

# ACCESSIBILITY OF HISTORIC CITIES

## THE OLD CITY OF JERUSALEM - A TEST CASE

ISSUE NO. 24, AUGUST 2020

# A MATTER OF ACCESS

Magazine on Accessibility for People with Special Needs



120

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Years of Inclusion



Inclusion for People  
with Disabilities

# A MATTER OF ACCESS

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[www.shekel.org.il](http://www.shekel.org.il) | E-mail: [avir@shekel.org.il](mailto:avir@shekel.org.il) | **A Matter of Access | Issue 24 | August 2020**

Editorial board address: 11 Yad Harutzim St. Jerusalem, 9342149 | Tel: 02-6720157 extension 122 | Fax: 02-6725208

# From the editors

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## Dear readers,

After a rather long break, we are happy to bring you this issue that deals with accessibility in historic cities and focuses on the accessibility project of the public space in the Old City of Jerusalem.

Historic cities are not a simple challenge when it comes to accessibility. The Old City of Jerusalem seems to be a particularly complex challenge due to a combination of a variety of factors and circumstances: complex topography, extremely dense construction, abundance of sites of historical-religious-archeological value, a complex and sensitive political situation. On a rather small area within the walls lives a population of several tens of thousands of residents, most of whom are people in poor socio-economic status, quite a few are elderly people and people with disabilities. That same area is also a destination for visits by millions of tourists from all over the world.

In order to make such a place accessible it is necessary to maneuver and find the appropriate balances between accessibility needs and stringent conservation requirements, and to take into account, with extreme caution, the set of complex environmental conditions.

We have endeavored to bring to the fore all the topics covered by the project, from the overall policy, conducting a comprehensive survey, setting priorities, building a work plan, to the step-by-step implementation of this plan. One article also discusses the analysis of what remains still to be worked on - they are neither few nor simple. At the end of this issue, there is an article by Architect Meirav Davish Ben Moshe, which deals with the initiative to develop in the Old City a program of an open-air museum, an idea formulated during the years of the project. In this context, physical accessibility will be an important component that will allow more people to enjoy the treasures of the Old City, not to mention the cultural accessibility that will contribute to a deeper understanding of the city on its long history and present life.

We hope that what is being said here can spur other historic cities in Israel, and also outside it, to move towards becoming convenient and inviting for all people, residents and tourists, with and without disabilities.

And a word to conclude, we wish to thank the editorial member, Architect Yael Danieli Lahav for her extensive assistance in preparing this issue.

We wish you all a fruitful reading, good health and a successful year.

Leah Ofer  
Avi Ramot







photo: © Rafael Ben Ari | Dreamstime.com

# MAKING THE OLD CITY OF JERUSALEM ACCESSIBLE - A PROFESSIONAL INTROSPECTION

Avi Ramot

Making the Old City of Jerusalem accessible has received much exposure during the recent year: articles in Israel and abroad, information on social media, letters to the editorial board and more.

The Old City is currently quite accessible and there are many people with disabilities who are touring it and of course live in it.

This may be the opportunity to stop for a moment, to think and practice a professional introspection regarding this challenging project.

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**Dr. Avi Ramot.** Director of the Israeli Center for Accessibility of Shekel Association.

## The decision phase to set off

In 2007 I was summoned to a meeting by Reuven Pinsky, the Commissioner at the time of the Old City Basin at the Jerusalem Development Authority. The meeting topic was to examine the possibility of executing accessibility in the Old City, following a proposal by a senior member of the Government Tourism Company, Nurit Berman. I really did not know what to expect. Reuven presented to me the government resolution from 2006 regarding upgrading the infrastructure of the Old City and informed me that the project was out for immediate planning with a very impressive multi-professional team. He suggested that if I believed that the challenge of making the Old City accessible to people with disabilities could be tackled, I was invited to join the planning team.

I knew, on the one hand, that I and my colleagues had no knowledge how to make such an ancient city accessible. I assumed that it would also be difficult to receive any assistance from abroad. The fact that we are talking about a very complex city, with challenging infrastructures, and in addition - a holy place for the great religions, caused me real concerns. On the other hand, the idea of tackling with such a seemingly impossible challenge, so unique, so different from anything else, made me very excited and gave me a feeling of a rare professional challenge not easily found.

After a brief hesitation, I announced that I was in. I knew that the difference between courage and stupidity depended on the result. Success equals citation, failure - is on you.

## The concept formation phase

The first phase of forming the concept was conducted by the extended design team. Questions arose such as: Whom is the accessibility for? For all disabilities? Priority for tourism? Priority for local residents?

This issue was very complex. On the one hand, millions of tourists enter the Old City each year, both from Israel and from abroad. We have had quite a few inquiries about the possibility of pilgrims reaching the holy places of Christianity and especially the Via Dolorosa and the Church of the Holy Sepulchre. There were questions about the possibility of Muslim tourists ascending to Al-Aqsa and reaching other holy places of Islam. Many Jewish tourists with disabilities wanted to get to the Western Wall. Religious organizations offered money in order to allow their members to reach the holy places.

On the other hand, there were the residents of the Old City. About 35,000 people live in the highest density, almost 120 people per dunam, eight times more than in any other neighborhood in Jerusalem. Beyond that, the Old City was in a process of change in the nature of the population, with middle-class and upper-class residents leaving the Old City and moving to more established neighborhoods in Jerusalem. In their place remained, and also entered, a relatively weak population - poor families, the elderly, people with disabilities.

Not with ease, but wholeheartedly, it was decided to give priority to the locals. Four theoretical demarcated areas have been defined, one in each quarter, where infrastructure work will be carried out, including accessibility. Our understanding was that in all the defined demarcated areas there were also suitable routes for tourism and therefore the work would serve it as well. In addition, it was clear to us that in order to allow a continuum of accessibility in the Old City, we would

have to make accessible the main routes, which are usually the popular tourist routes.

(As a footnote - many tour guides have heard of the Old City accessibility plan and have come to my office to lobby for the tourist routes where they lead their clients. Everyone told me how important it was to make it easier for tourists to walk and how important it was that people with disabilities could also participate. Some even told me that they should be trusted because they know the Old City like the back of their hand. I asked those who claimed this where Bab Huta street was. Most of them asked if it was real...)

It was a professional accessibility team, that included Dr. Judith Bendel, architect Yael Lahav and the undersigned, that mainly dealt with the second phase of



Children at Bab Huta street in the Muslim Quarter (Wikipedia)

forming the concept. We debated greatly about questions such as: Should we make it accessible to everyone already at this stage? Should we make it accessible for only vision and hearing impaired at the first stage? Should we focus on very specific disabilities? and more. After discussions and inner struggles, we brought to the extended planning team a proposal that said that in the first phase, access would be made for people with mobility disabilities. We knew that this was, in fact, the greatest challenge, in light of the challenging topography of the Old City. This recommendation was well in line with the operation of upgrading the infrastructure of the Old City, including the replacement of pipes, sewers, communications, paving and more. We have taken into account that while making it accessible for people with mobility disability, we can make it accessible, at least partly, also for people with visual impairments. Furthermore, we recommended to the planning team that the accessibility activity should not be limited to the four designated demarcated areas, but will also be planned and implemented in areas that are outside the complexes, this in order to create an appropriate accessibility sequence. The planning team, as well as the Jerusalem Development Authority, approved the recommendations of the accessibility team.

In the third phase of forming the concept the accessibility team discussed the question whether it was possible to make the Old City accessible for mobility disabled people in accordance with the existing accessibility regulations, which constitute part of the Equality Law for People with Disabilities – 1998.

For this purpose, it was decided to conduct a full accessibility survey in the Old City. To our surprise, there was no quality map of the streets of the Old City nor a clear and orderly list of streets. Therefore, we set out on the survey with what we had in hand.

The survey's task fell on the shoulders of Dr. Judith Bendel, accessibility licensee and expert in accessibility surveys. She enlisted to the task her husband, Dr. Jean-Pierre Bendel, a senior retired officer of the Israel Police, who served as an expert photographer.

The survey results were fascinating. Beyond the fact that it was found that the border between the public area and the private area is completely unclear in the Old City, it was further found that if we wanted to make it accessible in accordance with the existing regulations and standards, we would be in a state of absolute execution inability. As they say in Israeli slang - sheer waste of time...

Therefore, a very brave decision was made (remember what is the difference between courage and stupidity?) to examine existing standards in the world regarding ancient historic cities and to find out if there was knowledge abroad among senior professionals. We decided that if there were no results for locating the required knowledge, we would act on our own.

## The phase of finding existing knowledge in the world

The team began with two actions - one, an Internet search, and the other, turning to reputable experts in the field of accessibility in the world.

On the Internet we found three similar cities to the Old City of Jerusalem: Aley in Lebanon, Aleppo (Halab) in Syria and Medina, the ancient quarter of Tunis. It turned out that at Aley nothing had been done regarding accessibility, in Aleppo a huge infrastructure upgrade was carried out in 1993, but without regard to accessibility, and in Medina the Tunis government decided to enhance the quality of the wheelchairs.

We did not learn much from the world experts either. We wrote to fourteen experts, who were then considered the top accessibility experts in the world, and offered them to join the project. Eight did not answer at all and six wrote to me that it was an amazing project and wished me success, with a subtle hint that this was not really a practical project. Following this examination, we decided that without information, experience and any suitable accessibility standard, we would build on our own a suitable accessibility standard for ancient cities similar to the Old City of Jerusalem.

We particularly liked the hints from the experts about the feasibility of the project. It has certainly spurred us to do what has not yet been done. (And in this context: an economic philosopher named Walter Bagehot said: "The greatest pleasure in life is to do what others say you cannot do).

## The implementation phase

During the first years, the Jerusalem Development Authority was responsible for the implementation. Based on architectural plans, and closely accompanied by accessibility consultants, the various traffic routes in the Old City were addressed.



Where infrastructure needed to be replaced, we tried to ensure that a reasonable level of accessibility/passability was maintained. For example: the axis of Hagai Street, which leads from the Damascus Gate to the entrance to the Western Wall complex, was divided into five sections. Every few months, work was done on one section. This is because it is a relatively long street with a large number of shops and the merchants were very concerned that their livelihoods would be harmed during the works. Therefore, in addition to dividing the street into sections, we also tried to give temporary accessibility solutions to each store.

The implementation as a whole was slow. The installation of the handholds on the Via Dolorosa, a work that could normally and reasonably be done within a few days, took many weeks. Any drilling in a wall of a building or in a street paving was accompanied by a representative of the Antiquities Authority and sometimes there was a lengthy discussion about each drilling. There were quite a few professional compromises on this issue.

Another problem during the implementation was the involvement of religious bodies. Thus, for example, in the Armenian Quarter a handhold was installed with the close supervision of the Armenian Patriarch's representative. He made sure, inter alia, that the handholds would not disturb the important members of the community. Here too compromises were made.



The mobile ramp at the entrance to the Church of the Holy Sepulcher. © Oleg Grdinic | Dreamstime.com

One example is the mobile ramp installed down the stairs in front of the entrance to the Church of the Holy Sepulcher. It is a wooden ramp, reinforced with wooden strips. The slope of the ramp is very challenging on the descent and almost impossible on the ascent. We offered the church to fund a better- quality ramp in terms of accessibility.

The proposal was transferred to the Vatican and returned with a negative answer. We tried again after two years; the answer did not change. We tried through the



Muslim family that has been guarding the Church of the Holy Sepulcher for years, still with no success. The original ramp is still there.

Another thing that interfered with the pace of implementation was political issues. One day all the handholds at the Via Dolorosa disappeared. The merchants told us that apparently the Jordanian Waqf had given the order. We went to the Jordanian Waqf. There it turned out that although in fact we did coordinate the work with the VP of the Waqf, but not with the right VP. After a friendly discussion, 50% of the handholds returned the next day. A small tax for big politics.

That same strong Muslim organization demanded that we wait with the implementation of accessibility at Bab Huta Street until they saw the final plans. According to them, they have turned to the United Nations to complain about the Zionists who entered their neighborhood without permission. After several days they returned to us saying that they had turned to the UN with a complaint and that we could begin working. Moreover, they asked us to hurry because there were a lot of elderly people and children in wheelchairs living on the street.

The largest deviations during the implementation were precisely at the request of local residents. For example: We carried out a deviation of the small ramps on Ha'Ahim Street (the Brothers street), towards the Pilgrim Hotel Casa Nova, just so as not to interfere with a local "parliament" sitting on low stools in a very specific place, something which they have been doing for more than forty years.

About six years ago the responsibility for the implementation was transferred to the East Jerusalem Development Company (PAMI). The company has proven implementation ability and very close ties within the Old City, since it is in charge, inter alia, of routine maintenance of the place. PAMI's work was relatively very quick. More and more axes were made accessible at a rapid pace, sometimes at the expense of accuracy of the architectural design. For example: a ramp has been built on HaHasidot Trail Street, the safe use of which is rather doubtful. On the other hand, there is no other solution that will be really good.

In many cases, during our work, local residents approached us and made various requests. For example: To make the entrance to the yard (called "Hush") accessible because there is a woman there who gets around with a wheelchair; to make a small section of a very narrow street accessible because it will allow a resident traveling in a mobility scooter to place the scooter relatively close to the door of her home; to make accessible sections of some inaccessible roads, even if there will not be a sequence of accessibility, in order to facilitate at least in these sections.

We have tried to respond to most of the requests or at least to make it a little easier. The policy that was formed was to do the most for the residents, as decided in principle at the beginning of the project.

## The phase of credits (the honors)

Last year it was decided to launch a public relations campaign to advertise accessibility in the Old City. A public relations firm worked on the task with great vigor. Spokesmen sent articles to newspapers and the social networks, a meeting was held with the mayor at a restaurant in the Old City, CEOs of relevant bodies spoke, the director general of the Ministry of Tourism announced he would continue to support (??) and journalists filmed and interviewed the important persona.

The National Insurance Institute published a half-page article in a well-known newspaper stating that they were making the Old City accessible (in practice, they gave NIS 5 million. The full budget of the upgrade project, including accessibility, was almost NIS 900 million). The Jerusalem Post welfare reporter approached me and asked to interview me. After the interview she asked me why I was not invited to speak and why the accessibility staff members, who worked with me were not invited. I told her that everything was all right, and this for two reasons:

- As is well known, success has many fathers, failure is an orphan. If so many people attribute to themselves the success of the project, it is probably very successful, which is what matters.
- I told her a story about Napoleon. Napoleon Bonaparte, while still a young French officer, met a Prussian officer. The Prussian officer said to him: I do not understand you French. You fight for money, we fight for the honor! Napoleon answered him: You are right. Everyone fights for what he lacks.

## By-products

The work in the Old City had quite a few by-products:

- An accessibility map of the Old City had been prepared, whose distribution has been delayed due to copyright issues (Jerusalem Development Authority).
- A new app was launched (PAMI) of accessible routes in the Old City, available in several languages.
- Preparatory work was carried out for an international conference in Jerusalem on accessibility in ancient cities, an initiative that aroused considerable interest. Unfortunately, the conference did not take place due to demands from the funding body and organizational difficulties. However, the activity around this conference has created another system of international relations on this issue.
- An idea arose and was formed for an open-air museum in the Old City (architect Meirav Davish Ben Moshe. See on this issue, p. 101).
- A guide of making traffic routes accessible in the Old City (Architect Ofer Manor and Architect Davish Ben Moshe).
- A comprehensive article on the project was published in Universal Design Handbook, 2010, a very significant book in the field of accessibility in the world. The article was written by Dr. Judith Bendel, Architect Yael Lahav and the undersigned.
- Lectures on accessibility in the Old City in Israel and overseas.
- A mechanism has been set up for residents' complaints about accessibility problems in the Old City (PAMI)

The by-products were very good, except of course the canceled conference. This is probably proof that the project has a long-term impact.

## And what's next?

There are a number of options, which could and should be continued:

- Accessibility for visually impaired people: the integration of voice signage technology for people with visual impairments should be re-examined thoroughly. Voice signage may help not only people with visual impairments but also people with cognitive disabilities and possibly others as well.
- Improving orientation: although there is already a map and an app, the project of accessible signage in the Old City should be continued.

- A professional decision must be made on the issue of whether sections of traffic routes should also be accessible, without the sequence of accessibility along the entire axis. On the one hand, accessibility without continuity is not really accessibility. On the other hand, if this may help people with mobility disability in part of the route, why not?
- To develop the open-air museum project, with an emphasis on universal accessibility.
- To continue to disseminate the accumulated knowledge in Israel and around the world. A possible way to achieve this goal would be to establish a knowledge center for universal accessibility in historic cities.

## **An epilogue, which may also be a beginning**

With all the required modesty, this is a large-scale and extraordinary project, not only because of the intricate accessibility issues it has posed, but also because of the political and religious environment in which it has been planned and implemented.

This is a very impressive collaboration between entrepreneurs, planners, performers, organizers, and especially dreamers, who believed in the project. As is the way with good projects, it is not perfect. There are things to be added. Licensed accessibility consultants know that accessibility of a place, certainly a complex one, never ends. Improvement is always possible and new relevant technology is always found.

In a non-physical aspect, it seems to me that the great achievement of the project is in the change it has made in the locals regarding the issue of accessibility. In the course of the implementation, many understood the essence of the matter and wanted to enjoy the accessibility. They even developed a feeling of “I deserve accessibility” and more than once came to us with complaints.

### **The following story may sum up this point:**

A few months ago, I was called to the PAMI offices, where I was presented with a legal document from an East Jerusalem law office. The document discusses a claim of a woman, who moves around in a wheelchair and lives on the ninth station of the Via Dolorosa, near the Ethiopian church. She is suing PAMI for not arranging an accessible road for her from her place of residence to Beit HaBad Street. Between her house and the street there are height differences of about 4.5 meters, with the levels being connected by relatively steep stairs. It is clear that it is not possible to turn the stairs into an accessible road and also a solution of a wheelchair lift or an elevator turned out to be engineeringly inapplicable.

The PAMI people were really stressed out. Only I was happy. Finally, the locals demand accessibility by law, even if the specific case in question is not really a good example, and this because the location could not have been made accessible in a reasonable and mostly safe manner.



# PEOPLE, DONKEYS, WHEELS AND STAIRS

Yael Danieli Lahav

Via Dolorosa. Photographed at the beginning of the 20th century.  
(Library of Congress, from Wikipedia site)

Wheels and stairs can be thought in terms of “a little that holds a lot”. The wheel sets the technological system in motion, the stair stands at the foundation of the tectonic system. There are plenty of wheels, and stairs are not lacking either.

When writing these lines, there are no available technological solutions, simple and affordable for every person, that allow an ordinary person to climb stairs with the help of wheels.

**Architect Yael Danieli Lahav.** School of Architecture and the Department of Physiotherapy at Ariel University. A senior architect who has specialized in the planning and design of a built environment accessible to people with disabilities. Among other things, she advises to the municipality of Jerusalem on issues related to accessibility policy and making accessibility adjustments in the public space of the Old City.

This article was first published in the on-line journal Architect II on 2011 (the link to the issue in which it was published):



Stairs, by their very nature, are designed for pedestrians – human beings or four-legged. In fact, the body of those who walk on their feet is made in such a way that the entire structure of the limb, and its connection to the torso<sup>1</sup> is by its very nature intended for climbing. Each limb moves individually, while the whole body maintains balance, and the ability to move forward or backward (albeit in a more limited way) even when one limb is standing on a higher or more curved surface than the one on which the other is standing. Our ability to successfully deal with asymmetry situations in the limb position depends on the structure and function of the skeleton, joints, muscles, nervous system and sense of movement (kinesthesia)<sup>2</sup> that each and every one of us has.

For the benefit of the movement with the help of wheels humans pave roads. Even if they are sometimes quite uneven, the quality of the ride depends on the quality of the wheels, and the extent to which they are suitable for dealing with the road conditions.

## If grandma had wheels...

Typing on the pair of words wheelchair stairs on Google search engine uploaded 2,540,000 results. A lot of people have been trying for a very long time to be able to climb stairs using personal wheels. So far without impressive results. The existing solutions are too expensive, too cumbersome, not suitable for operating in too wide a range of surface types, have difficulty dealing with chaotic stair walks (non-uniformity of the dimensions of the tread and rise along the walking route), require too high skills and depend on propulsion technology with too low efficiency ... in short - even if such devices can be adapted at home, on the street, or worse, in open-air areas - they are simply not applicable.

In this article I will try to show how complex the matter is for people, who at a given moment, or usually, are unable to climb stairs.

## People and donkeys that prefer stairs

With the invention of the stairs, it became possible for the first time to build high-rise buildings and compress a large number of activities on one piece of land. In my opinion, stair architecture strongly expresses the builder's spirit, and I would even go so far as to say that with the discovery of how to use a right angle, stairs are the epitome of architectural thought. Where a staircase is found there was a human being.

In the eastern basin of the Mediterranean, donkeys and mules were the main means of transportation throughout the centuries prior to the 20th century. Since the introduction of motorized vehicles, the use of pack animals has greatly diminished, though not completely disappeared. The body structure of the domestic donkey is relatively small compared to the body structure of other pack animals (the horse, the mule, definitely the camel). The length of the domestic donkey, from the tail to the tip of the nose, reaches about 160 cm, the back width about 70 cm, and its height ranges from 95 to 125 cm.<sup>3</sup> The donkey's head

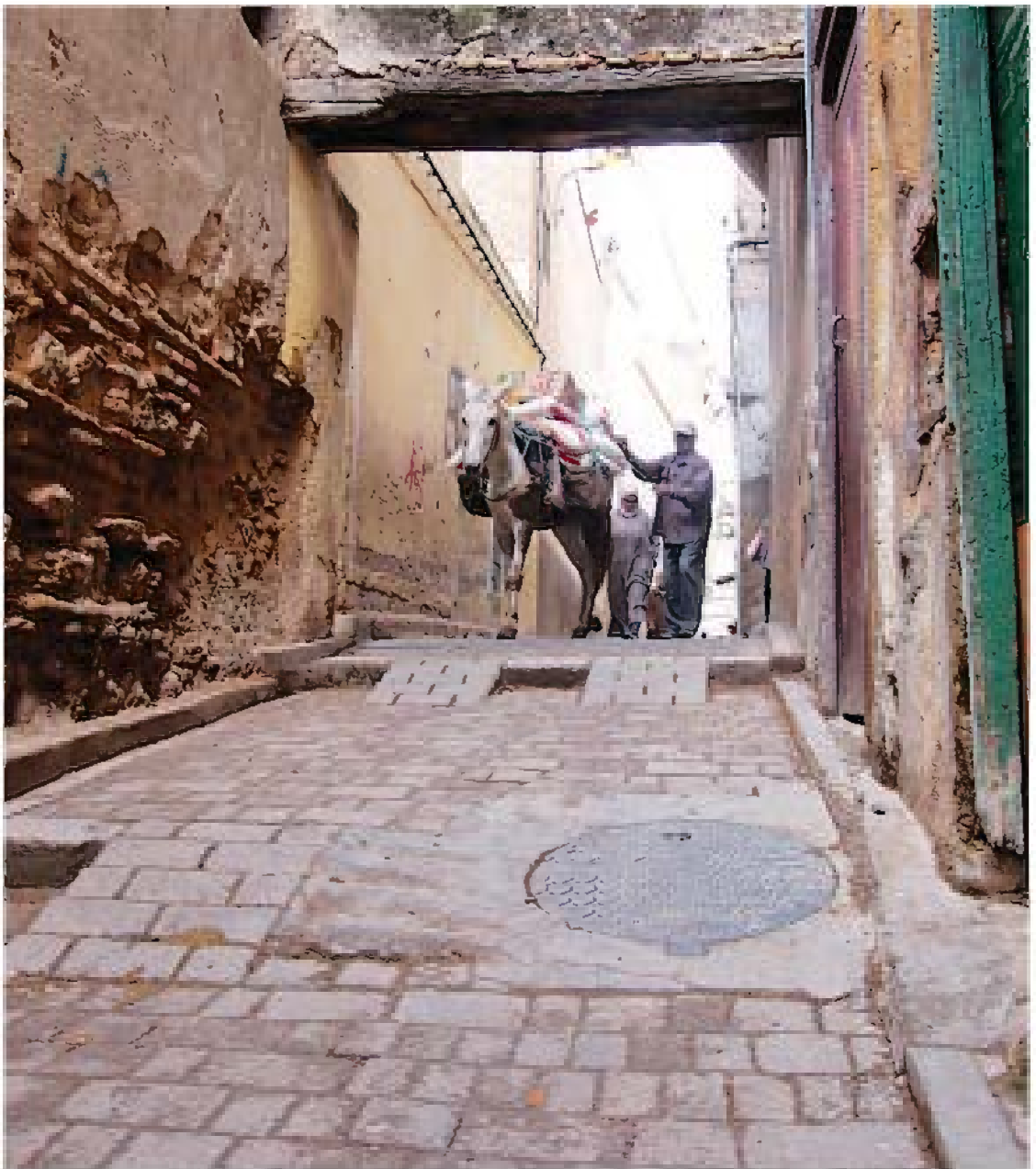
1 The torso is a name in anatomy for the largest parts of the human body, without considering the limbs and head. The torso includes the parts: chest, back and abdomen. Source: Wikipedia.

2 Kinesthesia, Kinesthesis, the sense that allows the brain to be aware of the position and movement of the muscles in different part of the body. Source: [www.informed.co.il/glossary/g\\_3527.htm](http://www.informed.co.il/glossary/g_3527.htm)

3 Source: <http://www.donkeybreedsociety.co.uk/page/AboutDonkeys>

and neck are long and heavy relative to its humble body and slender legs. The distance between the axis line of the front legs and the axis line of the hind legs of the average donkey ranges from 90 to 115 cm, a figure that was taken into account when building streets with a slope of 8%-25% (i.e., a ratio of 1:12-1:4). The donkey lives about 40-60 years (depending on its health and growing conditions), and is able to carry a very large load in relation to its body size. It is a stubborn but extremely intelligent animal, and has a high ability to adapt to difficult terrain conditions. Due to the donkey's body structure, a heavy load shifts its center of gravity too far from the balance point, making it difficult for it to maintain stability on a sloping road. Moderate stairs with a wide tread and a rise of 10-13 cm, solve the problem, because they allow the donkey to have a relatively balanced movement.

Many cities have derived the dimensions of their streets from the dimensions of a donkey.



Donkey on the streets in Fez, Morocco. © Blurf | Dreamstime.com

Susan Orlean<sup>4</sup> studied in 2009 the old city of Fez in Morocco. According to her, Fez is the largest old city in the world. All its houses are densely populated, its markets are crowded and it is a bustling city. Orlean reports that in 2009, about 100,000 people used donkeys as regular and daily means of mobility and transportation in ancient Fez. The donkeys were used to transport loads, remove garbage, evacuate the sick and injured, for riding, for construction work, and operate devices that require the rotation of wheels, for various activities, such as grinding with millstones, storing oil, pumping or squeezing.

## Stair streets in the Land of Israel

Not only Fez in Morocco is made according to the size of a tediously loaded donkey. In the cities of the Land of Israel as well, as in many cities in the Mediterranean basin, the donkey was the criterion for determining the minimum dimensions of the street.<sup>5</sup>

Jerusalem, Acre, Safed, Nazareth, Jaffa and other settlements were built on a hill or down a mountain, on the relatively moderate side. The layout of the settlement was such that streets that were built parallel to the elevation lines were used for commerce, while the streets built perpendicular to the elevation lines were made of stairs adapted for donkey walking. At first, these were connecting streets, along which were entrances to residential complexes and public buildings (religious buildings, schools, bathhouses, etc.)

