

SYMBOLS Culture of Death & Cultural Life

Good practices to attract the visually impaired people target audience to the built heritage



Co-funded by the Creative Europe Programme of the European Union



Good Practices case studies with Blind

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INTRODUCTION

SYMBOLS "Culture of Death & Cultural Life: New Audiences and Creations around European Cemeteries" is a international cultural cooperation project co-financed by the program "Creative Europe" of the European Commission. The project, led by the Avilés City Council through its Municipal Foundation for Culture, also gathers partners such as a Slovenian public company responsible for the management of the cemeteries in the village of Maribor, the Culture Department of the City of Genoa in Italy, the Dundee and Angus College in Scotland, the municipal association of Nebbiu in Corsica, and the Limerick Institute of Technology in Ireland, a public education centre dedicated to the teaching of art and design.

The project tries to foster exchange and artistic creativity, as well as access to culture, utilising funerary symbology as a source of inspiration and common theme.

Among its objectives, we could highlight:

- The transnational exchange of cultural and creative works (mobility in artists and products)
- · The work with new audiences, using cemeteries as "open air museums"
- · The promotion in the use of new technologies

For this purpose, within SYMBOLS, the following main activities have been carried out:

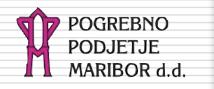
- Creation of inventaries and definition of common artistic elements (symbols), and creation of guides and activities with and for the new generations, in particular through an app for augmented reality called "ARTOUR".
- Work on access to heritage with and for audiences with hearing or visual disabilities, and the adaptation of ARTOUR for their needs.
- Organisation of the current touring and multidisciplinary exhibition that presents the created works by more than 40 European artists through 2 artistic residencies
- Exchange and transference of the experience through workshops and the creation of best practice guides, in particular those directed to the members of the Association of Significant Cemeteries in Europe (ASCE).



INTRODUCTION

Within this framework, this current publication summarises the activities and best practices created to bring the constructed and artistic heritage to people who are blind or suffer from visual disabilities, through a selection of applicable examples in European cemeteries. This guide is aimed at educational staff and also at the management staff of cemeteries, members of ASCE, with a view to share resources and experiences about cemeteries as artistic resources.





Slovenia. Pobrežje cementery. Maribor

Audience

1 blind person, 60 years old

Resource

Pobrežje cemetery, Maribor; September 5th 2016

Activities carried out

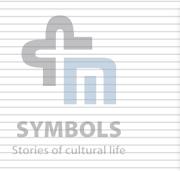
The purpose of the meeting and guided visit was to discover the actual issues blind people may have at discovering cemeteries and the heritage at the cemeteries.

The findings would help us achieve 2 goals:

- To improve the ARTOUR app to be used by the blind and by people with visual disabilities.
- To develop possible visiting routes or other solutions for the blind and for people with visual disabilities.

Outcomes

During the meeting we discussed several aspects of how such people perceive their surroundings, what technologies may help them and what are their actual needs.





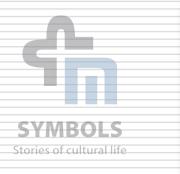
Slovenia

As it turned out, completely blind people still lack proper technological solutions in orientation and guidance solutions. Devices that currently exist are not helpful for a number of reasons:

- their accuracy is not good enough and may put them at risk.
- many events occur rapidly in today's world and changes are too quick for devices to understand and interpret them correctly (a bus may be standing 20m outside usual point due to construction work)
- devices are not ready for completely blind people (no buttons, just screens) or they are developed on
 platforms that are not fully supported.

For all these reasons people who are completely blins are worse supported than those with reduced vision.





