



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 Edouard 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 Šan 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,⁵ to mention just a few—with the most recent and sustained critique by Bernd Schipper in 2015.⁶ 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 Shirly 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.”⁷ 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.⁸

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-Ramesses mentioned in Egyptian texts. In 1918 Alan Gardiner published his seminal study of all available inscriptions in order to identify Pi-Ramesses, the full name of which is “House of Ramesses, Beloved of Amun, Great of Victories.”⁹ 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 Raameses-Rameses is identical with the Residence-city of Pi-Raimesse.”¹⁰ This equation was accepted for decades by both Egyptologists and biblical scholars.

The task of locating Pi-Ramesses presented its own challenges during the late 19th century and into the second half of the 20th century, with Pelusium, Tell el-Retaba, and Şan el-Hager (Tanis) all at different times considered to be candidates.¹¹ In 1928, two consequential excavations began in the northeast Delta. The first was that of Pierre Montet at Şan el-Hager, where his successors continue to excavate unto the present day.¹² Early on in his work, Montet determined that Şan el-Hager was Tanis and Pi-Ramesses.¹³ The Arabic name *Şān* preserves the ancient Egyptian name *dʿn(t)* (=Heb. *šōʿan*), thus assuring its identity.¹⁴ An early occurrence of *dʿnt* is found in the onomasticon of Amenemope of the 20th Dynasty (ca. 1186–1069 BCE).¹⁵

Before becoming a city, the area was named either *šht dʿ* “fields of Dja” or *šht dʿn(t)* “fields of Djaʿn” (as early as the reign of Ramesses II).¹⁶ 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-Ramesses.¹⁷ This identification continued almost unquestioned for the next thirty to forty years.

The second project initiated in 1928 was directed

apparent specificity, these are very much estimates not universally agreed upon.

EDITORIAL NOTE: It is the editorial policy of this journal not to publish specific dates earlier than 664 BCE. However, to facilitate the authors’ argument, the dates they provide have been retained. The reader should be aware that, despite the

by Mahmud Hamza at the village of Qantir. His discoveries led him to believe that Qantir was Pi-Ramesses.¹⁸ Subsequent work there in the 1940s and 1950s led others to agree,¹⁹ 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,²⁰ 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.²¹

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.²² Then, under Ramesses II, the great metropolis was built and became the *de facto* capital until Pi-Ramesses was deserted ca. 1135 BCE.²³ 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.”²⁴ 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).²⁵

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)²⁶ at the newly built city of Tanis.²⁷ 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.²⁸

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-RAMESES WITH RAMESES 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.²⁹ 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).³⁰ (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.³¹ As an eminent Egyptologist, Redford’s arguments proved to be influential and accepted by many scholars.³²

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.”³³ 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.”³⁴

This latter assertion is incorrect, however. In fact, Gardiner noted two cases where *pr* is omitted, with the more relevant example reading *r^c-ms-sw mri imn ṅh wd³ snb p³ dmi*—“Ramesses, beloved of Amun, l.p.h., the city.”³⁵ 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 *p³ dmi* “the city” in the two cases, used for clarification).³⁶ 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.³⁷

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 רַעְמֶסֶסֶס? 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 (𓆎) sign follows,³⁸ 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.³⁹ Sarah Groll likewise pointed to examples of the writing of the city of Ramesses with the same omission,⁴⁰ and then Kenneth Kitchen made the same observation, insisting that the exclusion "is of no consequence."⁴¹

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 Rameses at Tanis and Bubastis could serve to identify the site of the Ramesside capital."⁴² In addition to Schipper's position, Wente's interpretation has been embraced by various scholars, including Niels Peter Lemche, who opined: "Rameses may in Exod. 1:11 refer to Tanis."⁴³

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.⁴⁴ 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 Rameses in Gen. 47:11 and Exod. 1:11 "must have been adopted from a tradition older than the Third Intermediate and Saïte Periods."⁴⁵ We concur wholeheartedly.

In the final analysis, the biblical writers of the 1st millennium recognized Tanis (*šo'an*) as a major city along with Memphis and Thebes (Isaiah 19:13; Ezekiel 30:14), as a place where the officials of Tanis (*šare šo'an*) 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).⁴⁶

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,⁴⁷ rehearses God's wondrous acts in association with the exodus, he uses *šo'an* "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."⁴⁸ 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.,⁴⁹ demonstrates that the biblical authors understood the geographical and chronological differences between the two toponyms.

PITHOM AND SUCCOTH/TJEU: 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-itm* "house of Atum" is indisputable,⁵⁰ with reference to Atum, one of the oldest solar deities, whose powerful cult center was named *iwnw*,⁵¹ which occurs as *'ōn* "On" in Gen. 41:45, 50; 46:20, and as *'awen* "Awen" in Ezek. 30:17.⁵² In Greek texts, including the Septuagint, the city-name occurs as "Heliopolis." In Egyptian texts, Atum's most important and frequently used title is *itm nb iwnw* "Atum, lord of On."⁵³

Since the days of Naville and Petrie, both Tell el-Retaba and Tell el-Maskhuta in the Wadi Tumilat have been associated with Pithom.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.⁵⁵ He concluded that “here rather than anywhere else we must surely have the Per Atum of historical fame.”⁵⁶

True enough, the name *pr-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.⁵⁷ The form *pr-itm*, however, is neither the name of the principal Atum temple—which was *hwt bnbw*—nor the name of the town site. This usage of *pr-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).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-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.⁵⁹ Arabic *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.⁶⁰ The epithet “Atum Lord of Tjeku” has been found on inscriptions at both Tell el-Retaba⁶¹ and Tell el-Maskhuta,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* “Pithom” (Exod. 1:11), but also by the name *’etam* “Etham.” The Bible relates that after departing Succoth (Exod. 13:20; Num. 33:6), the exodus itinerary included a stop at *’etam biqse 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.⁶³

Based on what the villagers told him, Naville thought that the Arabic name Tell el-Mashūṭa, meant “mound of the statue.”⁶⁴ 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 *tkw* was the Semitic writing for *sukkot* “booths, shelters,”⁶⁵ and this understanding remains widely accepted today.⁶⁶ Thomas Lambdin noted the correspondence between Egyptian *tkw*, Hebrew *sukkot*, and Arabic *mashūṭa*, stating “this identification is both philologically and geographically acceptable.”⁶⁷


The earliest writing of *tkw* occurs on an inscription at Serabit el-Khadim, Sinai, dated to the 7th year of Thutmose IV (ca. 1393 BCE).⁶⁸ The inscription belonged to Amenemhet, *hry pdt n tkw*—“troop commander of Tjeku,” who was also a royal messenger (*ipwty nsw*). 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 *hry pdt*, Alan Schulman determined, “was one of the highest ranking officers, subordinate only to the ‘general’” (i.e., the *imy-r mšc wr*).⁶⁹

Such high military officers associated with Tjeku are further documented in the Ramesside Papyrus Anastasi V 19.2–3. The *hry pdt*, Kakemwer of Tjeku is dispatched from “the Broad Hall of the Palace”—presumably in Pi-Ramesses—to pursue runaway workers (or slaves) who fled towards the Wadi Tumilat.⁷⁰ He writes that he reached *p3 sgr n tkw* “the sgr-fort of Tjeku.”⁷¹ Egyptian *sgr* derives from Semitic *sagor* (or some similar form) meaning “keep, fortress, enclosure.”⁷² This is presently the lone reference to a *sgr*-fort in Egyptian texts. This fort in Tjeku is not the same as the *htm*-fort mentioned in Anastasi VI (see discussion below).⁷³ At Tell el-Retaba, Petrie discovered a door jamb with military and administrative titles of a high official: *hry pdt, imy-r h3swt, imy-r hwt* “troop commander, overseer of foreign lands, and overseer of the estate/mansion/temple (?),”⁷⁴ User-ma’at-nakht of Tjeku (*tkw*).⁷⁵ He likely served during the seven-decade reign of Ramesses II, to judge from his name. Another writing of *tkw*—incorporated into the epithet “Atum, Lord of Tjeku”—was found on a fragment of a naos

of Ramesses II at Maskhuta.⁷⁶

Tjeku is typically written with two determinatives in the New Kingdom, , as is the case Anastasi Papyri (see below). The throw stick () is normally used with foreign words or names (such as “Israel” in the Merneptah Stela),⁷⁷ plus the foreign-land or the desert, hilly terrain sign ().⁷⁸ This combination, Ellen Morris suggests, “make[s] it clear that Tjeku, like Tjaru (Sile),⁷⁹ was a border area regarded with some suspicion as not being entirely Egyptian.”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 (*sukkot*), and built himself a house and made booths (*sukkot*) for his livestock. Therefore the name of the place is called Succoth (*sukkot*).”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-Maskhuta,⁸² Um-Bardi, and Tell Kua—demonstrating that this practice had an early history in eastern Egypt.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 ().⁸⁴ This opinion, however, ignores an important piece of evidence, to wit, Deir el-Medineh

ostrakon 1076, published by George Posener in 1938 and then republished by K. A. Kitchen in *Ramesside Inscriptions*, vol. 2 (1979).⁸⁵ Kitchen’s translation and discussion of this ostrakon appeared in 1998,⁸⁶ but he kindly permitted Hoffmeier to publish it in *Israel in Egypt* two years earlier.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 itm* (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).”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. *htm* > Heb. *htm*) derives from the root meaning “to seal.”⁸⁹ As the name suggests, Khetem-forts are where foreigners received authorization to enter Egypt. Consequently, they were

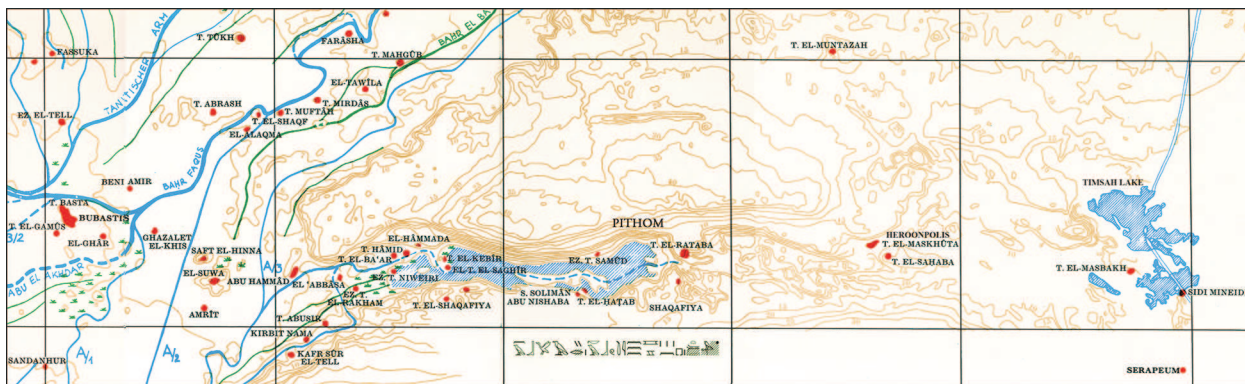


FIGURE 1: Map of the Wadi Tumilat (Bietak 1975, plan 4). We are grateful to Professor Bietak for providing this image and for permitting us to reproduce it here.

situated 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, *hṯm*-fortresses monitored movement and prevented unauthorized passage between one specific restricted area and another.”⁹⁰

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 \square — 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 (*dmi*) 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-^cAnty, 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 ... ir.(t) 3h.t n it.f(m) pr itm*), i.e., a temple.⁹⁷ The second inscription belongs to “the overseer of *hm ntr*-priests of Atum ... in Tjeku” and refers to the *w^b*-priests who serve in “the temple (*hwt ntr*) 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 townsite 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.¹⁰⁶ 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.”¹⁰⁷ 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.”¹⁰⁸

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.¹⁰⁹ Measuring 12.6 by 6.9 meters,¹¹⁰ the burial chamber contained a large anthropoid limestone sarcophagus of the tomb owner, Ken-Amun.¹¹¹ 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.¹¹² 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.”¹¹³ 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 brick-makers, 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.¹¹⁴ 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,¹¹⁵ 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 ostrakon 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.¹¹⁶ 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.¹¹⁷

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.¹¹⁸ Within the enclosure walls he discovered the remains of a temple of Atum, with inscriptions of Ramesses II and Ramesses III.¹¹⁹ 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.¹²⁰ 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.¹²¹ His stratigraphic sequence confirmed that the site was occupied continuously from the Hyksos period through the 7th century BCE.¹²²

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.¹²³ Slawomir Rzepka and Jozef Hudec, the co-directors, have published long and detailed reports since 2009,¹²⁴ 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.¹²⁵ 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. Rameses 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 Rameses III and which included a towering Migdol-style gate, enlarged the footprint of the Khetem-fort considerably.¹²⁶ 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.¹²⁷ 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 Rameses II.¹²⁸ 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 Rameses II and dyad of Rameses II and Atum, along with the limestone temple blocks of the king smiting a foreigner as "Atum Lord of T̄(k)u" offers a *ḥpš*-sword to Rameses.¹²⁹ One of the Rameses III blocks included the epithet "Lord of Tjeku."¹³⁰ 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 Rameses II's building program that included a defensive enclosure wall and gate, a temple of Atum, and storerooms in the region of Tjeku/Succoth. In addition, as we have seen, the Khetem-fort in Tjeku had a close connection to *pr itm* (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.¹³¹ Some of the tethering posts were made from inscribed fragments of the (partially?) dilapidated Atum temple.¹³²

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.¹³³ 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 after 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.¹³⁴ 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.¹³⁵ 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.¹³⁶ 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 Sefêh beginning in the Persian period.¹³⁷

The border fort Migdol (+ the names Seti I, Ramesses II, and Ramesses III) actually moved twice while retaining the name.¹³⁸ 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-*hr* > Shiḥor). It was discovered by Eliezer Oren during his pioneering survey of north Sinai in the 1970s–1980s.¹³⁹ 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.¹⁴⁰

