

INCLUSIVITY AND ACCESSIBILITY TO VISUALLY IMPAIRED AUDIENCES TO AUDIOVISUAL COLLECTIONS AND MUSEUMS

A Reflective Paper Over "*Making Sense: Exploring Moving Images Through Non-visual Multi-sensory Experiences*" At The Netherlands Institute For Sound And Vision

Camila M. P. G. Michelini¹ - April, 2020

Abstract: We live in a visual world. Images are everywhere, especially in museums, where visibility is key. When it comes to moving images, the visual aspect of the material is even greater since the first contact with it offered to the observer is through sight. So does it mean that visually impaired audiences are doomed to not have a consistent access to video content, which means not being able to have a deeper understanding of what's being shown through the moving images? Blind people or people that have low vision live in the same world as everybody else. Consequently, they do have constant contact with kinetic audiovisual content living in this society. It is time, then, to start taking this group into consideration when it comes to audiovisual cultural heritage.

This paper shows the evolution of a project destined to find non-visual multi-sensory solutions to cognitive access to video content. Through the initiative of *Making Sense*, a case study involving a series of workshops put into practice at the Netherlands Institute for Sound and Vision, it analyses the process of conception, organization, practice and reflection over the findings of an eight month participatory research.

Key words: *inclusivity; accessibility; visual impairment; multi-sensory approaches; participatory research; human rights, barriers to accessibility; museology; experiential learning; moving images; audiovisual; collection; learning cycle; holistic process*

INTRODUCTION

"The problem for the disabled person is that the ordinary habitual body, which relates us to the world, is no longer the same as it is the actual body. This knowledge is unacceptable, because one would be exiled from one's world. The phantom arm, Merleau-Ponty argues, is thus not a mere recollection, but a genuine phantom. The patient feels it now. Refusing to consign an arm to the past, he or she does not merely reminisce about the arm, but experiences life with the arm²."

The beginning

The research that led to the results presented in this paper has its beginnings in 2010: the curiosity of knowing more about how our perception of the world interferes with the way we experience everything around us. The passion in the matter was sparked by through the interest

¹ Reinwardt Academie, Master Museology.

² Hull, John. *Notes on Blindness: A Journey through the Dark*. Profile Books, 2017. p. 175.

in the concepts of phenomenology of perception and how they could help the understanding of how people perceive multi-sensory contemporary art. The intense contact with contemporary art installations and the multi-sensory immersion they can provide awakened the will to understand and discover more about embodied experiences³. Observing visitors' interactions with large scale installations that demanded a finer activation of other senses than sight triggered the enthusiasm in discovering more about the non-visual perception of the world around us. To do so, working with visually impaired people would provide a better understanding on how to observe, recognize and come in contact with exhibits in a highly visual environment such as a museum. The words of John Hull through his "diary" books were the first ones coming from a visually impaired that have contributed to this research. Observations about a world that was getting less and less visual⁴, until all the images and light were completely gone, have been a source of inspiration to perceive everything in the surroundings through a different perspective. Consequently, his presence can be found all along this article, since his testimonials can be used as data to work with visually impaired audiences.

The main barrier to develop the present research in museums was that, in order to explore exhibits with the purpose of collecting subjective and philosophical data, museological spaces would have to be accessible to the visually impaired. Regrettably, this was not the case. It didn't seem fair to let brilliant minds interested in museums be excluded from the museological environment. It didn't seem fair to present to them a small part of an exhibition or a collection in a special and isolated setup in order to fulfill a research, and then not give them the chance to go back and have contact with the artistic or historical objects again. Therefore, it was firstly necessary to engage awareness on promoting accessibility and inclusivity to museums, exhibitions and collections. Consequently, once those sites could provide non-visual discovery of their exhibits, a deeper philosophical dialogue involving the content presented could be explored.

³ Groth, Camilla. 2016. "Design- and Craft thinking analyzed as Embodied Cognition". *FormAkademisk - forskningstidsskrift for design og designdidaktikk*, volume 09, number 01.

Groth, Camilla; Mäkelä, Maarit. 2016. "The Knowing Body in Material Exploration". *Studies in Material Thinking: Experience/Materiality/Articulation*, volume 14. Auckland University of Technology. 1-21

Levent, Nina; Pascual-Leone, Alvaro (Ed.). *The Multisensory Museum: Cross-Disciplinary Perspectives on Touch, Sound, Smell, Memory, and Space*. Rowman & Littlefield, 2014.

O'Connor, Rosanna. "Blind Museology: Moving beyond a visual bias in western culture to build an inclusive environment within museums and galleries". Bachelor's dissertation. University of Exeter.

Vi, Chi Thanh; Ablart, Damien; Gatti, Elia; Velasco, Carlos; Obrist, Marianna. "Not just seeing, but also feeling art: Mid-air haptic experiences integrated in a multisensory art exhibition". *International Journal of Human-Computer Studies* 108 (2017): 1-14.

⁴ Hull gradually lost his vision during adulthood and documented the process. This documentation became, later, the book *Notes on Blindness: A Journey through the Dark*.

Accessibility, inclusion and human rights

“It is these worldly-bodily projects which undergo a transformation in the case of the disabled person. He or she, however, refuses to relinquish the world and to abandon the projects. There must be some assurance, some hope, that however severely disabled I may be, I still belong to this world, this familiar world of hopes and plans with which my life has been intertwined these many years⁵.”

Accessibility has three main definitions according to the Cambridge Dictionary. One is the quality or characteristic of something that makes it possible to approach, enter, or use it. The second is the ability to get something easily. The third is the ability to reach or enter a place or building⁶. All of these definitions are applicable to this research. When talking about accessibility to moving images, the two first ones are more coherent when dealing with a cognitive aspect. When the accessibility proposed refers to a physical element, then the third definition is more appropriate.

As for inclusion, the same source provides two definitions. One relates to the act of including something or someone as part of something. The other has a direct relation to social responsibility, being defined as the act of allowing many different types of people to do something and treating them fairly and equally. The latter is the suitable translation to what this research refers to.

When it comes to defining visual impairment, the World Health Organization (WHO) has set an official range of visual acuity to include people in this category. According to WHO, someone is visually impaired if their visual acuity is between 0.1 and 0.3 (10-30%). If the visual acuity is between 0.05 and 0.1 (5-10%) then we speak of severe visual impairment. When the visual acuity is between 0.02 (2%) and 0.05 (5%), then the person can be considered socially blind. As for someone to be called blind, their visual acuity has to be between 0.02 (2%) and light perception. For those who are totally blind, there is no light perception⁷.

The Federations of International Human Rights Museums formed in 2010 has as its pillars two main statements regarding contemporary museum work: 'first, that the roles of museums are changing; and second, that museums have acknowledged a growth in their social

⁵ Hull, *Notes on Blindness: A Journey through the Dark*, p. 175.

⁶ <https://dictionary.cambridge.org/dictionary/english/accessibility> Accessed April 06, 2020.

⁷ <https://www.bartimeus.nl/visuele-beperkingen> Accessed April 06, 2020.

responsibility⁸. The FIHRM's principles premises reinforce that it is time for museums to start including blind and partially sighted visitors to their target audiences. In the era of rethinking the position and relation of museums towards society as a whole, the idea of diversity became central to museums and it can be addressed through representation, education, and action. The visually impaired audience is a minority in this diversity that is oppressed, alienated and part of an excluded societal group⁹.

Dutch museums and collections such as Sound and Vision have a moral duty to think not only about the FIHRM's principles but also about the Dutch Law for Inclusion and Accessibility to Museums. In 2016, the Netherlands ratified the UN Convention on the Rights for People with Disabilities, meant to encourage, protect, and ensure the rights of people with any kind of impairment¹⁰. The truth is that very few practical initiatives can be found in the museum scene in the country. A growth in the debate about the subject is slowly happening since 2016. Nevertheless, big institutions have done what seems like mere baby steps when talking about effective measures to include visually impaired audiences to the museum social scene.

Visually Impairment and Barriers to Accessibility

“The real miracle of acceptance and transformation creates a new coherent world for a body at home in that world. The problem is then how the new world, the state of being blind or paralysed, relates to the other world, that in which sighted or mobile people live. Without this negotiation between the worlds of the disabled and the able-bodied the disabled person, hoping for a physical miracle, continues to live in a broken world, an experience of contradiction and frustration¹¹.”

Hoëlle Corvest presented some points about the reality of inclusion and exclusion of blind people to heritage sites such as collections and museums were brought to light¹². As a blind person working with accessibility and inclusion for more than thirty years, she is someone who has undeniable living and professional experience in the field. Therefore, listening to what she

⁸ Barrett, J. 2015. “Museums, Human Rights, and Universalism Reconsidered.” In *The International Handbooks of Museum Studies. Volume 1: Museum Theory*, edited by Andrea Witcomb and Kyly Message, 93-115. Oxford: Wiley.

⁹ *Ibid.* 93-115.

¹⁰ Pernisco, Nick. "Accessibility for the disabled in the Netherlands: 5 Tips When Visiting Holland". October 19, 2018. *Dutch Review*. Accessed January 07, 2020. <https://dutchreview.com/culture/living-in-the-netherlands/accessibility-for-the-disabled-in-the-netherlands/>

¹¹ Hull, *Notes on Blindness: A Journey through the Dark*, p. 177.

¹² Hoëlle Corvest, telephone call with the author, May 5, 2019. (Annexe 1)

had to say about the subject was one of the most significant steps of this research phase. As a person that constantly faces all kinds of barriers on a daily basis - physical, communicational, social and / or attitudinal¹³ -, she could critically and analytically discuss them taking into consideration a museological reality.

The first point made by Corvest was that, over the centuries, visually impaired people have been taught that they are forbidden to touch most of the things presented in the environment, especially when it comes to museums and historical places. "The touch will damage it" is a sentence that, according to her, they constantly heard since childhood. Therefore, visually impaired people grow up with the idea they cannot touch anything in those places. The result of it is a self exclusion from museums and other similar places because of the feeling of not being welcome there.

