Infrastructure in Jerusalem

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MAY 2020

Building Common Visions for the Future of Jerusalem: A Bottom-Up Approach







Executive Summary

This paper is part of the "Building Visions for the Future of Jerusalem: A Bottom-Up Approach" project, which engages Israeli and Palestinian residents of East and West Jerusalem and aims to dignify diverse voices, enhance knowledge of the complexity of Jerusalem, and contribute toward constructive public and civil society engagement regarding the future of the city. The paper focuses on infrastructure and is based on discussions and photo-voice that took place among three groups—Palestinian, Israeli, and mixed—of Jerusalemite activists and urban planners in the Abu Tor/A-Thuri neighborhood.

Infrastructure is one of the main factors that shapes people's everyday lives in the urban space: Public transportation, electricity lines, roads, and green spaces are all examples of this. In Jerusalem, the quality of the infrastructure is not unanimous across different neighborhoods: some enjoy good roads, drainage, and various parks and amenities whereas others severely lack such services. A significant difference in the quality of infrastructure exists between Israeli and Palestinian neighborhoods. With some exceptions, West Jerusalem neighborhoods have much better sewage, roads, electricity, parks, and other facilities than their East Jerusalem counterparts.

The findings from the Palestinian and Israeli groups reflect these differences, while also highlighting some common problems and challenges. Similar areas of concern include the lack of parking spaces, traffic congestion, the lack of recreational spaces for youths, dangerous roads and crossings, the neglect of open spaces, bad drainage, broken pavements, and not enough lighting. However, the photographs and discussions also reveal that Palestinian A-Thuri suffers more from dirtiness, poor sanitation, the lack of open space, water and electricity cuts, and insufficient and degraded housing conditions compared to Israeli Abu Tor.

Envisioning the future of the neighborhood, participants suggested focusing on small bottom-up interventions in open public spaces, which can beautify them and make them welcoming to different groups. This approach is also known as *place-making*: in other words, small-scale initiatives that are taken up by the community to plan, design, and manage open spaces according to the community's needs and strengths. Examples include "soft" measures such as painting, gardening, and providing street furniture. However, beyond the physical solutions, these initiatives require the consent of the community and a collaborative



approach to ensure that the new facilities will be used, taken care of, and enjoyed by different members of the community.

About the Project

"Building Visions for the Future of Jerusalem: A Bottom-Up Approach" is a *Leonard Davis Institute* (The Hebrew University of Jerusalem) and *Israel-Palestine: Creative Regional Initiatives* (IPCRI) collaboration funded by the European Union. The project engages residents of East and West Jerusalem, urban planners, students, women, youths, and local leaders to work together to shape the current and future reality of their neighborhoods and the city as a whole. Urban planning and formal negotiations in Jerusalem have generally ignored the voices of the residents, in particular those from marginalized and diverse communities.

This project aims to dignify diverse voices, enhance knowledge of the complexity of Jerusalem, and contribute toward constructive public and civil society engagement with respect to the future of the city. The project includes surveys of residents of Jerusalem, the mapping of local needs, community projects, and the increased efficacy of local residents of Jerusalem in shaping the future of the city. In its first stage, the project engaged residents from different Jerusalem neighborhoods in generating equitable solutions to local problems. The project provided and utilized capacity-building and participatory techniques to empower local communities and work with residents to create small interventions that would improve their reality. The community projects were decided on by the residents and included the creation of green spaces, public gardens, and libraries, as well as the beautifying of neighborhoods and any other initiatives or actions they prioritized. We believe that focusing on current inequalities while building partnerships at the neighborhood level can empower marginalized communities and answer some of their needs.

In the final stage of the project, Jerusalem residents working in thematic groups discussed wider issues of concern. Israeli, Palestinian, and mixed thematic groups gathered to talk about four main themes: 1) Youth and Education, 2) Infrastructure and Public Spaces, 3) Political Leadership and Representation, and 4) Safety and Protection. We also asked them to imagine and create new visions regarding what they wish their reality to look like. The results are a baseline for the following policy papers, which will hopefully contribute to local input toward short- and long-term solutions in Jerusalem. In the end, the participants' visual



visions, the leaders' verbal visions, and the policy papers will be presented in a traveling exhibition that will uncover some of Jerusalem's wishful future. Through this approach, we aim to engage and inspire residents, policy designers, and other activists to work on local creative initiatives, increase the knowledge of the complexities of Jerusalem, and contribute toward a negotiated solution for the city.