With time, when activity increased in the city, and the population density increased greatly, mainly in cities surrounded by wall, commerce also slipped to the stair streets, albeit in a less intense manner. An exception is the stairs market street in Jerusalem, which is on the ancient route of the Roman Decumanus (west-east axis in the city planning). And yet in Jerusalem, too, there is more commercial activity on the streets without stairs, which cross it parallel to the route of the valley from north to south (Hagai St., Cardo/ Beit Habad), and open-air commercial activity on the stair -streets perpendicular to the slope (excluding David Street). These cities are also characterized by the fact that towards the street the houses stand densely, side by side, leaving very narrow passages between them, in terms of cities that allow the movement of carriages or motor vehicles. Behind the built façade there are, quite often, large courtyards open to the sky, inner gardens, and quite a bit of light and air.

In Jerusalem, a considerable effort was made to build the streets that are perpendicular to the slope with moderate stairs with low rise (10-13 cm), with a tread as wide as possible. In places where there is no option for a tread that fits a

4 Source: <http://www.smithsonianmag.com/travel/shere-donkeys-Deliver-Morovvo.html>

5 During the years 2008-2009, I was a partner in a very comprehensive and thorough survey, the subject matter of which was the accessibility of the Old City of Jerusalem to people who move around with the help of personal devices - crutches and walking sticks, walkers of all kinds, wheelchairs and mobility scooters. The physical survey was conducted by Dr. Judith Bendel of Access Unlimited Association; In the analysis of the survey results took part Dr. Judith Bendel, Dr. Avi Ramot from the Israeli Center for Accessibility, and I, as part of my role as the Jerusalem Municipality's accessibility consultant. Simultaneously with the physical survey, I conducted in those years in the Old City a survey of housing conditions of families that have a person with a severe mobility disability. The survey was made possible thanks to the dedication of Shaher Shabana, who mediated between me and the families, accompanied me on all home visits and served as my interpreter, all voluntarily. The description of the last four cities is based on repeated visits, without a proper survey.





A typical stairs street in Jerusalem © Evgeniy Fesenko | Dreamstime.com

full donkey's tread, i.e. a tread whose depth reaches 110-125 cm, the tread size is reduced according to the donkey's steps. A donkey's step ranges from 37 to 42 cm. Thus, the stairs module in the Old City of Jerusalem is based on 37-42 cm. In other words, the tread according to one step, two steps or three steps of an average domestic donkey. The spaces maintained between one set of stairs and the next set are derived from two influencing factors: location and width of the entrances to the buildings at the side of the public staircase, and the minimum surface area required to position the animal and load or unload it.



## The geometry of the street: width, height, slope

The slope of a staircase is derived from the natural topography: while the rise (height) of the step maintains a constant measure of about 13 cm, the degree of width of the tread (the step tread) is adapted to the natural slope. For a narrow tread of 42 cm., suitable for the movement of pack animals, a slope is obtained in a ratio of approximately  $13/42 = 1:3$ . For comparison: the conventional slope for a comfortable and standard staircase, with a tread of 30 cm and a rise of 15 cm, is a ratio of 1:2. A reasonable pass, for a person pushing cart or using a wheelchair, is a length-to-height ratio between 1:9 and 1:11 respectively, so that a sloping surface 126 cm long (3 steps 42 cm wide) makes it possible to overcome one step of 13 cm high.

In the Old City of Jerusalem, the width of the widest streets reaches 5 meters. There are very few such streets, mainly in the Christian Quarter along the Eastern Wall, between Zion Gate and the Dung Gate. These streets were built when harnessed carriages, or cars, were already traveling in Jerusalem. The average width of the large market streets in Jerusalem reaches three to four meters from wall to wall, and when the stores open and the merchants take their merchandise out to the area in front of the store as is the custom, there is more-or less a two-meter road width left for the public passage, more than enough for the passage of people passing by those who stop to bargain. On non-commercial streets, the average size reaches two meters from wall to wall, and often drops to a meter and a half - just to allow the passage of a donkey and its rider. There is no significant difference in the width of the streets, between those built along the elevation lines and the streets and those that are stretched like stairs perpendicular to the slope.

## The end of the donkey era – adjustment to wheels

In the course of the 20th century, the use of wooden carriages/wheelbarrows, carried on three or four wheels, replacing the donkeys, took root in Jerusalem and Acre<sup>6</sup>, although their carrying capacity was considerably lower than that of the humble pack-animals.

The dimensions of the carts are somewhat similar to those of the donkey, adapting themselves to the conditions of the terrain - the width of the cart between the wheel axles reaches 67 cm, the length of the cart between the point of contact of the wheels with the ground reaches 95 cm. The body of the carts is larger, and their length is up to 120 cm without the handles. It is customary to attach to the back of the cart a chain with a tire that serves as a brake on the descents - the cart pusher stands on the tire, thus adding his weight to the weight of the load and slowing the cart's speed down. It is interesting to note already here that the accepted dimensions between the wheel axles of scooters and wheelchairs are very similar to each other, and also to those of the freight carts. In wheelchairs, the distance between the points of contact with the ground is 60-70 cm depending on the model, in scooters this size ranges from 90 to 105 cm, depending on the model. The length of a standard wheelchair, including the foot rest and handles, is about 105 cm, and the length of a standard scooter is about 140 cm.

Many people are assisted in their daily lives by mobile devices on wheels. Pushing baby carriages and wheelbarrows to transport goods, dragging suitcases on wheels and shopping carts, traveling in low-speed personal vehicles, such as

6 I have not seen such carts in Jaffa, Safed and Nazareth, although they may exist.

Segway or scooters of various kinds, as well as those who regularly use walkers and wheelchairs.

All of those find it very difficult to climb stairs with the help of these devices. There are no devices that are reasonably priced that can imitate the movement of the donkey up the stairs - wheel after wheel. First the device must be tilted backwards so that the front wheels climb first the stair, and pull behind them the rear wheels. Raising the device up the stairs requires a lot of driving force, which will manage to roll the weight from a position of complete stopping to a vertical upward movement, which overcomes the average height difference of 13 cm.

Descending the stairs actually requires a great deal of effort in braking, since tilting the device in the direction of the descent may, God forbid, cause uncontrolled rolling down the stairs. The encounter bump with the landing surface is also added to the downward movement.

And finally, the traveler's safety. The streets are stretched over the natural ground slope, depending on the shortest route between different foci of the Old City. The slope of a terraced street ranges from 10% (11-13 cm rise, with a 125 cm tread) to a 33% slope (11-13 cm rise and 37 cm tread). When ramps are placed on such stairs, one gets too steep a route for a person with a walking disability, who has difficulty holding himself back downhill. For this reason, it can be seen in almost all the streets where sloping ramps have been installed, that the common practice is to lay a rather narrow slope stone across the tread of the stair, in such a way that it does not reach from one step nose to the next step nose. A route is obtained that a person with a disability is unable, in fact, to overcome on his own, and is forced to be assisted by another person to push him. The assisting person must also hold back the mobility device against slipping down the stairs. In order for the assistant to be able to gain strength and overcome the steep ascent, it is customary to allow him as many breaks as possible for rest on horizontal surfaces. Hence, clever planning of a sequence of slopes will be done so that they are shifted every few steps from their route sideways, allowing horizontal surfaces between them, both for rest and for breaking the sequence of the track, so that the pace of movement on them will be as slow as possible. The shift also prevents children and other reckless people from speeding downhill, riding bicycles, or all sorts of devices that children build for themselves, and whose whole purpose is fast, not to say wild, gliding on dangerous slopes.

Laying slope stones in a method designed to hold back the speed of mobility devices on wheels downhill, and whose prevalence proves to be useful, makes it very difficult to drive any motor vehicle, even if it is narrow and short and has very high passability. Off-road vehicle with relatively large wheels, propulsive power in difficult terrain conditions and very good maneuverability is used inside ancient cities, of the type I am describing here, to evacuate the sick and injured, transport goods and heavy objects, or to evacuate garbage carts and so on.

The trouble is that there is no vehicle narrow enough, as wide as a laden donkey - that is, 120 cm at most, suitable for transporting a sick or injured person to an ambulance waiting outside the system of terraced streets. The narrowest model that can tackle the donkey stairs, and where a driver can be seated and next to him a stretcher of a wounded man, reaches a width of up to 142 cm.<sup>7</sup> Until

7 The measure was learned from Yossi Ben Shachar, the MDA ambulance driver who uses an MULE type all-terrain vehicle (ATV).

the visit of Pope John Paul II to Jerusalem, no one thought of trying to put in a motorized vehicle that would carry passengers along the terraced streets of Jerusalem's Old City. Until then, the only motor vehicle that entered the terraced streets was a particularly narrow service tractor (about 100 cm wide), with high wheels and thick tires, towing a cart, and its function was to transport building materials and remove garbage.

### Lessons learned from the Pope's visit, March 2000

Pope John Paul II's visit to the Western Wall in Jerusalem in March 2000 was accompanied by multiple preparations by the city leaders, as part of the Pope's personal security system, who moves from place to place in an armored personal vehicle nicknamed<sup>8</sup> Popemobile. In order for the armored vehicle (built especially for the visit to the Old City) to be able to travel on the terraced streets leading from the Christian Quarter to the holy places, it was inevitable to add stone ramps to the existing stairs. The route was carefully selected, and included the streets that could contain both the stone ramps and a route of stairs of reasonable width on their side, given of course the nature of the façade. On the side of a sealed wall, room was left for the passage of one person, and on the side of the store openings, the activity near the store was also taken into consideration.



The Pope's visit to the Western Wall. Photo: Menahem Kahana (published on the Irish Times)

Today, the ramps serve well the residents of the Old City: they are used for the ministry cars of very important people, who live in the city or come from outside, for the ride of security and rescue vehicles, for the ride of ATVs that tow garbage carts or construction materials, and for the ride of vehicles of people with disabilities..

8 The practice of driving the Pope in an armored glass box assembled on top of an armored "commercial" vehicle began in 1984, after an attempted assassination of the Pope.

The size of the stone ramps installed in honor of the Pope on top of the donkey steps is adapted to the particularly narrow vehicles built for the Pope, approximately 140 cm wide. The slope of the stone ramps is approximately 18%, in accordance with the rise size of the existing donkey steps. The resulting slope is too sharp for those who try to overcome it on their own in a motor-less wheelchair, but it is possible for owners of personal motorized mobile devices (wheelchairs, scooters, Segway, etc.). Pedestrians continue to use the remaining stairs on either side of the sloping route. Wherever possible, handholds were installed on the staircase sides.

Of course, not everywhere can ramps be built as wide and comfortable as those built for the Pope. For about two decades the municipality has been doing its best to deal with the introduction of wheeled vehicles into the streets<sup>9</sup>, so that they will replace the donkeys, which have gradually become unwanted, due to the dirt they leave behind, the unpleasant odor, and the reluctance of a crowd which is unaccustomed to rubbing shoulders with the smart pack animals.

The main conflict that has arisen, once the traffic has moved from donkeys to carts on wheels, is the need for wheel accessibility, that is, the requirement for ramps, as opposed to the interest of pedestrians, who are able to climb stairs, to keep for themselves as much of the original stairs width as possible, whose layout, as stated, is most convenient for moderate walking. At times when the streets are filled with a dense crowd of visitors, there is a growing need to allow security and rescue forces to move through the streets quickly, and on the other hand there is a growing need of the crowd that moves in dense masses to march fluently, without tripping over local slope stones.

## Accessibility is a resource

It seems to me impossible to resolve the difficulty of transporting goods and people, who do not climb stairs on their feet, without inserting mobile devices with high propulsion, high braking force, ability to maintain stability up or down a stairway, and yet maintain the safety, comfort and safety of a passenger with a disability, an injured person, a woman in labor, or a person who is having a heart attack. Furthermore, it is no longer possible to avoid the use of a motorized vehicle, which is able to “speed “ through the streets in relation to the running of pedestrians, and whose function is to maintain public safety.

Terraced cities are home to residents who cope with great difficulty with mobility disability, and need accessibility adjustments in order to be able to leave their home and return to it on their own, or with the help of an escort. Due to the low accessibility to motorized vehicles, only those, who are unable to move to more comfortable living conditions remain. There are also only few hotels in these areas. Tourists prefer to find accommodation at an easy-to-reach place, and tour inside the unique city that ignites the imagination, as long as they have the strength, curiosity, and ability to move on foot.

9 The first slope stones were installed to the best of my knowledge in 1985, on David Street, in a section that descends from the Jaffa Gate to Hagai Street. The merchants claim that they also changed the stairs' pace, spoiled the rhythmic structure that suited the donkeys, and with the slope stones they did create a route for the goods carts as well, but an obstacle and a lot of trouble for the tens of thousands of tourists, who visit the market street every year.



Business owners are being pushed to specialize in the sale of “lightweight” goods that can be transported in handcarts. The local authority is forced to compromise on garbage removal and street maintenance methods of the kind that make modernization very difficult. The result is a vicious cycle of deterioration and neglect of the public space, which is almost impossible to manage. The cycle of poverty of the residents, who were left behind in an environment with a low level of municipal service, is expanding, and with it the number of visitors, who walk through the alleys increases, but refrain from staying at the place after nightfall or doing business there.

The commerce is characterized by souvenir shops and stores that provide the basic needs of the locals. Almost all types of businesses and other public institutions leave the inaccessible space. The departure of necessary public institutions and businesses that may also serve as a source of livelihood for residents increases the neglect, since people who live outside the special compound stop reaching it for the purpose of settling various matters, and it is pushed out of the public consciousness. Little by little, they also stop coming to the markets or the entertainment sites.

That same thing happened to the cities of Acre, Safed, Tiberias, and Jaffa, and even to the Old City of Jerusalem. I suppose the same is true of other cities, which in the past have relied on donkey traffic, and now fail to allow, in their terraced streets, traffic with the help of mobile devices on wheels that are not set for efficient and quality travel on stairs.

All those who are interested in reviving the special fabric of the cities of donkeys, and in making these ancient cities accessible to a lifestyle that includes the traffic of mobile devices on wheels – even if they are personal, narrow-sized, and of low speed, must probably unite and propel the wheels of research and development. They should encourage the manufacturing and sale of devices that can cope with special terrain conditions, and with the demands of customers who live in those places, when each of them individually does not have enough purchasing power. The product market needs to be global. There are quite a few customers in the world, but they are scattered across many cities, in countries that unfortunately are often hostile to each other. Israel, which has very few natural resources, but many cultural, landscape and heritage resources, could be a spearhead if it only understood that without introducing sophisticated traffic systems into the ancient spaces, there is no chance for their growing into accessible attractions for those tens of thousands of visitors who are just waiting at the doorstep. To strengthen my words, I would say that the concept of “accessibility is a resource” has succeeded in increasing by dozens of times the number of visitors to Masada, Rosh Hanikra, the Agamon Hahula site and other nature, landscape and heritage sites that have enabled the entry of personal and motorized mobile devices.

There is no reason that the concept of accessibility that I presented in this article will not work in the ancient donkey cities of the Land of Israel as well. Sophisticated mobility devices will allow us to preserve, for future generations, the donkey streets and their wonderful stair rhythm, as they are. Without such devices, extinction is expected for some of the stair streets. Unfortunately, it is already possible to see how more and more stair streets are becoming slope roads for cars; and they also endanger both the vehicle drivers and the pedestrians, who barely cope with the steep slopes.



# ACCESSIBILITY IN THE OLD CITY OF JERUSALEM - AUDIT PLANNING AND IMPLEMENTATION

Judith Bendel, Meirav Davish Ben Moshe

## Introduction and background

The Old City of Jerusalem extends for 850 dunam (212.5 acres), and is characterized by very dense population, about 38,000, residents (Jerusalem Statistical Yearbook, 2014).

The Old City of Jerusalem has been settled continuously for more than 3,000 years. The current structure including the Old City walls and location of its gates exist since the early medieval era (Prawer, 1972; Rubin, 1999). The Old City contains a mixture of old and new construction, archeology, history, people of many different religions, holy sites for each religion.

**Dr. Judith Bendel**, managed the Access Unlimited Association. In addition to conducting accessibility surveys and consulting for the enhancement of accessibility for people with disabilities, she has built accessibility databases and mainly a comprehensive and detailed database on accessibility to tourist sites in Israel.

**Landscape architect Meirav Davish Ben Moshe** has written and edited the Old City Street Planning Guide, 2013, which is currently being updated. It will be joined by a guide to planning the Old City Basin that deals with the open and semi-urban areas around the Old City walls. Davish Ben Moshe has been serving in recent years as a supervisor and landscape consultant to the National Infrastructure Committee and to the National Planning Division at the Planning Administration and has also engaged in many master plans in East Jerusalem.

Illustrations not accompanied by credit were taken from the Old City Street Planning Guide.

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The holiness of the city to most major religions and its unique structure, mark the City as an international tourist destination, also for people with disabilities. In addition to the residents there are about 10 million visitors per year.

Making the public space of the Old City of Jerusalem accessible to people with mobility impairment is a complex and difficult task, yet very important. Greater accessibility will benefit everyone and contribute also to the quality of life of its residents, and residents with disabilities in particular.

This article discusses the tools, planning and implementation processes of accessibility in the unique and complicated nature of the Old City of Jerusalem, a model for other historic cities.

## Description of Structure and topography

The Old City was built in a Medieval Mediterranean scheme, based on a former Roman city, on two hills separated by a valley. Two main streets, the north-south Cardo Maximus and the east-west Decomanus Maximus, divide the Old City into four quarters, each containing residential block areas, schools, prayer places, etc. (Bahat & Rubinshtein, 1990).

The present design resembles other Middle Eastern cities. It is based on residential enclosures, connected by major streets allowing for free passage among the different parts of the Old City. Dead end streets and alleys lead to the residences. Many of the residential homes are located on top of the commercial areas. They can be reached only by staircases, starting from internal dead end alleys. (see Figure 1)



Figure 1: Dead-end residential alley, semi-private. Stairs in a variety of styles, sizes, angles and directions in one street, all serving private residential compounds. Photo: Jean-Pierre Bendel.



The main streets have the main trade markets, which overflow to the nearby streets, as well as most of the municipal and religious public buildings.

Some of the streets are sloped very steeply due to the natural topography. Many of the sloped streets were built with stairs to accommodate the pedestrians, while minimizing the slope between the staircases. The buildings were built along the streets, therefore the level of the entrances to the shops or houses correlates to the slope and subdivisions created by the steps.

Because the streets are hundreds of years old and surrounded by very high density construction, their width in general is at its maximum 3 m, and often the space available for pedestrians does not exceed 1.50 m. In addition, merchandise is displayed on the streets in front of shops; therefore the pathway is even narrower. (see Figure 2)



Figure 2. One of the major trading markets. The goods overflow into the street. Photo: Jean-Pierre Bendel.

In addition the physical infrastructure is often in poor condition due to wear, later additions to the original design etc. In some places the uneven pavement has archeological and historical value. (see Figure 3)

The structure based on insulas with winding and dead-end passages makes orientation very difficult, particularly for blind people, who are unable to maintain their internal “compass”. Also people with perceptual problems may find it hard to create a cognitive orientation map.

The seven well-preserved city gates are the only way to connect this area to the New City, outside of the Old City walls. A green area around the walls helps isolate the Old City from the new construction outside of the walls. The decision to have this separation was made in the 19th century, and it is maintained to this day.





Figure 3. Via Dolorosa, with original Roman pavement in situ. A section of the Via Dolorosa is paved with original large Roman stone tiles and is combined with much smaller stone tiles of the twentieth century. Pedestrians, carts, and wagons use the pavement intensively on a daily basis. Photo: Jean-Pierre Bendel

## Mobility and transportation

There is no public transportation system within the City walls. Three mobility systems are currently interconnected within the walls of the Old City.

- **Tourists and visitors:** The most common is for pedestrians who can use all streets, as long as their physical fitness permits them to use the stairs. Wheelchairs or scooters can be used in some flat streets or some streets where some arrangements were made, for example for transporting merchandise. (see Figure 4).



Figure 4. Semi commercial street, Christian Quarter. A Street constructed as a stairway is paved by limestone tiles with a handrail mounted on the left façade wall. Narrow stone ramps are anchored into the stairway for scooter and wheelchair users as well as pushers of carts and wagons. Photo: Jean-Pierre Bendel

- **Local municipal services:** Carts and cars, built specially to suit the crowded streets, are used for transporting merchandise, disposing garbage, emergency ambulance etc. For that purpose, narrow stone ramps were added to enable pushing them. These ramps are fitted to meet the distance between cart wheels (see Figure 5).



Figure 5. Residential stairway street in the Moslem Quarter. Narrow municipal service wagon, specially adapted for the narrow stairway streets, are an effective way to provide the Old City with routine municipal sanitation and maintenance services.  
Photo: Jean-Pierre Bendel

- **Residents:** Cars can be used only in a limited number of streets close to the Old City gates for residents only. There is no room for a sidewalk in these streets.

## The problem of planning upgrading

For many years there were no significant renovations done in the Old City. The conditions described above present enormous problems for pedestrians with mobility difficulties - narrow streets and stairs that leave no room for ramps suitable for wheelchairs, wear of infrastructure etc.

With the urgent need to upgrade the infrastructure for the increasing number of residents and tourists, a major comprehensive planning project was needed. This project was designed to address general concerns, with particular attention to incorporate accessibility into the overall plan. A multidisciplinary team was set up for this purpose and was coordinated by the Jerusalem Development Authority<sup>1</sup>. Priorities were proposed for each street.

<sup>1</sup> The team was composed of representatives of the following disciplines, services and entities: architecture, civil engineering, electricity, civil engineering, electricity, sewage, water, tourism, archeology, preservation, heritage, emergency services, religions, community organizations, and accessibility.

The accessibility planning sub-team was faced with two major dilemmas:

- How to implement the official national guidelines for accessibility<sup>2</sup>, to include people with physical, sight and hearing impairments as well as orientation difficulties, in the complex context of the Old City.
- How to develop a meaningful plan, since no criteria to prioritize the overall accessibility needs were available.

There are many cases in which enforcement of the guidelines for barrier-free design is problematic. As a result, there are buildings and environments that do not comply with the requirements.

Old cities throughout the world are the ultimate environments for facing difficulties with enforcement of the guidelines. Adaptation of environments and facilities must be undertaken in accordance with standards required by law, as well as with the goal of meeting the needs of the consumer. At the same time, access needs and universal design must also relate to: heritage; historic and archaeology needs; preservation as opposed to modernization and progress; tourism; and local citizens' welfare, different religions' needs, etc.

## Accessibility audit tools

The first step in addressing the demand to provide accessibility is to collect consistent, reliable and objective access information.

There are guidelines, but no official audit tools to assess compliance. Accessibility checklists are most commonly used to assess the degree to which both existing and new buildings satisfy legal criteria for access planning. For example; the purpose of the Americans with Disabilities Act (ADA) checklist for Readily Achievable Barrier Removal (*ADA checklist for Readily Achievable Barrier removal*, 2010), e.g., is to assist public accommodations as the first step in a planning process for readily achievable barrier removal. This tool checks for compliance with the ADA Accessibility Guidelines (2010) and has been widely used in the U.S. since the passage of the ADA. Other examples are Ireland (*National Disability Authority (NDA*, 2012), U.K (*Physical accessibility audit checklist* 2014) UK (*Wycombe District*, 2014). Checklists are commonly used also for tourism. Many countries publish access information for tourist sites at least for a specific region or city. For example, UK (*Visitbritain*), Spain (*Barcelona tourism*), Ethiopia (*US Aid, Handicap International*).

However, open space audit such as street and areas in cities which are also tourist attractions are less common.

Most existing data collection tools are not supported by data analysis tools.

Several authors focused on identifying instruments that measure the built environment and tourist sites. For example, The Enabler (The Enabler, 2005), assesses private homes (Scoring is dependent much on the evaluator's judgments). Other tools attempt to assess hazards that persons with physical

2 As in many countries, Israel has laws, regulations, and guidelines for barrier-free design. These guidelines, although often similar in nature, vary from country to country. In many countries, including Israel (The Standards Institution of Israel, 2013; Guidelines for Accessibility in Open Spaces, The State of Israel, 2008) and the U.S. (ADAAG, 2010), the standards refer to minimum requirements. In Israel, as in the United States., full compliance with the standards is required only for construction of new buildings, as well as alteration of existing buildings. Structural barriers must be removed from the latter however if complying with the Standards is not readily achievable, modification that does not fully comply may be approved on the condition that it poses no health or safety risk.

or cognitive deficits face in their homes and obtain a residence hazard score, with the ultimate purpose of predicting and preventing falls and other injuries. (Clemson, Fitzgerald, Heard & Cumming, 1999).

In the tourism industry some attempts were made to score a site based on the checklist mostly analyzed by hand (for example – Tourisme et Handicap association, 2014). A decision support system tool for evaluating accessibility of various facilities including tourist sites was created in Israel using mathematical equations based on the specifications of the official guideline requirements (Bendel, 2006).

Most of the evaluations or audits were done regarding accessibility in existing buildings, public transportation, or tourist sites. Emerson (2008) in Ottawa and tourist sites in Chicago (Open Doors Organization, 2010) are examples.

In old cities as well, although there is extensive activity all over the world on matters concerning the rehabilitation and upgrade of old and ancient cities and quarters, in many cities planning efforts and resources are limited to localized accessibility for sites, buildings with historical, archaeological, tourist attractions. Work was done on renovation and upgrading, for example; Athens, Greece and Ávila, Spain. *A Management Guide of Historic Cities* was published by the Organization of World Heritage Cities (2013), but accessibility was not addressed intensively. Specifically, not much work was reported on audit tools and criteria to evaluate old cities.

In regard to accessibility in the Old City of Jerusalem, the planning unit was required to make decisions and prioritize the required work. The work in planning accessibility resulted in an attempt to create such an evaluation tool, as well as a model for decision making. The pilot decision support system focused on the interplay between people and the built city environment. The results of the audit highlighted items in the Old City, that required adaptation or upgrading to better meet users' needs, and it prioritized items for implementation.

## **Audit of accessibility, decision support and evaluation system for old cities**

Since the official guidelines do not take into consideration the unique situation in old cities, an attempt was made to formulate a new standard for accessibility, specifically designed for the Old City of Jerusalem. The criteria were defined with the official standards in mind. Deviations from these standards were allowed for reasonable accessibility within the complex layout of the Old City.

The decision support and evaluation system, created for this purpose, is a unique and bias-free tool.

Criteria were defined to grade accessibility of specific elements and spaces separately, e.g., route width, slope, etc. At this stage, weighted criteria were defined specifically for people with mobility impairments, including persons using wheelchairs, crutches, or other assistive devices.

Grades were given on a scale from 1-5, as follows:

1 = inaccessible, no simple solution is apparent;

2= requires major renovations;

3 = requires some renovations;

4 = requires some superficial improvements of surfaces;

5 = accessible according to national standards, no renovations required.



## Audit of accessibility in the Old City

The audit of accessibility in the Old City was the first step taken in order to study and highlight the problems to be addressed in the planning process.

### Methodology

Information was collected regarding the streets' suitability for individuals using wheelchairs, crutches or walkers, or individuals with walking difficulties without aid devices. Another element was added to accommodate the need for appropriate orientation.

The audit took place in all streets and alleys of the Old City, regardless of the size, popularity or population. The audit included public open spaces only, to identify obstacles. No buildings were evaluated at this stage. Written and photographed documentation were produced (Bendel, 2008).

The main variables studied were:

- **Width:** When the width of the streets was not uniform along its entire length, an approximate average width of the street was established.
- **Height:** Some streets were covered, and the ceilings low. In others there were other obstacles, such as, old logs sticking out of the walls and protruding into pedestrian paths.
- **Slope:** Besides the steepness of slopes, the availability and standard of handrails was evaluated.
- **Stairs:** Size, height, surface, distance between steps and groups of steps were measured.

