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The Significance of Water-Deities Subjugated by Tyche on the City-Coins of Syria-Palaestina and Arabia during the 2nd and 3rd century CE

Robert W. Smith and Kevin W. Larsen

Abstract: The article proposes that the cities of the Southern Levant, which minted coins in the second and third centuries CE, depicting Tyche subjugating a water-deity had constructed significant water supply systems. Proud of such achievements, civic leaders were honoring Tyche who supplied their basic needs by providing plentiful water.

Key Words: Decapolis (<https://d-nb.info/gnd/4222766-5>), coin iconography, Roman provincial coinage, Syria-Palestine (<https://d-nb.info/gnd/4106469-0>), water management

Zusammenfassung: Im folgenden Artikel wird die These aufgestellt, dass die Städte in der südlichen Levante, die im zweiten und dritten Jahrhundert n. Chr. Münzen prägten, auf denen Tyche mit einer Wassergottheit zu ihren Füßen abgebildet ist, bedeutende Wasserversorgungssysteme errichtet hatten. Im Stolz auf diese technischen Errungenschaften ehrten die städtischen Honoratioren ihre Tyche, die durch die Bereitstellung von reichlich Wasser ihre Grundbedürfnisse deckte.

Schlagwörter: Dekapolis, Münzikonografie, Römische Provinzialprägung, Syrien-Palästina, Wasserwirtschaft

Cities in Rome's Southern Levantine provinces proclaimed their identity on their coins. They began to mint their own bronze coins following Pompey's subjugation of the region, expanded in number to their apogee in the prosperous period of the Antonine and Severan emperors, contracted with the economic tumult brought on by the civil conflicts of the Barracks emperors and then ceased minting coins before the reign of Diocletian. Generally, their coins show the emperor or a member of the Imperial family on the obverse and the reverse highlights a local theme that civic leaders wanted to highlight¹. Thus, the coins served as a means of expressing both loyalty to Imperial Rome and local urban pride. The images and iconography on the reverse of the city coins provide potential insights into the products, history, religious beliefs, and the possible presence of monumental structures associated with the cities².

Tyche on Coins

One deity particularly favored on second and third century civic coins of the southern Levant was the Greek goddess Tyche. She is easily identified by her distinctive *murate* crown of salient towers and recessed city walls. Tyche was the Greek goddess of fortune, and a tutelary deity of cities. Her distinctive crown identified her as a spiritual defender of the city who stood alongside the physical defensive walls and citadels providing security. Tyche is also frequently depicted holding a *cornucopia*. This 'horn of plenty' showed that the city honored her for the blessings of the agricultural productivity and mercantile success for which the local hard-working farmers and craft-workers sweat³. Cities honored Tyche on their coins as

¹ Harl 1987.

² See Howgego 2005a, 1–17; Heuchert 2005, 29–56.

³ On the *cornucopia* as an emblem of *virtus*, see Gersht 2013, 207, 216–217.



Map 1: A map of cities that used an image of Tyche with a foot on a prow



an expression of gratitude for gifts received, in the hope that she would bring continued prosperity and additional blessings to the city⁴. The power of Tyche to direct the fortune of a city is also indicated by the occasional depictions of her holding a ship's steering oar [*gubernaculum*] or standing on a prow directing the movements of the ›ship of the city‹, even though some coin-minting cities in the southern Levant using the image were land-locked (see **map 1**)⁵.

Many cities developed their own *Tychai* by combining iconic features such as attire and weapons typical of other female figures from Greek mythology, such as Amazons, Artemis⁶, and Athena⁷ or regional female Semitic deities such as Arstarte, Atargatis, or Gad⁸. During the early years of minting urban coins in the southern Levantine provinces, Tyche's prominent status is particularly indicated when she appeared on the obverse of coins⁹. By the third century CE, Tyche was widely featured showing her head and shoulders but she is relegated to the reverse of coins¹⁰. During that same period she is most commonly depicted in full body, either sitting or standing. There are numerous other details such as Tyche holding various small, difficult to discern symbolic objects in her hand. These aforementioned observations of iconographic details and potential messages raises a question of the significance of water-deities, not always recognized on coins, since they variously have half-bodies and lower bodies that taper off, but are clearly depicted, at Tyche's feet.

