
HISTORICAL AND BIBLICAL SURVEY ABOUT WATER SOURCE OF JERUSALEM

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(Received 19 February 2008)

Abstract

This study deals about hydro-geological and biblical aspects in Jerusalem water sources. I trust to confirm the verdicts of biblical texts concerning water spring Gihon, using scientific dates and the prophecies of Ezekiel from Old Jerusalem city. From present time I mention some efforts of Israel government to preserve and maintain the water sources in this biblical town. Not last, but least, I reveal the religious meaning of river of water life who flow in celestial Jerusalem, based on John's Revelation book and pictorial representations.

Keywords: water spring, Jerusalem, Ezekiel, Siloam, water of life

1. Introduction

In Jerusalem, as is the case anywhere in the world, water means survival and it means life. That fact becomes clear in Jerusalem, more so, it seems, than in other places, because the city is situated on the edge of a desert and the land is often without water. Water, therefore, takes on special significance in Jerusalem; in fact, its presence is intimately connected with the history of the city.

2. Water system in Old Jerusalem

A study of Jerusalem's water systems must begin at the spring Gihon. The spring is located in the Kidron Valley, east of ancient Mount Zion, and still brings up its water today. Not only did the spring Gihon supply water to the inhabitants of Jerusalem — either directly from its mouth or through its adjoining tunnels and Warren's Shaft — but it also supplied water for the irrigation of crops in the Kidron Valley and at the southern end of Mount Zion.

The huge Spring of Siloam (Gihon) was blocked somewhere near the source and the water diverted up the chimney-like channel where it could join the horizontal tunnel, taking the water to the temple area where Simon appeared. The huge spring that poured out tons of water every minute was a siphon spring. Only about 2% of all the springs of the world are siphon springs to varying degrees. In these cases there is somewhere upstream a subterranean cavern and it is connected downstream by a 'pipe' or crack that is roughly an upside-down U shape (Figure 1). The water feeds into the cavern slowly. Once the water level

reaches the top of the upside-down U, the water is siphoned out of the cavern until it reaches the inlet that breaks the suction. Gushers, like the Spring of Siloam at Zion, are related to siphon springs and are not restricted in the extent of their flow to the immediately surrounding sea level.

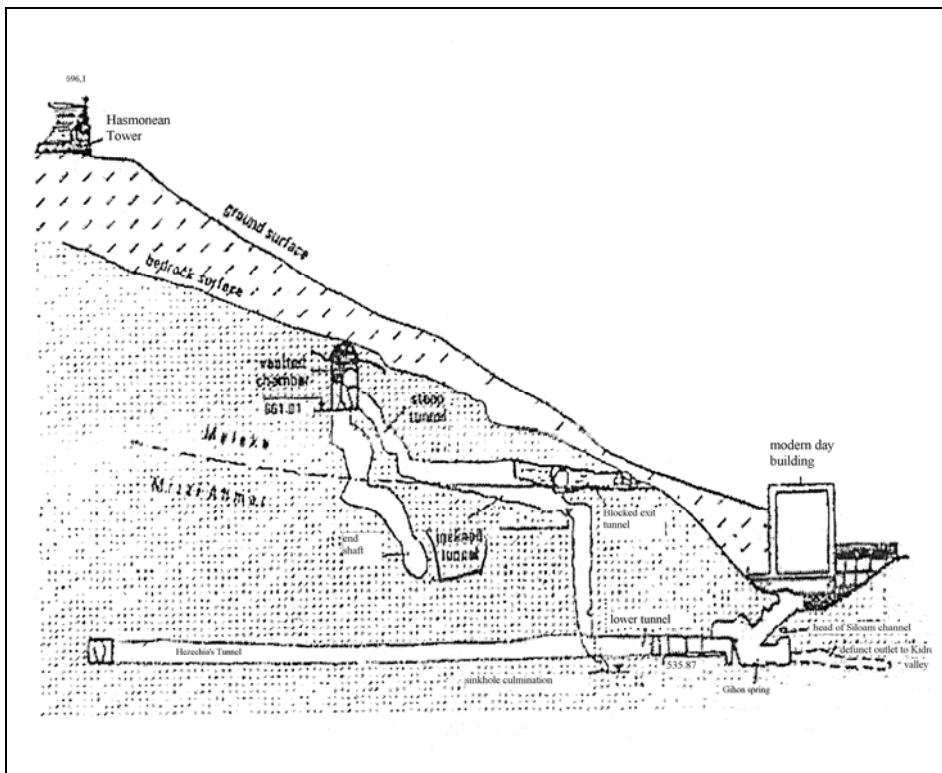


Figure 1. Gihon spring and tunnel system (section view).