Here again the availability and standard of handrails was assessed.

- **Surface:** Roughness of the surface, bumps, holes, missing, and uneven or broken tiles were noted.
- **Obstacles:** In addition to surface problems, poles, road blocks, electricity, telephone, other distribution boxes, and other permanent obstacles to travel were noted.
- **Signage:** For the purpose of general orientation, the location and design of signage were studied; the accessibility of signage according to the guidelines was not addressed.

Two sets of criteria were defined to analyze the data were defined by a multidisciplinary team of experts (rehabilitation and accessibility experts, and an architect). The approach considered the interaction between the individual and the environment, as well as possible combinations and variations between the different elements of the design.

The first set of criteria consisted of each specific elements audited, such as, slope. In other words, if the specific element in the street complied with all requirements for mobility impaired users according to the defined standards and behaviors (as defined by the criteria mentioned above), the element received a score of 5. However, elements received a score of 4 if some of the components did not fully comply with the standard but enabled some access.

For example, the slope received a score of 4 if all components complied with the standards except, for example, the width of the slope being less than required.

The second set of criteria defined the overall accessibility of the street. The

overall weighted grade was computed based on all the different elements, using the grades of each element determined by the first set of criteria. The relative importance of each element and the connection between elements was considered in the definition of the criteria. If all the elements at the street complied with all defined requirements, the street received a score of 5. However, if most the relevant elements received a score of 5 or 4, but one element scored 3, then the total score was 3. As such, the system is flexible, and the criteria can be further developed and refined.

## Results and decision making

Once the two sets of criteria were defined, all streets and alleys of the Old City of Jerusalem were graded and mapped accordingly.

A total of 126 streets were analyzed:

10 streets received the highest grade 5 (two streets received this grade just for certain sections).

35 streets were graded 4 (including some for just certain sections).

22 streets were graded 3 (including some for just certain sections).

24 streets were graded 2.

The remaining 35 streets were graded 1

These results indicate that the majority of streets in the Old City require a high level of intervention to improve their accessibility.

A decision was taken to start work on the streets which graded at least 3 on the surface criterion (Shekel, 2011).

Yet, in addition to decisions based on the use of the grading system, some other components had to be considered and dealt with before any recommendations or upgrading could be implemented, such as public vs. private land ownership. Not all public areas, such as, streets, alleys and squares, are public properties and everything beyond the entrance gate or door is private property in the Old City of Jerusalem. Inner dead end alleys are semi-private property, welcoming only local community members. In other cases, streets are owned by the church. Therefore the residents' consent to cooperate with the plan to upgrade their property is crucial and is not always in accordance with their priorities.

After much struggle with the problem, the planning team, with the input of policy makers, concluded that each priority area has some balance between the needs of the residents and those of the tourists, with emphasis placed on residents' welfare.

The streets were then mapped based on three priority components:

- Access leading to schools, especially special education schools
- Access leading to local public services
- Access leading to meaningful Islamic, Christian, and Judaic religious sites

This decision created momentum for resident participation, despite density, distrust, costs, and other factors.

## Implementation

A five year work plan for improving accessibility to the public in the Old City was prepared as part of the Old City upgrade project (Shekel, 2011). Four different areas meeting the aforementioned criteria were chosen for the pilot phase of the project.

The Jerusalem Development Authority assigned a multi-disciplinary planning team<sup>3</sup> to prepare a manual for the Old City renovation in which the main general issues of the public spaces are outlined and detailed. The chief architect of the Jerusalem Municipality suggested that the design of the public space in the Old City be unique and different from the generic planning outline for the public space of the New City of Jerusalem and should deal with the most important features of street design language: consistency, clarity and simplicity which follows the hierarchic approach from the general to the particular (Weiner-Singer, 2009). Teams of architects led sub-teams of city planners and prepared the detailed plans of each street. The detailed plans used design elements based on the principles in the manual, in order to meet the specific needs for the development of each street. In this way a general uniform design line was maintained for all streets.

## The Manual

The “Streetscape Manual for the Old City of Jerusalem” (Davish Ben Moshe, 2013)<sup>4</sup> is a comprehensive document, and the result of a lengthy process of intense study of the area, as well as the involvement and cooperation of residents, shop keepers, members of the Israel Antiquities Authority and other organizations operating in the Old City.

The main challenge, as mentioned above, was to upgrade and adapt the existing structures as much as possible using various means, such as steps, slopes and ramps, etc; the purpose being to allow access to emergency vehicles and auxiliary aids and also for people who use fixed landmarks for orientation<sup>5</sup>, by using up-to-date professional standards, while at the same time maintaining the character and uniqueness of the area.

It is hoped that also future design improvements will be resolved through cooperation and negotiation, on the basis of these guidelines.

## Manual Goals

- to guide designers in solving typical problems, related mainly to street planning in accordance with safety and accessibility guidelines.
- to create a general framework, from which exceptions may also be derived including - solutions to specific issues and special adaptations depending on the nature of the place and the behavior patterns of its inhabitants.
- to characterize typical street elements and create models for the use of materials, textures and shades.

## Design Concept

The Streetscape Manual was planned in accordance with the Master Plan for the Old City (Shekel, 2011) and the hierarchy of the Old City streets as presented in the plan.

3 The team included representatives from all the municipality departments, community workers, and professional consultants: Safety, Construction, Preservation Team, Old City Master Planners, Old City Accessibility Team of the Jerusalem Development Authority.

4 The manual received the Laureate “Urban Design Prize” (OtHaitzuv) a national competition led by 4 Domus Israel competition in design awarded in Tel Aviv 18/4/2013. The short clip describes the genius loci atmosphere of place, and the design process: <https://www.youtube.com/watch?v=GI-fn-FjwVA> The manual is currently being translated into Arabic and English.

5 This refers to people who have limited vision or significant difficulty in spatial perception and other problems.

The manual does not differentiate between the various quarters in the Old City and follows the following hierarchy (see Figure 6):

This hierarchy also dictates the priorities. Most of the main streets in the **A - Tourism and Heritage** category are planned to contain the most accessibility, whereas in most of the streets in the **C - Residential** category, which are typically small alleys, accessibility is more difficult due to topography and formation, therefore requiring more modest design details.

The **B - Routine Life** category contains a combination street design plan of both the Tourism and Heritage and the Residential categories.

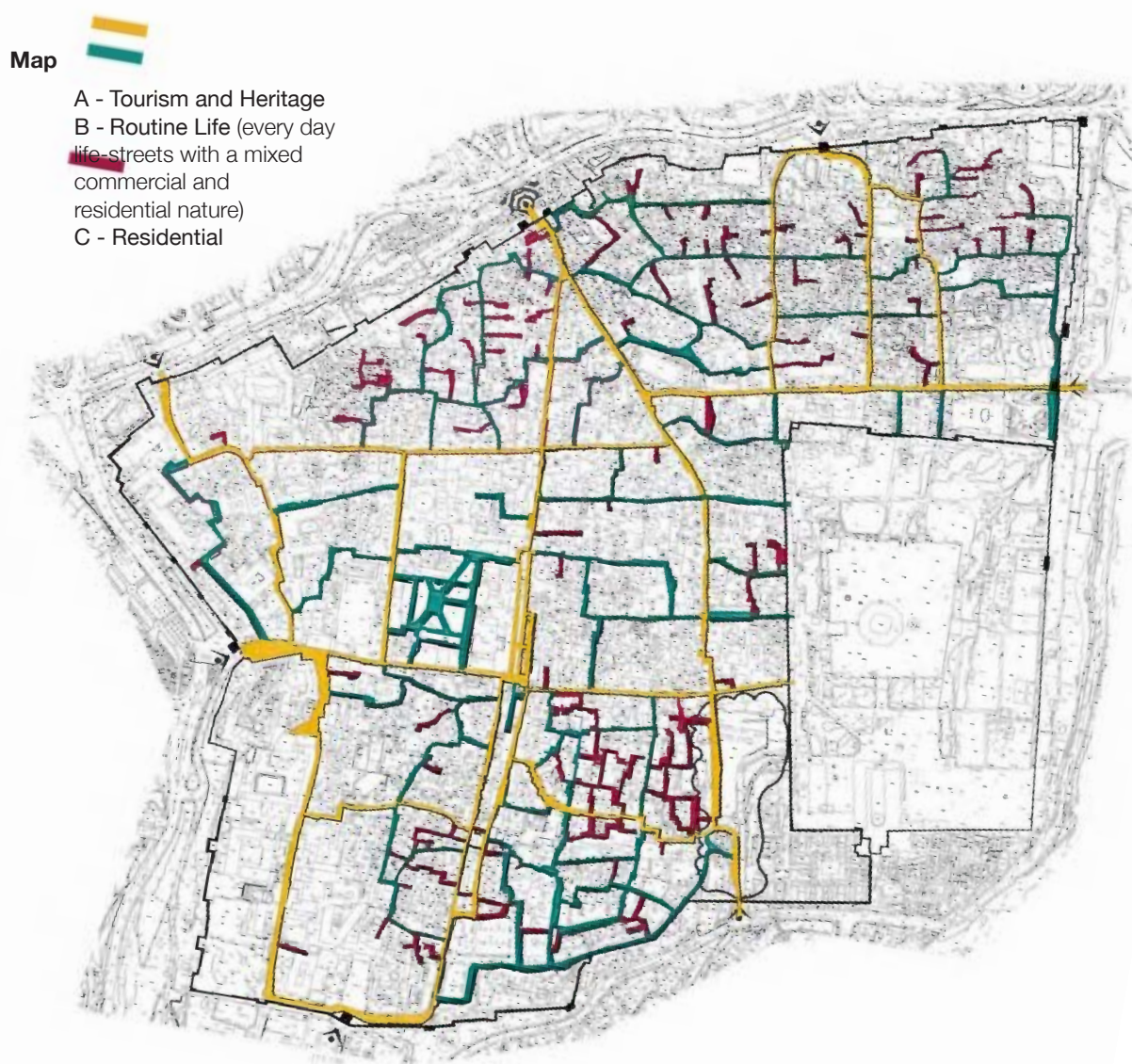


Figure 6. The old city street hierarchy, showing the 3 main types of streets: A-Tourism and Heritage, B - Routine Life (every day life) C-Residential, the basis for the implementation plan.

The major difference between the design elements is mainly in the details of paving the road surfaces, steps, slopes and related infrastructures-drainage and manholes in order to keep to the original design.

The rest of the open space fixtures, such as handholds, railings, benches, waste baskets, etc., are used in all types of streets in the same way, allowing alternative choices to satisfy optimal local adaptation.



# Manual Structure

The manual is divided to 3 main sections:

- **System details** - design components and rules for the main typical street category elements i.e.: A - Tourism and Heritage routes; B - Routine Life routes; C - Residential routes. The system details contain all components of the typical street elements (see Figure 7).

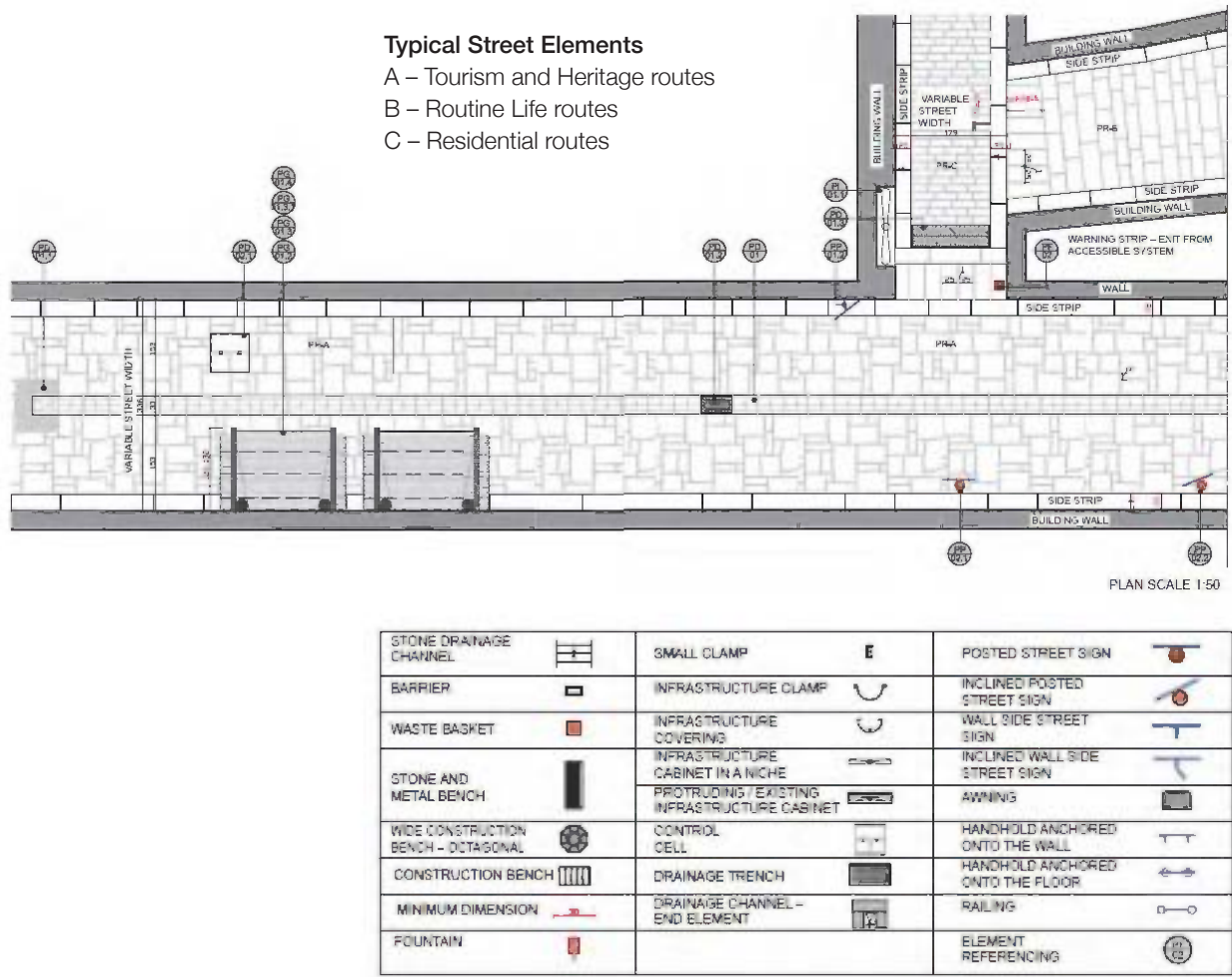


Figure 7. An example for typical street element - plan and photo before renovation presenting the problem

- **Sub-system items:** street surface and structure and infrastructure components i.e. paving, material: stone, street intersections (PR) stairs (PM), ramp and slopes (PN) drainage and manholes (PD).

Detailed design sketches come with all elements. For example (see Figure 8):

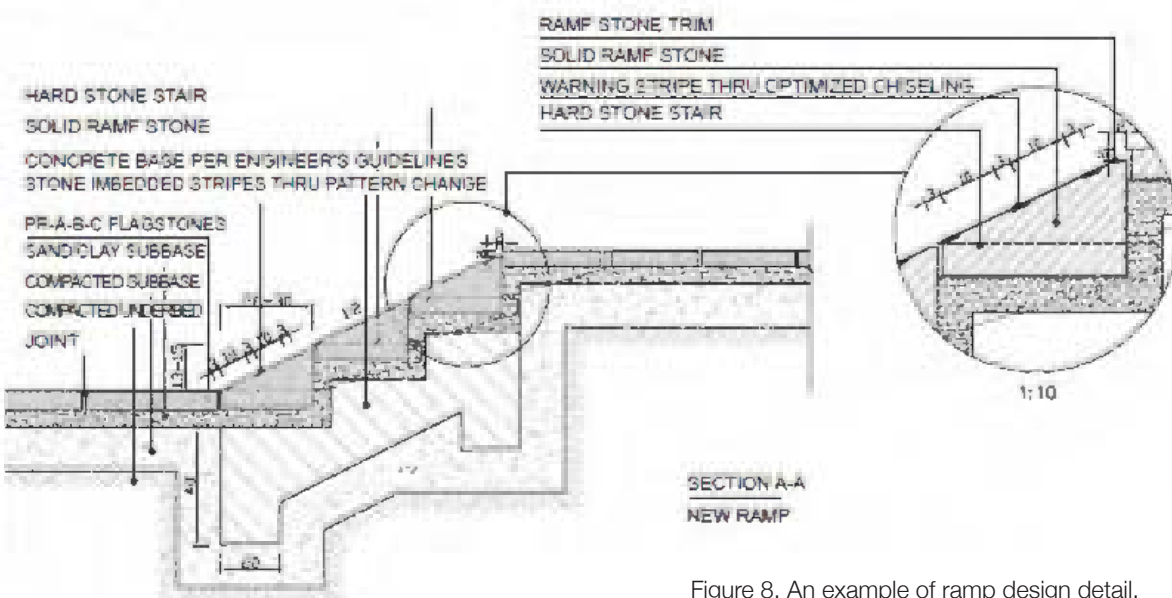
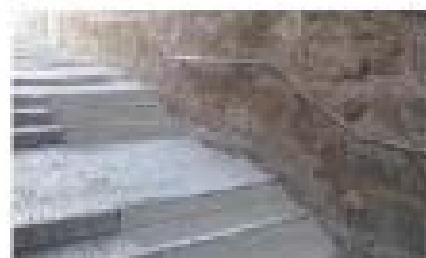
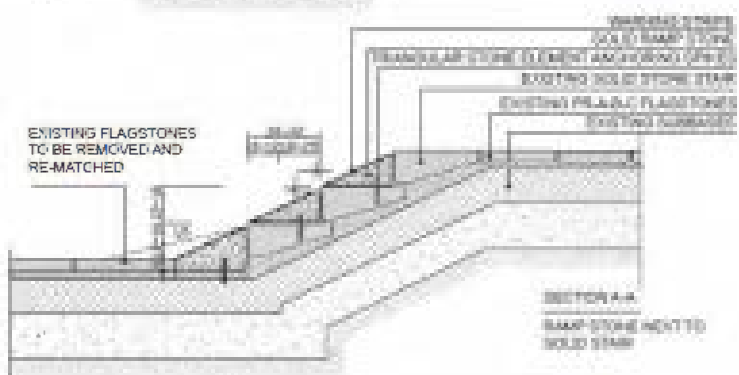
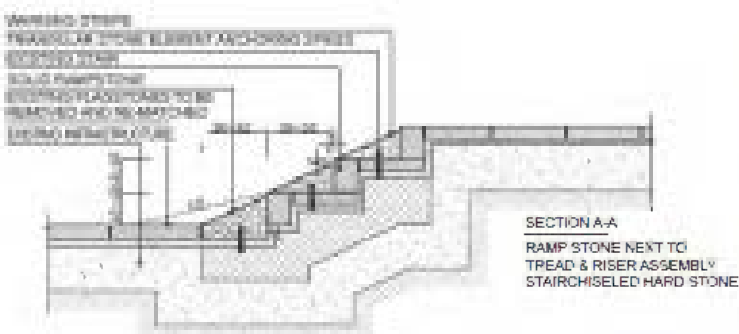


Figure 8. An example of ramp design detail.

- Individual elements:** street fixtures and supplemental items that create its look and feel, i.e.: street and building infrastructures (PI), awning design (PG), handholds and railings (PS), signpost design (PP), street furnishings and fittings: bench - PF-01; waste basket - PF-02; drinking fountain - PF-03; barrier post- PF-04. These items apply to all categories without distinction between them. Detailed design sketches come with each and every element. For example see Figure 9:

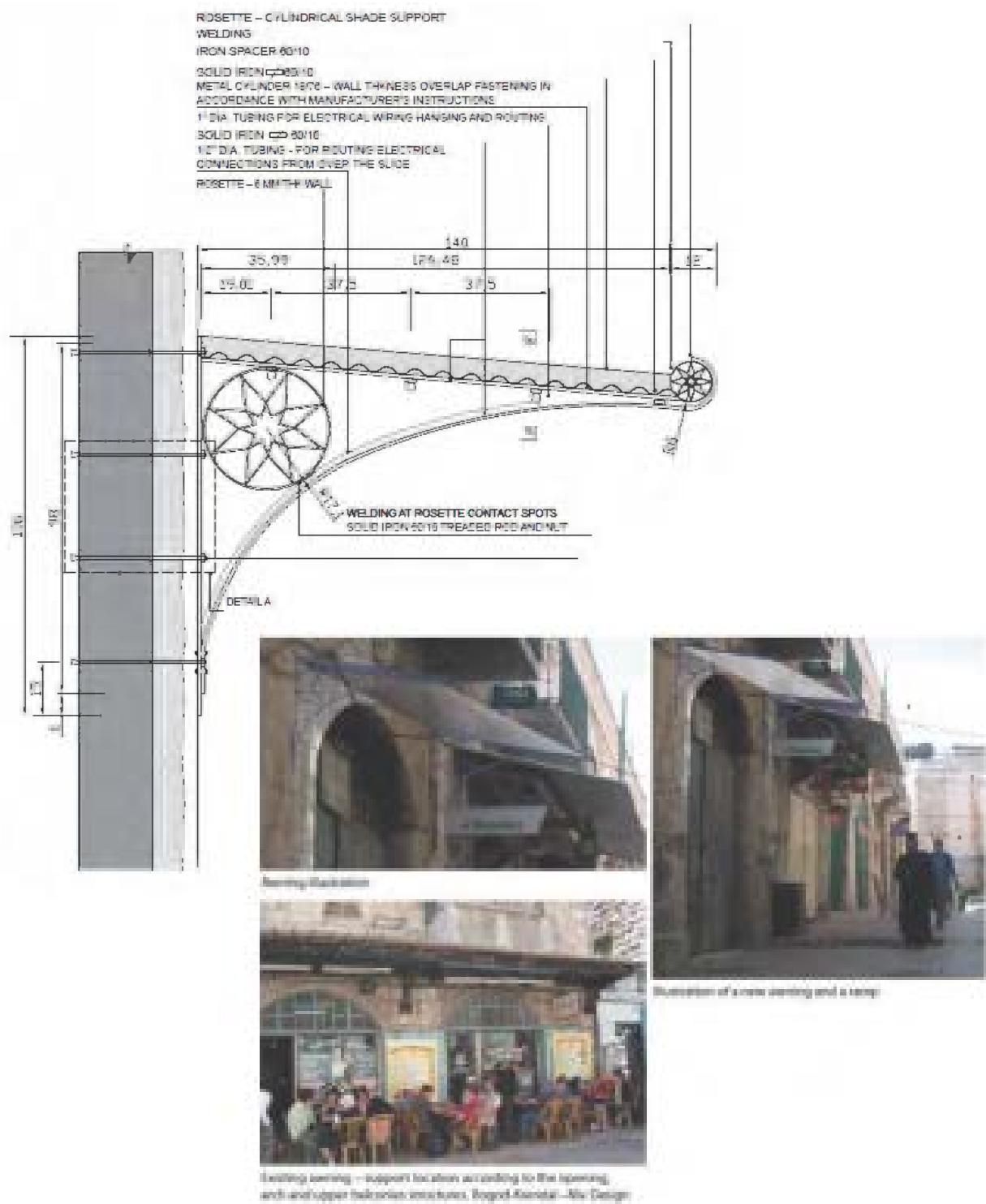


Figure 9. An example for an individual element- design section of a new awning compared with an existing one.

## From Design to Construction

Following are two examples of implementation in different streets that have already been renovated:

**Omar Ibn Al Khattab Square (Jaffa Gate) - Hierarchy- A - Tourism and Heritage.**  
(see Figure 10)



Figure 10: Omar Ibn Al Khattab Square (Jaffa Gate) Melzer-Igra-Cohen Architects and Urban Designers, Architect Guy Igra. These photographs show the finished renovations with an emphasis on the past and the comfort of the modern day, especially in the street's surface-stones and chiseling which is clean and highly maintained. The area is open and well lit to promote safety and personal security. All the poles were removed, (see the elegant awning) and were transferred to the façade. They were also reduced to a minimum in order to give an atmosphere of serenity and calmness, and in turn giving the center stage to those monuments that need to be the focus of attention.

High standards of design were used in the renovations in the Omar Ibn Al Khattab Square (Jaffa Gate) and utilized a mixture of past and modern methods in correlation with the importance of the area. (see Figure 11). This gate is the main entrance to the Old City, and therefore the decision was to prioritize improved access to pedestrians. The taxi station that dominated the public space in the past was removed entirely, and only a few vehicles are now allowed access. The street was leveled and only a minor curb marks the driving routes. The paving was replaced so that its texture meets modern safety standards and is easily maintained.





Figure 11: Modern fixtures such as the poles, garbage bins and benches were chosen to contrast with the old style oriental design of the buildings. The newly designed infrastructure cabinets within building facades resemble the ancient Mashrabiya<sup>6</sup> design style in nature and appearance but are based on a modern idea (IMSegev- "Segev Twist") of metal that looks woven even though it is only slightly curved.

**The Lion’s Gate - Hierarchy A - Tourism and Heritage and B - Routine Life**

The route leading from the Lion’s Gate to the Via Dolorosa, was chosen to be the manual pilot for handrails (see Figure 12). The design was changed after the prototype had been set; for example, the hand grip metals width and the decision to work with one metal piece. All fixtures were prepared in the factory and installed on site. The improved handrail in the photograph below looks like it has always been an integral part of the scenery.

6 Muslim architecture. It consists in a lattice, mostly made of wood, serving for building Mashrabiya is a typical element of openings, windows or partitions. In this case, an industrial solution has been selected, based on the visual characteristics of Mashrabiya.



Figure 12. The location of the handrail presented a particular problem. The Preservation of Historical Building's Team did not permit any attachments to the wall, and therefore the handrail is attached only to the pavement and only to one side of the street. This innovation makes all the difference for people with mobility difficulties.

## 8. Summary and conclusions

In this article, the work of a multidisciplinary team was shown. The team presented a systematic, comprehensive professional and conceptual basis, for upgrading the infrastructure and accessibility as much as possible, in the very challenging and complex site of the Old City of Jerusalem.

It was clarified that the first step needs to be a site audit, using a carefully developed tool and data analysis criteria to collect consistent, reliable, and objective information as a basis for decision making. The outcome of the audit in the Old City enabled defining strategy and setting priorities for multiyear planning and intervention for the benefit of residents as well as tourists. The criteria used to assess accessibility were defined based on the interaction between disability and environment according to universal design principles, adapted to the circumstances of the Old City.

As a first step in implementing the plan, a manual for renovating streets in the Old City of Jerusalem was composed. The manual, serves as a guideline for detailed creative solutions for specific places and so maintain the general design through the city, while keeping the balance between the requirements of heritage; history and archaeology; preservation, technical difficulties and accessibility needs.

Although accessibility could be obtained only partially in this complicated site, the upgrade of the infrastructure which was carried out so far, proved a great deal of difference.

Advanced technology to assist orientation and provide effective solutions for people with various kinds of disability as well as solution for transportation are yet to be studied.

The described pilot is based on universal values. It is expected that the audit tool as well as the manual guidelines can be adapted to old cities and heritage sites anywhere, in preparation for upgrading accessibility.

Research is recommended to test the system's usefulness in countries other than Israel, and to refine the criteria used for purposes of future evaluations.

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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.

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**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.

HaShalshet 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 enlarges 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.





