveys, explorations [...] for the purpose of elucidating or illustrating the Old Testament narrative, or any part thereof, insofar as the same is in any way connected with Egypt.”¹

Just as Heinrich Schliemann had set out inspired by Homer’s writings to discover Troy and Mycenae a decade earlier, so Édouard Naville and W. M. F. Petrie went to Egypt to identify sites connected to the Exodus story, investigating sites such as Tell el-Retaba, Tell el-Maskhuta, Tell el-Yehudiyah, Khataanah-Qantir, and Ṣan el-Hager (Tanis).² Ever since, archaeologists and biblical scholars have debated their identifications and their roles in the literature of the Hebrew Bible. Central to these enquiries were the toponyms Pithom and Rameses in Exodus 1:11.³ A general consensus developed among biblical scholars that Egyptology had furnished genuine background information and that the toponyms in Exodus reflected authentic memories from the New Kingdom, the likely era of the sojourn and exodus.⁴

This positive assessment of Exod. 1:11, however, has had its detractors in recent decades, including...
Donald Redford, John S. Holladay, John Van Seters, and Andrew Collins, to mention just a few—with the most recent and sustained critique by Bernd Schipper in 2015. The general approach of these authors is to minimize the significance of (or even to reject outright) the Egyptian elements in the Pentateuch as markers of late-2nd millennium BCE realia.

Also in 2015, a seminar on Egypt and the Bible was held in Lausanne, with the proceedings later published in the pages of this journal (volume 18, 2018). The agenda of the authors was disclosed by the editors, Thomas Römer and Shirlly Ben-Dor Evian: they advocate denying the use of Egyptian materials from the late 2nd millennium BCE as background to Hebrew texts because of “current trends in biblical research that consider most texts of the Hebrew Bible to have been composed during the first millennium BCE, and especially during the 7th and 3rd centuries BCE.” They therefore insist that only Egyptian evidence from the 1st millennium BCE should be considered for comparative or background information to the Exodus narratives. By so doing, these scholars allow their hypothetical reconstructions of the history and development of the Pentateuch to determine which contextual materials can be used in their analyses.

Our approach runs in the opposite direction, namely, that all relevant data from the ancient Near East—textual, linguistic, iconographic, and archaeological—should be used to analyze biblical texts. The data ought to shape one’s theories about the origins of biblical texts—not the other way around. The latest theory should not shackle one’s investigation and place limits on the data considered. Rather, conclusions should be based on where the evidence leads. As such, we are grateful for the opportunity afforded by the Journal of Ancient Egyptian Interconnections to present an alternative perspective to the significance of the Egyptian toponyms Pithom and Rameses in Exod. 1:11.

In what follows, we challenge the views expressed by Schipper in the afore-cited article (especially since it is the most recent statement), although we also address the views of others (Redford, et al.) as necessary. Schipper’s dismissal of the mention of Pithom and Rameses in Exod. 1:11 as authentic reflections of the Ramesside era (broadly ca. 1300–1100 BCE) centers on linguistic, biblical, and archaeological lines of evidence. We shall respond, accordingly, to each of these approaches.

RAMESES: ARCHAEOLOGICAL AND HISTORICAL PERSPECTIVES

The term “Rameses” occurs as one of the store cities of Exod. 1:11 (our main focus) and in four other passages: Genesis 47:11, “the land of Rameses,” as the place where Pharaoh permitted the family of Jacob to settle; and Exod. 12:37; Numbers 33:3, 5, the launching point of the exodus. Early on, Rameses was equated with the Delta site of Pi-Rameses mentioned in Egyptian texts. In 1918 Alan Gardiner published his seminal study of all available inscriptions in order to identify Pi-Rameses, the full name of which is “House of Ramesses, Beloved of Amun, Great of Victories.” After an analysis of scores of texts, he concluded that “whether or no [sic] the Bible narrative be strict history, there is not the least reason for assuming that any other city of Ramesses existed in the Delta besides those elicited from the Egyptian monuments. In other words, the Biblical Raamses-Rameses is identical with the Residence-city of Pi-Raammess.” This equation was accepted for decades by both Egyptologists and biblical scholars.

The task of locating Pi-Rameses presented its own challenges during the late 19th century and into the second half of the 20th century, with Pelusium, Tell el-Retaba, and Ṣan el-Hager (Tanis) all at different times considered to be candidates. In 1928, two consequential excavations began in the northeast Delta. The first was that of Pierre Montet at Ṣan el-Hager, where his successors continue to excavate unto the present day. Early on in his work, Montet determined that Ṣan el-Hagar was Tanis and Pi-Rameses. The Arabic name Ṣan preserves the ancient Egyptian name d’nt (＝Heb. sø’an), thus assuring its identity. An early occurrence of d’nt is found in the onomasticon of Amenemope of the 20th Dynasty (ca. 1186–1069 BCE).

Before becoming a city, the area was named either sḥt d’ “fields of Dja” or sḥt d’nt “fields of Dja’n” (as early as the reign of Ramesses II). Montet was understandably misled by the scores of Ramesses II inscribed monuments he found. Others, such as Gardiner, followed Montet’s belief that Tanis was Pi-Rameses. This identification continued almost unquestioned for the next thirty to forty years.

The second project initiated in 1928 was directed...
by Mahmud Hamza at the village of Qantir. His discoveries led him to believe that Qantir was Pi-Ramesses. Subsequent work there in the 1940s and 1950s led others to agree, although it took another two decades before the equation was fully recognized.

From 1980, Edgar Pusch directed work at Qantir until 2015, when Henning Franzmeier succeeded him. Final published reports have recently appeared, permitting us to better understand the history and enormity of the site. Based on the subsurface magnetometer survey, the greater city with its suburbs and peripheral settlements was estimated to cover an astounding 30 km²—about half of which (that is, c. 15 km²) comprised the Stadtzentrum (city center), including the major harbor/lake.

The reason that occurrences of the toponym Rameses in the Pentateuch are a critical dating criterion is because Pi-Ramesses had a limited history of occupation/settlement. As Hamza and Habachi demonstrated, Seti I (1294–1279 BCE) established a small palace at Qantir, possibly to place him closer to the Levant for his military activity. Then, under Ramesses II, the great metropolis was built and became the de facto capital until Pi-Ramesses was deserted ca. 1135 BCE. The reason for this abandonment, as Manfred Bietak has demonstrated, was that “the Pelusiac branch was silted up and the main stream flowed along the Tanitic branch at Bubastis.” This development, Karl Butzer has shown, is attributed to a sharp decline in the volume of the Nile’s flow after six to seven centuries of more robust discharge, causing this desiccation to occur rather quickly during the reign of Ramesses III (1184–1153 BCE).