This article examines the sub-type of Tyche standing or sitting coins that include a water-deity at or beneath her feet. This image was likely inspired by the famous third century BCE Hellenistic artist, Eutychides of Sicyon's, bronze image of Tyche of Antioch¹¹. That masterpiece is preserved, at a large scale in a Roman marble copy (**fig. 1**). In that image, Tyche sits on a rock with a water-deity beneath her feet. The swimming or struggling young male figure is widely interpreted to be a depiction of the River Orontes. The metropolis of Antioch, por-

trayed by her crowned Tyche, is literally ›on the Orontes‹ even as the city's coin inscriptions proclaim¹².

The Greeks recognized the existence of water-deities and presented them on their

⁴ On Tyche cf. e.g. Matheson 1994; Christof 2001, Meyer 2006. Regarding Tyche in the cities of the Decapolis cf. Lichtenberger 2003, 295–304.

⁵ Favored in the Cisjordan and rare in the Transjordan is Tyche standing with her foot on the prow of a boat, perhaps directing the life/course of the *poleis*. Numismatists have identified such Tyche images on coins minted by the coastal cities of Anthedon (e.g., RPC VI [online] temp. nos. [9150](#), [9151](#)), Antipatris (e.g., RPC VI [online] temp. nos. [8987](#), [8990](#)), Ascalon (e.g., RPC I nos. [4878A](#), [4878B](#); RPC II no. [2207](#)), Caesarea Maritima (e.g., RPC IX no. [2050](#); RPC IV.3 [online] temp. no. [8485](#)), Dora (Motta 2015, no. 39), Joppa (Rosenberger 1975, 77 no. 7), Tiberias (e.g., RPC III nos. [3923](#), [3933](#)), Tyre (e.g., Lichtenberger – Raja 2020b, 128 no. 15). Cisjordanian cities not directly adjacent to a sea that depict Tyche on a boat include: Neapolis (e.g., RPC IV.3 [online] temp. nos. [3798](#), [6355](#)), and Nicopolis-Emmaus (e.g., RPC VI [online] temp. no. [9004](#)). In the Transjordan, Esbus (e.g., RPC VI [online] temp. no. [9345](#)), Medaba (e.g., Spijkerman 1978, 182–183 nos. 5–6), and Philadelphia (e.g., Spijkerman 1978, 248 f. no. 18) are indistinct and have been alleged to depict an image of Tyche on a boat but the object under Tyche's foot is not certain. Given that there was shipping on the Dead Sea and the Jordan was navigable (cf. Strab. 16.2.16; Hirschfeld and Ariel 2005) Tyche standing on a prow may not be that out of place for Transjordan cities near the Dead Sea.

⁶ Artemis-Tyche is depicted with a bow and quiver on the coins of Gerasa (see Spijkerman 1978, 158–165 nos. 4. 5. 8. 14. 18. 19. 24. 26. 27).

⁷ Athena-Tyche is seen with armor on coins of Bostra (see Spijkerman 1978, 70–75 nos. 8. 22. 26).

⁸ Bowsher 1987, 66. See also the discussion in Wenning 1986, 123 f. and Meyer 2006, 251–278.

⁹ The Spijkerman (1978) collection includes busts of Tyche only on the obverse of seven total quasi-autonomous coin issues including those from Bostra (68 nos. 3. 4), Gadara (128 nos. 3–7), and Gerasa (158 no. 2).

¹⁰ The Spijkerman (1978) collection includes busts of Tyche on the reverse of (fifty-six total) coins from Abila 2. 7. 8; Adraa 4. 5; Bostra 7. 16–21. 25. 29. 45–47. 54. 58. 65; Canatha 1. 3–5, Charach-Moba 4; Gadara 3–7. 9. 11. 14. 16. 19. 24. 27. 29; Nysa Scythopolis 8. 9. 11. Petra 7–9. 16. 21. 25; Philadelphia 10. 16. 25. 31. 33. 38. 39; Rabbath-Moba 22. 23. 40.