Muristan Square, the Christian Quarter. ©Rostislav Glinsky | Dreamstime.com

# ISSUES IN THE IMPLEMENTATION OF ACCESSIBILITY IN THE OLD CITY OF JERUSALEM

Naftali Levy

Jerusalem is Israel's largest hub for international and local tourism. One of the leading, if not the leading historical attraction, is the ancient city abundant in religious buildings and history of all religions and congregations, archeological sites and cultural institutions. Millions of tourists visit it every year. As part of the increase in tourism waves in recent years, the tourism wave of people with disabilities has also intensified. In the process, the Jerusalem Municipality has been called upon to carry out many accessibility activities in the public space and in the public buildings under its responsibility, which serve its visitors.

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**Naftali Levy.** Professional advisor to the chairman of the local committee for planning and construction in Jerusalem. In his previous position he served as Assistant Director of Construction Licensing and Supervision. For many years he has been taking a significant part in promoting accessibility in Jerusalem.

Beyond annual work plans, it happens that accessibility demands come from outside and in which the municipality is also involved. At the beginning of 2011, a Vatican organization U.N.I.T.A.S.I (Unione Nazionale Italiana Trasporto Ammalati a Lourdes e Santuari Internazionali) addressed the Municipality with a request to promote the works required for the accessibility of the public restrooms in the Christian Quarter, next to Muristan.

U.N.I.T.A.S.I organization specialized in tourism of catholic pilgrims with disabilities to the holy places of Catholic Christianity. It attributes paramount importance to the existence of a pilgrimage that will suit the limitations and respond to the special needs of these pilgrims.

In recent years, the organization has been working to strengthen this activity in Israel in general and in Jerusalem in particular. After a series of professional meetings with all the relevant professional bodies, and with the approval of the municipal committees required for this in the process (Names Committee, Finance Committee, City Council), a plan was formulated, which included the implementation plan, work specifications, manner of implementation and schedules. In view of the importance of the project, the organization even offered to make a substantial contribution to its implementation. The municipality, on its part, budgeted the project in the same amount. The project, which was relatively small (making two toilet-cubicles accessible), required coordination and careful and sensitive work, which was successfully completed at the beginning of 2013. Following the success of this project, additional accessibility initiatives were promoted together with the organization, but the challenges posed by the Old City make their implementation difficult.

Naturally, mainly for strict conservation and architecture considerations, construction in the Old City is done sparingly and under strict control and rules. In fact, any change in a structure, even the smallest one, necessitates the preparation of a specific urban building scheme. The only works that are allowed without the preparation of a specific urban building scheme are in favor of "sanitary improvement" or in other words, minor renovations and strengthening of buildings for which there is concern for their stability.

In the Jewish Quarter, in part of which there is an approved urban building scheme that ostensibly constitutes statutory certainty, there is need, in addition to the approval of the planning institutions, to obtain also the approval of the Society for the Rehabilitation of the Jewish Quarter (government company), which in turn is very meticulous about everything that is being carried out within the boundaries of the Quarter.

The physical structure of the Old City and the various assets within it severely limit the construction options. Small, crowded buildings, side by side and one on top the other, narrow streets, steep slopes, ambiguity of property ownerships, rivalries and disputes between communities, religions, congregations, families and more, make it very difficult to begin orderly planning. The attempt to produce a general urban building scheme for the Old City, by virtue of which it would be possible to obtain building permits, has not yet succeeded, this in light of the planning complexity in this part of Jerusalem, with all the many subtleties and sensitivities that accompany it. There is no doubt that this is a complex and sensitive challenge, which certainly requires thinking of the future.



© Maria Barski | Dreamstime.com

# TO BE RELEASED FROM THE PRISON OF LONELINESS - PUBLIC PARTICIPATION IN THE OLD CITY ACCESSIBILITY PROJECT

Ami Meitav

It all began more than a decade ago when the Ministry of Jerusalem decided on investments in projects to upgrade the Old City's infrastructure through the Jerusalem Development Authority (JDA). The beginning of its activities on the

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**Ami Meitav**, Project management and coordination, The Development and Entrepreneurship Unit in East Jerusalem. Photos, except for the opening photo, were taken by the article writer.



subject was 2010. East Jerusalem Development Company (PAMI) began operating on the subject in 2014. In order to carry out the projects, it was necessary to contact the residents, merchants and church leaders in the east of the city and in the Old City in particular. I was asked by the various municipal authorities to help in the contact with the residents, due to the background of my acquaintance with the Old City from previous positions in the Ministry of Defense, and since I speak Arabic at a good level and know the city residents.

During the field tours, concrete blocks stood out, piled up on the stairs by the locals in order to facilitate the movement of device owners of various types: tractors, prams, walkers and wheelchairs, carts for transporting loads and more. The sight was ugly but it was clear that life was stronger and the residents' need for accessible ramps was real.

On the other hand, how does one make accessibility and ramps in a city built on a complex topography, a central wadi that crosses it from north to south and all the streets from east to west are steep?

A great difficulty arose already during the preliminary conversations with the residents, who found it difficult to believe that the authorities were carrying out projects in their favor after years of neglect. When presenting the projects, they looked for the hidden motive behind the sudden goodwill of the municipality to improve their living environment. Numerous individual conversations and conversations with the merchants' committees existing in every cluster of streets, have slowly thawed the hostility and suspicion. Knowledge of the Arabic language, and especially the subtleties of the customs of Arab society, were a necessary tool in the efforts of persuasion.

In order to help make the Old City accessible to people with disabilities, the National Social Security [Bituah Leumi] also embarked on the mission, seeing it as an important task within its goals.

In the first phase, the streets near the Jaffa Gate, in the area of the large churches, were handled. At the same time, the handling of the Saadia neighborhood was carried out, as part of the Development and Promotion of Entrepreneurship Unit in East Jerusalem. Saadia is a neighborhood in the Muslim Quarter near the Damascus Gate, with no tourist sites. We wanted to convey that the activity is not only aimed at tourists but at all residents and their needs. Many conversations with representatives of the neighborhood, which took place at the "Bnei Yerushalayim" club and at the residents' homes as well as with passers-by while working, taught us that people with disabilities, those who use a cane, prefer to go down the stairs rather than descent on the ramp. Even then, the insight was that it was incorrect to make ramps from side to side but rather to always leave room for a step. This insight continues to accompany us to this day on all the streets where we make accessibility ramps.

2014 was the year of setting the accessibility project in motion, and we underwent the learning process while rubbing shoulders with and talking to the residents. We also learned that many old people rarely left their homes because of their inability to get around on the terraced streets. Top priority was given to places where people with disabilities lived and great efforts were made to meet their needs. At the end of 2014, the Jerusalem Municipality received an application from a disabled woman living on Aqbat Shadad Street, an inner street at the Saadia neighborhood. In order to allow her to leave her home, ramps and handholds were built throughout the street she lives on although it is a small, side street in



this neighborhood. The residents were surprised by the level of investment for a single person.

In mid-2014, the flagship project of the Ministry of Jerusalem was conducted to restore Hagai Street, a central street from the Damascus Gate in the north to the Western Wall plaza. Many merchants feared that such a project would cause them an economic collapse because the Jerusalem municipality demanded day and night work in favor of shortening the duration of the project. The merchants said they would oppose and pile up difficulties but after many persuasive talks, agreed to night work. After a pilot, which proved that night work did not extend the project, the work was carried out including infrastructures and paving with the merchants' understanding. This street is of great importance as it is a major thoroughfare for people with disabilities as it descends with a gentle slope and allows passage to major commercial and tourist sites in the Old City.

From 2015 onwards, streets have been defined for the purpose of upgrading their maintenance and each year paving work was carried out that included, as an integral part already at the planning stage, the accessibility of the streets for people with disabilities.

During 2017, a request came from a man with disability from the Armenian Quarter, who was having difficulty leaving his home. After visiting the place and checking his needs, the authorities (JDA and PAMI) instructed to make accessibility ramps from his house to the street that connects it to Jaffa Gate.

Paving alteration work requires breaking stones and adjusting them on the spot, an activity that causes noise and dust. In a crowded and touristy city, such jobs shut down business and interfere with the families' rest. The balance between trading places, where only night work can be carried out and residential streets that allow daytime work so that the residents can sleep, was done only after the conversations and mapping the residents, door to door, names and telephones. In order to be attentive to the residents' needs during the works, the residents and merchants received my mobile phone number. Conversations with residents, even when we were not during work hours were important to show them that they had a "hot line" to the project, and they were a calming act that proved itself more than once.

Residents who saw the ramps, did not stop thanking us and asked to apply the project in their residential neighborhoods as well. At the PAMI's request I wrote, after many conversation meetings with residents of the various neighborhoods in the quarters, a position-paper that was accepted by the Jerusalem Ministry. To the residents' astonishment, the inner-neighborhood streets in the Christian Quarter (HaShlihim, HaKnesiyot, Al G'absha and al-Sayda)) and in the Muslim Quarter (Al-Kirmi, Al-Khari, Al-Khaladia and Al-Saray streets) underwent a face lift that included building ramps, handling infrastructures, lighting, handling facades and removing hazards.

During the works on Al- G'absha street in the Christian Quarter, the residents asked for a ramp to be built for them to the residential alley. Since this is a private area belonging to the Franciscan Church, we hesitated and I checked with the patriarchy for their position. The initial answer was hesitation, to say the least, due to internal relationships between them and the residents. After realizing that we were willing to fund the work, they agreed and the ramp was built to the residents' delight. Their reactions were moving.



Churches Street in the Christian Quarter –  
Before and after the upgrade



The most moving reaction was that of Mrs. Claire Sabillia, a Christian woman who suffers from muscular dystrophy, moves around with an electric wheelchair, lives in a small apartment near the Lions Gate. Until our project, she rolled on improvised concrete blocks. After finding out that the concrete blocks in the alley were meant for her, we talked and I promised to make every effort to improve accessibility to her apartment. In November 2016, the road leading to her apartment was renovated and we soon received the following letter: “Hello Ami, I want to thank you and the entire team you have sent to make this amazing ramp. You cannot know how satisfied and happy I am with the work done by Sa’ed (the contractor) and his friends over the last few days. Well-done to you for all your efforts to make it easier for any person with difficulties and disabilities, to live once again. May God bless you in heaven for all your human deeds and thank you from the bottom of my heart. To be released from the prison of loneliness. Claire Sabilla”



Access road to Clair Sabilla's home – Before and after.

Residents who had been imprisoned in their homes have purchased scooters that now connect them to the outside world.

Public participation and building trust with the residents required many coffee hours, meetings in private homes and an understanding of true adversity. However, the entire project would not have been carried out without the full support of the people of PAMI, who saw it as a task of central and human importance and responded to almost every request made to them.

To complete the project, I prepared an accurate accessibility map and the PAMI has invested a lot of money in favor of an accessibility app (see pp.116) that has won many accolades as the only app for ancient cities in the world. How fortunate and privileged we are.





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# Preservation, Renovation and Accessibility project of the Tower of David in Jerusalem

Eilat Liber

## Background

The Tower of David Museum is housed in the ancient and beautifully preserved Jerusalem Citadel named 'Tower of David'. The citadel is located near the Jaffa Gate, at the main entrance to the Old City and its four quarters, at the meeting point between the Old City and modern Jerusalem.

The Jerusalem citadel is an architectural and archeological gem that presents a sequence of testimonies to the city's fortifications from the biblical period to the present day. The earliest remains in the citadel are from the eighth century BC, the

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Eilat Liber. CEO and Chief Curator of the Tower of David - the Museum of the History of Jerusalem.



reign of King Hezekiah. The Hasmoneans then built fortified watchtowers on site and King Herod built his magnificent palace here. Evidence from the Byzantine period tells of residence of monks in the area, and during the early Muslim period an impressive fortress was built, which was upgraded during the Middle Ages by the Crusaders and Mamluks. The last to build the walls of the citadel and glorify it were the Ottomans who ruled the city from the 16th century.

## history of Jerusalem

The entry of General Allenby into the city in 1917 marked a new era for the citadel as well. Like the city itself, it underwent a process of preservation and restoration prior to its opening as a museum and center for cultural events from 1921 until the 1940s. Between the War of Independence and the Six Day War, the Jordanians ruled the Old City and the Legion soldiers occupied the citadel, on the 'urban line' - the border line that crossed the city.

After the unification of the city in 1967, the then mayor, Teddy Kollek, decided to turn the citadel into the home of a historical museum for the city of Jerusalem. To this end, archeological excavations were carried out at the site and in its vicinity, as well as extensive preservation and restoration operations. The castle's guard rooms have been restored and adapted to serve as exhibition spaces of the museum's permanent exhibition ; along the walls of the citadel, two promenades were set up that allow spectacular views of the city ; in the archeological garden in the courtyard of the citadel, walking trails were prepared for the visitors' enjoyment. All of this was done while adhering to preservation procedures and the development of a local architectural preservation language designed to ensure the unique character of the Jerusalem citadel. The planning team was headed by architect Ari Avrahami, whose work served as an example and role model for the preservation of other heritage buildings in Israel and abroad.

Simultaneously with the restoration of the structure, a professional team led by the museum's director Uri Abramson and the archaeologist curator Rene Sivan worked on preparing the permanent exhibit of the history of Jerusalem as an interpretive exhibition, not based on a collection of authentic exhibits but rather presenting the story of the city using a variety of media and illustration means. In April 1989, the museum was opened to the public and gained great success and popularity among Israeli and tourist visitors alike.

From its opening to the public until today, for over three decades, the Tower of David has been visited by millions of visitors from all over the world, children, teenagers and adults alike. In addition to the permanent exhibition, the museum has hosted changing exhibitions, groundbreaking cultural and art events, festivals and concerts, educational activities and guided tours, and spectacular night performances projected every evening on the citadel's walls, providing an extraordinary multi-sensory experience.

## Accessibility of the Tower of David Museum

Being a structure intended for protection, the Jerusalem Citadel is built of five high guard towers, inter-connected by colossal walls.

In the best tradition of building forts, the fortress has winding and narrow secret passages, a deep moat surrounds it, entrance bridges, a system of gates and vaults. It was built from the start to prevent the possibility of access and intrusion. At the underground level are the original cisterns of the fortress for collecting runoff

water and ancient underground halls that were exposed during the excavations. All of these create a spectacular and impressive multi-level complex, built of hewn stones from different periods and is very challenging for its visitors. A tour in the Tower of David requires climbing high and narrow stairs, walking on arched stones, passing through sloping and narrow tunnels and descending into dark cisterns. A special experience that is undoubtedly fascinating, but very far from being accessible to many audiences.

During the restoration project, when the citadel was being prepared to serve as a museum, only partial solutions were implemented for the visitors with disabilities. It is likely that public awareness of the issue of accessibility was then only in its infancy, the technological solutions were also few and it is possible that the tensions between the conservation constraints and the required development needs were quite complex and therefore most of the citadel complexes remained inaccessible.



Photo: Ariel Manor, Pikiwiki

Few wheelchair or platform lifts, which have been installed on the stairs, have constituted for a long time a single solution for those who had difficulty moving around or walking.

However, the museum's display, designed by London designer James Gardner and considered innovative and groundbreaking for its time, contained three-dimensional models, stylish reliefs and replicas of archeological finds, which allowed people with disabilities, unlike the customary in most museums, free touch and the experience of hand feeling and illustration that have turned the Tower of David into a sought-after museum for audiences with special needs.

## The Tower of David opens its gates - to everyone

In recent years, and especially since the Accessibility Law came into force, the museum has sought to expand its activities and open its gates to the general public, including populations with special needs.

At the basis of this decision lay the museum's vision, according to which every person has the right to know, enjoy and be moved by the historical heritage, the beauty and uniqueness of the place and the enormous cultural richness that lies between the citadel stones and the story of Jerusalem, and we must make every effort to enable every person whoever he is the experience of visiting the site.



Photo: Riki Rozman

In order to achieve these goals, we first had to learn and get to know in depth the challenges we were facing, which included not only finding solutions for physical accessibility, but adapting the entire activity to a variety of populations with special needs, while training the entire museum staff for the task.

With the help of the museum's accessibility consultant, Dr. Avi Ramot, an accessibility coordinator was appointed for the museum, who built the activity plan and coordinated the relationship with the various organizations.

Consequently, a new activity outline was developed for families – 'Let's meet in the tower' - which allowed families with children with special needs about ten concentrated days of activity a year tailored only for them, in areas of the citadel that were inspected and adjusted as fully accessible. It turned out that the families preferred to spend time together with similar families, when the museum is open only to them and they can arrive without shame, embarrassment or apprehension. In light of the success of these days of activity, other museums in Jerusalem have also initiated special days of activity.

At the same time, the museum established a forum of professionals and Jerusalem institutions for information sharing, consultation and learning, which met about four times a year and dealt with various aspects and promoting accessibility in museums in Jerusalem. In addition, the museum's innovation lab has been

developing audio solutions and audio description solution for people with sensory impairments, as an accessibility solution for the night shows, and other innovative technologies have been tried to improve the visitors' experience. For this activity, the museum received the Israel Accessibility Award for 2018.

## Accessibility in the Preservation and Renovation Project of the Tower of David 2022

For the past three years, a preservation and renovation project has been planned at the Tower of David Museum. After more than thirty years of extensive and successful activity, a renovation of the permanent display is required, which has become obsolete over the years. There is a need to renew the physical infrastructure, and of course a significant improvement in the accessibility conditions of the site is required.

Along with the desire and challenge to continue to preserve the uniqueness of Jerusalem Citadel, being one of the most beautiful and important archeological sites in the world, there is a growing understanding that there is need for open-mindedness in finding accessibility solutions also for unique sites of this type, for visitors from Israel and the world.

As mentioned, the need for accessibility is expressed also in adapting the future display and the entire information to the variety of disabilities, and in creative thinking about integrating appropriate technology in the service of display and illustration solutions.



Planned elevator – east. Imaging: Kimmel-Eshkolot Office



The museum's current renovation project is led by the firm of architects – Kimmel - Eshkolot. The display is designed by Hanan and Tal de- Lange and the curator Tal Kubo. Together with the Project's accessibility and preservation consultants and the Israel Antiquities Authority, which has been accompanying the planning since its inception, the proposed solution has been discussed and for the first time the levels of the citadel will be accessed by means of two elevators – the one near the western entrance will lead to the Museum's main display level, and the second, on the eastern wall leading to the galleries on the upper level of the citadel. Another proposed elevator – to the observation point at the top of the Phasael Tower - was not approved for execution by the Israel Antiquities Authority. The planning team is still examining possible alternatives and solutions to make the most beautiful lookout in Jerusalem accessible.



Planned elevator – west. Imaging: Kimmel-Eshkolot Office

Apart from elevators, accessibility will be improved on all paths and passages of the citadel, by lowering and straightening paths and passages, cutting curved and protruding stones, adapting handholds and other means. The challenge facing the planning team is to maintain the uniqueness and character of the site on the one hand, as against the need for accessibility and improvement of the experience for the visitors on the other.

The process of preserving the renovation of the Tower of David in Jerusalem was made possible thanks to the significant contribution of Ms. Vivien Duffield Clore and the Clore Israel Foundation, as well as the support of the Jerusalem Municipality and the Mayor Mr. Moshe Leon, the Ministry of Tourism, Ministry of Jerusalem and Heritage and Jerusalem Development Authority.

These days, in the midst of the corona crisis, the implementation phase of the project has begun, which will last about two years. We hope that with the opening of the renovated museum to the public at the beginning of 2022, visitors and tourists will return to Jerusalem and be able to visit a restored, renovated and accessible site.



Photo: Riki Rozman



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# ACCESSIBILITY FOR PEOPLE WITH DISABILITIES IN THE OLD CITY OF JERUSALEM - WHAT ELSE IS LEFT TO BE DONE?

Yael Danieli Lahav

Much has been written about the great efforts that have been made, and are still being made, to make the public space in the Old City of Jerusalem accessible to people with disabilities. I too have made my humble contribution both to the accessibility and to writing about it. An article I wrote in 2011 is republished in this issue (see p. 11). It was written when the big accessibility project passed from the initial planning phase to the actual implementation phase.

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Architect Yael Danieli Lahav, see p. 11

There is no point in rewriting it again. I will use the ideas that came up in the previous article as a starting point for the current article before us. Presenting the difficulties faced by those who wish to make a built property accessible in the Old City of Jerusalem was done in the wake of Naftali Levy of the Jerusalem Municipality, who described so well the statutory situation in what he wrote regarding this matter especially for us (see page 44).

The Old City of Jerusalem is a single and unique place. There is no equal in the entire world. It is a crowded built space used for a mix of residence, commerce, tourist services and a variety of institutions addressing the general public or closed communities. The Old City is one of the most crowded living spaces in Israel. On an area of 850 dunams live 35,000 inhabitants, i.e., 45 people per dunam. It is also one of the most significant tourist destinations in Israel, if not the most significant one. The number of tourists visiting the Old City exceeds two million people a year. Successfully integrating people with disabilities into the local community or the growing stream of visitors is a huge challenge. The challenge did not go unnoticed by the initiators of the large accessibility project and its managers. They did everything in their power to make the public space under their responsibility accessible. Streets, alleys, open spaces, public buildings, transportation services and parking. The main limitation they face is statutory. As part of the project, they are not allowed to carry out construction work in a land where they do not have possession. When they complete what they are capable and are allowed to do, it will be necessary to make accessible all the rest.

### **This article deals with some of what remains to be done.**

The Old City of Jerusalem is a multi-layered Kasbah. It has a morphology of a multi-layered Kasbah built on two hills and a wide valley between them. The eastern hill houses the Temple Mount and most of the Muslim Quarter. The western hill houses the Christian Quarter, the Armenian Quarter, and the remaining part of the Muslim Quarter. The Jewish Quarter is located in the Valley between the two hills. The slopes of the eastern hill are relatively moderate, the slopes of the western hill are steeper. Herod's Gate, Damascus Gate and the New Gate in the northern wall and the Jaffa Gate in the western wall connect the Old City with the new city. Zion Gate and the Dung Gate in the southern wall connect it with Silwan neighborhood (Kfar Hashiloah) and the City of David Antiquities complex and the southern wall, whereas the Lion's Gate in the eastern wall connects it with the Mount of Olives. The New Gate, Jaffa Gate and Zion Gate are the high gates. All three are on the slopes of Mount Zion, the summit of which is higher than them. The Dung Gate is the lowest of all, at the outlet of the inner valley to the Kidron River which is lower.

The hierarchy of streets characterizing the Kasbah has a deep cultural root – “The king's daughter is all glorious within”. The main street is the most public place, the residence is the most private and hidden place. The hierarchy of streets begins with urban main streets, from which one moves to secondary neighborhood streets, from them to dead-end allies semi-public, semi-private. From the alley one moves to a private living space which is also hierarchic. The alley opens to a courtyard common to several apartments, and from there one passes to a private foyer that leads into the inside of the apartment. The rule is that the private living space will be completely hidden from the public eye. The height of a window sill facing a main street should be above the eye level of a person riding a camel, i.e.



about 350 cm above street level. The front door of the house should be in a place hidden from the eye of a passer-by, that is, in the wall of the house opposite the wall facing a public street. In Jerusalem, this rule created a multi-layered Kasbah. The sides of the buildings facing the main and secondary streets are mainly used for commerce and public buildings. The living spaces extend above, or behind, the public stratum. Almost without exception, access to the living spaces, including the alleys, courtyards and apartments themselves, is by stairs. Finally, as if there are not enough barriers to accessibility, there is that too. You almost always have to go up or down a few steps when passing from the street to the yard or to the store and vice versa. Where there is no height difference between the street and the yard or shop, the threshold is nevertheless raised to prevent unwanted passage of rainwater and dirt from side to side.

**Interim Summary** - When it comes to accessibility for people with disabilities, the Kasbah on both hills is not a simple business at all. The Old City of Jerusalem has mountains around it. It is a Kasbah of many hundreds of years old, built on two hills with a fairly convenient topography. Despite this, those who are unaccustomed to it feel in a multi-layered Kasbah as if they have entered a spaghetti plate and now have to find their way in it.



Entrance to a residence in the Old City of Jerusalem. © Badahos | Dreamstime.com

## Access to property ownership

In ancient cities, and Jerusalem is not unusual in this regard, it is rare to find an arrangement for registering the rights<sup>1</sup> of residential apartments and shops that constitute independent property units that may be transferred from hand to hand by inheritance or real estate transactions, as is customary in new cities. Exceptions are buildings built in their entirety under modern planning and building

laws (Mandatory, Jordanian and Israeli). In these cases, the manner of registering the rights in the properties in the real estate books allows for transfer by sale or inheritance, as is customary in the new city. As mentioned, in most parts of the Old City it is not possible to separate ownership of a particular apartment from the ownership of the cluster of apartments and the common yard attached to it. Some of the built properties and the vacant land were bought with full money or given as a gift or inherited to organizations and individuals recognized as their official owners, and the tenants rent the apartments from them and use them for their own needs. Some of the properties and vacant land are recognized “since time immemorial” as belonging to certain clans of which the tenants are members. Be that as it may, the tenants without separate property rights are entirely dependent on the kindness of the property owners when it comes to carrying out significant construction and maintenance operations. When the ownership is registered in the name of an official party, the situation is still relatively good because there is someone to turn to. When the ownership is amorphous, such as in the hands of some clan, there is no one to turn to.

## Accessibility to the traffic system in a vehicle and on foot<sup>2</sup>

The immense effort invested in the accessibility project of the Old City is designed to create an accessible public space for pedestrians who are people with disabilities. Around the old city, parking lots of enormous capacity were built. Visitors’ entry by vehicle was prohibited in order to dilute vehicle traffic and increase the number of parking spaces available to residents. During the day, entry is only allowed for residents’ vehicles, for owners of vehicles with a disability card and for merchants with a special tag, who have arranged the matter in advance. On very busy days entry is only allowed to residents and people who have a reserved parking space. Transportation of goods is only possible in a small van.

Egged and the light rail operate a high-capacity accessible public transportation that encircles the Old City from all sides, (except the Lions Gate) and allows pedestrians to enter at one gate and exit at another. As far as possible, given the topography and morphology, including the width of the streets, ramps were



The light rail passing by the old town.

© Faina Gurevich | Dreamstime.com

- 1 A necessary condition for the completion of real estate transactions is the registration of the land in the name of the proprietor.
- 2 See more about the traffic system in this issue, in my article that is republished under the heading “People, Donkeys, Wheels and Stairs”, and in an article by Meirav Devish Ben Moshe and Judy Bendel, which is also republished under the heading “Accessibility in the Old City of Jerusalem – Audit planning and implementation”.)

built on top of stairs, stairways were dismantled and rebuilt to make them more comfortable, handrails were installed next to stairs and along relatively steep sloping streets.

Unfortunately, despite the enormous effort, some issues remain unresolved.

- **To get out of the house alone, to walk down the street** - Those who depend on personal mobile devices cannot move on the street without help, even though the situation is immeasurably better than it was before the ramps were built. In very many streets, due to the terrain conditions, the ramps built as part of the accessibility project are too steep. A person using a walker or a cane needs a close attendant to assist and support him as needed. Due to overcrowding, there are no benches for rest on the streets. For some people the effort to walk the steep streets is too great, so their walking distances are quite small.
- **To travel elsewhere, away from home** - Despite the effort, residents of the Old City, who are people with disabilities, do not enjoy effective public transportation. The distance from the house to the transport stations is too great. Most of them are too poor to rely on door-to-door taxi service. Agile entrepreneurs, who have recognized the need and potential offered by the accessible streets, operate paid shuttle and transport services in a scooter or an electric tricycle. The Catholic Patriarchate's Charity Association has purchased scooters that provide designated shuttle and transportation services for people with disabilities. The Jewish Quarter Community Center has purchased scooters operated by charity, which provides a similar service to the residents of the Quarter. There are more and more residents riding electric bikes, pushing shopping carts and wheelbarrows, or any other means of transportation that has small wheels.