The consequence of these ecological factors led to the abandonment of Pi-Ramesses by the royals and the administration, and then eventually by the majority of the population. Memphis became the seat of power for the balance of the Twentieth Dynasty until the founding of the Twenty-first Dynasty by Smendes (1069–1043 BCE) at the newly built city of Tanis. The city was then greatly expanded under Pseusennes I (1039–991 BCE). During the construction phase of Tanis, monuments from Pi-Ramesses were relocated to build the new capital, 20 km (12 miles) to the north, including statues, stelae, obelisks, and miscellaneous blocks. Tanis then enjoyed a continuous history down to Roman times.

Given the limited history of Pi-Ramesses, ca. 1270–1135 BCE, we would aver that the appearance of the place name Rameses in the Torah constitutes an authentic and datable memory from the 13th–12th centuries BCE (or shortly thereafter). By contrast, a 7th-century date, as favored by Schipper and others for the origins of the Exodus narratives, is a very unlikely time for this name to enter the Hebrew tradition.

**CHALLENGES TO EQUATING PI-RAMESSES WITH RAMSES IN THE PENTATEUCH**

Nearly 60 years ago Redford called attention to the missing element pi (written as pr “house” but vocalized as pi in Late Egyptian) in the Hebrew name as problematic for equating the two names. He further argued that linguistically the Egyptian word Ramesses, when written in Semitic languages in the Late Bronze Age, would appear with šin (š), not samekh (s). This linguistic question and related matters are addressed in the forthcoming second part of this essay. Furthermore, Redford contended that the name Ramesses lived on into later times and therefore could have entered the biblical tradition centuries after Pi-Ramesses’s demise. As an eminent Egyptologist, Redford’s arguments proved to be influential and accepted by many scholars.

Schipper’s stance is based largely on Redford’s observations; in addition, he maintains that because of the absence of the prefix pi in the writing of Rameses in Exod. 1:11 “is not the name of a city, but a personal name.” Then Schipper asserts: “no single record is presently known in which the city of Rameses is labeled with simply the name of the Pharaoh, Rameses.”

This latter assertion is incorrect, however. In fact, Gardiner noted two cases where pr is omitted, with the more relevant example reading r’-nts-sw mri lmn ‘nh wdp; snb pr’ dmi—“Ramesses, beloved of Amun, l.p.h., the city.” Gardiner even observed that the absence of pr in these writings offers “a very good parallel to the Biblical place-name,” the store city of Rameses (note the addition of p’ dmi “the city” in the two cases, used for clarification). Somewhat curiously, Schipper ignored Gardiner’s examples and their implications on pp. 137–138 of the article, especially since he cited p. 136 thereof regarding the full name of Pi-Ramesses.

Schipper’s second assertion above—namely, that “Rameses” in Exod. 1:11 “is not the name of a city, but a personal name”—is most confounding. Nowhere does he explain why the omission of the prefix pr would transmogrify Rameses from the
name of a city to that of a person in Exod. 1:11. Even if this were the case, the same royal name (nomen) of Ramesses II would stand behind both. Could there be any other individual named Ramesses that lurks behind biblical רממס? Attempting to separate the name of the city from the personal name of its founder has no bearing on the question of the toponym and its identification. In Gardiner’s study of Pi-Ramesses and its variants, ten examples are documented where after the royal cartouche is written, the seated-god (ʼḏ) sign follows, indicating the name of a god, thus elevating Ramesses to divine status. Pi-Ramesses, in sum, can be viewed as the residence of the divine ruler, Ramesses II.

Immediately after Redford’s study, others commented on the absence of the pr/pi element in the biblical toponym. Wolfgang Helck noted that the missing element pr/pi in the Hebrew writing was not a problem, since there are cases where it is not written in contemporary Egyptian texts.

Sarah Groll likewise pointed to examples of the writing of the city of Ramesses with the same omission, and then Kenneth Kitchen made the same observation, insisting that the exclusion “is of no consequence.”

Building on Redford’s contentions that the name of Ramesses II and his city lived on in the blocks that were transferred to Tanis, which later prompted the establishment of cults of Ramesses, Edward Wente proposed that “post-exilic Jewish scholars in Egypt, were misled about the location of Piramesse in assuming that the newly created cults of the gods of Ramesses at Tanis and Bubastis could serve to identify the site of the Ramesside capital.” In addition to Schipper’s position, Wente’s interpretation has been embraced by various scholars, including Niels Peter Lemche, who opined: “Ramesses may in Exod. 1:11 refer to Tanis.”

Kitchen objected to Wente’s interpretation, calling it “entirely unjustified.” Moreover, he found the scenario of Persian-period Jewish sages looking for the location of Exodus toponyms to be “improbable,” especially since such cults were not accessible to the public, and certainly not to foreigners.

More recently, Bietak has also dismissed this explanation on the grounds that these later gods of Pi-Ramesses cults were established in the Thirtieth Dynasty (380–343 BCE); he concludes that the toponym Ramesses in Gen. 47:11 and Exod. 1:11 “must have been adopted from a tradition older than the Third Intermediate and Saïte Periods.” We concur wholeheartedly.

In the final analysis, the biblical writers of the 1st millennium recognized Tanis (ṣʾan) as a major city along with Memphis and Thebes (Isaiah 19:13; Ezekiel 30:14), as a place where the officials of Tanis (ṣʾeṣʾan) served the king (see Isa. 19:11, 19:13; see also Isa. 30:4), and as the location of a royal residence (Isa. 30:4).

In addition, the Bible never uses “Rameses” (Gen. 47:11; Exod. 1:11, 12:37; Numbers 33:3, 5) to mean “Tanis/Zoan.” In fact, when the author of Psalm 78, dated to the 1st millennium, rehearses God’s wondrous acts in association with the exodus, he uses ṣʾan “Zoan/Tanis” in lieu of (Pi-)Rameses (vv. 12, 43). If (Pi-)Rameses was as well known in the 1st millennium as Schipper and others believe, one is led to ask: why did the Psalmist not use it in agreement with the references in the Pentateuch? The answer seems clear: the city Pi-Ramesses did not exist at the time. Rather, at the time of the composition of Psalm 78, Tanis (the successor to and replacement of Rameses) was the largest northeast Delta royal city. The presence of Tanis in Psalm 78 illustrates that the poem’s author was familiar with the geopolitical realities of his day, and that Rameses was not a viable option.

