



# Atlantis, a City of Many Names, as Recorded in the Pyramid Texts

## Abstract

About 70 epithets of Atlantis, the legendary city Plato recorded from an Egyptian source, are identified in the original hieroglyphs of the Pyramid Texts. Each of these names has a specific meaning. In combination they give a rich and clear characterization of the City. For example, many epithets depict the unique round shape of Atlantis, including the Great Disk (Aten), the Eye City, the Egg City, the Great Embrace, the Head and Face. Most of the recitations of Horus's Eye refer to Atlantis as the Eye City, since it looks like "the young girl's pupil." Some epithets portray the structure and environment of Atlantis, such as the Pillar City, the Walled Place, the Black City, the Northern City, the Great Island, and the Marsh City. Some epithets reflect the culture and history of Atlantis, such as Shu (Atlas) City, the Libation City, the Retreat City, the Fortified City, the Great Immersion, and the Great Erosion. The Hot/Cool Springs and the Aqueduct system are the Atlantis hallmarks told by Plato. The Pyramid Texts give many details on these geothermal and hydraulic marvels, which have not been recognized by Egyptologists. Their translations are all incorrect. The hieroglyph for the "Hot Spring" () has been mistaken as "flame." Therefore, the "Island of Hot Spring" (a nickname for Atlantis) was thought to be the "Isle of Flame." Another unsolved hieroglyph () clearly depicts the Aqueduct. King Horus is identified as "Horus of the Aqueduct Island." The Aqueduct flowline is figuratively metaphorized as the Centipede with its numerous supporting columns. Spell PT285 gives a vivid description of the two springs and the houses for the feeble and bathing. PT256:4-7 say: "The ejection of the Hot Spring of my effective Uraeus is Renenutet (cobra goddess) on my Head... I have seen the gods naked and bowing to me in praise." Why were the gods naked? Because they were bathing at the Hot Spring! The same bath pool was mistaken as the "Lake of Fire" for torment of the damned afterlife even 3000 years ago in Egypt, as illustrated in the Book of the Dead. The understanding of the Sahara desertification process has led to the revelation of Atlantis in the Atlas Basin. In turn, Atlantis must help convince the world about the remedy reviving the Green Sahara from the same place.

**Keywords:** Aqueduct, Atlantis, Atlas Basin, Horus's Eye, Hot Spring, Pyramid Texts, Sun City, Sun Disk

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## Introduction


Based on water cycle stability and paleoclimate data, I reconstructed the desertification process of the green Sahara.<sup>1</sup> The breach point of the green Sahara is the Atlas Basin, which is in the rain shadow area of the Atlas Mountain Range in today's Eastern Algeria and Southern Tunisia (see insert of Figure 1). About 5700 years ago, the water cycle in this standalone catchment collapsed. The water surface area of the terminal megalake shrank rapidly, and the precipitation decreased sharply. Due to the low evaporation, the strong rain shadow effect of the Atlas Mountain Range became fully active. Desert formed abruptly in the Atlas Basin and then gradually expanded to the South and East, spreading like wildfire powered by the westerlies and trade winds. This chain reaction also includes consequential desertification and aridification in West Asia and the Mediterranean region. The Sahara expansion forced people in North Africa into the Nile Valley. The population shift gave birth to the Egyptian civilization shortly afterward.

The understanding of the hydrology and water cycle stability in the Atlas Basin led to the identification of a site, matching Plato's Atlantis at the outlet of the canal connecting the two terminal megalakes in the basin.<sup>2</sup> Then, I came across the English translation of the Pyramid Texts (PT). The descriptions of the Akhet and its surrounding water bodies in PT agree perfectly with the environment around the terminal megalakes of the Atlas Basin before the end of the green Sahara.<sup>3</sup> I

started to learn hieroglyphs and study the original PT. The hydrological insight helped identify the exact meanings of many hieroglyphic words, leading to improved interpretations. I obtained many more matching details of the Akhet environment to the Atlas Basin.<sup>4</sup> It became clear that most of the PT were developed based on actual environment and real-life situations in the Atlas Basin during the green Sahara time, before the first Great Exodus around 5700 years ago. This assertion is also supported by several other observations. First, only the deeds of the Heliopolitan gods (the Ennead) are covered. The gods from other cults such as Amun and Ptah are rarely mentioned in PT, and no deeds of these gods are described. Secondly, there is no mention of the Egyptian great cities of Memphis (center for the Ptah cult) and Thebes (center for the Amun cult) as well as the mighty river Nile in PT. Thirdly, there is no trace found for the development of such an elegant, sophisticated, and voluminous religious document. It appeared abruptly as a mature system. The same can be said for the sudden emergence of the mature hieroglyphic writing system.

Reading deeper into PT hieroglyphs, I realized that many of the recited city names were meant for the same city – Atlantis, to reflect its rich environmental and cultural characteristics. The total may be more than 100, but this paper presents only about two third with confidence. In fact, giving a favorite city multiple nicknames is not a strange practice. Taking New York City as an example, its history is only about 400 years, but already has many nicknames including the "Big Apple," the "Capital of the World," the "City of Dreams,"





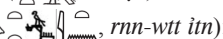
(or Field of Reeds). From the same spell there is a fragment showing  (*hnmmt*) – people of the Sun City (or Sun-Folk).<sup>4</sup> PT250:8-9 say:

*That is I: I am Perception at the west of the Sun (Disk), reserved of mind, at the fore of Nu's cavern.*

How can anyone be “at the west of the sun” which makes its cycle daily? The cardinal directions can only be identified on Earth. Here the Sun is clearly the earthly Sun Disk. The “Nu’s cavern” is the water gate which controls the water flow from Jackal Lake (the Great Green) to Stork Lake (the Field of Reeds). PT438:9 says that it releases water at the first and at the middle of the months. It is located at the narrow gorge on the Nurse Canal west of the Sun Disk. The above PT verses pin the Sun Disk precisely at the Atlantis location shown in Figure 1.

Several other spells also talk about the Sun Disk (Aten) as identified with Horus’s Eye: e.g. in PT357:25-27,

*Horus has taken his Eye from Seth and given it to you. His Eye is the sweet Sun Disk. Return it to yourself, allot it to yourself: oh, may it endure with you.*

Here the Eye is not a body part, but an epithet of Atlantis (explained later). Horus took over the City from Seth’s control.  (*irt.f itn bnt*) clearly means “His Eye is the sweet Sun Disk,” but in Allen’s book the “Sun Disk” part is neglected.<sup>5</sup> In PT622:1-3, Horus’s Eye ( *irt hr*) is identified as “Renenetet of the Sun Disk” ( *rnn-wtt itn*):

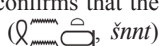
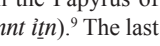
*Osiris Pepi Neferkare, I have provided you with Horus's Eye, this Sun Disk's (Aten's) Renenetet of whom the gods have been fearful, that the gods may be fearful of you like they are fearful of Horus's Eye.*

Renenetet is the goddess of harvest, represented by the Uraeus, which is the protection amulet on every pharaoh’s forehead. She is related to the Hot Spring of Atlantis as discussed later. As a similar statement, PT635:1-3 also tell that the name of the Sun Disk is Horus’s Eye, which is the same place of Ta’it City:


*Osiris Pepi, I have gotten for you Horus's Eye that was in Ta'it City, the name of the Sun Disk of whom the gods have been fearful, that the gods may be fearful of you like they are fearful of Horus.*

On the Thutmose I Victory Stela, the king is said to “rule what the Sun Disk (Aten) has encircled.”<sup>7</sup> The Sun Disk was deified as the Sun God Aten during Akhenaten’s rule (ca.1350 BCE) in the Eighteenth Dynasty. The prologue of Akhenaten’s Great Hymn to the Aten begins with a clear description of the relationships between Re-Horakhty, Shu, the Akhet and the Aten:<sup>8,4</sup>

*Worshipping the Living One Re-Horakhty who rejoices in the Akhet, in his Identity as Shu who is in the Aten, living forever, the Living Aten, the Great One who is in Jubilee, Lord of the Ring Island, Lord of the Aten, Lord of Heaven, Lord of the Earth, Lord of the Aten's House in the Akhet of the Aten.*

Shu (Atlas) is the principal god of the Akhet. This confirms that the Akhet and the Aten are together. The Ring Island ( *snnt*) is the same great Ring Island which will be discussed later for the Atlantis erosion. Similar expression is also found in the Papyrus of Ani for “the Ring Island of the Aten” ( *snnt itn*).<sup>9</sup> The last phrase in the above quote “Lord of the Aten’s House in the Akhet of the Aten” further emphasizes the relationship between the Akhet and the Aten. *shu itn* (Akhetaten – the Akhet of the Aten) is the name of Akhenaten’s new capital city in today’s Amarna, Egypt. Therefore,









Akhenaten’s controversial religious reform was likely an attempt to restore the traditions recorded in PT.

“The Sun’s shoulder in the Akhet” is repeatedly mentioned in PT as open (, *dsr*) to the east: for example,

PT246:8 – *They announce to the one (the Sun) with open shoulder in the east.*

PT578:4 – *They announce you to the Sun as one with open eastern shoulder.*

PT659:4 – *Go to the Sun and say to the Sun, whose shoulder opens in the east.*

Here the Sun is the Sun Disk. The hieroglyph  is generally interpreted as “mountain.” However, its purpose is definitely not to show the two peaks but to show the semi-circle profile in between. It is to reflect “the Sun Disk’s shoulder” which we can call “the Sun Shore.” Clearly the Akhet, , is a combination of the Sun Shore, , and the Sun Disk, . PT422:13 says: “Nut gives you the way to the Akhet, to the place holding the Sun Disk.” Allen translates  (*bw hr r*) as “the place where the sun is.”<sup>15</sup> Literally, it should be translated as “the place holding the Sun Disk” (*bw hr itn*), since  means “holding” or “carrying.” This adds another detail to the PT742:1 description that the Sun Disk is not only in front of the Akhet, but also in the embrace of the Akhet. The Akhet environment has been discussed in the previous paper.<sup>4</sup> The Sun Shore is on the western side and the Sun Disk is on the eastern side, like this: , the same layout as shown in Figure 1. The western Nurse Canal from the Great Green cuts the Sun Shore into two parts. PT685:3 says: “The two Sun Shores are parted: the god comes into being, the god takes control of his body.” Here,  (*dwi*) is not the “two mountains” as interpreted by Allen, but the “two Sun Shores” separated by the Nurse Canal. The god is born through the Nurse Canal when the two Sun Shores are parted. The Sun Disk is the carrier for the new life. The Sun Shore is the birthplace and harbor.



## The Eye City

### The Sun's Eye

In PT, Atlantis is called “The Sun’s Eye” (, *irt r*) or “The God’s Eye” (, *irt ntr*), since it looks like an eye’s pupil:

PT207:1-2 – *A meal for me, you in The Sun's Eye! A meal for me, you with access to The (Sun) Boat, you in The God's Eye!*

PT523:1-4 – *The Sky has fortified The Sun City for me. So, I ascend to the sky as The Sun's Eye, and stand at the eastern Horus's Eye wherein the gods' case is heard.*

Since the Sun City was surrounded by water, it was viewed as a floating, mobile carrier. In PT208:1, the Sun’s Eye is symbolized as the God’s Boat (, *wtz-ntr*) one can take to ascend to the Sky: “A meal for Atum! A meal for the one in The Eye, the God’s Boat!” It is also called the Sun Boat (, *wtz-r*). In PT402:4 from Teti’s pyramid, the Sun’s Eye is metaphorized as the solar sun which goes through its daily cycle: “I am That Eye of the Sun that spends the night conceived and is born every day.” The king is embodied in the Sun’s Eye who ascends to the Sky every morning and sets into the underworld every evening. During the night, he is conceived as the Sun’s Eye in Nut’s womb for rebirth. This symbolism is like the Egg metaphor discussed later. In the same verse PT402:4 from the Pepi II pyramid, “That Eye of the Sun” is replaced with “That Eye of Horus.” This indicates that both the Sun’s Eye and Horus’s Eye are epithets for Atlantis.

In PT684:30-31, the Sun Disk is metaphorized as the young girl's pupil, located on the bends of the Winding Canal: "I remain as you beneath the Sky's belly, as the young girl's **pupil** on the bends of the Winding Canal." What a beautiful and poetic metaphor for Atlantis! The bends of the Winding Canal correspond to the western corner of the canal. The Sun's Eye Atlantis (like the young girl's pupil) is located right at this corner (see Figure 1). The Sun's Eye is also called Tebi's Eye (𓇧𓇱𓇳, *irt tbi*) in PT254:43-45:

*I judge between the two contestants in the Great Immersion, for my control is the control of Tebi's Eye and my strength is the strength of Tebi's Eye.*

Tebi is another designation of the Sun-God, who has a fierce Eye of the Sun.<sup>5</sup> "The Great Immersion" is an epithet of Atlantis, as explained later. In PT, Osiris is frequently called the Foremost of Westerners whose throne is at the Sun Disk (PT422:12-24). Now we know why Osiris's hieroglyphic name 𓇱𓇳 (wsir) has a possessive eye symbol (𓇱). Literally, it is a title meaning the "Throne of the Eye." Since the Eye is the Eye City Atlantis, the name Osiris means "the King of the Eye City."

### Horus's Eye

Previously, I thought that Horus's Eye might also represent the Field of Reeds due to the similarity of its shape to a human eye.<sup>3,4</sup> However, with more cross checking, I found it not to be the case. Horus's Eye is no other place but the Sun City Atlantis. PT132:1 says: "Osiris Unis, accept **Horus's Eye** and go to it." PT133:1 also tells: "Osiris Unis, accept **Horus's Eye**, to which he went." Horus's Eye is a place one can go to. It is also a place one can revolve around, based on PT668:1: "I am a **screeching falcon** who goes around **Horus's Eye**." PT651:1 emphasizes "Horus's Sole Eye" – the one and only. In PT260:14-16, the Eye is said to be "my shelter," "my protection," "my force," and "my power":

*Rage departs for me, and those in Nu serve me with life, for my shelter is in my Eye, for my protection is in my Eye, for my force is in my Eye, for my power is in my Eye.*

PT214:7-8 explicitly tell that the Eye is the "Eye City," 𓇱𓇳 (nwt irt):

*Anyone who will speak bad of the name of Unis when you go forth, Geb has decreed him a reject in the Eye City, fleeing and becoming inert.*

PT683:10-11 tell that Horus's Eye is in Heliopolis:

*I am sound: as I am sound, Horus's Eye in Heliopolis is sound. I live: as I live, Horus's Eye in Heliopolis lives.*

Heliopolis is commonly known as the Sun City. Its hieroglyphic name is "The Pillar City." In later discussions, we will explain that both the Sun City (with another hieroglyphic name) and the Pillar City are epithets of Atlantis.

