

Telling Stories of Site

The Case of Lifta

Takehiko NAGAKURA, Massachusetts Institute of Technology, USA

Eytan MANN, Technion, Israel Institute of Technology, ISRAEL

Eliyahu KELLER, Massachusetts Institute of Technology, USA

Mark JARZOMBEC, Massachusetts Institute of Technology, USA

Abstract: The life cycle of many cultural heritage sites typically includes a long history of transformations since its inception, involving additions, adaptations, destructions and rebuildings. Such transformations produce one challenge for archaeologists, who excavate the layers of the site's remains and conject development, and another for conservationists who identify, preserve and perhaps reconstruct its presumed authentic state. Moreover, these transformations are not limited to that of physical forms. Indeed, a cultural heritage site is always a place for past activities, experiencing generation and loss of different uses and points of views with each change of hands. These cultural and historical multiplicities then, present a challenge for any cultural heritage practice aiming to make its history and narratives available to a public audience.

This paper introduces a recent cultural heritage project in the disputed and evacuated village of Lifta near Jerusalem, to discuss how contemporary technology tools can intervene in a complex social and political context. The pipeline of cultural heritage practice includes field-based data collection, processing and interpretation, and distribution, in which technological tools are critical. For data collection, the use of photogrammetric capturing and audio-video recordings, for example, are non-intrusive, and are efficient means to rapidly collect forms and events on the site. For data processing, an online platform can help team members practice sharing geo-located data and design multifaceted representation of the site in question. And for the public audience, narratives about cultural heritage can be developed through interactive digital tools such as game engine environment in the service of distributing multimedia contents (such as 3D capture, video, and audio for different sensory experiences), embedding different stories that represent multiple points of view, and accommodating the participation of those who are interested in making comments and sharing their personal points of views.

Keywords: *archaeology—digital heritage—multiplicity of narratives—storytelling*

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A Brief History of Lifta

The village of Lifta, whose buildings, caves, agricultural terraces, and spring, hold a long and conflicted history of inhabitation and evacuation, ritual and culture, is located at the western entrance to

the city of Jerusalem, nestled between two highways and mountain slopes. Surveyed and excavated numerous times from the beginning of the archaeological study of the Land of Israel at the end of the nineteenth century, (Galor, 2011, p. 11) and up to the most recent conducted by the Israeli Antiquities Authority and completed in recent years, the stories, histories and narratives of Lifta are complex and varying, and at times contested and contradictory.¹ The history of the village, as it is told today by official representatives of the State of Israel, finds its origins in the text of the bible.² A common proposition, though somewhat contested, suggests that a site mentioned in the Old Testament, 'Mei Nephtoah,' which is marked in the Book of Joshua as one of the boundary points between the lands of the tribes of Yehudah and Binyamin, is in fact the spring of Lifta.³ This relies on the assumption that the name 'Mei Nephtoah' was derived from the name of the 13th century Pharaoh Merneptah. As the argument goes, "the 'Wells of Merneptah which are in the hills' is the group of springs at Lifta, near Jerusalem, and were so named by Merneptah after his victory over the Israelites, whom he compelled to evacuate Jerusalem itself." (Yurco, 1986, p. 213) The settlement itself, as noted, may have already existed as early as the Iron Age (58–1000 BCE) in the place of the 'Nephtoah' or 'Mei Nephtoah' neighborhood. In addition, the Roman Jewish historian, Josephus, provides information about the destruction of a large settlement during the Roman suppression of the Great Revolt of 66–70 CE at the end of the Early Roman period, which some scholars believe to be Lifta⁴ (Moshe, 2012).

During the Ottoman period, Lifta was renewed and developed into a modern village, first through the construction of an industrial zone that served its vast agricultural areas. At the same time, some of the village's natural caves were converted into dwellings, mostly on the upper part of its northern slope. New buildings were added north and east of the core, which used more novel construction techniques and organization. Through their longitudinal construction sequences, these would also come to reflect the clan ties between the various residents. Inner courtyards between several such related buildings would become public spaces that were used and oriented towards the families that resided around them. Later, various 19th-century travelers and pilgrims would depict a small village hiding deep within a valley, surrounded by olive trees and wheat fields. Victor Guérin, a French explorer and amateur archeologist, described in the late 19th century a village "sitting on the sides of a rocky mountain... in the shape of an amphitheater," and having "hundreds of inhabitants, all Muslims."⁵ (Moshe, 2012)

¹ Various studies explore the battle of narratives around the question of the Israeli-Arab war of 1948, and the depopulation of Palestinian villages and spaces. For instance: Kadman, Noga, Dimi Reider, and Ofer Neiman. *Erased from Space and Consciousness: Israel and the Depopulated Palestinian Villages of 1948*. Indiana University Press, 2015.