To be able to force water to the top of the ridge, there would have to be an airtight, watertight system, *as there obviously is for a siphon spring*. Aristeas, in the 4th century B.C. described an inexhaustible (ανεκλειπτο) spring water system in the City of David that could never have depended on rain water cisterns, such as those under the Haran. He said it was under the temple and that it was indescribably (αδιηγητων) well developed, with lead-lined, plastered cisterns, and countless pipes. Running water could be heard underground even from the surface, directing water to the various places the city needed. Tacitus (Histories. 5.12) [1] and Isaiah (33.16-21) also recognized this water system. It was this water system that made the City of David like a perfect place for the temple. This means that the temple was never up north on that Haran that depended on cisterns for water. It belonged to this little City of David [2].

It was adjacent to this spring, to the west, that the Canaanite tribe of the Jebusites, prior to the time of David, had settled and built their stronghold. The spring not only provided the Jebusites with a reliable source of water in times of peace but also in times of warfare.

In the 11th Century B.C., after David had ruled as king in Israel for six years, he chose to move his capital from Hebron to the Jebusite city of Jerusalem. Several factors influenced his decision: Jerusalem, of course, had a reliable source of water, the Gihon; moving the capital to centrally-located Jerusalem would serve to unite the scattered tribes of Israel without fueling any petty jealousies among them; and finally, the capital's location in the territory of Benjamin would serve to appease that tribe which had supported the former king, one of their own, King Saul.

In 1004 B.C. David attacked Jerusalem, using the spring Gihon to do so. Apparently, the presence of the spring and its connecting tunnels and shaft were not a secret to those outside the city, at least not to the Israelites. David ordered a surprise attack through this "water shaft" (2 Samuel 5.8): *"On that day, David said, 'Anyone who conquers the Jebusites will have to use the water shaft to reach those 'lame and blind' who are David's enemies.' That is why they say, 'The 'blind and lame' will not enter the palace.'"*

It is more likely that the shaft was constructed originally to bring water up to the city by force. This shaft was known as the water channel (*tsee-nohr*, צְנוּר) (2 Samuel 5.8) at the time that David took the city [3]. A water channel is normally designed and used to allow water to flow from one place to another. There was no water up on the ridge to flow down to the spring, so the water must have flowed upward from the spring to the top of the ridge, where it poured out the way Aristeeas and the temple scroll testified [4]. It evidently had to be possible, because Josephus said that was the precise spot where the temple had been before it was destroyed [5] (War V.4.1.), and Aristeeas claimed to have seen the water flowing up on the temple level.

It was Joab, the Bible tells us, who, at the Gihon in the Kidron Valley, entered the horizontal tunnel that took the spring's waters toward the city. He followed the tunnel to what is known today as Warren's Shaft (named after Charles Warren, who discovered it in 1867) [6].

The text says that David conquered the town by approaching through the water channel (*wuh yee-gáh buh tsee-nóhr*). If the water was running at full speed, that would have seemed impossible. David's team probably had to break into the channel and turn away the water first. If they diverted the water, they could have climbed up the shaft — still with difficulty — but they also would have cut off the water supply for the city at the same time, forcing the Jebusites to surrender. Having scaled the shaft Joab entered the city and was instrumental in the overthrow of the Jebusites and in Israel's taking Jerusalem.

2.1. Hezekiah's tunnel

Three hundred years later, in 701 BC, King Hezekiah cut a tunnel down to the Spring. He dug it to supply water during an Assyrian siege.

The Chronicler said Hezekiah built that tunnel as part of his defence system against the Assyrians. He stopped up the water of the spring that was outside of the city (2 Chronicles 32.2-4): *"When Hezekiah saw that Sennacherib had come and that he intended to make war on Jerusalem, he consulted with his officials and military staff about blocking off the water from the springs outside the city, and they helped him. A large force of men assembled, and they blocked all the springs and the stream that flowed through the land. "Why should the kings of Assyria come and find plenty of water?" they said."*

2 Kings 20.20: *"As for the other events of Hezekiah's reign, all his achievements and how he made the pool and the tunnel by which he brought water into the city, are they not written in the book of the annals of the kings of Judah?"*; Isaiah 22.9, 11: *"You saw that the City of David had many breaches in its defenses; you stored up water in the Lower Pool... You built a reservoir between the two walls for the water of the Old Pool, but you did not look to the One who made it, or have regard for the One who planned it long ago"*.

He must have built the tunnel to prevent the run-off from existing. This would have involved a system whereby part of the spring could still fill the water channel and provide all the needed water in the city, but the rest would have been channelled through the tunnel to the Pool of Siloam (Figure 2). Victor Sasson thought the Pool of Siloam would have had a roof over it so that no one outside of the city would have known that it existed [7].

If Hezekiah's tunnel were non-existent or dammed up, that water would be forced to rise up and fill that shaft and run through the tunnel to appear in the temple area. This is evidently the way it happened, and Josephus' testimony tells exactly where the temple was. This channel was a huge tube through which water could be channelled from the spring to the temple, just as Aristeas and the temple scroll testify. If there had been a rope ladder at the east end of the tunnel, and the water had been turned off, Simon - one of the messianic rebels - could probably have escaped through the spring. The fact that he confronted the Romans from the west end of the tunnel means that he had no other exit.