Infrastructure Thematic Group: The Work Process

The group was composed of three sub-groups: Palestinian (from A-Thuri), Israeli (from Abu Tor and Bakaa), and a mixed team of expert urban planners and architects (from different neighborhoods in Jerusalem). Participants were recruited through social media and poster advertising (Figure 1), as well as through the facilitators' personal connections. Each group included six to ten participants of different ages, sexes, and occupations. All groups studied the Abu Tor/ A-Thuri neighborhood as a representative case. This neighborhood was selected as a pilot since here the two sides—East and West Jerusalem—are close to each other, separated by only one street, yet they are very different from one another in terms of



their physical characteristics and socioeconomic statuses. Moreover, the group facilitators had access to the community there and preliminary collaboration with the community council, which meant that the findings could be put good use.

Figure 1: A recruitment poster for the photo-voice process

Each group met separately during several workshops, which included brainstorming sessions and urban walks in the neighborhood guided by *photo-voice*. Photo-voice is a visual methodology used in participatory research to document reality using images or videos and



to reflect on them. During the process, participants take photos of their environment and/or topics they have agreed upon in advance. The photos are then brought to the group to initiate discussion. They help participants share their interpretation with other members, gain new insights about what they see, and communicate their findings to larger circles. Since infrastructure is a big topic, the teams decided to focus on public open spaces. However, during the workshops, other issues also emerged. Each participant shared their photos with the group and explained why they thought the photos were important and representative, and the presentations were followed by a group discussion. While each group had a slightly different selection process, each had to eventually collectively choose three photos that represented the main issues in the neighborhood, and these photos were later used to come up with a future vision. You can see the selected photos and the visual visions in the annex.

Background: Infrastructure in Jerusalem

Infrastructure can be perceived as the backbone of cities. It is a wide category that encapsulates multiple services and facilities that are necessary in order for an area to function effectively, such as roads, sewage lines, electricity grids, water pipes, railways, and sidewalks. The definitions of what counts as infrastructure are broad and diverse; some strictly focus on physical aspects while others are more flexible and also include social ones, such as social media technologies and social cohesion. Some infrastructure types are local, for example, sewage, while others are regional, national, or even international, such as gas pipelines. Accordingly, the responsibility for functioning infrastructure in a city falls on several governmental agencies and jurisdictions, depending on the scale and type of facility or service. Urban planners must adapt the infrastructure to the size of the population, emerging technologies, new growth areas, and other dynamic factors.

In Jerusalem, as in other cities, infrastructure is one of the main factors that shapes people's everyday lives: public transportation, electricity lines, roads, and green spaces are all examples of infrastructure. A good level of infrastructure can render life in the urban space safe, sustainable, and accessible to different groups, while degraded infrastructure can negatively affect one's daily life in many ways. The quality of the infrastructure is not unanimous across the urban space: some neighborhoods enjoy good roads, drainage, and various parks and amenities while others severely lack such services. In Jerusalem, there is a



significant difference in the quality, scale, and type of infrastructure between Israeli and Palestinian neighborhoods. Generally, West Jerusalem neighborhoods have much better sewage, roads, electricity, parks, and other facilities than their East Jerusalem counterparts (with some exceptions). One striking example of this gap is parks and playgrounds, which are severely lacking in East Jerusalem. In Beit Hanina, a neighborhood comprising about thirty-five thousand residents, there are only four playgrounds. In A-Thuri (thirteen thousand residents), there is only one, and it is very small. Another example is waste, which is not collected as frequently in East Jerusalem compared to the West, or not collected at all on some streets and especially in the neighborhoods on the Palestinian side of the separation wall.