POGREBNO PODJETJE

MARIBOR d.d

Slovenia

On the other hand, people with reduced vision can benefit a lot by simple technological solutions. They are already using mobile devices and certain adaptations can make an app very useful. We have discovered the following possibilities in this regard:

- · make the app ready for disabilities mode
- add audio guiding
- · add audio recordings of the text

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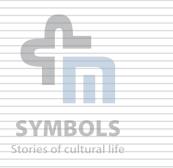
These features will be added to ARTOUR during the project to enhance the user experience. In the future, the ARTOUR team plans to enhance the navigation systems by implementing guiding technology were available.

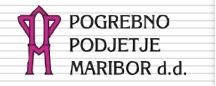
Evaluation from the organization

For Pogrebno Podjetje Maribor, who manages the cemetery, the visit was interesting in that it highlighted many real life obstacles that need to be approached carefully in the future to make it possible for blind people to explore cultural heritage at the cemeteries.

On the other hand, we have discovered from the blind person that it is really a very limited issue in modern world, since only 3 people in Maribor are completely blind. They need assistance for most of their life outside their house or going to unusual places. Therefore, it is economically and otherwise very hard to make solutions on a small scale. Solutions need to be found and addressed on a bigger scale by international cooperation, yet adapted at small scales (as in particular cemetery).

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Slovenia

Evaluation from the audience

The blind person and his caregiver were pleasantly surprised by the overall experience and idea that there is actually someone working on these issues in this way. As a real marginal group of population they do not often get that much attention.

The idea about real prices that was discussed at the meeting (with guiding technology) attracted much of their attention since they are often inclined to learn about new solutions at a much later stage. Normally it takes for example 2 years for them to get along with a trained dog.

The main difficulties and the key successful aspects

The main difficulty was to actually get anyone from this target group and arrange a meeting due to the very narrow target group we were looking for (completely blind people). Furthermore, it was really hard to plan anything beyond a meeting and short guiding tour since we did not have any previous knowledge or experience on this matter.

The biggest success was to acquire plenty of in-depth information about possible future arrangements for blind people and for people with reduced vision.

Recommendations

One of the key opportunities would be to engage in joint projects that would foster the development of guided tours in institutions.



United Kingdom. Houses of Parliament

Resource

Houses of Parliament

Audience

Blind and partially sighted visitors

Contact

www.parliament.uk/visiting/visiting-and-tours/tours-of-parliament/tactile-tours/

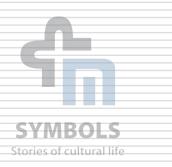
Description

UK residents who are blind or partially sighted can arrange a fully guided tactile tour of the Houses of Parliament free of charge.

In order to develop a real sense of the building and its history, visitors have the opportunity to talk to the House of Parliament team before the tours start and touch various specially made models and other objects.

The tours then follow a route covering





United Kingdom

Westminster Hall, Central Lobby, the Lords Chamber in the House of Lords and the Commons Chamber in the House of Commons. There are plenty of objects and items of furniture to explore along the tour route.

Tours run between 10-12 times per year, usually late on Friday afternoon, and last approximately 120 minutes. Visitors are recommended to arrive 60 minutes prior to the start of the tour to allow time to explore the tactile objects in Westminster Hall and to visit the facilities before the start of the tour.

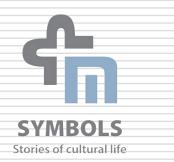


Booking requests should be made using the online tactile from available at the website:

http://www.parliament.uk/visiting/visiting-and-tours/tours-of-parliament/tactile-tours/touch-tourbooking-form/

All applications will be entered into a ballot three weeks before each tour date and successful applicants will be contacted to confirm their booking request.

The Houses of Parliament run regular training sessions for team members and staff to complete a customised e-learning course on disability awareness. Training is provided to help them know how to assist visitors who are wheelchair users, visitors living with dementia, visitors with mental health problems and visitors with special educational needs.



Argentina. La Recoleta. Buenos Aires

Resource

La Recoleta cementery, Buenos Aires

Audience

Blind people

Contact

www.cementeriorecoleta.com.ar cementerio-recoleta@buenosaires.gob.ar

Description

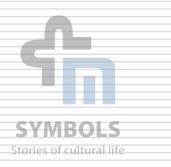


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In Buenos Aires, La Recoleta is one of the most popular cemeteries, and has become a tourist attraction, providing guided tours free of charge.