**It is proposed to establish an array of subsidized and supervised public transport.** - "Regular" taxis go inside the old city. A taxi ride makes it easier to get out of the house because it reduces walking distances. The trouble is that the possible travel route for a "regular" car is very limited. Service in small taxis with high passability would revolutionize the quality of life of all residents, all the more so residents with disabilities. Even if the small taxis do not reach the very door of the house, they will be very close in it. The small vehicle will squeeze into the narrow streets and will ride on ramps with a "reasonable" slope. It is proposed to establish a dedicated service for the residents of the Old City that will take them outside the walls, all the way to multi-capacity public transportation stations. Of course, the vehicles will be of an accessible design for people with mobility disability, and the assistance that the driver will provide to passengers will be adapted for people with disabilities of all types. The service will be provided to residents at all hours of the day, excluding in the market streets. There the service will be provided outside rush hours. Passenger waiting stations and parking of vehicles outside business hours will be at an approved location only.

The business potential is big. It is worthwhile to develop accessible vehicles designed for driving on very narrow streets with or without slopes. The Old City of Jerusalem is just one place out of hundreds if not thousands of similar places around the world. In Israel, it is joined by the Old Quarter in Safed and the Old City in Acre.

- **Parking arrangement** - The many parking lots built around the Old City are for a fee. They are too far from the residential neighborhoods, so even if residents

did not pay parking fees, they would not provide them with a reasonable parking solution. Inside the Old City there are almost no parking lots to be parked in. Residents with a disability tag are allowed to have a parking space marked on a signpost bearing their vehicle number. Some people fortunately live relatively close to where the vehicle can be parked. The right to reserved parking greatly improves their quality of life. There is currently no solution for those who live too far or there is no accessible road from the parking lot to their home.

**It is proposed to establish a parking system in the Old City using the method of an automatic underground car warehouse that will be reached by elevators from several centers in the city - to save space that a horizontal traffic system will occupy at street level, people and cars will use elevators.**



Parking in the Old City, Jerusalem. © Daniel Weishut | Dreamstime.com

The cars will arrive at the warehouse and leave it in places that will disturb as little as possible pedestrians and traffic on the ground. People will go in and out at places that have good access to the main points of interest and to the hearts of the residential neighborhoods. The secondary benefit from the parking system will be an accessible horizontal connection to pedestrians that will connect the significant points of interest to each other. The parking layout with the elevators that go out to the ground will provide the Old City with delivery, maintenance, rescue and security services in a completely different quality from the one that exists today.

- Special pick-up and drop-off stations for passengers on special transportation - In Israel, it is customary for people with disabilities to reach special education or sheltered employment frameworks or other welfare and leisure services by special transportation. Most of the passengers are people who cannot be sent to wait alone away from home, where there is no one to look after them until the shuttle arrives and no one to receive them when they return. Because the cars cannot get close to the house, the logistics of collection and dispersal become



extremely complex. When there is no one in the house who can accompany the passenger, they waive the ride. In too many homes children and adults with disabilities do not receive education, employment and leisure services just because they live too far from a place a car can reach. The accessibility project did not solve their problem. It should be emphasized that this is not about a difficulty in walking, this is a difficulty in providing an inclusive and safe environment for a person who has difficulty taking care of himself.

It is proposed to set up permanent stations for the collection and dispersion of passengers with disabilities - This should be managed through professionals and an array of volunteers, who have been trained and will do so in an institutionalized setting. The stations will be built in places that will have relatively easy access for pedestrians, they will provide shelter from rain in winter and shade in summer, there will be room to sit, and there will be a push-of-a-button connection to an emergency center.



Inaccessible entrance to a clinic: Photo: Amir Bitan

### Accessibility in the private built space

As stated, the municipality is prevented from carrying out design and construction activities where the public has no easement. In other words, the municipality may operate only on streets and alleys, squares, public gardens and buildings for which it provides a service to the public. In the Old City there are almost no buildings owned by the city or the government, or that the municipality or government budgets their maintenance, or rents them out for their own needs. Almost all buildings in the Old City will be defined in the accessibility legislation as existing buildings. According to the accessibility legislation, there is no obligation to make accessibility adjustments in existing buildings, except in their parts intended for public use.

- **Hubs of interest** – one may say, with the requisite caution, that it is probable that all have been declared for preservation. Preservation in the Old City is very strict. On the face of it, they can be exempted from making certain accessibility adjustments because of fear of damaging the essence of the place (preservation) or due to engineering difficulty and concern for the stability of the building. To these, statutory impossibility may be added. It is difficult to carry out construction work in a structure intended for strict preservation.

- **Schools** – Apparently, accessibility regulations of an existing education institution apply to all recognized (teaching core subjects), official (municipality), religious, and special education schools. The question is how many of the schools in the Old City meet the criteria, how many of them are assisted by the municipality, how many of them are forced to make the accessibility adjustments from extra-municipal budget sources. I have no data. Only questions.
- **Shops and commercial services including restaurants, banks, postal agencies and more** - Almost all shops and restaurants meet the exemption requirements included a priori in the regulations because their façade faces the street, the entrance to the store is either higher or lower than the street by one step, and the store area used by the public does not exceed 100 square meters. Most stores do not require an accessible toilet because the sales area is less than 150 square meters. Most restaurants and cafes do not require an accessible toilet because the sales area is less than 50 square meters.
- **Accommodation services** - Most hotels and hostels within the Old City are not required to make accessible accommodation units because they have less than 75 rooms, they do not provide a service to the public other than those staying in the place, and they do not have enough space to build an accessible accommodation unit on the entrance floor from street. To some of them there is no access at all from a street that has no stairs.
- **Residential buildings** - There is no obligation to make existing residential buildings accessible. As for new apartments, the obligation only applies to applications for a building permit for 8 new apartments in one stroke that have a common entrance or a common stairway. Apparently, there are not any or there may be isolated cases of such applications that have been filed since the regulations entered into effect ten years ago.
- **Statute or approval of an application for a building permit for an elevator or a private warehouse at the entrance to the yard** - Local planning scheme No. EC/9 (EC – East City) applies to the Old City. The scheme assists only slightly to new construction or alterations to existing structures declared for preservation. Old City residents, who are apparently entitled to housing adjustments due to mobility disabilities, are unable to exercise their eligibility because they cannot obtain a building permit on a property that is not under defined ownership and whose building rights are unknown, even if, fortunately, the property they live in has not been declared for preservation. In recent years, an attempt has been made to formulate an up-to-date planning scheme that will enable construction additions aimed at improving accessibility and sanitation in residential apartments. If and when the scheme is approved, it will also make it possible to overcome the difficulties posed by the attribution of collective assets described in this article. Permits for building additions will make it possible to set up warehouses in the alleys and yards for the storage of motorized personal mobility devices. The warehouses are a mandatory condition for obtaining a motorized wheelchair, including a scooter, from the Ministry of Health. The engine attached to the wheelchair is an entrance ticket to the public space. Only with the help of the motorized chair is a limb disabled person able to move on his own on the steep ramps.

It is proposed to promote a strategic accessibility plan from which a local planning scheme for accessibility for people with disabilities in the Old City of Jerusalem will be derived. The planning scheme will make it possible to overcome statutory and administrative barriers that cannot be resolved today, due to which it is not possible to establish, build and operate accessible solutions for residents and visitors, whether these are required by accessibility laws or whether they are a necessity of the reality imposed on people with disabilities, who live or visit an ancient space.

## Summary

When we began talking, 15 years ago, about making the Old City of Jerusalem accessible as a whole, they thought we were kidding. No one took it seriously. In 2006, I participated with Dr. Judy Bendel in a conference organized by the European Union in Belgium that dealt with the universal design of buildings - tools and policies. Dr. Bendel presented there the tools she used to survey the Old City, and I talked about public policy promoting accessibility for pedestrians with disabilities in the Old City of Jerusalem. The truth is that I myself did not believe the words that came out of my mouth. And here today, after 15 years of hard work, I am writing an article that takes the accessibility of the streets of the Old City to pedestrians as an obvious starting point for the future. It is a great joy. The project was successful beyond all expectations. This is the place to bless my good fortune that summoned me this thing, and also to thank everyone who has been contributing to the tremendous effort, and first and foremost to the residents who cooperate, believe in the good end, and motivate us all.



The Vamush family preparing for a flight from Phuket to Chiang Mai, Thailand. Photo with the courtesy of the Vamush family

# TO TRAVEL WITH A WHEELCHAIR IN ANCIENT CITIES

Aaron Dov Vamush

I grew up near the Old City of Jerusalem and after the reunification of the city I, too, joined the swarms of people that flowed back to the Old City, and since then I have toured it on foot lengthwise and widthwise.

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Aaron Dov Vamush, Travel consultant for people with mobility disabilities.



Then the Yom Kippur War broke out, and I fought on the canal front, where I was also wounded. A long and complex evacuation eventually brought me to Soroka Hospital, where I was operated on for long hours. The hospital informed my parents that if I stayed alive, I would be bedridden for the rest of my life! I later underwent a long rehabilitation at Hadassah Hospital in Jerusalem, and after ten months I returned home - confined to a wheelchair.

Getting around in those years in Jerusalem with a wheelchair was almost impossible as there was no lowering of sidewalks at all. Thus, if there was no adjacent parking near the desired destination, it was not possible to get there alone without help. This was a huge obstacle on the road to independence.

Needless to say, returning to visit the Old City required a team of dedicated attendants to do so.

My parents instilled gypsy blood into me so I did not intend to give up the passion for traveling and hiking. Whereas in Israel I began working in the field of accessibility and lowering sidewalks in Jerusalem immediately upon my release from the hospital, when I traveled abroad, I learned that I must compromise - it is impossible to make accessibility demands in foreign places, and one must get organized accordingly with help. Alternatively, when my independence was more important to me, I realized that I could not reach and experience everything. At the same time, I learned that in traveling not only the destination has a purpose, the way is also an enriching experience in itself.

Thus, for example, on a trip to France I dragged the family all the way from Normandy to visit Mont Saint-Michel, a small town on a cliff just out in the middle of the sea with a well-known church at its top. In the past it was possible to reach the cliff only at low tide. Later, a rampart has been built that allows access to the cliff even during high tide. Well, we got there and passed the rampart on dry land to the exposed cliff. We entered the town and began walking along a street that was getting steeper and steeper. I had to give up the desire to get to the church at the cliff top, but the experience of getting to this unique place, meeting people who insisted on parking their cars on the sand and then ran back as haunted before the tide reached and flooded their cars, added value and a little fun to this visit, even if we did not manage to climb to the top of the cliff.

While Mont Saint-Michel was an incomplete experience, the visit to the Gibraltar cliff (still in British hands) was a formative experience, as one could enter with the wheelchair into the tunnels the British dug at the top of the mountain for their cannon batteries to protect this important outpost that controlled Gibraltar, which was the only crossing between the Mediterranean and the Atlantic Ocean.

An access road leads to the top of the cliff next to which is the entrance to the tunnels. You enter and move on until you reach the windows or rather, gunfire openings, where you get an amazing view of the whole area. All this is possible because the cannons were moved on wheels and hence, the tunnels were quarried without stairs and on particularly comfortable slopes. Outside the tunnels, you get to meet other residents of the cliff, the Gibraltar monkeys. They are not the most pleasant in the world. The legend has it that Gibraltar will not fall as long as the monkeys live there. My humble contribution to the realization of the legend was a banana sacrificed in favor of a monkey that jumped on my shoulder and snatched the banana from my hand.



The tunnels of Gibraltar. © Arne Beruldsen | Dreamstime.com

Such dedicated construction (for cannon maneuvering) is sometimes also found in castles and palaces that were built for fear of rival attacks, and therefore batteries and ramps were built that made it possible to move the cannons easily. In retrospect, I discovered that I could use them to climb the walls with a wheelchair. I have been exposed to such castles in England and Wales, for example. There are such also in Israel, for example in Acre, which is a world heritage site. The city has also undergone serious wheelchair accessibility and provides a wonderful experience for its visitors.

The visit to the ruins of the city of Pompeii began with arguing with the site guard at the entrance to the city: we arrived at an entrance that was steep and bumpy and the guard waved at us a movement, which I interpreted as: “go away, there is no wheelchair access here”. I said that if so, we will just take a peep inside to get an impression of the place. Now he already asked for an entrance ticket. I said: “Why? You have just said that there is no access for a wheelchair”. We entered and surprisingly we were able to cover quite a bit of the city, until we reached one of the streets that led to some of the interesting houses to view due to the murals and other remains, but here a serious obstacle was already waiting for us. The streets in Pompeii were built for carts and the sidewalks next to them were 40-50 cm high. In the middle of the street was a large block of stone that did not allow me to cross into the street. It was clear to us that this would not be overcome by me and my spouse alone and we were already thinking of turning around and retracing our steps when a cheerful group of tourists noticed our situation and came to help us swinging me with the chair over the barrier. They also stuck around to make sure that on our way back we didn’t get stuck again. And while

we were still walking around the site, we met another tourist in a wheelchair, who identified himself as a tourist from Germany, who also did not give up his ascent to Pompeii.

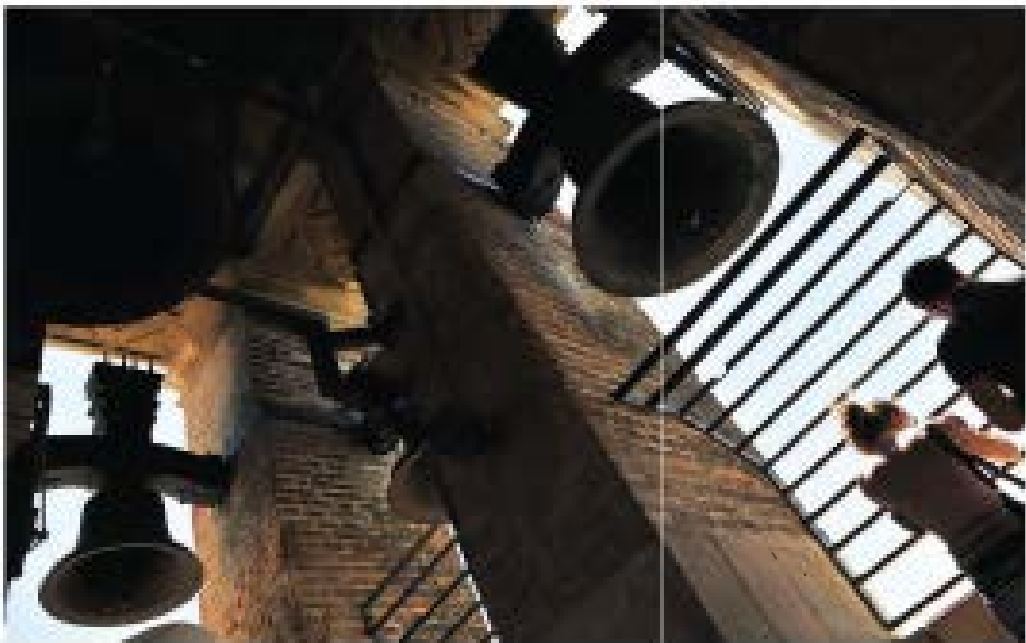


On the streets of Pompeii © Katatonia82 | Dreamstime.com.

In contrast, the king who built the circular observation tower in Copenhagen, Denmark, had, according to the story, an aspiration to reach the top of the structure in his chariot and therefore, ordered that the tower be built as a spiral with a rising ramp encircling the tower from the inside to its head. This makes the visit there also possible for a hiker with the wheelchair.

In Seville, Spain, we arrived to visit its famous cathedral and while I was trying to peek into the entrance to its square tower, “La Giralda”, built during the Muslim era, a group of tourists, who had just come down from the tower happily informed us that “there are no stairs here. You can go up.” To my great surprise, there were indeed no stairs, but a not particularly moderate slope. My wife got excited and said “Let’s go up, so what if it’s a little steep. We’ll do a section or two and rest.” And indeed, when she was pushing me and I was pushing myself, we went up two ridges at a time and stopped to rest. When I already felt drained and thought we could not continue to ascend any more, we encountered a group of young tourists from Germany descending from above. “Need any help?” they asked and we both answered together “Yes!”. These guys replaced my wife and within a few moments brought me up to the top level. We thanked them a lot and they slipped down and disappeared. We advanced around the corner and ... Good grief. A short staircase blocked our way out to the observation deck of the tower. But less than two minutes passed and more tourists showed up and immediately came to help us climb the stairs and out to the observation deck. And the view ... a bird’s eye view of the old city. An experience I have not had for years. And if you ask, how come this tower was built without stairs? The story is that the tower was built

this way because the muezzin, who had to go up and call out for the believers' prayer, was already old and was brought up to the tower while riding a horse.



Inside La Giralda tower of the Cathedral of Seville. © Josepizarro | Dreamstime.co

In Rajasthan, India, many palaces and forts were built so that the Raja or Shah, could ascend to the palace while riding on the back of an elephant. These ramps are usually a little too steep for an independent wheelchair climb, but with a bit of “Indian power,” as our local guide put it, i.e. the help of a person or two who pushed me from behind, I was fortunate to visit several such fascinating palaces and castles.



Wheelchair access at the Red Fort in Delhi, India. Photo: courtesy of the Vamush family.



There are countless other sites that can be told about, such as the city of Sim-Rip in Cambodia and in its center Angkor Wat temple, where a small detour brings us to a stairless entrance and to the inside of the complex. The old town of Edinburgh in Scotland, and the palace that dominates the city from above and which can be reached by accessible shuttle and then roll down alone. Ancient cities in France in the Dordogne region and throughout the south of France. The remains of the city of Mycenae of the lost culture of that name in the Peloponnese in Greece. So is the “Plaka” in Athens, Greece. This is an ancient neighborhood that was a crowded and ragged slum, full of garages and workshops. At the time I tried to get there with a wheelchair and ran away for my life. Towards the Athens Olympics, the area has undergone a serious restoration and facelift and has become a beautiful area, with a pedestrian zone, a variety of restaurants and cafes. There they also paved the way for wheelchairs to the specially built lift to transport the disabled Paralympic guests to the heights of the Parthenon. When there is a will, old neighborhoods can also be made accessible and turn into a vibrant and accessible area for everyone.

After my release from the hospital and my return back home to Jerusalem, I aspired to return to the Old City. Over the years, as I roll myself through the various gates of the city, I have learned how I can reach every area in the city. Over time, I became involved in several accessibility projects in the Old City and I enjoyed strolling through it and even leading friends, who were also confined to wheelchairs. Today, with the “Jerusalem Accessibility” app, the city is even more inviting.

So, if the fire for hiking is burning within you too, remember that wheelchair-accessible ramps and trails are revealed in the most unexpected places. So are good people in the middle of the road, and there are many, and they are happy to help when needed. Although we are likely to have disappointments from time to time, we will discover more often wonderful places and special people who turn the departure from home to the unfamiliar into an experience that stays with us for life. One only has to wish and dare!



At the Western Wall - The Bar Mitzvah program. Photography: courtesy of Lotem Association

# AN ACCESSIBLE TOUR OF THE OLD CITY OF JERUSALEM

Vered Sabag

Imagine the following situation - a group of 30 hikers, noise and commotion, crowds of people trying to pass through a narrow alley in the market, smells of spices and food from nearby restaurants, and an occasional ear-splitting deafening call of the muezzin. Two armed policemen on horseback are trying to pass through the crowd, checking the surroundings, and from above, the walls of the Old City framing the occurrence. Now imagine a group with communication disabilities, young people on the spectrum of autism, who went on a day tour with a guide and found themselves in that same situation.

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**Vered Sabag**, Vice President of Education at Lotem Association and director of the Nagish Lehakir association center. Vered has extensive experience in planning and leading trips for groups of people with disabilities. In addition, she has in recent years been involved in the development of accessible contents for heritage sites, museums and tourist sites in general, as well as in conducting seminars and study-days on service and content accessibility.

Sounds like a lost case in advance, doesn't it?

Indeed, guiding in the Old City is a very challenging "event", even for a group without disabilities. But guiding a group with a disability in these complex conditions can end up being an unpleasant experience, if not done in a tailored and accessible way.

Lotem association, engaging in guiding people with disabilities for 27 years, has been conducting accessible tours around the country in general, and in Jerusalem and the Old City in particular. Over the years, the association's staff has gained a great deal of experience in building hiking trails, coordinating the accessible sites and mainly in guiding the actual tour.

Beyond all the complexities we have already described, there are the complex physical characteristics of the terrain (slopes, very uncomfortable interlocking stone to move on, narrow passages). And let's not forget the story, yes, the story of this special place because the content we want to convey to the group is in itself a complex story - many characters, transition between periods, changes of government, different religions and what not???

So, how does one do that anyway? How does one create accessible tours with accessible guidance that allow for a fun and instructive normative hiking experience also for people with disabilities?

The purpose of this article is to give some examples of tours that are accessible to travelers with different disabilities, with reference to the technical and content characteristics that are worth paying attention and referring to when planning a tour.

## **An accessible tour for wheelchair users**

There is no doubt that the Old City of Jerusalem, and ancient cities in general, are no small challenge for travelers in wheelchairs. Nevertheless, our Old City, having undergone an impressive accessibility program in recent years, may offer an interesting and experiential tasting to such travelers as well.

Let's begin by saying that a year ago, the "Jerusalem Accessibility" app was launched. This is a wonderful app that allows you to get information about the accessible corners of the Old City and plan a customized and convenient tour of it.

## **So where are we going? And what do we talk about?**

Raz, one of our guides, a guy who gets around in an electric wheelchair and aided by a respirator, went out with us to roam around in the Old City and see "what else can be done there ..." We chose to walk on an accessible and convenient route in the Old City - from the quarter's parking to Batei Mahase (Shelter houses) square, to the Burnt House, the Cardo and back to the quarter's parking. Finally, we "jumped" with the vehicle to the Western Wall plaza.

It was clear to us that this axis would constitute a significant taste of the Old City contents for the average tourist. We also knew that we were facing some challenges along the way:

- The paving stones in the Old City are bouncy and unpleasant, to say the least, and in some cases a push of the wheelchair by an attendant is required.
- There is a high density of travelers on this route.
- There are unique points of interest on our way, which cannot be reached with a wheelchair.

We began our way in the quarter parking lot (the place has a number of parking spaces for the disabled). We found (not easily) a comfortable corner to say a few words about the Old City. In order to fully understand the space in which we will wander around, we brought with us a portable model of the Old City and its walls that allows us to better understand its structure, the thickness of the walls, and the walking route in which we will walk. We also brought with us the city's timeline - a large board with the period bar and next to each period an illustration of a typical figure and a significant event that characterizes the period, just to allow a little order in the city's complicated timeline.

We advanced a little on Chabad Street and immediately turned onto HaHatzozrot (Trumpets) Street and at its end we turned left again to Gilad Street. We passed the Rothschild House on our right and immediately after it, we turned right and continued up to the Batei Mahase (Shelter houses) Square. We told the special story of the neighborhood with the help of a collection of pictures from the old days to this day. We made sure to use enlarged pictures (these pictures help see the aid accessory even in the case of groups, for those who have difficulty seeing and for those who sit further away from the guide). We ended with an inscription engraved on one of the walls of the square: "Old men and women will still be sitting in Jerusalem ... and the streets of the city will be filled with boys and girls playing in its streets".

From there, the road led us straight to a left turn to Misgav Ladach Street. Shortly afterwards, we reached the top of the stairs leading down to the Western Wall. We knew this point was not passable for wheelchairs but we did not want to miss the experience, so we sent one of our guides, equipped with a cell phone with a camera down the stairs. While walking, he made sure to photograph the experience of descending to the Western Wall and the view from the observation deck on the Western Wall. This way we could prepare Raz for the expected surprise when we reach the Western Wall from the direction of the Dung Gate. Immediately after the stairs we turned left towards the Burnt House and went in to visit the site. The uniqueness of the Burnt House is that it shows one of the affluent dwellings from the days of the Second Temple, before the destruction.

Impressive archeological remains are on display, which can be seen up close. In terms of wheelchair accessibility - you can get to the central points of interest on the site and experience its story well. A large part of the exhibits is positioned in a way that allows a convenient point of view even for a person sitting in a wheelchair. At the end of the tour we continued on our way to the ruins of the Hurva Synagogue, where we told the special story of the synagogue using enlarged pictures from the days before the restoration as well as from the days when it was active before its destruction. From there we continued straight up to Hayehudim [Jews] Street and reached the lookout point over the open Cardo. The descent to the Cardo from this corner is not accessible so we chose to stop at the nearby seating area and describe the lifestyle at the Cardo during the Roman-Byzantine period. We brought with us a short video describing the Cardo today as well as an image depicting the appearance of the place in those days, the bustling life, the dress of the people and the discourse that took place on site. At the end of the explanations, we continued a little further along the Hayehudim Street to the HaShalsholet Street (the market area), where we took a "U-turn" and entered the indoor market. It was a great opportunity to explore Cardo in its accessible parts. We enjoyed the murals on site and reached up to the Madaba Map, with the help



of which we could once again describe the view of the city of Jerusalem during those days. From there we returned to Hayehudim street and the Cardo lookout point, and continued straight until we returned to the Quarter's parking where we began the tour.

Reaching the Western Wall for people in wheelchairs is only possible safely by car, so we got on the vehicles and reached the Dung Gate. We entered the plaza with the vehicle (special permission must be requested in advance) and from there we continued with great excitement to the Western Wall plaza. To our delight, the plaza allows visitors in wheelchairs from all over the world to reach the holy place and pray adjacent to the Western Wall itself.

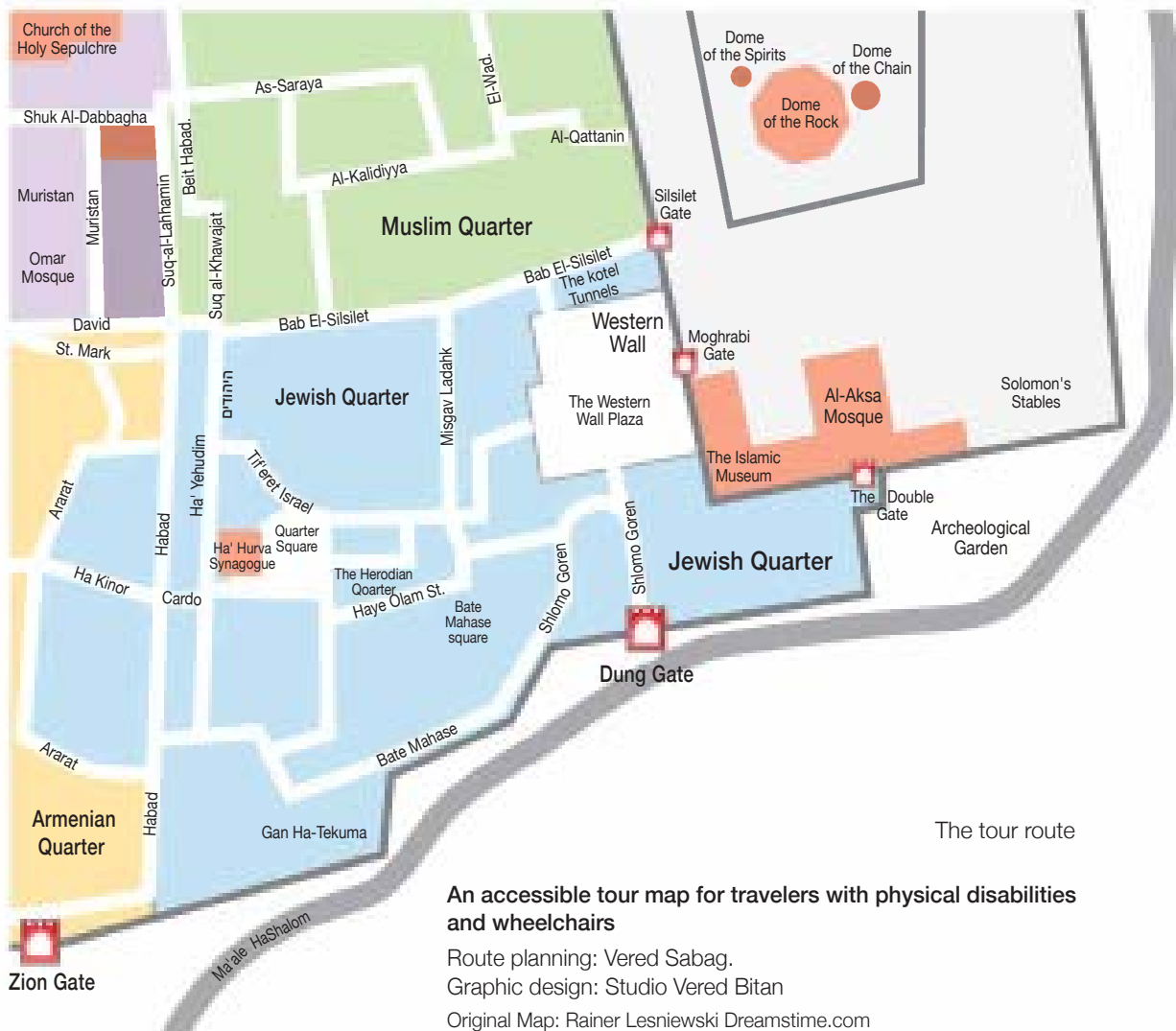
Finally, we continued to the virtual reality display - "A Look into the Past", which belongs to the Western Wall Heritage Foundation. The display makes it possible to understand what the Temple and the Western Wall plaza looked like 2,000 years ago. To reach the exhibit, one has to stand in front of the toilets in the Western Wall plaza and turn right according to the signs. From there we returned to the vehicle, exhausted but satisfied.

