Fissures and Cracks

Damage to homes in the Wadi Hilweh neighborhood of Silwan

MARCH 2020
Introduction

For over a decade, Palestinian residents of the neighborhood of Wadi Hilweh in Silwan have reported damage to their homes. Almost all the complaints come from families living along Wadi Hilweh’s main street which is situated above the archaeological excavation of a central tunnel in an underground network of tunnels, named the “Pilgrims’ Road” by the Elad Foundation. Over time, damage to homes in the neighborhood has amassed and increased. In 2019, Emek Shaveh attempted to map the homes which have shown cracks in the walls or where walls have collapsed, to gauge the scope of the phenomenon, learn of the nature of the damage, and the degree of proximity between the excavations and the damaged homes.

The following is a summary of the findings collected throughout 2019 via meetings with residents, families, and visits to the homes in question. It was made possible due to residents’ willingness to open up their homes to us, and with the assistance of the Wadi Hilweh Residents’ Committee.

The Neighborhood of Wadi Hilweh is divided into territories. Each territory’s name indicates a certain family’s historic connection to the land (for instance, the territory of Hosh Qara’in belongs to the Qara’in family). The families included in the survey are the Siyam family, who own approximately one third of the homes in Wadi Hilweh; the Awaida family who also own roughly one third of the homes; and the Hamdan, Abu ‘Ayesha, and Abu Ramila families (see table in Appendix 1 for more details).

Wadi Hilweh street, the main street, crosses the neighborhood from north to south spanning approximately 500 meters. Sections of the excavations are situated below the main street, and much of the excavation runs under homes to the west of the main street. Dozens of homes line the street, some densely built, and it is not always possible to distinguish between the different units. Our research indicates that approximately 35 structures have been damaged to varying degrees. Cracks in floors and walls were found, along with other forms of damage. All the structures are located along the “Pilgrims’ Road” excavation route (see attached map).

In response to our query addressed to the Israel Antiquities Authority about the collapses and cracks within the homes, we received the following response on October 24, 2017: “Your allegation regarding damage […] lacks any basis […]. The Israel Antiquities Authority is carrying out the said project based on an engineering plan with ongoing engineering consultation, in adherence to safety regulations.”

The documentation below does not purport to be a substitute for a comprehensive engineering investigation. We have no scientific evidence or proof of the connection between the excavations and the cracks and damage. We are simply sounding the voices and testimonies of residents who live in the homes above the excavation route.
Silwan and Archaeology

The Palestinian village of Silwan is located in East Jerusalem on the slopes south of the Old City walls. Approximately 20,000 Palestinian residents currently live there, along with roughly 1,000 Israeli settlers. The village has several sub-neighborhoods, including Wadi Hilweh (the subject of this report), Al-Bustan, and Battan al-Hawa, among others.

Wadi Hilweh is located close to the wall that surrounds the Old City and the Al Aqsa mosque (see the attached map), along a route that links the neighborhoods south of the Old City to the Al Aqsa mosque. On a daily basis, thousands of Palestinian residents pass through here on their way to work in North and West Jerusalem. Its strategic location is among the main reasons the Israeli government and the Elad Foundation are eager to take control of the area. The Judaization of the neighborhood could cut it off from other neighborhoods in East Jerusalem, thus curtailing Palestinians’ ability to move freely and with ease through Palestinian areas of Jerusalem.