² The historical narrative presented draws largely on the comprehensive work conducted by Dr. Michal Moshe as part of the archeological survey conducted by the Israeli Antiquities Authority. See: Moshe, Michal. "The Village and House in Lifta: An Architectural Historical Survey" in Israeli Antiquities Authority, Conservation Administration, *Lifta Survey (2014-2017)*. All translations are of the authors. http://www.iaa-conservation.org.il/Projects_Item_heb.asp?site_id=3&subject_id=6&id=180

³ Chapter 15 in the book of Joshua describes the limits of the land allocated to the Judea Tribe, and reads in verse 9 that "the border was drawn from the top of the hill unto the fountain of the water of Nephtoah, and went out to the cities of mount Ephron; and the border was drawn to Baalah, which is Kirjathjearim." Today, while the village's remains are recognized under the name Lifta, signs located at the site and placed by Israeli authorities mark the spring as Mei Nephtoah (the waters of Nephtoah).

⁴ Josephus Flavius quoted in Moshe, 2012.

⁵ Guérin, Honoré Victor. *Description géographique, historique et archéologique de la Palestine, accompagnée de cartes détaillées*. Paris, L'Imprimerie Imp., 1868, quoted in Moshe, 2012.



Fig. 1. View of Lifta from north-west towards Jerusalem; drone photo by the authors, 2019

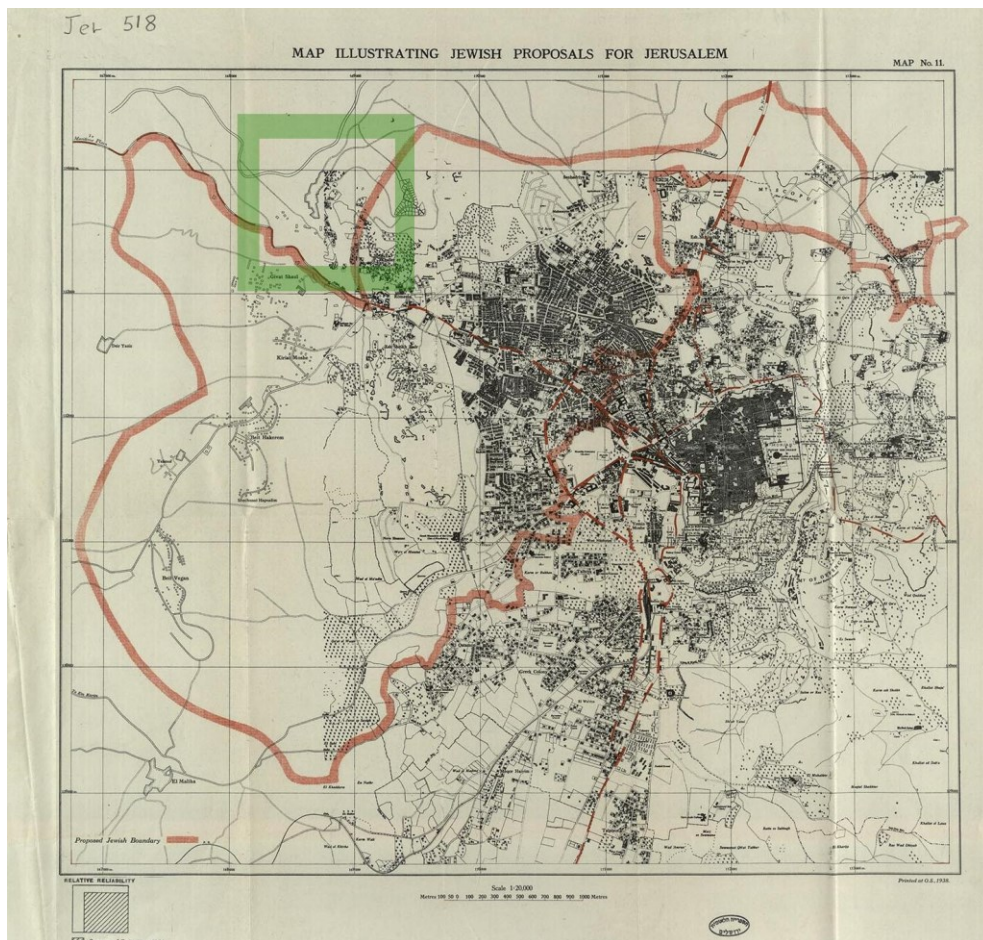


Fig. 2. Map illustrating Jewish proposals for Jerusalem, Survey of Palestine, submitted to the Woodhead Commission, 1938. Lifta, marked in the green square, is outside the Jewish proposal limit. (Source: The Eran Laor Cartographic Collection, National Library of Israel).

The period of the British Mandate of Palestine (1918–1948), following the collapse of the Ottoman Empire, brought development and change to many of the region's settlements, particularly due to the growing connection between the village and the city of Jerusalem which was also expanding rapidly at the time. This connection and growth in size also cultivated changes in the traditional village structure, in the design of the village's buildings, as well as in building technologies (Mohse, 2012). In 1924, Lifta was first included in Jerusalem's jurisdiction, with building laws, enacted during that year by the British government. This attempt to create uniformity, order and standardization of building according to organized principles, has brought a modern and bureaucratic character to what has been until that time a kind of organic development of the village, and put a stop to the correlation between the village's evolution and its residents' needs.⁶

In 1929, during the Palestinian riots of that year, there were several clashes between Jewish residents of Jerusalem and the Palestinian residents of Lifta. This began a period of sporadic conflicts and clashes. (Cohen, 2015, p. 98) In 1936, a Jewish newspaper reported on the establishment of a police station near the village, presumably as a reaction to the continuous clashes.⁷