Another observation brought up by Corvest concerns what happens when visually impaired people actually try to visit museums or historical places. Sometimes, they are presented to adaptations that can be manipulated. Nevertheless, they miss the interaction with the real thing being shown. Fact is that having access to an adapted reproduction is different than having access to the real object. The critical theorist Walter Benjamin has already talked about how the aura of art is compromised by its authenticity. The political theorist Andrew Robinson explains it saying that

"the aura is an effect of a work of art being uniquely present in time and space. It is connected to the idea of authenticity. A reproduced artwork is never fully present. If there is no original, it is never fully present anywhere. Authenticity cannot be reproduced, and disappears when everything is reproduced. Benjamin thinks that even the original is depreciated, because it is no longer unique. Along with their authenticity, objects also lose their authority. The masses contribute to the loss of aura by seeking constantly to bring things closer. They create reproducible realities and hence destroy uniqueness. This is apparent, for instance, in the rise of statistics¹⁴."

Benjamin's famous thesis of mechanical reproduction might seem too radical for this context. Nevertheless, the "aura, authenticity and reproduction" thesis can explain why visually impaired people miss the real interaction with heritage and art works. It is also a very good aspect to take into consideration when thinking about inclusivity to this specific type of audience. People are attracted to museums and collections because of the possibility of contact with real exhibits. If visually impaired people grow up being taught that they are only going to have access to

¹³ <http://www.acessibilidadenapratica.com.br/textos/tipos-de-barreiras/> Accessed March 04, 2020.

¹⁴ Robinson, Andrew. "An A to Z Theory. Walter Benjamin: Art, Aura and Authenticity". June 14, 2013. *Ceasefire*.

reproductions, why would they want to go to those places? Making those connections helps to understand not only the physical side of working with accessibility but also the importance of giving due attention to its intellectual and social aspects. As any other audience, the visually impaired not only want, but have the right to have access to culture and heritage.

The eye opener situation for this research happened while in contact with an initiative for visually impaired audiences in a museum: a multi-sensory approach to the art works. Like John Hull, I have found a new way of experiencing the world: "seeing" without seeing¹⁵. Since then, I have committed my research on exploring non-visual multi-sensory museum practices dedicated to the accessibility and inclusivity of low vision and blind visitors. Not only the professional and academic interest, but also the emotional attachment to the topic motivates this engagement experienced during this decade of research. The scientific interest combined to a high level of empathy¹⁶ towards those who cannot have fruitful experiences inside a museological environment are the energy that keep this work moving forward. All in all, that is how this research for practical interventions in museums and exhibitions regarding a non-visual multi-sensory approach towards inclusivity started in 2011, almost as a radical response to its absence in the museological scene.

The challenge at Sound and Vision

In 2019 a new challenge was presented: how to make the audiovisual collection from the Netherlands Institute of Sound and Vision - also known in Dutch as *Nederlands Instituut voor Beeld en Geluid* - accessible to blind audiences?

We live in a visual world. Images are everywhere, especially in museums, where imagery and access to visualising them is key. When it comes to moving images, the visual aspect of the material is even greater since the first contact with it offered to the observer is through sight. So does it mean that visually impaired audiences are destined to not have a consistent access to video content, which means not being able to have a deeper understanding of what's being shown through the moving images? Blind people or people that have low vision live in the same world as everybody else. Consequently, they do have constant contact with kinetic audiovisual content living in this society. It is time, then, to also take this group into consideration when it comes to media cultural heritage.

¹⁵ "And eventually, he finds a new way of experiencing the world, of seeing the light despite the darkness." (Hull, *Notes on Blindness: A Journey through the Dark*, back cover)

¹⁶ Krznaric, Roman, "The Future of Empathy". In *Empathy*. Rider Books, 2015. 203-214

Normative humans¹⁷ might say the sight is one's main sense, considering the high amount of visual stimuli and demand for a response to them one receives on a daily basis. Despite living in a highly visual environment, our perceptual experience of the world is richly multi-sensory. We are able to extract information derived from one sensory modality to inform another; we may know a shape by touch and identify it by sight or know, for example, a violin by touch and identify it by sound¹⁸. Nevertheless, the multi-sensory discovery requires a completely different involvement from a sighted person than from a visually impaired person, as for the second one, visual images are out of the equation. When it comes to museums, the supremacy of visual access was actually the case for a long period of time. Visitors would only acknowledge the sight as a vehicle to experience painting, engravings and sculptures. Since the end of the 1970's and the beginning of the 1980's, museums started to show an effort to change this model. With the development of cultural mediation, a set of systems were sought and studied by museological institutions to better inform, orient and give access to their audiences directly or through increasingly varied tools.

Originally, mediation was created to provide cultural access to an audience with varied profiles. With the wish to progress following constructivist learning ideologies¹⁹, many institutions have appealed to multi-sensory approaches, realising that this type of interaction with museum objects appears to encourage enjoyable and memorable lifelong experiences²⁰, as well as more emotionally engaging and stimulating contact²¹ with whatever is proposed for exploration.

The low vision and blind people's experience with museums points out how the audience participation and its close relation to exhibition environments are paramount for the examination and understanding of objects. Someone skilled in touch and reflexively knowledgeable about it - both as an everyday practice and as a practice associated with museum objects - can develop a greater sensibility to the texture of materials in different ways, depending on how they touch them, which hand they use, whether they make broad sweeping movements with the hands or

¹⁷ People with their full sensorial competencies are usually called "normal". Therefore they are here referred to as "normative", "sighted people", or simply "sighted".

¹⁸ Fielder, Jennifer C.; Proulx, Michael J. "Psychological representation of visual impairment: Perception and how visually impaired people "see" the world" IN: Ravenscroft, John (Ed.). *The Routledge Handbook of Visual Impairment: Social and Cultural Research*. Routledge International Handbooks, 2019. (chapter 3, eBook)

¹⁹ Smit, Ruben. 2015. "Heritage and Learning". In Brown, Claire; Knoop, Riemer (eds.). *The Public: Heritage Reader 1*. Amsterdam: Reinwardt Academy, Amsterdam University of the Arts, 2015. 18-32

²⁰ Wilson, P. F., Scott, J., Warnett, J. M., Attridge, A., Smith, M. P., Williams, M. A. 2017. "Evaluation of Touchable 3D-Printed Replicas in Museums". *Curator The Museum Journal*, volume 60, number 4, 445-465. Wiley Periodicals Inc.: 2018.

²¹ Vi *et al.* "Not just seeing, but also feeling art". p.1-14

more local and detailed investigations with the fingertips. All the information and knowledge acquired from the object is well related to the person's background, mood, feelings and so on²².

Thinking about it, the challenge to find a non-visual multi-sensory access solution to a highly visual collection such as the one from Sound and Vision was embraced and accepted. For six months there was an opportunity to bring the visually impaired public to discover this institution and their collection. This period would also be appropriate to challenge the "normative" staff to discover the Dutch audiovisual heritage they work with through non-visual stimuli. But how would it be possible to explore a highly visual material as the collection of the Netherlands Institute for Sound and Vision in a multi-sensory way? Most of the initiatives found in museums and exhibitions are directed to static representations, such as paintings, objects, sculptures, etc. Exploring moving images using more than only audio description was, at the beginning of this project, a big interrogation point due to the lack of written material available, as well as practical experiences. Inspired by Kolb's experiential learning cycle and styles,²³ a series of 3 workshops were developed and put into practice. The goal of the workshops was to provide a better understanding of how to work on a non-visual multi-sensory approach to the Sound and Vision collection.

Set up of research and methodology

A series of procedures led to a small and yet consistent intervention at Sound and Vision. Through verbal inquiries, interviews, observations and workshops, a lot of data was gathered, making possible the presentation of *Making Sense* not only to the institution involved, but also in an international congress about accessibility to cultural heritage. It is also paramount to mention the importance of working side by side with visually impaired people in order to validate the efficiency of this methodology, since full sighted people are too dependent on their visual experiences, making it difficult for them to come up with effective and meaningful non-visual solutions addressed to the visually impaired.

²² Herrington, K. "Accountability and disposal: visual impairment and the museum" In *Museum and Societies Journal*, volume 1, number 3. Leicester: University of Leicester, 2003. 104-115

²³ McLeod, Saul. 2017. "Kolb's Learning Styles and Experiential Learning Cycle". *Simply Psychology*. Accessed January 24, 2020.

Smit, Ruben. 2015. "Experiencing Heritage". In Brown, Claire; Knoop, Riemer (eds.). *The Public: Heritage Reader 1*. Amsterdam: Reinwardt Academy, Amsterdam University of the Arts, 2015. 33-46

The methodology used to conceive and execute *Making Sense* can be summarized in three main steps:

- 1) Collecting data:
 - Research phase (theoretical foundation);
 - Interview and consultations with experts;
 - Report on interviews and consultations.

- 2) Analysing data:
 - Set up of workshops taking into consideration concepts, other institutions' practices and recommendations collected;
 - Using own workshop experience to collect more data through:
 - Observation;
 - Discussion;
 - Interviews;
 - Using other institutions' examples to analyse data collected from own practices.

- 3) Conclusion and output
 - Report to the institution
 - Reflective paper.

Three main results were expected with the development of this project:

- To find ways of making the Dutch media heritage collected and preserved by the Netherlands Institute for Sound and Vision accessible to visually impaired audiences, broadening the possibilities of discussion and creation of knowledge around this material.

- To start a dialogue inside the institution between heritage professionals and the visually impaired community about inclusivity, using the workshops as an opening for the debate.

- To bring awareness about inclusivity focused on visually impaired to the institution. The goal was for this project to work as an “eye opener” to the staff, showing that this matter is also important in order for Sound and Vision to accomplish its mission.

Taking all of those aspects in consideration, this paper shows how a decade long research was applied to the Sound and Vision's collection reality. Focusing mainly on blind audiences in this first endeavor, the work also aims to contribute to enhance the richness, memorability, construction of knowledge and social ties provided by an immersive experience with Dutch audiovisual heritage, always with the aim to build on to improving the Netherlands Institute for Sound and Vision's mission. Therefore, the practice seeks to achieve solutions on how to make moving images accessible to visually impaired audiences at the institution.

