

## DIMINISHING LANDSCAPES

### **Solomon's Pools: A Patient Framework Awaiting Its Potential**

Dima Srouji

No problem has troubled Jerusalem so constantly since its inception as the issue of water supply.<sup>1</sup> The natural conditions of Jerusalem weren't favorable to support its growing population.<sup>2</sup> The political and religious phenomena of the city were demanding enough to turn a blind eye to the basic natural needs for human inhabitation. To make up for the shortage, multiple underground cisterns were dug in and around Jerusalem to collect water from springs and rainfall. Solomon's Pools were the center of the entire system.<sup>3</sup>

An image of a boy swimming in the muddy pool was chosen to be the thumbnail for a YouTube video. The title, in Arabic, translates: "Koshe – Brand New 2009 – al-Khadr – Swimming in Solomon Pools – Koshe." Koshe101 uploaded this footage of himself with his friends gathering at the edge of one of the pools on 11 April 2009. Three men in their mid-twenties stood fully dressed in preparation to jump in the shallow water; the rest, younger curious boys, sat on the edge to watch the action. The thirty-six-second clip shows one of them taking a step forward, then a leap into a three-second drop to the water while flailing his arms and yelling from the adrenaline rush. The man hits the bottom of the pool, loosening the mud and turning the water from green to brown.<sup>4</sup> Nineteen days later, on 30 April of the same year, two boys, 'Izz al-Din Sulayman Daraghma, twelve years old, and Mahmud 'Ali Mikkawi, thirteen years old, drowned in the third pool of the complex.<sup>5</sup>

According to the Independent Commission of Human Rights, one of the leading causes of child mortality in Palestine is negligence in the provision of care and failure to install public

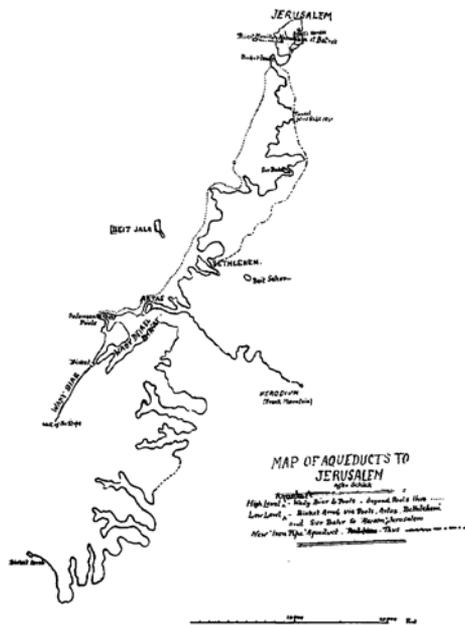


Figure 1. Map of Aqueducts to Jerusalem. Source: E. W. G. Masterman, "The Water Supply of Jerusalem, Ancient and Modern," *Biblical World* 19, no. 2 (February 1902): 103.

safety precautions. Since 1993, six people drowned in the pools without any authority being held accountable for their deaths. In 2009, the pools had no security measures, no guards on site, no protective fence, and no signs preventing children from jumping in.<sup>6</sup> Following the deaths, the families filed complaints against the Ministry of Awqaf, the holders of the site, and against the operating firm, Solomon's Pools Tourism Agency, and the matter was brought to the Palestinian judiciary.<sup>7</sup>

Negligence has shadowed the site of the pools through many phases of *atal*.<sup>8</sup> Their ever-changing occupiers and authorities and their varying policies painted different narratives of ruin for each generation. Looking back at this narrative, my own idea of *atal* in regard to the pools and the surrounding area relates to the Israeli occupation and the effect of the second intifada, and the change in management from *waqf* to the private sector.

In the neighboring village of Artas, the first pool and aqueduct are popularly held to have been built by King Solomon, an attribution reinforced by Artas historian Sanad Mousa. Yet some Palestinians and others involved with the renovation of the pools believe that the traces found through excavation in the last centuries point only as far back as the first century AD. The pools were fed by two supply aqueducts and transported the water through two different distribution aqueducts.<sup>9</sup>

The first supply aqueduct, Wadi al-Biyar, which fed the pools from the south, was probably built by Herod the Great between 37 BC and 4 BC. This was the shortest and steepest aqueduct to connect to the pools, collecting water from three springs in Wadi al-Biyar and rainwater from a series of dams in the valley, and tapping underground water aquifers on its route to the pools. This route remained in service for two thousand years, and was refurbished by the British along with the pools in 1924. This source provided water for Jerusalem's Old City up until 1967.<sup>10</sup>

The second supply aqueduct, the 'Arrub aqueduct, snaked around the ridges and valleys for forty kilometers at an incredibly slight slope of 0.09 percent, as flat as some of the most impressive Roman aqueducts.

