Accessibility and heritage in the tourism perspective: some 'minor' case studies from Italy.

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Abstract

Tourism is gaining importance for the older population, due to the fact that elderly people have more-than-average available free time and show an increasing desire to engage in travel to tourist/cultural destinations. Some European funded programs are sponsoring tourism packages for new potential users as a policy to foster the economic growth of this sector.

Moreover, in the Italian scenario of major and well-known heritage sites there is a trend of exploiting "minor" tourist destinations that can disclose undiscovered sceneries and areas of historical and artistic value.

This paper aims to highlight "minor" case studies presenting potential values both for tourism and culture and to check whether newer requirements are met. The selection of such cases was made based on:

- compliance with the most important accessibility requirements (as stated by law);

- design suggestions;

- checking MIBAC guidelines.

Keywords: accessibility, usability, heritage.

1. Introduction

In the current age of worldwide financial crisis, tourism and culture represent a crucial resource for attracting tourists and create a friendly and enjoyable environment, along with revitalizing cultural heritage. In this perspective, the needs of potential visitors are to be considered using a more inclusive approach. To this purpose, the *"Act for promoting accessibility in cultural and heritage areas/buildings/properties"* (MIBAC, 2008), by the Italian Ministry of Cultural Heritage,

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introduces new accessibility guidelines in heritage and cultural areas for the benefit of visitors of all ages and abilities (including those with sensorial difficulties), also addressing design solutions, mobility facilitations and aid systems. Unlike the previous legislation, which addressed only motor difficulties (Biocca, 2008), the focus is now on a wider range of considerations, as summarized in the following (Picchione, 2008):

1. <u>differences in level</u> affect also people with walking difficulties, not only those using wheelchairs;

2. <u>long walking distances</u> represent a problem for people with walking difficulties as well;

3. <u>good accessibility and usability of indoor spaces</u> are necessary for larger user groups;

4. <u>different specific codes</u> (fire safety, health, etc.) of the construction sector need a common view for integrating solutions through design and construction processes;

5. <u>low vision</u> should be given more consideration in design guidelines and solutions;

6. <u>orientation and sensorial difficulties</u> need a more detailed approach in defining guidelines and solutions for identification points, signage systems and mapping.

The general founding principle is that making heritage areas more accessible and usable is a priority with respect to historical preservation, nevertheless design solutions must meet heritage quality and value without altering the image that visitors/tourists perceive of these sites (Biocca, 2010).

1.1 Heritage and tourism

Heritage plays a key role in the EU as a catalyzer of entertainment and tourism among various user groups. However, the lack of suitable infrastructures in terms of accessibility is clearly in contrast with a growing demand of usable facilities. Social tourism is a rapidly developing policy for tourism promotion and empowerment among seniors and people with less travelling opportunities, both in terms of affordability and easy access to facilities. Relevant issues that should be solved in order to achieve this goal are the following:

- insufficient communication and awareness of choices;

- need for easier access to information;

- insufficient information sharing among tourist stakeholders;

- difficult enjoyment of heritage sites due to lacking tourist facilities and services;

- insufficient dissemination of tourist resources nationwide.

A higher number of travellers implies a potentially enhanced development of cultural and landscape areas. Actions improving quality and usability of such areas include:

- a wider extension of *Design for All* principles to open spaces;

- usability of all spaces, also by means of new technologies and systems, and creation of widespread tourist information networks;

- exploitation of accessible local heritage sites, e.g. natural and archaelogical paths, through specific tourism policies;

- optimization of tourism reception and accommodation facilities for the benefit of various user groups, especially those including people with lower incomes and elderly people.

1.2 Mobility and design guidelines

Paths and walkways are essential mobility elements in natural areas, parks and open spaces in general. Planning paths and walkways affects mobility and amenity of viewpoints. Walking a long distance can be a considerable physical discomfort for many people, even to the point of tiring out seriously. Long horizontal walkways are common in many areas of cultural interest, e.g. large museums, historical city centres, archaelogical sites, parks and historical gardens, and natural reserves (Biocca, 2009).

Covering long distances can be a barrier for people with limited mobility like elderly and cardiopathic people, who can experience problems even along a smooth way longer than 50 m, while, on the contrary, people on wheelchair can cover much longer distances. Such situation can be even worse in walkways with many level differences due to the ground layout and the orographical land features. Walking problems can also arise with an irregular or uneven floor/ground or cobbled pavings, and these situations are quite usual in archaelogical areas and obsolete parks.