Other typical problems in East Jerusalem include very narrow streets with no pavements; improper or a lack of drainage, which leads to floods in rainy weather; a lack of street lighting; no parking spaces; and multiple one-way roads where traffic is heavy and dangerous. The bus systems of East and West Jerusalem are also disconnected, which means that moving back and forth between the two sides can be time-consuming and expensive, even if the distances are small. The light rail is an exception to this situation, connecting the East and West of the city, yet most of the stations are located in West Jerusalem. Palestinian residents are more negatively affected by the disconnection because they rely more on employment opportunities in West Jerusalem than the other way around. The recent government decision 3790 (13 May 2018) recognizes many of these problems and aims to contribute toward their resolution in the next five years, in particular, through investment in transportation (585 million NIS), water and sanitation infrastructure (73.5 million NIS), and planning and land registration (50 million NIS) in East Jerusalem.

Thus, infrastructure is an important policy issue and is related to urban planning policies. One of the challenges in East Jerusalem is that most of the land is private and unregistered, in contrast to that in West Jerusalem. Many East Jerusalemite neighborhoods do not have any valid master planning that outlines their physical needs and future growth trajectories. Moreover, East Jerusalem neighborhoods receive a smaller share of the municipal budget and fewer services such as garbage collection. Water and electricity are provided by separate companies that operate in East Jerusalem and the West Bank, and their quality is poor. These combined factors make infrastructure in East Jerusalem a sensitive issue, both administratively and politically, since infrastructure is tied to larger policies





regarding East Jerusalem's status. In this sense, infrastructure is not a purely technical matter. However, infrastructure challenges exist all across the city and are experienced by residents of West Jerusalem as well, as the following analysis will demonstrate.

Analysis: The Main Problems

Participants of all three groups identified a large array of infrastructure-related problems in the Abu Tor/A-Thuri neighborhood. Some of the issues were common both to the Palestinian and Israeli sides. These included a lack of parking spaces, traffic congestion, a lack of recreational spaces for youths, dangerous roads and crossings, the neglect of open spaces, bad drainage, broken pavements, and not enough lighting. The poor maintenance of public spaces was also a key topic raised by all participants. These concerns are in line with the results of the project's survey in Jerusalem, where residents from all around the city were asked about things they would like to see improved in their neighborhoods (Figure 2).¹

Palestinians		Israelis	
Problem	%	Problem	%
Safety	18	Sanitation	17
Infrastructure	18	Infrastructure	16
Cost of living	12	Public transportation	10
Employment	11	Education	7
Education	8	Commerce	7

Table 1: Residents' top five responses to improvements they would like to see in their neighborhoods. Source: One City Two Realities. Jerusalem 2018 Public Opinion Survey.

¹ The public opinion survey included 612 Palestinian residents East Jerusalem and 516 Jewish residents of West Jerusalem. The Surveys were fielded, and responses were collected during January 2018. Full methodological information about the survey and results are available here: https://jerusalemvisions.huji.ac.il/book/survey-report



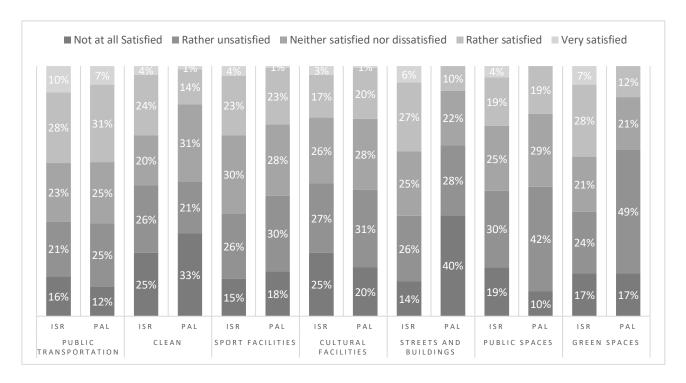


Figure 2: Residents' satisfaction with infrastructure in their neighborhood. Source: One City Two Realities. Jerusalem 2018
Public Opinion Survey.