At the end of the tour the excitement was great. For Raz, who as a young child was privileged to visit the place, returning to the Old City as an adult in a wheelchair, was powerful and shaking. The tour to places with a "childhood scent" reminded him that he has the ability to reach important and unique sites for him, his country and his people.

### **Some important things to know about getting around with wheelchairs in the Old City**

- It is possible to descend with the shuttle - from the upper parking lot in the Jewish Quarter to the Western Wall. This is true for up to two wheelchairs at a time.
- It is possible to reach the Western Wall plaza not through the Jewish Quarter and obtain a special permit to enter the Western Wall plaza by bus, which makes it easier to ascend and descend.
- Do not be tempted to walk from the Quarter parking lot to the Dung Gate. The passage through this road involves walking on a steep and dangerous road.





## Technical details worth knowing:

- Toilets – there are accessible toilets near the northern exit from the Cardo, next to the Burnt House as well as at the Western Wall plaza.
- Reasonable places for groups with wheelchairs to stop are in the area of the Hurva Synagogue, near the Cardo Observation point and in the area of Batei Mahase (Shelter houses) area.
- Options of accessible adds-on for independent travelers (less for groups).
- Davidson Center - The entrance and exhibition space (a museum that includes videos about pilgrimages and archeological findings from the Second Temple). The entrance to the center involves a wheelchair lift, not from the main entrance.
- Western Wall Tunnels - It is possible to reach a certain point in the tunnels. It is important to know that entry involves a descent in two lifts. In light of this, it is mandatory to coordinate your arrival. In addition, the visit is not recommended for groups with more than two wheelchairs.

## An accessible tour for travelers with visual impairments

Try to imagine yourselves closing your eyes and going on a tour of the Old City ... What would your sense of hearing perceive? What could you touch to get to know the environment? In which places would or wouldn't you have difficulty? For us, guiding travelers with visual impairments in the Old City is a real experience. All the senses come to life in an increased manner. Everything is very much alive there - the smells, the sounds, the colors, the movement of the people. Even the "stones with a human heart", which can be touched can teach us about the different periods ... In light of all this, we went on a trip to the Old City with a group of adults with visual impairments. We began a trip that is all a sensory experience that allows to get to know the richness and great variety of the place.

We chose to go on a trip that included entrance to the Tower of David, a visit to the Lutheran Church of the Redeemer and the Church of the Holy Sepulchre, a walk along the Via Dolorosa and the spice market and ending at the Western Wall tunnels and the Western Wall.

We dropped the participants off at the Mamilla area and gathered in a quiet corner to open the guidance (at the exit from Mamilla to the Jaffa Gate there is a semi-amphitheater where you can sit with a group and make an orderly opening). We distributed audio headphones to each participant. In the case of guiding a group with visual impairments, the use of audio headphones is very important. This way, everyone had the opportunity to hear us throughout the tour guidance and the guide had the opportunity to provide a visual description while walking (a visual description is a description of our environment as objectively and accurately as possible in order to allow the visually impaired participant to experience and understand his/her surroundings).

We began the tour at the Tower of David. The place has a number of great models depicting the Old City during different periods. We tried, through the models and replicas on site, to describe the structure of the old city, the different gates and quarters as well as the route we were about to take. We entered the displays that allow touching in some of the exhibits.



Tower of David Museum. © Guter | Dreamstime.com

In the Shivat Zion (Return to Zion) room and in the Roman-Byzantine period room, it is possible to touch various models, replicas and exhibits, which allows for further study of the characteristics of the period. In addition - in the courtyard of the citadel there are exhibits from the Crusader period. We brought with us an illustration of the sounds that characterized the days when the citadel was in use: sounds of war, dialogue between rulers, galloping horses and chariots moving through the streets.

At the end of the tour of the Tower of David, we returned to the Jaffa Gate again and dealt with the physical structure of the gate - we explained how the side of the gate was closed and why it was built angularly and not straight. We mentioned that this was how the ancient cities were built in the past – thick walls, large angular gates, narrow streets and adjoining houses.

We continued on David street through alleys bustling with shops and peddlers until we came to a junction with Muristan Street, where we turned left. We advanced until we reached the Church of the Redeemer. During the walk we made sure to provide a visual description of what was around us. It is important to note that in this type of visual description there is no need to use judgmental words - beautiful, ugly, pleasant ... the visual description should be made while actually describing what you see - the crowded stands, the people's clothing, the various goods sold, and more.

Before entering the Church, we felt with our hands the impressive front door and the special opening. For a start, we went up to the delightful lookout point on site. We climbed up spiral stairs with extra caution, but the view from above was worth the effort! Some may ask - what does a person with a visual impairment have to do in an observation point? But even such an audience can find great interest in looking from above (especially when most visually impaired people are not completely blind), enjoy the wind and hear the sounds of the Old City from a new direction. We made the observation clockwise - from 12 o'clock and back to it, and at every hour where there was a relevant or interesting structure, we indicated the hour, described its characteristics, its appearance and its importance. We linked our words to the models we saw at the beginning of the day and allowed to touch on the model we brought with us, which depicts the Old City today. We made sure to remember that our job was to be the eyes of the traveler, so we had to give an accurate and in-depth description, but not to the point of boredom... During the observation time, we also referred to the various sounds rising from the city: the sounds of the muezzin, prayers playing in the ears, the ringing of bells from the churches scattered in the space around us. All of these can help make the experience multi-sensory and powerful, even for a person who sees nothing in the observation point.

At the end of the observation we entered the church itself and told its story. We touched together the large stone pillars and the elegant seats. We described the structure which is almost completely clean of illustrations and ornaments, unlike many other churches.

As we left the church we turned left and immediately reached the Church of the Holy Sepulchre. We did not enter the church but described its appearance from the outside, we allowed to touch the entrance gate and told its story. From there, we continued our way on the Via Dolorosa, the last way of Christ. During the walk, we described the different stations on this way and stopped at the relevant places. When we reached the junction with HaGai Street, we turned right and



entered another market where the smells of spices accompanied us on our way. We continued straight until the Western Wall tunnels were to our left. We decided to go inside. The tunnel site is great because it allows contact with the stones and gives a wonderful feeling of a tunnel and of walking underground - moisture, coolness and silence. However, it is important to remember that the very act of entering a dark place, for a visually impaired person, makes him completely blind. In light of this, good preparation was required for what awaited us below, attaching additional attendants or walking in a line, in a way that gives confidence to those who need it.

In the Western Wall tunnels, we gathered around the magnificent model of the Temple Mount and the Temple located near the entrance. This model is tactile and therefore was an important tool for us. In addition, we chose to enter the prayer area at the place, gave time to feel the holy books and vessels and even sang a prayer song (without disturbing the worshipers at the place). We then continued towards the Little Western Wall, where we felt the huge size of one of the stones. This was a wonderful way to understand the manner of construction and its complexity in ancient times.



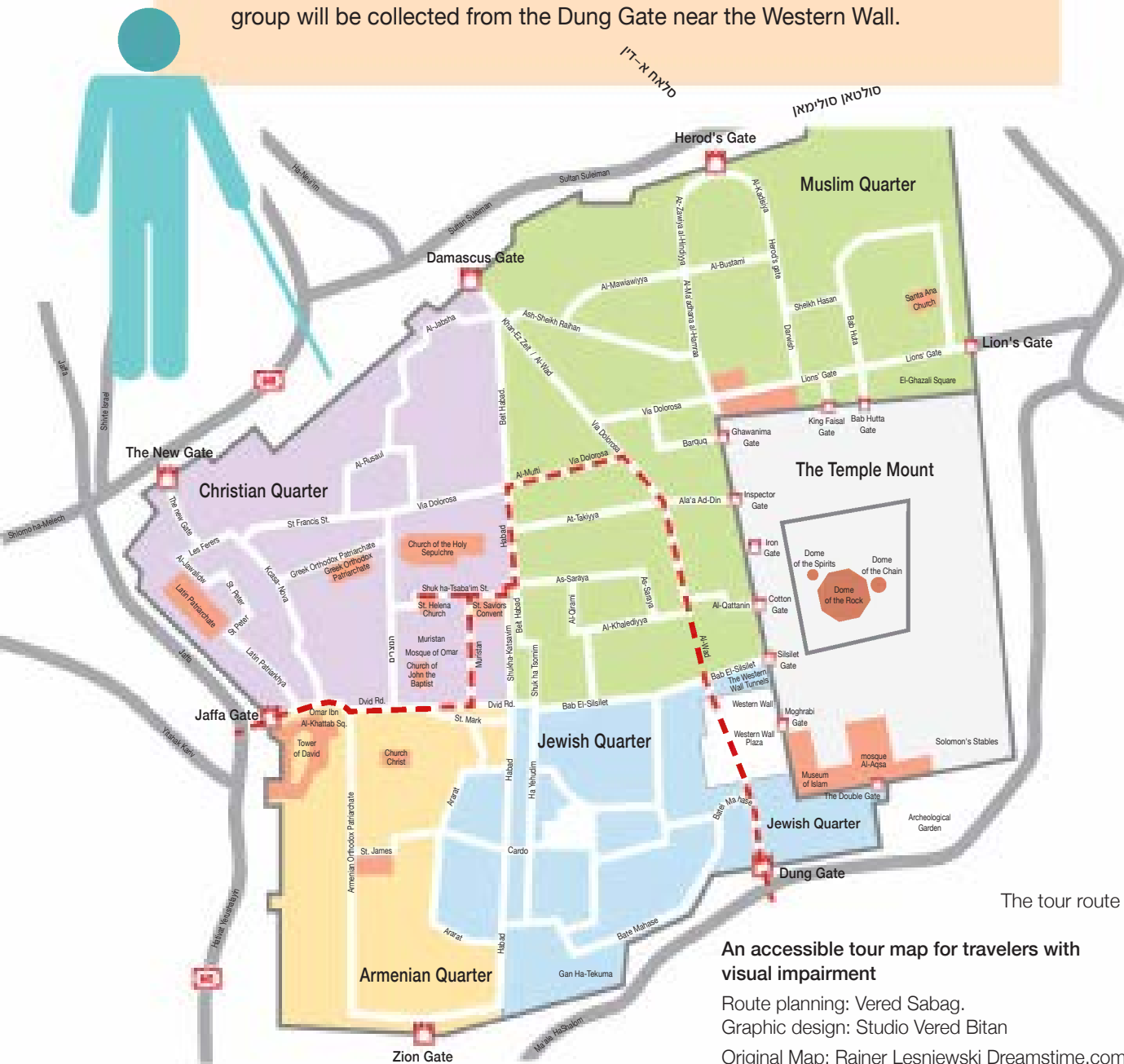
The Western Wall Tunnels. © Lev Tsimbler | Dreamstime.com

As we exited the tunnels, we played the song “Jerusalem of Gold” and we walked together towards the Western Wall plaza. When we arrived, we described the sight we saw, the plaza, the Western Wall, the Temple Mount and more ... At the end of the explanation, we allowed some prayer time and an independent visit to the place.

In the tour summary, the participants talked about the possibility of experiencing a tour of the Old City as any person, about the ability to understand the components of the place, the story behind the stones and the complicated historical sequence that accompanied the place. For some of the participants, this was their first visit to the Old City and for a few of them - a first visit to the Western Wall. The great excitement with which they described the experience for them was worth all the effort in planning and adjusting the tour.

# Technical details worth knowing

- Entrance to the Church of the Redeemer during prayer hours is not possible. Make sure in advance during what hours you should get to the place.
- The visit to the Tower of David and the Western Wall Tunnels - involves a fee. The visit must be arranged in advance. Tours of the Western Wall Tunnels - must be coordinated well in advance due to the many visitors to the site.
- Toilets can be found near the Jaffa Gate, the Tower of David, near the Cardo and the Western Wall plaza.
- It is important to be careful and check that all participants are present and ask the additional attendants to keep an eye out since the site is highly crowded.
- Drop-off and collection points - the group may be dropped off at Mamilla, the group will be collected from the Dung Gate near the Western Wall.



**An accessible tour map for travelers with visual impairment**

Route planning: Vered Sabag.  
 Graphic design: Studio Vered Bitan  
 Original Map: Rainer Lesniewski Dreamstime.com

# An accessible tour for travelers with cognitive disabilities of mild to moderate functioning

If we have so far described populations with which the tour is a little more complicated, here we find a fascinating and special challenge. Going on a tour with travelers with cognitive disabilities requires a lot of forethought. Apart from choosing the route in which we will go, a great deal of time must also be devoted to the content we choose to convey.

Many times we have already led such visitors to the Old City. Each time anew a lot of thinking and preparation was required of us. Nevertheless, these tours mostly ended with an uplifting feeling of learning, experience, excitement and joy.

The preparations included, among other things, the choice of information and content that we will deal with. We have tried to remember that a lot of information, which is not organized and is not related to the daily lives of the travelers is a complex thing to understand and often irrelevant.

In light of this, we chose the tour to be on the subject of religions and get to know through them the various figures in the city today. To make the tour more vivid and clear, we tried to lead the tour through the story of different characters, each of whom represents a different religion.



© Jose Hernandez | Dreamstime.com

We met at the Damascus Gate and held a short opening. We brought with us different hats - Keffiyeh, Kippah, Skufia (a type of hat or cap of the ranks of the clergy in Orthodox Christianity)

After telling a little about the city of Jerusalem and its uniqueness, we explained that today we were going to meet different figures living in the Old City, and that each of them would tell us its special story: what it believes in, what are the important symbols for it, what is the holy day of the week and more... We explained that everyone is connected to the holy city of Jerusalem and that together we will try to understand why. Before we left, we distributed a "Road Bingo" - cards with illustrations of various motifs that we will meet along the way - symbols, accessories, clothing, voices and more... We asked the participants to mark X on squares illustrating things they saw along the way.

We set off and began advancing on Beit Habad street. We touched the large stones and tried to understand whether they were new or old, whether they were similar to the stones of the houses in which we live. We looked at the large openings and the narrow alleys and mostly looked at the people - how they were dressed, what they held in their hand.

On the way we met various stations of the Via Dolorosa and presented a picture of a Christian clergyman. We tried together to locate such a person with our eyes and at the same time we used the "Christian pouch" - a small cloth bag from which we pulled out various elements that represent the religion - A cross bearing the image of Jesus, a small model of a church, a representative hat, the New Testament and more. With the help of the items we spoke a little about Christianity: Where it come from, who is its clergyman, what is the Via Dolorosa (briefly) and how is the New Testament different from the Bible.

We made our way and reached the Church of the Holy Sepulchre. We went into it and tried to characterize it - what forms it has, where the clergyman stands, what voices are heard in it, what the bells and organs are used for and how the prayer sounds in the place.

We left the church and reached Muristan Square and from there the Arab market. Prior to entering the market, we took great care to ensure safety and to prepare the travelers for the overcrowding and bustle of the place. We scattered the staff among the participants and asked everyone to see what was sold in the market and what language they spoke.

When we got out of the market, we gathered the group and listened to the experiences. The excitement was great. There were those who were apprehensive and just wanted to get out of there, and there were those who enjoyed the experience immensely. We linked the market to Muslims and showed a picture of a Muslim cleric. We took out the "pouch of Islam" and through the motifs that were in it - the Koran, a rosary, a kaffiyeh, a turban and a crescent - we told the story of the religion of Islam and its main motifs. We were lucky to also hear the muezzin calling when we left.

From there we continued to the rooftop lookout - this corner, located right on the border between the Arab market and the Jewish Quarter, is a great spot to look at the Old City from above and to distinguish between the various religious buildings. Together we tried to identify the mosques, churches and synagogues. We counted how many there were of each of them and discovered that they all lived here together - Muslims, Christians and Jews.





The Hurva Synagogue. © Asafta | Dreamstime.com

And if we are talking about Jews - we have reached a stage where our tour reached the Hurva Synagogue. Inside the synagogue there is local guidance that allows you to get to know the special story of the place but also to hear about the different motifs that it has.

Here, too, we pulled out our “Jewish small bag” and took out, as if from a ‘magic hat’, a head covering and a Kippah [yarmulke], a Star of David and a Bible. We listened to the voices on site - the quiet voices of prayer. Through these motifs, we also spoke this time about the characteristics of Judaism, the synagogue as a place of prayer and the connection between the Western Wall and the synagogues today.

We walked together to the lookout of the Western Wall and there we tried to observe the people who reached the place - what are they doing? How are they dressed?

When we got to the plaza, we took out again all the elements that were in the bags and tried to sort them out - understand what belongs to whom and remember again the characters we met on the tour. We looked at the bingo pages the participants filled out along the way and saw the human diversity and abundance of details that exist in such a small area.

We summed up by saying that the Old City is sacred to all religions, we repeated the reasons for this and together we hoped that the Old City and the Western Wall will always be open to anyone who wants to come and pray.

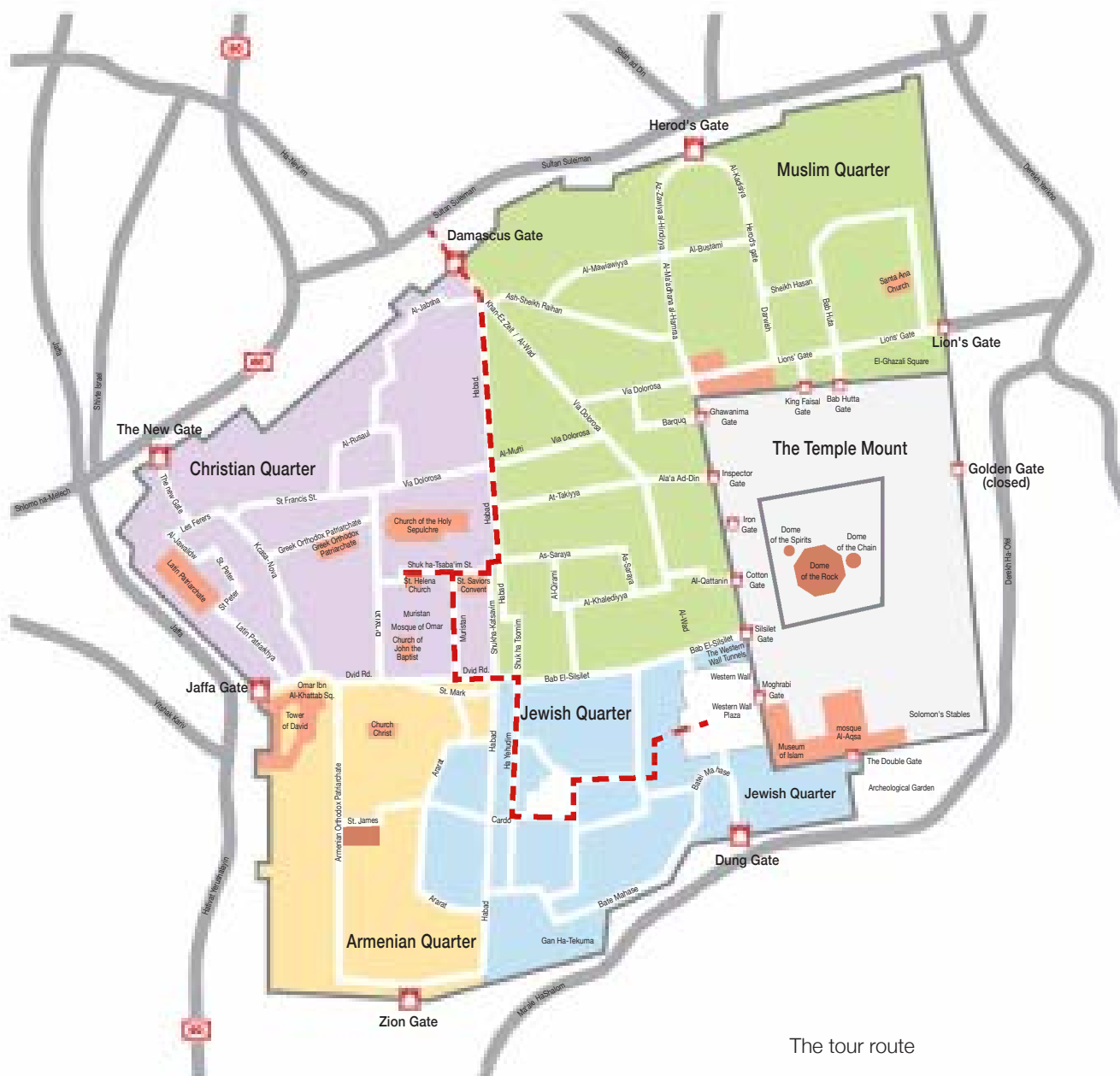
### Technical details worth knowing:

- The visit to the Hurva synagogue entails a fee. The visit must be coordinated in advance.
- Toilets can be found near Damascus Gate, at Muristan square, next to the Cardo and at the Western Wall Plaza. Not all the toilets have accessible booths.
- Prepare in advance as much as possible. For groups with communication disabilities - try to choose a walking route that is a little less crowded and prepare the participants before entering any crowded and noisy area.
- Choose as quiet guidance points as possible. Such points may be found at the entrance to Damascus Gate and at the roof observation point.
- Drop-off and collection points - the group can be dropped off near the Damascus Gate. Collection of the group from the Dung Gate near the Western Wall.

### Additional sites suitable for the tour

- In the City of David, a number of wonderful explanation and training aids have recently been designed, tailored for people with cognitive disabilities which may give an accessible explanation of the different periods and the significance of the archeology term in general. Admission is for a fee.
- The Tower of David has great accessible guidance for groups with cognitive disabilities. Admission is for a fee.





### An accessible tour map for travelers with cognitive disabilities

Route planning: Vered Sabag.

Graphic design: Studio Vered Bitan

Original Map: Rainer Lesniewski Dreamstime.com

## And here our paths part...

We tried to let you taste just a little of the experiences we have when we go on a tour with special groups. The Old City presents us with quite a few challenges, but nevertheless, there is a tremendous wealth of content, experiences, itineraries, which can produce a quality visiting experience tailored to any person with a disability.

The name of the game is early acquaintance - with the area, with its contents and with the touring population. With the help of early acquaintance, we will be able to choose the most appropriate and significant axis within the multiple possibilities that exist in the Old City. Adaptation and creativity are key tools in guiding groups

or independent travelers with disabilities. There is a lot of work, but at the end of the guidance, a lot of excitement and a significant sense of accomplishment is guaranteed.

We invite you to contact us via the association's email – [office@lotem.net](mailto:office@lotem.net) and together we will create a pleasant and accessible visit experience for anyone who needs it.



A group of hikers with cognitive disabilities at the Tower of David. Photo: courtesy of Lotem.





Entrance to Saltram House. Wikipedia. (see p. 92)

# HERITAGE SITES: ATTITUDINAL AND EXPERIMENTAL DIFFERENCES OF DISABLED AND ABLE-BODIED VISITORS

Michael Pearn

The polemic context of this chapter focuses on conservation within heritage settings as well as adopting an inclusive disability-centred approach. MacCannell’s exploration of authenticity within tourist settings (1999) together with Wang’s notions of authenticity (1999) form the conservational parameters, in terms of recommending caution to heritage bodies as to potential irreversible infringements on historic settings when considering improving disabled access to sites. In terms of Wang’s ‘objective’ notion, this chapter’s perspective attributes priority to the originality of traditional settings, thus warning against undue ‘constructivist’ changes. Crucially MacCannell’s conceptual writings, particularly on ‘front, back and reality’ (1999), are prominent in this investigation, specifically, when gauging the differing settings for disabled and able-bodied visitors. For example, those with disabilities often experience more of the ‘back regions’ than other visitors,

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Dr. Michael C. Pearn. University of Plymouth, England. Activist in inclusion of people with disabilities.

as barriers to access often deny them from using the 'front regions'. A hypothesis therefore could be: 'Does this lessen the visiting experience for patrons with disabilities?'

## Disablist Perspective

Prior to investigating the ideological clash between disability and conservation, it is important to offer an explanation of what constitutes disability and how it is regarded by various quarters. The term disability encompasses a wide range of impairments including physical or mental conditions with either long-term or short-term effects. It is considered that the term 'impairment' is intrinsically linked to the conceptual nature of disability. A concise appreciation of the meaning of impairment is, according to Doyle (2003), not offered in disability legislation, none the less the meaning of it is vital to the understanding of all types of disabilities. The World Health Organization (WHO) in 1980 classified the meaning of impairment as 'any loss or abnormality of psychological, physiological, or anatomical structure or function' (WHO, 1980). This classification is still fundamentally relevant to today's understanding of impairment and is largely considered a helpful vehicle for debate.

The social model of disability, inaugurated by the Union of the Physically Impaired Against Segregation (UPIAS) in 1976, has been highly influential in the emancipation of people with disabilities. Critically, this has involved the transferring of attention from the constraints incurred by those with disabilities in respect of the barriers in society which curb the freedoms and independence of disabled people. Integral to this ideological shift was the transference from the 'tragedy model' to adopting an absolute inclusive standpoint, which regards people with disabilities as 'normal' and valid citizens.

Further to the medical and social models of disability, there is the 'tragedy principle' or 'charity model', which presents disability as an extremely negative issue. This extremist view, which dwarfs the medical model's pessimism, views disabled people as fundamentally flawed. The principle, according to Hevey (1993), uses a disability or any ailment as 'a metaphor and a symbol for a socially unacceptable person'. Unlike the inclusive agenda of the social model, it is negative misrepresentations of disability like the medical model that aim to alienate and practically demonise disabled people. Hevey sees this kind of ostracism as naturalizing the exclusion of disability, which of course stalls the plight of the social model. Tregaskis (2002), within the context of the recent escalation of the social model's emancipatory influence on disabled people's lives, discusses capitalist-based barriers against disabled people and how disability groups have been perceived as the 'deserving poor'. It seems that such oppression is borne from an out-dated narrow definition of disability, which has only been broadened during the late 1980s/1990s. It would appear that we have now entered an era whereby society is often willing to bend over backwards in the context of building an egalitarian societal construct without giving careful consideration to possible consequences and repercussions within other scenarios, in this case heritage and traditional environments. Indeed it is the well-intended plight of political correct-ness which could result in catastrophic affects on historic environments.