In 1948, after the first Israeli-Arab War, the village's Palestinian inhabitants were either forced out and evacuated or escaped to East Jerusalem and other West Bank villages, as the village and its environs were taken over by Israeli military forces.⁸ Under Israeli rule, Lifta has become somewhat reflective of both the nation's ambitions, its origins, and to a degree, its future. In the first decades after the state's establishment, the ruins of Lifta, as other places, have become sites of inspiration for the cultivation of biblical myths and images that visualize the connection between the Jewish people and the Land of Israel, to the point that it even served as a filming location in the 1958 production of the Hollywood epic *Ben-Hur* (Amir, 1958). At the same time, and during the 1950s, Jewish immigrant families from Yemen and Kurdistan were resettled by the Israeli government in the then empty structures in the village, only to be removed by the government 25 years later, making them effectively the last inhabitants of the site.

The most recent development in Lifta's contested history, dating to 2006, is the submission, approval and suspension of plan 6036 by the Jerusalem municipality: a new urban plan seeking "to turn Lifta into a luxury commercial and residential development exclusively for Jewish expatriates." The proposed plan offered, among other things, the construction of "268 luxury housing units, a large shopping mall, a tourist resort, a museum and a luxury 120-room hotel." (Raffoul, 2015) The execution of the approved plan, however, was halted after a long legal battle conducted by former residents of Lifta, and the Save Lifta Coalition, a group of activists from both Israeli and Palestinian communities, one of whom is the architect Shmuel Groag, one of the authors of the original plan.

Today, Lifta stands as one of the only Palestinian village that was neither completely demolished nor resettled by a Jewish-Israeli population following the Israel-Arab war of 1948. Its remarkable condition, given its history, is a unique testimony of "an architectural and agricultural culture that has been

⁶ Moshe provides a brief description of the kind of rules that were enacted, limiting the size of the village, the distance between buildings, the size of plots, etc.

⁷ *Davar* (דבר), June 8, 1936, pg. 7. Historical Jewish Press (JPress) of the National Library of Israel Archive.

⁸ For a thorough account of the evacuated and destroyed villages in the 1948 war, see: Khalidi, Walid, ed. *All That Remains: The Palestinian Villages Occupied and Depopulated by Israel in 1948*. Washington: Institute for Palestine Studies, 2006.

prevalent in the Middle East for thousands of years but was destroyed in 1948 or has undergone modernization and development, thus losing any ancient cultural-historical characteristic.”⁹

This recent history of conflict and destruction finds echoes in its current daily state, when former Palestinian residents come to celebrate various events and commemorate their ancestors’ presence, or during frequent clashes between orthodox Jewish men who claim ownership over the village’s spring, and Israeli women who seek to bath recreationally in the cool waters.¹⁰

After decades of abandonment, a history of both battles, prosperity, destruction and mutual life, Lifta has transformed into a rich habitat for many plants and animals, some of which are quite rare, protected and endangered. Its importance, even today, is diverse: it is a natural reserve and a green lung adjacent to Israel’s capital and largest city; a site used daily by visitors and locals, whether due to its ruined beauty, or the cool waters of its spring, serving both secular individuals looking to escape the summer’s heat, or Jewish orthodox men, who use it as a mikveh,¹¹ and claiming it, through their actions as an exclusively male space; a symbol of Palestinian memory, resistance and national aspiration; and perhaps the last place, holding through its emptiness, the possibility of a mutual life in a contested land.

The village’s past and present offer an opportunity for the creation of a unique kind of scholarship. Due to the site’s complex and often ignored or manipulated history, there is an important potential role for historical research that exposes both the site’s various pasts and the contentious relationship between different narratives. Lifta is at once local and representative. It represents transformations, attitudes and cultural shifts pertaining to the city of Jerusalem, the State of Israel, Palestine and the region at large. Exposing competing histories through new technology will demonstrate in a special manner that historical, material and cultural compositions of archeological sites generally contain a multiplicity of narratives accumulated through time.

Lifta Workshop: Digital Archeology / Virtual Narratives

In June 2019, a collaborative workshop brought together the resources and expertise of the MIT Department of Architecture and the Ben Gurion University Department of Bible, Archeology and Ancient Near Eastern Studies, for undertaking an interdisciplinary study of the material remains of Lifta. The collaboration was intended to build upon the intrinsic relationship that both disciplines share and differ in, in respect to notions and ideas of site, temporality and imagination. Indeed, both disciplines draw upon the material reality of a site presence in order to imagine it in a different time. While architects are preoccupied with the design and production of future scenarios, archaeologists are committed to the unequivocal determination of the antiquity of things. Still, both fields deal with the fundamental question of how to conjure up an image of a place, whether by recollecting lost events or by speculating about future possibilities. The collaborative workshop aimed to use both the affinities and gaps between the disciplines as productive in order to produce unique immersive representations of the site.

⁹ “Save Lifta.” <http://savelifta.org/about-lifta/> (Accessed: 20 January 2020).