A straight line from the beginning point of the route to its end measures only ten kilometers. Along its route, the aqueduct collected waters from a series of springs northwest of the pools. It was neglected during the Ottoman period given its tendency to clog easily. The upper distribution aqueduct began at Solomon's Pools, ran northward



Figure 2. The pool sits empty, exposing its carved stone. Photo by Suha Khamis (1998).

at a higher level than the second lower artery, and skirted around Bethlehem along Hebron Road. The destination for this aqueduct was Hezekiah's Pool in the upper city of Jerusalem.<sup>11</sup> The lower distribution aqueduct, which dated back to the Hasmonean period, ran from Solomon's Pools on lower ground, through the city of Bethlehem via an underground tunnel, to the Temple Mount in the Old City. This route only dropped thirty meters along the 21.5-kilometer route, a slope of only 0.14 percent. To this day it is acknowledged as a precise work of art. This aqueduct along with one of Solomon's Pools were the oldest part of the system and were constructed to alleviate water shortage in Jerusalem as the sources in the city at the time were not sufficient to serve the growing population.<sup>12</sup>

In Artas, the history of these aqueducts and the pools is rooted in folklore. It is said that Artas was a haunted place. Out of one hundred jinn in the world, ninety-nine of them live in the village of Artas, according to the stories of this village. They tell the story of King Solomon, the king of humans, animals, and also the jinn, who ordered the spirits to build him the pools and line them with stone as he sat and watched leaning against his staff. Unbeknownst to the jinn, King Solomon died one day as he was still leaning against his staff waiting for the jinn to finish digging. After his death, the jinn were set free and stayed in Artas to watch over the pools.<sup>13</sup>

In 1998, before the second intifada, my mother, Suha Khamis, who was working in the capacity of project manager of the Solomon's Pools project with the Consolidated Contractors Company to renovate the pools and the Murad Castle and to realize the new



Figure 3. Hundreds of cars piled in the second pool were revealed after draining the water in preparation for renovation. Photo by Suha Khamis (1998).

convention palace, took me to the sites multiple times to experience the preservation of the monuments. This was a time for celebration, a moment of historic importance for the narrative of the pools. The area was conceived as a cultural heritage site connected to Jerusalem. To the disdain of Bethlehemites, the connection between Jerusalem and the pools was strong before the occupation.<sup>14</sup> Jerusalem and its surroundings were constantly at war over scarce water resources in the area, particularly during the dry seasons.<sup>15</sup> As one of the aqueducts ran underground through Bethlehem to quench the thirst of Jerusalemites this intersection of the aqueduct with Bethlehem became the center of a constant conflict between the two cities.

On the other hand, the amicable relationship between Bethlehemites and Jerusalemites was apparent at the location of the pools. Rousseau called the social activity around the watering hole *la fête autour du puits* – the feast around the well – highlighting the political dimension of the watering hole as a place of sociability and exchange.<sup>16</sup> This renewal project was an opportunity to remind ourselves of our own value, to bring Jerusalemites back to the villages for social gatherings of fun and leisure.

The excavation for the newly planned convention center across from the pools revealed many treasures that amused an eight-year-old. The magic of the site transported me to a place of imagination. I found fossils of seashells and snakes, large fossilized animal skeletons, and ancient pottery remains. I spent hours digging through the dirt by the pools. To me this was an archeological landscape rich with layers of partial narratives. I wondered about the generations who built the pools, swam in its waters,

