Water Is Life!
THE AVA PROJECT
The Achaemenid Persian Empire was the largest land empire of its day, stretching from Egypt to Afghanistan. Yet it was also a sea power, fielding great fleets of warships and sponsoring maritime exploration. The Greek historian Herodotus, for example, says that King Darius I (reigned 522-486 BCE) dispatched Scylax of Caryanda from the mouth of the Indus River (in what is today Pakistan) to explore the Arabian Sea and the Red Sea, a voyage which lasted thirty months. Darius’ son and successor Xerxes I (reigned 486-465 BCE) likewise sent Sataspes through the Strait of Gibraltar to circumnavigate Africa. Although the expedition failed in its objective, judging from his report Sataspes may have made it as far as the Cape Verde Peninsula in modern Senegal. Darius and Xerxes both also dug canals. Xerxes’ canal, built between 483 and 480 BCE in preparation for his invasion of Greece, bisected the Mount Athos Peninsula in northern Greece, near the modern town of Nea Roda. The purpose of the canal was to avoid the treacherous Mount Athos headland, where a Persian fleet had been wrecked in 492. According to Herodotus, the canal was wide enough that two triremes could traverse it side by side, a claim which archaeologists have been able to verify using seismic survey and bore holes. But the canal of Darius, which linked the Nile to the Red Sea, was by far the greater achievement. Herodotus tells us that the Egyptian pharaoh Necho II (reigned 610-595 BCE) first attempted to dig a Red Sea canal, but was unsuccessful. Evidently Darius succeeded where Necho failed and dug a canal connecting the Nile to the Red Sea through the Wadi Tumilat, northeast of Cairo. The location of the canal can be established with some certainty on the basis of satellite imagery and the stone stelae that were erected along its course. The western end of the canal met the Nile near Zagazig (ancient Bubastis) in the eastern Nile Delta. It continued 70 km to the east through the Wadi Tumilat. Just before reaching Ismailia it turned southward and then followed the route of the modern Suez Canal through Great Bitter Lake and Little Bitter Lake, reaching the Red Sea near Suez.
Four fragmentary stone stelae have been discovered along the canal’s course, featuring images of the Persian king along with an Egyptian motif depicting two human figures – representing Upper and Lower Egypt respectively – tying a lotus and a papyrus plant together. This motif, called ‘The Binding of the Two Lands,’ was a symbol of unity used by Egyptian kings for millennia and adopted by the Persians to represent their rule of Egypt.

The stelae also have inscriptions in Egyptian hieroglyphics and in Old Persian, Elamite and Akkadian cuneiform, naming Darius as the canal’s builder. The best preserved of these inscriptions is the cuneiform on the stela from Kabret. The text reads:

King Darius proclaims: I am a Persian; from Persia, I seized Egypt. I ordered this canal to be dug, from a river called Nile, which flows in Egypt, to the sea which goes to Persia. So this canal was dug as I had ordered, and ships went from Egypt through this canal to Persia, as was my desire.⁶

This inscription makes the canal’s purpose clear: it created a sea route from the Nile to the Persian Gulf. The hieroglyphic texts on the stelae are very poorly preserved, but they contain references to the Achaemenid capitals Persepolis and Pasargadae, suggesting that these inscriptions also referred to a maritime link to Persia.⁷ Despite these inscriptions, scholars have doubted the usefulness of the canal, and indeed it had its limitations. It would only have been navigable during the fall and early winter when the Nile flooded, and even then it would have been best suited to barges and small boats rather than large seagoing vessels. Moreover, sailing around the Arabian Peninsula was difficult and time-consuming, especially given the prevailing winds in the northern Red Sea. Furthermore, to make use of the easterly monsoon winds in the Indian Ocean it was necessary to sail in the summer months – the opposite time of year from when the canal was operational. Finally, the canal required frequent dredging in order to remain navigable.
At the same time, the alternative routes to the canal had their own shortcomings. It was certainly possible to travel overland from Egypt to Persia using the empire’s road network, which linked its major cities. But overland travel was slow, not to mention expensive if one was transporting bulky cargo. Another alternative was to sail up the Nile and then cross Egypt’s Eastern Desert to the Red Sea. This was also difficult, however. As with the canal, Nile navigation was seasonal, with fall being the best time to sail because the annual flood made the river deeper and allowed for larger vessels. Currents and wind speed (sails were necessary for sailing upstream) were also highly variable, and towing was frequently required. Crossing the desert was treacherous and time-consuming as well.

The canal not only created a sea route between Egypt and Persia but also facilitated access to the places in between. This purpose is suggested by the hieroglyphic inscription on the stela from Tell el-Maskhuta. The inscription is quite fragmentary, but it includes the name Saba’. Saba’ was a kingdom in what is today western Yemen, famed in antiquity for the export of spices. In the Hebrew Bible, for example, the queen of Sheba (the Hebrew name for Saba’) “came to Jerusalem with a very great retinue, with camels bearing spices, and very much gold, and precious stones...never again did spices come in such quantity as that which the queen of Sheba gave to King Solomon.” The canal gave Persia access to this spice trade by sea. It also connected Egypt to Maka, an Achaemenid province usually identified as being in the Oman Peninsula. Indeed, it is not clear what other territories on the Arabian Peninsula were part of the empire and
accessible from Egypt by sea by way of the canal. Finally, the canal supplied water for irrigation to the Wadi Tumilat, where Pithom (located at the site of Tell el-Maskhuta) grew into a major town as a result.

Darius’ canal had a long history even after the fall of the Achaemenid Empire in 330 BCE. It was dredged and re-dug many times by later Ptolemaic, Roman and Islamic rulers of Egypt. According to the Greek historian Diodorus Siculus, King Ptolemy II (reigned 282-246 BCE) even fitted the canal with a lock. It was finally closed in 747 CE in order to prevent grain shipments to the Hejaz, which was revolting against the newly established Abbasid caliphate. The remains of Darius’ canal were rediscovered in 1799 by Napoleon Bonaparte during his invasion of Egypt, and between 1858 and 1863 a new canal was dug along its course to supply water for the construction of the Suez Canal. This modern canal, known as the Sweet Water Canal or Ismailia Canal, is still in use today.

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1 Herodotus 4.44
8 1 Kings 10: 2, 10.
10 Diodorus Siculus 1.33.11.