¹¹ Paus. 6.2.7

¹² Meyer 2022, 24 remarks that not only is Tyche subjugating Orontes, the only year around water bearing river in the region, but by sitting on a rock she also controls the local mount Silpius.





Fig. 1: Tyche of Antioch

pre-Roman coinage. They depicted water-deities in four main ways: (1) As the head of man with long hair and beard; (2) as a man-headed bull, or the forepart of a man-headed bull; (3) as a figure swimming in water; (4) as a figure reclining in water or resting on a water urn. By the first-century CE, Romans adopted the earlier Greek practice of engraving water-deities onto coins of cities built alongside waterways. The use of water-deity images spread in the coinage of provincial cities in the first-century BCE and continued in civic coins from the second and third centuries CE in the Southern Levant¹³.

The interaction between Tyche and the various water-deities on the southern Levantine coins appears to vary with the age and stature of the water-deities. While Tyche is portrayed amicably standing or sitting alongside an equal-size older generation long-bearded

male river deity like Hieromices (the River Hieromax/Yarmuk) on coins of Adra'a¹⁴, she is very frequently portrayed as rudely stepping on what may be inferior, lesser river's deities that have short beards (*Potameides*), perhaps female or beardless juvenile streams (*Nymphs*) and legless/half-bodied springs (*Pegaeae*). Tyche was a powerful, older generation member of the Oceanid family of deities according to Hesiod¹⁵. It is not surprising that people in the Hellenized Levantine provinces of Rome believed she could exert control over junior members of her family.

The iconic ›Tyche of Antioch‹ that originally adorned a public monument, in the Seleucid capital was embraced in the later Roman provinces of Syria-Palestine and Arabia¹⁶. That appropriation could be attributed to an effort by those cities of the second and third centuries to identify with historically hallowed Hellenistic traditions. Our proposal is that the subjugation of a water-deity by the patron goddess Tyche is more specifically a local numismatic expression of the city having secured significant water sources. As such, the water-deity dominated by urban Tyche had a specific iconographic denotation and was more than a regional historical connotation suggesting that they had a Seleucid heritage¹⁷. Many of the cities minting coins of the sub-type, in focus here, did have

¹³ cf. Baukova 2021.

¹⁴ Spijkerman (1978), Adraa (60–63 nos. 6. 11. 14). See also Lichtenberger 2019, 4 f.

¹⁵ Hes. theog. 337–370. Among the lesser younger deities of the Oceanid family line there were a variety of *Nymphs*. Among these were the *Naiads* – fresh water gods who presided over fresh water supplies of the earth, such as springs, rivers, lakes, fountains and marshes. They are classified into five sub-groups, known as *Pegaeae* (springs), *Potameides* (rivers), *Limnades* (lakes), *Crinaeae* (fountains), and *Eleionomae* (marshes).

¹⁶ Butcher 2003. One of the first cities to use the image of Tyche subjugating a water deity was Damascus, during the reign of Demetrius III (95–84 BCE), see BMC Galatia, Cappadocia, and Syria p. 289 no. 1. The Nabatean ruler Aretas III (c. 84–71 BCE) likewise utilized the image of Tyche subjugating a water deity, see Meshorer 1975, nos. 5–6.

¹⁷ Howgego 2005b, 146.



Seleucid connections but others did not. Cities using the dominant Tyche coin-type, like Capitolias, remained to be founded long after the fall of the Seleucid Empire during the period of Roman rule. Other cities using the image, like Philadelphia, were founded by the Ptolemies of Egypt. The coin-minting cities that used the image of their Tyche triumphant over water-deities are not all extensively excavated. Most all of them, however, preserve artifacts of large scale hydraulic supply systems with architectural remains such as canals, tunnels, bridges, siphons and piping that carried fresh water from water sources to monumental public water installations such as fountains/*nymphaea*, *thermae*, and major cisterns. The symbolic imagery on the reverse of a *polis'* coins communicated a message about the cities' possession of a substantial water supply and the presence of water-associated amenities.