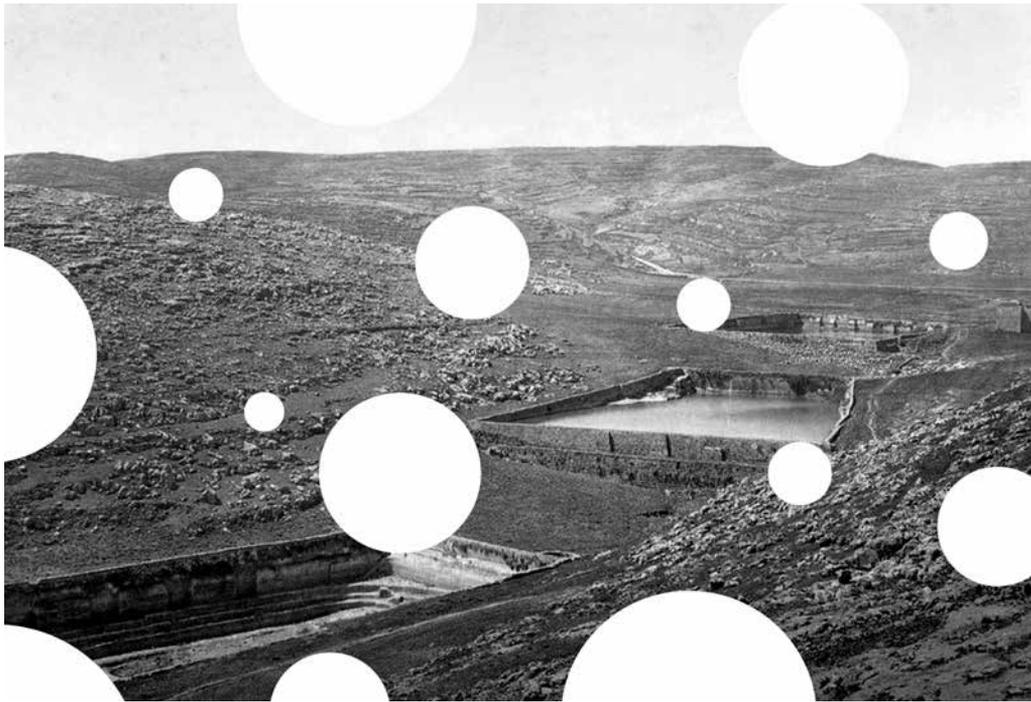


Figure 4. Collage by author representing the confiscated land of Artas superimposed on the ideal untouched land of the Solomon Pools and its surroundings before the occupation.

and drank from its springs. I sat by the edge of the middle pool cleaning my fossils. Below my dangling feet were hundreds of rusty stolen cars sitting in a meter of grassy brown water, stacked up to the top of the pool. According to the locals, these cars were mostly yellow-plated: Israeli gangs were trading cars with their Palestinian underworld partners, who would benefit from selling the yellow-plated cars and would eventually discard hundreds of them in the pools. As the pools were drained to prepare for renovation, it not only revealed the pile of cars, but exposed types of fish and water snakes. These creatures were removed and kept in water tanks in an effort to save them; unfortunately, the renovation and refilling of the pools took longer than expected and the fate of the creatures is unknown.<sup>17</sup>

The Israeli interaction with the pools went further than car gangs' activities. The occupation, namely the construction of settlements in and around Artas, was the cause of much of the water conflict in the area, once known as the food basket of the Bethlehem governorate.<sup>18</sup> The village is now bordered by Israeli settlements visible from the pools. Efrat sits just south of Artas, constructed partially on the village territory in 1979; Gush Etzion sits to its west. Efrat measures 2,180 dunams, 421 of which are built on lands belonging to Artas farmers. The separation barrier confiscates a further 37 percent of the total area of the village, the majority of it agricultural land that once served as a source of income for the residents.<sup>19</sup> The construction of Efrat severed the aqueducts supplying the pools, disrupting the flow of the infrastructure even below ground and capturing much of the subterranean services once controlled by the Palestinians. The

control of this water meant power over infrastructure space and control over services – what Keller Easterling calls extrastatecraft: the undisclosed activities, outside of, in addition to, and sometimes in partnership with statecraft.<sup>20</sup> The state of Israel has used this technique, which could also be called offensive urbanism, as a tool of occupation since its inception.