According to Egyptian myth, Horus lost his left eye in the struggle with Seth. The eye was later magically restored by Hathor.<sup>10</sup> Based on PT, the fight between Horus and Seth was over the control of "That Eye of Horus," the Eye City Atlantis. "Left" and "east" are the same word in hieroglyph. Horus's Eye (the Sun City) is on the eastern side of the Sky. With help from other gods, Horus finally gained control of his Eye City:

PT359:7-12 – *You gods cross on Thoth's wing to that side of the Winding Canal, to the eastern side of the Sky, in order to argue against Seth over That Eye of Horus. I will cross with you on Thoth's wing to that side of the Winding Canal, to the eastern side*

*of the Sky, for I will be arguing against Seth over That Eye of Horus.*

PT686:2-7 – *Horus has acquired his Eye and taken it from his opponents: there is no property right of Seth in it. Horus has filled it with oil, Horus has become content with his Eye, Horus has been equipped with what is his. Horus's Eye clings to him, its scent on him, and its wrath falls on his opponents.*

Here, "that side" (𓇱𓇳, *pf gs*) or "that side of the Winding Canal" is a specific reference to "the eastern side of the Sky," which is equivalent to the Akhet, the place where the gods are born. The hieroglyph for "side" (𓇱) was likely to mimic the shape of the promontory, on which the Eye City Atlantis was built and where the Hot and Cool Springs are located.

### Foremost of the Eye City

The lack of understanding about the "Eye" as the "Eye City" led to many incorrect translations in PT. One example is the "Eyes-Forward" translation, which appears many times. In PT359:28, the hieroglyphs for Allen's translation "Nephthys, and Eyes-Forward" have two versions. One is from Teti's pyramid, 𓇱𓇳𓇱𓇳 (nbt-hwt hnt n irti). The correct translation should be "Nephthys at the fore of those of the Eye City." The other one is from Pepi I's pyramid, 𓇱𓇳𓇱𓇳 (nbt-hwt m hnt irti). The correct translation should be "Nephthys out of those of the Eye City." The dual-eye means "those of the Eye City."

In PT519:32, 𓇱𓇳𓇱𓇳 (hnti-irti) has the "Falcon God" determinative. It can be translated as "Foremost of (those of) the Eye City" or "Eye City's Foremost," one of the identities of Horus, who is the ruler of the Eye City. Then, the verse PT519:32 can be translated as: "I am that which exists between the thighs of **Foremost of the Eye City**." The thighs are the areas surrounding the Eye City, as explained later. PT534:5 says: "Let **Eye City's Foremost** respect me and Thoth protect me." Sometimes the "Foremost of the Eye City" may also refer to Geb: e.g. in PT553:37-39,

*I have come unto you, my father; I have come unto you, Geb. I have landed on your causeway, gods. Let me sit on the great seat, on my father Foremost of the Eye City's thighs.*

PT601:29-30 says: "As **Foremost of the Eye City's** name remains at **Akhmim City**, my name is firm." Akhmim City (𓇱𓇳𓇱𓇳, *hm*, means "sacred image") is also translated as Letopolis. PT522:28 also confirms "the presence of **Foremost of the Eye City** in Letopolis." Therefore, "Foremost of the Eye City" is equivalent to "Foremost of Letopolis (hnti hm)," and Akhmim City is the same place of the Eye City. Indeed, Horus is called as "Foremost of Letopolis" in PT438:4-8:

*Live! Live – you have not really died – like Horus, Foremost of Letopolis, lives: he to whom the great cavern has been opened, the Heliopolitan, he of the great baton, the great one of the sedan chair of Foremost of Westerners.*

Shown in Figure 2, the Royal Temple Lintel of Pharaoh Amenemhat III (ca. 1900 BCE) is a true masterpiece with its beautifully carved hieroglyphs. The left-most column is a statement of the king's sovereignty. However, Egyptologists had difficulties ascertaining the meaning of the two hieroglyphs at the bottom-left corner, 𓇱𓇳 (nbt irt), in the red frame. Literally, it means "the lord of the Eye." Now we know that the true meaning of "the Eye" is the Eye City Atlantis. Therefore, the left-end column (in purple frame) translation is "The dual king, lord of the two lands, lord of the Eye City (Atlantis)." "Lord of the Eye" (𓇱𓇳, *irt*) also appears on the Stela of Sehetepibre from the same era.



**Figure 2** “Lord of the Eye City (Atlantis)” on the Royal Temple Lintel of Amenemhat III.

## The Egg City

PT317:3 also gives a clear description about the location of the Sun City with respect to the Sky: “I came from the thigh and tail of the great goddess **at the Sun City**.” The Sun City (Sun Disk) is right at the thigh and tail, the birth outlet, of the great goddess. Nut (the Sky) spreads herself over the Duat Lake (Jackal Lake) with her head in the west where the Sun sets every evening, and the Akhet on her east side where the Sun rises every morning. The Akhet is the birthplace for the Sun and the gods, and Nut gives birth from the west as stated in PT609:1: “My mother Nut has given birth to me from the west.”

PT517:3-4 point to the Sun City as “That Island” (𓆎𓆏, *iw pw*) located in between Nut’s thighs:

*I am one righteous before **That Island** of land I have swum to and arrived at, which is between Nut’s thighs.*

“That Island of land” (𓆎𓆏, *iw pw n ts*) clearly indicates that the Sun City is an island but connected (or close) to land. The Sun Disk was viewed as an egg laid by the great goddess Nut. When the Egg is broken (as the Ring Island being eroded into the External Isles looked like), a new life starts (PT516:3): “I am your potter on earth, the breaker of the complete **Egg**, to whom Nut has given birth.” PT669:20-21...28-29 provide more details about the conception and birth processes through the Egg:

*“Look, he is tied together; look, he has developed. So, with what can we break his **Egg**?” said the gods...*

*Look, I have developed. Look, I am tied together. Look, my **Egg** has been broken for me. So, with what can I be made to fly?*

PT408:1-5 describe the joyful moment of birth through the Egg:

*You night’s brood, come, give me birth. You two who conceive by day, extend yourselves and give birth to me, who am in **the Egg City**. And I, when you have given me birth; and I, when you have reared me – my mind will be expanded (with joy) at the fore of the Duat.*

Here, 𓆎𓆏 (swht, egg) has a “city” determinative, 𓆏, making it clear that the “Egg” is the “Egg City” which is the Sun Disk “at the fore of the Duat (Lake).” This detail survived in the Book of the Dead later: e.g. in the Papyrus of Nebseni,<sup>9</sup>

*O thou who art in thine **Egg City**, who showest from thy **Sun Disk**, who risest on thy **Akhet**, and dost shine with golden beams in the height of heaven, like onto whom there is none among the gods, who sailest above the **Pillars of Shu**.*

This short quote ties the Egg City, the Sun Disk, the Akhet, and the Pillars of Shu together at the same location. The Papyrus of Ani tells that one can “go round about **the Egg**.” This agrees with the Great Ring Island being surrounded by the Circular Canal as discussed earlier. Budge also noted that “the **Egg** is the Sun (Disk).” The hieroglyphic name for Isis, 𓆎𓆏 (*st*), has an “egg” sign. Like Osiris, Isis’s name is also a title, literally the “Queen of the Egg.” Since the Egg is the Eye City Atlantis, the name Isis means “the Queen of the Eye City,” a perfect match to the name of her husband Osiris, “the King of the Eye City,” explained earlier.

## The Head and Face

### The Head

The Sun City Atlantis is often called “the Head,” obviously due to its round shape and importance. PT222:15 calls it “the Great Head in his Greater Canal” (𓆎𓆏𓆏𓆏, *dp wr m wrw-mr.f*):

*He descends on his opponents and stands up **on the Great Head in his Greater Canal**.*

The “Greater Canal” must be the circular canal surrounding the city. In PT302:8-9, the city is called “the Sun’s Head”:

*Nut the great goddess has bared her shoulders to me; The two foremost bas of the bas of Heliopolis **holding the Sun’s Head**.*

Shu and Tefnut are the two foremost bas in Heliopolis, which is the Sun City holding (𓆎, *hr*) the Sun’s Head. In PT434:1, the city is called “the Head of Shu”:

*You are **above the Land**, you have the **Head of your father Shu** and have control of it.*

Shu is Atlas in the Greek mythology, who is the king of Atlantis. The “Land” here must refer to the “Fairest Plain” described by Plato in his book *Critias*.<sup>11</sup> Atlantis is located on top of the Fairest Plain.<sup>2</sup> This verse is about gaining control of the Sun City. PT689:7-9 further link the “Head” together with Horus’s Eye and the Sun’s Open Horn:

*I have found **Horus’s Eye**, the one that Horus made has been found, having been given its **Head**, having made to the front of the **Sun’s Open Horn**.*

The “Sun’s Open Horn,” 𓆎𓆏 (*wpt r*) is the Fork Canal bypassing the Sun City, as discussed later.

### The Face

For the same reason, the Sun City Atlantis is also called “the Face.” PT271:10 says: “Open the **God’s Face** to me, so that I can sit on the great seat beside the god.” Here the God’s Face must be the Sun City in which the king is enthroned. PT422:5 tells that: “**Your Face is in front of you**, and the praise of you is before you.” Here the Face must be the Sun City where the king is praised. PT251:1-2 make it clear that the Face is the fortified Sun City inside the circular canal:

*O you in charge of hours, who **are in front of the Sun**, make way for me that I may pass within the circuit of **The Fortified-Face**.*

The hieroglyphic word 𓆎𓆏𓆏𓆏 (*h3w-hr*) should be translated as the “Fortified-Face” or “Defended-Face.” Obviously, it is meant to be a city, not a human face. The “circuit” must be the circular canal surrounding the Sun City Atlantis. PT483:14-15 tell that this “Face” city is in the marsh and connected to the Winding Canal: “You go away to the sky on your metal chair and cross the Winding Canal, your **Face** in the **marsh** of Nut.” PT219:90 and 95 talk about the king’s identity in the “**South Hare City**” (𓆎𓆏, *wnw rsw*) and the “**North**

**Hare City** (𓇧𓇧𓇧, *wnw mḥti*). The “**Hare Cities**” likely represent the south and north outside isles, which resemble the two long ears of a hare hanging around its face (see in Figure 8).

### The Seal-Ring City

The Seal-Ring City (𓇧𓇧𓇧, *dbṛi*) is obviously another epithet for Atlantis due to the shape of the circular citadel and the surrounding canal. PT673:4-9 describe about the king’s standing in the mighty Shu City and governing the people of the Sun City (the Sun-Folk) as Horus in the Seal-Ring City:

*You stand up in the Akhet’s dual shrines in the mighty Shu City. You sit on your father Geb’s throne in the fore of the shrine, on the chair of metal at which the gods marvel, and the Dual Ennead come to you bowing and you govern the Sun-Folk as Min in his house, as Horus in the Seal-Ring City.*

Horus is the ruler of the Sun City. Therefore, the Seal-Ring City and Sun City are the same place. PT601:23 says: “As the name of Horus of the **Seal-Ring City** is firm, my name is firm.” PT\*760:4 also tells: “My father (Pepi) has inherited from Horus as Horus in the **Seal-Ring City**.” All the mentions about the Seal-Ring City in PT are statements of Horus’s kingship over the city.

The round-shaped “city” determinative, 𓇧 (niwt), was likely created according to the Atlantis profile. A city on land is normally built along a river valley and rarely forms a circular profile. The X crossing inside the “city” determinative may indicate the directions of two main streets (and bridges) in Atlantis, one from southwest to northeast and the other from northwest to southeast.

## Names Reflecting Atlantis Structure and Environment

### The Sun City

𓇧𓇧𓇧 (iṣḥw) appears in the Pyramid Texts (PT) many times, some with a falcon standard at the end. It is generally translated as “sunlight” or “sunshine.”<sup>5</sup> However, if we examine the contexts for all the mentions of this word, clearly it means a place. Indeed it is another epithet of Atlantis, possibly to reflect its lake and canal environment.<sup>4</sup> With the determinative, 𓇧, we may call it “the Sun City.” The true meaning of the three lines under the Sun Disk could represent three canals linking to the Circular Canal around Atlantis from the east. These three lines are replaced with three wavy bands in PT503:4 from Neith’s pyramid (𓇧𓇧). In PT493:2 (Neith pyramid), this determinative (𓇧) has only two water-like extensions which may represent the two side-branches (north and south) of the Winding Canal.

PT493:1-2 describe the relationship between the Field of Reeds and the Sun City:

*Greetings, you at the fore of the Abundance (Field of Reeds), who guard nourishment and sit at the fore of the green field at the shoulder of the Lord of the Sun City!*

Here 𓇧𓇧𓇧 (bḥ) is translated as “the Abundance” which represents the Field of Reeds. PT421:1-2 show:

*My father, you climb and descend the Sun City: you are a god of the Sun City, who is on the Edge of the Sky.*

“On the Edge of the Sky” indicates the location of the Sun City as part of the Akhet, which is “on the eastern side of the Sky.” The following verses provide more details about the Sun City:

PT257:3 – *Ennead, Horus is in the Sun City.*

PT456:4-5 – *The Looking (Waters’) caverns are opened for you, the Sun City’s procession is released for you.*

PT508:4-5 – *I have laid down for myself That Sun City as a footpath under my feet, that I might go up on it to where my mother is, that living Uraeus atop of the Sun Disk.*

PT604:3, 761:4 – *The Looking (Waters’) cavern is opened to you and your stride broadens the Sun City.*

PT261:1-2 – *My heart is exalted, the son of Shu’s heart. My joy extends with the glorious Sun City!*<sup>5</sup>

The second frequently used word with the determinative, 𓇧 is 𓇧𓇧𓇧 (ḥnmm). Faulkner interprets it as “sun-folk of Heliopolis.”<sup>12</sup> This word obviously refers to the people of the Sun City: for example,

PT509:18-19 – *I lift my arm toward the Sun-Folk, and the gods come to me bowing.*

PT606:8-10 – *I have come for you as Horus’s messenger, for he has installed you, father Osiris Nemptemzaf Merenre, on Sun Atum’s throne, that you may lead the Sun-Folk.*

In PT, almost all hieroglyphic words with the determinative 𓇧 have a meaning related to the Sun City. For example, 𓇧𓇧𓇧 (psdt) is “the Ennead of the Sun City.” 𓇧𓇧𓇧 (psd) means “be reborn” or “renew” in the Sun City.