Evidence from the City Coins

In the second and third centuries CE, in the Roman provinces of Arabia and Syria-Palestina, there are two common depictions of Tyche interacting with a water-deity. The first and most common depiction is Tyche standing with her foot placed over a water-deity. This is a dynamic pose of active subjugation. This image was favored by the Transjordan cities, with ten cities minting such imagery on their coinage at some point¹⁸. Of the available specimens of such coins, Bostra was the first city in the Transjordan to utilize this image¹⁹. That coin has the bust of empress Faustina I (c. 140 CE) on the obverse, with Tyche and a crouching water-deity on the reverse (**fig. 2**). In contrast, there are only three Cisjordanian cities that utilize the image of Tyche standing with a foot suppressing a water-deity²⁰. The earliest specimen in the Cisjordan comes from the city of Nysa-Scythopolis sometime during the later lifetime of Faustina II (c. 163 CE)²¹.

The second, less active depiction of Tyche's triumph over water sources is with her sitting on a rock or *dias*, with her foot placed on a water-deity she has previously defeated (**fig. 3**).



Fig. 2: Bostra coin from the reign of Antoninus Pius showing Tyche standing, holding a spear, holding ears of barley (or resting l. hand on hip), and resting her foot on a swimming water-deity (RPC IV.3 [online] temp. no. [6701](#)). London, British Museum, number [1961,0313.1](#)



Fig. 3: Pella coin depicting Lucilla showing Tyche sitting on rock with foot resting on a water-deity (RPC IV.3 [online] temp. no. [6584](#)). London, British Museum, number [1931,0603.20](#)

¹⁸ Abila (e.g., Spijkerman 1978, 50 f. no. 1), Adraa (e.g., Spijkerman 1978, 62 f. no. 14), Bostra (e.g., Spijkerman 1978, 68 f. nos. 5–6), Canatha (e.g., Spijkerman 1978, 94 f. no. 10), Capitolias (e.g., Spijkerman 1978, 100 f. nos. 7–9), Dion (e.g., Spijkerman 1978, 118 f. nos. 4–5), Gadara (e.g., Spijkerman 1978, 138 f. nos. 42–43. 45), Gerasa (e.g., Spijkerman 1978, 160 f. nos. 9–12), Madaba (e.g., Spijkerman 1978, 184 f. no. 10), and Rabbath-Moba (e.g., Spijkerman 1978, 266 f. nos. 14–17). The coin references in this note and notes 20 and 22 are representative and not an exhaustive list of specimens.

¹⁹ Spijkerman 1978, 70 f. no. 11.

²⁰ Eleutheropolis (e.g., RPC VI [online] temp. nos. [9131](#), [9132](#)), Gaba (e.g., RPC IV.3 [online] temp. nos. [4130](#), [4132](#), [4133](#)), and Nysa-Scythopolis (e.g., Spijkerman 1978, 190 f. no. 10). (Antipatris [RPC VI [online] temp. no. [8987](#)] and Caesarea Maritima [RPC III no. [3954](#)] depict a water-deity below Tyche, but without her foot on them).

²¹ Spijkerman 1978, 190 f. no. 10.





Map 2: A map of cities that use the image of Tyche subjugating a water-deity



This image is also favored by the Transjordan cities, with five out of six occurrences in the assemblages of coin-minting cities east of the Jordan River²². A total of nineteen different Arabian and Syria-Palaestina cities used the two images of Tyche subjugating a water-deity (**map 2**).