¹⁰ See for instance: Hasson, Nir. “Men and Women, Religious or Not, Battle for Rights at Israeli Springs - Israel News - Haaretz.Com.” <https://www.haaretz.com/israel-news/.premium-men-and-women-religious-or-not-battle-for-rights-at-israeli-springs-1.6221515> (Accessed: 20 January 2020).

¹¹ A ‘mikveh’ is a water source, usually a bath that is used for Jewish ceremonies of purification.

Lifta and its varying narratives are symbolic of the war on material history in Jerusalem, conducted through archaeological excavation and polemical writing, rendering the ruins of Lifta a tool in geopolitical conflicts. Instead of letting an archaeological site in this region to constitute proof of precedence or ownership by any one nation, ethnic group or religion, this workshop, through design analysis and visualization methods, aimed at constructing a multivalent and complex model of the Lifta's past. Lifta thus becomes a site constituted of multiple layers of political, design, and cultural histories, representing a multifaceted narrative.

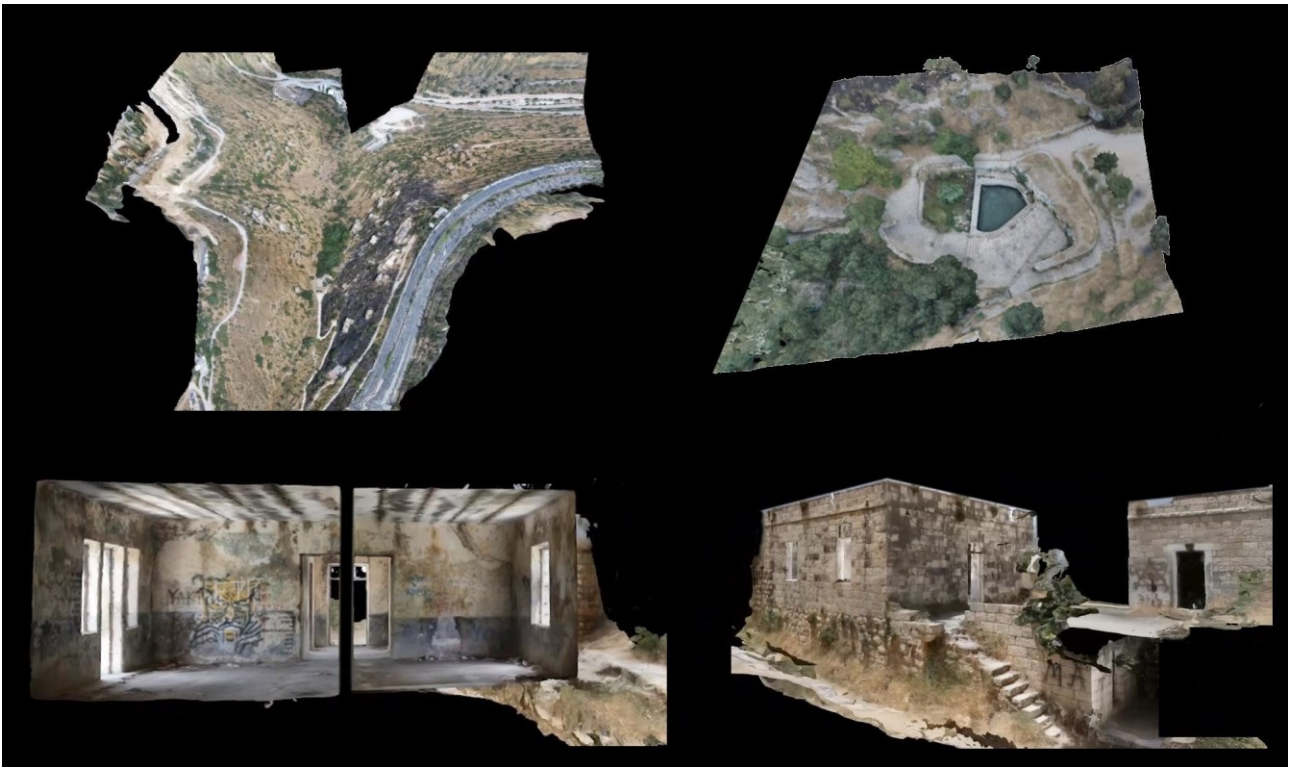


Fig. 3. Examples of the 3D models captured at various scales by different participants: the valley of Lifta made from drone photos (top left), the area around the main spring near the valley's center (top right), a house interior (bottom left) and exterior (bottom right) located to the north of the spring. Those heterogeneous models and other media such as drawings, photos and videos were shared and composed in an online platform to create narratives of the site.

The workshop asked students to participate in an interdisciplinary study of the evacuated village, and investigate through various methods the archaeological and architectural remains, as well as the various archives, narratives and stories told about the site. Working in groups, the students captured the site using ground and drone-based photogrammetry, laser-scanning, and produced 3D representations, digitally making available experiences that present a bricolage of Lifta's material remains, which are conceived as a pedagogical resource. By combining these 3D representations with an array of archival, historical and scholarly resources as well as audiovisual recordings of the events during the workshop, students of architecture, art, and urban planning, deployed interactive and immersive tools to create experiential installations of Lifta's contested terrain, in which they challenge both the linear and singular narratives of the site's past, as well as the traditional approaches to the study of conflicted histories.