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

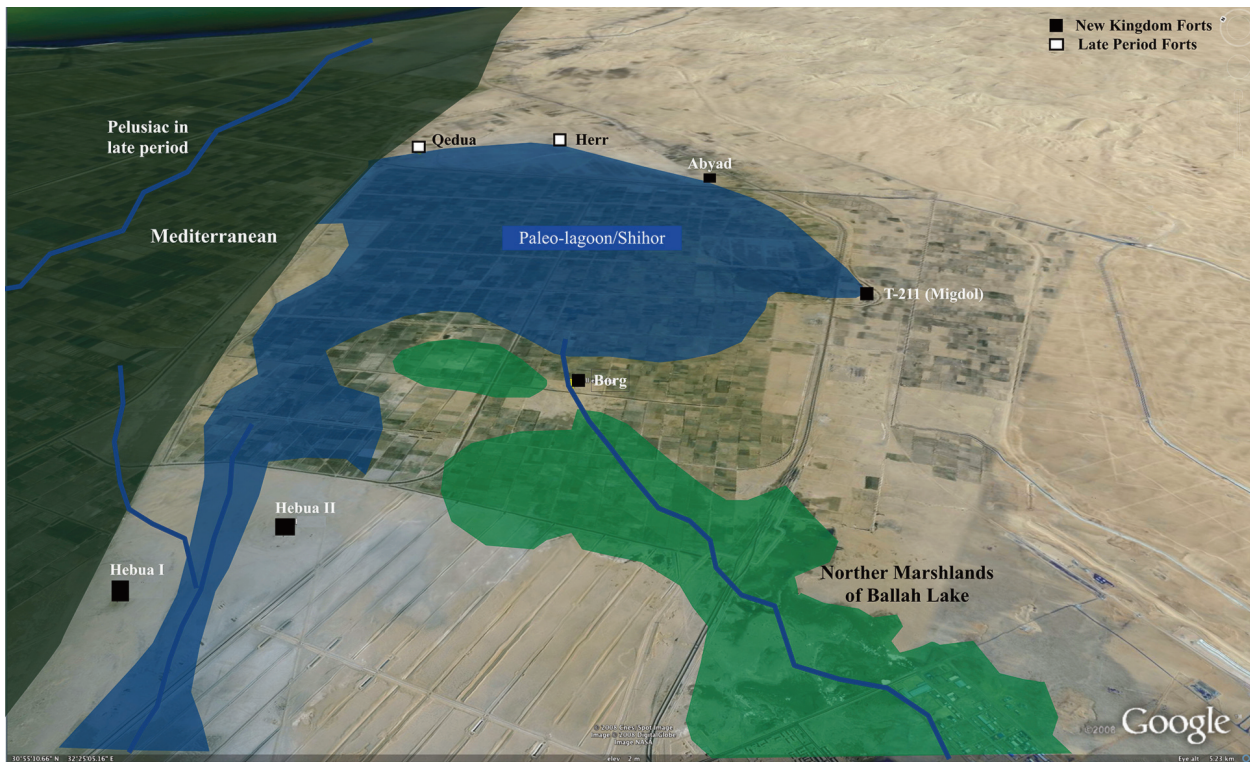


FIGURE 4: Paleoenvironmental map of east frontier zone, showing the forts of Tjaru, Tell el-Borg, and T-211 (Migdol?), based on geological work of Stephen Moshier and archaeological research of James Hoffmeier.

excavated it briefly, equating it with Migdol of the Saite-period fort on Egypt's northeastern entry point.¹⁴¹ Migdol is mentioned as Egypt's frontier fort in Jeremiah (44:1; 46:14) and Ezekiel (29:10; 30:6). Collins's assertion that Migdol's appearance in Exod. 14:2 is another case of "late redaction," like Pithom in Exod. 1:11,¹⁴² 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."¹⁴³ 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.¹⁴⁴

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,¹⁴⁵ 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.¹⁴⁶ The name survived into Greek as Magdalo.¹⁴⁷ 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."¹⁴⁸ Because of the rebuilding of Saite Tell el-Maskhuta, it has been assumed that Patumus was located there and was a Greek vocalization for Pithom. Identifying Patumus as "the Arabian town" situates it in the eastern Delta, including the Wadi Tumilat.¹⁴⁹ Since the canal starts near Bubastis, Patumus 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.¹⁵⁰ Identifying Patumus of Herodotus is anything but certain.

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), *p³-ḥ-r³* (*Pi-hahirōt*), Pa-Tjufy (Yam Suf), only "appear together in the same context" in Egyptian texts of the Ramesside era,¹⁵¹ a point affirmed just recently by Bietak.¹⁵² 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

HALOT M. E. J. Richardson (ed.). 2001. *The Hebrew and Aramaic Lexicon of the Old Testament*, 2 vols. Leiden: Brill.

Wb. Adolf Erman (ed.). 1926–1961. *Wörterbuch der ägyptischen Sprache*, 6 vols. Berlin: Akademie-Verlag.

REFERENCES

- Abd el-Aleem, Sayid. 2015. "Archaeological Discoveries from the Late Period" (Arabic). In D. Valbelle & M Abd el-Maksoud (eds.), *Le Canal de Suez et la coopération archéologique dans l'isthme de Suez*, 28–30. Cairo: Institut français d'archéologie orientale.
- Aiman Ashmawy Ali. 2019. "Donkey Burials at Tell el-Yahudia." In Stéphanie Porcier et al. (eds.), *Creatures of Earth, Water, and Sky: Essays on Animals in Ancient Egypt and Nubia*, 39–46. Leiden: Sidestone.
- Anderson, A. A. 1972. *The Book of Psalms*, vol. 2. London: Oliphants.
- Baines, John and Jaromír Málek. 1980. *Atlas of Ancient Egypt*. New York: Facts on File.
- Bey Shafei, Aly. 1946. "Historical Notes on the Pelusiac Branch, the Red Sea Canal and the Route of the Exodus." *Bulletin de la Société royale de géographie d'Égypte* 21: 241–276.
- Bietak, Manfred. 1975. *Tell el-Dab'a II*. Vienna: Österreichischen Akademie der Wissenschaften.
- . 1981. *Avaris and Piramesse: Archaeological Exploration in the Eastern Nile Delta*. Proceedings of the British Academy 65. Oxford: Oxford University Press.
- . 2015. "On the Historicity of the Exodus: What Egyptology Today Can Contribute to Assessing the Biblical Account of the Sojourn in Egypt." In Thomas E. Levy, Thomas Schneider, and William H. C. Propp (eds.), *Israel's Exodus in Transdisciplinary Perspective, Quantitative Methods in the Humanities and Social Sciences*, 17–37. Cham: Springer.
- , and Gary A. Rendsburg. 2021. "Egypt and the Exodus." In John Merrill (ed.), *Ancient Israel*, 4th ed. 17–58, 342–351. Washington: Biblical Archaeology Society.
- Bleiberg, Edward L. 1983. "The Location of Pithom and Succoth." In J. K. Hoffmeier and E. S. Meltzer (eds.), *Egyptological Miscellanies: A Tribute to Professor Ronald J. Williams (= The Ancient World 6)*, 17–37. Chicago: Ares.
- Breyer, Francis. 2019. *Ägyptische Namen und Wörter im Alten Testament*. Ägypten und Altes Testament 93. Münster: Zaphon.
- Brugsch, Heinrich. 1875. "Geographica." *Zeitschrift für Ägyptische Sprache und Altertumskunde* 13: 5–13.
- Burke, Aaron. 2007. "Magdaluma, Migdalim, and Majdila: The Historical Geography and Archaeology of the Magdalu (Migdal)." *Bulletin of the American Schools of Oriental Research* 346: 29–57.
- Butzer, Karl. 1976. *Early Hydraulic Civilization in Egypt*. Chicago: University of Chicago Press.
- Caminos, Ricardo A. 1954. *Late-Egyptian Miscellanies*. Brown Egyptological Studies 1. London: Oxford University Press.
- Capriotti Vittozzi, Giuseppina, and Andrea Angelini. 2017. "The Tell el-Maskhuta Project." In G. Roasati and M.C. Guidotti (eds.), *Proceedings of the XI International Congress of Egyptologists, Florence, 23-30 August 2015*, 81–86. Oxford: Archaeopress.
- Capriotti Vittozzi, Giuseppina, et al. 2018–2019. "Dall'Egitto sulla via dell'Oriente: le campagne di scavo a Tell el-Maskhuta lungo lo Wadi Tumilat." *Rendiconti della Pontificia Accademia Romana di Archeologia* 91: 227–247.
- Cavillier, Giacomo. 2004. "Il 'Migdol' di Ramesse III a Medinet Habu fra originalità ed influenze asiatiche." *Syria* 81: 57–79.
- Collins, Andrew. 2008. "The Biblical Pithom and Tell el-Maskhuta: A Critique of Some Recent Theories on Exodus 1,11." *Scandinavian Journal of Old Testament* 22: 135–149.
- Dorner, Josef. 1996. "Vorbericht über die Grabungskampagnen 1993/94 auf Tell Hebwa IV/Süd am Nordsinai." *Ägypten und Levante* 6: 167–196.
- Driver, S. R. 1911. *The Book of Exodus*. Cambridge: Cambridge University Press.
- Finkelstein, Israel and Neil Asher Silberman. 2001. *The Bible Unearthed*. New York: Touchstone.
- Fuller, Michael J. n.d. ["Retaba 1981"]. < <http://users.stlcc.edu/mfuller/Retaba/Retaba1981.html> >.
- Gardiner, Alan H. 1918. "The Residence of the Ramessides." *Journal of Egyptian Archaeology* 5: 127–138, 179–200, 242–271.
- . 1933. "Tanis and Pi-Ra'messe: a Retraction." *Journal of Egyptian Archaeology* 19: 122–128.
- . 1937. *Late-Egyptian Miscellanies*. Bibliotheca Aegyptiaca 7. Brussels: Édition de la Fondation égyptologique Reine Elisabeth.
- . 1947. *Ancient Egyptian Onomastica*. 2 vols. Oxford: Oxford University Press.
- . 1969. *Egyptian Grammar*. Oxford: Griffith Institute.
- Giveon, Raphael. 1969. "A Long Lost Inscription of

- Thutmosis IV." *Tel Aviv* 5: 170–174.
- Görg, Manfred. 1990. "Etham und Pithom." *Biblische Notizen* 51: 9–10.
- Graham, Geoffrey. 1997. "Tanis." In Eric Meyers (ed.), *Oxford Encyclopedia of the Ancient Near East*, vol. 3, 348–350. New York: Oxford University Press.
- Gręzak, Anna. 2015. "Ramesside and Third Intermediate Period Bone Remains from Tell el-Retaba." *Ägypten und Levante* 25: 167–174.
- Groll, Sarah. 1998. "The Egyptian Background of the Exodus and the Crossing on the Reed Sea: A New Reading of Papyrus Anastasi VIII." In Irene Shirun-Grumach (ed.), *Jerusalem Studies in Egyptology*, 173–188. *Ägypten und Altes Testament*: 40. Wiesbaden: Harrassowitz.
- Habachi, Labib. 1954. "Khata'na-Qantir: Importance." *Annales du service des antiquités de l'Égypte* 52: 479–559.
- . 2001. "Khata'na-Qantir or Avaris-Piramesse." In Ernst Czerny (ed.), *Tell el-Dab'a I: Tell el-Dab'a and Qantir, the Site and its Connection with Avaris and Piramesse*, 23–127. Vienna: Österreichischen Akademie der Wissenschaften.
- Hamza, Mahmud. 1930. "Excavations of the Department of Antiquities at Qantîr (Faqûs District)." *Annales du Service des antiquités de l'Égypte* 30: 66.
- Helck, Wolfgang. 1965. "TKW und die Ramses-Stadt." *Vetus Testamentum* 15: 35–48.
- Hoch, James. 1994. *Semitic Words in Egyptian Texts of the New Kingdom and Third Intermediate Period*. Princeton: Princeton University Press.
- Hoffmeier, James K. 1996. *Israel in Egypt*. New York: Oxford University Press.
- . 2005. *Ancient Israel in Sinai*. New York: Oxford University Press.
- . 2015a. *Akhenaten and the Origins of Monotheism*. New York: Oxford University Press.
- . 2015b. "Egyptologists and the Israelite Exodus from Egypt." In Thomas E. Levy, Thomas Schneider, and William H. C. Propp (eds.), *Israel's Exodus in Transdisciplinary Perspective, Quantitative Methods in the Humanities and Social Sciences*, 197–208. Cham: Springer.
- . 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.
- . 2018–2019. "The Curious Phenomenon of Moving Military Sites on Egypt's Eastern Frontier." *Journal of the Society for the Studies of Egyptian Antiquities* 36: 105–134.
- . 2019. *Tell Borg II: Excavations in North Sinai*. University Park, PA: Eisenbrauns.
- Hoffmeier, James K. and Ronald D. Bull. 2005. "New Inscriptions Mentioning Tjaru from Tell el-Borg, North Sinai." *Revue d'égyptologie* 56: 79–84.
- Holladay, John S. 1982. *Cities of the Delta, III: Tell el-Maskhuṭa*. Malibu: Undena.
- . 1997. "Tell el-Maskhuta." In Eric Meyers (ed.), *Oxford Encyclopedia of Archaeology in the Near East*, vol. 3, 432–437. Oxford: Oxford University Press.
- . 1999. "Tell el-Makshuta." In Kathryn Bard (ed.), *Encyclopedia of the Archaeology of Ancient Egypt*, 786–789. London: Routledge
- Hudec, Jozef, et al. 2018a "Tell el-Retaba Season 2017." *Polish Archaeology in the Mediterranean* 27: 93–122.
- , et al. 2018b. "Discoveries on Fortifications at Tell el-Retaba." *Asian and African Studies* 27: 21–110.
- Hussein, Hesham, and Sayid Abd el-Aleem. 2013. "Tell el-Kedwa (Qedua): Saite Fortress on Egypt's Eastern Frontier—The 2007 Season of SCA Fieldwork." Paper presented at the Delta Survey Workshop, Cairo, 22–23 March 2013. <https://academia.edu/4241574/Tell_el_Kedwa_Qedua_Saite_Fortresses_on_Egypt_s_Eastern_Frontier_The_2007_season_of_SCA_fieldwork>.
- Jansen-Winkeln, Karl. 2007. *Inschriften der Spätzeit, Teil II. Die 22.–24. Dynastie*. Wiesbaden: Harrassowitz.
- Kees, Hermann. 1961. *Ancient Egypt: A Cultural Topography*. Chicago: University of Chicago Press.
- Kitchen, K. A. 1979. *Ramesside Inscriptions: Historical and Biographical*, vol. 2. Oxford: Blackwell.
- . 1986. *The Third Intermediate Period in Egypt, 1100–650 B.C.* 3rd edition. Warminster: Aris and Phillips.
- . 1998. "Egyptians and Hebrews, from Ra'amses to Jericho." In S. Ahituv and E. D. Oren (eds.), *The Origin of Early Israel—Current Debate: Biblical, Historical and Archaeological Perspectives*, 65–131. London; Beersheva: Ben Gurion University of the Negev Press.
- . 2003. *On the Reliability of the Old Testament*. Grand Rapids: Eerdmans.
- Lambdin, Thomas. 1964. "Succoth." In G. A. Butterick (ed.), *Interpreter's Bible Dictionary*, vol.