### The Pillar City

The hieroglyphic name for Heliopolis is 𓇧𓇧𓇧 (iṣnw), literally meaning “The Pillar City.” Hēliópolis is the Latinized form of the Greek name Helioupolis (Ἡλιούπολις), meaning “The Sun City.” Obviously, the ancient Greeks knew that the Pillar City was called the Sun City. This agrees perfectly with the above analysis that both these names are for the same place – the Sun Disk. As described in PT, there were two pillars at the center of the Sun City. PT515:5-6 provide interesting information about these two pillars:

*I am one who is at the two restored pillars of the Sun Disk that belong to the earth, I am one who is at the two restored whites of the Sun Disk that belong to the Sky.*

𓇧𓇧𓇧 (nwy, brought back) is used after the “two pillars” and “two whites.” This means that the two pillars were rebuilt or refurbished after long-time weathering, including possible damage due to flooding, as discussed later. The restored pillars were probably polished smooth and gave a bright look under the sun.

The Pillar City, 𓇧𓇧𓇧 (iṣnw), is mentioned many times in PT as Heliopolis. It is always exchangeable with “the Sun City” or “the Sun Disk”: for example,

PT424:8-9 – *You sit on your metal chair and judge them, at the fore of the Big Ennead in Heliopolis.*

PT532:24 – *They have put you, Osiris Pepi, at the fore of the Dual Shrines of the bas of Heliopolis.*

PT690:20 – *Shu and Tefnut are the ones who guide you when you emerge from Heliopolis.*

PT670:40-41 – *You are given the Field of Reeds [by] the two great gods who row you: Shu and Tefnut, the two great gods in Heliopolis.*

PT505:5-6 – *Paths-Parter parting a path for me, Shu lifting me, the bas of Heliopolis laying down a stairway for me to join with the above.*



PT316:2-3 – *I sit with my back to the open side in Heliopolis; I am taken to the Sky.*

The “open side in Heliopolis” is on the east. The last quote indicates that the king was sitting in Heliopolis (the Sun Disk) with his back toward the east (the Field of Reeds) and his face to the west (the Sky). In the above verses, “metal chair (throne),” “Dual Shrines,” “Big Ennead,” “Paths-Parter,” “Shu and Tefnut” are all in the Sun City (or Sun Disk), which serves as a stairway to the Sky.

### The Wall City

The hieroglyphs and corresponding transliterations for PT280:1-2 (from the Unis, Teti and Pepi I pyramids) are:



 *irti irti s3ti s3ti.*  
 *hr.k h3.k z3 tw ry wr.*

Allen translated the first verse as: “You of the (evil) deed, you of the (evil) deed! You of the wall, you of the wall!” which does not make much sense. The “evil deed” interpretation for  (*irti*) is a pure guessing. Here, *irti* means “those of the Eye.” The Eye is the Eye City. Similarly,  (*s3ti*) is “those of the Wall,” where the Wall is the Wall City. Therefore, these two verses should be translated as:





***You of the Eye City, you of the Eye City! You of the Wall City, you of the Wall City!***

***Your Face behind you! Protect the Great Mouth!***



The Eye City and the Wall City are the same place as the Sun City Atlantis, which is also called The Face. For the same verse from the Pepi II and Neith pyramids, “Your Face behind you” is replaced with “Your Arms around you”. The Great Mouth probably refers to the Open Horn, as discussed later.

Obviously, Asyut City ( *s3wt*) is also an epithet of the Sun City Atlantis. This word means protection, possibly related to a similar word for “walls” ( *s3wt*). It is well known that walls were built around Atlantis to protect the city. In PT593:21-25, the Asyut City is linked to the Stability City and the God’s Canal, and the king claims his sovereignty over it:



*You are alive in the Beetle’s life, enduring in the Stability City. Isis and Nephthys have made protection for you in Asyut City – for their lord in you, in your identity of the Lord of Asyut City; for their god in you, in your identity of the God’s Canal – worshipping you so that you don’t become far from them.*

The Stability City ( *ddt*, means “stability”) is another epithet of Atlantis. The same name in PT254:39 and PT532:21 also has a “city” determinative. However, PT219:55 says: “In your identity of the Heliopolitan, enduring in his **Stability Island**.” Here (and also in PT477:29),  (*ddt*) has an “island” determinative. Obviously, it is the same place, with two different determinatives reflecting it as a city and as an island, a unique aspect of Atlantis. In PT254:39, it is also called Busiris City ( *ddw*) and Djedut City ( *ddwt*), all meaning “stability.” The God’s Canal in the above quote must be the circular canal around the city. In PT510:25-27, the God’s Canal is pinned together with Iseum City:

*For I am a clean one, son of a clean one, cleaned with those four jars of mine that were filled to overflowing from the God’s Canal in Iseum City with the breath of Isis when great Isis was elevating Horus.*

Iseum ( *ntrw*) can be interpreted as “The Gods’ City.” Sometimes, it appears as “The God’s City” ( *ntr*), e.g. in PT534:16. The God’s Canal is the place for purification, and the place from which the four washing jars are filled.

PT683:3 says: “This is Horus, who has emerged from the Inundation; this is the longhorned bull who has emerged from the

**Walled Place.**” Here “the Inundation” is a different name for “the Great Immersion” which is the Sun City Atlantis. The hieroglyph for “Walled Place” is  (*inbt*). It has a specific “circular wall” determinative, , a unique feature of Atlantis. In *Critias*, Plato talks about the walls around all three zones of the Atlantis citadel and the buildings:<sup>11</sup>

*Some of their buildings were simple, but in others they put together different stones, varying the color to please the eye, and to be a natural source of delight.*

About the stone colors, “one kind was white, another black, and a third red.” All these descriptions by Plato perfectly agree with the details recorded in PT, e.g., the “Great Black Wall” in PT366:8, the “White Palace” in PT262:24, and the “Red House” in PT667B:25.




### The Marsh City

The hieroglyphs of PT254:8 from Unis’s pyramid are:

 *sr hnt pr psdt h*.

Allen’s translation for this verse is: “The pelican will prophesy, the Sunshine-bird will come forth, the Great One will stand up.” The same verse from Teti’s pyramid has some variations in the hieroglyphs:



Here, there is a “city” sign, , following “marsh” ( *hnt*) and a  determinative for *psdt* (Ennead). Therefore, these two versions can corroborate for a better translation:

***The Marsh City will announce, the Ennead will come forth, the Great One will stand up.***

The “Marsh City” must be the same place as the Sun City Atlantis.


In PT318:4 from Teti’s pyramid, the Marsh City is personified as the king’s mother: “My mother is **the Marsh City**: I am her son.” Likewise, the Sun in PT always has a double meaning of the Sun God and the Sun City: e.g. in PT539:55-62,

*I am the Sun’s son, whom he desired, so I emerge and ascend to the Sky.*


*I am begotten to the Sun, so I emerge and ascend to the Sky.*

*I am conceived to the Sun, so I emerge and ascend to the Sky.*

*I am born to the Sun, so I emerge and ascend to the Sky.*

The Nomen  (*z3-r*) is one of the “great five names” of the Egyptian pharaohs. Literally, it means the “Son of Ra” or the “Son of the Sun God.” Therefore, the actual meaning of this title is: “the Heir of Atlantis.”

### The Open Horn

One of the most prominent images of the Sun Disk is the emblem of goddess Hathor as a divine cow or a beautiful lady. Figure 3 is a vignette in Plate VIII of the Papyrus of Ani. The Sun Disk is held by the Open Horn of Hathor. The legend in this vignette reads: “The Great Immersion, the Sun’s Eye.” Obviously, the Sun Disk is the Sun’s Eye and called “the Great Immersion.” PT405:7 says: “I am **That Eye** of yours that is on Hathor’s **Open Horn**.” Here the “Open Horn” ( *wpt*) refers specifically to the Fork Canal embracing the Sun City Atlantis, as shown in Figure 4a. In PT214:12-14, it is called “Horus’s Open Horn”:

*Jump to the place where your father is, where Geb is, and he will give you what is on **Horus’s Open Horn**. You shall become akh through it, you shall take control through it, you shall **pass** through it at the fore of the Westerners.*

Here, “what is on Horus’s Open Horn” is the Sun City Atlantis. The king is empowered through his sovereignty over the city. In PT456:11, the place is called the “Sky’s Open Horn”: “Receive his place on the **Sky’s Open Horn**, where your mind has come to rest.” PT\*741:11 calls it the “Sun’s Open Horn”: “I establish your ornament on the **Sun’s Open Horn**.” In PT655A:4-7, it is called the “Evolver’s Open Horn”:

*I am a falcon who emerges as **Horus’s Eye**, the **Uraeus** that emerges as a falcon, that emerges as **Horus’s Eye**. I have flown up and landed on the **Evolver’s Open Horn** in the prow of the **Boat** that is in **Nu**.*

Horus’s Eye and the Boat are all epithets of the Sun City, which is located on the Open Horn – the Fork Canal.

In PT519:30-32, this place is also called “Geb’s Open Horn” with several other environmental details:

*I am the Beetle’s son; I was born from the **Vulva** and under the tresses of **She-Increases-as-She-Comes** of the **Northern City**, which came from **Geb’s Open Horn**. I am that which exists between the **Thighs of Foremost of the Eye City**.*

First, this quote links the Open Horn to the Thighs of Foremost of the Eye City and the Vulva. The Vulva is also called “The Vulva City” (see later citations). “She-Increases-as-She-Comes” is the goddess representing primordial motherhood.<sup>5</sup> “The Northern City” (𓂏𓂏𓂏 *niwt mhwt*) is obviously the Sun City Atlantis, since it is located on the northern edge of the Atlas Basin, on top of the “Fairest Land.”<sup>2</sup> The versions from the Merenre and Pepi II pyramids make it more explicit by calling it “the Northern City, Heliopolis” (𓂏𓂏𓂏𓂏 *niwt mhwt iwnw*). The Thighs are the shore areas surrounding the Fork Canal or the Open Horn, the birthplace of the gods. In PT, a frequently cited identity is 𓂏𓂏𓂏𓂏 or 𓂏𓂏𓂏𓂏𓂏𓂏𓂏𓂏, (*hnti mmwt.f*). Allen translates it as “Thighs-Forward.” Literally, it means “Foremost of His Thighs” or “Thighs’ Foremost,” the ruler of the areas beyond the Sun City Atlantis. This title always belongs to Horus.



Figure 3 “The Great Immersion, the Sun’s Eye” on the Open Horn of Hathor.

## The Great Embrace

The configuration of the Fork Canal holding the Sun City is also portrayed as “The Great Embrace”:

PT222:9 – *He has come to you (Sun), his father: he has come to you, O One of the **Great Embrace**.*

PT222:34 – *You go up and go down: you go up with the Sun and rise up with the One of the **Great Embrace**.*

PT247:6 – *The eastern and western gods become content about the great thing that has happened in the **Embrace** – the god’s birth.*

In PT222:9, the hieroglyphic word 𓂏𓂏𓂏𓂏𓂏𓂏𓂏𓂏 (z<sub>hn</sub>-wr) is interpreted as “the Great Reedfloat” by Allen.<sup>5</sup> Literally and clearly, it means “Great Embrace.” It is a place under Horus’s sovereignty as indicated by the Falcon Standard. The “embracing arms” and “island” signs together form a combined determinative, 𓂏𓂏, to describe the place as an island being embraced. It reflects the configuration of the Sun Disk being held by the Open Horn, as shown in Figure 4a. Therefore, this term may also be translated as “the Great Embraced Island.” PT222:34 and PT247:6 makes it clear that the Sun (City) is “the One of the Great Embrace,” which is god’s birthplace. The Sun (City) is also viewed as the carrier with which the king goes up to the Sky. In PT, the external ring islands of Atlantis are often metaphorized as the arms embracing the Eye City or the Head (the central island). PT53 says: “Unis, accept **Horus’s Eye**, which you should embrace.”

This specific location of “Embrace” frequently appears in PT: for example,

PT20:1 – *I have come from your **Embrace**.*

PT579:1 – *This emergence of yours from your house, Osiris Meryre, is Horus’s emergence from your **Embrace**, Osiris Pepi.*

PT659:1 – *Behold, this your going; behold, these your goings – are Horus’s goings from the **Embrace** of his father Osiris.*

Allen generally translates the hieroglyphs corresponding to “from your Embrace” as “in search of you,” which does not reflect the original meaning.<sup>5</sup> Related to this metaphor, the verb “embrace” is also often used to personify Atlantis as Horus’s Eye being embraced by the gods. The short paragraph of PT524:34-36 is packed with geometrical details in a metaphorical way:

*I am the one who prevents the gods from turning away from **Embracing Horus’s Eye**. I sought it in **Pe City** and found it in Heliopolis, and I took it from Seth’s Head in **That Place** where he and Seth fought.*

Horus’s Eye, Pe City, Heliopolis, and the Head are pinned together to “That Place” (𓂏𓂏𓂏𓂏 *bw pw*), which is Atlantis. Seth’s Head is also a metaphor of the Sun City, since it is symbolized as Head (as discussed earlier), and Seth ruled it after throwing Osiris down. Then, Horus fought against Seth to take it back.

## Paths-Parter

The Open Horn and the Great Embrace are also related to a frequently cited title, Paths-Parter (𓂏𓂏𓂏𓂏𓂏𓂏𓂏𓂏, *w<sub>p</sub>-w<sub>z</sub>w<sub>t</sub>*): e.g. in PT301:27-28,

*Stand up, you of the **Great Embrace** as Paths-Parter, filled with your effectiveness and emergent from the Akhet.*

As shown in Figure 4a, the Fork Canal is the place for the ferry traffic to split. From here the boat can be rowed into the Sun City. It can also take the north route or south route around the city to travel further into the Field of Reeds. Paths-Parter was probably the world’s first traffic controller, who is generally identified as Jackal God Anubis: e.g. in PT535:21-24,



*You are Paths-Parter on his standard, Anubis at the fore of the god's booth. Ho, Pepi! You are at the fore of the houses of the great ones in Heliopolis. The akhs fear you, as well as the Imperishable Stars, and the dead fall on their face to you, for you have grabbed (control of) the Sun Folk.*

It is clear from this quote that Paths-Parter Anubis is at the fore of the great ones in Heliopolis, and he is the administrator of the Sun City. In PT580:19, the Sun City is called Anubis City (𓂏𓏏𓂏𓏏, *inp*).