Wadi Hilweh is located on the archaeological site known as the “City of David”, wherein remains were discovered dating back to the founding of Jerusalem approximately 5,000 years ago. The site is located inside the Jerusalem Walls National Park which is managed by the Nature and Parks Authority. The Elad Foundation, the Israel Antiquities Authority, the Jerusalem Municipality, and the Nature and Parks Authority carry out archaeological excavations in multiple locations throughout the neighborhood (it is important to note that the Nature and Parks Authority transferred the rights to operate the City of David to the Elad Foundation with the approval of the High Court). The “Pilgrims’ Road” is a nickname given by the Elad Foundation to a stepped street dating back to the first century CE, the Second Temple period (likely under the governance of Pontius Pilate). The street continues from the Pool of Shiloah Pool/Birket al-Hamra/Pool of Siloam, on the slope above the Kidron riverbed up along the Tyropoeon Valley (typically translated as the “Valley of the Cheesemakers”), which is known from the writings of Flavius Josephus. The street likely ended west of the Western Wall, or perhaps extended along the valley past Damascus Gate. According to the City of David’s website, the street is 600 meters long and approximately eight meters wide. The excavations have revealed roughly 350 meters of the southern part of the road, and to our knowledge they are likely to unearth most of it, if not all.

The horizontal method of excavation in Silwan is not accepted in Israel or internationally, and academics and archaeologists on behalf of the Israel Antiquities Authority itself have criticized this method. Founder and Chair of the Elad Foundation, David Be’eri, clarified the problem: “Buildings are typically constructed from the bottom-up [...] Here we built from the top-down. The problem is that everything is stranded in the air, you continue digging so you’re in the air [...] and then the winter comes and the land starts to slide, and there are Arab homes above, it’s scary.”1

Most of the homes in Wadi Hilweh were built prior to 1967, and have hardly changed since their construction. There are several explanations for this: As the planning and building authority in East Jerusalem, Israel is known to place many obstacles before Palestinian development or construction initiatives; the socioeconomic situation of the Palestinian residents of East Jerusalem is among the worst in the country; construction of residential structures is prohibited within national parks, and all building permits in the area require the approval of the Israel Antiquities Authority. Costs involved are steep and the bureaucracy involved is unusually burdensome. Considering this state of affairs, most residents do not seek recourse from the authorities to address these issues, including the damage caused to their homes in recent years.

1) https://www.haaretz.co.il/news/politics/1.1283656 (Hebrew)
Scope of Damage to Homes

The documentation of damaged homes includes 38 housing units. Several residences are sub-units within a residential complex, or a home with a central courtyard. What is common to all the structures examined is that they have all been damaged to varying degrees: there are ground-floor apartments wherein the scope of damage is large-scale and direct, including significant destruction of part of the house, along with apartments located on higher floors that sustained secondary damage, some of it clearly making the house unfit for habitation. Of the 38 housing units, severe damage can be identified among 10 ground floor units— including broad cracks and sunken floors. Some of these apartments were renovated, but a few months later the same issues recurred. Over 200 people live in the 38 damaged apartments, including women, elderly people, and children. Cracks and relatively minor damage to walls were identified in eight of the apartments.

The Home of the Awaida Family

The Awaida family home is at the center of Wadi Hilweh road between the Shiloah Pool/Birket al-Hamra/Pool of Siloam and the walls of the Old City. As with many Palestinian families in East Jerusalem, the Awaida family lives in an extended family residential model – meaning that parents, their children, and grandchildren, live together in a single residential unit or shared complex. A couple and their three sons, each with his respective family, live in a communal complex with three housing units and a shared yard, where the family’s children play. The parents are very old and live in one unit with the eldest son, Amar, his wife and four children. The oldest grandchild is nine years old and the youngest is three. Mazen, Amar’s brother, lives with his wife and their seven sons in a second unit. Mazen and Amar’s youngest brother, Amer, lives in the third unit with his wife and six children.

According to the family members who live in the complex, fissures began to appear in the walls soon after the excavation under their homes commenced. The family members also suffer from the noise emanating from the excavations.

Fissures and cracks in the apartments of the Awaida family in Silwan
In addition to the three families mentioned above, their relatives who live in homes nearby present similar situations. Last winter, the sewage system collapsed and flooded one of the homes, creating a health hazard to all the residents of the complex.