Hezekiah's tunnel is an amazing piece of engineering. It lurches about, piercing hard rock and missing softer stuff - adding needless excavation. Hezekiah, after all, worked under the stress of a siege.



Figure 2. Hezekiah's tunnel (view from pool of Siloam).

2.2. The Siloam channel

To control the flow of the waters to the valley, a channel called the Siloam Channel was constructed, most likely by King Solomon [8]. The channel ran from the spring Gihon south, along the eastern slope of Mount Zion. Small dams near Gihon directed its waters either toward Warren's Shaft or south through the channel [9].

An inscription adds to the problem (Figure 3). In the year 1880, a Hebrew inscription, six lines long was discovered in the tunnel. The inscription described how two teams of miners starting at opposite ends dug toward each other and met in the middle. The inscription, which was once longer, was removed to the Ottoman Museum in Istanbul, Turkey.

It tells how workers tunneled from opposite directions: *“And this was how the tunneling was completed: As [the laborers employed] their picks, each crew toward the other, and while there were still three cubits remaining, the voices of the men calling out to each other [could be heard], since it got louder on the right [and left]. The day the opening was made, the stone-cutters hacked toward each other, pick against pick. And the water flowed from the source to the pool [twel]ve hundred cubits, (despite the fact that) the height of the rock above the stone-cutters' heads was one hundred cubits.”* [10]



Figure 3. Siloam inscription.



Figure 4. The location of the Siloam inscription.

The tunnel is in S-shaped, followed a natural crack in the rock. The two crews of diggers followed a natural karstic dissolution channel [11].

Hezekiah's tunnel does not flow north, but it had been constructed before Ezekiel's time. The holy mountain was obviously Mount Ophel, located just above the Spring of Siloam. This is the location which Josephus pinpointed — 600 feet south of the Roman city of Antonia and right at the western end of the water tunnel [5] (*War VI.1*) (Figure 4). It is also the location of which Ezekiel spoke, where the stream that flowed underneath the mountain also flowed

underneath the temple near Siloam: *“The man brought me back to the entrance of the temple, and I saw water coming out from under the threshold of the temple toward the east (for the temple faced east). The water was coming down from under the south side of the temple, south of the altar. He then brought me out through the north gate and led me around the outside to the outer gate facing east, and the water was flowing from the south side. As the man went eastward with a measuring line in his hand, he measured off a thousand cubits and then led me through water that was ankle-deep. He measured off another thousand cubits and led me through water that was knee-deep. He measured off another thousand and led me through water that was up to the waist. He measured off another thousand, but now it was a river that I could not cross, because the water had risen and was deep enough to swim in a river that no one could cross. He asked me, “Son of man, do you see this?” Then he led me back to the bank of the river” (Ezekiel 7.1-6).*

The topography and geography of Ezekiel’s vision fit perfectly, once it is recognized that the temple was closely associated with the Spring of Siloam that provided all of that water. He would not have pictured a temple high on the dry hill north of the spring where there would have been no water to flow down to the Dead Sea. Enoch also claimed to have seen the holy mountain with a stream that flowed underneath that mountain toward the south (1 Enoch 26.2–3). There is no such stream flowing underneath the platform of the Al Aqsa Mosque and the Dome of the Rock. All Warren could find was a sewage drain down the Tyropoeon Valley, but no water running into the Dome of the Rock area [9, p. 352].

2.3. Pools in Jerusalem

During King Herod’s time (37-4 BC) some 15 pools and reservoirs were excavated to collect rainwater, aqueduct water and floodwater within and in the vicinity of the actual walls of the Old City.

We present the most important pools:

1. Upper Pool from the First Temple, located in the Old City;
2. Birket El Hamra, known also as the Siloam Pool, which is supplied by the Gihon Spring;
3. Miriam Pool, from the Second Temple, with unknown place today;
4. Sultan’s Pool, from Herodian period, located in the Ben Hinom Valley;
5. Mammilla Pool, from Herodian period, located in the upper Ben Hinom Valley, fed by floodwater and by the Upper Aqueduct;
6. Israel Pool from Herodian period, placed in the Old City;
7. Amegdalon Pool, from Herodian period, known also as The Tower or the
8. Hezekiah Pool, situated in the Old City;
9. Hesterotion Pool, from Herodian period, discovered in the 19th century [12].

We have also the Serpent Pool, outside of the city on its southwest corner; the Tower Pool, on the western hill near the three towers built by Herod the Great, and the Sheep Pool to the north of the Temple near the site of the Fortress Antonia.

It is this last - the Sheep Pool (or 'Bethesda' in Aramaic) — which is probably the most familiar to Bible students. It was here that Jesus healed the man who had been an invalid for 38 years: "*There is in Jerusalem near the Sheep Gate a pool, which in Aramaic is called Bethesda and which is surrounded by five covered colonnades. Here a great number of disabled people used to lie - the blind, the lame, the paralyzed. One who was there had been an invalid for thirty-eight years*" (John 5.2, 3, 5).

Since the time of the Second Temple (2nd century BC), water was imported to Jerusalem mainly by an aqueduct system.

