

# VENICE

## with eyes wide shut

by Lucia Baracco and  
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**A** city on water without equal in the world, **Venice is unique** culturally, environmentally and morphologically: its islands, connected by hundred bridges, make it the only city that is **completely car-free**.

Although these characteristics hinder the mobility impaired who are forced to rely on the public transportation system, they make it a **friendly city** for the **visually challenged**. In Venice, the blind and partially sighted can actually move around with less difficulty and with a higher level of safety than

in other Italian cities.

This article deals with the historic centre and islands with no car traffic only, illustrating the criteria adopted and steps implemented by the Venice Administration to make mobility safer and favour the orientation of the blind and partially sighted, be they residents, commuters or tourists.

Venice does not have a very large blind community nor do many blind tourists visit the city on their own.

However a considerable number of **blind people** commute to Venice **daily** to work or study, moving around with guide dogs or



white sticks. And although we might be unaware of them the number of **partially sighted** moving around the city every day is growing steadily.

### A LIVEABLE CITY

Venice is a very **liveable city** for pedestrians: there are no dangerous crossroads, nor noisy streets to cross, no roundabouts, narrow pavements, illegally parked cars or motorcycles violating traffic regulations.

Venice is also unique in terms of sound, touch, movement and topology: the walls of the narrow **calli** and of the buildings lining the canal banks, voices, sound of footsteps, smells and draughts become **points of reference** that are more intense than in any other city. While holding true for anyone familiar with Venice, these considerations become even more important for blind, partially sighted or elderly pedestrians who can move around with **a certain degree of confidence** and enjoy the advantages offered by the city. The blind and partially sighted will have no difficulty in reaching most services on foot by themselves or carrying out everyday tasks like going to work, taking a walk, doing the shopping, going to the cinema or to the theatre.

### MOBILITY PROBLEMS

Despite the favourable context people with visual disabilities may encounter **problem areas**, some common to all cities, others **typically Venetian**.

First of all, obstacles along paths. Many are common to urban environments like uneven paving and protruding objects like litter bins, display stands, phone boxes, advertising sign, jutting awnings, and projecting cornices as well as depressions in the road surface and construction sites that are not adequately identified or roped off.

LET'S GO BACK TO THE LAGOON CITY TO FIND OUT WHICH OBSTACLES HINDER THE MOBILITY OF PEOPLE WITH VISUAL DISABILITIES IN THE HISTORIC CENTRE AND WHICH MEASURES HAVE BEEN ADOPTED TO OVERCOME THEM.



#### Walkways for high tides

They are heaped up on the calli during many months of the year to be used in case of "high tides". It is important to place them so that the blind can detect them with their white sticks and leaving enough space on the bank to allow disabled to move easily and safely.

Typically Venetian obstacles include the **high tide walkways** that are left stacked up for many months in calli and along fondamenta. In all these cases, dangers could be reduced or avoided by means of simple solutions permitting the **identification of the obstacle** by means of the white stick.

### SOURCES OF DANGER

The worst danger facing the blind in Venice is the **risk of falling into the water**, whether at the end of one of the many dead-end alleys - that is, the ones that end on the water - or on the sections of bank without parapets - usually close to the bridges and used for loading and unloading goods.

The greatest source of danger for the partially sighted is represented by **bridges**, particularly wooden bridges whose treads are hard to distinguish while walking.

Luckily, most **Venetian bridges** are stone, revealing an effective use of traditional materials that still holds true today: every step tread is in white Istria stone, which marks the



#### Calle ending on water

Blind people walking down dead-end calli can find themselves on the edge of canal bank without warning, thus risking falling into the water. However, in case of high tides or poor visibility everybody is subject to this risk (picture: Calle Bernardo).



**Banks without parapets**  
**A blind person keeping to the middle or right of the street will suddenly find themselves on the canal edge thus risking falling into the water (picture: Campiello San Rocco).**

step, alternating with trachyte and other darker building materials. This makes the structure of the bridge much more "readable" and easy to cross safely even in case of poor visibility.

#### PROBLEMS OF ORIENTATION

While walking around Venice, visitors may find it difficult to get their bearings, feeling as though they are in a small labyrinth made of calli, campi and canali, but those familiar with the city and able to recognize the signals it offers at every corner know it is not so.

This applies in particular to the blind living in the city - though they can find their way through calli and campi, they may find it difficult to **identify the vaporetti landing-stages** or the **bridges** when they are parallel to the direction they are walking in or on banks without parapets. In these cases, they are forced to walk on the outermost edge of the banks to search for the bridge or landing-stage thus facing the risk of encountering unexpected drops and falling into the water.