PT304:1-10 give a description of the traffic control at the Open Horn, the world's first intersection:

*Greetings, Anubis's daughter at the Sky's Looking (Waters), you whom Thoth endowed, at the ladder's uprights! Open my path, that I may pass.*

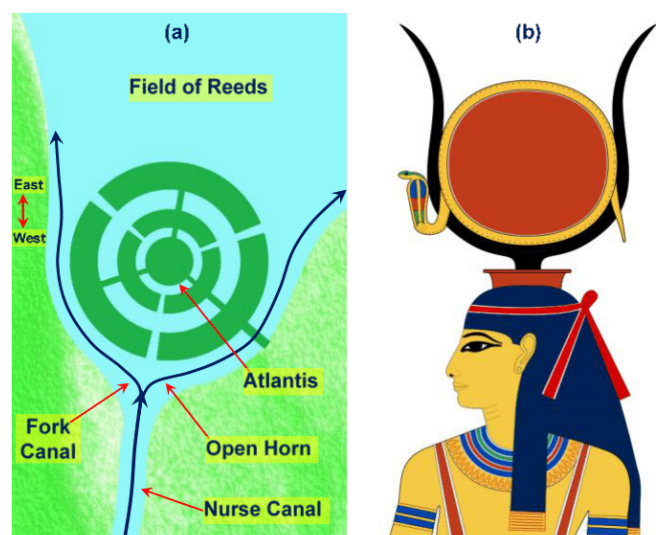
*Greetings, ostrich at the Winding Canal's lip! Open a path for me, that I may pass.*

*Greetings, Sun's crossing with four horns – your horn in the west, your horn in the east, your southern horn, your northern horn! Bend down that western horn of yours to me, that I may pass.*

*"You are a clean westerner?" (they ask).*

*I come from Falcon City.*

The Looking Waters is the Nurse Canal which is connected to the Winding Canal's lip through the Fork Canal. The Sun City's crossing on the Fork Canal has four branches. These four ferry routes are metaphorized as four horns. The western branch is the Nurse Canal, the eastern branch goes into the Sun City, the southern and northern branches bypass the city. The Falcon City (𓂏𓏏𓂏𓏏, *bikt*) is clearly related to the falcon god Horus, and therefore an epithet of the Sun City Atlantis. For safety and capacity, some of the ferries were rejected entrance into the City as indicated in PT386:2-3: "You shall let me pass in the **gate of the Parter City**. You turn me away and I will turn you away." In this quote, 𓂏𓏏𓂏𓏏 (*pšni*, means "divide" or "split") can be translated as "the Parter City," which is another epithet of Atlantis.



**Figure 4** Atlantis embraced by the Fork Canal, the Open Horn of Hathor.

### The Vulva City

PT437:23 says: "You go up to Sky as Horus on the **Sky's Vulva**." Similarly, in PT485:36-37: "Horus on the **Sky's Vulva**, give your arm toward me, that I may go up to the Sky." The hieroglyphic word

𓂏𓏏𓂏𓏏 (*šdšd*) is translated as "cushion" by Allen.<sup>5</sup> However, according to Budge, it should be translated as "Vulva."<sup>13</sup> The symbol on the standard looks the same as that on the Paths-Parter Standard, 𓂏𓏏. Both PT330:1 and PT331:1 tell: "I go forth to the Sky on **the Vulva in the Open Horn**." Obviously, the Vulva is the same place as the Open Horn, a metaphor of the Sun's birthplace. The gods were also born from this place. PT585:1 says: "I am the Great One who came from **Geb's Open Horn**." This place is clearly related to another epithet for the Sun City, 𓂏𓏏𓂏𓏏 (*htpt*), **the Vulva City** in PT666:29.

The Open Horn is also the place the mother goddess gets pregnant, as told by PT351(352):1, "The vulture (my mother) becomes pregnant (with) me in the nighttime, at your **Open Horn**, circling cow." PT205:7 says: "I am the great bull who struck Kenzet." As explained later, Kenzet is the Sun City Atlantis. The surrounding Open Horn resembles a bull striking the city. Parallel to many reiterations about the king's identity in the Sun City with different epithets, PT219:85 names the city as "The Bull City": "In your identity of the one in the **Great Compound of the Bull City**." Allen translates 𓂏𓏏𓂏𓏏 (*hwt wr k3*) as "the Compound of the Eldest of Bulls," which is not accurate considering the "city" determinative. *k3* should be interpreted as "The Bull City." PT342:3 uses a name "Black Bull City" (𓂏𓏏𓂏𓏏, *km-k3*), which apparently refers to the same place.

### The Kenzet City

Although Kenzet (𓂏𓏏𓂏𓏏, *knst*) does not have a "city" determinative, it is clearly meant to be the Sun City Atlantis. This word might be originated from 𓂏𓏏 (*knz*, bow),<sup>13</sup> reflecting Atlantis location between two megalakes. PT210:1-3 talk about Paths-Parter and Thoth in Kenzet. PT254:16 mentions "Kenzet's pillar, the bull of the Sky," one of the most notable hallmarks of the Sun City Atlantis. According to PT471:2-3, the Field of Kenzet is close to the Field of Reeds. PT579:4-5 further tell us that the Kenzet Canal is connected to the Winding Canal which surrounds the Field of Reeds:

*You cross the Winding Canal, cross over the Kenzet Canal, make landfall in the Eastern Side of the Sky, and sit in the Akhet's Dual Shrines.*

The king can cross the Winding Canal and the Kenzet Canal to reach the Eastern Side of the Sky, which is the Akhet, and sit on the throne in the Dual Shrines. The Kenzet Canal must be the Circular Canal around the Sun City Atlantis. PT\*767:20 clearly says that "this Circular Canal" (𓂏𓏏𓂏𓏏, *mr-šnw-nw*) is located "on the lips of the Winding Canal." PT525:4 talks about the lake of Kenzet. This lake might be the artificial reservoir holding water from the springs of Atlantis.

### Thoth's Wingtip

In PT219, parallel to many other citations about the Sun City Atlantis, Verse 59 says: "In your identity of Andjeti, at the head of his cultivations." Here the hieroglyph for the place Andjeti is 𓂏𓏏𓂏𓏏 (*ndt*). According to Budge, 𓂏𓏏 (*nd*) may have the meaning of "wingtip."<sup>13</sup> Then, Andjeti means "One of Wingtip." The "cultivations" are the farmlands in the Field of Reeds. As discussed in previous papers, the Field of Reeds is also called Stork Lake due to its shape like a stork or ibis.<sup>34</sup> From PT, we also know that the Field of Reeds is associated with Thoth who is portrayed as having an ibis's head. As shown in Figure 1, Atlantis is located right at the "wingtip" of the bird-shaped Field of Reeds. PT224:15 gives a similar statement: "As Anubis at the fore of the Westerners, as Andjeti at the fore of the **lip of the eastern cultivations**." The Field of Reeds is surrounded by

the mouth-shaped Winding Canal. The Sun City Atlantis is located right on the lip of the Winding Canal.<sup>4</sup> The cultivations of the Field of Reeds are on the eastern side of the city.

Here are more PT verses providing the relationship between the Sun City Atlantis and Thoth's wing:

PT555:13-14 – *Thoth in the limit of your bush's shade, put me on your wingtip in that side north of the Winding Canal.*

PT566:1-2 – *Let me proceed with you, Horus. Ferry me, Thoth, on your wingtip as Sokar at the fore of the Maat-boat.*

PT359:6 – **Fell** on Thoth's wing on **that side** of the Winding Canal.

PT534:29 – **Go to Pe City, to Thoth-Carried City.**

Again, “that side” means the “eastern side of the Sky” where the Akhet (as well as the Sun City Atlantis) is. Pe City is another epithet of Atlantis, which looks like being carried by the Field of Reeds (see Figure 1). “Thoth-Carried City” (𓄏𓄏𓄏, *hr-dhwti*) is a very descriptive name for Atlantis related to Thoth's wing.

The single-word hieroglyphic name corresponding to the Greek name Atlantis is yet to be found. An article from the website “Quest for Atlantis” suggests that the name Atlantis might be derived from a combination of two hieroglyphic words: 𓄏𓄏 (*itr*, canal) and 𓄏𓄏 (*nd*, a piece of land).<sup>14</sup> Egyptian had no letter “L” in its early stages, but “R” could be used as “L”. Putting together, these two words form *itr-nd*, which is equivalent to “Atlanti.” With the Greek ending “s” the word becomes “Atlantis,” meaning “canal land” or “canal surrounded land.”

## Names Reflecting Atlantis Culture and History

### Shu City

Shu is the god who supports the Sky. He and Tefnut are called the great gods of the Sun City (PT670:41). In the Papyrus of Ani, Shu is called “the Chief of the Akhet.” In several recitations of the Pyramid Texts (PT), it is obvious that Shu also represents the place he rules, namely the Sun City Atlantis. Therefore, the Sun City was also called “Shu City.” PT261:5 from Unis's pyramid says: “I traverse **Shu City**, travel the horizon.” The corresponding verse from Pepi I's pyramid draws an equivalence between Shu City and the Sun City: “I traverse **Shu City**, travel **the Sun City**.” PT259:9 from Teti's pyramid says: “He is off to the Sky, he is off to the Sky, from **Shu City which is together with the Sun Disk**.” The hieroglyphs for the last part are 𓄏𓄏𓄏 (𓄏𓄏𓄏 *m šw hn' itr*). *hn'* means “together with.” This makes it clear that Shu City and the Sun Disk are the same place.

PT509:1-5 is a paragraph closely related to Plato's description about the catastrophic submersion of Atlantis:

*The sky speaks, the earth trembles, Geb quakes, the god's two cultivations yells, the earth is hacked ... I cross the Basin and travel across the fierce lake, one who topples Shu's walls.*

An earthquake likely caused landslide at the narrow outlet and blocked the water discharge from the Field of Reeds to the Mediterranean Sea. Then, the surging water from the Great Green quickly submerged the Sun City Atlantis in one day and one night.<sup>2</sup> Here, “Shu's walls” (𓄏𓄏𓄏 *znbwt šw*) clearly means “the walls of Shu City,” Atlantis.

PT\*767:9 says: “So raise yourself and sit on **Shu City**.” PT511:5 is a similar expression: “I stand up on **Shu City**.” Also, in PT673:4:

“You have stood up in the Akhet's dual shrines **in the Mighty Shu City**.” Allen translates 𓄏𓄏𓄏 as “upon the void” (*hr šw n ht*).<sup>5</sup> Here, 𓄏𓄏 (*nh*) should be together as one word meaning “mighty.” Therefore, the correct translation of “*hr šw nh*” is “in the Mighty Shu City.”

In PT, the officials' title, 𓄏𓄏𓄏 (𓄏𓄏𓄏, *wr-šw*), is frequently mentioned. Allen translates it as “Watchers.”<sup>5</sup> Literally, it means “Shu's Great.” Here, “Shu” must be “Shu City”. The title should be translated as “Shu's Great Ones” or “Shu's Elders.” They must be the high officials ruling Shu City (Atlas City). PT665A:12 says: “The great ones stand up for you (Pepi II) and **Shu's Elders** sit down for you as Horus who tends his father.” In the following citations, this title links the city names Pe and Nekhen together:

PT437:11-12 – *(The Sun) gives him (Pepi I) his akh as one of Shu's Elders of Pe City, and privileges him as a god as one of Shu's Elders of Nekhen City.*

PT483:7 – *Shu's Elders of Pe City will install him and Shu's Elders of Nekhen City give him his insignia.*

The parallel uses of “Shu's Elders of Pe City” (𓄏𓄏𓄏 𓄏𓄏𓄏, *wr-šw piw*) and “Shu's Elders of Nekhen City” (𓄏𓄏𓄏 𓄏𓄏𓄏, *wr-šw nhnw*) clearly indicate that Pe City (𓄏𓄏, *p*, means “base”) and Nekhen City (𓄏𓄏, *nhn*, means “rising sun”) are the same place. With Shu's Elders acting as the administrators of this city, it must be the Mighty Shu City. Similarly, PT468:35-36 identify these two epithets with the Sun City Heliopolis:

*Ho, Pepi! You become ba as the bas of Heliopolis, you become bas as the bas of Nekhen City, you become ba as the bas of Pe City.*

In PT413:3-4, Pe City is identified with the Seal-Ring City, an epithet of Atlantis, as discussed earlier.

Atlantis was also called Ta'it City (𓄏𓄏𓄏, *tsit*). PT597 says: “Ho, Nemtiemzaf Merenre! Come and get dressed in Horus's Eye, **Ta'it City**.” PT414:2 is similar: “You get dressed in Horus's Eye, **Ta'it City**.” These verses reflect the city as a textile provider, and identify it with Horus's Eye, the Sun City Atlantis. PT415:1 tells that Ta'it City is “on the lip of the Great Nest.” The Great Nest is the Field of Reeds due to the shape similarity. PT81:2-3 further identify Ta'it City with Dep City (another epithet of Atlantis as discussed later):

*Awake, Ta'it, in peace! Awake, you of Ta'it City, in peace! Horus's Eye in Dep City, in peace!*

### The Libation City

There are many recitations about libation in PT. Libation is conducted to resolve wrongdoings and disputes, often together with cleansing, censuring, anointing, and offering. Ironically, some of the libation spells are mainly for the purpose of getting rid of the accusers: e.g. in PT23:1-4,

*Osiris, acquire for yourself all those who hate Unis and anyone who speaks bad of his name.*


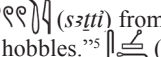






*Thoth, go, acquire him for Osiris: get the one who speaks bad of Unis's name; put him in your hand...Libation.*

Libation is a solemn ceremony. PT\*793:12-14 say:

*The libation is libated and drumming drummed. Become still, become still! Hear, hear this speech that Horus said to his father Osiris, that you may become akh thereby, that you may become great thereby.*

The Spell PT483 begins with: “The libation is libated, Paths-Parter goes on high.” Paths-Parter is Jackal God Anubis, who is about to speak on behalf of Pepi I at this occasion as described in PT483:11-13:

*A speech emerges before Anubis and your privilege has come from the mouth of Anubis. Horus, the **Thighs’ Foremost, is the Bull-Catcher and Lord of the Libation City.***

As discussed earlier, Horus is the Foremost of the Thighs, the areas around the Sun City Atlantis. Here the hieroglyphs for “the Bull-Catcher” are  (*sꜣtiti*) from the Pepi I pyramid and  (*sꜣtiti*) from the Pepi II pyramid. Allen translates it as “he of the hobbles.”<sup>5</sup>  (*sꜣt*) means “to bring” or “to carry.” The “coil rope” signs (*ꜣ*, *ꜥ*) indicate that the word is related to the bull lassoing, as mentioned in PT254:35: “I tied the head of the Apis on him on the day of lassoing the long-horned bull.” The hieroglyph for “lassoing” is  (*ꜣꜥꜥ*), which also has a “coil rope” determinative. *sꜣtiti* is likely related to another word  (*sꜣt*) meaning “to make libation.” Bull lassoing and libation are two activities tied together as described by Plato for Atlantis. Allen translates  (*ꜣꜥꜥꜣ*) as “Rebellion-Town” which is far from the true meaning.  (*sꜣt*) means “libation jar.”<sup>15</sup> Together with the “lifting” sign,  (*ꜣ*), there is no doubt that *sꜣwt* means “The Libation City.” Horus is “the Bull-Catcher and the Lord of the Libation City.”