Ironically, we therefore agree with Van Seters: “the geographic background of the exodus story is Egypt in the time of the writer.” If the references to Rameses in the book of Exodus originated in the mid-1st millennium, it stands to reason that Zoan/Tanis would have been used. The fact that Rameses and Tanis are distinguished, with the former limited to the Torah and the latter to Psalm 78, Isaiah, etc., demonstrates that the biblical authors understood the geographical and chronological differences between the two toponyms.

**PIT HOM AND SUCCOTH/TJE KU: TEXTUAL PERSPECTIVES**

Although Pithom is the first toponym mentioned in Exod. 1:11, and it occurs only here, we treat it secondly, primarily because its identification is interconnected with that of Succoth. Its Egyptian etymology pr-ʻtm “house of Atum” is indisputable, with reference to Atum, one of the oldest solar deities, whose powerful cult center was named ỉwnw, which occurs as ṣʾ “On” in Gen. 41:45, 50; 46:20, and as ʿawen “Awen” in Ezek. 30:17. In Greek texts, including the Septuagint, the city-name occurs as “Heliopolis.” In Egyptian texts, Atum’s most important and frequently used title is ɪtn nb ỉwnw “Atum, lord of On.”

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Since the days of Naville and Petrie, both Tel el-Retaba and Tel el-Maskhuta in the Wadi Tumilat have been associated with Pithom.\textsuperscript{54} Before these sites are considered, it should be noted that Heliopolis, the original cult center of Atum, also has been posited as a candidate for biblical Pithom. Eric Uphill has probably made the best case for this identification, noting that Ramesses II was likely the builder of the massive mudbrick temenos walls identified by Petrie.\textsuperscript{55} He concluded that "here rather than anywhere else we must surely have the Per Atum of historical fame."\textsuperscript{56}

True enough, the name pr-\textit{itm} occurs, for example, on the London obelisk of Ramesses II, originally from Heliopolis. It is clear that this occurrence refers to a smaller chapel within a larger Heliopolitan temple complex that incorporates the name of Ramesses III.\textsuperscript{57} The form pr-\textit{itm}, however, is neither the name of the principal Atum temple—which was \textit{hwt bnbn}—nor the name of the town site. This usage of pr-\textit{itm} can hardly explain the Exod. 1:11 place name. The Septuagint of Exod. 1:11 reads "Pithom and Rameses, and On which is Heliopolis." Uphill suggested that Heliopolis is introduced because the Septuagint translators believed that their ancestors sojourned near Heliopolis due to references in the Joseph story, including his marriage to Asenath, daughter of Potiphera, priest of On (Gen. 41:45, 50; 46:20).\textsuperscript{58} If the Septuagint’s interpolation "On which is Heliopolis" had been inserted after "Pithom," one might think that it was an explanatory gloss, but the placement after "Rameses" militates strongly against this possibility.

A different location called pr-\textit{itm} is documented in Egyptian texts within the Wadi Tumilat, a defunct ancient Nile distributary and a strategic artery for travel between the southern Delta and Sinai.\textsuperscript{59} Arabic \textit{tumilat} preserves the name of Atum, the patron of this narrow 52 km-long zone, which was a part of the 8th Nome of Lower Egypt.\textsuperscript{60} The epithet "Atum Lord of Tjeku" has been found on inscriptions at both Tell el-Retaba\textsuperscript{61} and Tell el-Maskhuta,\textsuperscript{62} thereby adding to the confusion of identifying these neighboring sites. Atum’s high status in this region is indicated not only by the toponym pitom \textit{Pithom} (Exod. 1:11), but also by the name \textit{etam} "Ethan." The Bible relates that after departing Sukkoth (Exod. 13:20; Num. 33:6), the exodus itinerary included a stop at \textit{etam "Etham." The Bible relates that after departing Sukkoth (Exod. 13:20; Num. 33:6), the exodus itinerary included a stop at \textit{etam biqg ham-midbar} "Etham, at the edge of the wilderness" (Exod. 13:20; see also Num. 33:6). Most likely, a) Etham is to be located at the eastern end of the Wadi Tumilat, at which point one reaches the wilderness (western Sinai); and b) the term appears to incorporate the name Atum.\textsuperscript{63}

Based on what the villagers told him, Naville thought that the Arabic name Tell el-Mas\text{\textsuperscript{\textsc{\textcircled{5}}}}huta, meant "mound of the statue." Egyptians still try to explain the meaning of toponyms with popular etymologies, even though the original meanings were lost during the transition from Egyptian (Coptic) to Arabic. By contrast, already in 1875 Heinrich Brugsch recognized that Egyptian \textit{tkw} was the Semitic writing for \textit{sukkot} "booths, shelters,"\textsuperscript{64} and this understanding remains widely accepted today. Thomas Lambdin noted the correspondence between Egyptian \textit{tkw}, Hebrew \textit{sukkot}, and Arabic \textit{mas\textsc{\textsuperscript{\textcircled{5}}}}huta, stating "this identification is both philologically and geographically acceptable."\textsuperscript{65}

The earliest writing of \textit{tkw} occurs on an inscription at Serabit el-Khadim, Sinai, dated to the 7th year of Thutmose IV (ca. 1393 BCE).\textsuperscript{66} The inscription belonged to Amenemhet, \textit{hry pdt n tkw}—"troop commander of Tjeku," who was also a royal messenger (\textit{ipwty ns}). It is noteworthy that the earliest known writing of Tjeku is attached to the name of the military commander, as might be expected, given the strategic nature of this entryway into Egypt. The \textit{hry pdt}, Alan Schulman determined, "was one of the highest ranking officers, subordinate only to the ‘general’" (i.e., the \textit{imy-r ms wr}).\textsuperscript{67} Such high military officers associated with Tjeku are further documented in the Ramesseide Papyrus Anastasi V 19.2–3. The \textit{hry pdt}, Kakemwer of Tjeku is dispatched from "the Broad Hall of the Palace"—presumably in Pi-Rameses—to pursue runaway workers (or slaves) who fled towards the Wadi Tumilat.\textsuperscript{68} He writes that he reached \textit{pr sgr n tkw} the \textit{sgr-fort of Tjeku}.\textsuperscript{69} Egyptian \textit{sgr} derives from Semitic \textit{sgr} (or some similar form) meaning "keep, fortress, enclosure." This is presently the lone reference to a \textit{sgr-fort} in Egyptian texts. This fort in Tjeku is not the same as the \textit{hmn-fort} mentioned in Anastasi VI (see discussion below).\textsuperscript{70} At Tell el-Retaba, Petrie discovered a door jamb with military and administrative titles of a high official: \textit{hry pdt, imy-r h\textit{swt}, imy-r h\textit{kw} "troop commander, overseer of foreign lands, and overseer of the estate/mansion/temple (?).}\textsuperscript{71} User-ma\textit{t-nakht of Tjeku (tkw).}\textsuperscript{72} He likely served during the seven-decade reign of Ramesses II, to judge from his name. Another writing of \textit{tkw}—incorporated into the epithet "Atum, Lord of Tjeku”—was found on a fragment of a naos