Depictions of Tyche standing upon water-deities or seated using them as a footstool are both a symbolic portrayal of Tyche's triumph. The subjugation of a water-deity beneath a foot suggests a less than amicable relationship. The city leaders choosing such images proclaimed that Tyche had tamed a previously wild and free water spirit for their cities. If the very ancient symbolism of treading on enemies seen in ancient depictions in Egypt and Mesopotamia and mentioned in biblical texts that describe subjugation of enemies in the Levant (Joshua 10:24, Psalm 110:1) is doubted, the presence of Nike reaching out or flying to crown Tyche with vegetative wreaths is a further celebration of her victory (**fig. 4**). This symbol of victory is variously seen on triumphant Tyche coin issues from the Decapolis cities of Abila, Canatha, Dion, Gadara, and Nysa-Scythopolis²³.

With a concentration of victorious Tyche over water-deities minted on city-coins in Transjordan cities, and especially in the north where the Decapolis cities were centered, the natural question is »Why?« What factor(s) contributed to the Transjordan cities choosing to put a victorious Tyche over a water-deity on the reverse of their coinage? Lichtenberger and Raja propose in the case of Gerasa that »the citizens of Gerasa chose this type in order to visualize the geographically favored position of the city directly at the Chrysorrhoeas«²⁴. While this could be the case, for Gerasa, it does not account for the adoption of the image, for hilltop cities like Gadara and Capitolias that were not directly situated on perennial waterways.



Fig. 4: Abila coin from the reign of Marcus Aurelius showing Tyche standing on a water-deity and being crowned by a flying Nike (RPC IV.3 [online] temp. no. [6504](#)) Hirsch, Auction 346 (2019-02-13) no. [2656](#)

Fresh Water Acquisition in Coin-Minting Cities in the Southern Levant

Access to and control of adequate supplies of fresh water have always been essential for urban life. Along the Mediterranean littoral, mountain ranges of the Southern Levant generate some relief rainfall as moisture-laden clouds from the Sea, blown east by the prevailing winds are pushed up over the heights. Porous limestone bedrock of the hills absorbs most rainfall and produces few perennially running waterways and no navigable rivers. Natural springs and wells supplied people with a comparative abundance of water for cities in Syria-Palestine as compared to Arabia. All of the coin-minting cities in the Cisjordan, with the exception of a few in the far southwest,

²² Canatha (e.g., Spijkerman 1978, 94 f. no. 15), Gadara (e.g., RPC VI [online] temporary no. [9265](#)), Gerasa (e.g., Spijkerman 1978, 160 f. nos. 11–12), Paneas (e.g., RPC VI [online] temp. no. [9182](#)), Pella (e.g., Spijkerman 1978, 212 f. nos. 5,7). Ptolemais is the only city west of the Jordan River that combined a seated Tyche with a foot on a water-deity (e.g., RPC III nos. [3911](#), [3911A](#)).

²³ See Spijkerman 1978, Abila (50–57 nos. 1, 26, 29), Canatha (95 no. 15), Dion (118–121 nos. 4, 5, 13), Gadara (138–148 nos. 42, 43, 45, 50, 65, 71), Nysa-Scythopolis (203 no. 49).

²⁴ Lichtenberger – Raja 2020a, 165.



surpass the 250 mm of precipitation required for semi-arid farming. Growing populations in coin-minting cities, however, required additional water resources and the arduous effort of drawing water from deep wells was supplanted by the construction of aqueducts like those described by Roman authors Vitruvius (1st century BCE, *De Architectura* [On Architecture], Book 8) and Frontinus (ca. 35–103 CE, *Roman Aqueducts*). Aqueducts of the Roman era Levant are seen at the Cisjordanian coin-minting cities of Aelia Capitolina (Jerusalem), Caesarea Maritima, Diospolis, Diocaesarea (Sepphoris), Dora, Eleutheropolis, Neapolis, Nicopolis, Nysa/Scythopolis, Sebaste (Samaria), and Tiberius²⁵.