In the first part, the Netherlands Institute for Sound and Vision is presented. Through a brief overview of their collection, structure, mission and vision, it is easier to understand the context in which *Making Sense* was conceived, developed and applied. The second part addresses concepts related to multi-sensory approaches and moving images, as well as how these two elements were combined during the research. The third part examines and explains how relevant aspects of videos were identified, prioritized and chosen so to be approached in the workshops with the visually impaired people. The fourth section is about participatory research and how it was set up in the context of present investigation. In this part, the initial project and the actual workshop programme as a laboratory for a learning cycle can be found. The fifth part shows a detailed description of the workshops set up and the sixth section describes the findings and what was experienced throughout the whole programme. The final considerations regarding the workshop practices are presented in the seventh part. The penultimate section offers an overview of collaborations and exchanges with professionals and researchers that contributed, directly and indirectly, to the learning process throughout *Making Sense*. Finally, the last part is dedicated to an important reflection over the presentation of the project outcomes at an international conference on accessibility to museums and cultural heritage, and the feedback from other professionals in the field contributed to the growth of the research as well as to a deeper analysis of the process currently in place at Sound and Vision.

THE NETHERLANDS INSTITUTE FOR SOUND AND VISION

The Netherlands Institute for Sound and Vision - also known as *Nederlands Instituut voor Beeld en Geluid* - is an organization that provides an integral overview of media history and current media affairs, press and journalism, and also takes care of the press and media collections in the Netherlands, as they describe themselves on their official website. The collection safeguarded by the institute has over 17 Petabytes²⁴ of digitized material, including born-digital video, digitized video and audio, and digitized film. All this content would be an equivalent of more than 20,000 hours of material. Just out of curiosity, if everything was recorded in CD-

²⁴ The numbers refer to the beginning of 2020.

rooms and we could pile them, we would have a "tower" of more than 18 kilometers. And each and every year, it gets bigger since the production of Dutch tv, radio and games doesn't stop.

Moving images can be defined as a generic term for a visual work that has the appearance of movement. Examples include motion pictures, videos, and other theatrical releases, shorts, news footage (including television newscasts and theatrical newsreels), trailers, out-takes, screen tests, training films, educational material, commercials, spot announcements, home movies, amateur footage, television broadcasts, and unedited footage²⁵. Therefore, the collection dealt in in this project is full of material that can be categorized as moving images.

The Netherlands Institute for Sound and Vision has a mission to make media heritage open and searchable to everyone. After making their collection available online, they are now researching how to make it accessible to visually impaired audiences. With a mainly visual collection, Sound and Vision is now interested in studying a non-visual approach that makes it possible to navigate and discover audiovisual material.

Sound and Vision has as **mission** to promote the use of media to better people's lives while their **vision** is to promote the use of the collection by everybody:

***Our mission:** to improve people's lives in and with media by archiving, exploring and contextualising it, whereby the freedom of thought and expression in text, image and sound is paramount.*

***Our vision:** Media is an integral part of the world we live in. In 2025, Sound and Vision will be the guardian and leading institute for archiving and interpreting journalism and media. Creating and championing the democratic values of freedom of thought and expression through text, image and sound are key to this. To this end, Sound and Vision will actively promote the use of its extensive collection and open it up as much as possible, for everyone – from professionals to people with a more casual interest. To inspire them and help them excel. In this way, Sound and Vision will help to build a more media literate world.*

To achieve this, Sound and Vision will seek collaboration with all the relevant stakeholders and take the lead where necessary. Through its building, its collection and its museum, it will do everything in its power to create free thinking in media. Sound and Vision sees the broadcasters, scientists, government, politicians, educators, heritage organisations, public libraries, business community and creative industry as key partners in making this a success.²⁶

²⁵ <https://www.archives.gov/preservation/products/definitions/moving-image-def.html> Accessed April 06, 2020.

²⁶ <https://www.beeldengeluid.nl/en/about/mission-and-vision> Accessed January 24, 2020.

It might sound obvious that the visually impaired should be taken into consideration when talking about having access to national audiovisual heritage. After all, the institution's vision says that they will "open it as much as possible for everyone". Nevertheless, low vision and blind audiences are not an active part of this "everyone". Even though 285 million people worldwide have a visual impairment, 300,000 only in the Netherlands²⁷, they are still minorities put aside. Most sighted people might not even consider the possibility of this audience being able to access audiovisual content, since a significant part of the Sound and Vision collection assembles moving images. As the noun itself specifies, it is a highly visual content mainly accessed by sight. Therefore, many might say that it would be impossible to make sense of them if one is deprived from sight. Preconceptions and prejudgements like these can be, sometimes, harder to overcome than the physical solutions to accessibility.

MULTI-SENSORY APPROACHES TO IMPROVE THE COMPREHENSION OF MOVING IMAGES

"I am developing the art of gazing with my hands. I like to hold and rehold and go on holding a beautiful object, absorbing every aspect of it...I am beginning to enjoy the different textures of materials...Weight, texture, and shape, temperature, and the sound things make, these are what I look for now²⁸."

The understanding of the need and importance for the creation of such a programme was only possible after an intense theoretical research phase that happened in the early stages of the internship. Without the insights provided by the study of other institutions' initiatives and the direct contact with researchers in the accessibility field for visually impaired audiences in museums, the creation of a pertinent programme wouldn't have been attainable. The main goal at this phase was, besides gathering enough data to highlight the relevance of the initiative, also to find concrete answers to prove that multi-sensory approaches could give results when it comes to understanding moving images in a non-visual way.

Audio description was the first answer that surfaced. Even though audio description is a very important tool for accessibility, a multi-sensory approach seemed to have potential to provide a more complete solution to the matter. According to a large spectrum of researchers, ranging from neuroscience to art history, human-computer studies and psychology, human beings were given five senses to help them perceive and interact with the world around them. Nevertheless, the use of visual and aural senses are predominant when it comes to these tasks, even though

²⁷ <https://www.doordeogenvan.org/nieuws/feiten-en-cijfers-over-visuele-beperking/> Accessed January 07, 2020.

²⁸ Hull, *Notes on Blindness: A Journey through the Dark*, p. 153.

prior explorations have suggested that multi-sensory experiences enhance the richness and even the memorability of events²⁹. In several domains, such as the museological one, vision and hearing have been the dominant senses for centuries. Our senses of touch, taste, and smell have often been described as secondary, sometimes even called "the lower senses"³⁰.

Hoëlle Corvest also clarified some aspects about the necessity of supplementary approaches combined to the audio description. That is because audio description only works as a tool for accessibility. For a deeper and more complete understanding of the video, it needs to be presented alongside other supportive tools. To understand that, it is crucial to be sensitive about the fact that visually impaired people need to be able to acquire concrete information. This concrete information is what will allow them to build knowledge around what is verbally presented in the audio description. Only words as a tool of description can, very often, create an abstract understanding about a given subject. The interpretation of words happens inside one's head, according to their personal background, since each person's brain is going to associate what is described to previous individual experiences. If a young, blond woman wearing a wool hat is mentioned to be appearing on the screen, it is almost impossible that everyone listening to it will have imagined the hat being the same. Nevertheless, if you can also touch a similar hat, the mental conception about its shape will be less abstract.

Because of the simplicity of audio description, it can end up being a very comfortable tool to museums. Institutions usually think that providing only audio description is good enough for a non visual access to exhibits. Doing that, they can call themselves "inclusive", being excused from investing in other multi-sensory mediations. The truth is that only audio description is not enough. More mediation to complement the verbal description is needed if museums want to transmit a correct and fair non-visual "picture" of the material presented.

The first goal for this project was to make the digitized collection accessible to the visually impaired audience through audio description. A partnership with Scribit, an audio description platform from Bartimèus³¹, was established since day one, making them an important collaborator to this project. Nevertheless, the intention of this project was to involve other senses to optimize the understanding of videos. Consequently, questions such as "*Which*

²⁹ García, Natalia Grau. "El Arte a la 'Vista' de Tod@s: Casi diez años de actividades accesibles a discapacitados visuales." *5è Congrés Internacional d'Educació i Accessibilitat a Museus i Patrimoni*. 2018.

O'Connor. "Blind Museology".

Vi *et al.* "Not just seeing, but also feeling art". p.1-14.

³⁰ *Ibid.* p.1-14.

³¹ Dutch institution for the visually impaired.

activities could help the research to explore ways to put audiovisual and multi-sensory together in a coherent way?" and "Given the great amount of material available at the Netherlands Institute for Sound and Vision archives, which theme should we start to work with?" were still unanswered.

RELEVANT ASPECTS OF A VIDEO TO BE WORKED ON WITH VISUALLY IMPAIRED AUDIENCES

After a long period dedicated to theoretical research³², the next step was to find videos to be audio described. The search had to be done through the official Youtube page of Sound and Vision³³, which facilitated the work. Firstly, because it is impossible to go through all the content of a 20,000 hour archive. Secondly, because the few videos on Youtube are already grouped by theme, making it easier to analyze the content.

Once again, the hours of discussion with Hoëlle Corvest were a key game-changer when deciding how to structure the workshops. In a few hours of conversation she nourished my understanding about the use of audio description, tactile images and multi-sensory accessibility to audio visual content (Annexe 1). Until now, working with Scribit to audio describe videos was the only sure thing about the whole project. Questions like *"How to bring out forms being described in the video?"* and *"How to consistently build non-visual knowledge about spatial organization shown in the image?"* were still not clear. While talking about her own personal and professional experiences, Corvest guided me through a critical thinking on how important it was to choose a theme to be explored. That is because, after exploring and discovering common elements about a given thematic, each video can be analysed and understood inside its own context. Following this logic, it is possible to investigate specific elements from a given theme, allowing the visually impaired to discover and understand elements that are not only coming from from universal actions.