The cemetery started its activity in 1822, and although in its beginnings it was a Roman Catholic cemetery by denomination, it later became secular, and today its graves and tombs gather people from all beliefs and religions. This site hosts over 5,000 people, amongst who are politicians, Nobel Prize recipients, artists and citizens.

The cemetery is renowned for its numerous and beautiful sculptures, most of them depicting angels.



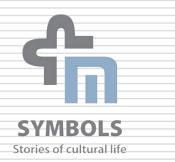
Argentina

The graves and tombs of the wealthiest families in the country have become an interesting sight, where one can admire from classical style constructions to art nouveau. The artistic diversity of the cemetery is such that many students of art and architecture visit it as part of their practical classes.

Over the last few years, some companies and tourist guides that specialise in the contents of the cemetery have been providing guided tours for blind people. The visits are adapted to individual or group requirements and start with an informal talk about the neighbourhood of Recoletas, where the cemetery is situated. Afterwards, a visit is paid to the Church of El Pilar and the cemetery.



At La Recoleta Cemetery, visitors come in contact with beautiful sculptures, discovering through their tact forms and textures that have been previously described. Furthermore, the visit includes reading of commemorative plaques, which are apt for blind people given their raised lettering.



Greece. Museum Tactual. Athens

Resource

Tactual Museum, Athens

Audience

Blind or visually impaired

Contact

www.tactualmuseum.gr fteweb@otenet.gr

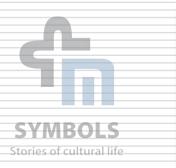
Description

The Tactual Museum



was founded in 1984 and it is housed on a two-floor neo-classical building in Kallithea, Athens (Greece). It aims at providing to visually impaired people the opportunity to come in touch with ancient Greek Culture.

The exhibits in the Tactual Museum, - statues, vessels, sculptures and useful artifacts - are exact replicas of the originals which are displayed in the Museums of Greece, such as the National Archaeological museum, the Acropolis, Delphi, Olympia, Heraklion Museums and the Museum of Cycladic Art, dated back to the Cycladic, Minoan, Geometric, Archaic, Austere Rythm, Classical, Hellenistic and Roman periods.



Greece

It also includes a Byzantine section , which consists of wood carved temple, epitaphs and icons, as well as a model of a Byzantine Church and several religious artifacts. There is also a new exhibition dedicated to the education of the public regarding the Olympic Games and the ParaOlympics, which was introduced by the Culture Ministry's General Secretary of the Olympic Games. In the lobby can be found the Mascots and the symbols of the Olympic Games which have been reproduced in anaglyph form by the artist Maria Veropoulou, as well as relief maps of Athens with the Olympic Facilities pointed out.

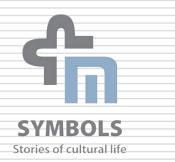
Educational programmes

Educational programs for children aged 6 - 12, can take place upon request.

The children are invited to touch and feel the exhibits and try to conceptualize the sculptures by touch. The use of masks during the educational games help the sighted children have a better understanding of the problems visually impaired individuals encounter.

Educational programs are also available upon request on the weekends.

At the Tactual Museum, programs for educating teachers in Interpretation of seminars are offered. The program is directed at teachers of pre-school and elementary school



United Kingdom. Tate Gallery

Resource

Tate Gallery

Audience

Blind or visually impaired

Contact

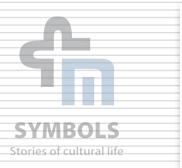
www.tate.org.uk ticketing@tate.org.uk

Description

Tate Gallery provides several types of services for blind or visually impaired:

- Braille and large print gallery plans are available from the Information desks.
- Touch tours: they include a sculpture that can be explored through direct handling and a number of other two and three dimensional works that are explored using a combination of raised images, handling objects, description and discussion
- Visual description: The talks take place seated in the gallery with trained picture describers giving a detailed and fascinating description of the works. Sighted escorts and guide dogs are welcome.