Below the rock, the aqueducts ran uninterrupted, connecting water from wells and cisterns to pools and to inhabitants in multiple areas in and around Jerusalem. The pools and their aqueducts connected villages to Jerusalem, making the suburban as important as the urban. This connection itself was part of the Palestinian identity until 1967, when the aqueducts were cut off from Jerusalem. Softening the ground, cutting into the rock and shrub, the pools reflected and shimmered in the light of the Mediterranean sun. The connection to the Mediterranean here isn't unfamiliar: the bodies of water are, to me, reminiscent of a time when the notion of a Mediterranean identity was an appropriate one for the area. Jerusalemites and Bethlehemites, as well as villagers, would take a trip to the Mediterranean sea or would choose to go to the pools – closer than the beach and more serene – to dip in the water and picnic. Israel's occupation of the mountainous areas of Palestine after 1967 and their separation by military barriers from the coastal area undermines this historical identity. The occupation authorities also interrupt the flow of water infrastructure from Palestinian villages to Jerusalem, depriving villagers from access to water on the smaller scale of house to street, put visitors of the pools at risk, and undermine the value of these historic structures.<sup>21</sup> These impediments are compounded by mismanagement on the part of the Palestinian Authority.

The ruins of the aqueducts still run under the separation barrier, representing continuity and symbolically defying the borders of the occupation. The continuous grid expressed something of a nightmare in architecture theories of the 1960s, such as the criticism of globalization portrayed by Superstudio through a series of famous collages of grids, symbolizing a world with no architecture, rather a continuous, homogeneous network. Superstudio used the supersurface, which could now be seen as prophetic of the internet, superimposed on natural geographic sites, and megastructures that spanned the entire surface of the earth. The idea of globalization normalizing all was something of a dreaded, albeit rapidly approaching, future.<sup>22</sup> In the case of Palestine, not so much globalization, but continuity, is thought of differently. The concept of a continuous grid from the “inside” to the “outside” – whether it's a water system, flow of information, the internet, or the distribution of services – is where the occupation begins not just to affect the physical crossing of borders on the surface, but to interrupt the idea of continuity of services below and above ground.

Superstudio imagined this continuity as a nightmare; to us, the nightmare is the interruption of such a grid. The recreation of this connection is perhaps a utopian ideal, assuming the end of the occupation and the realization of a Palestinian state, including control of access to Jerusalem. If the water from the pools can remain an uninterrupted source, despite the separation barrier above and despite interruptions below, to connect to the Jerusalem water network, the underlying grid can perhaps be used as the foundation for a solution. The return to this ideal is impossible today, partially because of the

occupation, but also because of population growth. The water sources that previously reached Jerusalem can today barely quench the thirst of the villages in the Bethlehem governorate, including the illegal settlements that benefit from the diversion of much of the Palestinian water supply.

The drowning deaths of ‘Izz al-Din al-Daraghma and Mahmud ‘Ali Mikkawi exemplifies the lack of management from the authorities involved with the pools. Two weeks after the lawsuit stemming from the drownings, the operating firm, now known as the Solomon’s Pools Tourism Agency, began building a fence around the pools. The fence was conditioned decades earlier in the 1994 agreement between the Ministry of Awqaf (“Public Endowments”), the holders of the site, and the private firm. Despite the management breach of contract on multiple occasions, causing a lack of enforcement and lack of accountability for safety precautions and protection for visitors, Awqaf did not terminate the agreements. The operating firm neglected to abide by any of the regulations for safety and security of the visitors to the pools, Awqaf neglected to enforce the regulations, and the Civil Defense team that came to the rescue lacked the facilities necessary to save children from drowning, using ropes, instead of the necessary rescue equipment, to bring the bodies out of the pool after their deaths.

Management has changed from 2009 to today. The Solomon’s Pools Tourism Agency now has control over the Bethlehem Convention Palace, as well as Solomon’s Pools, Murad Castle, and the surrounding area. Their role has been clarified, encouraging the execution and completion of projects that have been deserted for years. However, the current use of the pools as a source of water is unclear. A source from the Arja Textile Company revealed that, due to this lack of clarity, from 1967 until agreements were made in the 1990s, the water was free-for-all and was collected by multiple factories in the region, including the Arja Textile Company, the Nassar quarry, and other concrete factories. “This was absolutely normal at the time,” a manager of Arja Textiles told me, “the water was up for grabs and there was no clarity in management and control, so we took the water for free and used it to dye the fabric in our factory. This was a good thing, we create jobs in the West Bank. A few years ago, after management changes, companies started buying the water from the pools as it was still cheaper than buying it from the municipalities.”<sup>23</sup>