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of Ramesses II at Maskhuta.\textsuperscript{76}

Tjeku is typically written with two determinatives in the New Kingdom, \underline{גֶּעֶה}, as is the case Anastasi Papyri (see below). The throw stick (ז) is normally used with foreign words or names (such as “Israel” in the Merneptah Stela),\textsuperscript{77} plus the foreign-land or the desert, hilly terrain sign (לע).\textsuperscript{78} This combination, Ellen Morris suggests, “make[s] it clear that Tjeku, like Tjaru (Sile),\textsuperscript{79} was a border area regarded with some suspicion as not being entirely Egyptian.”\textsuperscript{80} A sensible explanation for the toponym is that this frontier zone was frequented by Semitic-speaking pastoralists who made shelters or booths for their own accommodations or pens for their livestock. Gen. 33:17 illustrates this practice: “Jacob journeyed to Succoth (סוקת), and built himself a house and made booths (סוקת) for his livestock. Therefore the name of the place is called Succoth (סוקת).”\textsuperscript{81}

Moreover, the same type of journey reflected in P. Anastasi VI, with Bedouin entering the Wadi Tumilat to water their flocks, is attested already 500 years earlier. Pastoralists regularly entered Egypt, as evidenced by the Middle Bronze II Levantine tombs discovered in the Wadi Tumilat at Tell el-Retaba,\textsuperscript{82} Um-Bardi, and Tell Kua—demonstrating that this practice had an early history in eastern Egypt.\textsuperscript{83}

It has been common for scholars to think that Tjeku is only a region in the 2nd millennium BCE, and not until sometime in the 1st millennium BCE did it become a city and thus was written with the city sign (سلاح).\textsuperscript{84} This opinion, however, ignores an important piece of evidence, to wit, Deir el-Medineh ostracan 1076, published by George Posener in 1938 and then republished by K. A. Kitchen in Ramesseide Inscriptions, vol. 2 (1979).\textsuperscript{85} Kitchen’s translation and discussion of this ostracan appeared in 1998,\textsuperscript{86} but he kindly permitted Hoffmeier to publish it in Israel in Egypt two years earlier.\textsuperscript{87} This text demonstrates clearly that Tjeku was a settlement, perhaps with a fort, already during the Nineteenth Dynasty (see further below). Those who maintain that Tjeku only became a “city” in the late period need to rethink that position.

The earliest attestation of pr ītm (Pithom) in Wadi Tumilat is found in P. Anastasi VI, lines 54–57, a critical document for understanding the toponymy in the region. The scribe Inena sends a dispatch to his superior, reporting that he permitted “the Shasu (Bedouin) tribes of Edom to pass the Khetem-fort of Merneptah-Hetephirma’at (l.p.h.) which is <in> Tjeku (Succoth) to the pools of Pi-Atum [/// of] Merneptah-Hetephirma’at which is <in> Tjeku (Succoth).”\textsuperscript{88} Several crucial points can be deduced:

1. These occurrences of Tjeku demonstrate that it was the name of Wadi Tumilat. Pastoralists entered the wadi to access water from the lakes immediately west of Tell el-Retaba (Fig. 1). To access this vital water source, pastoralists had to gain permission at the Khetem-fort. The word Khetem (Eg. ḥṭm > Heb. הַחֵטֶם) derives from the root meaning “to seal.”\textsuperscript{89} As the name suggests, Khetem-forts are where foreigners received authorization to enter Egypt. Consequently, they were

\begin{figure}
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\includegraphics[width=\textwidth]{Figure1.png}
\caption{Map of the Wadi Tumilat (Bietak 1975, plan 4). We are grateful to Professor Bietak for providing this image and for permitting us to reproduce it here.}
\end{figure}
situating in well-traveled frontier zones to guard access to Egypt. Morris observes that such forts “most often placed at vulnerable points of entry into the Nile Valley, kmw-fortresses monitored movement and prevented unauthorized passage between one specific restricted area and another.”80

2. There was an installation of some sort called pr itm (Pithom) in Tjeku, near or associated with the Khetem-fort. It may originally have been the name of a temple, as has been widely assumed. The problem, however, with identifying the nature of pr itm is that there is a lacuna where the determinative is written. Gardiner restored the genitival n(y) under the erased sign and before the cartouche of Merneptah, thus: “Pithom/// of (or belonging to) + royal name.” The space above the break could accommodate — the indicator for an architectural feature.91 A settlement that derives its name from its temple is a possible understanding of Pithom. Examples of the city-name formula with pr + a deity’s name are well attested in the New Kingdom, especially in the Onomasticon of Amenemope. See, for example, the list of city (dmtn) names, e.g., Per-Hathor, written with and located near Gebelein;92 the little known Per-Boinu, but written with indicting the name of a deity;93 Per-‘Anty, house of the falcon god located near Assiut;94 and Per-Amun-Re of the Throne of the Two Lands in the Remote North, in the Heracleopolitan nome.95

3. Thus pr itm could originally been the name of the temple complex of Atum in Tjeku that Petrie discovered at Retaba, whose name (as point 2 illustrates), gave rise to the name of the site.

Two statues of the Twenty-second Dynasty were discovered by Naville at Maskhuta. One dates to the reign of Osorkon II (ca. 874–850 BCE), belonging to Ankh-renep-nefer (or Ankh-Khered-nefer),96 “chief inspector” ... “doing what is useful to his father (in) Pithom” (hry idw pr-itm ... tr.(t) ḫ.t n ḫ.t f (m) pr itm), i.e., a temple.97 The second inscription belongs to “the overseer of kmw nfr-priests of Atum ... in Tjeku” and refers to the wḥb-priests who serve in “the temple (hwjt nfr) of Atum which is in Tjeku.”98 Clearly there were one or two temples of Atum in the Tjeku-region. If these texts originated at Maskhuta, then there was a 9th-century temple there. Should they have originated at Retaba as many think, then the Atum cult continued after the New Kingdom’s temple fell out of use (see below).