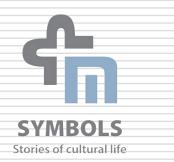
United Kingdom

· on line tools: i-Map is an online art resource designed for visually impaired people with a general interest in art, art teachers and their visually impaired pupils. It incorporates text, audio, image enhancement and deconstruction, animation and raised images. Rather than examining the entire artwork at once, i-Map introduces detail in a carefully planned sequence, gradually building towards an understanding of the work as a whole. Used in conjunction with the text-only facility on the website, the drawings bring to life the visual elements of the art works for those people who have no useful sight. They can be accessed from the raised images on the website and can be ordered from the RNIB Raised Images Service.

The initial phase of i-Map launched in 2002 focused on four pairs of works by Henri Matisse and Pablo Picasso. It explored their artistic innovations, influences and motivations, as well as some of the key concepts in modern art. The second phase, The Everyday Transformed, focuses on six new works



from Tate's collection by artists who all share an interest in the material reality of everyday life and includes an exploration of movements such as Surrealism, Dada, Futurism, Pop Art and Rayonism. This e-tool has received widespread recognition including winning a BAFTA Interactive Entertainment Award for Accessibility in 2002, being short-listed for the Visionary Design Awards in 2002, and receiving a special commendation at the Jodi Mattes Awards 2003.



Vatican City. Vatican City Museums

Resource

Vatican City Museums

Audience

Blind

Contact

www.museivaticani.va visitedidattiche.musei@scv.va

Description

The Vatican Museums have available 2 different tours, free of charge, for blind and visually impaired audiences:



- Tactile tours which enable visitors who are blind or visually impaired to explore a selection of original sculptures on display in the Gregorian Profane Museum.
- A multisensory itinerary to explore a selection of works in the Vatican Pinacoteca (Picture Gallery). The aim of this tour is to enable these visitors to understand ichnographically a selection of masterpieces, by allowing them to touch thermoformed panels and scale reproduction bas-reliefs, equipped which Braille legends and black print descriptions.



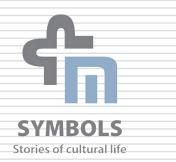
Vatican City

During the tour, the visitors' idea of the work of art is stimulated through other senses, so as to facilitate the re-elaboration of the artistic message. Multidisciplinary didactic communication systems are used, such as literary and musical stimuli as well as multisensory systems using analytic and synesthetic references.

Visit Details

- Syncretic and analytic reading of the works of art reproduced on the thermoformed panels and on the scale reproduction bas-reliefs. In-depth study of the subject, including the different aspects and effects of the composition, techniques, form and colour.
- The visitor can listen to poetry reading and music, which together with analogical, syncretic references (aural, olfactory, tactile, etc.), stimulated by the guide, evoke the images depicted, enabling visitors to experience the work of art in its entirety.
- This guided tour offers the possibility of touching a fragment of a fresco with the detail of the halo of the angel, by Melozzo, and a section of the painting portraying the shroud of the Deposition, created
 as similar as possible to the original - by expert restorers.

Guide dogs for the blind may enter the Museums provided they are kept on a lead and wear a muzzle. In the case of entry with a guide dog, the visitor must communicate their intention to visit one day in advance.



Portugal. The Community Museum of Batalha

Resource

The Community Museum of Batalha, Portugal

Audience

Blind or visually impaired

Contact

geral@museubatalha.com www.museubatalha.com

Description



The MCCB is a small local community museum managed by the Town Council of Batalha.

In 2009, the Batalha Municipality agreed to set up a new museum – Museu da Comunidade Concelhia da Batalha [Batalha Community Museum] with a "Museum for all" approach. The desire to take the challenge was based on political, social and economic reasons and, above all, on the belief that by using such an approach an otherwise small and local museum could gain visibility and recognition.