Across the Jordan Rift Valley in the East there is some relief rainfall in the heights along the Rift but progressing eastward, as the elevation falls it is increasingly dry and not conducive to intensive agriculture. In the heights of Amman, Jordan (ancient Philadelphia) the average annual rainfall is 187 mm²⁶. In Jerash, Jordan (ancient Gerasa) the annual precipitation is 204 mm. In Bayt Ras, Jordan (ancient Capitolias), the average annual rainfall is 205 mm²⁷. There is little reason to believe that the overall climate of the region today is significantly different from what it was in the second and third century CE. Therefore, in order for the urban centers of Arabia and Syria-Palestine to initially attain their stature as a *polis* and to provide for a significant population they had to have some natural perennial water sources. As long as settlements were modest in size, wells, local springs, and domestic cisterns that collected winter rainwater from roofs and slopes were sufficient sources. When cities like Gadara, Hippos, and Capitolias were founded on water-poor, strategic heights and urban populations increased, enhanced water acquisition systems were essential²⁸. By the second century many Levantine cities constructed large-scale water systems that augmented the naturally available local water sources. Cities of the northern Transjordan often benefitted from local water tun-

nels cut through the soft limestone bedrock diverting water from nearby springs at higher elevations. Inscriptions that identify the funders and overseers of such large scale hydraulic projects are unfortunately rare. The high level aqueduct at Caesarea Maritima funded by the Emperor Hadrian c. 130 CE and constructed by detachments of Roman legions provide such an example. That imperial funding of an aqueduct for a loyal city, and bastion of Roman power in the face of rising Jewish opposition to Roman rule was consistent with Hadrian's utilitarian benefactions. He initiated many such benefactions to promote provincial identification with Rome in many loyal cities around the Roman Empire²⁹.

The most ambitious regional aqueduct that has been tracked in the Transjordan in recent years is the traditionally identified Qanāt Fir'aun (Pharaoh's Canal). This Roman era project completed in the mid-second century in the time of the Antonine Emperors was supplied with water from multiple springs in the northern Nuqrah (ancient Batanaea). They collected in a dam at Eldili, Syria and delivered the captured water through one of the longest of all Roman era aqueducts to a terminus at Gadara³⁰. The cities along the course of this extensive central Decapolis water system that benefited from this particular aqueduct include Adra'a, Dion, and Abila (**map 3**). Other cities in the Transjordan that had their own major functioning aqueducts by the mid-third century CE include: Bostra, Caesarea Paneas, Canatha, Capitolias, Gerasa, Hippos-Sussita, Petra, and Philadelphia (see **table 1** for a com-

²⁵ See Amit – Patrich – Hirschfeld 2002.

²⁶ <https://en.climate-data.org/asia/jordan/amman/amman-6326/>

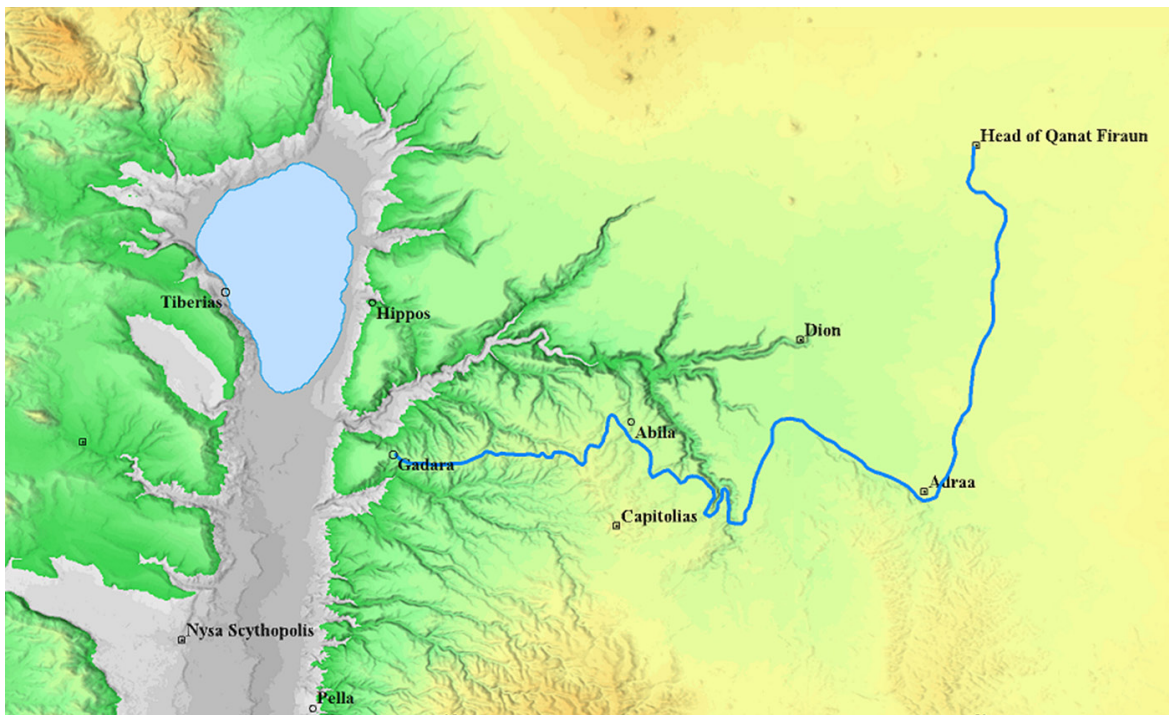
²⁷ <https://tcktcktck.org/jordan/irbid/bayt-ras>