- 4, 449. Nashville: Abingdon.
- Leclère, François. 2020. "Tell Sâ el-Hagar (Tanis)," *Rapport d'activité 2018. Supplément au Bulletin de l'Institut français d'archéologie orientale* 118: 110–120.
- Lemche, Niels Peter. 1994. "Is it Still Possible to Write a History of Ancient Israel?" *Scandinavian Journal of Old Testament* 8:164–190.
- Lesko, Leonard H. 2002. *A Dictionary of Late Egyptian*, 2 vols. 2nd edition. Providence: B.C. Scribe Publications.
- Lloyd, Alan. 1988. *Herodotus Book II, Commentary* 99–182. Leiden: E. J. Brill.
- Malleson, Claire. 2015. "Archaeobotanical Investigations at Tell el-Retaba: Ramesside Fortresses and 3rd Intermediate Period Town (Area 9)—Polish-Slovak (PCMA) Mission Season 2010–14." *Ägypten und Levante* 25: 175–199.
- Massimilano, Nuzzolo and Jaromir Krejčí. 2017. "Heliopolis and the Solar Cult in the Third Millennium BC." *Ägypten und Levante* 27: 357–380.
- Montet, Pierre. 1933. "Tanis, Avaris, et Pi-Rameses," *Revue biblique* 39: 191–215.
- Morris, Ellen F. 2005. *The Architecture of Imperialism: Military Bases and the Evolution of Foreign Policy in Egypt's New Kingdom*. Probleme der Ägyptologie 22. Leiden: Brill.
- Muchiki, Yoshiyuki. 1999. *Egyptian Proper Names and Loanwords in North-West Semitic*. Society of Biblical Literature Dissertation Series 173. Atlanta: Society of Biblical Literature.
- Mysłiwiec, Karol. 1978. "Le naos de Pithom." *Bulletin de l'Institut français d'archéologie orientale* 78: 171–195.
- Naville, Edward. 1888. *The Store-City of Pithom and the Route of the Exodus*. London: Trubner.
- Oren, Eliezer. 1984. "Migdol: A New Fortress on the Edge of the Eastern Nile Delta." *Bulletin de l'Institut français d'archéologie orientale* 256: 7–44.
- Petrie, W. M. F. 1906. *Hyksos and Israelite Cities*. London: Bernard Quaritch.
- Posener, George. 1938. *Catalogue des ostraca hiératiques littéraires de Deir el Médineh*. Documents de fouilles de l'Institut français d'archéologie orientale du Caire 1.3. Cairo: Institut français d'archéologie orientale.
- Pusch, Edgar. 2017. *Fenster in die Vergangenheit: Einblicke in die Struktur der Ramses-Stadt durch magnetische Prospektion und Grabung*. Hildesheim: Gerstenberg.
- Pusch, Edgar, et al. 1998–2015. *Forschungen in der Ramses-Stadt*, 9 vols. Hildesheim: Gerstenberg.
- Raue, Dietrich. 1999. *Heliopolis und das Haus des Re: Eine Prosopographie und ein Toponym im Neuen Reich*. Berlin: Achet-Verlag.
- Redford, Donald. 1963. "Exodus I 11." *Vetus Testamentum* 13: 401–418.
- . 1987. "An Egyptological Perspective on the Exodus Narrative," in Anson F. Rainey (ed.), *Egypt, Israel, Sinai: Archaeological and Historical Relationships in the Biblical Period*, 137–161. Tel-Aviv: Tel-Aviv University Press.
- . "Zoan," 1992. In D.N. Freedman (ed.), *Anchor Bible Dictionary*, vol. 6: 1106. New York: Doubleday.
- . 1998. "Report on the 1993 and 1997 Seasons at Tell Qedwa." *Journal of the American Research Center in Egypt* 35: 45–60.
- . 2009. "The Land of Ramesses." In Peter J. Brand and Louise Cooper (eds.), *Causing His Name to Live: Studies in Egyptian Epigraphy and History in Memory of William J. Murnane*, 175–177. Leiden: Brill.
- Redmount, Carol. 1989. "On an Egyptian/Asiatic Frontier: An Archaeological History of the Wadi Tumilat." PhD dissertation, University of Chicago.
- . 1995. "The Wadi Tumilat and the 'Canal' of the Pharaohs." *Journal of Near Eastern Studies* 54: 127–135.
- Römer, Thomas and Shirly Ben-Dor Evian. 2018. "Editorial Introduction." *Journal of Ancient Egyptian Interconnections* 18: vi–vii.
- Rzepka, Slawomir, et al. 2009. "Tell el-Retaba." *Ägypten und Levante* 19: 241–280.
- , et al. 2011. "New Kingdom and the Third Intermediate Period in Tell el-Retaba." *Ägypten und Levante* 21: 139–184.
- , et al. 2012. "Egyptian Mission Rescue Excavations in Tell el-Retaba, Part 1: New Kingdom Remains." *Ägypten und Levante* 22: 253–287.
- , et al. 2013. "Tell el-Retaba, Season 2010." *Polish Archaeology in the Mediterranean* 22: 79–95.
- , et al. 2014. "Tell el-Retaba from the Second Intermediate Period till the Late Period: Results of the Polish-Slovak Archeological Mission, Season 2011–2012." *Ägypten und Levante* 24: 41–122.
- , et al. 2015a. "Tell el-Retaba." *Polish Archaeology in the Mediterranean* 24: 139–163.

- , et al. 2015b. “From Hyksos Settlers to Ottoman Pipe Smokers: Tell el-Retaba 2014.” *Ägypten und Levante* 25: 97–166.
- , et al. 2017a. “Tell el-Retaba Season 2016.” *Polish Archaeology in the Mediterranean* 26: 109–135.
- , et al. 2017b. “From Hyksos Tombs to Late Period Tower Houses, Tell el-Retaba—Season 2015–2016.” *Ägypten und Levante* 27: 19–85.
- Schulman, Alan R. 1964. *Military Rank, Title and Organization in the Egyptian New Kingdom*. Berlin: Hessling.
- Seguin, Joffrey. 2007. *Le Migdol du Proche-Orient à l’Égypte*. Les Institutions dans l’Égypte ancienne 3. Paris: Presses de l’Université de Paris-Sorbonne.
- Tallet, Pierre. 2012. *La zone minière pharaonique du Sud-Sinai*. Catalogue complémentaire des inscriptions du Sinai 1. Mémoires publiés par les membres de l’Institut français d’archéologie orientale du Caire 130. Cairo: Institut français d’archéologie orientale.
- Trzciński, Jerzy, et al. 2017. “Preliminary Back-Analysis of the Height of Mud Brick Fortifications Based on Geoarchaeological Data at Tell el-Retaba Site in Egypt.” *Studia Quaternaria* 34: 99–108.
- Uphill, E. P. 1968. “Pithom and Raamses, Part I: Their Location and Significance, Part I.” *Journal of Near Eastern Studies*: 27: 297–299.
- . 1969. “Pithom and Raamses, Part II,” *Journal of Near Eastern Studies* 28: 15–39.
- Valbelle, Dominique. 2001. “The First Persian Period Fortress at Tell el-Herr.” *Egyptian Archaeology* 18: 12–14.
- , et al. 2007. *Tell el-Herr: les niveaux hellénistiques et due Haut-Empire*. Paris: Errance.
- , and Etienne Louis. 1988. “Les trois dernières Fortresses de Tell el-Herr.” *Cahiers de recherches de l’Institut de papyri de l’Institut de papyrologie et d’égyptologie de Lille* 10: 23–55.
- , and Giorgio Nogara. 1999. “La forteresse du IV^e siècle avant J.-C. à Tell el-Herr (Nord-Sinai).” *Cahiers de recherches de l’Institut de papyri de l’Institut de papyrologie et d’égyptologie de Lille* 21: 53–66.
- Van Seters, John. 2001. “The Geography of the Exodus.” In Andrew Dearman and M. Patrick Graham (eds.), *The Land That I Will Show You: Essays on the History and Archaeology of the Ancient Near East in Honour of J. Maxwell Miller*, 255–276. Journal for the Study of the Old Testament Supplement Series 34. Sheffield: Sheffield Academic Press.
- Wente, Edward. 1992. “Rameses.” In D. N. Freedman (ed.), *Anchor Bible Dictionary*, vol. 5: 617–618. New York: Doubleday.

NOTES

- ¹ 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: *ra’amses* in Exod. 1:11 (with *pataḥ-pataḥ* sequence at the start), though *ra’mases* elsewhere (4x) (with *pataḥ-shəwa* 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.
- ⁴ See, for example, Driver, 1911, 3–4; Hyatt 1971, 15; Herrmann 1973, 58–60.
- ⁵ Their publications will be cited as particular arguments are raised below.
- ⁶ Schipper 2015, 265–288.
- ⁷ Römer and Ben-Dor Evian 2018, vi.
- ⁸ Some of the basic ideas expressed herein occur also in Bietak and Rendsburg 2021, 17–58, 342–351.
- ⁹ Gardiner 1918, 127–138, 179–200, 242–271.
- ¹⁰ Gardiner 1918, 266.
- ¹¹ For a review of this history, see Hoffmeier 2005, 53–58.
- ¹² Leclère 2020, 110–120.
- ¹³ Montet 1933, 191–215.
- ¹⁴ Gardiner 1947, 2:199*–2:200*.
- ¹⁵ Gardiner 1947, 1:24–26.
- ¹⁶ Gardiner 1947, 2:200*.
- ¹⁷ Gardiner 1933, 122–128.
- ¹⁸ Hamza 1930, 66
- ¹⁹ Habachi 1954, 479–559 and Habachi, 2001, 23–127.

- 20 Pusch et al. 1998–2015.
- 21 Pusch 2015, 211.
- 22 Ramesses VI (1143–1136 BCE) is the last pharaoh whose name appears on monuments at Pi-Ramesses; see Kitchen 1998, 81.
- 23 Hamza, 1930, 64; and Habachi, 2001, 106–107.
- 24 Bietak 1981, 277–278. See, further, Bietak 1975, 215–216.
- 25 Butzer 1976, 33.
- 26 Kitchen 1986, 255–256, §213.
- 27 The actual founding of the city apparently harks back to late in Ramesses XI’s reign (1099–1069 BCE); see Graham 1997, 348–350.
- 28 Redford 1992, 1106.
- 29 Redford 1963, 401–418. Redford has also argued that other toponyms in Exodus reflect the 7th century BCE in Redford 1987, 175–177.
- 30 Redford 1963, 411–413.
- 31 Redford 1963, 408–409.
- 32 See, e.g., Van Seters 2001, 255–276 and Finkelstein Silberman 2001, 65–67.
- 33 Schipper 2015, 272.
- 34 Schipper 2015, 272.
- 35 Gardiner 1918, 137–138. More recently, Bietak (2015, 26) drew attention to these occurrences.
- 36 Gardiner 1918, 138.
- 37 See Schipper 2015, 272, n. 41.
- 38 Gardiner 1918, 136–137, 180, 183–184, 188, 192, 195–196.
- 39 Helck 1965, 41–42.
- 40 Groll 1998, 189–190.
- 41 Kitchen 1998, 71 n. 20.
- 42 Wentz 1992, 617.
- 43 Lemche 1994, 174.
- 44 Kitchen 1998, 83.
- 45 Bietak 2015, 30.
- 46 We understand the word *ḥanes* (often rendered as the proper noun Hanes) to reflect Egyptian *ḥ(wt) 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.
- 47 For a survey of opinion, see Anderson 1972, 562.
- 48 Van Seters 2001, 256.
- 49 Elsewhere only Num. 13:22 (as a gloss, apparently) and Ezek. 30:14.
- 50 Redford 1963, 403–404; Helck 1965, 35; Kitchen 1998 72; Muchiki 1999, 234; and Breyer 2019, 94–95.
- 51 Gardiner 1947, 2:144*–145*.
- 52 HALOT 1.22. See also the listings in Muchiki 1999, 229–230, and Breyer 2019, 80.
- 53 For a brief survey of Atum and the cult of Heliopolis, see Hoffmeier 2015a, 5–12. See also Massimiliano and Krejčí 2017, 357–380.
- 54 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.
- 55 Uphill 1968, 297–299, and Uphill 1969, 15–39.
- 56 Uphill 1968, 299.
- 57 Kitchen 1979, 479, line 16.
- 58 Uphill 1969, 38–39.
- 59 Redmount 1989, 20–21.
- 60 Baines and Málek 1980, 15.
- 61 Petrie 1906, pls. xxix, xxx.
- 62 Naville 1888, pls. 3A, 3C, 7A, 7C, and 8.
- 63 Görg 1990, 9–10 and Kitchen 2003, 259. See discussion at Breyer 2019, 80–81.
- 64 Naville 1888, 1.
- 65 Brugsch 1875, 8.
- 66 Muchiki 1999, 232–233. See further comments by Breyer 2019, 92.
- 67 Lambdin 1964, 449.
- 68 Giveon 1969, 170–174, see especially fig. 2. In general, see Tallet 2012, nos. 36, 38, 176 (*non vide*).
- 69 Schulman 1964, 53.
- 70 Text in Gardiner 1947, 66, line 10. That Pi-Ramesses is intended, see Kitchen, 1998, 74; and Morris 2005, 421.
- 71 Gardiner 1947, 67, line 1.
- 72 Hoch 1994, 270, no. 385.

- ⁷³ For the distinction between the *sgr*-fort and the *h̄tm*-fort, see the following: Caminos 1954, 257; Bleiberg 1983, 24; and Kitchen 1998, 74.
- 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 ʿst*) and temple (*hwt ntr*); see Lesko 2002, 1:303–304. The meaning of what is meant in this text is ambiguous.
- ⁷⁵ Petrie 1906, pl xxxi.
- ⁷⁶ Naville 1888, pl. 3a. See also Myśliwiec 1978, 171–195
- ⁷⁷ Gardiner 1969, 513 (sign T14).
- ⁷⁸ Gardiner 1969, 489 (sign N25).
- ⁷⁹ Hoffmeier and Bull 2005, 79–84.
- ⁸⁰ Morris 2005, 176.
- ⁸¹ The reference, however, is to a place in the land of Canaan.
- ⁸² Holladay 1982, 44–46 and pls. XL–XLIV.
- ⁸³ For donkey burials in the northeast Delta and Wadi Tumilat, see Ashmawy Ali 2019, 39–46.
- ⁸⁴ Bleiberg 1982, 25. See also Naville 1888, pl. 3.c.
- ⁸⁵ Posener 1938, pl. 43, no. 1076; and Kitchen 1979, 463.
- ⁸⁶ Kitchen 1998, 73.
- ⁸⁷ Hoffmeier 1996, 180.
- ⁸⁸ Translation by Hoffmeier, based on the text in Gardiner 1947, 76, lines 12–15.
- ⁸⁹ *Wb.* 3.350; *HALOT* 1.364.
- ⁹⁰ Morris 2005, 5.
- ⁹¹ Gardiner 1969, 492.
- ⁹² Gardiner 1947, 2:17*–18*.
- ⁹³ Gardiner 1947, 2:32*.
- ⁹⁴ Gardiner 1947, 2:68*–69*.
- ⁹⁵ Gardiner 1947, 2:117*–118*.
- ⁹⁶ Jansen-Winkel 2007, 126. We are grateful to Boyo Okinga for this reference.
- ⁹⁷ Naville 1888, pl. 4. See Kitchen, 1998, 76.
- ⁹⁸ Naville 1888, pl. 5.
- ⁹⁹ Holladay 1982, 1–59.
- ¹⁰⁰ Holladay 1997, 432–437, and Holladay 1999, 786.
- ¹⁰¹ Redford 1987, 137–161.
- ¹⁰² Van Seters aligns with Redford’s earlier suggestion that the “pools of *pr-itm*” may be an estate under the control of the temple of Atum in Pi-Rameses (Redford 1987, 142).
- ¹⁰³ Van Seters 2001, 258–260.
- ¹⁰⁴ Collins 2008, 135–149.
- ¹⁰⁵ Collins 2008, 139–142.
- ¹⁰⁶ Naville 1888, pls. 8–10.
- ¹⁰⁷ Collins 2008, 142.
- ¹⁰⁸ Schipper 2015, 270.
- ¹⁰⁹ The surrounding tombs were from the Greco-Roman period.
- ¹¹⁰ We are grateful to Dr. Hesham Hussein and Dr. Mostafa Hassan of the Ministry of Antiquities for providing this information.
- ¹¹¹ For a brief report in Arabic, see Abd el-Alim 2015, 28–30.
- ¹¹² The largest tomb discovered thus far at Hebua 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.
- ¹¹³ We are grateful to Dr. Aiman Ashmawy, who is publishing the tomb, for providing us with Ken-Amun’s titles.
- ¹¹⁴ See Holladay’s site plan in Holladay 1982, pl. 37.
- ¹¹⁵ Made under the orders of Mohamed Ali Pasha, possibly over the so-called Canal of the Pharaohs. See Redmount 1995, 127–135.
- ¹¹⁶ 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.
- ¹¹⁷ Capriotti Vittozzi and Angelini 2017, 82.
- ¹¹⁸ Petrie 1906, 28–30 and pl. xxxv.
- ¹¹⁹ See Petrie’s site plan in Petrie 1906, pl. xxxv, and for the Rameses II temple blocks see pl. xxx–xxxi.
- ¹²⁰ For a recent survey of the work done at Retaba, see Rzepka et al. 2014, 41–122.
- ¹²¹ Fuller n.d.
- ¹²² Fuller’s work was reported in 2005 in Hoffmeier 2005, 60.
- ¹²³ Rzepka et al. 2014.