**Recent Investigations at Tell el-Maskhuta**

Despite the presence of Ramesside period texts found at Maskhuta by Naville, and the reference to the sgr-fort in Tjeku in P. Anastasi V, John Holladay’s careful excavations at Maskhuta between 1978 and 1983 produced no New Kingdom levels.99 After the Hyksos period, there was an 1,100-year hiatus before a settlement and fort were built, likely in connection to Necho II’s canal project (610–595 BCE). Holladay, consequently, theorized that the name Pithom was applied to Maskhuta, and the Ramesside materials were relocated from Retaba 14 km to its west, thereby christening new Pithom. Accordingly, Holladay asserted that this Pithom at Maskhuta is the site intended in Exod. 1:11 and was hence “anachronistic.”100

This interpretation has been widely embraced, including by Redford,101 Van Seters, Collins, and most recently Schipper. Technically, there is only an anachronism if one a priori assumes the 7th–6th-century date for the text. If indeed, as we argue herein, that pr itm was the name associated with Retaba starting in the Ramesside period, then there is no anachronism.

Van Seters, who worked with Holladay at Maskhuta, goes further to question whether Pithom was ever the name of Tell el-Retaba.102 He acknowledges that Atum “may have had a temple or estate in the Wady Tumilat called Per-Atum as early as the 19th Dynasty, but that is entirely uncertain.”103 Indeed the nature of pr itm in P. Anastasi VI is ambiguous: although it seems to have included an architectural component, there is no doubt that pr itm flourished at or near the Khetem-fort of Tjeku in the Ramesside era.

Collins recently offered a defense for Maskhuta being Pithom.104 His treatment of the Greco-Roman period texts is helpful, but his critique of Kitchen’s interpretation of the hieroglyphic inscriptions is unconvincing.105 Kitchen, by contrast, opines that there is no basis for identifying Maskhuta with a townsit called pr itm, but rather maintains that Pithom in the Ptolemy II stela from Maskhuta was a temple “in Tjeku.” Tjeku occurs twelve times on the stela, whereas Pithom occurs just twice, indicating
the priority of Tjeku over Pithom at Maskhuta in the Late Period. Collins then concludes that “the location of a biblical Sukkoth at Tell el-Maskhuta must face the fact that the site had no stratum or ceramic from a settlement in the period in question,” leading him to assert: “Thus a central element of Kitchen’s conservative Exodus theory completely collapses.” As we shall see anon, however, new evidence completely undermines Collins’s claim.

Schipper agrees with those who think that a shift occurred in the late 7th century BCE from Retaba to Maskhuta. He appeals to the “recent research” of Holladay (now approaching forty years old!) but seems unaware of the most recent research at Retaba and Maskhuta (see below). Thus he concludes: “along with the monuments, the name ‘Pithom’ was also transferred from one place to the other.”

The problem with historical reconstructions based on the absence of archaeological data is that when new discoveries are made, old theories can collapse in an instant. Indeed, a new discovery at Maskhuta challenges Holladay’s dating scheme, and by extension Schipper’s and Collins’s arguments against the antiquity of Pithom and Rameses in Exod. 1:11.

In 2010 a stunning, in situ find came to light at Tell el-Maskhuta that can be securely dated to the Nineteenth Dynasty—namely a large mud-brick vaulted tomb. Measuring 12.6 by 6.9 meters, the burial chamber contained a large anthropoid limestone sarcophagus of the tomb owner, Ken-Amun. The burial chamber is lined with beautifully decorated limestone slabs. This impressive tomb is presently the largest and the only stone-lined decorated burial of the New Kingdom discovered on in the Wadi Tumilat and in the northeastern frontier zone, viz., the Hebua and Tell el-Borg region. It is befitting a high-ranking official with close royal connections. Ken-Amun’s titles bear this out: “Royal butler clean of hands,” “Fan bearer at the right of the king,” “Attendant of the lord of the two lands,” and “King’s messenger/envoy.” One of the representations of Ken-Amun shows him holding a feather fan and dressed in an elegant flowing gown that was popular in Ramesside times. Ken-Amun’s wife, Isis, was a singer of Atum, suggesting that a temple to the supreme solar deity was nearby.

A tomb of such a high-ranking 13th-century BCE official could not be an isolated structure. The construction of such a tomb would require brickmakers, builders, stonemasons, and artisans, not to mention that the limestone for the walls and sarcophagus had to be transported from quarries in the Nile Valley. In addition, a phyle of funerary priests were required for embalming and funerary ceremonies. Simply put, a tomb like Ken-Amun’s necessitated a robust and diverse community during the Nineteenth Dynasty.

Holladay’s excavations were confined to within the Twenty-sixth Dynasty enclosure wall and south of the kilometer-long, east-west sand dune (canal dredgings?) that runs parallel to the asphalt road and the adjacent canal. Ken-Amun’s burial, however, was discovered 250 m north of the northern corner of the Saite fort, on the north side of the canal (Fig. 2). Could it be that the elusive New Kingdom settlement and sgr-fort at Tjeku mentioned in P. Anastasi V were located in the area north of the dune and canal?

This entire area has been greatly developed in modern times. A Google Earth image reveals the complexity of this area for archaeological investigations (Fig. 3). North of the dune there is an asphalt road, followed by the Wadi Tumilat canal, and to its north runs a four-lane highway, and then the narrow strip of sandy terrain in which Ken-Amun’s tomb was discovered. Immediately north of this cemetery is a pair of train tracks, and then the modern town. No doubt, much of New Kingdom Succoth/Tjeku, named both in P. Anastasi VI and in Deir el-Medineh ostracon 1076, and now also associated with Ken-Amun’s tomb, was destroyed by modern development.

In 2012 Giuseppina Capriotti Vittozzi of the Italian Archaeological Centre in Cairo renewed work at Maskhuta, concentrating initially on geophysical surveying of the site. Her work has focused primarily on the area south of the canal, but, in the light of the discovery of the tomb of Ken-Amun, Capriotti observed that the presence of this tomb calls “into question” Holladay’s hypothesis regarding the occupational history of Maskhuta and that the name of the site in pharaonic times remains an open question.

**RENEWED EXCAVATIONS AT TELL EL-RETABA**

Petrie discovered a series of defensive fortification walls at Retaba that he dated to the Eighteenth, Nineteenth and Twentieth Dynasties respectively. Within the enclosure walls he discovered the remains of a temple of Atum, with inscriptions of Ramesses II and Ramesses III. A number of brief and poorly published excavations followed over the
**Figure 2:** Google Earth Image of Tell el-Maskhuta with tomb of Ken-Amun at top. Prepared by James Hoffmeier.