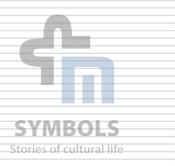
Portugal

MCCB engaged a team of experts, led by Dr. Joselia Neves, from different scientific and technical backgrounds and with different skills who worked together as interdisciplinary production team. An advisory committee was also established representing the interests of blind people and people from other disability groups.

In order to make the museum accessible for Blind or visually impaired audiences:

- Touchable objects were incorporated into the permanent collection within cabinets and showcases were designed to be accessible to everyone;
- Audio description, including guided touch, was incorporated in the standard audio guide. The audio guide included description and the voices of local people with the more general information offered by the narrator;
- In the designated spots on the audio tour that allowed for touch, real objects, replicas or raised pictures were displayed to allow direct contact;
- All printed texts were available in Braille. presented Information in digital formats, such as virtual books on interactive displays, were also available in analogue formats (i.e. paper), videos were subtitled. and colourful pictures and small print texts were also made available in black and white, high contrast and big print.





Portugal

The Advisory Committee played a key role in the Museum collection design and planning. A good example of it was the 3D model of the Monastery, conceived to show the different phases in which the Monastery was built. The original concept was to create a video showing 3D virtual reconstruction of the architectural changes in the Monastery. This would be supported by three 3D printed tactile models showing how each of the "new" phases contributed to the architectural whole. The models were made using additive technology, faithful to scale and detail, and were beautiful clean white pieces that were intended to be appealing to the eye and touch.

Initial tests by the blind or visually impaired representatives at the advisory committee soon made it clear that these faithful replicas were far too detailed and on too small a scale to be informative. The first step taken in response to this was to provide the advisors with tactile replicas of the Monastery's gargoyles. The size, texture and, above all, their simplicity resulted in the gargoyles being identified as one of the highlights of the museum by the advisory panel.



Canada. Museum for Human Rights (CMHR). Winnipeg

Resource

Canadian Museum for Human Rights (CMHR), Winnipeg

Audience

Blind or visually impaired

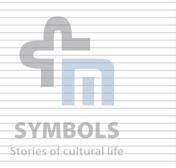
Contact

Lise Pinkos - Responsable de Programas Educativos (Manager, Education Programs) lise.pinkos@humanrights.ca www.humanrights.ca

Description

<u>Sight Unseen: International Photography by Blind Artists</u> is the first major exhibition of work by acclaimed international blind photographers, uniquely enhanced by the CMHR. It explores the idea that blind people can often see in ways that sighted people cannot. The core exhibition features photographs by artists with various degrees of vision loss who use different technologies and creative methods to express what they see.

Sight Unseen is also the first museum exhibition in the world to use cutting-edge technology by <u>3DPhotoWorks that creates three-dimensional</u>, tactile versions of the photographs for people with vision loss.



Canada

The images are created in a three-step process. First, the two-dimensional image is converted into 3D data. Next, the data is sent to a machine that sculpts the image in a block of substrate, giving it length, width, depth and texture. In the final step, the image is laid back down on top of the relief in perfect registration.

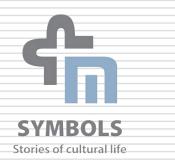
Touch-activated sensors are also embedded in the prints to provide audio descriptions and narrative, creating context for a blind person who is viewing the image for the first time.

The Museum offers enhanced accessibility for people with vision loss through its mobile app, which can be downloaded for free from the App Store or Google Play (simply search "Canadian Museum for Human Rights").

Exhibit text and images of the photography flow into the mobile app when visitors approach various Universal Access Points (UAPs) located throughout the gallery. The information can also be accessed by keying in the 3-digit UAP number, which is displayed both in raised figures and in braille. Cane stops on the floor alert blind visitors to the location of different exhibit elements.