³² Besides audiovisual concepts, I went through Beeld en Geluid mission and vision, as well as tried to understand better how the institute and its departments were structured. Between curators, technicians, programmers, archivists, educators and museum professionals, it took me a while to apprehend that the archive and museum (known as "Experience") share the same building, have some departments in common as well as some independent fronts of action. Nevertheless, the departmental structure is still confusing for a non-native intern. That is because the institution went through a restructuring not long ago, adopting a more philosophical - and broadened - approach to its departments (e.g.: *Verhalen, Vesting, Vereeuwigen, Verwennen, Verkennen, Veroveren, Vernieuwen...*). I quickly stopped worrying about it when I realized some staff members, due to the restructure, didn't know a lot about other departments than the ones they were part of.

Fiske, John. *Television Culture*. Routledge, 1987.
Garde-Hansen, Joanne. *Media and Memory*. Edinburgh University Press, 2011.
McLuhan, Marshall. *Understanding Media*. Cambridge: MIT Press, 1994.

³³ Because of rights, only videos published on Youtube can be used for audio description on Scribit.

Following those premises, a methodology of active and multi-sensory learning started to be shaped to foster observation, imagination and critical thinking based on visually impaired experiences and knowledge to enjoy videos. To do so, the Dutch Royal coronation ceremony was picked as a theme. This subject was selected because it embraces a lot of aspects, as for:

- The ceremonial elements are almost the same in every video (places, objects, behavior, etc.), making it easier to explore a larger amount of videos at once;
- The oldest video in the archive is a coronation video, the *Inhuldiging Prinses Wilhelmina, 1898*;
- The last coronation ceremony happened not long ago (2013) so it is a cultural memory³⁴ for everyone who could possibly join the activities;
- The Royal Family and their rites are part of Dutch identity and [intangible] heritage;
- It is relatively simple to find reproductions of royal objects.

SETTING UP A PARTICIPATORY RESEARCH ON ACCESSIBILITY TO MOVING IMAGES

The core of the learning cycle of *Making Sense* was based on the concept of participatory research. According to Encyclopedia.com's definition, participatory research can be identified by five characteristics:

1. Participation by the people being studied;
2. Inclusion of popular knowledge;
3. A focus on power and empowerment;
4. Consciousness raising and education of the participants;
5. Political action.

Due to the nature of its essence, a precise definition should be avoided so that each group that does participatory research can be free to develop some of its own methods³⁵. According to Jarg Bergold and Stefan Thomas,

"Participatory research methods are geared towards planning and conducting the research process *with* those people whose life-world and meaningful actions are under study. Consequently, this means that the aim of the inquiry and the research questions develop out of the convergence of two perspectives—that of science *and* of practice. In the best case, both sides benefit from the research process. Everyday practices, which have long since established themselves as a subject of inquiry, introduce their own perspective, namely, the way people deal

³⁴ Choyke, Alice M. 2009. "Grandmother's Awl: Individual and Collective Memory Through Material Culture". In Barbiera, Irene; Choyke, Alice M.; Rasson, Judith A. (ed.). *Materializing Memory: Archaeological Material and the Semantics of the Past*. 21-40. BAR International Series 1977, Archeopress:Oxford

³⁵ <https://www.encyclopedia.com/social-sciences/encyclopedias-almanacs-transcripts-and-maps/participatory-research> Accessed April 14, 2020.

with the existential challenges of everyday life. The participatory research process enables co-researchers to step back cognitively from familiar routines, forms of interaction, and power relationships in order to fundamentally question and rethink established interpretations of situations and strategies.³⁶ "

From the initial project to the final findings, most of the five aspects presented in the first definition of participatory research as well as the characteristic elements of the practice provided by Bergold and Thomas were applied throughout the process.

The initial project

The initial project was to find a multi-sensory approach in order for the visually impaired audience to discover the content of the Sound and Vision's collection. More than only aiming to give them access to the content, there was a desire to include this specific audience to the museum visitors target, allowing them to become part of the debating community that gives life to the institution. Therefore, what the project proposed at first went beyond accessibility, looking forward to the inclusion and "access for all³⁷" to the collection.

The main idea behind the initial project was that working towards the inclusion of low vision and blind audiences could also allow sighted visitors' experience to be enriched through different ways of exploring the collection's content. The multitude of discovery possibilities has also the potential to activate exchanges between visitors inside and outside the exhibition spaces. With this initiative, Sound and Vision could try to give access to its heritage to a broader audience, aiming to promote a richer debate about it. The embryonic goal was to work in collaboration with different types of groups - the first of them being the visually impaired potential visitors - in order to understand more about a non-visual approach to a mainly visual material. Comprehending this group's non-visual perception and their relation with the audiovisual world was essential before starting to think about multi-sensory accessibility alternatives. To do so, a group of visually impaired volunteers would be necessary. The participation of media professionals working at Sound and Vision would also be decisive for the project to reach its goals. Nevertheless, this scope was too broad for the time frame and the resources available. Therefore, the goals and the stakeholders of the project had to be adapted, giving emphasis to the accessibility to the visually impaired audiences to the collection.

³⁶ Bergold, Jarg; Thomas, Stefan. "Participatory Research Methods: A Methodological Approach in Motion". *Forum: Qualitative Social Research*. Volume 13, No. 01, Art. 30 (January, 2012).

³⁷ Eardley, Alison F.; Mineiro, Clara; Neves, Joselia; Ride; Pete. "Redefining Access: Embracing multimodality, memorability and shared experience in museums". *Curator: The Museum Journal*, volume 59, Issue 3. (July 28, 2016): 263-286.

Two target groups were kept in mind for the progress of the project. The first and main target group of this project was the visually impaired audience. One of the goals of this initiative was to understand their relation with the audiovisual world. Therefore it is extremely important to establish a close relationship with low vision and blind people. Their collaboration is fundamental to the understanding of non-visual perception of materials. Acquiring this insight is a key step to the process.

The secondary target group was the institution staff. Since one of the goals of the project is to work as an “eye opener”, it is essential to bring awareness to the need for a change of mentality in the work environment. The inclusion process of visually impaired audiences can only be effectively achieved once staff start to actively consider them on a regular basis.

In order to achieve the expected results with the target groups, the first idea was to develop a programme of workshops, visits to the archives and visits to the museum. These activities would promote discussions and, consequently, bring insights on how to put together multi-sensory approaches to videos in the collection. Given these points, a plan of practical research would have to be created and put in action so that an adequate non-visual investigation to moving images could be supported.

With these aspects clarified, the next step was to focus on the research to create the concept for the workshop activities (Annexe 2).

Following the first draft of ideas, the activity sessions came to life. At this point, it was essential to keep the programme simple and realistic because long activity sessions wouldn't be beneficial to anyone involved.

Workshop programme: a laboratory for a learning cycle

The workshops were created as a way to support the understanding and learning on how to enrich video comprehension through multi-sensory means. When it comes to bi-dimensional moving images, most of the approaches to accessibility are through audio description. Therefore, it was important to experiment, discuss and learn through the activities how to investigate the material presented beyond oral narrative. Consequently, the activity gatherings had a laboratory aspect. In total, three main workshops were proposed:

- Workshop 1 focusing on a non-visual visit to the building and storage;
- Workshop 2 focusing on the making of audio description;
- Workshop 3 focusing on further multi-sensory exploration of royal coronation videos already audio described.

The idea to propose workshops was more to understand and learn how to enrich the non-visual comprehension of videos through a multi-sensory way than to learn how to do audio description. After months investigating research in the academic and professional field, multi-sensory experiences in object-based museums comprised the great majority of the reported experiences. When it came to videos and bidimensional moving images, most of the explorations were through audio description. Therefore, creativity and adaptation of approaches to the reality of the Sound and Vision collection was demanded. *"Which activities could help the research to explore ways to put audiovisual and multi-sensory together in a coherent way?"* was the main question at this point. It was urgent to understand what medium other than audio description should be used to improve the non-visual comprehension of the videos, and how it should be put into practice using multi-sensory tools. Due to all those open queries demanding answers, the workshops were going to be a place for experiments and research leading to discovery, dialogue, exchange and practice. It was then decided the activities proposed would be tackled as one would conduct an experiment in a lab, since they were going to be used as a way to collect data with the objective to reach results.

The sequence of workshops was developed in order to create a chain of thinking. Information acquired and created would be rings that, linked together, would form the chain of knowledge. In the past, I have gained my knowledge base as a museum educator practicing it, since there wasn't a discipline for it in the Fine Arts School during my Bachelor's years. While working in museums in Brazil, whenever new lines of activities were to be implemented, the educational department would work with the resources they had. The professionals would learn how to improve the activities with the experience of doing it. And the process would be repeated until a good approach would be achieved. With this experiential background in mind, a practical approach was a fit choice given the context of the research at Sound and Vision. There was, then, a need to work "hands on" with the subject instead of theoretically adapting it to the given reality; a need to be in touch with people who weren't dependent on their sight; a need to understand how one can perceive moving images without seeing them; a need to comprehend how people with close ties to the audiovisual can better discover and make sense of it. For all of those reasons, it was time to act and to learn through experience.

In essence, the three sessions were put together to work as a learning cycle where we could have an experience, reflect on it, learn from the reflection and improve on said experience, in a new workshop, putting in practice what was learnt previously.

WORKSHOPS SET UP

Workshop 1

Workshop 1 was dedicated to the introduction of the project and the discovery of Sound and Vision building. This experience was proposed aiming to answer the following questions:

- What is the relationship of visual impaired people with media and audiovisual?
- What are the channels and tools they use to have access to them (tv, radio, podcast, videos with audio description...)?
- How do they use these channels and how often?
- What is their connection with Dutch cultural heritage produced and transmitted by the media?
- What is their relation with Sound and Vision?
 - Do they know it?
 - If so, what do they know about it?
 - Have they ever been to the "Experience"?
 - Have they ever been there?
 - If so, how was it?
 - If not, why?
- What would they expect from an initiative that is willing to promote their access to the collection and inclusion to the museum?

An afternoon programme with three parts was prepared, consisting of a talk, a tour through the storage and a tour through the museum "Experience". Three people attended this session: Ariana and Enrique, two people fully sighted³⁸ and Joop van de Pas, a blind person with near-total vision loss (1% sight).