One of the family members shared that they discovered fissures in the wall several months ago. Initially the fissures were thin, and over time they grew into more substantial cracks. Family members appealed to organizations and nonprofits that specialize in renovating structures. However, as of the date when the interview was conducted they had not received any such assistance, nor from official bodies such as the Jerusalem Municipality or the social services.

A cousin who lives in another apartment in the complex, whose walls also developed cracks, reported that following discovering the damage he called the police who sent municipal representatives. The representatives arrived with an engineer from the municipality who examined the damage and informed him that the house was dangerous to live in and must be vacated. In the winter of 2017-2018 he was compelled to leave the home and rent an apartment until the Jerusalem Municipality would repair the damage. Although he evacuated the home several months ago, the house has remained empty. No one has taken responsibility for the situation and repaired the damage. Today he regrets having made a complaint: “I made a big mistake when I informed them of the damage, as the result is I cannot return to my home, and while it stands empty no one bothers to help me.”

Ruins of a section of the house following the 2017 rainy season

Ruins of a section of the house following the 2017 rainy season
The Hamdan Family and an Anonymous Family

Another home that was examined belongs to a family that wishes to remain anonymous. Throughout 2018 the house was renovated due to damage, yet recently the cracks have returned. A family member told us that the repair proved to be useless.

The Hamdan family also lives in an extended family model in a residential apartment building – father, mother, children, and their families. A total of 15 people live in two floors. In the winter of 2018, the outdoor kitchen of the ground floor entirely collapsed. Family members recounted that before the collapse they heard the sounds of excavation underground and felt the house move. Due to the kitchen’s collapse, the household members were compelled to evacuate the home for a few months, in hopes that the municipality or social services would repair the damage. When they realized that the authorities did not intend to repair the damage, they returned to live in the home despite the potentially life-threatening damage, in fear that should they not move back in, settlers would take it over.

The father of the family requested assistance from the municipality to repair the damage. In response, the municipality suggested to reinforce the foundations. Building engineers with whom he consulted told him that the municipality’s suggestion would not resolve the problem, as they claimed the damage would recur insofar as excavations continued under the home’s foundations.

The Siyam Family

The home of the Siyam family is located toward the bottom of Wadi Hilweh street, and houses close to 20 family members. The father of the family already told us several years ago that he and his family noticed cracks in the walls and floors of the home. With time, the cracks grew and became a dangerous to those living in the building. Urgent repairs were required. Family members were unable to locate an organization or public body that would subsidize the repairs and decided to repair the damage themselves, despite the costly expenses. In spite of the renovations and repairs, the problems remain, and new impairments are appearing throughout the building.

Cracks in the homes, 2017
Collapses and Pits in Public Spaces

The cracks and damage to homes, join the gaping pits that have emerged in public areas of the neighborhood over the past decade. Initial reports regarding pits on the main road and the area around the mosque were already issued in the winter of 2010. In response, the Jerusalem Municipality fenced off the damaged areas, brought an engineer to examine the sites, and ensured that the pits were filled with soil and concrete. The Wadi Hilweh mosque is adjacent to the Shiloah Pool/Birket al-Hamra/Pool of Siloam above the tunnel excavation route, and in 2013 the steps below the visitors’ center leading to the Gihon Spring collapsed. During the same period, the Israel Antiquities Authority was excavating directly under the steps. The most recent collapse incident in a public space occurred in March of 2019 in a parking lot adjacent to an Israel Antiquities Authority excavation site funded by the Elad Foundation, in the middle of Wadi Hilweh street (see the photographs below). A great portion of the parking lot caved in. Following the collapse, the Jerusalem Municipality conducted maintenance and stabilization work over the course of several months.

2) Short video “The collapse in Silwan”, Peace Now, 2.3.2010.
Conclusion

The formation of fissures and cracks in homes in Wadi Hilweh and Silwan is a well-known problem. Nevertheless, we encountered difficulties in gathering evidence, as most of the residents are fearful of discussing the damage caused to their homes, as they find it difficult to ascertain whether those coming to check on the condition of their home are seeking to help or harm them.