²⁸ At Gadara and Hippos siphons had to be employed to get water from superior elevations up to the sites. In Capitolias an extensive local water catchment system helped to fill the largest municipal cistern in the region. See Lucke – Schmidt – Al-Saal – Bäumier 2008, 229.

²⁹ Boatwright 2017, 108.

³⁰ Döring 2009; Döring 2012; Döring 2017.





Map 3: General route of the Qanāt Fir'aun Aqueduct
(Drawn by authors using Bible Mapper5.0 employing information from Döring 2017)

Coin-Minting Cities	Aqueduct / Number / Romaq Identifier	Source
Abila	Y / 2 / #485, 486	Mare 1984
Adra'a	Y / - / #1137	Döring 2017
Bostra	Y / - / #864	Braemer et al. 2009, 41 f.; Kindler 1983, 20
Caesarea Paneas	Y / - / #598	Hartal 2002; Wilson 2004, 53
Canatha	Y / - / #1213	Braemer et al. 2009, 41 f.; Peuser 2000, 223–229
Capitolias	Y	Lenzen 1997
Charach-Moba		
Dion	Y / - / #1196	Döring 2017
Esbu		
Gadara	Y / 2 / #488	Döring 2017; Keilholz 2017; Zenz 2006
Gerasa	Y / 3 / #489	Boyer Forthcoming; Lepaon 2012; Passchier et al. 2021
Hippos-Sussita ³¹	Y / 2 / #325, 326	Kowalewska – Eisenberg 2017; Meshel et al. 1998
Madaba	Y	Hanson 2016, 297
Pella		
Petra	Y / 4 / #492	Bellwald 2008, 61; Ortloff 2005
Philadelphia	Y / - / #493	Hanson 2016, 771; Waheeb 1995
Philippopolis	Y	Hanson 2016, 298
Rabbath-Moba		

Table 1: Coin-Minting Cities in the Transjordan supplied water via an Aqueduct
(Cities in **bold** minted a coin with a water-deity in subjection to Tyche)

³¹ The case of Hippos' subjugation to Tyche will be discussed in a forthcoming article by the authors.



plete list of coin-minting cities of Transjordan that were supplied with water from aqueducts by the third-century CE.).

When substantial perennial fresh water access was acquired, city officials, like those in Rome, controlled private access and made it primarily available to the citizenry. This was done through the construction of various monumental water features such as fountains, *nymphaea*, and *thermae* (i.e., Bathhouses). While not every coin-minting city has been extensively excavated, studied, and the findings published, where data is available there

is a high degree of correspondence between a city that minted coins with an image of Tyche subjugating a water-deity and that city being able to distribute fresh water in monumental water amenities since its Tyche had 'enabled' the engineers and rock-cutters to capture a water source (see **table 2** for Transjordan coin-minting cities that had monumental water features. See **table 3** for monumental public water features in coin-minting cities of the Cisjordan [limited to cities with specimens of a water-deity subjugated to a standing or sitting Tyche on a coin])³².