³⁸ The full vision participants were blindfolded so they could have a non-visual multi-sensory discovery and exploration of what was to be presented.

The first part of the workshop was dedicated to a dialogue about media and the relationship the attendees had with it in their daily lives. Then, a presentation of the project followed by a background history of the building and its architecture was given³⁹.

The second part of the programme consisted of a visit to the vaults where the physical collection is stored. The places visited were, in the stated order:

- BenG Lab;
- Storage of film rolls;
- Storage of vinyls;
- Storage with historical TV and radio samples;
- Storage of TV show apparatus and props.

The third part of the visit had to be rescheduled to another day because the first activities lasted longer than expected and the museum was already closed to visitation when the time came. One week later, in a last minute accordance, another visually impaired⁴⁰ person went to Hilversum to discover the "Experience". An itinerary to be followed with certain attractions was previously crafted, taking in consideration their multi-sensory stimuli possibilities. The discussion and discoveries during the visit allowed perfecting a programme for a non-visual guided tour through "Experience". This event also allowed the realization of the physical accessibility limitations that could be faced by low vision and blind visitors in the space. A conversation about possible solutions to make this specific audience visit more accessible, inclusive and enjoyable took place during the visit as well (Annexe 4).

Workshop 2

Workshop 2 involved the making of audio description through the platform Scribit. The presentation and activities were prepared and led by the representatives of the online program. The expectation with this session was to answer the following questions:

- How to bring staff together with the visually impaired audience interested in media and audiovisual heritage?
- How is the response of the staff to such an initiative?

³⁹ A sample of the glass surrounding the front of the entire construction as well as a sample of the glass composing a wall inside the building were available for tactile discovery.

⁴⁰ Véronique Steijn has low vision (40%) and is a museum guide also engaged in the research of VIP accessibility and inclusion to Cultural Heritage. Due to her experience with visiting exhibitions and her visual impairment, she was invited to test out an itinerary for a multi-sensory exploration of the museum previously planned.

- Show staff: What's the importance of audio description to those who cannot see well?
- How does audio description change contact, interpretation and access to media to the visually impaired audience, specially to visual contents like videos, films and tv programs?
- How beneficial would an exchange between visually impaired audiences and media professionals be by pairing them to work on audio description together?
- Would an audio description workshop focused on granting access to the Sound and Vision collection bring awareness to media professionals about the importance of the inclusion to the visually impaired audience?
- Would such an initiative motivate the staff from Sound and Vision to work with audio description through tools such as Scribit?

In the program, attendees would be challenged to audio describe videos from Sound and Vision Youtube catalogue. For this session, a great effort was made to bring the host institution's staff to join. Invitations to the whole *Verhalen* department were sent through email. The success of the first workshop guaranteed the recurrent presence of Joop van de Pas who brought along with him a completely blind friend, Bart Mers. Véronique Steijn who has 40% of her sight, also attended as a response to a Facebook post inviting people on a group directed to visually impaired audience. At the end we had a total of six attendees: three visually impaired and three employees from Sound and Vision.

To start the workshop, the concept of audio description was explained. Then tutorials on how to use Scribit to audio describe videos were shown and discussed. Thereafter the attendees were paired up, one visually impaired with one sighted, so they could work on their own audio descriptions. At the end, all pairs presented their final audio descriptions to the group.

Workshop 3

Workshop 3 was dedicated to the research of multi-sensory approaches to the 2013 Dutch royal coronation video. From all three workshops, this one required the most research and preparation. Following Kolb's Learning Cycle⁴¹, workshops 1 and 2 performed as an introduction to create a groundwork for workshop 3, the latter starting from a video that had been edited and

⁴¹ McLeod. "Kolb's Learning Styles".
Smit. "Heritage and Learning", 18-32.

audio described specially for the activities of *Making Sense*. The main focus of this session was to find answers to the following questions:

- How to work with multi-sensory stimuli as one of the tools to build a larger understanding of audiovisual materials?
- How to experiment different sensorial approaches to one specific chosen theme (in this case, the Dutch Royal coronation)?
- What is the effectiveness of the chosen approaches to improve the understanding of the ceremonial images shown in the video?
- Which tools and approach solutions used are more effective?
- How to prioritize the non-visual multi-sensory solutions that contributed the most to the comprehension of the video?
- Was the learning cycle proposed for this workshop effective?

Preparation

An intense theoretical research about the use of multi-sensory tools in collections and exhibitions was needed for the preparation of workshop 3. Along with concepts, it was also necessary to make choices regarding the elements that would be explored through non-visual sensorial approaches. The sense of hearing was going to be required by the video's sound and audio description. The sense of touch was also important to be involved through the haptic discovery of some objects related to the theme. A few of them were arranged to be available during the session, such as a reproduction of a crown, a sceptre and a royal cape⁴² (Annexe 7).

An intense work to prepare the audiovisual material to be used also had to be done. The outlined idea was to create an audio description for all the coronation videos, from Princess Wilhelmina (1898) to King Willem-Alexander (2013). Nevertheless, given time management restrictions discovered from previous sessions, this number was cut down to one video. The original version of the chosen video - the 2013 coronation ceremony - was three hours long. Therefore, it had to go through editing especially for this activity, resulting in a 7 minute long video.

⁴² These are iconic elements from a coronation ceremony that only get to be seen from afar and are not commonly present in daily life. Therefore, only describing them with words would be too abstract if one doesn't have a visual memory of it (in the case of born blind people).

Finally, a tactile blueprint of the square the ceremony in the video took place was crafted. There wasn't enough budget to order a 3D print of the location, so it had to be improvised with the material available⁴³. On it, the distribution in the space of the main streets and passage walks used by the royals during the ceremony, as well as the main buildings and elements from the Dam Square (Royal Palace, New Church and obelisk) could be conveyed through haptic exploration.

Activity

The activity was built in three moments:

1. A first listening to Willem-Alexander's coronation video with audio description (discovery);
2. A multi-sensory exploration of the key elements previously prepared (exploration and understanding);
3. A second listening to Willem-Alexander's coronation video with audio description (deeper understanding).

The multi-sensory discovery started by the haptic exploration of the following elements (Annexe 7):

- Crown;
- Scepter;
- Cape;
- Trumpet;
- Flag hung below the trumpet.

An embodiment of the ceremonial postures⁴⁴ was then proposed. At this moment, the attendees were guided so they could mimic some key ceremonial gestures present in the video⁴⁵. The next step was the tactile discovery of the Dam Square block through the aerial view map in relief. Through it, the low vision and blind attendees could understand better the disposition and

⁴³ Calling back to life artistic skills acquired during two bachelors in Fine Arts and Visual Arts, I built a relief drawing using wax strings, Duplo (bigger version of Lego) and an A3 print of an aerial Google Maps view from Dam Square (more to guide me during the construction so I could get the proportions right) (Annexe 7).

⁴⁴ Groth and Maarit. "The Knowing Body", p.1-21.

⁴⁵ Mimicking these moments that "cannot be touched" is also a way of creating more concrete knowledge through proprioception (Levent and Pascual-Leone, 2014). According to Francesca Bacci and Francesco Pavani, embodying what is on display can provide a new self-awareness, which in turn has the power to deeply affect our understanding (Levent and Pascual-Leone, 2014).

organization of the space where the ceremony took place. Following a guided tactile discovery, they could grasp the disposition of the buildings in the space as well as the direction people mentioned in the video walked. The last proposition was to listen again to the audio description played in the beginning of the session, paying attention whether the understanding of the video had improved after the multi-sensory activities. All the answers were positive.

WORKSHOP FINDINGS: EXPERIENCES THROUGHOUT MAKING SENSE

“The tangible world sets up only as many points of reality as can be touched by my body, and this seems to be restricted to one problem at a time. I can explore the splinters on the park bench with the tip of my finger but I cannot, at the same time, concentrate upon exploring the pebbles with my big toe. I can use all ten fingers when I am exploring the shape of something but it is quite difficult to explore two objects simultaneously, one with each hand.” John Hull⁴⁶

Workshop 1

Some important considerations were made by the visually impaired who collaborated in workshop 1. According to Joop van de Pas, it is better to access audiovisual material through tv than through radio. Even with only 1% of sight, it is beneficial to have contact with the image that accompanies the sound. Nevertheless, the lack of audio description available on Dutch tv prevents blind people from having access to information the same way as sighted people do. Podcasts are also a way of staying informed. However, not all visually impaired people can navigate apps on smartphones well, especially the elderly ones. Surprisingly, the highlight of the session was the contact with the props from Dutch tv shows and series. Even not being able to understand through haptic exploration some of the props (like a sign plate from the very famous series *Van Kooten en de Bie*, that had the name of a well known fictional village called *Juinen* flat printed on it), he was overwhelmed with joy to know the original one was at an arm’s reach, even asking to take a picture of him next to it so he could show it to his friends.

Regarding the other two attendees, their excitement was not the same due to their lack of previous contact with Dutch television shows (one was from Spain, the other was from Malta and both were living in the Netherlands for only a few years). At this point, the different level of connection to Dutch cultural heritage produced and transmitted through media could be felt. Regarding the attendees' connection to Sound and Vision, Joop, who is Dutch, had already heard about the place but had never had the opportunity to be there. Ariana and Enrique, Maltese and Spanish respectively, discovered the existence of the place and the collection

⁴⁶ Hull. *Notes on Blindness*, p. 71.

through the workshop call, so it was their first time having contact with it too. At the end of this first contact, van de Pas' expectations about the project were high and he engaged the group in a discussion about how urgent it is for the national broadcasting companies to add audio description to their entire programme grid.

Workshop 2

Throughout the presentation of Scribit, the activity and the personal contact between staff and visually impaired people, workshop 2 encountered a very positive reaction from both sides. The staff present understood better how audio description works and how important it is to those who are blind or have low vision. The session also provided an important moment where experiences about the contact with audio description were shared. From the perspective of the visually impaired, there was a big frustration around the fact that, unfortunately, tv and internet video content are rarely equipped with this accessibility tool. Having a brief contact with how to do audio description through Scribit showed the media professionals attending the session that producing it was way easier than they thought, especially after witnessing the scope of its importance to the visually impaired. Without a question, workshop 2 motivated the staff to look at audio descriptions with different eyes.