It is unclear whether Arja still purchase water from the Pools Agency. Water from the pools is sold to factories, while Artasis along with most Bethlehemites have no access to an affordable water source due to the occupation. The Palestinian Water Authority is forced to buy its water supplies from Israel, given Israel’s domination of Palestinian water sources.<sup>24</sup> Today, Artasis struggle with water more than ever in the history of the village, ironic given the origin of the name of the village Artas, a derivative from the Latin *hortus conclusus* (enclosed garden).<sup>25</sup>

The drowning incident described at the beginning of this essay, along with many others through the ages, is sometimes blamed on the jinn of Artas taking spirits to their next stage.<sup>26</sup> These stories played a role in the Palestinian identity in its culture and tales. In the 1920s, the pools themselves also played a role in the development of Palestinian

national consciousness.<sup>27</sup> The power of water sources and the control of their routes have led to conflict between Palestinian villages and cities for centuries.

These monuments are unparalleled in the world, with an unrivaled appeal to the imagination. In their appearance, the pools capture the layered aesthetic of the Palestinian locality that began to deteriorate after the second intifada. Extremely rich historical edifices were either demolished or allowed to disappear with little public intervention to rescue them. Today, the pools sit in the shadow of the “modern” convention palace next door. In a time of economic idealism, construction began on what was intended to become a resort at Solomon’s Pools – what surely would transform it into a tourist attraction.<sup>28</sup> In 1998, I walked through what was designed to be a hustling, bustling center where merchants could open up small shops to sell their goods to the flood of tourists. Reminiscent of the markets in the Old City of Jerusalem, the freshly poured concrete formed a long open-air bazaar, lined with arches waiting to be clad and small side chapels for shops on either side of the nave, and framing a beautiful view of the cypress trees beyond. The framework of what was to come seemed then to its planners a symbol of growth, a place to finally solidify the ambitious and modern Palestinian identity.

I now consider the description of this project that I overheard growing up to be a Westernized idea of a tourist attraction. A more appropriate typology for such a place could be archeological gardens and a park with contextually sensitive kiosks to serve tea and coffee and sell small souvenirs, such as postcards of old images of the pools and the surrounding villages, and handicrafts from the area, such as olivewood carvings and olive oil soap. This, a utopian ideal, is my mother’s *atlal* that in her recollection was how Solomon’s Pools were during the Jordanian rule and before the occupation.<sup>29</sup>

As Bethlehem became a place for only a few determined tourists after the second intifada, this dream fell apart. The Israeli army shelled the project systematically throughout the intifada. The damage done was renovated repeatedly despite the systematic destruction. Till now, on a rainy day the copper roof of the new museum allows water in, most likely due to the bullet holes that punctured it since the second intifada. Under this roof, the museum’s historic collection of textiles, jewelry, and ancient pottery unfortunately doesn’t have the audience it deserves. The architecture of the pools as well as the surrounding complexes must exalt itself as a product of essential human history and problem solving skills. This place was a radical solution to an architectural and spatial problem. The precision of construction of the pools is a work of art by any architectural criteria. The generations involved in building and rebuilding them over the centuries struggled to anticipate scenarios of environmental, domestic, and political issues that remain valid today.

As the newly built structures were restored multiple times after the second intifada, repairing the damage done by their shelling, those involved in the project felt defeated emotionally and psychologically. The completion of the project is itself a testimony to the strength of Palestinian resilience. It stands both as a ghost of the lost potential and as a beautiful patient skeleton, ready to be reactivated by a future generation.