Collaborative Process

The workshop aimed to produce experiential representations of Lifta while engaging in a collaborative work process. Accordingly, the fieldwork included various partners and collaborators which contributed to a collective archive of Lifta, to be presented in an immersive and interactive platform. First, the workshop's development and the themes to be explored was done in close collaboration with a team of expert archaeologists, led by prof. Yuval Yekutieli and Eli Cohen who incorporated their method or "reading-out" stories from the site's material remains.

This was fundamental to the project's motivation to integrate surveying and storytelling of site. While the archaeological approach enriched the design of the experience, the workshop embraced the notion of collaborative archaeology, not deployed by a small circle of experts but rather crowd-sourced to other stakeholders as well as architecture students, and towards the public.



Fig. 4. (From left to right) A Palestinian refugee leading a tour at the site, local people bathing at the main spring, archaeologist lecture, and a student participant recording the site after the natural fire spotted during the workshop.

Other meaningful partners were the 'Save Lifta Coalition' which consist of activists of different backgrounds, including Palestinians and Israelis; including those who lived in Lifta, their families and descendants. Among them is Ya'akub Oda, a Palestinian refugee, born in Lifta and lived there with his family until the depopulation of the village during and after the 1948 Arab-Israeli War. Oda toured the village ruins with the workshop participants and told his story—the memories of Palestinian Lifta, before 1948. These are vivid stories of life in the village, the families, rituals and daily social life. Leading a group of students through the landscape, approaching the spring Oda recalls:

"This area is our water system, this is what remains, and it is very important in our memory, to us the Liftawis, people can come here and clean and pray around this area, and women with jugs on their head would come to take water to drink... and here there was a huge strawberry tree with a shadow not less than 40 meters in diameter, villagers would come and sit under the tree and tell stories of their fathers."

These testimonies stand in stark contrast to the official survey of the village done by the Israeli Authority of Antiquities, which naturally takes a more scientific tone in describing the site and its history. While the survey strives for objectivity, the oral history is subjective and intimate. Part of the challenge was to capture both.

Depopulating of the Lifta, first of its Palestinian population, happened a second time more recently, during the past couple of decades. This time of its Jewish-Kurdish inhabitants who were settled in the village ruins in the 1950's. Although the circumstances are different, here too are families who

were evacuated from their homes and have their own personal perspectives on the ruins of Lifta. Yoni Yochanan is among the last Jewish settlers of Lifta, still holding tight to his family's house in the wadi, fighting for his right to the ground and his own evacuation. He too contributed his own stories to project and added another layer to the complex strata which is Lifta. Climbing up to Yochanan's house, students visited the house, which he is now renovating with his own hands, and without official permits, hoping to transform the Palestinian-origin structure into a hotel. He told of his roots in Lifta, proving another different perspective on the landscape:

"After the war, the Arabs left the village, and our parents moved into the houses from Iraq and Yemen. There was nothing here, and after a few years they connected the houses to electricity.... There were 350 families in Lifta... Today, they want to make a new neighborhood here and destroy the houses, so we don't know what will happen (...) I think this place should become like a museum to the Jewish and Arab who lived here."

Given these various accounts of the site, how does one capture the site's physical state along with its concealed narratives? Can an archaeological survey expand beyond its objective standpoint to include multiple material remains overlaid with multiplicity of stories? And if so, how to curate these experiences?

The workshop attempted to develop a methodology and technological framework to unravel some of these questions, by curating 3D scanned models and other audio visual materials to be choreographed and presented in a time-based, and geo-referencing manner to unfold narratives. This was done through two means: 1) Online Platform 2) VR experiences.

Online Data integration and distribution platform

The Design Heritage (Nagakura et al., 2018) is an online collaborative platform to present 3D captured photogrammetric models along with other types of evidence about the site, open to the public to add multimedia data, such as archival documents, video and audio captures of onsite events and tours, as well as fieldwork documentation. The workshop used this platform to allow curation of storylines, which include different 3D models, onsite recordings, archival documents and notes. Through storylines, the site can be imagined from different points-of-view, focusing on varying aspects of its heritage experiences.

A community of users, whether students or civilian contributors, are invited to add their own created models to the platform, and to place them in the context of large areal model, which sits on the global coordinate system. This 3D map of the site accommodated detailed 3D models of the main spring and other community spaces as well as the interior and exterior of major houses captured on the site, while allowing the audience to navigate between different scales. Field notes and archival documents of photos and drawings were geo-referenced on the map to be brought up at relevant locations. It is also animated by the audiovisual recordings of a former resident touring on the site, onsite operation of the workshop participants, and the fire spotted on the site and evacuating visitors. The dataset in this map collectively conveys different experiences and narratives of the site.¹²

¹² A short introductory video on the workflow, from fieldwork to online platform, can be found online: <https://www.youtube.com/watch?v=bMzPxYUcn1s&feature=youtu.be>