As noted, the documentation presented herein does not purport to substitute a comprehensive engineering investigation. However, it raises questions regarding the responsibilities of the authorities working in the neighborhood. The Jerusalem Municipality, the Nature and Parks Authority, the Israel Antiquities Authority, and the Elad Foundation all boast of exciting archaeological discoveries, praising the stepped street excavations as one of the most important discoveries in recent times. In light of all the touristic development and archaeological research, these bodies must recognize the collapses and detrimental effect to homes located at the heart of the antiquities site and examine how they were caused and whether they are linked to the excavations. The authorities must find a suitable solution for the dozens of families whose homes were damaged, whether inadvertently or not.

Responses from the Authorities

Jerusalem Municipality: The municipality’s hazardous buildings department received an alert from the residents regarding the collapse of a section of a sports field and the wall between the field and an adjacent house. The hazard has been removed.

Nature and Parks Authority: “We have not received any complaints about the issue and are not familiar with the phenomenon as you present it. It is important to note that the archaeological excavations in the area are conducted by the Israel Antiquities Authority. To the best of our knowledge these excavations, are being conducted with all the necessary permits and with meticulous engineering oversight. If we receive a proper, specific and credible complaint we will be able to investigate it on an individual basis. At the same time, it is important to note that some of the houses in question were built against the law and therefore without any engineering oversight as required. This too is an issue which is worth investigating.

The Israel Antiquities Authority: The area in question has been prone to problems for many years. In the 1980s, before the large excavations had begun, houses collapsed and each winter several homes would be rendered unfit for residence. This has also been reported in newspaper articles. The excavation is taking place with close engineering oversight. So that the excavation can take place, the most advanced safety measures are being implemented which involve no risk-taking. The Israel Antiquities Authority invites anyone who feels like they have been detrimentally impacted to approach it directly.
Archaeological Sites in Silwan

1. Givati Compound
2. City of David Visitors' Center
3. Area G
4. Kenyon’s excavations
5. Gihon spring
6. Shiloah tunnel
7. Area E
8. Weil's excavations
9. Siloam Pool
10. “The Pilgrimage Route”
11. Al Bustan Neighborhood
12. Parking Lots

Legend:
- Ancient Water Tunnels
- Excavation Area
- Tourist Area
- Planned Tourist Area

Map Design by Lou Oates
## Appendix A: List of Families Living in Damaged Apartments

<table>
<thead>
<tr>
<th>Family</th>
<th>Number of apartments</th>
<th>Individuals</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Awaida A</td>
<td>Nuclear family</td>
<td>3</td>
<td>26</td>
</tr>
<tr>
<td>Awaida B</td>
<td>Nuclear family</td>
<td>4</td>
<td>22</td>
</tr>
<tr>
<td>Awaida C</td>
<td>Nuclear family</td>
<td>5</td>
<td>24</td>
</tr>
<tr>
<td>Siyam A</td>
<td>6 apartments, in which 1 is lived in</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Rented to the Gamgum family</td>
<td></td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Rented to the Abu Sabih family</td>
<td></td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Rented to the Abu Ramila family</td>
<td></td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>Rented to the Abu ‘Ayesha family</td>
<td></td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Rented to the Ashur family</td>
<td></td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>Siyam B</td>
<td>6</td>
<td></td>
<td>28</td>
</tr>
<tr>
<td>Siyam C</td>
<td>4</td>
<td></td>
<td>24</td>
</tr>
<tr>
<td>Siyam D</td>
<td>2</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Hamdan</td>
<td>5</td>
<td></td>
<td>25</td>
</tr>
<tr>
<td>Qara’in</td>
<td>Nuclear family</td>
<td>4</td>
<td>16</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>39</strong></td>
<td><strong>207</strong></td>
</tr>
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