*Dima Srouji is a Palestinian architect and artist who was born in Nazareth and grew up in Bethlehem, Jerusalem, and Doha, Qatar. She earned a Bachelor of Architecture Honours from Kingston University in London and a Master of Architecture from Yale University and has lived and practiced in London, New Haven, and Milan.*

#### Endnotes

- 1 E. W. G. Masterman, "The Water Supply of Jerusalem, Ancient and Modern," *Biblical World* 19, no. 2 (February 1902): 87–112.
- 2 Vincent Lemire, "Water in Jerusalem at the End of the Ottoman Period (1850–1920)," *Bulletin du Centre de recherche à Jérusalem* 7 (Autumn 2000): 136–150.
- 3 Masterman, "Water Supply of Jerusalem."
- 4 Koshe101, "Koshe – jadid jadid 2009 – al-Khadr – sibaha fi Birak Sulayman – Koshe" [Koshe – Brand New 2009 – al-Khadr – Swimming in Solomon's Pools – Koshe], YouTube, 11 April 2009, online at [www.youtube.com/watch?v=H0G2Njynna8](http://www.youtube.com/watch?v=H0G2Njynna8) (accessed 28 December 2016).
- 5 Independent Commission of Human Rights (ICHR), "Fact-Finding Report on the Drowning of the Daraghmeh and Mikkawi Children in Solomon's Pools in Bethlehem in April 2009," May 2009, online at [www.rwi.lu.se/NHRIDB/Asia/Palestine/Fact-Finding%20Report%20on%20Drowning%20April%202009.pdf](http://www.rwi.lu.se/NHRIDB/Asia/Palestine/Fact-Finding%20Report%20on%20Drowning%20April%202009.pdf) (accessed 23 January 2017).
- 6 ICHR, "Fact-Finding Report."
- 7 ICHR, "Fact-Finding Report."
- 8 *Atlal* is a term derived from classical Arabic literature and poetry. It refers to residual places and spaces that denote earlier existing structures, erased by time or willful destruction.
- 9 HYDRIA Project, "Solomon's Pools and Relating Aqueducts, the Heart of Jerusalem's Past Water Supply," n.d. [2009], online at [www.hydraproject.info/en/palestine-solomons-pools/waterworks25/](http://www.hydraproject.info/en/palestine-solomons-pools/waterworks25/) (accessed 23 January 2017).
- 10 Marwan Abu Khalaf, "The Local Landscape Effects of a Regional Water System in Artas, 1850–1948," *Journal of Eastern Mediterranean Archaeology and Heritage Studies* 2, no. 3 (2014): 209–228.
- 11 Tom Powers, "The Lower Aqueduct of Jerusalem," *View from Jerusalem*, n.d., online at [israelpalestineguide.files.wordpress.com/2010/07/lower-aqueduct-wpics.pdf](http://israelpalestineguide.files.wordpress.com/2010/07/lower-aqueduct-wpics.pdf) (accessed 24 January 2017).
- 12 Powers, "Lower Aqueduct."
- 13 Celia E. Rothenberg, *Spirits of Palestine: Gender, Society, and Stories of the Jinn* (Lanham, MD: Lexington Books, 1998), 22.
- 14 Rothenberg, *Spirits of Palestine*, 30.
- 15 Masterman, "Water Supply of Jerusalem," 110.
- 16 Lemire, "Water in Jerusalem," 135.
- 17 Conversation with locals of Artas.
- 18 Applied Research Institute – Jerusalem (ARIJ), *Artas Village Profile* (Jerusalem: Applied Research Institute – Jerusalem, 2010), online at [vprofile.arij.org/bethlehem/pdfs/VP/Artas\\_vp\\_en.pdf](http://vprofile.arij.org/bethlehem/pdfs/VP/Artas_vp_en.pdf) (accessed 24 January 2017).
- 19 ARIJ, *Artas Village Profile*, 17.
- 20 Keller Easterling, *Extrastatecraft: The Power of Infrastructure Space* (London: Verso, 2016), 22.
- 21 ICHR, "Fact-Finding Report."
- 22 See, for example, "Superstudio: progetti e pensieri," *Domus* 479 (1969): 38–43.
- 23 Conversation with Arja Textile Company Representative.
- 24 ARIJ, *Artas Village Profile*, 16.
- 25 Abu Khalaf, "Local Landscape Effects," 227.
- 26 Rothenberg, *Spirits of Palestine*, 30.
- 27 Vincent Lemire, "The Awakening of Palestinian Hydropolitical Consciousness: The Artas-Jerusalem Water Conflict of 1925," *Jerusalem Quarterly* 48 (Winter 2011): 31–53.
- 28 Phillip Hammack, *Narrative and the Politics of Identity: The Cultural Psychology of Israeli and Palestinian Youth* (Oxford: Oxford University Press, 2010) 84.
- 29 Conversation with Suha Khamis, December 2016.