The Lower Aqueduct was built during Hasmonean rule at the time of the Second Temple. This aqueduct, who imported water from Ein Eitam springs to the Temple Mount was in operation up to the end of the Ottoman rule and was repaired many times during its history. The 'Solomon's pools' are fed by floods, nearby springs, as well as by the two aqueducts (Biyar and Arruba) which carry water from springs located south of the pools.

The Upper Aqueduct was built by King Herod and was rebuilt 200 years later by the Roman Tenth Legion, using a ceramic pipe acting as a siphon.

The few scriptural reports of that stream imply that it was continuous as Ezekiel said. He also pictured fruit trees in the Kidron Valley near the river, producing fruit every month of the year, implying that the stream would be flowing continuously.

Before Passover, Jesus came to the Kidron Valley, looking for a sign to tell him whether or not the new age had begun. The place he looked for guidance was the Scripture. Ezekiel was the reliable prophet who had told how things would be in the new age, after the Babylonian exiles returned. There would be fruit in the Kidron Valley every month of the year. Every season would be the season for figs, so Jesus, following the clues given by Ezekiel, went to the Kidron Valley to see if there was ripe fruit. There was not, so he cursed the fig tree for not having ripe fruit out of season, and acted accordingly: "*Early in the morning, as he was on his way back to the city, he was hungry. Seeing a fig tree by the road, he went up to it but found nothing on it except leaves. Then he said to it, "May you never bear fruit again!" Immediately the tree withered*" (Matthew 21.18, 19).

The Siloam pool, whose present small dimensions date from Byzantine times, is the outlet for the spring water coursing through the ancient Hezekiah's tunnel. In Jesus time Siloam pool was recognized also from therapeutically of diseases. Gospel of John confirms this fact: "*As he went along, he saw a man blind from birth... He spit on the ground, made some mud with the saliva, and put it on the man's eyes. "Go," he told him, "wash in the Pool of Siloam" (this word means Sent). So the man went and washed, and came home seeing*" (John 9.1, 6-7).

3. Modern adduction water in Jerusalem

Ezekiel 47 described the water from the Spring of Siloam flowing out from under the threshold of the temple, flowing down the Kidron Valley to the Dead Sea. During the last fifty years many springs and wells have dried up. The Jordan River those fifty years above became a mile wide during flood season every year has been reduced to a trickle.

Israel has constructed a huge pipe that drains the water out of the Sea of Galilee and conducts it to the Negev so that the water that formerly flowed down the Jordan River is no longer available either for the wells of the Dead Sea.

The expansion of modern Jerusalem in recent years, which includes water supply to all parts of the city, sewage treatment and purification, has set new challenges for the engineers. Today the Kidron Valley is usually dry, but we do not know how wide or deep the water was that charged down the streambed that runs though Wadi Qumran in Ezekiel's day.



Figure 5. Karstic fractures filled with red-brown soil, at the entrance to Jerusalem.

The Gilo project of tunnels and a viaduct connecting them, as part of Road No. 60, giving access to Gush Ezion south of Jerusalem, are a good example of the procedures followed during the various stages of a major civil engineering project. The Gilo project consists of two tunnels and a viaduct. Excavation of the short tunnel began in July 1992 and was completed in March 1993. Excavation of the long tunnel began in September 1993 and was completed in May 1995.

The Mount Scopus tunnel provides an example of tunneling in a different rock type (Figure 5). The tunnel is excavated through the N-S trending ridge between Mount Scopus and the Mount of Olives. The ridge ranges in elevation from 750 to 840 m above Mediterranean Sea level. The tunnel site is located

between the Mount Scopus University Campus and the Augusta Victoria Hospital [13].

4. Celestial Jerusalem sources of water

The most controversial and mysterious building, the Temple at Jerusalem, founded by King Solomon in the tenth century BC, have been destroyed by the armies of Babylon in 587 BC and rebuilt by the Jews who returned to Jerusalem after the captivity. King Herod replaced it with a new, larger temple a few years before the birth of Christ. This magnificent structure took many years to be build, and it has not long been completed in 70 AD when it was demolished by the Romans.

For the Jews, the necessity of undertaking that task as soon as possible is emphasized by the stern dictum that “a generation that does not rebuild the Temple is judged as if it had destroyed it”. The good news, completely changing the situation, fulfilling every religious duty and delightful to every inhabitant and lover of Jerusalem, is that the peaceful restoration of the Temple is now actually in process. The return of the Jews to the Holy Land has also mystical reasons, and these are the deepest and most compelling.

4.1. New Jerusalem - City of life

A constant theme in Biblical prophecy is that one day the Temple will be seen once more, greater and more splendid than any that preceded it. It is not only the Jews who long to see the Temple at Jerusalem restored. Christians have inherited that aspiration with the Old Testament, and it has been the declared purpose of many western idealists and esoteric movements. The crusading Templar and the Knights of St John were dedicated to rebuilding Solomon's Temple. In the days of Solomon and while the Temple was still intact, the tribes of Israel were prosperous and high-spirited and lived harmoniously in a state of perfect order. All this was a product of the Temple and the cycle of rituals performed in and around it. When the Temple was destroyed, they say, the world fell into disorder and nothing has ever gone right since.