As can be seen in Figure 2, both Palestinian and Israeli respondents mentioned infrastructure as a topic they would like to see improved (18% and 16%, respectively) and, more specifically, sanitation, public transportation, and public spaces. Similarly, they showed a medium-to-low level of satisfaction with the level of cleanliness, sports facilities, and public transportation in their neighborhoods (Figure 3). These results demonstrate that residents' concerns in the Abu Tor/A-Thuri neighborhood are also representative of other neighborhoods in the city. It is also worth noting that 40% of the Palestinian respondents are not at all satisfied with streets and buildings compared to only 14% of the Israelis. Although, when this category is combined with "rather unsatisfied," the responses are similar: 40% of both Palestinians and Israelis are not satisfied.

However, even though residents from all across the city have reported similar issues and exhibited similar levels of satisfaction, a closer look at the Abu Tor/A-Thuri neighborhood highlights some differences between the Israeli and Palestinian neighborhoods. In Palestinian A-Thuri, the following issues were recognized as being most troubling (in no particular order):

- 1. Dirtiness and rubbish on the streets and in schools and open spaces, caused by insufficient waste collection
- 2. Sanitation: poor sewage





- 3. No open green spaces and parks
- 4. Steep roads with no stairs or banisters for support and broken pavements, which make walking hazardous
- 5. Exposed electricity lines (Figure 4)
- 6. Insufficient and degraded housing conditions
- 7. Crowdedness
- 8. Frequent water and electricity cuts



Figure 3: Exposed electricity lines in A-Thuri

In Israeli Abu Tor, the following issues were raised (also in no particular order):

- 1. Insufficient vegetation
- 2. Not enough playgrounds for children
- 3. Stray cats
- 4. Noise
- 5. Lack of historic preservation
- 6. Generally neglected appearance of the buildings and facilities
- 7. Dirtiness
- 8. Poor accessibility to other neighborhoods, either by car or by public transportation



While some of the issues overlap, the extent of the problems is not the same in the Israeli and Palestinian neighborhoods. For example, while both Palestinian and Israeli residents reported that their neighborhood suffers from insufficient waste collection, generally, waste collection is much poorer in East Jerusalem.

The photo-voice process provides a useful window to how Palestinian and Israeli residents of Abu Tor/A-Thuri reflected on the different problems. The three photos selected by the Palestinian group present the following problems: a) an open fire in a private open space in the neighborhood (Figure 5), b) exposed electricity lines, and c) a degraded street that is not very accessible.

The three photos selected by the Israeli group present the following issues: a) a neglected open space, b) an old kiosk in a park (Figure 6), and c) an empty derelict area on the seam between the Israeli and Palestinian neighborhoods (Figure 7). The professional mixed group chose photos of spaces where small-scale place-making interventions could make them more engaging and inviting, for example, an abandoned rooftop balcony. While these photos do not necessarily represent the most 'burning' issues in terms of infrastructure, they offer opportunities to develop cleaner, safer, and more engaging urban spaces.



Figure 5: Burning tires in an A-Thuri open space







Figure 6: An abandoned kiosk in Abu Tor



Figure 7: An under-used space in Abu Tor

The Vision for the Future

The thematic infrastructure groups decided to focus on public open spaces, which is just one aspect of infrastructure. Accordingly, their visions for the neighborhood focused on bottom-up interventions that can beautify open spaces in the neighborhood and make them welcoming for different groups in terms of age, sex, and ethnicity. This approach is also known as *place-making*: in other words, small-scale initiatives that are taken by the community to plan, design, and manage open spaces according to the community's needs and strengths. Different place-making projects have taken place across Jerusalem in the last few years, led by residents and the municipality's development authority for the city center *Eden*, with promising outcomes.



The three groups adopted the place-making approach and suggested affordable and creative means to invest in under-used spaces in the neighborhood. The group's poster (see annex) demonstrates the rationale behind this approach and its potential benefits. The 'before' images were selected in the photo-voice process of the Palestinian group. The 'after' images show how neglected and dangerous spaces can be turned around. For example, instead of burnt tires, the park can be revived as a natural children's playground while recycling the tires to create community art and work. Another example, from the Israeli group, is turning the old kiosk in the park into a place where community members can enjoy a coffee and chat in a cooperatively owned or private coffee place, while their children play nearby. Alternatively, according to another suggestion, the derelict public space on the seam between Abu Tor and A-Thuri should be shared, especially across the seam line. In the participants' words, inclusiveness is a beautiful thing that should be architecturally designed.