In his book *Critias*, Plato gives detailed descriptions on the bull lassoing in conjunction with libation in Atlantis:<sup>11</sup>


*There were bulls who had the range of the temple of Poseidon; and the ten kings, being left alone in the temple, after they had offered prayers to the god that they might capture the victim which was acceptable to him, hunted the bulls, without weapons but with staves and nooses; and the bull which they caught they led up to the pillar and cut its throat over the top of it so that the blood fell upon the sacred inscription. Now on the pillar, besides the laws, there was inscribed an oath invoking mighty curses on the disobedient.*

The victim bull must be acceptable based on certain standard. No weapons were allowed. Only staves and ropes could be used to catch the bull. Then, the victim was led up to the pillar and its throat was cut over the top so that the blood could be shed on to the sacred inscription on the pillar. Afterward, the bull’s blood would be cast into bowls filled with wine for libation:

*When therefore, after slaying the bull in the accustomed manner, they had burnt its limbs, they filled a bowl of wine and cast in a clot of blood for each of them; the rest of the victim they put in the fire, after having purified the column all round. Then they drew from the bowl in golden cups and pouring a libation on the fire, they swore that they would judge according to the laws on the pillar...*

These details from Plato are in perfect agreement with the libation practice recorded in PT. This may be the origin of the bullfighting and bull-leaping traditions in the Mediterranean areas.

## The Great Immersion




“The Great Immersion”  (*mꜣꜥꜥꜣ-wꜣt*) appears many times in PT, and it clearly refers to the Sun City Atlantis.<sup>4</sup> PT254:43 says: “I judge between the two contestants in the Great Immersion.” According to PT, the judgement is always conducted at the Dual Shrines (PT412:33) and observed by the Big Ennead (PT610:14). The following verses further identify “the Great Immersion” with “the Sun City”:

PT493:3-4 – *May you let me eat of grain, and I will become thereby like Osiris on the Great Immersion.*

PT496:12-13 – *I collect (grain from) them like the one at the fore of his Dual Ennead, who lives on the Great Immersion.*

PT510:8 – *They row Horus in Horus’s emergence from the Great Immersion.*

The vignette from the Book of the Dead shown in Figure 3 tells that “The Great Immersion” is “The Sun’s Eye.” The Sun’s Eye is the Sun Disk in the Open Horn of the divine cow Hathor. It is a metaphor of the Sun City Atlantis surrounded by the two branches of the Fork Canal after it splits from the Nurse Canal and further connects to the Winding Canal.

In PT510:8 from the Merenre pyramid, the hieroglyph for the Great Immersion is  where the “water” determinative, , is replaced with a “surging lake” determinative, . This indicates that the Great Immersion was due to “the surge of the Great Green” (PT406:4), also described as “the Great Lake’s wrath” (PT262:22). PT249:7-8 indicate that “the Great Flood” occurred during a night:

*I am the one to whom belongs the linen that the Uraei guard during the night of the Great Flood that comes from the great goddess.*






PT144:1 also indicates that Horus’s Eye (the Sun City) was destroyed by water: “Osiris Unis, accept Horus’s Eye, **which he destroyed with water.**” These details agree with the descriptions by Plato in his book *Timaeus*:<sup>16</sup>

*...there occurred violent earthquakes and floods; and in a single day and night of misfortune all your warlike men in a body sank into the earth, and the island of Atlantis in like manner disappeared in the depths of the sea. For which reason the sea in those parts is impassable and impenetrable, because there is a shoal of mud in the way; and this was caused by the subsidence of the island.*

## The Great Eroded Island

PT366:7-12 contain rich details about the layout of the Sun City Atlantis:

*Your sisters Isis and Nephthys come to you, making you sound – very black in your identity of the Great Black Wall, very green in your identity of the Great Green. Look, you have become great and round, as the **Great Ring Island**. Look, you have become encircled and round, as the **Circular Canal** that surrounds the External Isles. Look, you have become round and big, as he who surrounds the **Great Eroded Island**.*

The “Great Black Wall”  (*km-wꜣt*) must be the wall surrounding the Atlantis citadel. The version from Teti’s pyramid has a Falcon Standard in between , meaning a place (or city) under Horus’s sovereignty. The wall sign may act as a determinative to indicate that the “Great Black City” is fortified with strong walls. As a confirmation, PT552:11 and PT558:2 use  without a wall sign. PT674:11 gives a name , meaning “The Black City” or “The Black Falcon City.” Earlier, we saw the epithet “Black Bull City.” PT534:20 recites: “Go to the **shores of the Black!** Enough! Go to the **Marsh City!**” The blackness must be the stone color of the city wall. Egypt has an archaic name Kemet ( *kmt*). It is commonly believed that this name was derived from the color of the fertile black soil of the Nile valley land. Then, why is it tagged with a “city” determinative? Very likely this name originated from the “Black City” Atlantis.

The Great Green (Duat Lake) is connected to the waterways around the city. In the above quote,  $\text{𓂏} \text{𓂏} \text{𓂏}$  (*šn-wr*, great ring) has an “island” determinative,  $\text{𓂏}$ . Therefore, it should be translated as “the Great Ring Island.” The hieroglyph  $\text{𓂏} \text{𓂏}$  or  $\text{𓂏} \text{𓂏}$  (*dbn*) has a “Sun Disk” determinative,  $\text{𓂏}$ . It must be the Circular Canal surrounding “the External Isles” ( $\text{𓂏} \text{𓂏}$ , *h3-nbwt*). Allen translates  $\text{𓂏} \text{𓂏}$  (*3-sk*) as “The Big Waters That Perish.”  $\text{𓂏}$  (*sk*) means “wipe” or “sweep.” With the “water” determinative,  $\text{𓂏}$ , it becomes clear that *sk* means “erosion.” With the “island” determinative,  $\text{𓂏}$ -*sk* should be translated as “Great Erosion” or “Great Eroded Island.” Comparing the last two verses of the above quote and PT718:22-23 below, “the Great Eroded Island” may also refer to “the External Isles.” “The External Isles” must be a result of long-time water erosion of “the Great Ring Island.” Supporting evidence can be found in the inscription on the Thutmose I’s Victory Stela, where “the Isles of the Great Ring Island” ( $\text{𓂏} \text{𓂏} \text{𓂏}$ , *iww šn-wr*) are mentioned.<sup>7</sup>

$\text{𓂏} \text{𓂏} \text{𓂏}$  (*šmnt šn-wr*) appears in the Victory Hymn of Thutmose III. Breasted translates it as “the circuit of the Great Circle.”<sup>17</sup> Since *šmnt* has an “island” determinative,  $\text{𓂏}$ , and *šn-wr* has a “canal” determinative,  $\text{𓂏}$ , it can be better translated as “the Ring Island of the Great Circular Canal.” This “Great Circular Canal” clearly originated from the “Circular Canal” above, which “surrounds the External Isles.” However, *šn-wr* has generally been mistaken as “ocean” in most Egyptological writings and dictionaries.<sup>12,15</sup>

The above PT366 spell is found in pyramids of several pharaohs including Pepi I, Teti, Merenre, and Pepi II. Related messages are also contained in other spells such as PT454, 593, and 718. All of them clearly describe that the Circular Canal encircles the External Isles:

PT454:3 – *Osiris Pepi, you have become great and round, as the Circular Canal that goes around the External Isles.*

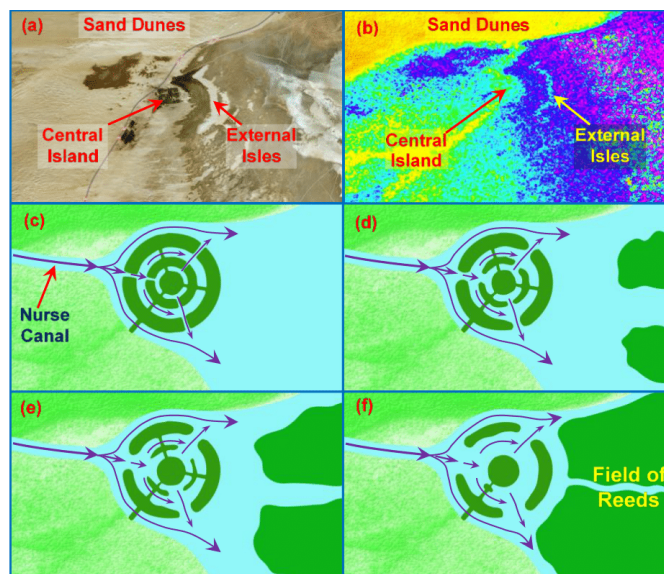
PT593:11-14 – *Your sister Isis has taken hold of you, having found you very black in your identity of the Great Black Wall. You have encircled everything inside your arms in your identity of the Circular Canal that goes around the External Isles, having become big in your identity of the Great Eroded Island.*

PT718:22-23 – *Ho, Osiris Neith! You are the great god, great and round as the Circular Canal that surrounds the External Isles.*

The circular island city Atlantis is a unique geometrical feature. It perfectly fits the surface profile at the outlet of the canal connecting the two megalakes in the Atlas Basin during the green Sahara time (as shown in Figure 1). In the close-ups shown in Figure 5, (a) is the surface image from Google Earth, (b) is the ground profile for the same area based on the Global Digital Elevation Model (GDEM).<sup>2</sup> The central round island and the crescent-shaped external island are clearly visible. They are the remains of the central island and the outer ring island after long-time erosion due to water flow from the western Jackal Lake to the eastern Field of Reeds. The estimated outside diameter of the ring-island structure is about 3700 meters, almost the same size given by Plato for Atlantis, as calculated below. In Figure 5, (c) through (f) show the likely water flow and the erosion process over thousands of years. After the desertification about 5700 years ago, the water flow stopped, but wind erosion and sand accumulation continued to shape the surface profile until reaching the status we see today.

When the Sun City Atlantis was initially built around 11,000 years ago, the citadel consisted of three beautifully arranged concentric zones (as shown in Figure 5c). Based on Plato’s descriptions in *Critias*, the largest is the first (outside) ring island with a width of three stadia (528 meters, one stadium = 176 meters).<sup>11,18</sup> The second

(inside) ring island has a width of two stadia (352 meters). The central island has a diameter of 5 stadia (880 meters). Adding the two water zones of two stadia (352 meters) and one stadium (176 meters), the diameter of Atlantis is 3696 meters. With the long-time water flow through the canals inside and around the city over about 5000 years, the boundaries of these zones were gradually eroded. The thinnest second ring island was the weakest of the three zones facing erosion. Therefore, it was likely to erode quicker than the other two zones. The water flow also gradually widened the openings of the outside ring island and eroded it into several isles. Therefore, “the Great Ring Island” and “the External Isles” correspond to different stages of the long-time erosion.



**Figure 5** Atlantis site and the likely erosion process: (a) current surface image from Google Earth; (b) ground profile based on GDEM; (c)-(f) likely water flow and erosion over 5000 years during green Sahara time.

As previously discussed, the central island of Atlantis is called the “Sun’s Head.” PT335:1 metaphorizes the External Isles as the “headband”: “How beautiful is the sight of me, with my headband in the Sun’s Open Horn.” PT467:14 also symbolizes it as “a star of gold on whom the Sun City’s Bull has put the headband on.” In PT254:29, the External Isles are metaphorized as fetters in which the Sun is trapped: “You see the Sun in his fetters, you worship the Sun in his escape from fetters.”

## The Restoration

PT587 is a lengthy spell talking about the restoration of the Sun City – Horus’s Eye. In doing so, the king decided to sacrifice the ring islands to reinforce the central island. PT587:5...11-12 say:

*Greetings, Horus’s Eye, which he has restored by means of both his arms!*

*... You shall listen to Horus: he is the one who restored you, he is the one who constructed you, he is the one who established you.*

As discussed earlier, the ring islands of Atlantis are often metaphorized as arms. Obviously, stone was quarried from the ring islands and used to rebuild or enlarge the central island. This is why the second ring island has completely disappeared from the profile we see today. Only the central island and part of the outside ring island are visible.

PT587:31-39 provide more details about the city’s restoration:

*He (Horus) is the one who established you, (Eye), in your identity of the Settlements, he is the one who went and returned after you in your identity of The City, he is the one who saved you from everything painful that Seth did to you.*

*So, return, return, Nut, for Geb has commanded that you return in your identity of The City.*

*I, in fact, am Horus, who restored his Eye by means of both his arms. I restore you, O restoration; I have established you, O my Settlements; I construct you as a City.*

Here “the Settlements” (𓂏𓂏𓂏, *grgwt*) is obviously another epithet of the Sun City Atlantis, which is simply called “The City” (𓂏𓂏, *pw niwt*), the one and only. PT319:9 calls it “The City of God” (𓂏𓂏, *niwt ntr*): “I have built the City of God soundly.” In PT258:6, it is called the “Favorite City” (𓂏𓂏, *gs3*). In PT519:49, its name is “The Great Island” (𓂏𓂏, *iw-3*). The “falcon” determinative indicates Horus’s kingship over the island. The name Settlements is like “Atlantis Metropolis.” It includes not only the central island, but also the External Isles and even the shore areas. PT603:11 says: “He has come that he might rule the Cities, lead the Settlements.” PT465:9-10 make it clear that the Settlements is the center of power and control: “I course the Sky: I lead those in the Settlements, I acquire the crown there like Horus, Atum’s son.”