To illustrate the inappropriateness of some disability-orientated facilities, it is necessary to consider the potential clash of modernistic entities within an otherwise traditional setting. Religious settings such as cathedrals and churches

are worthy examples of vulnerable environments. Facilities for disabled access, by definition, are symbols of modernity. By their mere presence within heritage environments some modernistic facilities could be interpreted as a ‘fly in the ointment’ effect, where a historical experience is tainted by a reminder of the present. An example of such a modern encroachment was the disability provision within Truro Cathedral, particularly in relation to the cathedral’s internal ramp adjacent to the altar. The ramp, resembling a marine jetty, was garishly coloured in green and white and typified the inappropriate combination of modernity and gothic.



In contrast to the inappropriate provision within Truro Cathedral, Lanhydrock, a National Trust Property in Cornwall, has installed a lift within its 18th century house. The lift, when out of use, has been cunningly concealed behind original oak panelling, successfully disguising the ‘modern intruder’.

The ramp in Truro Cathedral. Photo: courtesy of Rev. Roger Bush, Dean of Truro Cathedral



© Tomas Marek | Dreamstime.com .Lanhydrock

## Heritage Perspective

The essence of this chapter investigates how a consensus may be reached between conservational ideologies and the emancipation of disabled people. The formulation of a paradigm is therefore proposed whereby the interests of both conservational and inclusive ideologies are carefully considered. The emergence of such a multi-faceted paradigm could be interpreted in pragmatic terms by heritage sites which would ensure any facilities for disabled visitors to heritage sites did not cause negative infringements to the environment or the traditional aesthetics of sites.

This paradigmatic intervention would ensure a compromise is reached and, in the context of disability-orientated changes to heritage sites, would ensure a level of acceptability in terms of associated conflicts between societal inclusion ideologies and conservation. Current research into this ideological conflict is limited. Existing investigations, however, tend to favour a disability-centred approach, thus establishing how current policies and legislation can be applied to traditional settings, without fully appreciating the potential irreversible degrading consequences on the historical aesthetics of heritage environments.

Goodall sets out three scenarios by which planners and heritage bodies can determine whether increasing accessibility to historical sites can be 'conservationally' acceptable. These three scenarios are as follows:

- Sites where it is practical to make full access improvements.
- Sites where full accessibility cannot be achieved and compromise solutions are adopted.
- Sites whose fragility make it impossible to provide access without endangering their special values or the safety of visitors. (2005: 185)

Whilst this is possible for many heritage sites, particularly properties, to adhere to legislation such as the DDA, it is frequently impossible to adapt heritage sites,



Tintagel fortress © Alberto Dubini | Dreamstime.com



like monuments and ruins, in order to achieve greater disabled access. One typical example of this is Tintagel Castle, situated in North Cornwall, whereby access to the castle ruins was solely reliant on winding steps leading up a cliff, below which English Heritage have a very informative visitors' centre, complete with a video presentation of the ruins. However, the question here is raised as to how disabled visitors simply have to forego the experience, both physically and atmospherically, and also to what extent a visitors' centre can successfully supplement experience. It stands to reason that Tintagel Castle is an example of where a compromise has been reached, and where the autonomy of disabled visitors along with the fight for societal inclusiveness has to be surrendered.

A recent PhD study (Pearn, 2009) investigating the attitudes of disabled and able-bodied visitors to heritage sites in the South West of England, primarily aimed to establish a consensus between the access needs of visitors with disabilities along with the non-encroachment of associated alterations into the historical integrity of the sites. The investigation found a distinct willingness, particularly in the context of able-bodied visitor attitudes, as to the adoption of disability-orientated facilities. Despite their unquestionable respect for authenticity, able-bodied visitors were primarily willing to condone alterations, particularly in the knowledge of the disabled visitor experience being significantly enhanced.

Disabled visitors often achieve a very different experience to their able-bodied associates. This experience is frequently a 'watered down' experience due to many diversions and inaccessible areas. A classic example being the use of alternate access points for disabled visitors. Saltram House, a National Trust property in Plymouth, has installed a carefully constructed ramp to its main front entrance, enabling their disabled visitors to enter the house conventionally. In contrast, Lanhydrock provides an alternate entrance for its disabled visitors; the former servants' access point. As a consequence of this, Lanhydrock's disabled visitors forego the grandeur of entering the house conventionally and, whilst this has evidently been a pragmatic approach to the access quandary, a significant part of Lanhydrock's visitor experience is lost due to this alternate access point.

Among the theoretical concepts supporting this research was MacCannell's 'staged authenticity' (1976). Largely based around touristic settings, staged authenticity involves 'front' and 'back' regions, the front region being the focus of tourist gathering and activity and the back region being the part of the setting not permissible to tourists and where the contrived is far less prevalent. In applying MacCannell's staged authenticity to heritage settings, disabled visitors frequently have to divert from the conventional 'visitor route' thus experiencing back regions in order to avoid barriers to access.

Goffman's theory of 'performers' and 'performances' (1959) can be applied to staged authenticity in that the front regions are based around the performances. It is therefore possible to make further links from his well-established approaches to this comparatively modern assessment of disability perception within society. Goffman's term 'performance' refers to activities of an individual occurring under the observation of other people. In his insights into the 'individual', as someone who, like those with disabilities, is set apart from other members of society, Goffman focuses on the stigmatism of such individuals which leads to unwanted attention, acting as a distraction from another focal point. In the context of heritage settings, disabled visitors have the potential for being such distractions through their conspicuousness, caused by their disability.

The 'front' for the purpose of this investigation is the setting of a typical heritage site, for example a stately house, whereby the setting consists of able-bodied visitors (the observers) and one, or a number of visitors with disabilities (the individual/s). The visitors with disabilities are the unacquainted, and so, to a certain extent, taint the otherwise scenic surroundings. To reiterate, this portrayal is based upon the discriminatory opinions of a minority of visitors, and should not be an indicative representation of the majority. Using the terms of Goffman, visitors who possess wheelchairs or mobility aids often see these aids as an important part of their 'personal front'. Such apparatus exist as part of their identity and could therefore be termed as the individual's 'expressive equipment'. Continuing this analogy, of 'expressive equipment', pre-judgemental attitudes towards disability in general can be linked to Goffman's interpretation of status in terms of 'appearance and manner' (1959). Wheelchair- users for example, may be regarded by some as having a lesser status than others because of the mere fact they are disabled. However, it must be noted that this interpretation is based on pure prejudice, before any social interaction takes place.

## A Dual Experience

Paradoxically, the parameters of this study defy conventional attitudes in terms of human rights law. Monaghan (2005) discusses 'soft law' in relation to gender and nationality discrimination. The historical ineffectiveness of soft law within the context of disability legislation has resulted in disabled people not receiving the autonomy they rightfully deserve. However, the paradox comes within the context of heritage sites and the inappropriateness of current disability legislation in terms of its potential degradation of traditional aesthetics.

The crux of this investigation attempts to identify a compromise whereby disablist legislation is applied to places of historical significance sensitively, thus not incurring negative encroachments on the authentic and traditional visitor experience. This compromise involves a fundamental attitudinal shift which, if anything, will result in a slight reversal of inclusive ideologies such as those manifested by the social model of disability.

The tourism industry, being dominated by supply and demand patterns, is often torn between preservationist paradigms and the need to commoditise touristic environments. In discussing the dilemma of balancing conservation and enterprise, Silberberg (1995), in Apostolakis (2002), discusses the commercial development of a typical heritage site having to transfer from the mentality of 'being willing to take tourists to a stage of being able to accept tourists'. Applying Silberberg's philosophy to heritage sites accommodating visitors with disabilities, the dilemma of knowing how far to go without sanitising heritage environments is clear. The dilemma lies within being cautious against inadvertently 'repackaging what was once regarded as authentic'.

The obligation of many heritage sites and organisations to accommodate visitors with disabilities ultimately extends the commoditisation process in terms of transforming heritage sites to heritage attractions. A critical or even cynical approach would suggest that this transference even involves heritage sites entering into the realms of pseudo-escapism as discussed by Boorstin (1964). Considering this investigation from an accessibility perspective, one might feel that comparing disability- orientated alterations to commoditisation and pseudo-events may be somewhat overstated. However, those harbouring impassioned

conservationist stances would be more inclined to support the curbing of external encroachments into the historical integrity of heritage sites. Among these external encroachments, besides accessibility, are various interpretations of authenticity which, in their own right, depict the meaning of authenticity. In relation to Wang's Notions of Authenticity (1999), objectivist authenticity poses the greatest threat to traditionalist thinking and to the historical integrity of heritage environments. Pseudo-events and objectivist authenticity both occur when originality has been contrived, usually with the aim of creating a more enhanced experience. In relating these two originality opposers to accessibility, the resistance to change for traditionalism becomes increasingly challenged. It could further be argued that such resistance even curbs disabled visitors' quest for intra-personal authenticity, which arguably cannot be achieved within a society dominated by obstacles to access. Therefore, the pertinent question is whether people with disabilities should have their spontaneity and freedoms temporarily curtailed when visiting heritage sites.



The Alarde celebration. © Alvaro German Vileda | Dreamstime.com

The addition of disability-orientated provisions within heritage sites could be regarded as a method of commodifying heritage for the benefit of paying visitors. This process in essence is similar to the tourism industry commodifying indigenous cultures. Greenwood (1989) cites the case of local culture within the Basque region of Spain in which commodification has been instrumental in commoditising and belittling culture. He uses the Alarde, an ancient ritual of the Spanish town of Fuenterrabia to celebrate the town's victory over the French during a siege in 1638. The Alarde initially was very much a private ceremony, restricted to just Fuenterrabia's population.

However, the ritual became a victim of commercialisation on being exposed to large numbers of tourists, thus resulting in the 'collapse of cultural meanings'

and traditional value. Greenwood comments: 'Making their culture a public performance took the municipal government a few minutes; with that act a 350-year-old ritual died' (1989: 180).

This investigation argues that, despite the feelings of able-bodied and disabled visitors, any alteration to a heritage site or property, no matter how charitable, is an infringement and commoditisation of heritage. As with the commercialisation of the Alarde, transforming a heritage site into a touristic attraction inevitably involves the extraction of authenticity. In dealing with the conservation versus accessibility, and for that matter objectivist authenticity and pseudo-encroachments, schism, a balanced approach between able-bodied and disabled visitors is fully intended. It should therefore be stated that the investigation acknowledges that able-bodied visitors experience barriers too. Stumbo and Pegg put emphasis on barriers being wide-ranging and applicable to all social groups. These constraints, they say, 'are the elements of a tourism destination that stimulate visitation' (2005: 204). Stumbo and Pegg take a participatory approach to the experience of tourism and speak of the importance of inclusive leisure facilities 'without undue constraints'. However, a more balanced and moderate approach is reflected within this investigation which, in practical terms, places emphasis on reaching a compromise.

## The Disability Perspective

The constructs of this investigation include establishing synergy between the disabled visitor experience within heritage sites being enhanced as well as supporting the preservation of authenticity. To gain a balanced approach, a brief analysis of society's current and past treatment of people with disabilities is necessary.

The transference from the medical model to the social model has involved a revolutionary attitudinal shift which has led to people with disabilities becoming valid members of all sections of society. This has recently been escalated through the passing of the Disability Discrimination Act 1995 (DDA), which has now made any discriminative behaviour towards disability illegal. Much of the legislation within the DDA can be heralded as a positive breakthrough in terms of the resulting autonomy rightfully awarded to people with disabilities. However, the heritage sector, namely historical sites and properties, is one of the few areas in which the powers of the DDA are less clear-cut. Statutorily the listed status of buildings has power and priority over the DDA and other disability-related legislation. The premise of this chapter and of a recent PhD is inclined to agree and support the promotion of conservational practices over and above the DDA and other disability-related philosophies.

It is therefore the ideological clash of conservation and social inclusion which is under scrutiny and a concept pioneered by the PhD pre-empting this chapter.

## Legislative Framework

Before setting out the social model of disability's purpose, it is important to address the meaning of disability and the identity of disabled persons. An estimated 8% of the UK population are said to have a disability of some kind, and it is further estimated that 2% of visitors to heritage sites are registered as disabled. It could be surmised that one prominent reason for the percentage of disabled visitors being so low is because heritage sites, due to their nature, are not 'disabled friendly', particularly from an accessibility perspective. With the



combined presence of the social model and the DDA, there could be a strong and justified argument for heritage sites to raise the disabled visitor quota by improving accessibility.

The term disability encompasses a wide range of impairments including physical or mental conditions with either long-term or short-term effects. It is considered that the term 'impairment' is intrinsically linked to the conceptual nature of disability. A concise appreciation of the meaning of impairment is, according to Doyle (2003), not offered in disability legislation, nonetheless the meaning of it is vital to the understanding of all types of disabilities. The WHO in 1980 classified the meaning of impairment as 'any loss or abnormality of psychological, physiological, or anatomical structure or function'. This classification is still fundamentally relevant to today's understanding of impairment and is largely considered a helpful vehicle for debate.

## The Social Model and its Influence

This investigation sets out to interrogate how the 'social model of disability' can suitably be applied to heritage settings. Unusually, this involves a certain amount of 'watering down' of some of the concepts' ideals, particularly as the eradication of all barriers within heritage settings is conservationally unfeasible.

While maintaining many positive aspects of the social model, this investigation challenges and questions the model's practical application within sites of historical interest. For example, if the model were to be applied in its entirety, the destruction to historical integrity would be undesirable. Whilst the investigation by no means supports any ideal within the medical model of disability, it does call for sensible and realistic thinking and planning when imposing access amenities on any construction or environment classified as heritage.

## A Historical Background

Fundamental meanings of disability have radically changed since the dominance of the medical model during the pre 1970s. Nowadays disability is regarded by most as not a medical or pathological deficiency, but a condition requiring changes within society in order to improve the lifestyles of those who are disabled. This viewpoint typifies the social model, its ramifications and its quest to bridge the disabilities/able-bodied divide. Watson (1998) in Swarbrooke and Horner (1999) advocates an 'interpretative analysis' which contextualises disability and related chronic conditions. This approach aims to shift the emphasis onto personal identity, rather than the focus being on the impairment. Watson's vision is an attempt to 'de-stigmatise' disability and, similar to the social model's position, can be seen as a viable pathway towards inclusion.

The ethos of the 'social model of disability' was introduced in Britain in 1976 by the Union of the Physically Impaired Against Segregation (UPIAS). However it was Oliver (1986) who claims to have interpreted and conceptualised the Union's assertions into the social model. Oliver's creation meant it was then possible to directly challenge the medical model. The social model's broad agenda asserts that society disables the impaired, as opposed to the disability itself being the hindrance.

The social model was introduced to challenge the ethos and repercussions of the medical model. The medical model is the traditional definition of disability, and many see it as an outdated concept. This is mainly because of its narrow,

‘disablist’ vision. With the recent full inception of the DDA, it would appear that the UPIAS’s vision is beginning to accelerate. However, there is still scope for criticism of the DDA, particularly because it contains too many legislative recommendations which are fundamentally based on the medical model rather than the social model.

There seems to be a plethora of now obsolete models which accompanied the medical model prior to the late 1970s. Disability policy consultant June Isaacson Kailes (Kailes, 2002) discusses the ‘segregation’ and ‘rehabilitation’ models in relation to the oppressive era of disability. The rehabilitation model, having distinct similarities to the charity model, made half-hearted attempts in the 1970s to medically cure disability by making ill-conceived efforts to include people with impairments. Kailes describes how society’s attempt at rehabilitation and inclusion did not involve the removal of physical barriers. Such a lack of pragmatism involved disabled people faced with the impossible task of, for example, having to tackle flights of steps to reach a workplace, not being given the necessary provisions to enable them to work effectively, and a general lack of sensitivity in the able-bodied approach to disability. Aside from the rehabilitation model’s drawbacks, there was at least the attempt to include those with disabilities.

## Comparative Viewpoint

The social model adopts the necessary approach for an inclusive society which, from its inception, has emphasised the positive attributes of someone with a disability. McConkey and McCormack in arguing for changes in attitudes to people with disabilities say: ‘People’s negative stereotypes of disability can be counteracted by presenting opportunities for disabled people to demonstrate what they can do rather than dwelling on their limitations’ (1983: 56).

McConkey and McCormack (1983) discuss the need for greater collaboration between disabled people and their able-bodied counterparts. The social model, along with McConkey and McCormack’s call for greater inclusion, may potentially be without due consideration to the negative impact on heritage and culture.

Further to the medical and social models of disability, there is the ‘tragedy principle’ or ‘charity model’, which presents disability as an extremely negative issue. This extremist view, which dwarfs the medical model’s pessimism, views disabled people as fundamentally flawed. The principle, according to Hevey (1993), uses a disability or any ailment as ‘a metaphor and a symbol for a socially unacceptable person’. Unlike the inclusive agenda of the social model, it is negative misrepresentations of disability like the medical model that aim to alienate and practically demonise disabled people. Hevey sees this kind of ostracism as naturalising the exclusion of disability, which of course stalls the plight of the social model.

Hevey’s perception of disability harks back to the way in which disability has been regarded historically. Before the emergence of the social model, the prejudice against people with disabilities was commonplace. The social model has reversed this preconception of disability and through its ethos, together with other emancipatory concepts and legislation, prejudice of disability has become far less prevalent.

The historical integrity of certain areas within society is, however, in danger of being impinged upon by this otherwise positive and egalitarian movement. The shift towards a more inclusive societal approach has involved a radical

increase in disability-related legislature effectively instructing changes upon the physical constructs of society to enable greater autonomy amongst people with disabilities. According to the Approved Document Part M, which ensures planners and developers adhere to current building regulations, the requirements of the document are met by 'making reasonable provision to ensure that buildings are accessible and usable'. In reference to people regardless of disability, age or gender, the document legislates that they should be able to: 'gain access to buildings and to gain access within buildings and use their facilities, both as visitors and as people who live or work in them . . .' (Approved Document Part M, 2000).

Part M is chiefly wholly acceptable within the majority of societal scenarios. However, the document, like the DDA, falls short of recognising the often inappropriateness of many accessibility recommendations within heritage settings. Despite the strict restrictions enforced by listed building statuses, there is a certain amount of flexibility and tolerance around such restrictions which allow for certain alterations to take place. Conservationists are even at times compelled to alter heritage sites for the greater good. A measured and balanced stance has to therefore be maintained in the interest of conservation to ensure well-meaning political correctness is not responsible for the diluting of otherwise enriched, meaningful and genuinely educative heritage experiences.

## Conclusion

The fundamental aim of this investigation is to introduce synergy between disablist emancipation and preservation of historical places. This unique standpoint provides immense challenges to both heritage sites and the patience and understanding of people with disabilities. Where this synergy and subsequent balance exists is variable and determinant on the nature and scale of various heritage sites.

This investigation is still very much in its embryonic stages. Theoretically, the grounding and concepts of the investigation, both from a conservational and disability stance, have been broadly set. The next stage is the marrying of these theories pragmatically to the heritage industry, which would be followed by the adoption of 'best practice' approaches in terms of the sensitive installation of accessibility amenities. As with the disabled tourists attitudinal continuum (Appendix A), any such amenities have to be appreciative of both the valid experience provided for disabled visitors to heritage sites as well as being mindful of our duties as custodians of sites of historic interest. The second continuum (Appendix B) projects the need for a balanced approach in the maintaining of the integrity of heritage along with the onset of objectivist authenticity, in terms of Wang's approach. The continuum represents satisfactory levels of alterations imposed on heritage sites by accessibility amenities, whilst also representing at the opposing end levels of unsatisfactory infringement likely to cause irreversible inroads into traditional aesthetics.

By adopting a politically correct approach, some heritage sites, given the lack of advice as to how to sensibly adapt within this flexibility, could inadvertently be the perpetrators of their own downfall, in terms of causing irreversible degradation to their traditional aesthetics and identities. It is the avoidance of an ideological clash and the determining of an acceptable balance between the autonomy of disabled

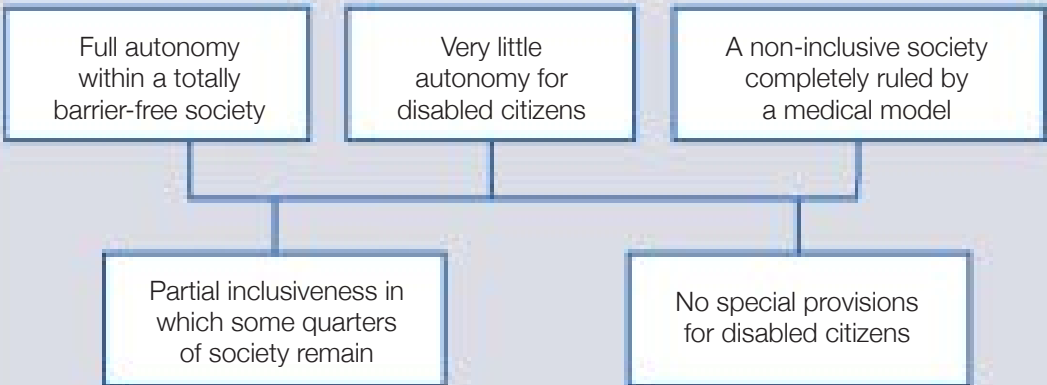
visitors and the integrity of heritage sites that custodians and society collectively should seek to achieve.

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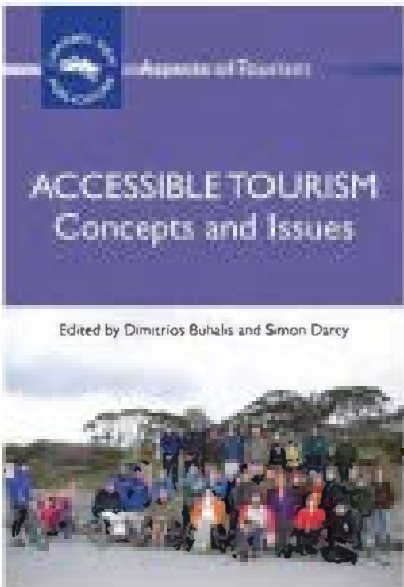
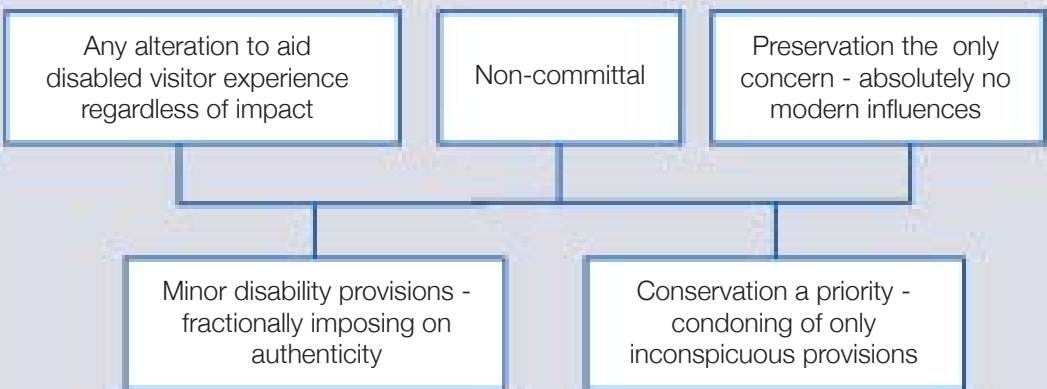
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**Appendix A Continuum representing opposing societal treatment of people with disabilities**



**Appendix B Experiential continuum representing the opposing priorities attributed to disabled visitors and the conservational concerns of heritage sites**



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# THE OLD CITY OF JERUSALEM – A STREET MUSEUM

Meirav Davish Ben Moshe

The Old City of Jerusalem is a magnet for life, for life that occurs all the time yet it actually revives again and again what was once there and thus takes a look at the future. While walking in the Old City of Jerusalem, everything is crowded, charged, bustling, flooded with smells, colors, sounds and a sense of touch.

We are surrounded and flooded with an emotional and sometimes deeply religious awakening, feel and experience people who have dreamed all their lives about their holy city. Alongside them are walking and talking people that this has been their home for generations or those who are currently staying here, and those for whom this is their business, which opens and closes every day. Every alley is a full world, evoking longing and a sense of old memory that awakens to a life that existed, exists and will exist in the Old City of Jerusalem. There is a sense of home, people, food and shopping, of routine alongside holidays, of intensive

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Architect Meirav Davish Ben Moshe. (see p. 21)

All photos, excluding the opening photo, were taken by the author.

cosmopolitanism of people of different religions, and special events: days of meeting, walking and ceremonial restoration on the path of torment, intending to the moment of Muhammad's ascension to heaven, alongside new festivals - the Light Festival that has already become a new tradition, mass Iftar meals, breaking the fast during Ramadan and others.

"Museums are democratising, inclusive and polyphonic spaces for critical dialogue about the pasts and the futures. Acknowledging and addressing the conflicts and challenges of the present, they hold artefacts and specimens in trust for society, safeguard diverse memories for future generations and guarantee equal rights and equal access to heritage for all people."

The question is: what is the purpose of the definition and the classification? Do they change anything in our attitude to the place? In the modes of behavior in it and toward it? And does this definition carry values and commitments to those operating in it?

The purpose of the article is to clarify these concepts and present a position on questions about the place and modes of action for dealing with the future challenges in it.

## Definition

A museum is a place where collections in a certain field or in several fields are concentrated: works of art, craft objects, antiquities, science and the like. It is an institution that allows the public access to exhibits that represent a variety of natural, cultural, historical and heritage phenomena, for the purposes of education, research, study, interpretation and presentation, and enjoyment. This common definition of a museum concept can be found in similar forms in dictionaries and popular information sites. Is it necessary to update the concept and why does a discussion of it become the center of controversy? What has changed in the way we perceive our cultural and visiting sites, what is the correct language of discourse when we come to curate exhibits? What is the correct context for understanding culture/a place? How does one convey a place experience and what is the relationship between the built and the out-door? Who understands and can define, curate, guide? Who decides?

The definition of a museum was discussed at a special meeting of ICOM<sup>1</sup>, the International Museums Association in Kyoto 2019. The new definition proposed there, greatly expands the concept and updates it to the 21st century. This is the proposed redefinition:

"Museums are democratising, inclusive and polyphonic spaces for critical dialogue about the pasts and the futures. Acknowledging and addressing the conflicts and challenges of the present, they hold artefacts and specimens in trust for society, safeguard diverse memories for future generations and guarantee equal rights and equal access to heritage for all people."

Try to re-read the definition and replace the word museum with the "Old City of Jerusalem" and you will see that when we read it that way, we will create a necessary affinity between the place and all its commitments to the past and present, to the people who inhabit it, with an emphasis of course on inclusive and committed policies to the cultural/human/ historical multi-voice, and here in Jerusalem, also the political and the controversial. There is no definition of high

<sup>1</sup> <https://icom.museum/en>

and low; it is possible to characterize more or less important but the emphasis is on the accessibility of the in-depth layers of information, the cultural accessibility of evolving and accumulating information. This is a concept of commitment to the wide mosaic without judgment, including disharmony.

In the definition there is also an emphasis on the time component, on the fact that the museum/place by this definition, is dynamic and changing and therefore the place and its objects, or its ceremonies worthy of preservation, can change and be updated both in their display and in the way through which we learn and experience the past, present and future. The modes of change and their extent depend on the context and long-term vision.