- ¹²⁴ 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.
- ¹²⁵ 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.
- ¹²⁶ 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.
- ¹²⁷ Trzciński et al. 2018, 101–105.
- ¹²⁸ Rzepka et al. 2011, 148–152.
- ¹²⁹ Petrie 1906, 29–30 and pls. xxxviii–xxxii. For the site plan and temple plan, see pls. xxxv–xxxv-a.
- ¹³⁰ Petrie 1906, pl. xxxi.
- ¹³¹ Rzepka et al. 2011, 129–135.
- ¹³² Rzepka et al. 2011, 153–155.
- ¹³³ Rzepka et al. 2014, 109–117, and Rzepka et al., 2017, 130–133.
- ¹³⁴ Rzepka et al. 2017b, 72–76.
- ¹³⁵ Rzepka et al. 2017b, 73.
- ¹³⁶ Rzepka et al. 2017b, 74.
- ¹³⁷ Hoffmeier 2018–2019, 105–134.
- ¹³⁸ For a review of the various locations of Migdol, see Seguin 2007.
- ¹³⁹ Hoffmeier 2018–2019, 114–121, and Hoffmeier 2018, 1–25.
- ¹⁴⁰ For images of the fort at T-211, see Hoffmeier 2018, 16, figs. 8–9.
- ¹⁴¹ Oren 1984, 7–44.
- ¹⁴² Collin 2008, 138.
- ¹⁴³ Oren 1984, 31.
- ¹⁴⁴ In addition to Seguin’s above-cited work, see Hoffmeier 2018, 114–115.
- ¹⁴⁵ Redford 1998, 45–60, and Hussein and Abd el-Aleem 2013.
- ¹⁴⁶ Valbelle and Louis 1988, 23–55. Valbelle and Nogara 1999, 53–66; Valbelle 2001, 12–14; Valbelle et al. 2007.
- ¹⁴⁷ On the variations of the preservation of Late Bronze Age term “Migdol” in the Levant and Egypt, see Burke 2007, 29–57.
- ¹⁴⁸ Lloyd 1988, 157.
- ¹⁴⁹ Kees 1961, 190.
- ¹⁵⁰ Shafei 1946, 249.
- ¹⁵¹ Groll 1998, 189. To this list we can add Migdol (cf. Exod. 14:2) discussed above, since it is mentioned in P. Anastasi VI.
- ¹⁵² Bietak 2015, 29.



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

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ABSTRACT

The present article continues our study of the city-names Pithom and Rameses in Exodus 1:11 (the first part having been published in the *Journal of Ancient Egyptian Interconnections* 33), along with related matters, with particular attention to the linguistic evidence. It is determined that: a) the transcription of *r^c-ms-sw* as רַעַמְסֵס “Rameses” coheres with the Semitic evidence of the 13th–12th centuries BCE; b) the word מַס “corvée” is not a borrowing from Neo-Assyrian (or any other Akkadian dialect) but rather constitutes a pure West Semitic word; c) the word מַסְכָּנֹת “storages, storehouses” also is patient of a good West Semitic derivation; d) the narrative of Exodus 1–2 should not be divided into separate sources, but rather should be read in a holistic manner; and e) the two chapters are dated on linguistic grounds to the earliest stratum of Biblical Hebrew narrative prose literature.

The first part of this article focused on historical and archaeological material. In this the second part of the article, we turn to the linguistic evidence.¹

EGYPTIAN NAMES IN SEMITIC TRANSCRIPTION

In his recent article devoted to the city names “Pithom” and “Rameses,” Schipper wrote, “All evidence from the first millennium BCE documents that an Egyptian *ś* becomes in Hebrew a *samech*, whereas the older Egyptian loan-words in Hebrew have a *shin* for an Egyptian *ś*.⁵⁵ In the following, this principle is illustrated by Egyptian Toponyms and personal names in ancient Hebrew. All of these names document that a *samech* in Hebrew goes back to Egyptian *sin* (*ś*), while a *shin* in Hebrew renders the Egyptian sibilant *shin* (*š*).² His note 55 reads

simply, “See, for example, Hoch, p. 368, no. 548.”

Where does one begin to critique this statement? Let us start with n. 55, which directs the reader to an entry in James Hoch, *Semitic Words in Egyptian Texts*.³ First, Hoch’s magnificent book⁴ is devoted to loanwords in the opposite direction: Semitic (mainly Canaanite) words which appear in Egyptian texts of the New Kingdom and Third Intermediate Period, and not to “the older Egyptian loan-words in Hebrew,” as Schipper writes in the lead-up to n. 55. Secondly, the example referenced is Hebrew סִלְלָה *solala* “siege-mound,” a word that appears eleven times in the Bible (2 Samuel 20:15, etc.), and which appears three times in Egyptian texts, with variable spellings: *t-r-r-ya* / *t-r-r-t* / *t-r-t-r*. Nothing about this word is relevant to the discussion at hand: a) it is a

Hebrew/Canaanite word that appears in Egyptian, not an Egyptian word that appears in Hebrew/Canaanite; and b) it involves a Hebrew *samekh* /s/, which is transcribed with Egyptian /t/ (Gardiner V13), that is, neither of the processes that Schipper mentions in the sentence to which n. 55 is appended.

Next, although the wording is a bit convoluted, we understand Schipper's contention as follows: Egyptian /š/ (by which we assume he means both Gardiner O34 and S29) appears as Hebrew *šin* /š/ in older texts, but as Hebrew *samekh* /s/ in later ones. But then he seems to confuse matters a bit, for after repeating the first part of this equation, he adds that Egyptian /š/ enters Hebrew as *šin* /š/. This latter point is true, but it is not quite relevant.

So, if we understand Schipper correctly, he maintains the following. (Note that from this point forward we use the simpler transcription /s/ for Gardiner O34 and S29,⁵ as opposed to /š/ employed by Schipper.)

1. Egyptian /s/ > Hebrew /š/ (at the earlier stage)
2. Egyptian /s/ > Hebrew /s/ (at the later stage)
3. Egyptian /š/ > Hebrew /š/ (throughout)

As examples of the three processes, Schipper provides the following:

1. *ms* "birth" > מִשָּׁה (as far as we can tell, this is his only example)⁶
2. *p³-t³-rsy* "the land of the south" > פְּתוּרֹס (Isaiah 11:11, etc.)
p³-nh³sy "the Nubian" > פִּינְחָס (Exod. 6:25, etc.)
3. *ššnq* "Sheshonq" > שִׁשְׁחָן (1 Kings 11:40, etc.)
nšm.t "feldspar, amazonite" > לְשֵׁם (Exodus 28:19; 39:12)⁷

The main point of the philological portion of Schipper's article⁸ is to argue that since *r³-ms-sw* "Rameses" appears in Hebrew as רַעְמֶסֶס (Genesis 47:11; Exodus 1:11, etc.),⁹ with *samekh* rendering Egyptian /s/, then this borrowing fits into category no. 2, during the later stage. Those familiar with the history of research into this issue will know that Schipper advances here the opinion voiced by Donald Redford as early as 1963 (duly cited by Schipper).¹⁰

The main problem with this scenario is that its

underlying assumptions are completely wrong. Since there is such uncertainty about the dating of biblical texts, and since there is so little epigraphic Hebrew that may guide us, the best approach is to broaden the horizon and to look at how Egyptian loanwords were rendered into Northwest Semitic languages during the c. 1,000-year period under discussion.¹¹ Fortunately, we do not have to reinvent the wheel, for the very research that is required here was conducted by Yoshiyuki Muchiki in his 1990 dissertation to the University of Liverpool (supervised by K. A. Kitchen and Alan Millard), subsequently published as a book, *Egyptian Proper Names and Loanwords in North-West Semitic*.¹² Somewhat astonishingly, Schipper never once cites Muchiki's standard work, with its wide-ranging collection of data.

Let us do so, accordingly, by mining Muchiki's data sets for relevant information, with special attention to the two corpora of Semitic texts reflective of Late Bronze Age Canaanite, *grosso modo*: Ugaritic and Amarna Akkadian.

Unfortunately, there is but very little material forthcoming from Ugaritic. Muchiki registers the following relevant items:¹³

- Eg. *snb* "being well" > Ug. *snb* (PN)
Eg. *s³.t-n.t* "daughter of Neith" > Ug. *snt* (PN)
Eg. *imn-ms* "Amun is born" > Ugaritic syllabic PRU IV 17.28 *a-ma-an-ma-ši* (line 0) / *a-ma-an-ma-aš-šu* (lines 16, 27) (PN)

From this limited amount of data, we conclude that Egyptian /s/ was borrowed or rendered with Ugaritic /s/ during the Late Bronze Age. For the one item written in cuneiform script, see further below.

Happily, there is much more material available from the Amarna letters. From this corpus, Muchiki registers the following relevant items:¹⁴

- Eg. *imn-ms* "Amun is born" > EA 113.36, 114.51 *a-ma-an-ma-ša* (PN)¹⁵
Eg. *hr-ms.w* "Horus is born" > EA 20.33 *ha-a-ra-ma-aš-š[i]* / 20.36 [*ha-a-ra-*] *ma-aš-ši* / 49.25 [*ha*]-*ra-ma-sa* (PN)¹⁶
Eg. *p³-sr* "the prince" > EA 162.71 *pi-iš-ia-ri* (PN)¹⁷
Eg. *st(i)* "Seth" > EA 5.19 *šu-ut-ti* / 234.14, 234.23 *šu-ta* / 288.19, 288.22 *šu-ú-ta* (PN)¹⁸
Eg. *ds* "jar" > EA 14.i.48 *da-[š]i*

- Eg. *hnn s^h* “an upright box or chest” > EA 14.ii.52 *ha-nu-ú-nu ša-hu-ú*
 Eg. *nms.t* “a kind of jar” > EA 14 (5x) (i.32, ii.67, ii.50, iii.37, iii.67) *na-am-ša*
 Eg. *psd* “nine” > EA 368 obv. 14 *pi-si-it*
 Eg. *p³-sb³* “the door” > EA 368 rev. 6 *pu-us-bi-ú*
 Eg. *sš.š¹.t* “scribe of letters” > EA 316.16 *ša-aḥ-ši-ḥa*
 Eg. *sḫ* “seven” > EA 368 obv. 12 *šap-ḥa*
 Eg. *si(s)* “six” > EA 368 obv. 11 *ša-ú*
 Eg. *t³-isb.t* “the stool” > EA 368 rev. 9 *ta-as-bu*
 Eg. *wrs* “head support” > EA 5.22 *ú-ru⁷-[u]š-ša*

From this array of Egyptian personal names and loan words appearing in Amarna Akkadian, it is clear that Egyptian /s/ may be rendered with either Akkadian /s/-signs or /š/-signs. There are more of the latter than the former, especially in the domain of personal names, but two additional observations are noteworthy.

First, the same personal name, Egyptian *ḥr-ms.w* “Horus is born,” could be written as either *ḥa-a-ra-ma-aš-š[i]* / [*ḥa-a-ra-*] *ma-aš-ši* or [*ḥa*]-*ra-ma-sa*, that is, with either /š/ or /s/ to represent Egyptian /s/.¹⁹ Note that the former two examples appear in EA 20, written by Tushratta king of Mitanni, while the third example occurs in EA 49, written by Niqmaddu king of Ugarit. At the same time, though, a Ugaritic scribe from the same chancellery (more or less) could render the latter portion of the Egyptian *ms* element with /š/-signs, for as we saw above *imn-ms = a-ma-an-ma-ši* / *a-ma-an-ma-aš-šu*. Or, to put this in chart form:

- Eg. *ms* “born” = *maši* (EA 20 – Mitanni)
 Eg. *ms* “born” = *masa* (EA 49 – Ugarit)
 Eg. *ms* “born” = *maši* / *mašu* (PRU IV 17.28 – Ugarit)

Second, a key text in our discussion is EA 368, a scholarly tablet which transcribes Egyptian common nouns (including numerals) into cuneiform script.²⁰ The same scribe rendered Egyptian /s/ with cuneiform /š/-signs on two occasions and with cuneiform /s/-signs on three occasions, to wit (with special attention to the transcriptions in bold):

- Eg. *si(s)* “six” > EA 368 obv. 11 *ša-ú*
 Eg. *sḫ* “seven” > EA 368 obv. 12 *šap-ḥa*
 Eg. *psd* “nine” > EA 368 obv. 14 *pi-si-it*
 Eg. *p³-sb³* “the door” > EA 368 rev. 6 *pu-us-bi-ú*
 Eg. *t³-isb.t* “the stool” > EA 368 rev. 9 *ta-as-bu*

In light of all the evidence presented here, we echo Muchiki’s summary statement: “It seems that there are no fixed correspondences between Eg and Akk sibilants.”²¹ And while the evidence from Ugarit was more limited, we may assert the same lack of consistency regarding the sibilant correspondences between Egyptian and Ugaritic.²²

This inconsistency at first may surprise, but parallels abound in the study of loanwords in world languages. To stay within Semitic, from a later time period, we may observe that Arabic loanwords with /s/ appear in Ge^{ez} relatively consistently with /s/, but appear in Tigre, Tigrinya, and Amharic with either /s/ or /š/, with no discernible pattern.²³ Inversely, Arabic loanwords with /š/ appear in Ge^{ez} with either /š/ or /s/, once again with no discernible pattern, though in the other languages consistently with /š/.²⁴

Or we may note that Akkadian /š/ may enter Hebrew as either /š/ or /s/; see, for example, respectively, Akk. *šulmānu* “bribe” > **שְׁלֹמָנִים** (Isaiah 1:23, in the plural form), Akk. *šaknu* “governor” > **סַקְנִים** (17x, always in the plural).²⁵ Obviously, in this case, we are able to determine that the former is through the Babylonian dialect, while the latter is through the Assyrian dialect—but that is because we have explicit evidence for this dichotomy in the pronunciation of the sibilants within the two main Akkadian dialects.²⁶

Such variability—sometimes explicable as in the Assyrian-Babylonian split, sometimes inexplicable as in the case of Arabic borrowings into Ethiopian languages—occurs throughout world languages, including, for example, when words with English /s/ are borrowed into Korean. Yoonjung Kang, who has studied the topic more intensely than anyone else, concluded as follows: “Loanword adaptation is conditioned by many extragrammatical factors, such as the role of orthography, the channel of borrowing, the degree of bilingualism, etc.”²⁷ Which is to say, variation is inevitable, for there is no single path which delivers a word or proper name from one

language into another.