The importance of the Temple's plan is emphasized by the prophets of Israel. Ezekiel goes into it in great detail, giving the dimensions of its various parts as imparted to him by an angel with a measuring rod. “*Thou son of man*”, he exclaims, “*show the house to the house of Israel, that they may be ashamed of their iniquities: and let them measure the pattern*” (Ezekiel 44.6). A similar angel, also with a measuring rod, appeared to St John in Revelation, 11, and told him to “rise and measure the temple of God, and the altar, and them that worship there in” (Revelation 11.1). The object of his measuring was the celestial Jerusalem, that pattern in the heavens which he saw descending to Earth.

This is the temple of prophecy, as foreseen by the Biblical sages. Ezekiel in his detailed description of the Temple's dimensions uses two different scales of measure, the cubit and the rod of six cubits, implying the 1 to 6 ratio between the actual building and the greater temple over the city. Isaiah makes it plain that the future Temple will not belong only to one people but will admit the “*sons of the stranger*”, and he writes: “*For my house shall be a house of prayer for all people*” (Isaiah 56.7). St John in his vision of the heavenly city sees that the New Jerusalem is not focused upon any particular building (Figure 6). Inhabited by the Holy Spirit, the city itself will be itself the temple. In Revelation, 22, he says: “*Then the angel showed me the river of the water of life, bright as crystal, flowing from the throne of God and of the Lamb through the middle of the street of the city; also, on either side of the river, the tree of life with its twelve kinds of fruit, yielding its fruit each month. The leaves of the tree were for the healing of the nations. No longer will there be anything accursed, but the throne of God and of the Lamb will be in it, and his servants will worship him*” (Revelation 22.1-3).



Figure 6. The New Jerusalem with river and tree of life from Voronet monastery (Last Judgment, detail).

St. John leaves us with a concluding vision, a hopeful picture of the destiny that lies ahead. It is a vision of Heaven – or rather, of a new Heaven and a new Earth (21:1) – but rather than our being caught up to where God dwells, John's image has God coming down to dwell with us (21.3), and the focal point of his residence is “*the holy city, new Jerusalem*” (21.2).

The theme of *life (blessing)* forms an overarching motif throughout chapters 21-22, flowing as a natural counterpoint to the theme of *death (judgment)* which culminates in chapter 20 with a description of the second death. Since chapter 21 concludes with an explicit reference to a *book of life*, it should not surprise us to find John unpacking the *character* of that life in the

verses that follow. Specifically, we desire to highlight the biblical-theological development of three controlling life images in Revelation 22.1-3: the *tree of life*, growing beside the *water of life*, in the midst of the *city of life*.

4.2. *The tree of life*

The explicit phrase “tree of life” (22.2) drives us naturally back to the Garden of Eden. Then we are told of two specific trees (archetypes, perhaps) – the tree of life, and the tree of knowledge of good and evil. After Eden, explicit ‘*tree of life*’ language virtually disappears from Scripture until it mysteriously reappears in Revelation, the final book of the New Testament. Interestingly, the imagery does reappear briefly in Proverbs of all places. Wisdom is called “*a tree of life to those who lay hold of her*” (Proverbs 3.18); the “*fruit of the righteous*” (Proverbs 11.30); “*a desire fulfilled*” in contrast to “*hope deferred*” (Proverbs 13.12); a gentle tongue (Proverbs 15.4). In short, the tree of life epitomizes blessing, paradise and fulfillment – everything that is good and desirable in ‘*wisdom*’ [14].

The tree of life represents the promised reward for obedience, and the vision in Revelation represents a reversal of the first curse: “No longer will there be anything accursed” (Revelation 22.3). As such, the tree of life in the New Testament represents at the very least a return to Eden (if not much more) – the curse will be undone, and God will once again dwell with man [15]. The Revelation's tree of life imagery has its roots in creation. But, what do we make of the counterpart life images – the water of life, in the city of life?

For instance, the creation account itself is full of ‘water’ imagery: the story begins with the Spirit of God hovering over the waters (Genesis 1.2). In Ancient Near Eastern cosmology, we see two constant water related threats: the chaos of water unrestrained, the calamity of water lacking altogether. God deals with both of these threats in creation. First he separates the waters above and below the Earth; he makes a space for dry land to appear (Genesis 1.7-10).

Then he ensures that what he has created will be able to be fruitful and multiply; he provides a mist (or spring) to water the Earth (Genesis 2.5, 6). Here, then, is the first ‘water of life’. Immediately following this explanation, we learn that Yahweh has planted a garden (which requires even more water), and in the midst of this garden grow the two principal trees (Genesis 1.9). So we have the original river of life, watering the garden as a whole, but especially the trees of life and knowledge.