Workshop 3

A number of specific outcomes from workshop 3 were very valuable to the research in general. The explanation involving the tactile map caused a greater impact on the non-visual understanding of the video than the haptic exploration of the objects. The embodiment exercise was also interesting due to the exploration of elements that are not mentioned in the audio description and are also important in ceremonial events⁴⁷. All this data was collected during the experience through observation and discussion as well as at the end of the session where an oral feedback was asked from each participant. The richness of the exchange was also promoted by the different aspects of the attendees' visual impairment: one completely blind, one with 1% of sight and one with 25% of sight. It was important to realize that, sometimes, what sighted people assume is going to be crucial to the understanding of moving images is, actually, not essential when it comes to a non-visual discovery. The reproduction of the royal objects in context are a good example of it. In the video, these elements have a high visual appeal leading people that can watch to think they are important to the comprehension of the whole picture.

⁴⁷ The understanding of, for example, hand positions can change the perception of the global situation (e.g. the king entering the church holding the queen's hand and uncomfortably keeping his other hand on his hip level; the position the sceptres were held by people in the opening procession; etc.).

FINAL CONSIDERATIONS ON THE WORKSHOPS

Workshop 1 sessions ended up being very important to collect data regarding physical, intellectual and emotional accessibility to the collection, the building and the museum. All in all, even cutting the day programme to a three hour activity was still very ambitious to propose the discovery of so many storages due to the amount of subjects to discuss. The difficulty to move around the building as a result of the lack of physical accessibility to the visually impaired also added non-planned extra time to the tour. Altogether, it would have been less tiring and more profitable to have planned, from the beginning, a separate workshop dedicated only to visit the "Experience".

Workshop 2 was a very nice experience of exchange, bringing awareness to the staff about how audio description is a very important tool when one cannot see a video. The low vision and blind attendees also had the chance to share their difficulties on accessing audiovisual material, bringing up a debate about the importance of this specific tool. The dialogue and remarks that emerged during this session were as constructive as the practice itself. The videos that were concluded were made available on the online Scribit catalogue.

Workshop 3 was useful to verify that, in the specific case of chosen theme (Dutch royal coronation), touching and wearing royal elements brought a ludic and fun aspect to the activity. Nevertheless, the haptic discovery of the tactile map and a discussion about what it represented, and how and why some parts appeared in the video were more meaningful to the construction of a deeper understanding of the ceremony audio described.

In the long term, the constant presence of one collaborator throughout all the sessions in the programme allowed a more thorough analysis of the learning cycle process from the workshops independently as well as a block of activities. This was a valuable contribution to the evaluation of the complementary aspect of the contents integrating each session as well as the order they were presented.

COLLABORATIONS AND EXCHANGES: A RICH CONTRIBUTION TO THE LEARNING PROCESS

Before, during and after the three main workshops, collaborations and exchanges with other professionals happened to enrich the understanding of this project. Besides the main activity sessions, I had the chance to interact with a lot of people who had, directly or indirectly, interest

in the research I was working on. The following experiences were selected both because of their importance to the development of the project as well as because they show how the workshops brought awareness and motivation to people that had contact with it.

John Jacobsen and his research at the University of Amsterdam

The first contact was from a student in Preservation and Presentation of the Moving Image at the University of Amsterdam. He was finishing his dissertation about accessibility for visually impaired people to archival collection through interfaces, and was using the initiative at Sound and Vision as a case study for his final work. This dialogue brought awareness about the lack of online accessibility to Sound and Vision archival interfaces. Thanks to John Jacobsen, my perception about what it would take to transform the archive into an inclusive platform was broadened. The effort employed to audio describe videos in the collection would be less important if the platform needed to access it couldn't be navigated by a visually impaired person. The public that would benefit from the audio descriptions wouldn't be able to navigate through the website in order to actually look for videos and play them. Since then, a report with future changes that would be needed in order for the institution to provide an inclusive collection and museum started to be formulated (Annexe 6).

Ash Marriott and Europeana

Ash Mariott wrote a project to give accessibility to deaf and deafblind audiences to Europeana's online archival platform. It happened that the project was only a draft and hadn't been approved yet. The positive point about this connection was that Marriott understood a lot of programming, allowing him to point out the coding problems that were preventing a *Text Through Speech Reader* tool (also known as TTS Reader) to work properly on the Sound and Vision website. With his knowledge, he showed that inserting a few simple words into the coding was a very simple process for people who knew how to do it. We concluded that, with a very low budget and work load, the problem pointed earlier by John Jacobsen could be solved. He also informed me that the technology to make videos accessible to people with hearing impairment (automatic generated subtitles) was already available. This meant that all companies like Sound and Vision and Europeana had to do to create a more inclusive digital environment was to incorporate them to their digital archival interfaces.

Extra editions of Scribit workshops

The feedback from the staff that attended Workshop 2 was very positive and enthusiastic. Nevertheless, only three people out of a few dozen attended the first session. The easy manipulation of the Scribit platform and the fast satisfactory result it provides after a couple of hours of manipulation encouraged the planning of further editions of this activity. Extra editions would enhance the chances to engage more people from the staff into this initiative, contributing to spread awareness to the urgent need of inclusion of the visually impaired audience. It was also an opportunity to allow the normative audience of audiovisual archives to have access to this type of material in different ways. After all, audio description was the first step to encourage the use of all the senses in the enjoyment of videos, a multi-sensory experience that can happen not only through sight, but also through touch, smell and hearing. In short, it is a discovery where one can feel all the possible ways to reach an exciting experience. It is about exploring with your senses, not about replacing the vision with the rest of these senses. According to García, multi-sensory explorations also promote imagination, awareness of limitation and empathy towards the visually impaired population, as well as experiencing and exploring the expressive resources of the body and being able to communicate ideas and feelings⁴⁸.

One of the great achievements of this experience was to watch some people from the staff express that after their contact with the Scribit workshop and the overview of the project, they also find it important that this initiative is not only about the inclusion of a fraction of the audience, the visually impaired, but rather to work on a new way of exploring the archival material. This change of mentality is a great way to improve the discussion and the research about media accessibility to everyone, as Sound and Vision's vision promotes. As a result, by the end of the internship, three sessions of Scribit audio description workshop were offered, the second counting with eight attendees and the third counting with eleven.

Rob de Bie and the History of Sound tactile visit

Some people get really impressed when they realize how interesting it is to try to discover the environment in a multi-sensory way. That was the case of Rob de Bie. Working as a volunteer at the collection storages, Rob is a storyteller who creates and executes thematic guided visits concerning the objects collected by Sound and Vision. After attending workshop 2 and paring up

⁴⁸ García. "El Arte a la 'Vista' de Tod@s".

with a blind collaborator to work on an audio description, he started to reflect on how he could do his visits so they could be attended by visually impaired people. With some motivation, he planned to offer a visit about the History of Sound. The initiative interested the three blind and low vision collaborators that attended workshop 2. The richness of the experience is that it was a two way learning moment: the attendees acquired knowledge by having close contact with some precious historical objects, and Rob experimenting new ways of non-visual exploration of a visit he was used to doing otherwise.

Another aspect that contributed a lot to everyone's experience was the passion by the subject transmitted by Rob de Bie's narratives and propositions. It was impossible not to love the subject and everything he was presenting, information and objects. This type of stimuli also has the power to reach a multi-sensory experience level, as explained by Francesca Bacci and Francesco Pavani. They say that:

when confronted with an everyday object, we can predict in most cases how the visual characteristics will feel when touched, as we have accumulated several experiences with that type of object. In the case of art, this predictability, this consistency across different sensory modalities is rarely maintained. It is therefore not enough to permit visually impaired audiences to touch the art, as this may often not be the best way to convey the artwork's meaning. Finding new ways to translate across sensory modalities require passion, creativity, and deep understanding of the senses, along with undefeatable will to pass on the artwork's meaning and message⁴⁹.

There was no doubt Rob de Bie was passionate about the subject he was communicating and he did have an undefeatable will to pass on the objects' history, meaning and anecdotes related to the history of sound. At the end, this passion contaminated everyone present, turning this guided visit into a memorable experience of exchange to be repeated.

In summary, all the interactions above contributed to the improvement of the *Making Sense* initiative at Sound and Vision in their own way. The contact with Jacobsen hinted at the fact that visually impaired audiences would benefit better from videos with audio description if they could actually be able to navigate the institution's website using a TTS Reader software. Unfortunately, the page design didn't allow it. The exchange with Ash Marriott brought to light that the technology to make videos accessible to people with hearing impairment (automatic generated subtitles) and visual impairment (TTS Reader) was already available. All Sound and Vision had to do was to incorporate them to their website coding. The Scribit workshops stimulated people from the staff to reflect about the importance of discovering audiovisual

⁴⁹ Lavent *et al.* *The Multisensory Museum*.

material in a different way. They started realizing that besides giving access to visually impaired audiences, the initiative also had the potential to change their experience in discovering videos. Finally, the guided visits promoted by Rob changed his perspective of exploring a collection he was before so used to while bringing the visually impaired into the institution's vaults for the first time. After all the practical activities, connections, collaborations and exchanges, the findings provided by *Making Sense* were organized to be presented at an international congress of accessibility to museums and cultural heritage, a big accomplishment for a project developed during an internship project.

REFLECTION THROUGH PRESENTATION: "MAKING SENSE" AT THE 6TH INTERNATIONAL CONGRESS ON EDUCATION AND ACCESSIBILITY IN MUSEUMS AND HERITAGE

The 6th International Congress on Education and Accessibility in Museums and Heritage took place in São Paulo, Brazil, and comprised a range of Latin-American museums extremely accessible and inclusive to all sorts of audiences. It seemed the concept of "access for all⁵⁰" was really being taken more seriously by the Latin American countries than by the European ones. Regardless of physical, mental and/or social situation and abilities, groups identified in museum studies as "minorities" seemed to have a bigger voice and space to act in the museological scene in cities like São Paulo than in the whole Dutch territory.