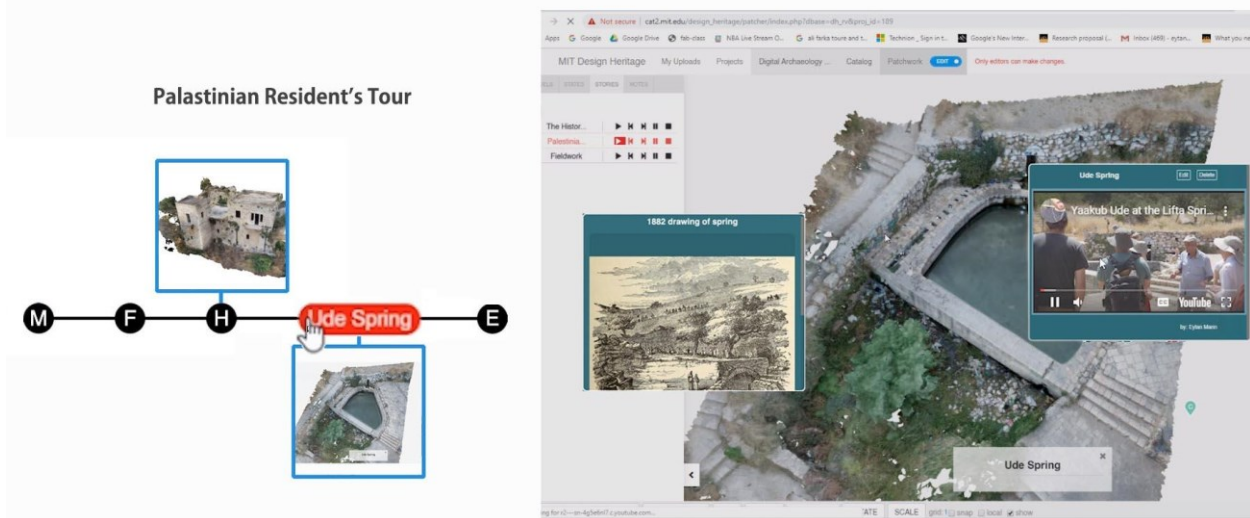


Fig. 5. Top: Onsite tour with Ya'akub Oda, a Palestinian refugee from Lifta. Bottom left: A sequence of five 3D scenes composed in the online platform to trace the tour, including his talk in his former residence and the community spring where the villagers bathed. Bottom right: The screen shot of the 3D scene around the spring shows an integration of the photogrammetric 3D model with the video recording of the talk and a historic drawing, each geo-referenced to the locations on the model.

In addition to this, the platform offers a set of tools to curate narratives and adds a new dimension to the traditional google-map-like platforms. For example, three storylines were put together on the platform during the workshop.

1. Historical photos: A collection of historical photographs and illustrations from various sources were uploaded to the platform and geo-located on the 3D models. Its sequence is designed to provide a sense of the place through the perspective of a photographer.
2. A Palestinian Life in Lifta: This sequence includes the segments from Palestinian refugee Ya'akub Oda's onsite tour recorded in videos, with each geo-located on the 3D models.
3. Workshop Journal: The third sequence was used to manage multiple collaborators, and represents the story of the workshop's fieldwork itself. It includes the geo-referenced notes, photos, and videos collected and exchanged during the collaborative work and helped store, manage, share, and discuss the community's process.

VR Curations

The student projects took another step further towards the creation of a visual, immersive and critical historiography of Lifta. In each of the three projects developed, the site and its various interlocutors,

its archival resources, are all composed in the service of the narratives, through which Lifta's complex histories unfold anew. In that sense, the projects represent, though are in no way comprehensive, of the variety of approaches and scales that can be employed in the study and narration of the site. While the first project focuses on the question of ritual and myth and their expression in public space, the second presents a more tectonic approach, questions of vision and the meaning of an architectural detail. The third project takes yet another approach as it brings forth questions of political ideology and representation, of labor and materiality, and how those are represented in a domestic space.



Fig. 6. The public review of student projects (left), and the exhibition of their work where a visitor with HMD exploring a scanned house through VR presentation.

The first project, titled 'Stories of the Spring', focuses on the history and present of public rituals, myths, and conflicts around Lifta's water source, the historical origin of the settlement¹³ In it, the audience is placed in three distinct situations in relation to the body of water, and is exposed to various happenings around it. The experience begins in one of the houses looking over the spring, in which the audience can both receive a perspective of the spring's location and presence in the village setting, and while exploring the house, the history of its residents and images of the 1948 evacuation. The second scene brings the audience to the spring itself, where figures of Hasidic men appear around the water, and the sound of children playing echoes in the background. At the same time, the work of a Palestinian female artist is presented in the vicinity, suggesting a tension between the two uses and meanings of the same site. The last scene brings the audience to the mouth of the spring, where a small canal channels the water towards the village. In it, the audience is exposed to the narration of a Palestinian refugee from Lifta, who explains the mythical significance of the site, while a 19th century etching of the spring appears within the point cloud model, giving the immersive experience of meeting an ephemeral character.

¹³ For instance: Canaan, Tawfik. *Haunted Springs and Water Demons in Palestine*. Palestine Oriental Society, 1922.