In fact, another Egyptian matter may serve as a useful illustration. The element *pr* “house,” present in numerous Egyptian toponyms, may appear in Greek transcription commencing with either *pi* or *phi*. Note, for example, how *pr itm* becomes *Patoumos* in Herodotus, *Histories*, 2.158, but how *pr grr* becomes *Phagroriopolis* in Strabo, *Geographika*, 17.1.26. True, about three centuries separate the two writers, but chronology alone cannot resolve this issue.

Or to put this in other terms: will a scholar three thousand years from now realize that the initial sound in “English” Chekhov and “English” Tchaikovsky derives from the same Russian phoneme? Will he or she be able to determine that the former was a direct borrowing, whereas the latter traveled from Russian to English via German intermediation?

To return to the topic at hand: the picture presented here demonstrates beyond doubt that the Egyptian term *r^c-ms-sw* “Rameses” could have entered Hebrew/Canaanite at any time during the millennium of years under discussion: during the Late Bronze Age, during the Early Iron Age, or during the later biblical period. When Schipper writes as follows, he totally ignores any early evidence: “the Hebrew word רַעַמְסֵס/רַעַמְסֵס seems to follow the same rules as the general evidence from the Hebrew Bible and the ancient Hebrew inscriptions from the (middle of the) first millennium BCE: an Egyptian *ś* becomes in Hebrew a *samech*, ... Therefore, the name ‘Raamses’ in Ex 1:11 points to the first millennium BCE.”²⁸

As we have seen, however, and to repeat for emphasis: the use of *samekh* /s/ (2x) in the name רַעַמְסֵס aligns with what we know of Semitic transcriptions of Egyptian /s/ during the Late Bronze Age (as attested at Ugarit and in Amarna Akkadian). There are sufficient examples of Egyptian /s/ = Semitic /s/ during the Late Bronze Age to assume that the name “Rameses” entered Hebrew/Canaanite in such fashion during this time period.²⁹

In fact, given the intense presence of the Ramesside pharaohs in the land of Canaan during this time period—from Rameses II through Rameses IV³⁰—it would be rather shocking if the denizens of the land did not know the name “Rameses” until the mid-1st millennium BCE, as Redford and Schipper would have us believe.

Nothing that we state here proves definitively that the name רַעַמְסֵס entered the Hebrew language in

such form during the time of earliest Israel (that is, 13th–12th centuries BCE).³¹ But the linguistic evidence does demonstrate that the name רַעַמְסֵס could have entered the Hebrew language at this period, *pace* Redford and Schipper, who deny such a possibility altogether. When one brings the historical and archaeological evidence into the picture, the scales are tipped in favor of an early (read: contemporary) borrowing of the name “Rameses,” when these powerful pharaohs ruled the land of Canaan, as opposed to a later one, when a different geopolitical situation obtained.

Until this point, we have resisted using the evidence of Hebrew itself, due to, as indicated above, the uncertainty over the dating of biblical texts and the dearth of epigraphic Hebrew from the 10th century or earlier. That said, one Hebrew word is worth closer inspection, namely, the verb ה-ס-ש *ś-s-h* “plunder” (Judg 2:14, 16, etc.), presumed to be a borrowing from the Egyptian noun *ś³sw* “Shasu.”³² Given the proliferation of Shasu references in Ramesside texts,³³ one should assume that this word was borrowed into Hebrew at an early time.³⁴ And if such be the case, note the correspondence between Egyptian /s/ and Hebrew *samekh* /s/ in this loanword. In fact, we have corroboration of this point from EA 252.30 *šu-sú-mi* “my plunderers,” in a letter sent by Lab’ayu, king of Shechem.³⁵ This reference demonstrates both: a) that the verb ה-ס-ש *ś-s-h* “plunder” entered the patois of the central hill country of Canaan by the 14th century BCE; and b) that an Egyptian word with /s/ would be transcribed by the Canaanite scribe with a cuneiform /s/-sign.

True, the passage just cited is from a 14th-century Amarna tablet, while Hebrew is attested from only the 12th century onward—but given the close affiliation between Amarna Canaanite and Biblical Hebrew,³⁶ one may see in EA 252.30 the roots of the usage of the verb ה-ס-ש *ś-s-h* “plunder” in the latter dialect, especially in light of the geography (EA 252 from Shechem/early biblical usages such as Judges 2:14, 2:16, 1 Samuel 14:48, 23:1, set in the central hill country).

In sum, there is absolutely no objection to understanding רַעַמְסֵס as a 13th–12th century transcription of *r^c-ms-sw* “Rameses.”

EXCURSUS: THE NAME מֹשֶׁה “MOSES”

The name מֹשֶׁה “Moses” is patient of two distinct etymologies.³⁷

1. It may derive from Egyptian *ms* “born,” minus any theophoric element. As we have seen above, Egyptian /s/ may appear in Semitic transcription with either /s/ or /š/, including side by side. Thus, even though *r^c-ms-sw* “Rameses” appears as רַעַמְסֵס (with *samekh*), simple *ms* “born” could appear as מִשָּׂה (with *šin*). Recall the chart above:

- Eg. *ms* “born” = *maši* (EA 20 – Mitanni)
 Eg. *ms* “born” = *masa* (EA 49 – Ugarit)
 Eg. *ms* “born” = *maši* / *mašu* (PRU IV 17.28 – Ugarit)

Two problems arise, however. The first is the lack of any Egyptian PNs consisting of simple *ms* “born” only. There is always another element (typically a theophoric one) preceding the verbal predicate.³⁸ Of course, the Israelites could have removed such, since they worshipped only the single deity Yahweh, but this requires an extra step in the reconstruction of the name’s development.

Secondly, the vowel pattern of מִשָּׂה (with /o/-vowel in the first syllable) is different from everything we know about the vowel pattern of Egyptian *ms*. Again, the Israelites could have converted the original form into a masculine singular participle form (which is what מִשָּׂה reflects), although once again this requires an extra step in the name’s development.

2. The second option is to consider מִשָּׂה to be a native Semitic form, cognate to Ugaritic *mī* (masc.) “boy, lad, child”/ *mīt* (fem.) “lady, woman.” The masculine form occurs once in Ugaritic literature: Ba’al has intercourse with a cow who then conceives and gives birth: CAT 1.5 V:22 *w[th]rn wtldn mī* “and [she concei]ves and bears a boy.”³⁹

The feminine forms occur repeatedly with reference to the two noble women of Ugaritic lore: *mīt hry* “Lady Hurray” in the Epic of Kirta (CAT 1.14 III:39 and parallels) and *mīt dnty* “Lady Danatay” in the Epic of Aqhat (CAT 1.17 V:16 and parallels).⁴⁰

Also related, most likely, is Akkadian *māšu* “twin” (also the constellation “Gemini”).⁴¹

The Semitic noun *mī*, accordingly, is a kinship term, with attention to the special member of the family, including: special child (twin, Ba’al’s offspring) and honored lady (Hurray, Danatay). In the Hebrew tradition, מִשָּׂה would be rather fitting: the special child born to his parents, adopted and raised by the Egyptian princess, and yet nursed by

his mother still.

In theory, and even most likely, the Semitic lexeme could be cognate with Egyptian *ms*,⁴² but as such the two vocables descend from Afroasiatic parentage and therefore are less relevant to the present discussion.

Of the two options, we incline towards the latter, although we are not dogmatic on the issue.

THE TWO ALLEGED AKKADIAN LOANWORDS

Schipper contends that two vocables in Exodus 1:11 derive from Akkadian, specifically Assyrian, and more specifically, Neo-Assyrian:⁴³ a) מַס “corvée” (in the phrase שָׂרֵי מַסִּים “officers of the corvée,” i.e., “taskmasters”), purportedly from Akkadian *massu*; and b) מִסְכָּנוֹת “storages, storehouses” (in the phrase עָרֵי מִסְכָּנוֹת “storage cities”) presumably from Akkadian *maškantu/maškanu*.⁴⁴ As a historical context for the use of these two words in Exodus 1, Schipper looks to the Assyrian domination of Canaan during the 7th century BCE, along with the subsequent penetration of the Egyptian Twenty-sixth Dynasty into the region. Frankly, we do not quite understand the entire line of argumentation, but that point aside, once again, Schipper omits several very important linguistic data.

Regarding the first word: note that *massu* occurs already both in the Alalakh tablets as LÚ.MEŠ *ma-si* “corvée men,” and in EA 365 (lines 14, 23, 25), sent by Biridiya, ruler of Megiddo, in the expression LÚ.MEŠ *ma-as-sà*^{MEŠ} “corvée men.”⁴⁵ It is a clear West Semitic term, especially since it occurs nowhere else in cuneiform documents.⁴⁶

There is nothing, accordingly, to support Schipper’s succinct declaration: “The Hebrew word מַס derives from Akkadian *massu*.”⁴⁷ Note, moreover, the total absence of this lexeme from the standard work by Paul Mankowski, *Akkadian Loanwords in Biblical Hebrew*.⁴⁸ In fact, one wonders on what grounds Schipper can make such a pronouncement.

In theory, Schipper is on slightly firmer ground when positing מִסְכָּנוֹת “storages, storehouses” (in the phrase עָרֵי מִסְכָּנוֹת “storage cities”) as a loanword from from Akkadian *maškantu/maškanu*⁴⁹—but once again his treatment ignores a major piece of evidence. In a recent article,⁵⁰ Krzysztof Baranowski observed that the plural form *maškanātu* occurs in EA 306.31, in a letter sent by Šubandu, ruler of a city somewhere in southern Canaan (probably Ashkelon). The relevant phrase (lines 30–31) reads as

follows: URU.DIDLI.KI.MEŠ-ka ù KISLAḪ \ ma-aš-ka-n[ati]-ka “your cities and your storehouses.” The Sumerogram that precedes the key word, that is, KISLAḪ, means “threshing floor” (in line with one of the key meanings of the Akkadian word), so that the reference is to a place where grain was threshed and stored, hence the rendering “storehouses” is apt.⁵¹

To be sure, Amarna Akkadian *maškanātu* and Biblical Hebrew **מִסְכְּנוֹת** do not align perfectly, since the former includes /š/, while the latter evinces /s/.⁵² But to focus on the Neo-Assyrian period, when in fact the term was used by a scribe in southern Canaan during the 14th century BCE, to our mind introduces an unwarranted bias in favor of 1st-millennium sources. We recognize, of course, that Baranowski’s article appeared after Schipper’s, but the evidence from EA 306 has been available for more than a century.

Notwithstanding the above, in theory the Hebrew form **מִסְכְּנוֹת** “storages” still could derive from the Assyrian dialectal version of the posited Akkadian word, except to note that the desired etymon does not occur in Middle Assyrian or Neo-Assyrian texts. Mankowski noted this difficulty,⁵³ though in the end concluded as follows: “In spite of the shaky nature of the positive evidence, the loan-hypothesis is still the least unsatisfactory explanation for this word.”⁵⁴ Hardly a sterling endorsement for the borrowing route that Schipper would like to postulate; and in any case, to repeat, the word was used by at least one Canaanite scribe already in the 14th century BCE.

In addition, there is another possible explanation to the phrase **מִסְכְּנוֹת**, not necessarily mutually exclusive with the one just presented. As indicated, we accede to the notion of “storage cities” *vel sim.* as the most likely meaning of the term (as opposed to, for example, “fortified cities,” based on LXX). Such cities, whatever their specific function may have been, would have required a bureaucratic structure to administer them.

We propose, therefore, that **מִסְכְּנוֹת** “storages, storehouses” also be connected to the Ugaritic-Hebrew word *skn*/סִכְּן “prefect, governor, manager, administrator.” The nominal form with prefixed *m*-refers to the place where the actions subsumed under the root *s-k-n* transpire. Naturally, this represents a well-known *Nominalbildung* throughout Hebrew and Semitic more broadly (two examples will suffice: **מִדְבָּר** “steppe, wilderness” is the place where *d-b-r* “drive flocks” occurs; **מִזְבֵּחַ** “altar” is the

place where *z-b-h* “sacrifice” occurs).⁵⁵ It is true that Hebrew סִכְּן with the connotation “prefect, governor” is limited to Isaiah 22:15,⁵⁶ but the Ugaritic cognate *skn* is exceedingly common, well attested, especially in the administrative texts.⁵⁷ Note, moreover, CAT 4.609:10–11 *skn qrt* “prefect/manager of the city” (2x). It is but a small step to assume that said individual, or individuals, would supervise the activities conducted in **עָרֵי מִסְכְּנוֹת** “storage cities,” although perhaps more broadly “administrative centers.”

Of the two words posited by Schipper as Akkadian loanwords, the first one, **קֹס** “corvée,” is clearly a West Semitic word, while the second one, **מִסְכְּנוֹת** “storages, storehouses,” appears in similar fashion in EA 306.31 and/or is patient of a good West Semitic derivation as well.

Schipper ends this section of his article as follows: “such a theory for the possible historical background of Ex 1:11 [i.e., the 7th century BCE] cannot be more than a hypothesis.” We agree, although with both of his key data points removed from the equation, to our mind, the proposal converts from the hypothetical to the purely imagined.

LITERARY UNITY OF EXODUS 1–2

The debate between the source-critical division of Exodus 1 and the unified literary approach is only of tangential interest to our topic, but since Schipper delved into the matter, we take the opportunity to offer some comments on this subject as well.

Schipper writes,

Although there is currently no consensus on the classification of these different literary components in Ex 1, at least one insight is clear: Ex 1 can be divided into three layers—a priestly source, non-priestly passages, and post-priestly additions. Regardless of which of these literary layers Ex 1:11 should be connected to, the literary evidence itself leads to two insights: because of the plural verb in v. 11a (וַיִּשְׂמוּ), v. 11 (1) is disconnected from v. 10 and instead (2) forms a unit with v. 12. Both v. 11 and v. 12, can be seen as doublets to the priestly verses 13–14. Therefore, some scholars argue that vv. 11–12 should be taken as a post-priestly addition, whereas others plea for a non-priestly source. In a detailed analysis of Ex 1, Jan Christian Gertz has argued convin-

cingly that Ex 1:11–12 was most likely an original part of the introduction to the non-priestly narrative of the exodus.⁵⁸

It truly is remarkable that source critics are unable to agree on the division of the text and the assignment of the verses to whatever source(s). As another indication thereof, note that Richard Friedman assigns vv. 8–12 to the E source,⁵⁹ while Joel Baden attributes them to the J source.⁶⁰ While these points by themselves do not constitute sufficient cause to dismiss the entire J-E-P enterprise (or other source-critical approaches), they nevertheless raise an eyebrow and suggest that an altogether different approach is worthy of consideration.