**Figure 3:** Google Earth Image of Tell el-Maskhuta showing the area north of the Saite-period fort. Prepared by James Hoffmeier.
years. Michael Fuller, who worked with the Johns Hopkins team from 1977 to 1981 posted some information of his salvage work in 1981 on his website. This material included an analysis of the stratigraphy, which unfortunately remains little known. His stratigraphic sequence confirmed that the site was occupied continuously from the Hyksos period through the 7th century BCE.

Starting in 2007 and continuing to the present, a joint Polish-Slovak team has engaged in modern scientific work at Retaba, including magnetometer surveying and excavations. They have clarified a number of important chronological and occupational questions. Slawomir Rzepka and Jozef Hudec, the co-directors, have published long and detailed reports since 2009, but this important body of data is conspicuously absent in Schipper’s 2015 study. This is especially regrettable, because the findings published by Rzepka and Hudec impinge directly on Schipper’s working hypothesis about the relationship between Retaba and Maskhuta.

The Polish-Slovak work now shows that the first of the three defense walls originated “early” in the Nineteenth Dynasty, and not the Eighteenth Dynasty as Petrie thought. Wall 1 was initially only about 1.85 meters wide, but it was widened by adding inner and outer layers, expanding its width to about 5.4 meters. Ramesses II is thought to have initiated the building program, with the expanded walls most likely constructed later in the dynasty (although possibly said walls were accomplished already during the latter years of his long reign).

The subsequent two wall systems, dated to the reign of Ramesses III and which included a towering Migdol-style gate, enlarged the footprint of the Khetem-fort considerably. Wall 2 measured 9 meters wide and then was widened by an additional 8.5 meters (Wall 3). To estimate the original architectural heights of the three wall phases, “a linear-elastic perfectly plastic model with the Mohr-Coulomb (MC) failure criterion was used,” and it was determined that Wall 1 was about 5 meters tall, while Wall 2 could have been 8 meters high and Wall 3 as high as 13–14 meters. Thus, in Ramesside times, a massive defense establishment was in place.

Within the original enclosure wall, long and narrow mud-brick storage facilities were exposed in the 2009–2010 season in Area 9, dating to the reign of Ramesses II. Petrie had exposed the south side of the gate tower of the earliest wall, and its orientation aligned with the approach to the Atum temple 75 m to its east, where he uncovered a granite stela of Ramesses II and dyad of Ramesses II and Atum, along with the limestone temple blocks of the king smiting a foreigner as “Atum Lord of ṭḫn” offers a ḫps–sword to Ramesses. One of the Ramesses III blocks included the epithet “Lord of ṭ>(); The new dating for the Wall 1 gate and its axial connection to the temple of Atum illustrate the centrality of this sanctuary to the site plan and may explain the basis for the name Pithom.

In sum, it is now evident that Retaba was a thriving New Kingdom site, whose military significance expanded with Ramesses II’s building program that included a defensive enclosure wall and gate, a temple of Atum, and storerooms in the region of ṭ])); In addition, as we have seen, the Khetem-fort in ṭ]]; In the Khufu temple there was a close connection to pr ṭn (Pithom) during the Nineteenth Dynasty. The new archaeological data concurs with what is known from contemporary texts.

The issue remains, what became of Retaba after the Twentieth Dynasty. The site persisted throughout the Third Intermediate Period, as indicated by the recent discovery of a stable from this era. Some of the tethering posts were made from inscribed fragments of the (partially?) dilapidated Atum temple.

Although it appears that the fort and earlier temple were deteriorating, Anna Wodzińska’s analysis of the pottery from the 2010–2011 season shows that during the Third Intermediate Period, wares from the Levant and the Western Oases were still arriving at the site, and ceramics from the Saite and Persian periods were also present. The absence of 6th-century BCE and later architecture, however, seemed to support the notion that Retaba was abandoned in favor of Maskhuta. The presence of sherds from 610 BCE could represent the presence of squatters who lingered at the site after it was deserted.

This picture changed dramatically, however, with the 2016 season, when in Area 9—inside the southwest corner of enclosure Wall 1 and about 25 meters due south of the New Kingdom Atum Temple—several large buildings were discovered dating to the late 7th and 6th centuries BCE. Building 2191, a large mud-brick structure measuring 16.3 by 9.7 meters, contained four rooms. The outer wall varied from 0.8 to 1.0 meter thick. Adjacent to it stood another building, which measured 20 by 10.5 meters, with walls as thick as 1.8 meters, and whose
inner chambers are filled casemates. Likely these structures were foundations for so-called tower houses. While work on these sizeable Late Period buildings are at the early stages of research, proof now exists that there was continual occupation throughout the Ramesside era when the Khetem-fort was most formidable, and then, though less robust, settlements continued throughout the Third Intermediate Period and into the Persian epoch. Tell el-Retaba, therefore, was not deserted when the Saite fort was constructed at Tell el-Maskhuta.

Tell el-Maskhuta’s fort likely functioned as the principal military and administrative operational center for the Red Sea canal project, but did the name Pithom shift from the Retaba to Maskhuta? The phenomenon of transferring names from an earlier site to a new, replacement nearby location is attested on the northeastern frontier. For example, the name Tjaru/Sile moved from Hebua, when the New Kingdom and Saite period forts were abandoned, to a new site 8.5 km to the south-southwest at Tell Abu Sefeh beginning in the Persian period.

The border fort Migdol (+ the names Seti I, Ramesses II, and Ramesses III) actually moved twice while retaining the name. This Migdol-fort was situated on the road to the Levant following Hebua II and Tell el-Borg (Fig. 4). It has been identified with the New Kingdom site, T-211 located at the southern end of the paleo-lagoon (known as š-ḥr > Shihor). It was discovered by Eliezer Oren during his pioneering survey of north Sinai in the 1970s–1980s. Based on aerial and CORONA satellite images, a large fort is visible at this site, but due to the as-Salam irrigation project, it is now apparently inaccessible.

Oren did excavate T-21 (Tell Qedua), situated on the northeastern shores of the paleo-lagoon, about 12 km east of Hebua I and 9 km north of T-211. He
excavated it briefly, equating it with Migdol of the Saite-period fort on Egypt’s northeastern entry point. Migdol is situated as Egypt’s frontier fort in Jeremiah (44:1; 46:14) and Ezekiel (29:10; 30:6). Definitions of Migdol’s appearance in Exod. 14:2 is another case of “late redaction,” like Pithom in Exod. 1:11, and is based on Oren’s dating of Migdol/Qedua—but he ignores Oren’s caveat that “T-21 has nothing to do with the Exodus episode or with the Egyptian New Kingdom period.” Despite Collins’s dubious claim, there is a well-documented New Kingdom military site on the road out of Egypt, not far from Tjaru named the Migdol (+ royal name), and it could be at T-211 in north Sinai.