The project of *Making Sense* was sent as a proposal for a keynote presentation to the Brazilian congress as soon as the internship at Sound and Vision started. Having a positive answer to the application became an extra motivation to produce relevant material during the work at the audiovisual institution. After seven months of activities, the presentation about *Making Sense* was put together giving emphasis to the process of experiential learning. The goal was to show how professionals could learn and produce a lot by "putting themselves out there" applying what was being theoretically researched, even if there are still doubts about the subject. Observations in the European academic and museological field of research over the years indicated that there is a lot of theoretical research being made about accessibility to museums to visually impaired audiences but not much being applied. In the Netherlands, the interest on the matter had a boom in 2016, after the country ratified the UN Convention on the Rights for People with Disabilities. Before that, it was extremely hard to find any initiative or written material about it, especially when it came to museology. Nowadays, a lot of theory about multi-sensory exploration of museums, especially in art museums, is being researched. Nevertheless, not

⁵⁰ Eardley *et al.* "Redefining Access" p.263-286.

much is being put into practice - at least not in The Netherlands. Taking this specific characteristic in the Dutch museological scenario, the goal with the keynote presentation of *Making Sense* was to inspire people to do more when it comes to putting into practice theoretical research, working with the data produced from research based on experiences. It seemed a nice way of motivating more initiatives inside the museological scene, even if they were not perfect. The point was to inspire professionals to constantly keep learning and improving their knowledge while keeping the practical research alive. When put like that, it sounds beautiful and inspiring. Presenting positive results from an initiative that happened with almost very little financial and workforce resources as *Making Sense* seemed motivating and important. At least inside a European context. However, what wasn't being taken into consideration so far was that, for most of the Latin American countries, low budgets and lack of people engaging in museum projects is a constant reality.

After the first day of presentations in the congress, it became clear that the Latin-American museum context is very different from the European. Even with the short contact promoted by keynote presentations, it was clear that experiential learning is in the Latin-American DNA. Observing how they develop their museum practices shows how most professionals in this part of the globe give priority to practice over theory. It seems that they instinctively choose to get into action as soon as possible, favoring the learning process through experience. And as the outcomes showed, they evolve a lot through it. A LOT. Focusing, then, the *Making Sense* presentation on experiential learning was extremely redundant to that reality. And the outcomes achieved in an eight month endeavor seemed poor compared to all the great initiatives that were being shared so far. "Inclusion as a holistic process" became, then, the main focus about the experience of *Making Sense*.

Inclusion, diversity and equity: a holistic process

A holistic approach means thinking about the bigger picture. Whether you're doing holistic parenting, holistic website design, or holistic medicine, each change made to one part affects the whole⁵¹. While developing and putting the project *Making Sense* into practice, this aspect about inclusivity - be it of visually impaired audiences or of any other minority not yet included in the museum community - surfaced in the research. It was perceived that for the inclusion to be really effective, the attitude and the actions should go beyond giving access. That is because giving access to minorities doesn't prevent them from facing the same feeling of not belonging in a museum environment. Access alone provides insufficient change to the hostile climate and

⁵¹ Ameritech College of Healthcare. "6 Ways to Approach Problems Holistically". 2017. Accessed February 10, 2020.

the culture towards them cultivated in museums for centuries. As Dafina-Lazarus Stewart said, what we need is a reinforcement of the notion that diversity and inclusion are achieved by having people with different backgrounds in the same spaces⁵². To succeed in an endeavor like that in a big institution such as Sound and Vision, the different departments that make the whole engine work smoothly need to work together, in a holistic way. And this means a perennial change in the philosophy of the institution, since they need to position themselves as being inclusive and need to act accordingly.

Following these premises, Stewart highlights how a truly democratic museum must not be ideologically neutral; rather, it must ardently pursue the engagement of its staff and public in an ostensibly democratic society. Whether museum leaders will gather the institutional will and the moral and ethical courage to provoke and institute real, substantive institutional transformation is unknown. The first step on that road, however, is to make equity and justice the yardstick by which leaders measure progress instead of merely diversity and inclusion⁵³. And more so, in order to achieve that transformation, the institutions behind the museums need to be open and work towards a holistic transformation instead of leaving the equity and justice transformation in the hands of a few activists among the staff.

That is why it is necessary to work towards building and sustaining inclusive environments. In such spaces, all people, regardless of their social identities, have equal access to opportunity and advancement, receive credit for their work, and are valued for more than just their membership in a social identity group⁵⁴. Each person needs specific tools in order to gain access to space and information. Equity comes when those tools are made accessible so the public can be - and feel - included in the museological climate and culture. Therefore equity goes beyond inclusion towards a real democratic museum.

Given these aspects about inclusion and equity succeeding from a holistic process, the focus of the *Making Sense* keynote presentation had to be restructured in less than 24 hours, which jeopardized its quality as well as the reflection over the subject. Even emphasizing the discussion about the need for a holistic approach, the practices displayed drew the attention of other museum professionals. Their feedback reflected the state of the practical research presented: that it was a very basic, improvised and precarious approach if compared to other

⁵² Stewart, Dafina-Lazarus. "Language of Appeasement". *Inside HigherEd*. March 30, 2017.

⁵³ *Ibid.*

⁵⁴ Cochran, Geraldine. "The problem with diversity, inclusion and equity". *The Scholarly Kitchen*. June 22, 2018.

museums. The fact that the research was a laboratory to understand the possible solutions to better treat digital archives towards a more inclusive material sank into oblivion. Pointing this condition about the research didn't change the disappointment from the audience towards the initiative. "Your institution needs to evolve", one blind person said over the microphone. The same person questioned the "attitudinal barriers" in museums⁵⁵. This aspect is well debated and taken into consideration when it comes to inclusivity, equity and accessibility in Brazil, but it is scarcely mentioned in European conferences about inclusivity and accessibility to disabled people, if not mentioned at all.

What if this 2019 endeavor at Sound and Vision ended with the conclusion that the Netherlands is behind Latin American museum practices when it comes to the research in accessibility and inclusivity of visually impaired audiences to collections? That was the impression after presenting a keynote about *Making Sense* at the 6th International Congress on Education and Accessibility in Museums and Heritage that took place in Brazil at the end of November, 2019. This was a very important experience that led to a deeper reflection on the following points:

- To which extent and context Experiential Learning is effective?
- Does going into action, even when the theory is not clear enough, can contribute to bring better solutions to a specific case?

All in all, joining an international event about inclusivity in museums and exercising the presentation of the process of *Making Sense* was a key reflection moment for this research. Important topics for investigation emanated from the examination of this experience, leading to questions that will keep encouraging further developments of the present study. Why are museum and heritage professionals not talking about the negative attitudes of people towards disability in The Netherlands? What would it take to find a balance between practice and research regarding inclusivity of the visually impaired audiences in museums? Regarding the common barriers to participation experienced by people with disabilities⁵⁶, why aren't they in the highlight of museological debates about accessibility and inclusivity in Europe? Why do museums and cultural heritage institutions prefer to treat inclusivity as a "one department" topic instead of treating it holistically? All things considered, *Making Sense* opened doors at Sound and Vision to a new approach to the accessibility to their collection. It was also a valuable

⁵⁵ CDC, Centers for Disease Control and Prevention. "Common Barriers to Participation Experienced by People with Disabilities". 2019

⁵⁶ *Ibid.*

initiative that enriched the discussion and practice related to the subject in the museum and heritage field.

FINAL CONCLUSIONS

"A note on the experience of hearing rain falling. This evening, I came out the front door of the house and it was raining. I stood for a few minutes, lost in the beauty of it. Rain brings out the contours of what's around you. In that, it introduces a blanket of differentiated and specialized sound which fills the whole audible environment. If only there could be something equivalent to rain falling inside than the whole of a room would take on shape and dimension. Instead of being isolated, cut off, preoccupied internally, you're presented with a world. You are related to a world. You are addressed by a world. Why should this experience strike one as being beautiful? Cognition is beautiful. It's beautiful to know⁵⁷."

Eight months of theoretical and practical research were engaged with the objective to investigate possible multi-sensory approaches to the Sound and Vision video collection. The accessibility and inclusion of visually impaired audiences was the main target of this initiative, a programme based on Kolb's Learning Cycle and Experiential Learning. After a few months focused on theoretical investigation, practical experience was essential to verify the application on accessing audiovisual collections with proved solutions of multi-sensory discovery of object-based collections. Three workshops of activities were set up where some multi-sensory approaches to videos were tried out in collaboration with visually impaired people.

The first workshop was paramount to set the tone for the project. The three hour experience brought important insights concerning physical, intellectual and emotional accessibility not only to the collection, but also to the building and the museum. It was apprehended that mobility in a non-adapted space takes more time for visually impaired people, even when assisted by a sighted person. Consequently, tasks took longer to be concluded. After workshop 1, it was concluded that time management is key when it comes to a non-visual experience as well as the optimization of the number of activities proposed.

The Scribit workshop was responsible for bringing together the staff of Sound and Vision and the visually impaired participants of the project. It promoted working in pairs, resulting in collaborations that contributed to raise awareness about how audio description is an important tool for accessibility. This session was also responsible for the first videos from the collection to be made available online with audio description.

⁵⁷ Hull, John. *Notes on Blindness*. Directed by Peter Middleton and James Spinney. UK, 2016. Minute 43:00:00

The third workshop session dealt with the investigation of multi-sensory solutions to better understand a video with audio description. Addressing the theme of the Dutch ceremony for royal coronation, tactile discovery of objects and embodiment exercises of postures were suggested. As a result, more concrete comprehension of the video was achieved after listening to the audio description one more time.