These interventions are relatively modest. They include 'soft' measures such as painting, gardening, and providing street furniture. However, beyond the physical solutions, they require the consent of the community and a collaborative approach to ensure that the new facilities will be used, taken care of, and enjoyed by different members of the community. Only by building trust and making the community a part of these changes will they be sustained for future residents to use and benefit from.

Conclusion and Recommendations

As noted in this report, infrastructure is a large category that contains many subtopics that affect people's everyday lives, including how they move around the city (e.g., roads and pavements), whether they feel safe or not (e.g., electricity and sewage), and how they are able to enjoy their environment (e.g., open and green spaces and public facilities). It was also noted that although every neighborhood in Jerusalem can improve with regard to its physical infrastructure and benefit from newer facilities, wide gaps exist between East and West Jerusalem. In general, Palestinian East Jerusalemite neighborhoods, such as A-Thuri, suffer from crowdedness, unsafe infrastructure such as exposed electricity lines and a lack of drainage, and few to no open spaces that are sources of community gatherings and enjoyment. Infrastructure is more than a technical issue, and as such, it is intertwined with the political future of Jerusalem.



There are many solutions that are recommended to amend the deep inequality in the level of infrastructure between the two sides of the city, as well as to solve the individual problems of each neighborhood. These require a massive investment of funds in order to rectify and update old infrastructure components as well as to build new ones. Examples include the following: improving public transportation, with an emphasis on East Jerusalem and especially on the links between the East and West of the city; fixing pavements; adding street lighting; improving the frequency and scope of waste collection; building new playgrounds and neighborhood parks, especially in the Palestinian neighborhoods; fixing drainage; and adding safety measures to reduce the risk of car accidents.

Nonetheless, the groups in this project decided to start on a small scale and focus on short-term, affordable solutions that can be expanded later on, mainly, the upgrade and renovation of open public spaces—through painting, gardening, providing street furniture, and using modest constructions (e.g., small cafés). In all the groups, people emphasized that they would like to take responsibility for spaces in their neighborhoods. Thus, they recommended a collaborative approach that will make residents participate in decision-making processes so that they will feel a sense of ownership of the new facilities and will be incentivized to use them and take care of them. One way to facilitate such an approach is to use the photo-voice method, which allows multiple participants to document the neighborhood from their unique perspectives and to share their insights easily. By gradually coming up with solutions through a bottom-up approach, the community will be better equipped and more motivated to pursue large-scale projects and confront greater challenges.



Public Open Spaces Group

Building visions for the future of Jerusalem: Bottom-up approach

حردت مترا طررت تحريطات مورهم مطمعه طمعال المرادة على المستقبل القدس: نهج من أسفل إلى أعلى المرادة على المرادة على





Old kiosk in the park on Ephrayim Street next to the playground קיוסק ישן ליד גן המשחקים ברחוב אפרים كشك قديم في الحديقة في شارع إفرايم بجوار الملعب





Abu Tor. Empty derelict area on the seam between the Israeli and Palestinian neighborhoods.

אבו טור. שטח ריק על קו התפר בין שכונות ישראליות ופלסטיניות

ابو طور، منطقة فارغة على الحدود بين الأحياء الإسرائيلية والغلسطينية



Community members are enjoying a coffee and chatting in the cooperative or private coffee place, while the children are playing nearby.

חברי הקהילה מבלים בבית הקפה הקואופרטיבי או הפרטי בזמן שילדיהם משחקים בפארק

يستمتع أعضاء المجتمع بالقهوة والدردشة في المقهى التعاوني أو الخاص بينما يلعب الأطفال



Residents are welcomed again. After a participatory process, the area returned to be residents-owned.

התושבים שוב מוזמנים. לאחר תהליך שיתוף ציבור השטח חוזר להיות בבעלות התושבים

السكان مرحب بهم. بعد عملية مشاركة الجمهور ، تعود ملكية المنطقة إلى السكان مرة أخرى



Public Spaces should be shared, especially across the seam line. Inclusiveness is a beautiful thing that should be architecturally designed.

