Current situation – transfer of goods in carts. Photo: Sharon Abramaon.

Renovation of streets in the old city of Jerusalem from the perspective of accessibility - HaShalshelet Street as a test case

Sharon Abramson

The Old City of Jerusalem, the city within the walls, is situated on a mountainside to the east. The urban infrastructure of the city was laid by the Romans when they rebuilt Jerusalem after the demolition of the Temple as “Aelia Capitolina”. It is built, like any Roman city, on a grid system. Additional construction layers of the Crusaders, Mamluks and Turks were placed on this system, all of which left their special mark. In the case of Jerusalem, the streets built from north to south correspond to the topography, and the streets built from east to west are built against the topography, that is, they have a large slope, and are historically built as streets with stairs. In addition, the entire city is defined as an archeological site to which very strict conservation guidelines apply.

Sharon Abramson, Architect. In recent years she has been dealing with the urban space, from a concept of searching for qualities in the existing space and strengthening them, and an architectural intervention that creates a continuous process between the old and the new.

It is important to note that many residents of the Old City are older people, who have difficulty getting around in this space.
HaShalshelet Street begins at the intersection of the markets at the geographical center of the city and reaches up to one of the entrances to the Temple Mount. The street is mostly a commercial street, with shops on both sides as well as entrances to buildings and residential complexes. The average width of the street is about three meters and sometimes even less. In areas where there are no shops there are monuments of Mamluk buildings of great importance.
From all this data it is clear that it is not possible to make full accessibility according to the accessibility regulations, and the aim of the project is to find a way to improve the existing one and increase walking comfort as much as possible. Attempting to adhere to regulations sometimes even creates a situation of obstacles and impairment to accessibility. An example of this is the creation of a long ramp that will match a standard slope when there is a step, which at the same time also creates a transverse obstacle of crossing the street from side to side. In other words, on the one hand – the ramp bridges over a step and improves accessibility and on the other hand, creates an obstacle on its own.

Detail of a ramp according to urban guidelines - problematic on a narrow street with shops on both sides.
Photo: Sharon Abramson

The more moderate the slope of the ramp is, and therefore the more convenient, the longer it is and enlarger the obstacle area that it creates. The big challenge then is to find the balance between the percentage of slope on the one hand and the reduction of the disturbance on the other. Each step should be examined individually as the parameters vary and the main ones are: the width of the street ranges from 2.4 meters to 4.5 meters; the intensity mode of use between the sides - is there a sequence of stores on both sides or only on one side, are there facades with no entrances, and are there entrances to sub-streets or residential complexes that should aspire to be without obstacle at all. The solution in the

intensive and narrow areas was to create a ramp with a relatively strong slope, and reduce the obstacle in the passage. Of course, there is no possibility of installing handholds in such cases, since if there is a shop on both sides it is not possible to attach the sloping passage to the side of the street and it should be in the middle. The historic and aesthetic character of the street has also been impaired with the ramps. Clinging to one side of the street with the ramp on this street is also problematic because, as mentioned earlier, in these cases these are usually buildings of great historical value and the ATVs that remove the garbage and also use the ramps affect the walls and buildings.

Although the building standard does not allow for less than three steps in public areas, the attempt here is to reduce as much as possible the number of consecutive steps to moderate the walk and adhere to the historic character of the street. The stairs' tread is at least 43 cm to allow a walker to be placed on the stair, although the standard allows less.

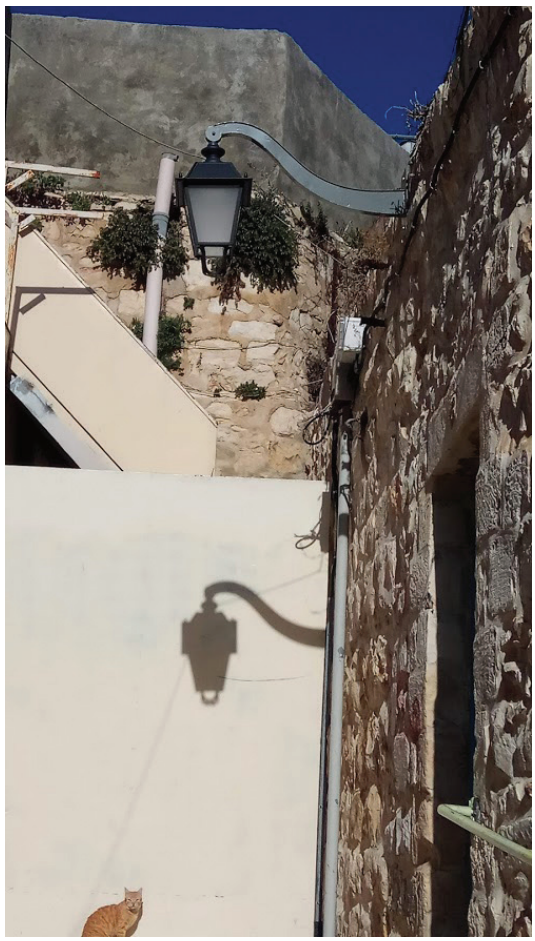
A specific ramp in a steep slope – reduces the size of the obstacle in the street (still in work stage and without paving joints). Photo: Sharon Abramson.

Accessibility improvement is reflected in additional elements. The selected stone flooring is rougher to prevent slipping, despite the "price" of dirt accumulation in the grooves and difficulty in cleaning the stone.

In light of the complexity and problematic nature of the existing solutions, the question arises as to whether it is not appropriate to strive to eliminate the stairs as much as possible, even at the cost of increasing the slope on the street. And if so, what is the right degree of slope to be reached. In my opinion, it is right to use this solution as much as possible. A slope without stairs also helps the passage of emergency and garbage removal vehicles.

An example of a very steeply sloping street can be found on Or Chaim Street in the Jewish Quarter. The street is in fact not commercial, and there are only entrances to houses, which allows the installation of a handhold along the walls, but it is certainly not an easy slope.

Or Chaim Street, the Jewish Quarter - a steep slope without stairs. Photo: Amir Bitan



New lighting removed from the wall and allowing for even scattering and maximum lighting coverage. Photo: Sharon Abramson

Here too, as in other cases in the Old City, every street and every situation should be examined on its own merits, and it is incorrect to decide on one comprehensive solution.

In addition to the slopes, stairs and ramps, there are other issues that have been addressed to handle accessibility, such as:

- New and comprehensive lighting design in the streets so that it will not be attached to the walls and allow maximum light scattering.
- Much effort has been invested also in the treatment and renovation of drainage receptors to comply with the accessibility standard. The accessible receptors absorb much smaller amounts of water than the regular road receptors that were used on the streets of the Old City, therefore this requires a very large addition of receptors.

In conclusion, it can be said that the handling of accessibility in this type of street requires the exercise of broad discretion on the part of the designer and the accessibility licensee. All elements must be examined on their own merits, and without referring blindly to standards. This is an attempt to find the optimum in a situation that is far from optimal.