#### POSSIBLE SOLUTIONS

As mentioned, the Venice catchment area is far greater than that of many other equally large tourist cities. Making public itineraries accessible means combining the need to **safeguard the cultural and artistic heritage** with the requirement of ensuring every citizen's right to accessibility and safety.

The work out by the Administration in the latest years regarding the needs of people with visual disabilities resulted in the identification of two major intervention areas: **ensuring safety** by eliminating dangerous situations, and **making orientation easier**.

In both cases, the proposed solutions **favour the use of natural elements** and, only where that is not possible, the use of **tactile bumps on the pavement**. As far as the latter are concerned, in compliance with the provisions of the Commissione Autonomia (Autonomy Commission) of the Unione Italiana Ciechi (Italian Union of the Blind), published in the special issue of the Corriere dei Ciechi (December 2000), "Progettare per l'autonomia" (Planning for Independence), only two tactile signals are used: the **direction signal**, made of raised parallel lines, when a structure must be identified, and the **warning signal**, for loading and unloading goods, made of raised small domes/half-spheres, to identify dangerous situations. All activities of the office responsible for the elimination of the architectural barriers involved constant two-way communication with the users, who were involved in the active experimentation and testing of tactile paving surfaces, as well as in the planning of works.



#### Proposed solution

**Re-introduction of mobile cast-iron or iron gates where banks are used for loading and unloading goods.**

**The opening will be provided with tactile paving surfaces with audible warning signals that will alert the blind/partially sighted when the gate is open.**



A positive dialogue relative to safeguarding the city and urban accessibility has also been built up with the Venetian Soprintendenza, the office responsible for cultural heritage.

### ENSURING SAFETY

Three possible solutions have been identified in order to ensure that the blind can detect **the end of the calle** with their white stick in time and avoid the risk of falling into the water: the reintroduction of the **original cast iron or iron fixed gates**, where there is evidence of their prior existence.

The **original mobile gates** will be reintroduced for safety reasons also on banks for loading and unloading goods. In this case a tactile paving surface will also be put in place, with audible signals that warn the blind in case of an open gate; finally, where the reintroduction of the original gates is not possible (for safety reasons or other motives), a stretch of **tactile paving surface** with warning-danger signals will be placed before the edge along the entire calle or bank.

In compliance with the special laws for Venice, only **traditional building materials** can be used in the city; consequently, paving surfaces with different or contrasting colours with respect to the surroundings cannot be utilized.

Crossing **wooden bridges** has become safer thanks to a simple device that improves their "readability", by means of an anti-slip "**step-marker**" in contrasting colour with respect to the tread.

This device will be useful not only for the partially sighted, but also for most elderly people and people with poor sight.



#### Ancient gates

Falling into the water is an age-old problem: Venetians used to protect the calli ending on water and the banks close to the bridges by means of fixed or mobile gates. Many fine examples still exist (picture: Campo S. Stefano).

### MAKING ORIENTATION EASIER

In addition to intervention to make mobility safer, the Administration has tried to respond to another problem area reported by users: the difficulty in finding **bridges or landing-stages** that are **parallel to the direction users are walking in** without falling into the water. In this case too, the Administration opted for tactile paving surfaces only on the most important itineraries and where natural reference points were lacking.



#### Ponte dell'Accademia

Wooden bridges are difficult to decode. The absence of a step-marker makes the steps look like a continuous surface, causing people with poor sight to feel particularly insecure when descending.



#### Proposed solution

A simple anti-slip step-marker, in contrasting colour with respect to the tread, makes crossing bridges easier and safer (picture: bridge at Tre Ponti).



**How to detect a bridge**  
Identifying a bridge may be difficult if it is parallel to the direction the blind or partially sighted are walking in or on banks without parapets or low walls for protection (picture: fondamenta Misericordia).



**Proposed solution**  
Only in cases where there are no natural points of reference, a tactile paving surface for detection will be laid perpendicularly and in line with the bridge.

#### COMMUNICATING ACCESSIBILITY

Another important aspect of the efforts made to improve Venice's accessibility is **communication**: in other words, communication is an integral part of the policy of elimination of the architectural and perception barriers. Users have been provided with **tactile maps** informing them of every intervention carried out by the City of Venice. In case of intervention in particularly complex urban areas, tacti-

le maps represent a **valid tool** communicating forthcoming projects and making orientation easier.

Further maps illustrating the city's unique morphology can be downloaded from the Facilitated Reading Project - **Progetto Lettura Agevolata** website ([www.letturagevolata.it](http://www.letturagevolata.it)), for those who want to get to know the city better.

**Tactile maps**  
Various tactile tables describing forthcoming interventions have been created using "microcapsule paper" to ensure improved tactile exploration.



## THE AUTHORS

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