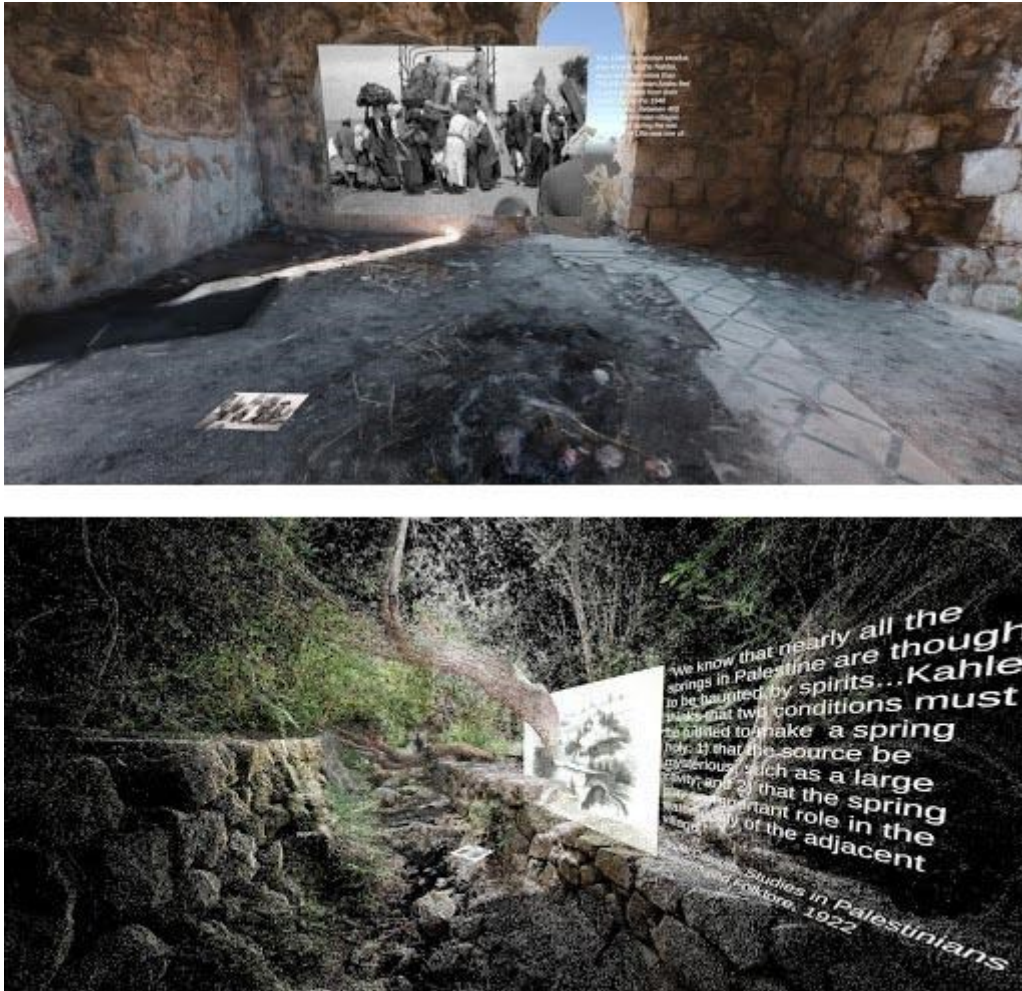


Fig. 7. Screen shots from 'Stories of the Spring' VR installation: One of Lifta's houses overlooking the spring, and a historical image depicting the evacuation of Palestinians from Lifta in 1948 (top); A point cloud scan of Lifta's spring, alongside an silhouette image of Ya'akub Oda, with audio of Oda's account of Palestinian life around the spring, and a 19th century representation of the spring (bottom);

The second project, simply titled 'Openings', proposes to examine Lifta's history through the wide array of the apertures on the site, some of which are natural, some designed, some created by violence and war. The VR experience begins with a somewhat abstracted space, employing the notion of a cabinet of curiosities as instruments that "sought out objects which appeared to transgress the boundaries between nature and artifice," (Bowry, 2014) where the project offers a kind of aperture museum in which various scanned openings are arranged. While some apertures offer entrance to the original spaces in Lifta from which they were extracted by 3D scanning, others lead to archival texts and images related both to Lifta and to the notion of sight, photography and vision. Also, some of the openings connect beyond the limits of Lifta and provide the audience to look through them to related geographic locations, such as other Palestinian villages and cities, or sites of conflict and ruination throughout the world.¹⁴

¹⁴ Problematic perhaps, one of the recurrent references when speaking to activists who are involved with Lifta is the case of Machu Picchu. For instance, the architect Gadi Iron, who is part of the Save Lifta Coalition, states that "We want to make a kind of Machu Picchu out of the village, Lifta is just as important." "Interview with Gadi Iron, Architect." <https://www.zochrot.org/en/testimony/54959> (Accessed: 24 January 2020).



Fig. 8. Screen shots from 'Openings' VR installation, showing a catalog of openings (left) from the site: windows, doors and holes, which function as portals to other places (right) in Lifta and beyond. Through the catalog of openings, the students devised a curatorial structure for the experience.