The connection with *city of life* is admittedly the most obscure. We may note that one of the rivers flowing from the garden is the Gihon; some scholars of Jewish interpretation have found a connection between this and the spring named Gihon on the temple mount in Jerusalem (1 Kings 1.33, 38, 45; 2 Chronicles 32.30; 34.14).

We see that the tree itself is the means of judgment: as the fiery serpent is to be set upon a pole in the desert (Numbers 21.8, 9), even so Christ himself would be lifted up upon a tree (John 3.14, Acts 5.30) (Figure 7).



(a)

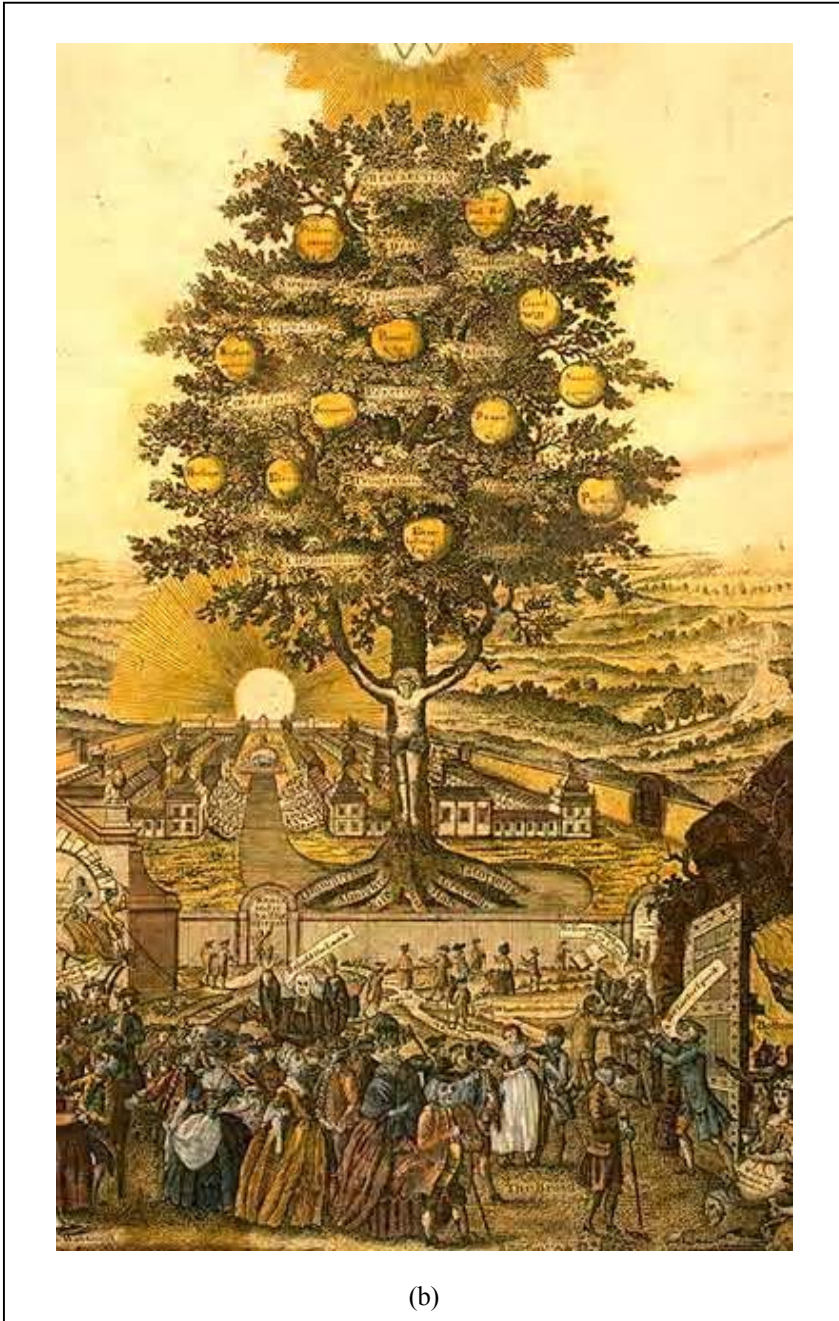


Figure 7. Christ crucifixion with tree of life in background (icon ‘Jesus the tree of life’ from Stavropoleos museum Monastery) (a); Christ – the tree of life in heavenly Jerusalem (hand-coloured engraving printed for John Hagerty, 1791, found in Maryland Historical Society Library, Baltimore, Maryland) (b).

The point in all of this is that any tree is ultimately meant to be a sign of life, a little pointer to the ultimate ‘tree of life’. The imagery here is not so much tied to the tree itself, as to its shade, healing, fruit, bounty; consequently, we can expand the metaphor to include references to gardens, vines, oases in the desert. Scripture consistently paints mankind as seeking ‘a land flowing with milk and honey’, fertile, well watered, land, a place where peace and prosperity abound. This is a picture of the Promised Land (Genesis 13.10).