In order to cope with such inconveniences, *"arranging walkways with flat, smooth and slippery-proof pavings and equipped with rest and service areas every 50-100 m, possibly roofed and with benches or ischial supports"* is required by law, *"also for preventing the possibility of a tedious experience which could produce a feeling of tiredness and discomfort"* (D.P.R. 503, 1996). Moreover, *"focus must be on removing obstacles along walkways/paths. In particular, those with low and severe vision problems need to check and clearly recognize walking areas"* (D.P.R. 503, 1996).

Another key group of design recommendations includes orientation: some solutions can be easily and economically installed and, at the same time, allow users with vision and cognitive problems to use comfortably the built environment. Providing natural guidance systems as well as signals or furniture to identify ways is advisable. In particular, natural and well recognizable

plantar-touch elements are preferable to artificial guidance which can result more intrusive. Wayfinding also plays a key role in orienting visitors. It is a clear identification system of places and spaces as related to one or more designated destinations, where each signal shows how to reach them. These signals can often be maps located in strategic points or can be "mobile", i.e. installed on devices a user can wear.

In places of cultural interest, maps located in strategic points (entrances, main crossings, vertical connections, direction changes, etc.) are required to be clear, accessible and readable to the largest possible number of users (Biocca, Morini, 2010). In the case of tactile visual maps, additional recommendations for blind people are: objects and lines in relief, Braille texts or in black relief, touchable textures, etc. In open spaces like parks, historical gardens and archaelogical areas, blind people and other visitors can experience 3-D mockups of the locations.

An architectural barrier is also defined as *"lack of suggestions and signals for a better orientation and recognizability of places and dangers for everybody and in particular for visually impaired and deaf people"* (D.P.R. 503, 1996).

Additional recommendations for a better usability of the built environment are related to implementation of services and facilities for reception and hospitality by:

- refurbishing rest areas, eating spots and toilets for all user groups;

- designing houses or rooms for resting and sheltering from adverse weather conditions;

- implementing alarm points for prompting the presence of any person experiencing health problems or safety risks.

Moreover, a network of info-points is relevant to disseminate knowledge about the site's resources and providing information on how to reach locations easily, which transportation means to use and which time schedules. Potential users shall share such information both on the spot and from remotely, by means of different technology tools: web pages with search engines, interactive maps on desktops and mobile systems etc. In order to facilitate users, especially older, in visiting a venue, solutions for a remote preview are recommendable, delivered through virtual tours with information content so that everybody can evaluate in advance any difficulty in walking as related to their abilities. Finally, the placement of ICT devices (e.g. webcams) in strategic points can supplement safety and security.

2. Examples of recent case studies.

A short collection of recent case studies is here highlighted, with an emphasis on solutions that empower access and use of cultural properties, both heritage sites and open spaces.

2.1 Jazz concert hall and park - Rome, Italy

This case study is part of the final publication of the BAS (*Building Accessible Services*) EU project (CNR ITC, 2006). This project developed a methodology for assessing accessibility of different building types (Sakkas et al., 2004). It is a collection of best practices across Europe in terms of alternative solutions for enhancing access and usability of different building categories and infrastructures (services, facilities, transportation systems, leisure and education facilities, etc.).

The Jazz House is the result of a large redevelopment plan of a former mansion house. The whole complex has been designated to accommodate facilities for fruition of jazz music (both live and studio), a popular genre in the cultural environment of Rome (ZETEMA, 2005). The plan was to keep the original facades and encumbrances of the existing buildings, while remodelling layouts with different usage rooms. The three buildings now accommodate a concert hall with an information centre, a restaurant and a music-recording studio with visiting musicians' rooms.