The Canadian Museum for Human Rights offers a wide education programme including the techniques used by the artists of the Sight Unseen exhibition:

- <u>Creative touch</u>: participants are encourage to use braille and fingers to express themselves by creating a raised-ink drawing using special paper and pens Then, Museum staff will heat the artworks in a machine to create the tactile effect.
- <u>The #VoiceOverPhoto project</u>: expressing creativity by using an iOS accessibility tool called VoiceOver, designed for people with vision loss.
- Lectures and workshops with blind or visually impaired photographers



USA. Instituto de Artes. Detroit

Resource

Detroit Institute of Arts

Audience

Blind

Contact

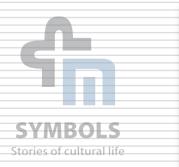
Pamela Marcil pmarcil@dia.org www.dia.org

Description

The Detroit Institute of Arts (DIA), one of the premier art

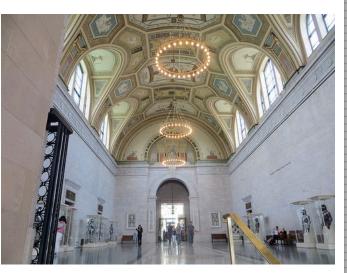
museums in the United States, is home to more than 60,000 works that comprise a multicultural survey of human creativity from ancient times through the 21st century.





USA

The DIA recently launched an art-making program for students in Detroit Public Schools and Lincoln Park Public Schools who are blind or visually impaired (BVI), in collaboration with University of Michigan (UM). During five weekly visits, museum staff trained 15 UM art students in how to work with BVI students in an art-making experience. University students provide individual assistance to BVI students during four weekly art-making sessions, led by artist and UM art instructor Sadashi Inuzuka and DIA teaching artists. At the end of the project, the BVI students' art will be displayed in the museum's Walter Gibbs Learning Center.



This prototype program is built on Inuzuka's work, who is working with the DIA to establish an international model for providing learning opportunities for blind or visually impaired youth while building understanding, friendship and awareness between all kinds of learners. Visually impaired himself—Inuzuka has retinoschisis, which keeps him from driving and makes it difficult to read, Inuzuka started the program following a series of presentations and workshops.

Jennifer Czajkowski, executive director of Learning & Interpretation (L&I) at the DIA, sees positive outcomes for all involved. "Students who are blind or visually impaired engage in creative expression in an inspirational setting, learning from art students and teaching artists," "UM students gain experience and develop skills working with different kinds of learners, coached by Sadashi and DIA staff."

The DIA's L&I department develops and manages this and other programs where viewing, discussing, and art-making stimulate thinking and promote personal connections with art, no matter what cognitive or physical abilities an individual brings to the experience. At the heart of these programs are the beliefs that art is an inherently interesting subject that provides excellent opportunities for mental stimulation, and that art serves a vital role in helping all individuals explore and express their humanity.



Germany. Diálogo en la Oscuridad. Hamburgo

Resource

DIALOGUE IN THE DARK, Hamburg

Audience

Blind or visually impaired

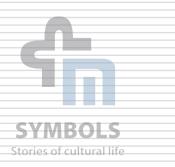
Contact

info@dialogue-in-the-dark.co www.dialogue-in-the-dark.com

Description

The concept of Dialogue in the Dark is simple: <u>visitors are lead by blind guides in small groups through specially</u> <u>designed darkened rooms</u>. Scent, sounds, wind, temperature and textures convey the characteristics of daily environments – for example a park, a city, a boat cruise or a bar. A reversal of roles is created: people who can usually see are confronted with the sudden withdrawal of their key-sense sight and are taken out of their familiar environment. Blind people are the experts out of their living circumstances, and provide the public with security and a sense of orientation by transmitting to them a world without pictures.

The concept has proved quite effective. Since more than 25 years Dialogue in the Dark has been presented in 39 countries throughout Europe, the Americas, Africa and Asia. Millions of visitors have been led through the exhibition by thousands of blind individuals, and learned to see in the darkness.