In this particular instance, we begin by questioning Schipper's highlighting of the verb וַיִּשְׂמוּ "and they placed" at the start of v. 11. We truly do not understand what the issue is here. Throughout this section, including in the preceding v. 10, all of v. 11, and the succeeding vv. 12–14, Egypt (or the Egyptians) is grammatically plural, while Israel (or the Israelites) is grammatically singular:

- v. 10 וְנוֹסֵף גַּם-הוּא עַל-שְׂנְאֵינוּ וְנִלְחַם-בָּנוּ וְעָלָה מִן-הָאָרֶץ:
 "and he too will be added to *our* enemies, and he will fight against *us*, and he will go-up from the land"
- v. 11 וַיִּשְׂמוּ עָלָיו שָׂרֵי מִסִּים לְמַעַן עֲנֹתוֹ בְּסִבְלָתָם
 "and *they* placed upon him officers of the corvée, in order to oppress him with *their* levies"⁶¹
- 1:12 וּכְאֲשֶׁר יַעֲנֶה אֹתוֹ כֵּן יִרְבֶּה וְכֵן יִפְרָץ וַיִּקְצֹוּ מִפְּנֵי בְנֵי יִשְׂרָאֵל:
 "and as *they* oppressed him, so did he multiply and so did he spread-out, and *they* loathed the children of Israel"
- 1:13 וַיַּעֲבֹדוּ מִצְרַיִם אֶת-בְּנֵי יִשְׂרָאֵל בְּפֹרֶד:
 "and the Egyptians [*they*] forced-labor on the children of Israel with harshness"
- 1:14 וַיִּמְרְרוּ אֶת-חַיֵּיהֶם בְּעִבְדָּה קָשָׁה
 "and *they* made-bitter their lives with hard labor"

If there is something distinctive about the plural verb וַיִּשְׂמוּ "and they placed" at the start of v. 11, as signaled by Schipper, we confess to an inability to apprehend the matter.

More generally, the catalyst for the source-critical division imposed by adherents of the theory onto the text of Exodus 1–2 derives largely from perceived

doublets and inconsistencies, such as different notices about the Israelite population increase and different notices about the imposition of forced labor.⁶² At the same time, though, scholars with a more literary bent have demonstrated that a unified holistic reading of Exodus 1–2 is not only demonstrable but also preferable.⁶³ Robert Alter has written as follows most eloquently, not about Exodus 1–2 *per se*, but about biblical literature generally, "As an attentive reader of other works of narrative literature, I have kept I mind that there are many kinds of ambiguity and contradiction, and abundant varieties of repetition, that are entirely purposeful, and that are essential features of the distinctive vehicle of the literary experience."⁶⁴

In the case of Exodus 1–2, two specific points toward the literary unity of the narrative may be observed. The more major issue is the presence of the *Leitwort* בַּת "daughter" (plural בָּנוֹת "daughters"), which occurs 11x in the opening chapters of Exodus: 1:16, 22; 2:1, 5, 7, 8, 9, 10, 16, 20, 21. Additional support is provided by בָּתִּים "houses" in 1:21 and תַּבַּת "basket of" in 2:3, used to echo the *Leitwort*. The repeated use of the *Leitwort* in these chapters serves to unite discrete scenes (Pharaoh's decree, role of the midwives, birth of Moses, life in Midian, etc.) into a single engaging narrative. By assigning certain verses to "J" and certain verses to "E," however, source critics denude the text of this important device and thereby fail to appreciate the literary artistry inherent in the employment of this technique.

In addition, through such misguided analysis, much more is lost. The reader of the narrative is supposed to apprehend the irony, namely: Pharaoh decreed that every "daughter" may live (1:16, 22), but then the "daughters" (the daughter of Levi [i.e., Moses's mother], the daughter of Pharaoh, and the daughters of Reuel)—in addition to other females (the royal handmaid and Moses's sister)—are responsible for ensuring the very life of Moses.⁶⁵ The story of Exodus 1–14 is the "birth of a nation" (note the expression in Exodus 1:9 עַם בְּנֵי יִשְׂרָאֵל "the people of the children of Israel" [ironically in the mouth of Pharaoh]), with Exodus 1–2 serving as the initial act. Since women are the birth-givers of the world, they therefore play such a prominent role at the outset of the narrative.⁶⁶ By placing this bit of a text into one source and that bit of a text into another source, per the source-critical approach, this major theme

evaporates.

The second issue which we raise here is more minor, but it bears discussion nonetheless. The related nouns **חֲמֶר** “mortar” (Genesis 11:3; Exodus 1:14) and **חֲמֶר** “bitumen” (Genesis 11:3; 14:10; Exodus 2:3), along with the verb **ח-מ-ר** “caulk” (Exodus 2:3), appear rarely in Biblical Hebrew prose: the verses indicated represent the only attestations within the narrative prose corpus. We call attention to the former noun in Exodus 1:14 and the latter noun and the verb in Exodus 2:3: together the three words create a lexical cluster which further serves to unite the individual scenes.⁶⁷ Naturally, once again, the assignment of these verses to different sources negates our analysis, for Exodus 1:14 typically is assigned to “P,” while Exodus 2:3 typically is assigned to either “J” or “E.”⁶⁸

In addition, the two nouns bring the reader back to the early chapters of Genesis: in this case, the Tower of Babel story (see especially Genesis 11:3). This is not a stand-alone phenomenon, but rather part of a deliberate plan, with Exodus 1–2 evoking Genesis 1–11 with a series of explicit lexical linkages: the expressions in Exodus 1:7; the phrase **בְּיָסוּב** in Exodus 2:2; the noun **תְּבָה** in Exodus 2:3, 5; etc.⁶⁹

In sum, Exodus 1–2 constitutes a well-integrated unified narrative, not only unto itself, but also with long-range connections to Genesis 1–11. Moreover, once again there is a theological message to be realized: the two most important events in the history of the world were the creation of the world (Genesis 1–11) and the creation of the people of Israel (Exodus 1–2).

The issues raised in this section of our article have taken us off the course of its prime objective, but they are important, both to establish the essential unity of Exodus 1–2 and to set the stage for what follows. With such in mind, accordingly, we turn now to the linguistic dating of these two chapters. As we shall see, the linguistic profile of the Biblical Hebrew prose employed by the author bespeaks an early dating, and not the late 7th century BCE proposed by Schipper (for the single verse of Exodus 1:11, that is) and, of course, even later datings proposed by other scholars.

LINGUISTIC DATING OF EXODUS 1–2

Schipper contends that Exodus 1 is to be dated to the late monarchic period. First, he writes as follows: “Ex 1 can be divided into three layers—a priestly source, non-priestly passages, and post-priestly addition.”⁷⁰

He then adds that “the ‘non-priestly’ exodus narrative can be dated to the late pre-exilic period (late 7th or early 6th century BCE)”⁷¹—although nowhere does he justify this statement. Finally, as indicated above, Schipper seeks a historical context for the narrative within the geopolitical sphere of the period just mentioned, which he finds in the Assyrian retreat from its western domains and the concomitant increased imperial activity under Necho II (r. 610–595 BCE). Said activities include the building of the canal in the Wadi Tumilat (even if never completed), the incursion into Canaan (2 Kings 23:29; 2 Chronicles 35:22), and the pharaoh’s involvement in Judahite political and economic affairs (2 Kings 23:33–35).

If Exodus 1 were written during this time period, however, we would expect the Hebrew prose to reflect the more intricate style identified by Frank Polak in his decades-long research project—but it does not. In fact, the linguistic-stylistic profile of Exodus 1 demonstrates that it is among the *earliest* biblical texts to be written.

Above we demonstrated that Exodus 1–2 should be considered a literary unit, and thus we extend our analysis here to include both chapters. We do so: a) to expand the database, since any relatively small chunk of text (such as a single chapter or portion thereof) could in theory be linguistically anomalous; and b) because, to repeat, Exodus 1 does not stand by itself but rather is intimately connected to Exodus 2 (see above, with especial attention to the *Leitwort* **בָּת** “daughter”).

The more intricate style of late-pre-exilic and exilic-period Hebrew prose is seen in compositions such as 2 Kings 22–25 and the Jeremiah Vita, as summarized and visualized in TABLE 1.⁷²

In TABLE 2 are the data for Exodus 1, Exodus 2, and then Exodus 1–2 together, mapped against the much larger totals for the texts comprising the earlier classical stratum, which includes large portions of Genesis, Exodus, Judges, and Samuel (indicated by “CLASSICAL STRATUM” in TABLE 2):⁷³

Clearly, Exodus 1–2 is written at an earlier stage in the development of the Hebrew language and its literary prose. The key figure is the low .620 Noun-Verb (NV) ratio for Exodus 1–2, in contrast to the high .721 NV ratio aggregated for the two 6th-century BCE units (see above). The second key figure is the staggering low .084 Nominal-Finite (NF) ratio for Exodus 1–2 vs. the high .250 aggregated for the two 6th-century BCE units (again, see above). As

TABLE 1: Intricate style.

6TH-CENTURY BCE UNITS	NOUNS	VERBS	NV RATIO	FINITE	NOMINAL	NF RATIO
2 Kings 22–25	1119	366	.736	281	81	.224
Jeremiah Vita	2518	1044	.707	773	271	.260
TOTAL	3637	1410	.721	1054	352	.250

TABLE 2: NV and NF ratios of Exodus 1–2

CLASSICAL UNITS	NOUNS	VERBS	NV RATIO	FINITE	NOMINAL	NF RATIO
Exodus 1	123	57	.683	54	3	.053
Exodus 2	148	109	.576	98	11	.101
Exodus 1–2	271	166	.620	152	14	.084
CLASSICAL STRATUM	15,523	9631	.612	7974	1521	.154

Polak has demonstrated clearly, the lower the NV and NF ratios, the earlier the biblical text, while the higher the NV and NF ratios, the later the biblical text.

Polak has built on his earlier research into NV and NF ratios to include other stylistic-syntactic features into the mix. Since he devoted an entire article to an analysis of the Exodus narratives, including Exodus 1–2,⁷⁴ we are able to readily present the relevant data extracted therefrom in TABLE 3.

Polak’s data reveal that chapter 2 is written in what he calls the *lean, brisk, voiced style* (VoLB-1), while chapter 1 is written in the slightly more developed style, although still within the general VoLB classification (hence VoLB-2). To be sure, none of Exodus 1–2 is written in the later *intricate, elaborate style* (IES). Moreover, when viewed as a single large chunk of narrative, the totals for Exodus 1–2 (see the bottom row in TABLE 3) reveal a narrative written in VoLB-1 style overall.

If the narrative were written at a later date, as argued by Schipper (and many others), one would expect the text to reveal the IES style, with a greater number of explicit lexicalized components per clause, with more hypotaxis generally, and more complex hypotaxis specifically—but such a literary-stylistic-linguistic profile is wanting in Exodus 1–2.

And while the approach developed by Polak allows only for relative chronology and not absolute dating, a setting in the early monarchic period (10th century BCE) or possibly even the pre-monarchic period (11th century BCE) is perfectly reasonable for Exodus 1–2.⁷⁵ To be sure, the burden of proof remains with anyone who may wish to date this material to the later biblical period, whether it be ca. 600 BCE, the exilic period, or the Persian period. We know what texts composed during this span of time look like, and Exodus 1–2 (or any part thereof) is not one of them.

Schipper is not alone in ignoring the work of

TABLE 3: Clause analysis of Exodus 1–2. ELC = explicit lexicalized constituent.

PERICOPE	TYPE	TOTAL # CLAUSES	0–1 ELC% (# CLAUSES)	3+ ELC% (# CLAUSES)	ALL HYPOTAXIS % (# CLAUSES)	COMPLEX HYPOTAXIS % (# CLAUSES)
1:1–22	VoLB-2	67	41.8% (28)	6.0% (4)	29.9% (20)	11.9% (8)
2:1–10	VoLB-1	50	52.0% (26)	2.0% (1)	14.0% (7)	4.0% (2)
2:11–25	VoLB-1	68	61.8% (42)	2.0% (1)	11.8% (8)	0.0% (1)
TOTAL	–	185	51.9% (96)	3.2% (6)	18.9% (35)	5.4% (10)

TABLE 4: Selected verbs in Exodus 1–2.

SEMANTIC FIELD	CLASSICAL VERB	LATER VERB	CONTROL VERB
conveyance	<i>l-q-h</i> 4x	<i>hby</i> 1x	<i>n-š-</i> 0x
motion	<i>h-l-k</i> 6x	<i>b-w-</i> 6x	<i>y-š-</i> 3x
perception	<i>r-ʿ-h</i> 8x	<i>š-m-</i> 2x	<i>y-d-</i> 4x

TABLE 5: Selected verbs in 2 Kings 22–25.

SEMANTIC FIELD	CLASSICAL VERB	LATER VERB	CONTROL VERB
conveyance	<i>l-q-h</i> 10x	<i>hby</i> 6x	<i>n-š-</i> 3x
motion	<i>h-l-k</i> 8x	<i>b-w-</i> 13x	<i>y-š-</i> 2x
perception	<i>r-ʿ-h</i> 6x	<i>š-m-</i> 6x	<i>y-d-</i> 0x

TABLE 6: Selected verbs in Jeremiah Vita.

SEMANTIC FIELD	CLASSICAL VERB	LATER VERB	CONTROL VERB
conveyance	<i>l-q-h</i> 28x	<i>hby</i> 12x	<i>n-š-</i> 0x
motion	<i>h-l-k</i> 26x	<i>b-w-</i> 45x	<i>y-š-</i> 14x
perception	<i>r-ʿ-h</i> 9x	<i>š-m-</i> 25x	<i>y-d-</i> 14x

Frank Polak specifically or the major strides accomplished in the diachronic study of ancient Hebrew during the last several decades more generally. To be honest, we do not understand why scholars proceed with their studies without recourse to this material—especially since the linguistic evidence constitutes *the most objective criterion* for the dating of any text. This is true not only for Hebrew, but for virtually every language with a literary tradition.⁷⁶

Let us turn to another data collection which informs our discussion. As Polak also has shown, the various strata of Biblical Hebrew prose also display different lexical choices for key verbs.⁷⁷ The data for the relevant verbs in Exodus 1–2 appear in TABLE 4.

Obviously, in only two chapters one cannot expect to find the full data sets that one would optimally desire in order to produce conclusive results. Nevertheless, as the chart reveals, a clear pattern emerges. In Exodus 1–2, *ל-ק-ח* *l-q-h* “take” dominates over *הביא* “bring” (that is, Hiphʿil of *ב-ו-א* *b-w-*), with a 4:1 ratio; *ר-א-ה* *r-ʿ-h* “see” dominates over *שמע* *š-m-* “hear,” again with a 4:1 ratio; and *הלך* *h-l-k* “go” and *ב-ו-א* *b-w-* “come” appear in equal measure, 6x each. This is precisely what one sees in the Classical Stratum analyzed by Polak.

In the later strata, including in the two corpora mentioned above, that is, 2 Kings 22–25 and the

Jeremiah Vita, the verbs listed in the “Classical Verb” column decrease in proportional use, while the verbs listed in the “Later Verb” column increase in proportional use, as TABLES 5 and 6 indicate. (These trends become more sweeping and more complete in the Persian-period literature.)