יש להכשיר מרחבים ציבוריים משותפים במיוחד לאורך קו התפר. הכללה היא דבר יפה שדורש מחשבה אדריכלית

يجب أن تكون الغراغات العامة مشتركة ، وخاصة عبر خط التماس. الشمولية شيء جميل ينبغي تصميمه معماريا





Stairs and sidewalk are colorless and lifeless without any congruency with their role as public space

המדרגות והמדרכה חסרי צבע וחסרי חיים ללא כל הלימה עם תפקידם כמרחב ציבורי الدرج والأرصغة عديمة اللون والحياة دون أي تطابق م£ دورها كمساحة عامة



This deserted road is the entrance to many residents' homes: the first place they see when they leave and the place where their kids play.

דרך שוממת זו היא הכניסה לבתים רבים של התושבים. המקום הראשון שהם רואים כשהם עוזבים את ביתם. המקום בו ילדיהם משחקים

هذا الطريق المهجور هو مدخل للعديد من منازل السكان. أول مكان يرونه عندما يغادرون. وهو مكان لعب أطفالهم إيضا



History is forgotten and identities are diminished as we walk indifferently next to the Greek Orthodox church wall.

ההיסטוריה נשכחת וזהויות נעלמות כשאנו הולכים באדישות ליד חומת הכנסייה היוונית

لقد نسي التاريخ وتضاءلت الهويات حيث نسير بلا مبالاة بجانب سور الكنيسة الأرثوذكسية اليونانية



Stairs can be like a waterfall full of life, color, and inspiration when one goes to work or comes back home.

המדרגות הן כמו מפל מלא חיים וצבע. מעניקות השראה בדרכך לעבודה או בשובך הביתה الدرج يشبه شلال الماء المليء بالحياة والألوان. يعطي إلالهام عندما تذهب إلى العمل أو تعود إلى المنزل



Transforming the road to a pedestrian road full of colors, shades and cute corners, which is safe for children and elderly alike.

הפיכת הכביש למדרחוב להולכי רגל מלא בצבעים, הצללות ופינות חמד. מקום בטוח לילדים וקשישים כאחד

تحويل الطريق إلى طريق مليء بالألوان والظلال والزوايا اللطيفة التي هي آمنة للأطفال وكبار السن على حد سواء



Historical sites, which represent the diversity and uniqueness of Jerusalem, should be highlighted to emphasize the city heritage while lighting up the streets.

יש להדגיש אתרים היסטוריים המייצגים את המגוון והייחודיות של ירושלים. רחובות מוארים יסייעו להדגשת מורשת העיר

يجب تسليط الضوء على المواقع التاريخية ، التي تمثل تنوع القدس وتغردها ، للتأكيد على تراث المدينة أثناء إضاءة الشوارع





In the overcrowded neighborhood public spaces are turning into a second-floor garbage can.

בשכונה הצפופה השטחים הציבוריים הופכים לקומה שנייה של פחי אשפה في الحي المكتظ ، تتحول اي مساحات عامة إلى سلة قمامة بالطابق الثاني



Creativity lurks in every corner – this terrace can become something totally different. יצירתיות אורבת בכל פינה – מה שהיה פעם מזבלה יכול להפוך למרפסת יפה يكمن الإيداع في كل زاوية – ما كان عبارة عن نغايات يمكن أن يتحول إلى شرفة جميلة



Where the streets have no identity איפה שלרחובות אין זהות בيث الشوارع ليس لها هوية



Every street should have its unique identity with colors, symbols and passion לכל רחוב צריכה להיות זהות משלו עם צבעים, סמלים ותשוקה באי أن يكون لكل شارع هويته الخاصة مح الألوان والرموز والشغف



The opposite of green is fire and smoke ההפך מירוק הם אש ועשן

عكس العناصر الخضراء هي النار والدخان



Reviving the park as a natural children's playground; instead of burning the tires, they should be recycled to create community art and work.

להחיות את הפארק כגן שעשועים טבעי לילדים. במקום לשרוף את הצמיגים למחזר אותם ביצירת

إحياء حديقة كملعب طبيعي للأطغال ، بدلاً من حرق الإطارات ، قم بإعادة تدويرها لإنشاء فن وعمل مـ6 المجتمع