Coin-Minting Cities	<i>Nymphaeum</i> / Fountains	<i>Thermae</i>	Cisterns	Source
Abila		Y		Smith ³³ ; Kowalewska 2021, 26
Adra'a		Y		Döring 2017; Kowalewska 2021, 35
Bostra	Y	Y	Y	Kowalewska 2021, 35
Caesarea Paneas	Y	Y		Kowalewska 2021, 22; Wilson 2004, 53
Canatha	Y	Y		Kowalewska 2021, 26; Peuser 2000, 223–229
Capitolias			Y	Lenzen 1997, 40
Charach-Moba				
Dion		Y		Kowalewska 2021, 26
Esbu				
Gadara	Y	Y		Keilholz 2017; Kowalewska 2021, 29; Zenz 2006
Gerasa	Y	Y	Y	Boyer Forthcoming; Kowalewska 2021, 29; Lepaon 2012; Passchier et al. 2021
Hippos-Sussita	Y	Y		Kowalewska 2021, 30; Kowalewska & Eisenberg 2017; Segal 2008
Madaba		Y		Hanson 2016, 297)
Pella		Y		(Kowalewska 2021, 32
Petra	Y	Y	Y	Kowalewska 2021, 41; Orloff 2005
Philadelphia	Y	Y		Hanson 2016, 771; Kowalewska 2021, 32; Waheeb 1995
Philippopolis		Y		Kowalewska 2021, 41
Rabbath-Moba				

Table 2: Monumental Public Water Features in Coin-Minting Cities in the Transjordan (Cities in **bold** minted a coin with a water-deity in subjection to Tyche)

³² Meyer 2022 makes an argument that the imagery of the river deity crawling as if emerging from the water and hair hanging down as if dripping wet suggests an image of flowing water.

³³ Smith 2018 reports the presence of a Late Roman bath

house based on the presence of slab *tubulae*, round *pilae* fragments, and an argillite-lined pool beneath later Byzantine ecclesiastical structures of Area E Pilgrimage Complex. A map showing the pool of the baths can be seen in Smith 2022, 6.



Coin-Minting cities	<i>Nymphaeum</i>	<i>Thermae</i>	Cisterns	Source
Antipatris				
Caesarea Maritima	Y	Y		Kowalewska 2021, 16
Eleutheropolis		Y	Y	Kowalewska 2021, 44; Sagiv – Zissu – Amit 2002
Gaba				
Nysa-Scythopolis		Y	Y	Hanson 2016, 781; Kowalewska 2021, 30
Ptolemais		Y		Mishnah Avodah Zarah 3:4

Table 3: Monumental Public Water Features in Coin-Minting Cities of the Cisjordan (limited to cities with specimens of a water-deity subjugated to a standing or sitting Tyche on a coin)

Conclusion

The preponderance of evidence from the Syro-Palestinian and Arabian provincial urban centers which minted coins in the second and third centuries CE is that cities featuring Tyche in triumph over water deities had constructed significant water supply systems by the time when the coins were struck. With the completion of canals and water tunnels that led from outlying springs and catchment basins, citizens could draw water from public wells that opened over an aqueduct as its waters flowed beneath the surface to a central terminus where perpetually flowing fountains supplied citizens with water to drink amongst architectural marvels. *Nymphaea* created moist, pleasant-sounding, numinous settings and baths really made provincial citizens or travelers feel like they were ›Romans‹. This was particularly remarkable in the arid environs of Syria-Palestine and Arabia. Civic leaders that included the image of Tyche standing or resting with her feet on water-deities claimed a superior status. They believed that their Tyche was to be worshipped, for providing plentiful water and highlighted her being on their coins.

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