The second paragraph of the redefinition is: "Museums are non-profit institutions. They are collaborative and transparent, operating in the spirit of active partnership with and for diverse communities. To collect, preserve, research, interpret, present and expand our understanding of the world, in order to contribute to human dignity and social justice, equality for all human beings and the preservation of the planet."

The Old City of Jerusalem is not an institution; It has no management and a board of trustees, it does not have a collection and therefore all its experiential assets are actually public domain, even though they are privately owned or owned by various people and institutions, some of which have significant profit motives. Nor is it a democratic place, (it is doubtful whether a museum really is). The city does not operate in partnership as an incorporated institution of different bodies even if they have the same interests and they are certainly not free of accounts, passions and intense struggles. But the Jerusalem Municipality, the public and religious institutions in it, the Tower of David Museum, the Rockefeller Museum and mainly the communities living and operating in it, all collect, explore, interpret and expand our understanding of the place, and through it - the world. The emphasis I would like to adopt is the end-part of this definition, the purpose of the cultural action and the duty of the builder and maintainer of the property - in a museum - in the city, to contribute to human dignity and social justice, equality for all human beings and the preservation of the planet.

All of these have importance and value and therefore the Old City of Jerusalem should be defined as a museum. To present these goals and create an affinity between the public activity and the lives of its current residents, as opposed to private, business, religious and other activity. To take upon ourselves - designers and contractors, maintenance people, guides, residents and visitors - responsibility for the time and place entrusted to us now. The action of the curators of the place as a museum therefore requires a balance between these different values and needs which are well detailed in the first definition.

## Vision

"Museums are not for profit. They are participatory and transparent, and work in active partnership with and for diverse communities to collect, preserve, research, interpret, exhibit, and enhance understandings of the world, aiming to contribute to human dignity and social justice, global equality and planetary wellbeing."

The uniqueness of a street museum is life. The sanctity of the place and the historical and archeological memory it has accumulated are here in the background and not at the center. The unique experience focuses on the present in view of the past. Walking along, the discovery of lifestyles from the past until today, are at



the center of the experience of this museum. This thinking actually expands the museum's field of action to places that were not previously exposed to visitors at all and are now the focus of the museum experience.

## Characterization

The definition of the city as a museum refers to it as an open-air museum compared to an in-door institution managed independently and autonomously. This definition is a complex concept that according to the definition of Sten Rentzhog (2007)<sup>2</sup> deals mainly with self-knowledge – i.e. the reflection of the ways of life at the place to its visitors. This definition reflects what is done in many open-air museums around the world, thus for example: “Danish Village Museum” and the municipal Den Gamle By museum, in Aarhus, Denmark, about which Gabriel Horowitz<sup>3</sup> tells, and many other open-air museums created and existing in Europe and the United States in areas abandoned for mainly economic reasons and with the transition to accelerated urbanization. All of these present this conception of preserving the past for the benefit of future generations. These sites also served as a model for the Hasmonean village of “Neot Kedumim”, the open-air museum at Ein Yael in Jerusalem, “Gan Adam Veolamo” at the Eretz Israel Museum in Tel Aviv and others. The locals, whether they are instructors or people whose daily occupation is - bakers, potters, blacksmiths and farmers in traditional methods, receive those who come to it and share with them various forms of familiarity and contact with the place's materials, working methods, tools, structures, lifestyle during the year seasons, its development over the periods, and the like. Sometimes the place does not have a museum definition and its guides do not have appropriate training regarding the “collection”, but their uniqueness lies in the authentic nature of the place, from which its definitions have been born, and it actually shapes this way its mediators and guides.

Various studies that redefine, as mentioned, the concept of the museum and the concept of anthropology point at the creation of the personal identity and empowerment of the locals, who grew up in it, returned to it or chose it, through their integration into the process itself and its components.<sup>4</sup>

We therefore define the Old City as a kind of open-air museum with different routes and guides (referring to people and systems alike), emphasizing those who are frequently there and the opportunity to share with them the experience of visiting the city. The components of the museum represent the different quarters, the different cultures, and the different lifestyles of Muslims, Christians, Armenians and Jews living, growing up and changing in the Old City of Jerusalem.

The museum will focus on places where there is an opportunity to unfold an in-depth story. In the selection of places, the curatorship process will locate places, that if they had not been set up, there is little chance that their story would have been revealed to the public. Their cumulative value deepens and makes the visit to the Old City of Jerusalem unique.

## Curatorship

2 Sten Rentzhog, Open Air Museums – The History and Future of the Visionary Idea, Hamtli Förlag publisher, April 2007

3 Gabriel Horowitz, Scandinavia: Open-Air Museums, ‘Masa Aher’ [Different voyage] magazine online

4 Zvezdana Antos, Annette B. Fromm, Viv Golding editors, Museums and innovations, Cambridge Scholars Publishing, 2017

The curatorship process of such a museum is not simple. Assuming that this is a long-term process that depends on budget and time, priorities are to be given to the museum's initial establishment and setting a broad and detailed action plan from which the work stages, schedules and areas of activity for establishing the overall array will be derived. Following are highlights for issues to consider in this complex and challenging process:

- The steering and work team will include a variety of professionals - curators in the fields of archeology, history, art, education, technology, construction, marketing, operation and more. The participation of representatives of the various quarters in the Old City is very important due to the existing crowding at the place, complexity and traffic options, management of routine and emergency life, ongoing garbage removal operations, commercial life management and more. There is great importance to defining the residents' privacy. The process will include finding a balance between the curiosity of visitors during the day and the night and maintaining a good routine.
- The possibility of the project's success depends on its acceptance by the locals and the degree of hospitality they want. One should keep in mind that the local bearing capacity is not infinite, and many examples from around the world are already known - Venice/Barcelona/Paris and more, where the locals are fed up with the disappearance of their familiar and well-liked lifestyle in favor of souvenir shops and 24/7 supermarkets and turning the city into Air B&B clusters. Care must be taken not to turn the local charm into an empty decor.
- The process will examine the possibility of public participation in guiding and providing an opportunity to get to know the residents and merchants, the possibility of receiving visitors to institutions, workshops, cafes and the like. In this context, a process of learning and drawing lessons from its accumulated experiences in Israel (Jaffa, Acre, Haifa) and around the world is extremely important, and it is proposed to operate with an expanded "pilot" approach and the option of replacement that prevents burnout of people and businesses, in hosting a wide and diversified audience.
- It must be decided whether the intention is to deepen the acquaintance with the place in certain contexts of lifestyle: archeology/history/present time, or whether the intention is to give a little of each subject hoping to arouse curiosity and develop different paths in the future.
- It is necessary to decide which population to turn to first, in the hope of making a rolling and gaining momentum event that benefits the local economy and the operation of the project. In this context, one can look at the model of turning the Mahane Yehuda Market in Jerusalem into a kind of open-air street museum, which is already on the verge of balancing between a real place where ordinary shoppers routinely mix with a live theater of spell sellers, boutique shops and restaurants.
- Although the museum can already be established on the basis of the existing infrastructure, it is proposed to provide a supportive framework for the project and treat the urban space well as a suitable preparation for the absorption of such activity. That means, ensuring the maintenance of the flooring, drainage infrastructure, placing handholds, shading, street furniture, ensuring regular cleaning, night lighting, inspection and guidance of emergency routes and the

like. We emphasize in this context that preparations for festivals such as the Festival of Light, which is crowded and short-termed, where the audience is channeled to walking routes, and the spreading of festival staff, which allows temporary and random connections of electricity, water, signage etc., does not conform to the spirit of the museum, which relies on the place routinely and over time, such that changes, is built and maintained in a sustainable manner and for the benefit of future generations.

- The establishment of the Open-Air Street Museum could become an economic lever. The Old City has unrealized potential of properties that have been evacuated from their residents and can be converted for more beneficial use, accommodation, catering and leisure for the millions of tourists who want to visit it for various tourism reasons: pilgrimage, archeology, history and culture.

## Setting up the museum

In the Old City, about 10 corners will be located, 2-3 in each quarter. About ten such corners will allow at least a two-way route. In each curatorial process, points will be selected that rely on the important places that represent the Quarter - its daily lifestyle, the community members, typical foods, shops and the commercial life in it. They will also be chosen against the background and in the context of the special landmarks in it - archeology, history, religion, heritage, unique ceremonies - in different mixes and compositions.

Each corner will be designed as a unique stopping point. It will have shade, seating/standing place and furniture accordingly, an operating point for information - a local person who will volunteer for this activity and be trained for it, or another guide. Physical alternative for information and a digital option will be installed: hearing or an augmented reality (AR) position, in a technique chosen for operation - via a telephone or another device: glasses and the like. At some sites, an article or object will be selected, which allows for a real and authentic touch that represents and complements the digital information to a tangible experience. When thinking and locating the stopping points, emphasis will be placed on dispersing visitors throughout the space, with an emphasis on the margins. This way, it will be possible to increase the bearing capacity of the site, which is already at its capacity limit in peak events and is defined as extremely crowded even on a daily basis.

See several examples of such points:

This museum will be able to develop and grow over time and it allows visitors to the Old City to deepen their visit to the city, to go to corners they did not know, to renew and return to the familiar - historically and culturally.



**Illustration 1: Lifestyle/population**

An alley in the Armenian Quarter that has been renovated and made accessible and allows contact with the characteristics of the place - the facades of the houses, layers of construction. With the renovation process it is definitely inviting to planned or random encounters with those who live there.



**Illustration 2: Lifestyle/population**

An alley in the Muslim Quarter that has been renovated and made accessible and allows contact with the characteristics of the place - the facades of the houses, layers of construction. With the renovation process and the participation of the public it is inviting to planned or random encounters with the residents and merchants there.





**Illustration 3: Institutions and Lifestyle**

The Latin Patriarchate Alley in the Christian Quarter and the religion institutions, mixed and varied functioning - hotels, education, religion and residence. An inviting starting point for encounters and entrance to typical courtyards, sitting in cafes, shops.



**Illustration 4: Lifestyle/Trade**

Hagai Street/Damascus Gate section in the Muslim Quarter. The street has been renovated and made accessible and contains a variety of characteristics: shops, artisans, cafes and local food. Visiting it sharpens questions about the conflict in Jerusalem and the presence of national identity. The place allows for confrontation and presentation of the position of Muslims and Jews living and trading there, or just watching from a distance.



**Illustration 5: Lifestyle/Institutions – and the City boundaries**

In the background are Mount of Olives and the At-Tur neighborhood, HaKaraim Street in the Jewish Quarter built after the Six Day War. The place allows for a discussion of modern conceptions of new construction versus the old one, observation of the Temple Mount, an understanding of routine and peak events at the Western Wall, and sharpens questions about the conflict. Invites planned or random encounters with Jews living, working and studying there.



**Illustration 6: Jaffa Gate – Tourism.**

The area has undergone renovation and accessibility from end to end and allows contact with the characteristics of the place from the past to the present. The development invites discussion of development issues in an archeological/historical environment (e.g. the Cardo / Decumanus excavation cover), asks about the ethics of planning intervention, and sharpens different approaches to solving design, transportation, and accessibility challenges. Invites planned or random encounters and connection to another activity - Wall tour, visit to the Tower of David Museum, churches and institutions in the circumference.



**Illustration 7:** Possibility of placing a picture of the Jaffa Gate - early 20th century. (Collection of the online photos of the U.S. Library of Congress, Edith and Eric Matson Collection) as a stopping point for elaborating on the historical range and changes that have taken place at the Jaffa Gate over at least the last hundred years.

**Illustration 8: Mashrabiya –  
HaShalshelet Street**

Wood and iron in a variety of combinations, balcony/lattice / handhold and railing, taking a look at design details, needs and solutions then and today. See Figure 9 below for a “patented” Mashrabiya based on a visual trick that has no real plaiting, a shelf product that has been adopted to hide infrastructure cabinets, air conditioners and trash hiding.



Illustration 9: A new trash hiding



#### Illustrations 10, 11: Traffic and accessibility

Stairs/sloping passage/handhold and railing, voice guidance, compliance with accessibility standards, and the like. Taking a look at accessibility issues: what can or cannot be made accessible, maintenance needs, emergency and mobility as against the carrying capacity of natural stone, rules for preserving facades of buildings and the like, visitors' conduct and requirements adjusted for people with disabilities in an ancient space – what and how this is done is the interesting question for the audience, and this as well is in the essence of a museum concerned with lifestyle.





# Operation

Given the complexity of this unique museum, there is a need for a point of departure for the visit, a visitors' center that will provide a background clarifying the nature of the street museum, the rules of conduct and the sensitivity of the different populations to the various visitors. The point of departure for the street museum is the entrance to the Tower of David Museum, where they will begin with a preparatory video of the street museum experience, which will place them culturally and historically. They will receive initial guidance on the manners of operation and contact people and a map of possible routes - on paper and in the app, the required accessories, and from there they will set out independently or with group/individual guidance provided in different languages and depending on the nature and length of the tour.

We must strive that all museum points will be accessible to people with disabilities, however a small number (up to 20% at the most) that are not accessible might be selected.

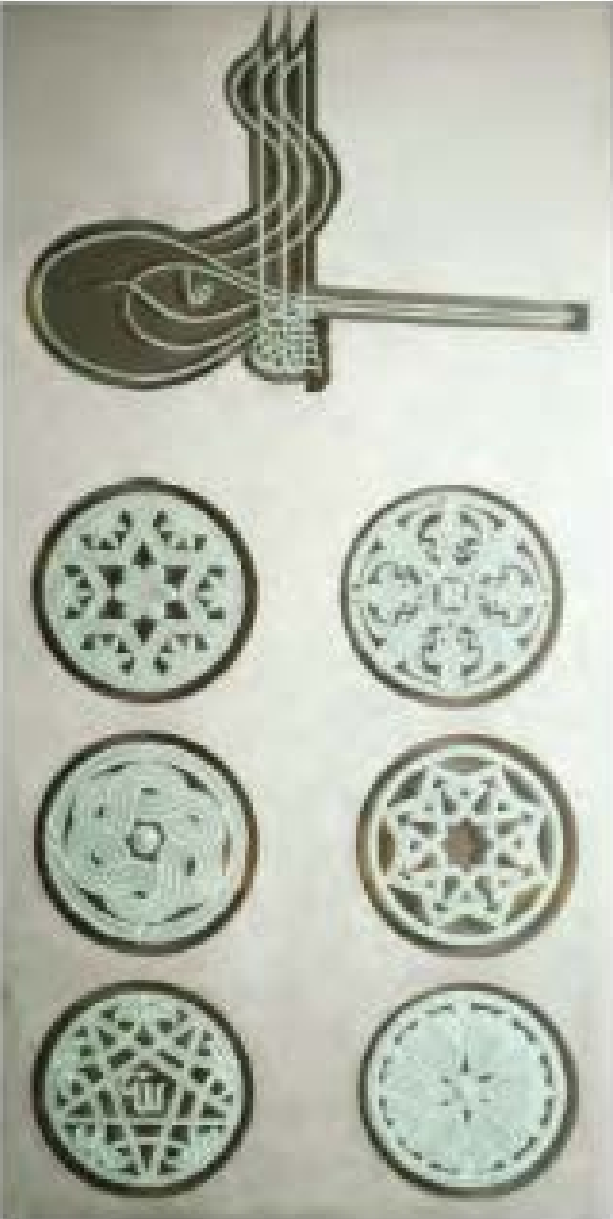


Illustration 12: Ottoman guilloches (Collection of the Tower of David Museum)

It is proposed to examine the establishment of an information center for daily life at the Tower of David Museum (proposed by Yael Danieli-Lahav). This refers to a research institution within the museum that will be able to collect and expand the street experience to unique topics - areas of practice, objects, costumes, raw materials and more. This center will also be able to operate separately and focus on other issues but the uniqueness of the proposed center is in the focus on lifestyle and not necessarily on the findings and objects that are part of the museum's collection. The importance of visiting and stopping at the center is as a preparation and elaboration for the activities and sights of the street. This preparation is not necessary for visitors and wanderers of the Old City, but because the experience offered at the museum is often not one that can be marked on a sign or listened to in the app, the context and background make the difference between a casual visit and the recognition that it is a cultural experience similar to a visit to a built museum and a quality collection.

See illustration 12 below: Identifying and discovering guilloches on the streets of the Old City, pillar capitals, decorations, new street furniture and design details inspired by the ancient - become clearer after a short study of the subject and understanding the identification options in the context and background of the street. See illustration 12 on page 112.

## Summary

What has been written here stems from my many years of acquaintance with the Old City and my visits to it over the years, especially from my work there in the last decade while writing “Bezchut Haderech” - The Guide of The Old City Street Planning in Jerusalem”, a guide that is being updated these days and extends the city's responsibilities to the Old City Basin. This work has greatly sharpened the need to form a guiding, modest and correct design language for the place and its complexity. Writing the guide does not replace sharp-eyed and creative planners, but its purpose was to unify the rules of work in the space in order to highlight the characteristics of the museum, which has already been considered but has not yet been born.

The concept of the guide is of cultural accessibility, shifting the gaze to the important while clearing excess information born mainly from the transfer of the infrastructure of buildings that were built long ago and did not contain preparations for electricity, water and sewage, did not solve drainage questions, and did not comply with the accessibility rules and provisions of the law. Setting priorities and rules for development that will allow the main players we detailed above, and the Old City as a whole, to become readable and simple in all their splendor. The Old City is not “Disneyland” and needs no additions and decorations. Cultural accessibility believes in the place itself, which already dictates the rules of the space and guides its conduct. It does not regard it as an untouchable monument, but is very wary of excessive visual information, excessive lighting and materials that attract excess attention from the space and its lifestyle. The concept of the museum chooses human and digital means as primary mediators, inviting visitors to a multi-sensory in-depth experience.

This attitude of mine towards the place is personal and subjective but inevitably painted in the colors of the establishment and systems of government defined as an occupier on the streets of the Old City which are not Jewish. When forming ways to work on the guide we tried, without success, to hold large meetings open

to the public or to form focus groups in order to encourage different audiences to be a part of the process. On the other hand, random encounters that took place around the question of the stairs, or how to properly drain the street and where to put the garbage hidings, gave rise to fruitful discussions with specific street tenants, merchants and stakeholders. I found there attentive, experienced and responsible interlocutors from whom I learned a lot. The discussion of place and design details took place at eye level, a face-to-face dialogue. I believe that forming the character of the street museum and questions of choice, design and construction made with mutual respect, listening to values as well as to local hardships, have a chance. It is very important to manage it this way, while providing information and maintaining transparency that ensures developing trust, partnership, hope and fair involvement. I hope the process will materialize and hold on to the place, and if not tomorrow then the day after tomorrow.

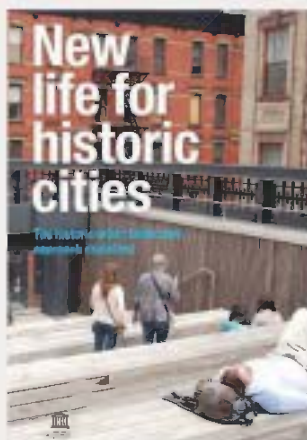


## Historic cities – General



<http://www.historic-towns.org/>

Website of the European Association of Cities and Historic Areas. Engaged in the development of European policy on the dissemination of information on examples of Good Practice.



<https://whc.unesco.org/en/activities/727/>

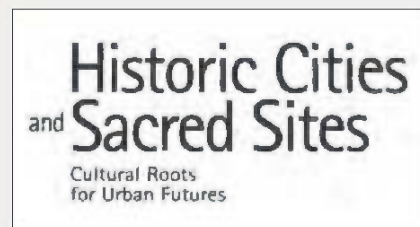
### **New life for historic cities: The historic urban landscape Approach explained**

UNESCO brochure from November 2011. Engages in the management of historic urban landscapes in a holistic approach that combines the preservation of an urban heritage along with economic and social development.



<https://www.akdn.org/what-we-do/historic-cities>

The program (AKHCP) Aga Khan Historic Cities Programme manages Projects of urban renovation, restoration and preservation in historic centers of cities, including activities to improve the quality of life of local residents. Operates in the Middle East (not in Israel), Asia and more.



<http://documents.worldbank.org/curated/en/693441468769796497/pdf/multi0page.pdf>

### **Historic Cities and Sacred Sites: Cultural Roots for Urban Futures**

A 444-page document of the World Bank from 2000. It deals with the issues of the preservation of historic cities and holy sites, the planning and management of heritage preservation, the economic aspects of the subject and more.



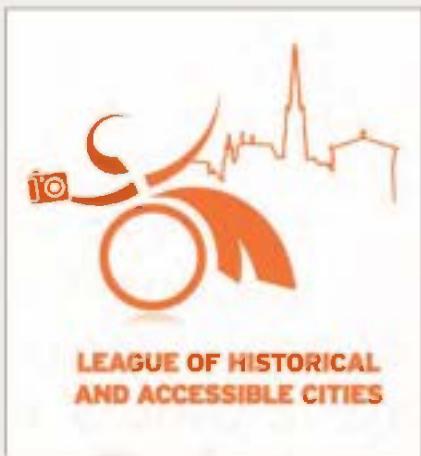
<https://www.heritagecouncil.ie/projects/historic-towns-initiative>

An Irish program launched in 2012 for the preservation of heritage in historic cities and villages in Ireland and improve their quality of life for residents and visitors.





## Accessibility in historic cities



<http://www.lhac.eu/>

A European organization site established in 2010. Focuses on improving accessibility for people with disabilities in historic cities, along with promoting the development of sustainable tourism and protecting cultural heritage.

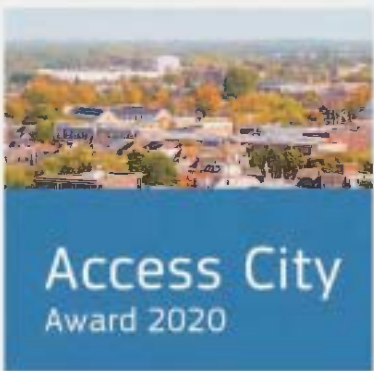


<https://wriroscities.org/sites/default/files/Istanbul-Public-Spaces-Public-Life-EMBARQ-Turkey-Gehl-Architects-Oct-2013.pdf>

A comprehensive survey (83 pages) from 2010 of the historical part of the city of Istanbul, Turkey. Addressing urban problems with an emphasis on pedestrians, including the elderly and people with disabilities, and recommendations for change.

<http://www.designforall.in/dfa/pdf>

Issue of online journal of Design for all institute of India, vol 4, no. 8, pp. 23-63 engaging in exploring world heritage sites in India from the perspective of the universal design approach.



<https://ec.europa.eu/social/main.jsp?catId=1141>

The European Commission Award portal awarded annually to outstanding cities for making cities accessible for people with disabilities (Access City Award), including many historic cities. From it you may reach the winning cities and a description of the projects carried out in them.



<https://www.longdom.org/open-access/mobility-and-sustainable-cultural-tourism-case-study-cracow-and-warsaw-old-towns-accessibility-2167-0269-1000195.pdf>

Article in Journal of Tourism & Hospitality, dated 2016, engaging in accessibility for people with various disabilities in historic quarters in Warsaw and Krakow.

# MAP OF ACCESSIBLE STREETS IN THE OLD CITY OF JERUSALEM



The map was prepared by PAMI ( East Jerusalem Development Company). Professional consultant: Ami Meitav



# APPS FOR NAVIGATION IN OLD JERUSALEM THAT HELP PEOPLE WITH DISABILITIES

## Accessible JLP – Old City

Developed by Accessible Roads Company. Offers convenient and alternative routes for people with mobility disabilities. Shows only the accessible streets. It allows route planning with stops and pointing to the user's location in real time on the map.

Free download for Apple and Android.

### Download for Android:

<https://play.google.com/store/apps/details?id=pami.accessibility.sayyes>

### Download for Apple:

<https://itunes.apple.com/il/app/accessible-roads-jerusalem/id1434672106?mt=8>

### Guidance video

<https://www.youtube.com/watch?v=caCxEfuw5gl&feature=youtu.be>

## Sound tours

An app that helps make tourist tours of the Old City accessible to blind and visually impaired people. Developed by the Center for the Blind with the help and funding of the National Security Institute. Allows audio guidance, visual description, and historical information about prominent sites in the Old City. Four languages – Hebrew, English, Arabic and Russian.

### Download for Android:

<https://play.google.com/store/apps/details?id=com.mytoursapp.android.app1295>



**SHEKEL** regards inclusion of people with disabilities in the general community as a national mission to improve society as a whole. Over the past four decades, SHEKEL has integrated tens of thousands of adults and children with disabilities within all areas of the community, including: housing, employment, education, culture, therapeutic services, and accessibility (including town planning, physical infrastructure, transportation, and services). SHEKEL continues to work tirelessly, leading and developing innovative projects that promote inclusion for people with disabilities within Israeli society throughout the country.

## Main areas of activity:

**Housing in the community:** Over 400 people, living in 150 apartments, live full lives as an integral part of the general community.

**Employment and vocational rehabilitation:** Around 800 people receive vocational rehabilitation and employment services in Jerusalem, Petach Tikvah, Shoham, Ramat Gan and Tel Aviv.

**SHEKEL COLLEGE:** Cultural and leisure programs: vocational and enrichment courses serve over 1,500 people with special needs. Courses and activities include arts, drama, music, computers, communications, sports, social clubs, vacations and much more, including unique programs and partnerships with Israel's leading cultural institutions.

**Therapeutic Centers:** Provide specially adapted accessible therapeutic services, including: therapy for children and adults traumatized by sex abuse and other forms of abuse; social and sex education; psychotherapy for emotional problems; consultations for family members and professional staff.

**Special education:** Afternoon enrichment programs in special education schools, in Jerusalem and Petach Tikva, help ease the burden on families of children with special needs, allowing them to raise their children with disabilities at home.

**Israel Center for Accessibility:** Has frequently set international standards for accessibility, the Center initiates and carries out ground breaking projects throughout Israel and overseas.

## SHEKEL's Social Enterprises:

**SHEKEL Gift Shop:** SHEKEL House, 11 Yad Harutzim St, Jerusalem • 972-2- 6442047 • store.shekel.org.il

Rich variety of original and high quality gifts, handmade with loving care by people with disabilities. Gifts for: events, Jewish holidays, children and infants, household and kitchen gifts.

**"Between the Lines" SHEKEL Graphic Design Studio:** Contact Yael: 972-2-5480108, 972-52-5610383 • beinastudio@gmail.com • [www.beinastudio.com](http://www.beinastudio.com)

Branding, conferences, websites, event branding, personal event invitations and souvenirs.

**Hamezion:** chain of 'style-vintage-secondhand' stores • 39 Pierre Koenig St. Jerusalem • 972-26247993 • [www.hamezion.co.il](http://www.hamezion.co.il) • 5 Dorot Rishonim St., Jerusalem • 82 Jabotinsky St., Ramat Gan - 972-3-7798558

Hundreds of clothing items, including designer, vintage and secondhand clothing; jewelry; household items; books and more. • Discover a world of exciting bargains at Hamezion! Donate items in good condition instead of throwing them out.

## For Donations:

**Your support is needed to continue SHEKEL's work** in developing and operating activities that integrate people with disabilities in Israeli society. • Tel: 972-2-6727605 or website: [www.shekel.org.il/donate](http://www.shekel.org.il/donate)

**SHEKEL:** Inclusion of People with Disabilities, The Israel Center for Accessibility. 11 Yad Harutzim St., Jerusalem. • P.O.Box 53105 Jerusalem, 9153002. • Tel: 972-20157 ext. 122 • Fax: 972-2-6725208 • [shekel@shekel.org.il](mailto:shekel@shekel.org.il) • [www.shekel.org.il/en](http://www.shekel.org.il/en)