PT690:41 calls Atlantis “The Great City” (𓂏𓂏, *niwt wrt*): “Osiris is the Ba in Nedit City, the Controlling Power in the Great City.” 𓂏𓂏 (𓂏𓂏, *ndi*) means “overthrow.” Therefore, the city name “Nedit” (𓂏𓂏, *ndit*) means “The Fallen City.” Like the city name Kenzet, Nedit sometimes has a 𓂏𓂏 determinative instead of a “city” determinative. The glyph 𓂏𓂏 might be created to represent the topographical profile of the two megalakes on the west and east sides of Atlantis. The Fallen City name “Nedit” was clearly adopted to commemorate the overthrow of Osiris and taking over of Atlantis by Seth. PT532:5 says: “They found Osiris after his brother Seth threw him down in the Fallen City.” Seth’s rule caused devastation to the city. PT111:1 says: “Osiris Unis, accept Horus’s Eye (City), which Seth trampled.” Later, Osiris’s son Horus reclaimed power from Seth. He saved the city from Seth’s hands. PT247:12-13 reflect this recovery: “Stand up, you in the Fallen City. Your good bread has been made in Pe City; receive your control of Heliopolis.” Contrasting to “Nedit” as “The Fallen City,” the city name “Shedit” (𓂏𓂏, *šdt*) means “The Rescued City,” which is clearly to commemorate the return of the city back to Horus’s control. PT160:1 says: “Osiris Unis, accept Horus’s Eye (City), which he rescued from Seth.” PT582:20-22 talk about the king’s glorious sovereignty over the Rescued City – the Sun City Atlantis:

*I give judgment as Sobek in the Rescued City and as Anubis in Takhbet City. I call for a thousand, and the Sun Folk come to me bowing.*

Here, Takhbet City (𓂏𓂏, *tšhbt*) is another epithet of the Sun City although its meaning is unsure.

PT\*709:2-5 make it clear that Horus is the ruler of “The Great City.” He was the one who took care of the Eye City. The restoration and protection of the citadel against water erosion require engineering designs and organized constructions. PT626:1-4 say:

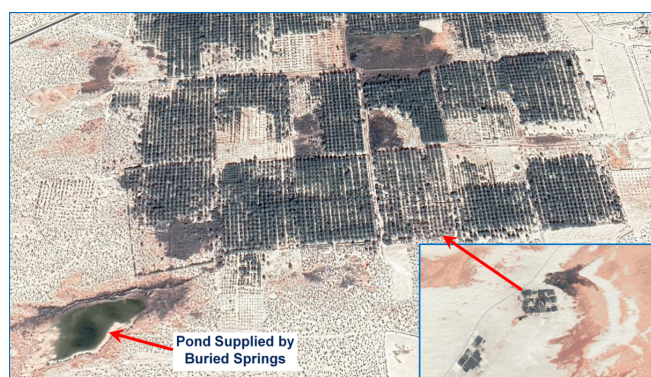
*I have emerged as a great one, I have alighted as a falcon (Horus), My sight is on the Designer’s loop, I split up the isles and delimit the isles’ borders, and the god’s two cultivations are given to me.*

The “Designer’s loop” may refer to the Aqueduct system which will be discussed later. The god’s two cultivations are the Field of Reeds and the Fairest Plain.<sup>18</sup>

## The Current Atlantis Site

The Atlantis site is in the southern Tunisian desert close to the border with Algeria. In early 2023, we formed an international team to do a site survey and probing. A proposal has been submitted to the Tunisian National Heritage Institute. Our team leader Mr. Malek Sammoudi and technical advisor Mr. Hakim Kerkeni made a personal visit to the area on August 5 and 6, 2023, to visually observe the topography and environment. They also engaged in talks with the residents. They found that the whole area is covered by meters of sand or silt. There is an oasis supported by abundant underground fresh water. Date palm trees are planted on the central island. On the northeast side of the plantation there are ponds with thick wild vegetation around them. The planters said that these ponds were always there due to the water surfacing from underground. They become bigger in winter when the evaporation is low.

Excitingly, Malek and Hakim were shown two freshwater wells on the oasis, one giving cool water and another hot water. The planters must mix the hot water with the cool water to bring the temperature low enough for irrigation. This unique hydrological feature matches perfectly with Plato’s description about the Hot and Cool Springs of Atlantis and the findings from PT, which will be discussed below. From the satellite image in Figure 6, another pond is seen on the southwest corner of the plantation with a size of about 100 meter wide and 400 meter long (in 2018). The water level in the pond indicates that the underground water table is still very high in this area. From the images corresponding to different times during the last 13 years, we can see that palm trees have not grown well in some areas consistently. Assuming same irrigation and caring, the areas of poor vegetation growth may indicate shallow underground structures which block water permeation. When water cannot permeate into the area, it dries up quickly in the summer due to the high evaporation, and the palm trees cannot grow well.



**Figure 6** Water pond supplied by buried springs and date palm trees at the current Atlantis site (the central island).

## The Atlantis Springs and Aqueduct System

### The Two Springs

One of the greatest wonders of Atlantis is the coexistence of the Hot and Cool Springs on the island. Plato gives a vivid description of the Springs in *Critias*:<sup>11</sup>

...In the next place (of the temple), they had fountains, one of cold and another of hot water; in gracious plenty flowing; and they were wonderfully adapted for use by reason of the pleasantness and excellence of their waters. They constructed buildings about them and planted suitable trees, also they made cisterns, some open to the heavens, others roofed over, to be used in winter as warm baths; there were the kings' baths, and the baths of private persons, which were kept apart; and there were separate baths for women, and for horses and cattle, and to each of them they gave as much adornment as was suitable.

The Two Springs give abundant flows. The water was used for gardens and daily life. Atlanteans made cisterns to store water and built baths separately for the king and public. There were even baths for horses and cattle.

In the Pyramid Texts (PT), Spell PT285 precisely mirrors the above details of the two springs. The hieroglyphs from Teti's pyramid and the corresponding transliterations are listed below together with the revised English translations:

(1-2) 

*iw nšzwi.k ir šzwi.k bšī iwn trī ib hm.*

(3) 

*wy m mw i y irt bb n tī sšzw.*

(4) 

*hwt hzy hwt dt twr htt-ib.i.*

(5-6) 









*ih-tī ib nw sw rw m mw šw šw š htt-ib.i ti.*



(1-2) **Your two springs are off to your two vessels: spew as column, spray from center, and fall.**



(3) **You two, with water! O you of the Eye City, circulate to the line of Seshau!**

(4) **House for the feeble, house for bath, show respect to my masonry thought.**

(5-6) **The palace line is at center, he of the lion is with water. Extend, extend, oh my masonry joy!**

The same Spell PT285 was inscribed in the pyramids of Unis, Teti, Pepi I, Pepi II and Neith, with the first three sets well preserved. There are some small variations which help better understand the meanings of the hieroglyphs. *nšzwi* means “two emissions of fluid.” Allen translates it as “two (poison) drops.”<sup>5</sup> The correct translation should be “two springs.” *šzwi* means “two vessels.” *bšī* means “spew out,” a typical behavior of the spring.  (*in*) corresponds to  (*iwn*) in the Unis version. This makes it clear that the meaning is “column.” The determinative  is not the Sun Disk but probably a top view of a spring to illustrate its ejection at the center and spray in radial direction. This makes it clear that the springs spew as column, spray from center and fall to flow away. Allen translates  (*y irt*) as “you of the injured eye.” Here,  is equivalent to , and the eye represents the Eye City. Together,  means “the two of the Eye City” to reflect the two Hot and Cool Springs of Atlantis. The stick on the eye may indicate a spring ejection from it.  (*ti*) may be translated as flowline. In the other versions, a “headband” determinative is used for the “rope” determinative, which may indicate the Aqueduct flowline around the Head, a nickname of Atlantis.

The hieroglyph  for Seshau is a very special depiction of something particularly important. It is very likely to illustrate the design of the water collection from the spring. The lower part depicts the spring ejection. The upper part shows an arc structure for receiving water at an elevated level. The collected water enters the Aqueduct system for distribution. Here the name Seshau is a title like today's “hydraulic engineer” or “civil engineer.” PT364:28 also mentions a female “civil engineer” Seshat: “Nephthys has collected all your limbs for you, in her identity of Seshat, lady of builders.” Here the limbs symbolize the External Isles of Atlantis, and this verse talks about the restoration of the citadel against water erosion. In PT200:2, Atlantis is called “**The Great Endurance** ( *mn-wr*) in Horus's limbs.”

In PT285:4, “the house for the feeble” ( *hwt hzy*) was probably like a hospice. The residents must have found the healing effect of the Hot Spring for some chronic diseases and used it as a treatment. “The house for body” ( *hwt dt*) is clearly a public bath. For both these houses, “foggy” and “raining” determinatives are used, respectively, to indicate steamy environment and/or showering arrangement. The designer was very proud of the facilities. PT62:1-2 tell that the health benefit of the Hot Spring was exploited, and the water quality was checked:

*Osiris Neith, accept the waters that are from Horus's Eye: relax yourself with it.*




*Osiris Neith, accept Horus's Eye, Thoth has examined the waters from it.*

Horus's Eye is the Sun City Atlantis. The waters from it are the Hot and Cool Springs.



### The Hot Spring

About the Atlantis Hot Spring, there are many details provided by PT. For example, PT313:3-6 describe the Hot Spring as a resort for retreat:

*Open a path for me on the hot blast whereunder the gods scoop water. Horus's retreat – TWICE – I also retreat at this hot blast whereunder the gods scoop water; and they make a path for me that I may pass on it: I am Horus.*

Allen translates the hieroglyph  (*bhhw*) as “blast of heat.” Obviously, this “hot blast” is the Hot Spring, under which the gods scoop (or draw) water. Naturally, the Hot Spring was an enjoyable place where the king Horus used for “retreat” (, *zbn*), not only for himself but also for honorable guests from outside. Probably for this reason, the island is called “**Horus's Retreat City**” (, *zbn-niwt*) in PT 240:3. It is also a safe place to go to as reflected in PT550:1-2:





*You go back to the Great Black (City). Retreat into the Fortified City, into the place in which they (Horus and Seth) retreated.*


The “Great Black” (, *kn wr*) must be the “Black City” Atlantis as explained earlier. The “Fortified City” (, *hr-ḥš*) is the same place. PT493:17-18 give further confirmation: “To me belongs the Sixth-Day meal in the **Fortified City**. I live off a pregnant cow like those in Heliopolis.”

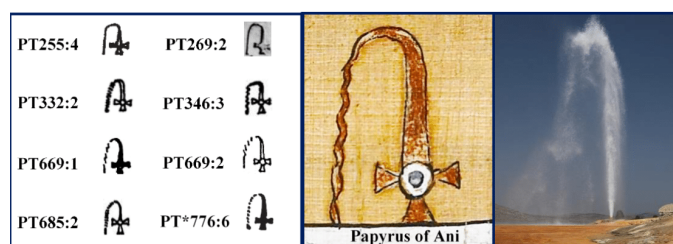
PT256:1-7 identify the Hot Spring as the “effective Uraeus,” which is the most notable ornament on the Egyptian pharaoh's crown. This spell also portrays a dramatic scene of the gods giving their praises while being naked:

*I have inherited from Geb, I have inherited from Geb.*


*For I have inherited from Atum; for I am on the throne of Senior Horus; for my Eye is my force; for my protection is what was done to me; for the ejection of the Hot Spring of my effective Uraeus is Renenutet on my Head; for I have put fear of me in their hearts by making discord among them; for I have seen the gods naked and bowing to me in praise.*

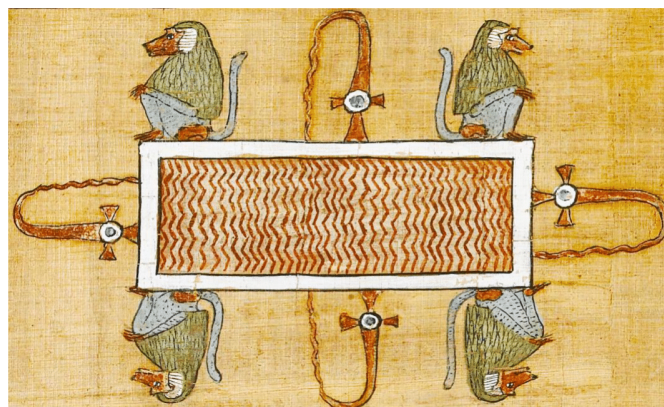
Why were the gods naked? Because they were taking a bath in the warm water from the Hot Spring! The Eye is the Eye City Atlantis, which is also metaphorized as Head, as discussed earlier. Allen translates  (nsr n hh n zht.f) as “the flame of the blast of my effective Uraeus.” With the new understanding,  (nsr) should be interpreted as “ejection,” the discharge of the Hot Spring.  (hh) should be interpreted as “Hot Spring.” This word was likely originated from the hissing sound of the Hot Spring. For the same reason of liquid ejection and hissing sound, the Hot Spring was naturally metaphorized as an upright cobra, the Uraeus, and personified as the goddess Renenutet ( rnm-wtt).

Now, look at this hieroglyph: . It is the determinative for almost all the “Hot Spring” descriptions in PT. However, it has been mistaken as “flame” or “fire,” and all the Hot Spring verses have been interpreted incorrectly. The hieroglyph creators were obsessed with detail accuracy. They would never use such a depiction for flame or fire. An open-air flame always shoots higher due to the upward movement of the surrounding air heated by the flame. It never bends down. Figure 7 lists eight copies of this hieroglyph from various PT verses. All these depictions show an upward ejection which freely falls to the ground after reaching the highest point. This parabolic profile is clearly an upward free jet of liquid. Some of the sketches even show the breakups of the liquid column when it falls, exactly like what we observe from a spring ejection (pictured on the right). The same hieroglyph in the middle is taken from a vignette (shown in Figure 8) in the Papyrus of Ani. It clearly shows the waviness of the liquid column when it falls to the ground. The red color indicates hot temperature. The white circle around a bluish opening must represent the mouth of the Hot Spring.



**Figure 7** The hieroglyphs of Hot Spring in various verses of the Pyramid Texts and the Papyrus of Ani.





In Figure 8, with the hieroglyph  representing the Hot Spring on each side of the rectangle, the wavy area inside the rectangle is nothing but a pool of warm water from the Hot Spring. However, due to the wrong understanding of the Hot Spring sign, the pool of warm water has been interpreted as the “Lake of Fire” fueled by four burners around it even in ancient Egyptian writings. It has become a symbol of the eternal torment for the afterlife of the wicked. For example, in the Papyrus of Bakenmut from the Twenty-first Dynasty (ca. 1000 BCE), the “Lake of Fire” is filled with skinny bodies of the damned.<sup>19</sup>




**Figure 8** The pool of warm water (which has been mistaken as the “Lake of Fire”) and the Hot Spring hieroglyph from the Papyrus of Ani.