4.3. The water of life

Egypt and Assyria (and Babylon) have counterfeit rivers of life. In Jeremiah, the prophet challenges the people: “*What do you gain by going to Egypt to drink the waters of the Nile? Or what do you gain by going to Assyria to drink the waters of the Euphrates?*” (Jeremiah 2.18) Both of these rivers formed the lifeblood of these ancient superpowers. Later, when the nation of Israel looks to these countries for deliverance, God will accuse them of drinking from a false river of life. We see this clearly in the preceding verses of the passage from Jeremiah: “*My people have committed two evils: they have forsaken me, the fountain of living waters, and hewed out cisterns for themselves, broken cisterns that can hold no water*” (Jeremiah 2.13). Clearly, God is portraying himself as the water of life. Dr. Pete Enns said about the fight between the Eternal God and deities of Egypt, specially with Nil: “An attack on the Nile was nothing less than an attack on Egypt itself... The waters of the Nile will no longer bring security and prosperity to Egypt; they will rather be the cause of Egypt's destruction. The Nile was personified and worshiped as a god in Egypt. An attack on the Nile is in effect an attack on Egypt's gods, and hence, reflects the conflict that drives the Exodus narrative as a whole... The attack on the Nile is the attack of the true God on false ones” [16]. Enns summarizes once again: “Moses' safe passage through the waters of the Nile not only looks backward to the Flood story, but forward to the passage through the sea in Exodus 14 for all God's people” [16, p. 62]. It is also worth noting that Miriam's song points forward to Zion (city of life theme): “*You will bring them in and plant them on your own mountain, the place, O Lord, which you have made for your abode, the sanctuary, O Lord, which your hands have established*” (Exodus 15.17).

Of course, before the people can enter the Promised Land, they first need to cross the desert (the antithesis of Eden). We see the challenge immediately: the newly created people need water or they will quickly perish. God responds by sending forth water from a rock, a virtual river of life to sustain the entire nation (Exodus 17.6, Numbers 20.8-12). Water of life, then, flowing from the rock is God's answer, a sign that the God of heaven is indeed present in their midst on Earth. This connects beautifully with the New Testament images of Emmanuel, “God with us” (Matthew 1.23) in the person of Christ, and of the New Jerusalem coming down from Heaven to Earth in Revelation 21. It is also worth noting that once again, this ‘water of life’ comes with a price: it is the

‘water of death’ for Moses: he will not be allowed to enter the Promised Land, because the rock was struck (Numbers 20.12). Note the prevalence of water language here, there seems to be a clear connection between the Exodus and the image of the Garden of Eden, watered by the river of life. So, Deuteronomy 6.10, 11 summarizes what he is about to do: *"And when the LORD your God brings you into the land that he swore to your fathers, to Abraham, to Isaac, and to Jacob, to give you - with great and good cities that you did not build, and houses full of all good things that you did not fill, and cisterns that you did not dig, and vineyards and olive trees that you did not plant- and when you eat and are full"*.

Here we see all three elements in which we are interested: God is bringing Israel into a land filled with cities, cisterns (water), and vineyards and olive trees (trees). Most significantly, *they* are not the source of the bounty – God is! The Promised Land described here is a vision of Paradise regained. Nehemiah summarizes what these things point to: *"So they ate and were filled and became fat and delighted themselves in your [God's] great goodness"* (Nehemiah 9.25). Cities of life, trees of life, water of life – all point to the magnificent providence of God, enjoyed in safety and abundance. There are additional connections to river of life imagery in the Psalms. God blesses his children: *"...you give them drink from the river of your delights. For with you is the fountain of life; in your light do we see light"* (Psalms 36.8, 9). Also Psalm 46 reveal: *"There is a river whose streams make glad the city of God, the holy habitation of the Most High."* (Psalms 46.4) Here we see Zion taking on Edenic characteristics – it is the holy hill where God dwells, the source of a river of life which brings blessedness. Other passages reinforce this connection: Psalm 65 tells us *"the river of God is full of water"* (Psalms 65.9); the psalm is filled with praise to God who dwells in Zion (Psalms 65.1), where the people are blessed to be near his dwelling place, the temple (Psalms 65.4). God himself is the rock from which the river of life flows (Psalms 78.35). We see all three facets (tree, water, city) clearly in verses 33-36: *"He turns rivers into a desert, springs of water into thirsty ground, a fruitful land into a salty waste, because of the evil of its inhabitants. He turns a desert into pools of water, a parched land into springs of water. And there he lets the hungry dwell, and they establish a city to live in; they sow fields and plant vineyards and get a fruitful yield"*.

Most significantly, however, the Spirit of Lord is clearly identified as the water of life which will quench his people's true thirst, by circumcising their hearts of stone, turning them into hearts of flesh that desire to keep God's Law. Let's hear Ezekiel 35.25-30: *"I will sprinkle clean water on you, and you shall be clean from all your uncleannesses, and from all your idols I will cleanse you. And I will give you a new heart, and a new spirit I will put within you. And I will remove the heart of stone from your flesh and give you a heart of flesh. And I will put my Spirit within you, and cause you to walk in my statutes and be careful to obey my rules. You shall dwell in the land that I gave to your fathers, and you shall be my people, and I will be your God. And I will deliver you from all your uncleannesses. And I will summon the grain and make it abundant and*

lay no famine upon you. I will make the fruit of the tree and the increase of the field abundant, that you may never again suffer the disgrace of famine among the nations”.