If Exodus 1, or Exodus 1–2, were written in the late monarchic period, c. 600 BCE, one would expect the verb choices to more closely emulate the distributions in 2 Kings 22–25 and the Jeremiah Vita. Such is clearly not the case, though.

Yet another linguistic issue may be raised here. One of the grammatical features that distinguishes the classical stratum of Biblical Hebrew prose from the later stratum is the former’s almost uniform use of *wayyiqtol* to express the narrative past at the head of the clause versus the latter’s increased use of *wə-qatal* for the same tense in the same situation.⁷⁸

In the two corpora dated to the early 6th century BCE on which we continue to focus, one notes the use of *wə-qatal* in the following instances:

- 2 Kings 23:4, 5, 8, 10, 12, 14, 15
- 2 Kings 24:14
- 2 Kings 25:29 (2x)
- Jeremiah 37:11, 15 (2x)
- Jeremiah 38:28
- Jeremiah 40:3

Four examples will suffice:

- 2 Kings 23:14 **וּשְׁבַר אֶת-הַמַּעֲבֹת**
 “and he smashed the *massebot*”
 2 Kings 24:14 **וְהִגְלָה אֶת-כָּל-יְרוּשָׁלַם**
 “and he exiled all Jerusalem”
 Jeremiah 37:15 (2x) **וַהֲכֹוּ אֹתוֹ וַתִּתְּנוּ אוֹתוֹ בַּיִת הָאֲסוּר**
 “and they beat him, and they put him in
 prison”

When we look at Exodus 1–2, we find zero instances of this usage, and for good reason: these chapters do not date from the time period of 2 Kings 22–25 and the Jeremiah Vita, that is, late 7th and early 6th centuries BCE, but rather from a much earlier period in the development of ancient Hebrew narrative prose.

In fact, in general one finds in Exodus 1–2 *zero* features of the type identified within Transitional Biblical Hebrew texts (Jeremiah, Ezekiel, etc.) and Late Biblical Hebrew texts (Ezra-Nehemiah, Chronicles, etc.).⁷⁹ To the contrary, when a linguistic contrast may be established, one finds classical features in the opening two chapters of Exodus, including the following:

1. adverbial-directional *he* (2x)
 Exodus 1:1 **מִמִּצְרַיִם** “to Egypt”
 Exodus 1:22 **הַיַּאֲרֵה** “into the Nile”
2. paragogic *nun*
 Exodus 1:22 **תִּחְיֶינָה** “you shall let live”
3. **עַל-ח-מ-ל +**
 “have compassion upon”
 Exodus 2:6 **וַתַּחַמַּל עָלָיו** “and she had compassion upon him”

In later Hebrew, the first two features become exceedingly rare and/or disappear altogether (e.g., there are 7 cases of paragogic *nun* out of a potential 372 cases in Jeremiah, and 0 instances of paragogic *nun* out of a potential 46 cases in Ezra-Nehemiah).⁸⁰ The third feature continues in the later stages in the language, but one also begins to find **אֶל + ח-מ-ל** “have compassion upon.”⁸¹

In sum, no matter which diagnostic tool one uses for the linguistic analysis of Exodus 1–2, the conclusion is clear: these two chapters are written in an earlier stratum of Biblical Hebrew prose, and not a later one.

To repeat: we simply do not understand why scholars proceed with their studies without recourse

to material relevant to the diachronic development of ancient Hebrew—especially since the linguistic evidence constitutes *the most objective criterion* for the dating of any text. If Schipper and others wish to date Exodus 1 to the later period, we would expect some discussion along these lines. No Egyptologist would declaim that a text written in Middle Egyptian or even Ramesside Late Egyptian should be dated to the Saite period—without a thorough discussion of the linguistic evidence and without convincing justifications for the late dating.⁸² We should expect the parallel argumentation in the field of biblical studies. Ignoring the linguistic evidence may allow the scholar to propose this or that date for a particular biblical text, but in the end such an approach is not very helpful.

CONCLUSIONS

1. The mention of the construction of Pithom and Rameses in Exodus 1:11 fits perfectly into the historical context of the Nineteenth and Twentieth Dynasties (13th and 12th centuries BCE). See in detail Part I of our co-authored article.
2. There is absolutely no objection to understanding **רַעַמְסֵס** as a 13th–12th century BCE transcription of *r^c-ms-sw* “Rameses.” Evidence from both Ugarit and Amarna demonstrates that Egyptian /s/ was transcribed by Semitic scribes with either /s/ or /š/.
3. The first key word, **מִס** “corvée,” is not a borrowing from Neo-Assyrian (or any other Akkadian dialect): it is a pure West Semitic word, attested already (and only) at Alalakh and Amarna.
4. The second key word, **מִסְכָּנוֹת** “storages, storehouses,” appears in similar fashion in EA 306.31 and/or is patient of a good West Semitic derivation (cf. especially Ugaritic *skn*). The usage, accordingly, is known already in Late Bronze Age sources from the land of Canaan; once again, there is no need to look to Neo-Assyrian (where, in any case, the word is not attested).
5. The larger account of Exodus 1—and indeed the still larger account of Exodus 1–2—should not be divided into separate sources, but rather

should be read in a holistic manner as a single unified narrative.

6. The two chapters are dated on linguistic grounds to the earliest stratum of Biblical Hebrew narrative prose literature.

ABBREVIATIONS

CAD	Erica Reiner, et al. (eds.). 1956–2011. <i>The Assyrian Dictionary of the Oriental Institute of the University of Chicago</i> , 21 vols. Chicago: Oriental Institute.
CAT	Manfried Dietrich, Oswald Loretz, and Joaquín Sanmartín. 2013. <i>The Cuneiform Alphabetic Texts from Ugarit, Ras Ibn Hani and Other Places</i> , 3rd ed. Alter Orient und Altes Testament 360/1. Münster: Ugarit-Verlag.
EA	El-Amarna Letters (see Rainey 2015).
DULAT	Gregorio del Olmo Lete and Joaquín Sanmartín. 2003. <i>A Dictionary of the Ugaritic Language in the Alphabetic Tradition</i> , 2 vols., translated by Wilfred G. E. Watson. Leiden: Brill.
EHL	Geoffrey Khan (ed.). 2013. <i>Encyclopedia of Hebrew Language and Linguistics</i> , 4 vols. Leiden: Brill.
HALOT	M. E. J. Richardson (ed.). 2001. <i>The Hebrew and Aramaic Lexicon of the Old Testament</i> , 2 vols. Leiden: Brill.
PRU IV	Jean Nougayrol. 1956. <i>Textes accadiens des archives sud</i> = Claude F.-A. Schaeffer (ed.), <i>Le Palais royal d'Ugarit IV</i> . Mission de Ras Shamra 9. Paris: Imprimerie Nationale.

REFERENCES

Ackerman, James S. 1974. "The Literary Context of the Moses Birth Story (Exodus 1–2)." In Kenneth R. R. Gros Louis, et al. (eds.), *Literary Interpretations of Biblical Narratives*, 74–119. Nashville: Abingdon.

Ahituv, Shmuel. 1999. "Nodedim ba-Negev bi-Mqorot Mišrayim" (English title: "Nomads in the Desert in Egyptian Sources"). In Robert Chazan, et al. (eds.), *Ki Baruch Hu: Ancient Near Eastern, Biblical, and Judaic Studies in Honor of Baruch A. Levine*, 21*–27*. Winona Lake, IN: Eisenbrauns.

Albright, William F. 1943. "An Archaic Hebrew

Proverb in an Amarna Letter from Central Palestine." *Bulletin of the American Schools of Oriental Research* 89: 29–32.

Allen, James P. 2013. *The Ancient Egyptian Language*. Cambridge: Cambridge University Press.

Alter, Robert. 2019. *The Hebrew Bible*. 3 vols. New York: W. W. Norton.

Baden, Joel S. 2012. "From Joseph to Moses: The Narratives of Exodus 1–2." *Vetus Testamentum* 62: 133–158.

Baranowski, Krzysztof J. 2017. "The Biblical Hebrew 'Store Cities' and an Amarna Gloss." *Vetus Testamentum* 67: 519–527.

Breyer, Francis. 2019. *Ägyptische Namen und Wörter im Alten Testament*. Ägypten und Altes Testament 93. Münster: Zaphon.

Carr, David M. 2006. "What is Required to Identify Pre-Priestly Narrative Connections between Genesis and Exodus? Some General Reflections and Specific Cases." In Thomas B. Dozeman and Konrad Schmid (eds.), *A Farewell to the Yahwist? The Composition of the Pentateuch in Recent European Interpretation*, 159–180. Society of Biblical Literature Symposium Series 34. Atlanta: Society of Biblical Literature.

Cassuto, Umberto. 1967. *A Commentary on the Book of Exodus*, translated by Israel Abrahams. Jerusalem: Magnes.

Cochavi-Rainey, Zipora. 2013. "Amarna Canaanite and Hebrew." *EHL* 1: 96–98.

Fox, Everett. 1995. *The Five Books of Moses*. New York: Schocken.

Friedman, Richard E. 2003. *The Bible with Sources Revealed*. San Francisco: Harper.

Frymer-Kensky, Tikva. 2002. *Reading the Women of the Bible*. New York: Schocken.

Giveon, Raphael. 1971. *Les Bédouins Shosou des Documents Égyptiens*. Documenta et monumenta Orientis antiqui 18. Leiden: Brill.

Greenstein, Edward L. 1997. "Kirta." In Simon B. Parker (ed.), *Ugaritic Narrative Poetry*, 9–48. Society of Biblical Literature, Writings of the Ancient World 9. n. pl.: Scholars Press.

Harrell, James E., James K. Hoffmeier, and Kenton F. Williams. 2017. "Hebrew Gemstones in the Old Testament: A Lexical, Geological, and Archaeological Analysis." *Bulletin for Biblical Research* 27: 1–52.

Hays, Christopher B. 2010. "Re-Excavating Shebna's Tomb: A New Reading of Isa 22,15–19 in its Ancient Near Eastern Context." *Zeitschrift für die*

- alttestamentliche Wissenschaft* 122: 558–575.
- Hess, Richard S. 1993. *Amarna Personal Names*. American Schools of Oriental Research Dissertation Series 9. Winona Lake, IN: Eisenbrauns.
- Hoch, James E. 1994. *Semitic Words in Egyptian Texts of the New Kingdom and Third Intermediate Period*. Princeton: Princeton University Press.
- Hoffmeier, James K., and Gary A. Rendsburg. 2022. “Pithom and Rameses (Exodus 1:11): Historical, Archaeological, and Linguistic Issues (Part I).” *Journal of Ancient Egyptian Interconnections* 33: 1–19.
- Hornkohl, Aaron D. 2014. *Ancient Hebrew Periodization and the Language of the Book of Jeremiah*. Studies in Semitic Languages and Linguistics 74. Leiden: Brill.
- Hurvitz, Avi. 2014. *A Concise Lexicon of Late Biblical Hebrew*. Supplements to Vetus Testamentum 160. Leiden: Brill.
- . 2017. *From Genesis to Chronicles: Chapters in the Linguistic History of Biblical Hebrew* (Hebrew). Jerusalem: Bialik.
- Isbell, Charles D. 1982. “Exodus 1–2 in the Context of Exodus 1–14: Story Lines and Key Words.” In David J. A. Clines, et al. (eds.), *Art and Meaning: Rhetoric in Biblical Literature*, 37–59. Journal for the Study of the Old Testament Supplement Series 19. Sheffield: JSOT Press.
- Izre’el, Shlomo. 1997. *The Amarna Scholarly Tablets*. Cuneiform Monographs 9. Groningen: Styx.
- Joosten, Jan. 2012. *The Verbal System of Biblical Hebrew*. Jerusalem: Simor.
- Kang, Yoonjung. 2011. “Loanword phonology.” In Marc van Oostendorp, et al. (eds.), *The Blackwell Companion to Phonology*, 2258–2282. Malden, MA: Wiley-Blackwell.
- Kaufman, Stephen A. 1974. *The Akkadian Influences on Aramaic*. Assyriological Studies 19. Chicago: University of Chicago Press.
- Lambdin, Thomas O. 1952. “Egyptian Loan Words in the Old Testament.” *Journal of the American Oriental Society* 73: 145–155.
- Leslau, Wolf. 1957a. “Arabic Loanwords in Amharic.” *Bulletin of the School of Oriental and African Studies* 19: 221–244.
- . 1957b. “The Phonetic Treatment of the Arabic Loanwords in Ethiopic.” *Word* 13: 100–123.
- Mandell, Alice. 2015. “Glossary.” In Anson F. Rainey, *The El-Amarna Correspondence*, William Schniedewind and Zipora Cochavi-Rainey (eds.), vol. 1, 1269–1313. *Handbuch der Orientalistik* 110. Leiden: Brill.
- Mankowski, Paul. 2013. “Akkadian Loanwords.” *EHLL* 1: 82–84.
- . 2000. *Akkadian Loanwords in Biblical Hebrew*. Harvard Semitic Studies 47. Winona Lake, IN: Eisenbrauns.
- Miller-Naudé, Cynthia L. and Ziony Zevit, (eds.). 2012. *Diachrony in Biblical Hebrew*. Winona Lake, IN: Eisenbrauns.
- Muchiki, Yoshiyuki. 1999. *Egyptian Proper Names and Loanwords in North-West Semitic*. Society of Biblical Literature Dissertation Series 173. Atlanta: Society of Biblical Literature.
- Noonan, Benjamin J. 2019. *Non-Semitic Loanwords in the Hebrew Bible*. Linguistic Studies in Ancient West Semitic 14. University Park, PA: Eisenbrauns.
- Parker, Simon B. 1997. “Aqhat.” In Simon B. Parker (ed.), *Ugaritic Narrative Poetry*, 49–80. Society of Biblical Literature, Writings of the Ancient World 9. n. pl.: Scholars Press.
- Polak, Frank. 1997–1998 (5758). “Temurot u-Tqufot bi-Lšon ha-Sipporet ba-Miqra’.” *Bet Miqra’* 43: 30–52, 142–160.
- . 1998. “The Oral and the Written: Syntax, Stylistics and the Development of Biblical Prose Narrative.” *Journal of the Ancient Near Eastern Society* 26: 59–105.
- . 2016. “Story Telling and Redaction: Varieties of Language Usage in the Exodus Narrative.” In Jan C. Gertz, et al. (eds.), *The Formation of the Pentateuch: Bridging the Academic Cultures of Europe, Israel, and North America*, 443–475. *Forschungen zum Alten Testament* 111. Tübingen: Mohr Siebeck.
- . 2018. “Hidden Protest, Implied Theodicy and Secret Promise in the Opening of the Book of Exodus.” In Beate Ego, et al. (eds.), *Theodicy and Protest: Jewish and Christian Perspectives*, 29–44. *Studien zu Kirche und Israel, Neue Folge* 13. Leipzig: Evangelische Verlagsanstalt.
- Quack, Joachim Friedrich. 2000. “Review of Yoshiyuki Muchiki, *Egyptian Proper Names and Loanwords in North-West Semitic*.” *Review of Biblical Literature*. <bookreviews.org/bookdetail.asp?TitleId=408>, accessed 24 April 2020.
- Rainey, Anson F. 1970. “Compulsory Labour Gangs in Ancient Israel.” *Israel Exploration Journal* 20: 191–202.
- . 2015. *The El-Amarna Correspondence*, William