Germany

Scenario

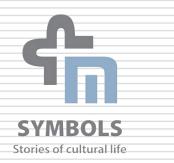
A tour in the exhibition lasts for 1 to 1,5 hour and happens in complete darkness. In the beginning it's a shock to accept the total absence of any visual information, but bit by bit human nature is able to adapt and can cope with the unusual circumstance.

Most importantly are two helpers: Firstly, a white cane is delivered before the journey starts. This every day aid of blind people helps to find orientation in the dark, and protects everyone while moving around by identifying obstacles of all kind. Secondly, no one is left alone in the dark. All tours are organized in groups of up to eight people, and lead by an experienced and specially trained blind guide. S/he knows exactly how to supervise the group. Comfort and safety are guaranteed and as the most competent ambassador blind individuals convey a culture without images.

The visitors explore the unseen, and learn to see in darkness. Communication bridges the gaps, and with physical support as holding hands and most importantly trust, all people appreciate the tour in the dark. The tour guide takes the group through faithfully recreated environments as a park, a city, helps to embark a ride on a boat or offers a drink or a snack in the bar. An invisible landscape emerges, composed out of sounds, scents, wind, textures and temperatures and arises inner pictures in the people's mind.

Guides

All exhibition guides at the global Dialogue in the Dark hubs are blind or visually impaired people. They lead visitors through the exhibitions providing an imaginative, educational and entertaining experience. Progressing from initial disorientation to the joy of perceiving the world through the other senses, blind guides enable visitors to feel comfortable and safe during the exhibition tour.



Spain. Museo del Prado. Madrid

Resource

Museo del Prado, Madrid

Audience

Blind or visually impaired

Contact

atencion.visitante@museodelprado.es www.museodelprado.es

Description



In 2015 the Museo del Prado launched its first initiative focused on visually impaired visitors and based on innovation and technology. As a result of this project, six works representative of different pictorial genres to be found in the Museum's collections can now be touched.

The Prado's initiative is unique since it applies 3D printing techniques to reproductions of painted—i.e. flat—work. The exhibition "Touching the Prado" is one of the most sophisticated yet in efforts to unlock the beauty of the visual arts for those unable to see them.

Developed in collaboration with professionals in the sector of visual impairment, this project allows for the reality of the painting to be perceived in order to mentally recreate it as a whole and thus provide an emotional perception of the work. Non-sighted visitors will be able to obtain a heightened degree of artistic-aesthetic-creative enjoyment in order to explain, discuss and analyze these works in the Prado.



Spain

The Museum has chosen a limited selection of painting (i.e. Noli me tangere, de Correggio; La Gioconda, Leonardo da Vinci; La fragua de Vulcano, Velázquez; and El caballero de la mano en el pecho, del Greco, among others) due to their accessibility in terms of size and details. The ideal size to use this 3D technique is 1,80×1,20, so paintings can be easily touched with the hand.

The paintings are photographed and 3D printed using the Didú technique to create almost a textual guide to the original paintings. Didú is a technique developed by a Bilbao, Spain-based design agency, which describes the technique on their website as "relief printing which allows us to get closer to art in a different way" by adding volume and texture to what is usually a flat representation. Certain aspects of each painting, including textures, were selected for showcasing in the 3D reproductions. A chemical process involving ultraviolet light and special ink resulted in a few millimeters of added volume. The reproductions retained the originals' color, for visually impaired visitors with the ability to perceive it.



It takes about 40 hours to achieve the detailed effects of volume and texture in a high resolution photograph of an original artwork. After the printing, it takes another 12 hours to apply a chemical that brings volume to otherwise flat surfaces. The outcome is an original interpretation of the original — a tactile image — that can bring out entirely different dimensions in art that all can enjoy. Instead of having the paintings' details described, now they can also be felt — offering a different sensory experience to great works of art. In fact, by touching one's way through an artwork, the sight-impaired can create a mental map of the entire piece, and potentially develop a more emotional response to the experience as well.