Here is the fullest expression of life imagery we have seen thus far – images of sprinkling clean water (water of life), cleansing from uncleanness, resulting in fruitful abundance; the people dwelling again in the Promised Land, at peace with God; elevated once more over the nations (like a cedar); cities (and the ultimate city) restored, like the Garden of Eden.

Here at last, we see unmistakable connections to the river of life flowing from the throne in Revelation 22.1-3 (Figure 8).

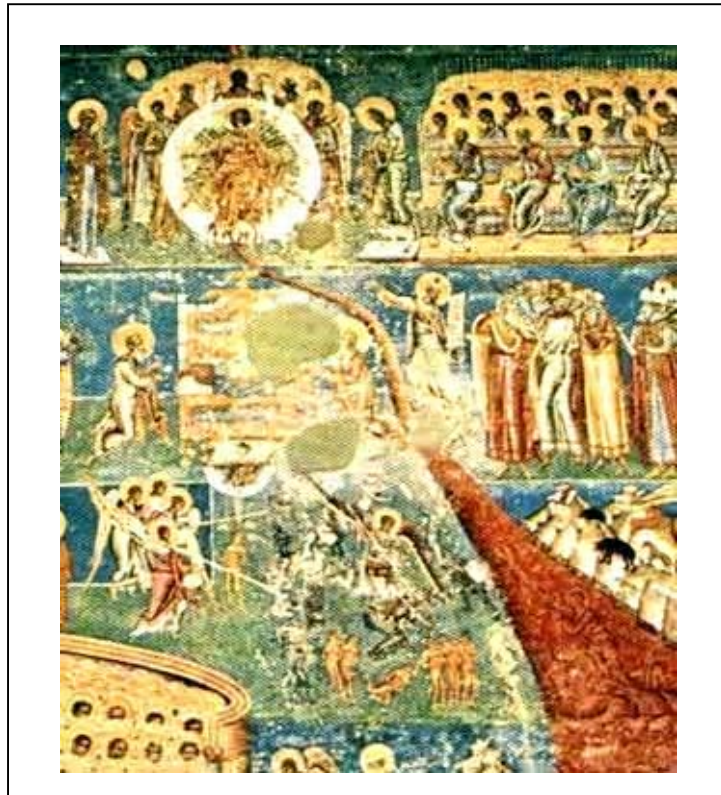


Figure 8. The river of fire flowing from the throne, powered the saints and burns the sinners (The Last judgment detail, Voronet monastery).

There are some discontinuities however. First, there is not one Tree of Life (growing on both sides of the river!), but rather many little ‘trees of life’ (but note the similar verbiage: they too grow on both sides of the river; their leaves are also for healing) [17]. Second, the heavenly city in Revelation 21 has no temple (Revelation 21.22); in Ezekiel, the vision is all about the new temple. So we see that John's vision in Revelation is not mere repetition of Ezekiel's

vision – he develops the metaphor and drives it forward. Nevertheless, John shows undeniable continuity with Ezekiel [18].

The watershed event, of course, is the coming of Christ. In John 4, Christ offers the woman at the well living water: “*Everyone who drinks of this water [from Jacob's well] will be thirsty again, but whoever drinks of the water that I will give him will never be thirsty forever. The water that I give him will become in him a spring of water welling up to eternal life.*” (John 4.13, 14) Jesus is portraying himself as the source of the living water – to repent and believe in him is to drink and be ultimately satisfied [19]. This happens by Christ coming and dwelling in the heart of the believer, through the Holy Spirit (Revelation 3.20). All of this is only possible because of the greatest reversal of all – Christ is crucified on a tree of death; the water of his life flows from his side upon the cross; all this happens outside the city. In this he becomes the ultimate suffering servant, bearing our judgment that we might receive his life [20].

Scripture, however, tells us that there is another reality – that everything *good* in this physical reality (cities, trees, rivers, fathers, mothers, brothers, kings) is actually pointing us towards something far greater in a corresponding spiritual reality. That spiritual reality has already been inaugurated by the death and resurrection of Jesus.

5. Conclusions

The biblical messages about water in Jerusalem have both temporal and mystic perspectives. In history, the habitants of Holy Land valorized all spring waters, making tunnels and channels (like Hezekiah and Siloam), aqueducts and pools. Where is found water flowing on ground, are also found tree plantations and important cities. Using the spring siphon of Gison, Jerusalem has been privileged also in war and peace times.

In religious field I surveyed Old and New Testament references about spring water, starting from Moses book of Genesis, during in time of prophets like Ezekiel, and ending with Jesus Christ attitude and identification in Gospels and Revelation. The last books of Bible give a new means from water, along the tree of life and city of life, becoming source of eternal life.

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