PT404:3-4 say that the Hot Spring is in the Head of the Eye City:


*I am green as the green Head of your Eye in which the hot blast is, and I become green with you.*

Here “green” is emphasized to reflect the flourishing vegetation on the island. The Eye represents the Eye City Atlantis, where the Head (the central island) is. Here, the “hot blast”  (hhhw) has the “Hot Spring” determinative with three dots representing water. It is the Hot Spring on the central island. In PT249:5 and PT273:15, the hieroglyphic epithet for the Sun City Atlantis is  (iw n sisi), which is commonly mistaken as the “Isle of Flame” or “Island of Fire.” The “city” determinative, , indicates that this place is not only an island but also a city. The correct translation should be the “Island of Hot Spring.” This name  (sisi) was also likely created to mimic the hissing sound of the water ejection from the Hot Spring. The Island of Hot Spring is the mythical birthplace of the world, the first “place” to appear from Nu, based on the Heliopolitan cosmogony.<sup>5</sup>

**The Uraeus, a Metaphor of the Atlantis Hot Spring**





Another hieroglyphic word for the Hot Spring in PT is  (sdt). It is commonly translated as “fire” but clearly means “Hot Spring” in many of its citations: e.g. in PT233:1-3,

*The cobra that came from the earth falls, the Hot Spring that came from Nu falls. Fall down, flow away!*

In this parallel sentence, the Hot Spring is metaphorized as a cobra. The cobra snake was believed to be born from the earth. The earth was thought to be supported by the primeval water Nu. Therefore, it is the Hot Spring that comes from Nu, not fire. The Hot Spring ejection falls and flow (, zbn) away.

In PT332:1-2, the Hot Spring is metaphorized as the “Coiled One”:



*I am that one who emerged from the Coiled One, I have emerged from the Hot Spring, the Repeller.*

The Coiled One (, hn) refers to the cobra, which forms a circular shape in coiled position, similar as the Atlantis layout. The hieroglyphs for “from the Hot Spring, the Repeller” are slightly different from the pyramids of Teti (, m hh.f inny), Merenre (, m hh inny), and Pepi II (, m hh inny). In Teti’s version, hh has a determinative of “spewing mouth,” but in Merenre and Pepi II the “Hot Spring”

sign is used. The hieroglyph for *inmy* clearly means “repeller.”<sup>13</sup> In contrast, Allen’s translation is: “with my fiery blast, my one that turns (opponents) away.”<sup>15</sup> These two verses echo the self-creation of Atum from the primordial water. In addition, PT\*806:8 provides a similar sentiment: “I spent the night in your bond. I sit in your coils.” This creation legend was directly inspired by the Hot Spring of Atlantis.

PT\*776:4-7 further relate the Hot Spring ejection to the Heliopolitan myth of creation, a story about how the Sun God Atum created the first couple, Shu and Tefnut, through masturbation (also see PT527:1-4):

*The ground’s-son (cobra) falls on his head, the Hot Spring comes forth to the horizon, and Ka-Allocator emits with semen.*



The ground’s son is the cobra which is born from underground. The first part of this quote is like that in the previous quote. Allen translates  (*zm*) as “burn” and  (*mtwt*, semen) as poison. With the Heliopolitan creation theory in mind and the “Hot Spring” determinative, *zm* should be interpreted as “emit” or “ejaculate.”

With the hot and forceful ejection, the Hot Spring is metaphorized as a hissing spitting cobra (the Uraeus). It possesses a terrorizing effect for protection. The following citations are from different spells with confirming details:

PT254:1-2 – *The great Uraeus is censured for the Bull of Nekhen City, and the ejection of my Hot Spring is toward you who are around the shrine.*

PT255:2-4 – *The Akhet is censured for Horus of Nekhen City and the ejection of its Hot Spring is toward you who are around the shrine, the flood of its Hot Spring is toward you who bear the great goddess.*

PT255:10-11 – *I will give the ejection of my Eye so that it surrounds you and puts downpour among those who do (evil) deeds and its flood among those original gods.*

As discussed earlier, Nekhen City is the Eye City of Horus. In PT505:11-12, it is even called the “Terrifying City” (, *swrt*, means “terror”), and the terrifier is “the Uraeus that came from the Sun (City),” a metaphor of the Hot Spring of Atlantis. In PT540:5, the Sun City is called the “Repulse City” (, *snʿt*). Clearly, the Hot Spring was a very impressive ejection which gave a high flow rate of hot water. This detail agrees with Plato’s description about the Hot Spring in Atlantis which gives “gracious plenty flow.” PT319:1-3 link the Sun City, the Eye, the Hot Spring, the Head, and the Open Horn altogether:



*I am a bull of the Sun City in the middle of its Eye: my mouth is sound with the Hot Spring, my Head is in the Open Horn of Horus, lord of the Fairest Plain.*





Another version of the Heliopolitan creation of the first couple is through sneezing and spitting. PT600:1-3 say:

*Atum Beetle! You became high, as the hill; you rose as the Benben in the Benben Compound in Heliopolis. You sneezed Shu and spat Tefnut.*

Obviously, this metaphor is also related to the Hot Spring. PT222:1-3 say:

*You (Unis) stand up on it (the Sun City), this land that came from Atum, the spittle that came from the Beetle.*

Here the spittle (, *nšš*) is the Hot Spring. PT222:20 talks about birth with the word “spew” (, *nšnš*), like the Hot Spring outflow.

Atlantis was also frequently called Dep City (, *dp*), which may be related to “spit” based on the pronunciation. In Spell PT219, parallel to many citations of the king’s identity related to the Sun City such as “Shu’s son” and “Heliopolitan,” PT219:80 lists the king’s “identity of the one in Dep City.” PT81:3 says that Horus’s Eye is in Dep City. PT601:32 tells: “As the name of Wadjet is firm in Dep City, my name is firm.” Wadjet (, *wꜣdt*) represents the Uraeus goddess and is associated with Sun’s Eye. She is often depicted as Horus’s Eye, , which provides wellbeing, healing, and protection. The Wadjet goddess is also known as “She of Buto.” Buto City (, *imt*) is obviously the place where the Hot Spring is, and the name may reflect its location at the promontory discussed earlier. PT583:3 says that the “Uraeus is on the Sun’s Open Horn,” where the Sun City Atlantis is. For thousands of years, the Uraeus is a sacred head emblem worn by ancient Egyptian deities and sovereigns, as shown in Figure 9. Since it came from the Sun City (PT505:12), Uraeus also frequently appears on the Sun Disk depictions (as shown in Figure 4b).

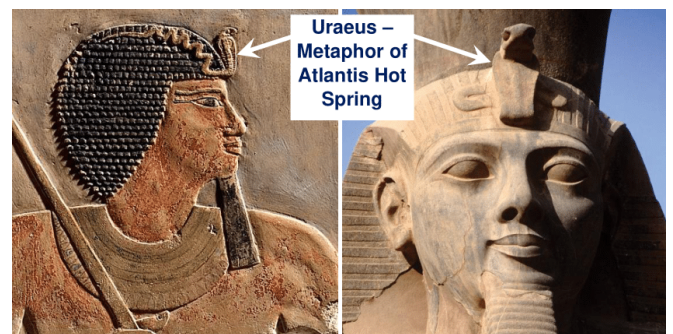


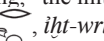


Figure 9 The Uraeus on Pharaoh’s head is a metaphor of the Atlantis Hot Spring.

In PT, the name  (*iht-wtt*) is clearly related to the Uraeus and the Hot Spring. Allen translates it as “Firstborn’s Thing.”  (*wtt*) means “beget.” Therefore, *iht-wtt* should be interpreted as the “Begetter’s Thing,” the initiator of new life. It is also called the “Great Thing” (, *iht-wtt*): e.g. in PT221:10-12,

*(O Unis), the Great Thing has given you birth, the Begetter’s Thing has adorned you; the Begetter’s Thing has given you birth, the Great Thing has adorned you: for you are Horus, encircled by the aegis of his Eye.*

PT\*709:6 says: “The Begetter’s Thing that comes from Heliopolis is fetched to you.” The pleasant scent of the Begetter’s Thing is mentioned in many PT spells: e.g. in PT665D:7-8,

*Great praise toward you! The great scent toward you! Pleasant to the nose is the scent of the Begetter’s Thing.*

This scent is probably from the Hot Spring due to its high temperature and the dissolved components.


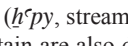
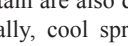
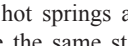
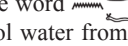
### The Cool Water

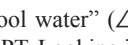
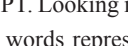
How about the Cool Spring of Atlantis recorded by Plato? Are there any descriptions about it in PT? Yes, absolutely. PT630:1-2 give a clear depiction:

  
*isir NN nn ʿꜣꜣ im.k iw hꜣpy iw nšfšf*


*Osiris Pepi Neferkare, this fountain from you: it is streaming, it is discharging.*



This is a straightforward statement, but the translation by Allen is obscure: “Osiris Pepi Neferkare, I have deflected the expectation from you: I am streaming, I am dripping.”<sup>5</sup>  (h'py) is clearly “fountain” or “well.” It does not have the “Hot Spring” determinative, . The word choices  (h'py, streaming) and  (nsf, discharging) for this fountain are also different, showing less forceful flow behaviors. Generally, cool springs are from shallower underground formations than hot springs and their pressure is lower. PT212:1 and PT400:1 have the same statement: “Horus’s Eye drips on the *dmw*-bush.” Here, the word  (ndfd, drip) indicates the gentleness of the cool water from Horus’s Eye for irrigation of plants. In PT, there are many spells specifically emphasizing “two springs” or “two flows,” e.g. in PT285:1, PT241:2, PT378:10, PT423:5 and 7. This must be for the purpose of referring to the two well-known Hot and Cool Springs of Atlantis.

There are indeed many mentions of the “cool water” ( *kbh*) and “Cool Waters” ( *kbhw*) in PT. Looking into their uses carefully, it becomes clear that these two words represent cool waters from two different sources. When the singular “cool water” is used, it is mostly for the water from the Cool Fountain of the Sun City Atlantis. When the plural “Cool Waters” is used, it always refers to the water of Jackal Lake (the Great Green). Therefore, it represents the source of primeval water. PT423:1-2 is a good example:

*Ho, Osiris Pepi! Accept this your cool water. Become cool with Horus, in your identity of the one who comes from the Cool Waters.*

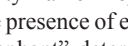
The first “cool water” is the water from the Cool Fountain of the Eye City. The second “Cool Waters” represents the Great Green or the Duat Lake – the primeval water. Sometimes, the “cool water” is specifically mentioned as from the Sun City with its different nicknames. PT676:9 says: “This cool water of yours, Osiris, from **Busiris City**, from His Ba’s **Settlements**.” Here, based on the source of the “cool water,” Busiris City and the “Settlements” are the same place of the Sun City, a confirmation to the earlier assessment. PT662B:1-2 says: “Father Pepi Neferkare, stand up and receive this your first cool water that comes from **Akhbit City!**” Akhbit City ( *sh-bit*) is known (from PT609:3) as the birthplace of Horus. PT701A:6-7 confirm and pin it together with Pe City: “Horus emerges in **Akhbit City**. **Pe City** stands for Horus, so that he can become clean there.” Obviously, it is the same place as Atlantis.

Same way, from PT459:1-2 we know that Elephantine City is also an epithet of the Sun City Atlantis:

*Ho, Osiris Meryre! Receive this your clean water that comes from Elephantine City. Your water is from Elephantine City.*

PT658A:5-6 provide a confirmation:

*The gods have desired you for Horus, in your identity of the one from Elephantine City. The gods have made you for Horus, in your identity of the Eye.*

Here the Eye is the Eye City Atlantis. The city name Elephantine  (*shw*) was likely used due to the presence of elephants in the city. The round symbol next to the “elephant” determinative probably represents the city wall of Atlantis. Plato also mentioned the elephants in Atlantis:<sup>11</sup>

*There was an abundance of wood for carpenter’s work, and sufficient maintenance for tame and wild animals. Moreover, there were a great number of elephants in the island.*

About the Cool Waters, there are numerous references in PT. PT325:3-4 describe the flow of the Cool Waters from Jackal Lake to the Field of Reeds:

*The Sky’s doorway is opened, the Cool Waters’ door is pulled open, for Horus of the Akhet at daybreak, that he might emerge into the Field of Reeds and become clean in the Field of Reeds.*

This is one of the most frequently recited spells in PT. When the water from the deeper Jackal Lake in the west flowed into the shallow eastern Stork Lake, people would be impressed with the refreshing purity and coolness of the current. This must be the reason why Jackal Lake got the nickname Cool Waters that reflects the depth difference between the two lakes.


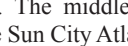
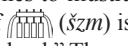
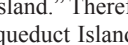
### The Aqueduct Island

The water flow from the Atlantis Springs was “in gracious plenty.” For its use by the entire city, the world’s earliest Aqueduct system was built, according to Plato:

*Of the water which ran off they carried some to the grove of Poseidon, where were growing all manner of trees of wonderful height and beauty, owing to the excellence of the soil, while the remainder was conveyed by aqueducts along the bridges to the outer circles.*

Any mentions about the Atlantis Aqueduct system in PT? Again yes, there are many. This is revealed by another unsolved hieroglyph. In the current English translation, “Horus of Shezmet” is often cited as one of Horus’s identities: e.g. in PT510:17-18,

*The Sky’s door is opened, the Cool Waters’ door is pulled open, for Horus of Shezmet at daybreak, that he might descend and become clean in the Field of Reeds.*

The Sky and Cool Waters refer to the same place, the Great Green (Duat Lake). The hieroglyphic word for Shezmet is  (*szmt*) with an “island” determinative, , at the end. The middle *szm* hieroglyph is a portrait of something special for the Sun City Atlantis. Examining all its appearances in PT, I realized that it was the graph of nothing else but the famous Aqueduct of Atlantis! Figure 10 shows two versions of the frequently used *szm* symbol with copies from PT and larger sketches. The first depiction shown in Figure 10a appears in the Merenre and Pepi II pyramids. The top horizontal narrow rectangle represents the Aqueduct at an elevated level. The dropping parabolic bands on both sides illustrate water pouring to the ground, to show the elevation of the Aqueduct. The four (some show three) standing rectangles at the bottom represent cisterns for water storage. The cisterns are connected to the Aqueduct through pipes. Sometimes the cisterns have a water jar shape. The second depiction shown in Figure 10b appears in the Pepi I pyramid. The cisterns are replaced with pipeline branches to illustrate a network. Now it becomes clear that the meaning of  (*szm*) is “Aqueduct,” and  (*szmt*) means “Aqueduct Island.” Therefore, the identity “Horus of Shezmet” is “Horus of the Aqueduct Island,” which is another form of “Horus of Atlantis” since the Aqueduct Island is clearly an epithet of Atlantis.