Subsequent work by Redford (1993, 1997) and Hussein and Abd el-Aleem (2007) at Qedua confirmed Oren’s conclusion that the fort may have sustained damage during the Persian invasion of 525 BCE, leading to its demise. It was, however replaced by the Persian, Ptolemaic-period and Roman forts at Tell el-Herr, 2.5 km to the south. The name survived into Greek as Magdalo. Thus Migdol/Magdalo survived at least three different locations over a period of 1,500 years.

The common factors in these name transfers are the paleo-environmental change that slowly isolated the earlier site, resulting in changes in the access routes to Egypt. This is what happened as noted with Pi-Ramesses; the city moved but the name did not transfer. Secondly, the earlier site was abandoned, thus freeing the name to be reassigned to the new site. Tell el-Maskhuta’s rebirth around 610 BCE might be attributed to a change due to the new canal, but we now know that Tell el-Retaba was not abandoned in the late 7th and 6th centuries BCE. This suggests the name was still in use in the Saite period.

This leaves us then with the reference to Patumus used by Herodotus in connection with the Necho-Darius canal. He describes the canal as follows: “It is fed by the Nile, and is carried from a little above Bubastis by the Arabian town of Patumus; it issues into the Red Sea.” Because of the rebuilding of Saite Tell el-Maskhuta, it has been assumed that Patamus was located there and was a Greek vocalization for Pithom. Identifying Patamus as “the Arabian town” situates it in the eastern Delta, including the Wadi Tumilat. Since the canal starts near Bubastis, Patamus would seemingly be closer to the west end of the wadi than farther east at Makshuta. Aly Bey Shafei, who worked with early maps and visited various traces of the canal in 1946 to clarify the course of the Red Sea Canal, considered Herodotus’s description to place Patumus closer to Bubastis. Identifying Patumus closer to Bubastis.

It seems unlikely, then, that the name of the townsite Pithom was transferred from Tell el-Retaba to Tell el-Maskhuta, rendering the claim that Pithom’s appearance in Exod. 1:11 is an anachronism or evidence of late redaction unnecessary. If the Ramesside-period name Pithom was associated with Retaba as argued above, its presence in the Pentateuch is not a sign of lateness, but points to an earlier memory. As Sarah Groll observed, the collocation of the toponyms associated within the exodus tradition, viz. Pi-Ramesses (Rameses), Pi-Atum (Pithom), Tjeku (Succoth), gsm (Goshen), pí-ha-ro (Pi-hahiroth), Pa-Tjufy (Yam Suf), only “appear together in the same context” in Egyptian texts of the Ramesside era, a point affirmed just recently by Bietak. This cluster of Egyptian toponyms that occur both in the Anastasi papyri of Ramesside times and in the book of Exodus cannot be a coincidence, but rather points to authentic memories from the setting of the sojourn-exodus, regardless of when the Exodus narratives were authored.

**CONCLUSION TO PART I**

Pithom is to be located at Tell el-Retaba, and Rameses is to be located at Qantir. The two toponyms are well attested in the New Kingdom epigraphic record, while archaeological excavations of the two sites demonstrate that both were major centers during the Nineteenth and Twentieth Dynasty periods. The biblical tradition recorded in Exod. 1:11 regarding the Israelite settlement in Pithom and Rameses accords perfectly well with the Egyptian evidence. In fact, the converging lines of evidence point to an early Israelite tradition, and not to any later time (say, after c. 1000 BCE). In fact, if we consider the founding of Tanis in ca. 1075 as a terminus ante quem, we may be able to posit a very early Israelite tradition for the recollection of the residency of the Israelites in the city of Rameses.

**ABBREVIATIONS**

REFERENCES
Giveon, Raphael. 1969. “A Long Lost Inscription of
Thutmose IV.” Tel Aviv 5: 170–174.
For a review of this information, see Hoffmeier 2015b, 198.

2 Hoffmeier 2015b, 198‒199.

3 Various Bible translations use different forms of the name “Rameses/Raameses/Ramesses,” especially in light of the different Hebrew forms: raʾāmsēs in Exod. 1:11 (with pataḥ-pataḥ sequence at the start), though raʾāmāsē elsewhere (4x) (with pataḥ-shōva sequence at the start). To keep matters simple, we shall use the spelling “Rameses” for the biblical toponym and “Ramesses” for the name of the various pharaohs and the Egyptian toponym Pi-Ramesses—unless, of course, a different form occurs in the title of a work or within a quotation therefrom.

See, for example, Driver, 1911, 3–4; Hyatt 1971, 15; Herrmann 1973, 58–60.

Their publications will be cited as particular arguments are raised below.


7 Römer and Ben-Dor Evian 2018, vi.

Some of the basic ideas expressed herein occur also in Bietak and Rendsburg 2021, 17–58, 342–351.


10 Gardiner 1918, 266.

11 For a review of this history, see Hoffmeier 2005, 53–58.

12 Leclère 2020, 110–120.


16 Gardiner 1947, 2:200*.

17 Gardiner 1933, 122–128.

18 Hamza 1930, 66

Pusch et al. 1998‒2015.

Ramesses VI (1143–1136 BCE) is the last pharaoh whose name appears on monuments at Pi-Ramesses; see Kitchen 1998, 81.

Hamza, 1930, 64; and Habachi, 2001, 106–107.


Butzer 1976, 33.


The actual founding of the city apparently harks back to late in Ramesses XI’s reign (1099–1069 BCE); see Graham 1997, 348–350.

Redford 1992, 1106.

Redford 1963, 401–418. Redford has also argued that other toponyms in Exodus reflect the 7th century BCE in Redford 1987, 175–177.

Redford 1963, 411–413.


Schipper 2015, 272.

Gardiner 1947, 137–138. More recently, Bietak (2015, 26) drew attention to these occurrences.

Gardiner 1918, 138.

See Schipper 2015, 272, n. 41.


Helck 1965, 41–42.

Groll 1998, 189–190


Wente 1992, 617.


Bietak 2015, 30.