CONCLUSIONS

Technology has provided new solutions to access museums, galleries and heritage sites for blind and partially sighted visitors. Apps and the latest ICT solutions have dramatically changed the way to enhance engagement with the arts of blind or visually impaired people.

Tactile panels, enlarged prints, Braille and visual descriptions have given way to new measures of bringing cultural resources to these groups. At present, the main museums and cultural heritage management entities are opening new forms of access to art, including:

- <u>3D printing techniques to reproductions of painted—i.e. flat—work</u>. Developed in collaboration with
 professionals in the sector of visual impairment, this initiative allows for the reality of the painting to
 be perceived in order to mentally recreate it as a whole and thus provide an emotional perception of
 the work. Non-sighted visitors are able to obtain a heightened degree of artistic-aesthetic-creative
 enjoyment in order to explain, discuss and analyze pieces of art.
- <u>On line tools</u>, incorporating text, audio, image enhancement and deconstruction, animation and raised images. This tools help to understand the work as a whole. An integral aspect of some available tools, is the creation of raised drawings. Used in conjunction with the text only function on the website, the drawings bring to life the visual elements of paintings.
- <u>Soft technology devices</u>, like DiscoveryPen, an audio labelling device that brings digital to traditional print technologies. Using litho printed paper or board, miniscule dot patterns are added to the artwork. The device has a scanner at its 'nib' which detects the pattern, thereby triggering a signal to play a pre-recorded MP3 file.



CONCLUSIONS

 <u>Multisensory itineraries</u> to explore artistic works by allowing them to touch thermoformed panels and scale reproduction bas-reliefs, equipped which Braille legends and black print descriptions. During the tour, the visitors' idea of the work of art is stimulated through other senses, so as to facilitate the re-elaboration of the artistic message. Multidisciplinary didactic communication systems are used, such as literary and musical stimuli as well as multisensory systems using analytic and synesthetic references.



RECOMMENDATIONS

- Well trained staff is one of the key issues to smooth access to cultural heritage (i.e. regular training sessions for team members and staff to complete a customised e-learning course on disability awareness). Training help staff to know how to assist visitors with special educational needs.
- Involving blind staff and creating a reversal of roles: people who can usually see are confronted with the sudden withdrawal of their key-sense sight and are taken out of their familiar environment. Blind people are the experts out of their living circumstances, and provide the public with security and a sense of orientation by transmitting to them a world without pictures.
- Collectiveness: Cooperation with professionals in the sector of visual impairment is critical to provide feedback and test the solutions proposed. Continuous and effective consultation with blind and partially sighted visitors and their representative organisations is highly recommended when taking practical measures to ensure accessibility of cultural activities.
- Educational programmes both for general public and non-sighted visitors can increase awareness and public engagement. Art-making program for students who are blind or visually impaired, allows them to explore a variety of materials, textures and colors, and develop fine motor skills.
- Communication: Redesigning the website to make it an immersive experience on par with attending the museum in person, optimized for people with low vision who use screen readers.
- Social clauses: To require from tenders for public procurement of services that they demonstrate their experience and understanding of inclusive design (also known as Design for All) for people with a disability and specifically visually impaired people.



Edita:



Ayuntamiento de Avilés. Fundación Municipal de Cultura. (Spain)



Empresa pública de gestión de cementerios de Maribor. (Eslovenia)



Ayuntamiento de Genova. Departamento de Cultura. (Italia)



Centro educativo de Dundee y Angus. (Escocia - R.U.)



Mancomunidade de municipios de Nebbiu. en Córcega. (France)



Instituto de Tecnología de Limerick. (Irlanda)



Co-funded by the Creative Europe Programme of the European Union



Colabora:

Asociación Europea de Cementerios Significados (ASCE)







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