several transport lines. A landscape planning requalified this heritage area, while new car parking lots nearby improved the general accessibility for visitors. The existing mansion house (Villa Osio) was designed in 1936. Recently, the Italian government entrusted the City Council of Rome with the confiscated property. The core of the redevelopment area is the main *A* building, whose ground floor is now accommodating the concert hall (auditorium) for 146 people, an entrance hall, and an information centre with CD music listening facility (see Fig. 1).
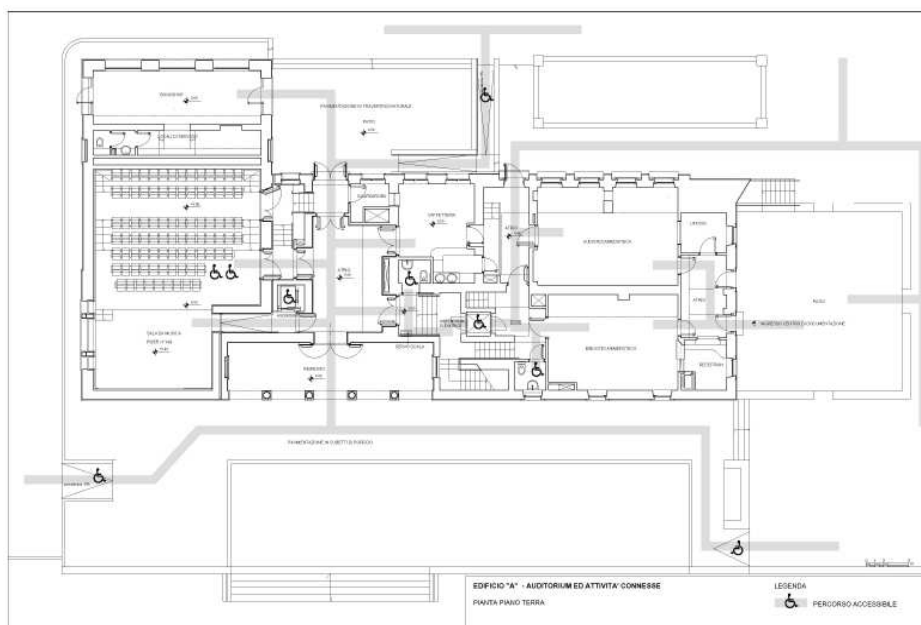

Figure 1: 'A' Building, ground floor (Zetema, 2005)

The first floor hosts the offices, a music direction room, and rooms and facilities for musicians, connected by a lift to the stage. The facades were modified only in order to restore the purity of the original style (see Fig. 2). There are two other buildings: *B*, next to the main entrance, with a restaurant-cafeteria and *C*, which is dedicated to music production and includes a recording studio, three music rooms, an office, a radio room, a direction room and small living units hosting visiting musicians. Inside the park, archaeological spots, lights, viewpoints and accessible pathways have been highlighted for the benefit of all citizens, regardless of concert scheduling.

Figure 2: Main entrance to the concert hall ('A' building) (Biocca, 2006)

The main building of the complex is a 'L'-shaped former mansion house, with a walking surface of 1200 m^2 on three storeys. The redevelopment design for accommodating the new rooms has its core in the concert hall, which required a relevant layout transformation in the smaller wing. The concert hall's layout plan is formed by two terraced seating areas serviced by corridors. The lower area has three seating rows at the same floor level as the entrance and an additional free space to allow a better access. Musicians, producers and presenters can access the stage through a smooth slippery-proof and colour-contrasted slope. The general facilities (dressing rooms and toilets) are on the first floor and are connected to the stage through an accessible elevator for musicians only. The entrance hall is equipped with an accessible toilet and a cafeteria.

Smoothly sloped ramps overcome differences in level outside as to walkways, patios and courtyard (see Fig. 3). Outdoor pavings are assembled with natural materials and the main indoor passages, as well as the way from the entrance hall to the concert hall, have no differences in level. The additional rooms of the main wing on the ground floor are refurbished as a music information centre with an audio and video room, a library and a reception. Access is from the west patio through smooth ramps. Accessible toilets for visitors are located nearby and in the basement, and can be reached through an accessible lift. The main staircase in the middle is equipped with an accessible lift and connects all the rooms. The smaller *C* building accommodates a music production centre, a hall, a secretary's room, recording rooms, direction room, and toilets on the ground floor. Every room is easily accessible.

Figure 3: Ramp access from the park side (Biocca, 2006)

Living units for the musicians are constituted by three double rooms with toilets on ground floor, accessible from the patio outside, one double and one single room, a small flat and a common living room on the first floor, all with toilets and balconies accessible through a staircase with lift.

Walking across the park is very easy thanks to no-step walkways made of ecological materials, well-lit and signalled with orienting information systems. The park is also furnished with several wooden benches along walkways and around buildings (see Fig. 4).