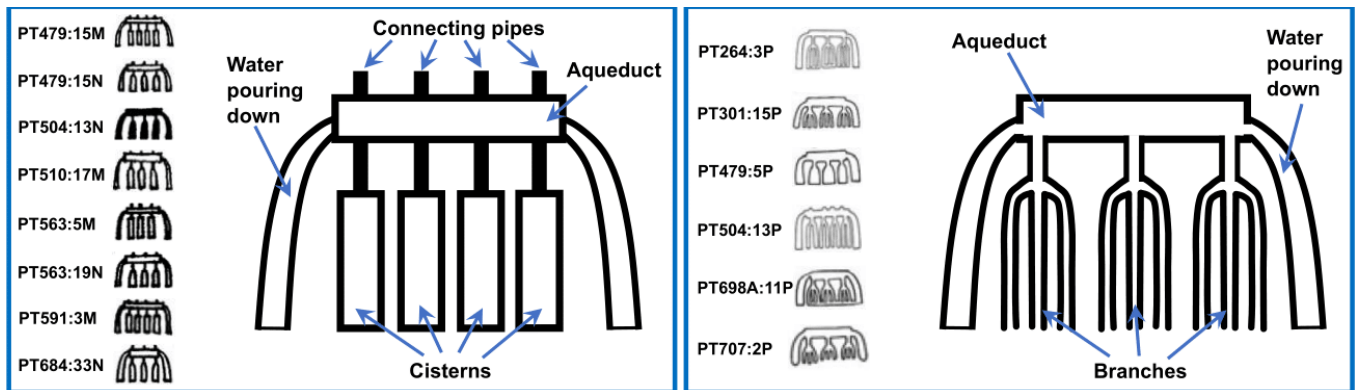



Figure 10 The Atlantis Aqueduct hieroglyphs in Pyramid Texts.

With this finding, many recitations in PT become meaningful. For example, in PT627B:19-20, the current English translation for *ist nt šzmt* is “place of malachite” while its true meaning is “place of the Aqueduct Island”:

*I am now off to my place of the Aqueduct Island and my food is now in the Fields of Rest and the Lakes of Turquoise.*

The Fields of Rest are the farmlands in the Field of Reeds, together with shallow lakes which give a turquoise color. “The Aqueduct Island” is mentioned several times in PT698A:9-12:

*The Akhet’s shoulder is opened to Him of the Aqueduct Island, that He might pass in it. I in fact am He of the Aqueduct Island. The Sun Shore’s shoulder is opened to Him of the Aqueduct Island, that He might pass in it. I in fact am He of the Aqueduct Island, and I pass in it.*

“He/Him of the Aqueduct Island” is equivalent to “Horus of the Aqueduct Island.” Through this clarification, these verses portray a picture of the Sun Disk being held by the Akhet’s shoulder, just like the Akhet hieroglyph, , as discussed earlier in “The Sun Disk” Section. The Sun Disk is the Aqueduct Island. Hence, *(rnn ḏwt)* is translated as the “Sun Shore’s shoulder” instead of “mountain’s shoulder” from Allen’s book.<sup>5</sup>

The Spell PT591 is about the application of the Aqueduct system in wider areas. Verses 1 to 6 are repetitive, only with different subjects. Therefore, only PT591:1 is shown below:



*ḏbꜣ.n sw ḥrw m šzmt.f nmt ḥr tꜣ.f m tīwti.*

**Horus has facilitated himself with his Aqueduct (system) that runs over his land for all.**



The translation from Allen’s book is: “Horus has arrayed himself with his malachite sporan that strides over his land in reconciliation.”<sup>5</sup> The word *šzmt* was misunderstood as the “malachite sporan” and the entire verse became obscure. This spell indicates that the Aqueduct technologies were further applied to many other towns and cultivations for irrigation.


A big translation revision is also made for PT581:4-5 (Pepi I):



*iw n.k šzmw ḥr mw ḥrw, ḥnt nmt.f ḥr ḥꜣw ḥntiw ḥrti.*

**The Aqueduct runs to you with water of the vineyard, and Thighs’ Foremost holds cisterns for those of the Dual Shrines.**



The hieroglyph  (*šzmw*) is a vivid depiction of an elevated aqueduct section supported by two forked poles. The object in the middle under the aqueduct may indicate a cistern. The determinative of “vineyard,” , is also quite self-explanatory. The word *ḥꜣw* (*hꜣw*, vessels) should be translated as “cisterns,” as related to the Aqueduct system.

In PT, the Aqueduct flowline is metaphorized as Centipede ( *zꜣꜣ*). The numerous supporting columns of the Aqueduct must have made it look like a centipede. PT378:1-11 give this description:

*Cobra, to the sky! Horus’s Centipede, to the earth!*

*Horus’s sandal has stepped, Protector. The Protector is for Horus...*

*You two Snakes, you two Snakes, you two Uprisings, you two Uprisings, whom the god’s “cord” made! Guard me and I will guard you.*

In this quote, the Cobra is a metaphor of the Hot Spring, which gives a hot water ejection toward sky. Horus’s Centipede is the Aqueduct flowline, which transports water from the springs to the users for daily life and irrigation. The Hot Spring was viewed as the protecting Cobra due to its high temperature and powerful ejection. The two Snakes ( *fnwy*) or two Uprisings ( *tnwy*) are metaphors of the two Hot/Cool Springs of Atlantis. *mti* (*mti*, means “cord”) is metaphorical for *mt* “penis” according to Allen.<sup>5</sup> PT381:1-2 tell that the Aqueduct flowline (the Centipede) encircles the palace of the king:

*The Great One’s Centipede has gone down, having encircled Him of the Compound. He of the Compound has been encircled by the Centipede.*

Echoing on this arrangement, the king is said to be “in his Centipede (the Aqueduct flow loop)” in PT570:32. However, the Centipede has been misunderstood as the king’s “sedan chair” because of the many feet of its bearers.<sup>5</sup> PT502N:1-2 further inform that the Aqueduct system was also built along the main street leading to the king’s palace:

*The Centipede is on Horus’s path; Horus is on the Centipede’s path.*

*Horus, come from the Centipede! Centipede, come from Horus!*

### The Lake City

In Spells PT301 and PT\*737, “Horus of Shat City” and “Horus of the Aqueduct Island” appear in parallel many times, in an exchangeable manner: e.g. in PT301:14-17,

*I have come to you, **Horus of Shat City**; I have come to you, **Horus of the Aqueduct Island**; I have come to you, **Horus of the East**. Look, I have gotten you your great eastern **Eye** from the cavern.*

Clearly, Shat City (𓂏𓂏𓂏, *šst*) is the same place of the Aqueduct Island – the Sun City Atlantis. Literally, this name can be translated as “**Lake City**,” reflecting the man-made reservoirs holding water from the Springs. Earlier, Seshat (𓂏𓂏𓂏𓂏, *ššst*) is mentioned as the “lady of the builders.” These two words are all related to the construction of the water supply system of Atlantis. For the same reason, in PT219:100-102, Atlantis is called the “City of Lakes” (𓂏𓂏𓂏𓂏, *nīwt šīw*):

*In your identity of the one in **the City of Lakes** – what you have eaten, **The Eye**, your belly grows round from it, your son Horus releasing to you so that you might live from it.*

This statement is both metaphorical and humorous. The City of Lakes is the Eye City, which is symbolized as a cake one can eat. It is round. When you swallow it, your belly becomes round too. PT222:32 says: “You become clean in the Akhet and release your cleaning in Shu’s lakes.” Here, “Shu’s lakes” (𓂏𓂏𓂏, *šīw šw*) means “the lakes of **Shu City**” which is together with the Akhet.

### Conclusions

This paper is packed with new findings from the Pyramid Texts (PT) about Atlantis with detailed citations and analyses. I will highlight a few. In PT, Atlantis is called the Great Disk (Aten) located in front of the Akhet, and the Akhet is in front of the Field of Reeds. Horus’s Eye is the name for the Sweet Sun Disk. As a metaphor, Horus’s Eye mostly refers to the Sun City Atlantis as the Eye City, and sometimes has double meaning. Due to the unique round shape, Atlantis is also called the Egg City, the Head, the Face, the Seal-Ring City and so on. The Sun Disk is held by the harboring Sun Shore open to the east, and together they are called the Great Embrace. The Nurse Canal from the Great Green on the west flows into the Circular Canal around the city forming a fork split – the Open Horn. The Open Horn holding the Sun Disk is the most notable head emblem worn by Egyptian

goddesses. The Open Horn was the world’s earliest intersection of water transportation, and Paths-Parter was the first traffic controller. This specific geometry also simulates the birth outlet for the gods and for the Sun City Atlantis as the carrier of the afterlife cycle.

Shu (Atlas) sometimes represents the Sun City. The “walls of Shu City” were toppled by the “fierce lake,” reflecting the catastrophic submersion of Atlantis recorded by Plato. The epithet “Great Immersion” must have been used to commemorate the event. The name “Libation City” together with bull catching/lassoing reflect the bull sacrifice and libation practice described by Plato in Atlantis. Many details are provided in PT about the city’s water erosion and restoration. The most intriguing findings are the PT accounts of the Hot/Cool Springs and the Aqueduct system of Atlantis, with much more details than Plato’s descriptions. For example, the chief designer of the water supply system was a lady – Seshat. The Hot Spring was the original inspiration for the protecting Uraeus and the Heliopolitan creation myth. The hieroglyphs for the “Island of Hot Spring” (mistaken as “Isle of Flame” by Egyptologists) have a “city” determinative, implying that the island is a city. It is the mythical birthplace of the world, the first “place” to appear from Nu, based on the Heliopolitan cosmogony. At the current Atlantis site, there are still hot and cool wells. The water from the hot well must be mixed with water from the cool well for irrigation.

Table 1 lists the Atlantis epithets identified in this paper with brief notes on their meanings. It is proper to conclude with PT285 to honor the Atlantis hydrologists who designed the world’s first Aqueduct system about 11,000 years ago:

*Your two springs are off to your two vessels: spew as column, spray from center, and fall.*

*You two, with water! O you of the Eye City, circulate to the line of Seshau!*

*House for the feeble, house for bath, show respect to my masonry thought.*

*The palace line is at center; he of the lion is with water. Extend, extend, oh my masonry joy!*

(Seshau or Seshat is the designer of the Aqueduct system. “He of the lion” is the king.)

**Table 1** List of Atlantis epithets found in the Pyramid Texts

Hieroglyph	Epithet	Meaning	Hieroglyph	Epithet	Meaning
☉	The Sun	Often refers to the Sun City	𓂏𓂏	Sun Disk	For Atlantis round shape
𓂏𓂏𓂏	Sun City	For Atlantis environment	𓂏𓂏	Sun’s Eye	For Atlantis round shape
𓂏𓂏	Sun Boat	As carrier for afterlife	𓂏𓂏	God’s Boat	As carrier for afterlife
𓂏𓂏	City of God	As birthplace of the gods	𓂏𓂏𓂏	Akhbit City	Birthplace of Horus
𓂏𓂏	The Akhet	Sun Disk inside Sun Shore	𓂏𓂏	Akhmim City	Sacred image
𓂏𓂏	Anubis City	Related to Jackal god	𓂏𓂏	Asyut City	Means protection
𓂏𓂏	Aqueduct Island	Atlantis Aqueduct also told by Plato	𓂏𓂏	Island of Hot Spring	Atlantis Hot Spring also told by Plato
𓂏𓂏	That Island	The one and only	𓂏𓂏	Black City	For black city wall
𓂏𓂏	Busiris City	Means stability	𓂏𓂏	Bull City	Located on the Open Horn
𓂏𓂏	Buto City	Promontory location	𓂏𓂏	Coiled One	Like a coiled cobra
𓂏𓂏	Dep City	For spitting of Hot Spring	𓂏𓂏	Djedut City	Means stability

Table I Continued...

Hieroglyph	Epithet	Meaning	Hieroglyph	Epithet	Meaning
	Egg City	Shape and gods' rebirth		Elephantine	Presence of elephants
	The Eye	That Eye, the one and only		Hare City	Ring isles of Atlantis
	Eye City	For Atlantis round shape		Horus's Eye	Horus's Eye City
	Great Endurance	Endued water erosion over thousands of years		Great Embrace	Central island embraced by ring-isles
	Favorite City	A lovely place to be		Fortified City	A well defended city
	The Face	For Atlantis round shape		Fortified-Face	A well defended city
	Fallen City	Osiris's overthrown by Seth		Rescued City	Taken back by Horus
	Falcon City	Related to Horus		Great Head	For Atlantis round shape
	Gods' City	As birthplace of the gods		Great Black	For black city wall
	The City	That one and only		Great City	Mighty power
	Kenzet City	For Atlantis location		Lake City	Lakes from the Springs
	Libation City	Libation also told by Plato		Marsh City	Surrounded by marsh land
	Nekhen City	Means rising sun		Northern City	On north of Fairste Plain
	Parter City	Located at the Open Horn		Pe City	Means base
	Pillar City	Heliopolis		Great Erosion	Eroded into separate isles
	Great Island	The mighty city Atlantis		Shu City	Shu is Atlas
	Repulse City	For frightening Hot Spring		Retreat City	Resort at the Hot Spring
	Seal-Ring City	For Atlantis ring shape		The Settlements	Atlantis metropolitan areas
	Stability City	Also called Stability Island		Stability Island	Also called Stability City
	Ta'it City	Textile provider		Tebi's Eye	Tebi is a Sun-god
	Terrifying City	For frightening Hot Spring		Thoth-Carried City	Located on Thoth's wingtip
	Vulva City	As birthplace of the gods		Wingtip City	Head of Field of Reeds
	Walled Place	Atlantis city walls also told by Plato		Great Immersion	Atlantis submersion also told by Plato

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### Conflicts of Interest

The author declares no conflict of interest.

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