We understand the word hanes (often rendered as the proper noun Hanes) to reflect Egyptian h(w)et nsw “palace of the king.” For discussion, see Muchiki 1999, 230, and, in greater detail, see Breyer 2019, 81–85. Note further that here and throughout this article we use a simplified method of transliterating Hebrew forms, keeping diacritical marks to a minimum.

For a survey of opinion, see Anderson 1972, 562.


Elsewhere only Num. 13:22 (as a gloss, apparently) and Ezek. 30:14.


Gardiner 1947, 2:144*-145*.

HALOT 1.22. See also the listings in Muchiki 1999, 229–230, and Breyer 2019, 80.

For a brief survey of Atum and the cult of Heliopolis, see Hoffmeier 2015a, 5–12. See also Massimilano and Krejčí 2017, 357–380.

Notice Naville’s title: The Store-City of Pithom and the Route of the Exodus. Petrie’s relevant publication was Hyksos and Israelite Cities, Hyksos and Israelite Cities, in which he initially located Rameses at Tell el-Retaba.


Uphill 1968, 299.

Kitchen 1979, 479, line 16.


Baines and Málek 1980, 15.

Petrie 1906, pls. xxix, xxx.

Naville 1888, pls. 3A, 3C, 7A, 7C, and 8.


Naville 1888, 1.

Brugsch 1875, 8.


Lambdin 1964, 449.

Giveon 1969, 170–174, see especially fig. 2. In general, see Tallet 2012, nos. 36, 38, 176 (non vide).

Schulman 1964, 53.


Gardiner 1947, 67, line 1.

For the distinction between the sgr-fort and the htm-fort, see the following: Caminos 1954, 257; Bleiberg 1983, 24; and Kitchen 1998, 74.

Morris (2005, 456) renders this as “temple.” The word hwt is a large building or house, which can with the right complementary word be rendered palace (hwt `mt) and temple (hwt ntr); see Lesko 2002, 1.303–304. The meaning of what is meant in this text is ambiguous.

Petrie 1906, pl xxxi.

Naville 1888, pl. 3a. See also Myśliwiec 1978, 171–195.

Gardiner 1969, 513 (sign T14).

Gardiner 1969, 489 (sign N25).

Hoffmeier and Bull 2005, 79–84.

Morris 2005, 176.

The reference, however, is to a place in the land of Canaan.

Holladay 1982, 44–46 and pls. XL–XLIV.

For donkey burials in the northeast Delta and Wadi Tumilat, see Ashmawy Ali 2019, 39–46.

Bleiberg 1982, 25. See also Naville 1888, pl. 3.c.

Posener 1938, pl. 43, no. 1076; and Kitchen 1979, 463.

Kitchen 1998, 73.


Translation by Hoffmeier, based on the text in Gardiner 1947, 76, lines 12–15.

Wb. 3.350; HALOT 1.364.


Gardiner 1969, 492.

Gardiner 1947, 2:17*-18*.

Gardiner 1947, 2:32*.

Gardiner 1947, 2:68*-69*.

Gardiner 1947, 2:117*-118*.

Jansen-Winkeln 2007, 126. We are grateful to Boyo Okinga for this reference.

Naville 1888, pl. 4. See Kitchen, 1998, 76.

Naville 1888, pl. 5.


Redford 1987, 137–161.

Van Seters aligns with Redford’s earlier suggestion that the “pools of pr-htm” may be an estate under the control of the temple of Atum in Pi-Rameses (Redford 1987, 142).


Collins 2008, 135–149.

Collins 2008, 139–142.

Naville 1888, pl. 8–10.

Collins 2008, 142.

Schipper 2015, 270.

The surrounding tombs were from the Greco-Roman period.

We are grateful to Dr. Hesham Hussein and Dr. Mostafa Hassan of the Ministry of Antiquities for providing this information.

For a brief report in Arabic, see Abd el-Alim 2015, 28–30.

The largest tomb discovered thus far at Heuba IV is 9.5 x 4.06 meters, for which see Dorner 1996, 170. The largest one discovered at Tell el-Borg was Tomb 4, which measures 7.70 x 3.60 meters, for which see Hoffmeier 2019, 190–196.

We are grateful to Dr. Aiman Ashmawy, who is publishing the tomb, for providing us with Ken-Amun’s titles.

See Holladay’s site plan in Holladay 1982, pl. 37.

Made under the orders of Mohamed Ali Pasha, possibly over the so-called Canal of the Pharaohs. See Redmount 1995, 127–135.

Capriotti Vittozzi and Andrea Angelini 2017, 81–86 and Capriotti Vittozzi et. al. 2018–2019: 227–247. We are grateful to Dr. Capriotti Vittozzi for sending PDFs of these articles.

Capriotti Vittozzi and Angelini 2017, 82.

Petrie 1906, 28–30 and pl. xxxv.

See Petrie’s site plan in Petrie 1906, pl. xxxv, and for the Ramesses II temple blocks see pl. xxx–xxxi.

For a recent survey of the work done at Retaba, see Rzepka et al. 2014, 41–122.

Fuller n.d.

Fuller’s work was reported in 2005 in Hoffmeier 2005, 60.

Rzepka et al. 2014.
In addition to the article cited in Note 121, see the following: Slawomir Rzepka et al. 2011, 139–184; Rzepka et al. 2012, 253–287; Rzepka et al. 2013, 79–95; Rzepka et al. 2014, 41–122; Rzepka et al. 2015a, 139–163; Rzepka et al. 2015b, 97–166; Malleson 2015, 175–99; Gręzak 2015 167–174; Rzepka et al. 2017a, 109–135; Rzepka et al. 2017b, 19–85; Trzciński et al. 2017, 99–108; Hudec et al., 2018a, 93–122; and Hudec et al., 2018b, 21–110.

Given Ramesses II’s long reign, it could be that he is responsible for both phases. Rzepka et al. 2011, 139–152; and Hudec et al. 2018b, 33–36. For the most detailed treatment of the defense walls, see Trzciński et al. 2017.

The basic plan of the gate was determined by Petrie (1906, pl. xxxv), which Cavillier (2004, 57–59) identified as the Migdol-style that compared favorably with Ramesses III’s gateway plan at Medinet Habu. The renewed work on the western gate by Hudec helped to improve Petrie’s plan slightly; see Rzepka et al. 2011, 139–142.


Rzepka et al. 2011, 148–152.

Petrie 1906, 29–30 and pls. xxxviii–xxxii. For the site plan and temple plan, see pls. xxxv–xxxv-a.

Petrie 1906, pl. xxi.


Rzepka et al. 2017b, 72–76.

Rzepka et al. 2017b, 73.