- Schniedewind and Zipora Cochavi-Rainey (eds.). 2 vols. *Handbuch der Orientalistik* 110. Leiden: Brill.
- Ranke, Hermann. 1935/1952/1976. *Die Ägyptischen Personennamen*, 3 vols. Glückstadt: J. J. Augustin.
- Redford, Donald B. 1963. "Exodus i 11." *Vetus Testamentum* 13: 401–418.
- . 2009. "The Land of Rameses." In Peter J. Brand and Louise Cooper (eds.), *Causing His Name to Live: Studies in Egyptian Epigraphy and History in Memory of William J. Murnane*, 175–182. *Culture and History of the Ancient Near East* 37. Leiden: Brill.
- Rendsburg, Gary A. 1996. "Semitic Words in Egyptian Texts." *Journal of the American Oriental Society* 116: 508–511.
- . 2016. "The Literary Unity of the Exodus Narrative." In James K. Hoffmeier, Alan Millard, and Gary A. Rendsburg (eds.), *"Did I Not Bring Israel Out of Egypt?" Biblical, Archaeological, and Egyptological Perspectives on the Exodus Narratives*, 113–132. *Bulletin for Biblical Research Supplement* 13. Winona Lake, IN: Eisenbrauns.
- . 2019. *How the Bible Is Written*. Peabody, MA: Hendrickson.
- . 2020. "Israelite Origins." In Richard E. Averbeck and K. Lawson Younger (eds.), *"An Excellent Fortress for His Armies, A Refuge for the People": Egyptological, Archaeological, and Biblical Studies in Honor of James K. Hoffmeier*, 327–339. University Park, PA: Eisenbrauns.
- Sagrillo, Tony L. 2015. "Shoshenq I and Biblical Šīšaq: A Philological Defense of Their Traditional Equation." In Peter James and Peter G. van der Veen (eds.), *Solomon and Shishak: Current Perspectives from Archaeology, Epigraphy, History and Chronology*, 61–81. *British Archaeological Reports International Series* 2732. Oxford: Archaeopress.
- Schipper, Bernd. 2015. "Raameses, Pithom, and the Exodus: A Critical Evaluation of Ex 1:11." *Vetus Testamentum* 65: 265–288.
- Schneider, Thomas. 2001. "Review Essay of Yoshiyuki Muchiki, *Egyptian Proper Names and Loanwords in North-West Semitic*." *Jewish Quarterly Review* 92: 155–165.
- Sivan, Daniel. 1984. *Grammatical Analysis and Glossary of the Northwest Semitic Vocables in Akkadian Texts of the 15th–13th C.B.C. from Canaan and Syria*. *Alter Orient und Altes Testament* 214. Neukirchen-Vluyn: Butzon & Bercker.
- Smith, Mark S. 1997. "The Baal Cycle." In Simon B. Parker (ed.), *Ugaritic Narrative Poetry*, 81–180. *Society of Biblical Literature, Writings of the Ancient World* 9. n. pl.: Scholars Press.
- Smith, Sidney, and C. J. Gadd. 1925. "A Cuneiform Vocabulary of Egyptian Words." *Journal of Egyptian Archaeology* 11: 230–240.
- Weinstein, James M. 1981. "The Egyptian Empire in Palestine: A Reassessment." *Bulletin of the American Schools of Oriental Research* 241: 1–28.
- . 2012. "Egypt and the Levant in the Reign of Ramesses III." In Eric H. Cline and David O'Connor (eds.), *Ramesses III: The Life and Times of Egypt's Last Hero*, 164–171. Ann Arbor: University of Michigan Press.
- Young, Ian. Robert Rezetko, and Martin Ehrensverd. 2008. *Linguistic Dating of Biblical Texts*, 2 vols. London: Equinox.

NOTES

- ¹ Hoffmeier and Rendsburg 2022. Once again, the authors take the opportunity to thank Charles Loder (M.A. Rutgers University) for his assistance in the preparation of our article.
- ² Schipper 2015, 274.
- ³ Hoch 1994.
- ⁴ Rendsburg 1996.
- ⁵ This convention is followed also by Hoch 1994 (see conveniently the charts on pp. 433, 436), and by other authors with standard works in this research area: Muchiki 1999 (see especially the summary charts on pp. 49, 184, 263, 285, 306); Noonan 2019 (see esp. p. 277); and Breyer 2019.
- ⁶ On the derivation of the name מֹשֶׁה "Moses," see the EXCURSUS.
- ⁷ For more on this mineral, see Harrell et al. 2017, 22–23; Noonan 2019, 143; and Breyer 2019, 124–125.
- ⁸ Schipper 2015, 272–276.
- ⁹ The form appears as רַעַקְסִס in Exod 1:11 (with *pataḥ-pataḥ* sequence at the start), but to keep matters simple herein, we use the dominant form (4x) רַעַקְסִס (with *pataḥ-shawa* sequence at the start) throughout.
- ¹⁰ Redford 1963, 411–412. See also Redford 2009. For similar comments (albeit in brief), see Breyer 2019, 15.

- ¹¹ After this section of the article was written, we were happy to learn that much of what we state herein was expressed already by Sagrillo 2015, 63–66. The two treatments (that is, his and ours) overlap to a great extent, although they are not totally duplicative. For example, we provide more details concerning Amarna and Ugaritic material, while Sagrillo included some valuable Hittite evidence, to which we did not turn our attention.
- ¹² Muchiki 1999. We are well aware of several critical reviews of this book, and thus we have checked and double-checked every reference—which naturally we would have done anyway, since our method is always to consult the primary sources. See most importantly Schneider 2001, although see also Quack 2000.
- ¹³ Material culled from Muchiki 1999, 276–287 (= ch. 4). We do not include here Eg. *sk.t* “boat”/ Ug. *tkt* / Heb. תִּכְתֹּךְ (Isaiah 2:16) (listed on p. 283), with the atypical consonantal correspondence, especially between the Hebrew and Ugaritic forms. Most likely we have here either a *Wanderwort* or an Egyptian word that entered the different Semitic languages through different pathways.
- ¹⁴ Material culled from Muchiki 1999, 289–312 (= ch. 5). We have checked the cuneiform transcriptions against the definitive edition by Rainey 2015 and in a few places have made minor corrections, improvements, etc., with an eye to greater accuracy. We have omitted one item registered by Muchiki, namely, Eg. ¹*nʿr-ms(w)* “nʿr-tree is born” > EA 21.33 *na-ah-ra-ma-aš-[š]i* (see p. 293), which we take not to be an Egyptian PN but rather read as three separate lexemes *1 na-ah-ra ma-ʿašʿ-ši* “one polished nahra,” per the analysis by Rainey 2015, 1.158–159, 2.1354. For an additional lexeme appearing in EA 252.30, not registered by Muchiki, see at the end of this section.
- ¹⁵ See Hess 1993, 30, no. 20. The name also occurs at EA 113.43, although only the first sign is visible.
- ¹⁶ See also Hess 1993, 73–74, no. 69. Hess transcribed the last sign in 49.25 as *ša*, but the correct reading is *sa*, as listed by Rainey and Muchiki. See also Shlomo Izre’el at ORACC: oracc.museum.upenn.edu/contrib/amarna/corpus.
- ¹⁷ See also Hess 1993, 125, no. 131.
- ¹⁸ See also Hess 1993, 148–149, no. 158.
- ¹⁹ Muchiki 1999, 310.
- ²⁰ For the *editio princeps*, see Smith and Gadd 1925. For a more recent edition, see Izre’el 1997, 77–81.
- ²¹ Muchiki 1999, 310.
- ²² Would that we had Egyptian names and loanwords in early Aramaic and Phoenician texts, but all of the available evidence derives from c. 700 BCE. onward (with a great concentration of material during the Persian period), and thus we do not present this material here. See the summary statements in Muchiki 1999, 49, 184.
- ²³ Leslau 1957b, esp. 108. For further details on one of these languages (Amharic), see Leslau 1957a, esp. 224. The extent of the inconsistency may even be seen with single lexemes, for example: Arabic *sūq* “market” > Amharic *suq* and *šuq*, Arabic *sarṭān* “Cancer” > Amharic *sārṭan* and *šārṭan*, with the Amharic forms as free variants.
- ²⁴ Leslau 1957b, 114.
- ²⁵ Mankowski 2000, 155–157; and more succinctly Mankowski 2013.
- ²⁶ The same holds, naturally, for Akkadian loanwords in Aramaic, for which see Kaufman 1974, esp. 140–142.
- ²⁷ Kang 2011, esp. 2275.
- ²⁸ Schipper 2015, 275.
- ²⁹ For the record, we note here that Breyer 2019, 99, presents only the bare evidence, without engaging into the issue, though he does provide ample bibliography to earlier studies.
- ³⁰ See the classic study by Weinstein 1981. Even at a distance of forty years, with new data forthcoming from new excavations, the picture described by Weinstein remains more or less valid. For attention to one particular pharaoh, Weinstein 2012.
- ³¹ For further discussion, see Rendsburg 2020.
- ³² Lambdin 1952, esp. 155; and Muchiki 1999, 257

- (although he expresses some qualification about the identification). Not everyone accepts this example, though: see, e.g., Breyer 2019, 151, 164, 193; and Noonan 2019 (where the word appears not at all). Note, however, that the word has no Semitic cognates (the so-called Ugaritic evidence cited in *HALOT*, 2.1608, may be ignored), and therefore a borrowing from Egyptian seems secure.
- 33 See the survey by Aḥituv 1999. For a more detailed study, see Giv'eon 1971.
- 34 We have no evidence of the noun in Hebrew, but the shift from nominal usage to verbal usage has well-known parallels; in English, for example, compare Vandals > “vandalize,” Gypsies > “gyp” (with its negative, even racist, overtones), and so on.
- 35 For the reading and the translation, see Rainey 2015, 1.1024–1025. The interpretation goes back to Albright 1943, 32, n. 27.
- 36 See the survey by Cochavi-Rainey 2013.
- 37 There is an enormous bibliography on the subject, mostly well known, and thus we proceed without citing the various studies, especially since this section is an Excursus, and not the main body of our article.
- 38 Ranke 1935/1952/1976, 3.64–65. The only possible exception would be the New Kingdom name *p³-ms*, apparently meaning “the one born” = “the child,” for which see Ranke 1935/1952/1976, 1.105 (no. 11).
- 39 Smith 1997, 148.
- 40 For the former, see Greenstein 1997, 17; for the latter, see Parker 1997, 58.
- 41 CAD 10 [M/1], 401–403.
- 42 Compare, e.g., Egyptian *snw* “two” = Semitic *tn* “two.”
- 43 Schipper 2015, 276–278.
- 44 Schipper 2015, 278.
- 45 See Rainey 2015, 1.1242–1243; and Sivan 1984, 245. For extended discussion, see Rainey 1970, 192–194.
- 46 CAD 10 [M/1], 327. See also Mandell 2015, *apud* Rainey 2015, 1.1305.
- 47 Schipper 2015, 278.
- 48 Mankowski 2000.
- 49 For these two words, along with several related forms, see CAD 10 [M/1], 369–376.
- 50 Baranowski 2017.
- 51 See also Rainey 2015, 1.1165.
- 52 As duly noted and discussed by Baranowski 2017, 526.
- 53 Mankowski 2000, 99.
- 54 Mankowski 2000, 100.
- 55 Technically, the two examples represent different *mišqalim* (nominal patterns), but the informed reader will understand. For succinct treatment, see Lipiński 1997, 217, §29.21.
- 56 We retain the traditional understanding (and Masoretic pointing) of סִבְּקָ in Isaiah 22:15, *pace* Hays 2010, who posited the form *sikkān/sikkōn*, with the meaning “funerary stele” (cf. Ugaritic *skn* “funerary stele”).
- 57 *DULAT*, 2.757–759.
- 58 Schipper 2015, 276–277 (with footnotes omitted).
- 59 Friedman 2003, 119.
- 60 Baden 2012, 151–152.
- 61 Presumably “their” here refers to Egypt (sc. the Egyptians), which, as indicated, is treated consistently as grammatically plural. In theory, the antecedent could be Israel (sc. the Israelites), although, as indicated, this entity is treated as grammatically singular in this pericope. Hence, the question is: do the סִבְּקָם refer to the levies of forced labor imposed by the Egyptians, or are they the burdens to be carried out by the Israelites? Given the dichotomous manner of referencing Egypt as plural and Israel as singular in these verses, the scales are tipped toward the former understanding. Alternatively, the specific form סִבְּקָם looks ahead to Exodus 2:11, where “their” refers clearly to the Israelites, and thus it may bear said connotation in Exodus 1:11 as well. On the noun *sēbel*, *sablum* in Hebrew and other West Semitic sources, see Rainey 1970, 195–197.
- 62 See, for example, Baden 2012, 134.
- 63 See Ackerman 1974; and Isbell 1982. Other

- relevant works are cited by Baden, 2012, 134–135, n. 1.
- ⁶⁴ Alter 2019, 1.6.
- ⁶⁵ See Polak 2018, 41–42.
- ⁶⁶ See Frymer-Kensky 2002, 24–33, 360–365 = her chapter entitled “Saviors of the Exodus.”
- ⁶⁷ For more on these verses, see Rendsburg 2019, 102–103.
- ⁶⁸ Friedman 2003, 119–120, considers Exodus 2:3 to be part of the “J” source; while Baden 2012, considers this verse to be part of the “E” source.
- ⁶⁹ See Rendsburg 2016, 129–130.
- ⁷⁰ Schipper 2015, 276. The footnote to this sentence directs the reader to Carr 2006, 172–175.
- ⁷¹ Schipper 2015, 277.
- ⁷² Data from Polak 1998 (see especially the summary chart on p. 70).
- ⁷³ For these data sets and for others below, we are indebted to Charles Loder (see n. 1) for his invaluable analysis. Data available at github.com/charlesLoder/exodus_1-2.
- ⁷⁴ Polak 2016—with the longer and more detailed version of the article available at telaviv.academia.edu/FrankHPolak.
- ⁷⁵ In general, see Richelle 2016. For the specific literary-political environment during the 10th century BCE, which could have spawned the creation of the ancient Israelite national narrative, see Rendsburg 2019, 443–467 (= ch. 21).
- ⁷⁶ See the collection of essays in Miller-Naudé and Zevit 2012.
- ⁷⁷ Polak 1997–1998 (see conveniently the summary charts on pp. 158–160).
- ⁷⁸ Joosten 2012, 224, 227. For more detailed analysis, see Hornkohl 2014, 287–293.
- ⁷⁹ For the former, see Hornkohl 2014. For the latter, see the many works of Avi Hurvitz, including, most recently, Hurvitz 2014 and Hurvitz 2017.
- ⁸⁰ For adverbial-directional *he*, see Hornkohl 2014, 203–226. For paragogic *nun*, see Young, Rezetko, and Ehrensverd 2008, 2.123–126.
- ⁸¹ See Hornkohl 2014, 236, n. 195.
- ⁸² Note the focus on the Twenty-sixth Dynasty in Allen 2013, 3.