The third project aims to narrate the story and history of Lifta by focusing on stone, the material from which the site, its architecture, and many of its traditions are created. Organized in three juxtaposed narratives, the project, titled 'Stones Sighing,' pulls strings and archives from various sources in order to expose the composition and decomposition of the site. The first narrative, which gives the installation its rhythmic structure, is the autobiographic poem, "Standing before the Ruins of El-Birwha," written by the Palestinian national poet Mahmoud Darwish. Narrated in three languages—the original Arabic, Hebrew and English—the poem accompanies the various scenes, inflicting them with the voice of Palestinian memory. The second narrative is that of the life-cycle of the stones themselves. Here, every scene takes place in a space that represents a different moment in the life of Lifta's stones. This silent material is animated through its historical procession, beginning with an excavated cave, continuing to one of Lifta's early houses, moving onto a more modern and recent residence, then a renovated house still occupied by an Israeli resident, and ending in a collapsed and punctured ruin. The last narrative of this project informs the stone's representational, ideological, daily and symbolic role. Focusing on the tradition of Palestinian masonry, the narrative exposes—through archival materials, historical texts and scholarship embedded and activated within the experience—the manner in which traditional methods, Palestinian labor, the very texture and chiseling of the stones themselves, became an instrument in the service of Israeli ideology and architectural design. Adopting the only vernacular tradition that could be found, modern Israeli architects employed the stones of Lifta (and of other villages), in the cultivation of a biblical image of Jerusalem, and in the design of contemporary, quasi-vernacular architectural works¹⁵ (Nitzan-Shiftan, 2017). The narrative ends with a heavily manipulated representation of the space in which this journey began; an emptied out and hollowed ghost frame of what was once Lifta's stones.

¹⁵ Architectural historian Alona Nitzan-Shiftan makes note of the use of Palestinian masonry motifs, methods and styles in the design and conception of a post-1967 unified Jerusalem, meant to evoke a kind of biblical—rather than modern—image of the city and the state.



Fig. 9. Screenshots from 'Stones Sighing' VR installation: One interior of the houses in Lifta in a state of disrepair (top) and another with two drawings from different sources and times, juxtaposing the same architecture typology (bottom). The archival findings of the relevant typology appear floating inside the 3D captured spaces.

Conclusion

International communities have recognized the significance of digital cultural heritage practice as expressed in a series of historic charters. The Venice Charter (1964) aimed to safeguard important physical sites through conservation and restoration efforts, while the UNESCO Paris Charter (2003) advocated protection and accessibility of digital content from books, artworks to monuments as information for all. More recently, the Seville Principles (2010) provided a framework for the creation of authentic visualization of cultural heritage.

In light of these, the underlying objective of heritage practices is to identify or create authentic content and to preserve it, either in physical or digital form, as "information for all". Therefore, the processes employed to warrant authenticity and appropriate methods for the preservation of sites and remains are key topics in these charters. Nevertheless, in order to animate these sites and remains, and to draw them out of their digital vaults, a digital cultural heritage practice needs to foster a means of delivering narratives that are associated and stem from the site and its history.

The case of Lifta not only demonstrates the technological capacity of contemporary digital tools for rapid onsite recordings, but rather complements those by critically reflecting on new ways in which digital heritage is created from these recordings, with narratives and curations embedded, for circulating and sharing the sense of various experiences of the place. Through the use of online collaboration and interactive presentations, the multiplicity of narrative histories and viewpoints becomes

inherent to the understanding of the site as are its material remains. It produces a rich and diverse representation in its archival sources and one that, through community participation, holds the potential to grow and evolve through time. Such a representation can complement the outcome of traditional practice of cultural heritage project and bring a new value to a cultural heritage itself. At stake is not only a precise documentation of historical remains and evidence, but also the establishment of access for new publics to different forms of knowledge, and to multiple pasts.

With new means of documenting the site and its heritage raise new questions regarding the curation of materials. While it is becoming clear that digital narrative tools are persuasive narrative builders and may be used to build fictional worlds, it is ever more urgent to encourage its use for the curation of multifaceted narratives, which tell various stories of place and history, towards an open-source model for historiography and heritage.

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The Digital Archeology / Virtual Narratives workshop and exhibition were generously funded by the MIT International Science and Technology Initiatives (MISTI) Israel Seed Fund, and the MIT Department of Architecture as well as MIT-SUTD IDC program.

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Appendix: About the Lifta workshop

Additional Collaborators

Dr. Yuval Yekutieli, Department of Bible, Archeology and Ancient Near East Studies, Ben Gurion University

Dr. Eli Cohen, Department of Bible, Archeology and Ancient Near East Studies, Ben Gurion University

Alon Havkin, Scan the City Project, Israel

Student Participants:

Dalma Foldesi, Gabrielle Heffernan, Matthew Ledwidge, Jung In Seo, Radhika Singh, Cristina Solis, David White

Itinerary (2019)

May 28–30: Preliminary training and research sessions at MIT

June 1–13: Fieldwork in Lifta, Jerusalem

- Field recording (photogrammetric captures, drone, Lidar, audio-video, 360 camera)
- Archaeologist lectures
- Onsite talk of former residents/settlers

- Meeting the local community group, Save Lifta
- August 26–30: Project development at MIT design studio
- September 28: Public review of student works

VR Exhibition:

- September 24-October 4, Keller Gallery at MIT
- Digital Archeology, Virtual Narratives: The Case of Lifta*

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