Figure 4: View of the park (Biocca, 2006)

2.2 University "La Sapienza", Botanical Garden – Rome, Italy

The Botanical Garden originally was part of the Vatican gardens under the kingdom of pope Nicolò III (1277-1280). Then in 1660, pope Alessandro VII decided that the University of Rome (now University "La Sapienza") should have its own Botanical Garden, separated from that of the Vatican. After other location changes during the XIX century, in 1883 it received its present collocation, within the garden of the Corsini Palace, rich of archaeological ruins belonging to the Thermal Baths of Settimio Severo (source: website of the Botanical Garden). The entrance to the Garden is free of charge for disabled people and there are explanation leaflets both in Italian and English. There also is the possibility of taking guided tours, with no additional payment, granted that a reservation is made in advancement by email. It is open from Monday to Saturday, during the whole year, with opening hours varying according to the period (spring to summer - from March to October, and fall to winter – from November to February). On the website there are news, info, contacts, a map of the garden with the different areas reserved to specific plants or built as specific gardens. Unfortunately, the only language available is Italian. For blind people there is a specific part, "The Aromatic Garden", with a tactile map and plants that can be smelled or touched. The parking area is free of charge for disabled people, and toilets are accessible, as well as pathways, at least the majority of them, both for wheelchair users, mobility impaired people and blind people. Furthermore, there are two electric transport means for reaching slope areas which are worthwhile visiting. On the website there are no information about accessibility, except regarding the free entrance for disabled people, but on the website devoted to accessibility and tourism in Rome (www.handyturismo.it) it is possible to know more about accessible paths.

2.3 Redevelopment plan of the "Josef Ressel" path in the natural reserve Igouza - Basovizza, Italy/Slovenia

The "Josef Ressel" path is a naturalistic trail developing for about 4 km amidst the woods of Igouza and Lipizza, crossing the border between Italy and Slovenia and thus connecting Basovizza (Trieste) to Lipizza (Nasti, 2008). The path was planned and developed to be accessible for people with visual impairments. In order to do this, the trail has been equipped with technological aids which can be found in correspondence with the stops located along the first 1.9 km of the path, which at present constitute the only walkable section. There are four stops along the path with a total of eight information boards in three languages: Italian, English and Slovenian, in addition to tactile tools and automated vocal messages allowing blind people to access the information about the local flora and fuana, as well as the geological and naturalistic features of the wooded area. It is also possible to freely request an audioguide that makes use of 65 electronic sensors receiving input from the presence of the user and transmitting the message related to the location that the user is passing through in that moment.

Figure 5: A view of the "Josef Ressel" Path (Nasti, 2008)

At a distance of about 1500 m from its starting point, the "Josef Ressel" path turns to the right, along the portion of the trail known as CAI 3, where the vocal signal can no longer be received for about 330 m before it becomes operative again, and the ground on which the path develops is uneven and hence poorly accessible. Therefore, an alternative path has been recognized in

order to let people with motor disabilities cross that particular area of the woods, although this solution is not entirely accessible itself because of the presence of calcareous rocky soil.

In order to solve this problem and make the entire path easily usable also by people with motor disabilities, an adjustment plan was proposed in 2005 (Nasti, 2008). This plan involved three main intervention areas:

1. Adjustment of the CAI 3 path: projection of a wooden walkway with a width of 100 cm to be joined to the existing one, in order to allow weelchair users to avoid the harsh terrain and safely cross the path;

2. Adjustment of the alternative path: leveling the calcareous rocks protruding from the surface of the soil by using a large hammer and a mill to reduce their size, so that the path would become less difficult for people using weelchairs;

3. Improvement of stop areas and parkings: replacement of the existing terrain with small rubble, 15 x 30 mm in size, in the stop areas and construction of a parking space nearby the path entry, with an accessible connection to this latter, placed on a plain area with max. 1% inclination and measuring 320 x 500 cm.

The adjustment plan also contemplates the setting up of a bird watching station that can be used by people on weelchair as well. The station should be built in an easily accessible and recognizable glade, which implies the presence of an accessible way to reach it coming from the path. The station should have the following technical features:

- threshold height less than 2 cm;

- open entrance (no door) at least 90 cm wide;

- indoor area measuring 150 x 150 cm, with no furniture;

- two sets of slits (openings), one at 75-140 cm from the ground and the other at 125-190 cm;

- console under the slits placed at 70 cm from the ground and measuring 50 cm in depth.

Other improvements being considered are: the introduction of mobility aids, such as electric scooters for people with fatigue problems and universal all-terrain weelchairs to ease the crossing of the more difficult sections of the path; the setting up of two public restroom facilities, having high-tech features, one placed at the starting point of the path and the other by the borderline, in an area accessible both from the CAI 3 and the alternative path.

3. Conclusions

The illustrated case studies were assessed using different methodologies (metrics, performance-based and guidelines) applied only basing on research and professionals' direct experience. There is no available survey at the moment on the response from end users, even though most conditions of these case studies regarding accessibility were found generally satisfactory among associations of users with disabilities. However, future efforts must address a unique assessment methodology which integrates the different approaches used so far and become an implemented assessment tool.

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