The collaborations and exchanges with different professionals directly and indirectly related to the subjects researched were also important to achieve the final results. Thanks to them, more awareness regarding web accessibility tools, audiovisual accessibility solutions to the visually impaired and audio description were added to the project. Without the platform Scribit, a whole step of the programme wouldn't be possible. Through the Scribit workshop, Rob de Bie felt motivated to discover new ways of exploring the collection through his storytelling skills. Taking the experience even further, he started working on a project to bring visually impaired groups to visit the physical collection of Sound and Vision on a regular basis. The proposition is to tell the history of sound through a multi-sensory discovery of some key objects in the storage. His plans are to start with frequent group visits in the second semester of 2020.

Besides the practical aspects of the programme put into practice at Sound and Vision, the critical thinking stimulated by the presentation of the project findings during the 6th International Congress on Education and Accessibility in Museums and Heritage were of great impact for the conclusion of this step of the research. It was a moment of self-reflection of the activities, opening the initiative for debate among museum professionals. At this point, it was important to realize that *Making Sense* might have been a pioneer initiative in the Dutch audiovisual collection context, but it still has a long way ahead and it can be substantiated from other institutions' experiences.

All in all, the experience provided by *Making Sense* made it possible to verify that multi-sensory approaches contribute to deepen the understanding of videos. Nevertheless, it was put into practice during a very short period of time, which compromised the involvement of a significant number of staff in the activities. This somewhat jeopardized the secondary goal of the project. This difficulty was mainly due to the ramification of the institution's organization. Composed by a national archive and a museum, there is a great number of people involved in the complex departmental structure necessary to keep both of them running smoothly. Inclusivity is an initiative that needs to be embraced by the whole system and not only by two people from the staff. Therefore, instead of only trying to gather data from workshops, it is also necessary to bring awareness to the staff about the importance of working in an inclusive way. That is why,

besides aiming only at achieving results about multi-sensory approach to moving images, this project also tried to highlight the importance of working with inclusivity in a holistic way, which means fully thinking about the bigger picture⁵⁸. However, networking with colleagues in order to motivate them to join a project requires more time, engagement and influence than an eight month experience provides. Maybe if the project was embraced by the educational or the museum design department too, a more extensive result might have been accomplished. In any case, inclusivity is only truly achieved when installed in the core of the institutional practice. For this to happen, it is necessary to re-think the institution's philosophy so it becomes a perennial practice, and big transformations like that take a lot of time to be consolidated.

REFERENCES

- Acessibilidade na Prática. "Tipos de Barreiras". 2012. Accessed March 04, 2020. <http://www.acessibilidadenapratica.com.br/textos/tipos-de-barreiras/>
- Ameritech College of Healthcare. "6 Ways to Approach Problems Holistically". 2017. Accessed February 10, 2020. <https://www.ameritech.edu/blog/6-ways-approach-problems-holistically/>
- Barrett, J. 2015. "Museums, Human Rights, and Universalism Reconsidered." In *The International Handbooks of Museum Studies. Volume 1: Museum Theory*, edited by Andrea Witcomb and Kyly Message, 93-115. Oxford: Wiley.
- Bartiméus. "Visuele beperkingen". Accessed April 06, 2020. <https://www.bartimeus.nl/visuele-beperkingen>
- Bartiméus Sonneheerdt. 2014. *Feiten & cijfers over blind of slechthziend zijn*. Accessed January 07, 2020. https://bartimeusfonds.nl/wp-content/uploads/2014/05/BARTI1305_factsfigures4.pdf
- Beeld en Geluid. Accessed January 14, 2020. <https://www.beeldengeluid.nl/>
- Bergold, Jarg; Thomas, Stefan. "Participatory Research Methods: A Methodological Approach in Motion". *Forum: Qualitative Social Research*. Volume 13, No. 01, Art. 30 (January, 2012).
- Cambridge Dictionary, s.v. "Accessibility". Accessed April 06, 2020. <https://dictionary.cambridge.org/dictionary/english/accessibility>
- CDC, Centers for Disease Control and Prevention. "Common Barriers to Participation Experienced by People with Disabilities". 2019. Accessed January 28, 2020. <https://www.cdc.gov/ncbddd/disabilityandhealth/disability-barriers.html>
- Choyke, Alice M. 2009. "Grandmother's Awl: Individual and Collective Memory Through Material Culture". In Barbiera, Irene; Choyke, Alice M.; Rasson, Judith A. (ed.). *Materializing Memory: Archaeological Material and the Semantics of the Past*. 21-40. BAR International Series 1977, Archeopress:Oxford
- Cochran, Geraldine. "The problem with diversity, inclusion and equity". *The Scholarly Kitchen*. June 22, 2018. Accessed January 06, 2020. <https://scholarlykitchen.sspnet.org/2018/06/22/problem-diversity-inclusion-equity/>
- Door de ogen van. *Feiten en cijfers over visuele beperking*. (n.d.). Accessed January 07, 2020. <https://www.doordeogenvan.org/nieuws/feiten-en-cijfers-over-visuele-beperking/>

⁵⁸ Whether you're doing holistic parenting, holistic website design, or holistic medicine, know that each change you make to one part affects the whole (Ameritech College of Healthcare. "6 Ways to Approach Problems Holistically". 2017).

- Eardley, Alison F.; Mineiro, Clara; Neves, Joselia; Ride, Pete. "Redefining Access: Embracing multimodality, memorability and shared experience in museums". *Curator: The Museum Journal*, volume 59, Issue 3. (July 28, 2016): 263-286.
- Encyclopedia.com, s.v. "Participatory Research" Accessed April 14, 2020. <https://www.encyclopedia.com/social-sciences/encyclopedias-almanacs-transcripts-and-maps/participatory-research>
- Fielder, Jennifer C.; Proulx, Michael J. "Psychological representation of visual impairment: Perception and how visually impaired people "see" the world" IN: Ravenscroft, John (Ed.). *The Routledge Handbook of Visual Impairment: Social and Cultural Research*. Routledge International Handbooks, 2019. (chapter 3, eBook)
- Fiske, John. *Television Culture*. Routledge, 1987.
- García, Natalia Grau. "El Arte a la 'Vista' de Tod@s: Casi diez años de actividades accesibles a discapacitados visuales." *5è Congrés Internacional d'Educació i Accessibilitat a Museus i Patrimoni*. 2018. Accessed June 12, 2019. <https://congresoaccesibilidad.mmb.cat/comunicaciones-nuevo/>
- Garde-Hansen, Joanne. *Media and Memory*. Edinburgh University Press, 2011.
- Groth, Camilla. 2016. "Design- and Craft thinking analyzed as Embodied Cognition". *FormAkademisk - forskningstidsskrift for design og designdidaktikk*, volume 09, number 01. Accessed January 13, 2020. <https://doi.org/10.7577/formakademisk.1481>
- Groth, Camilla; Mäkelä, Maarit. 2016. "The Knowing Body in Material Exploration". *Studies in Material Thinking: Experience/Materiality/Articulation*, volume 14. Auckland University of Technology. 1-21
- Hendriks, Klaus B. 1986. "Care of Black-and-White Photographic Negatives on Film". *CII Notes 16-3*. Canadian Conservation Institute. Accessed January 27, 2020. <https://www.canada.ca/content/dam/cci-icc/documents/services/conservation-preservation-publications/canadian-conservation-institute-notes/16-3-eng.pdf?WT.contentAuthority=4.4.10>
- Herrington, K. "Accountability and disposal: visual impairment and the museum" In *Museum and Societies Journal*, volume 1, number 3. Leicester: University of Leicester, 2003. 104-115
- Hull, John. *Notes on Blindness: A Journey through the Dark*. Profile Books, 2017.
- _____. *Notes on Blindness*. Streaming. Directed by Peter Middleton and James Spinney. UK, 2016.
- Krznicar, Roman, "The Future of Empathy". In *Empathy*. Rider Books, 2015. 203-214
- Levent, Nina; Pascual-Leone, Alvaro (Ed.). *The Multisensory Museum: Cross-Disciplinary Perspectives on Touch, Sound, Smell, Memory, and Space*. Rowman & Littlefield, 2014.
- McLeod, Saul. 2017. "Kolb's Learning Styles and Experiential Learning Cycle". *Simply Psychology*. Accessed January 24, 2020. <https://www.simplypsychology.org/learning-kolb.html>
- McLuhan, Marshall. *Understanding Media*. Cambridge: MIT Press, 1994.
- National Archives. "Moving Images". Accessed April 06, 2020. <https://www.archives.gov/preservation/products/definitions/moving-image-def.html>
- Nederlands Instituut voor Beeld en Geluid. "Inhuldiging prinses Wilhelmina (1898)". Filmed [1898]. Youtube video, 6:14. Posted [April 27, 2013]. Accessed January 24, 2020. https://www.youtube.com/watch?v=IsIPj5k2NeE&list=PL5X5Uv5arwuPDkmbmxgdBxQDoJvxiKxJv_&index=2
- O'Connor, Rosanna. "Blind Museology: Moving beyond a visual bias in western culture to build an inclusive environment within museums and galleries". Bachelor's dissertation. University of Exeter. Accessed January 9, 2020. <https://www.academia.edu/29188832/>

- BLIND_MUSEOLOGY_MOVING_BEYOND_A_VISUAL_BIAS_IN_WESTERN_CULTURE_TO_BUILD_AN_INCLUSIVE_ENVIRONMENT_WITHIN_MUSEUMS_AND_GALLERIES
- Pernisco, Nick. "Accessibility for the disabled in the Netherlands: 5 Tips When Visiting Holland". October 19, 2018. *Dutch Review*. Accessed January 07, 2020. <https://dutchreview.com/culture/living-in-the-netherlands/accessibility-for-the-disabled-in-the-netherlands/>
- Robinson, Andrew. "An A to Z Theory. Walter Benjamin: Art, Aura and Authenticity". June 14, 2013. *Ceasefire*. Accessed March 04, 2020. <https://ceasefiremagazine.co.uk/walter-benjamin-art-aura-authenticity/>
- Smit, Ruben. 2015. "Heritage and Learning". In Brown, Claire; Knoop, Riemer (eds.). *The Public: Heritage Reader 1*. Amsterdam: Reinwardt Academy, Amsterdam University of the Arts, 2015. 18-32
- _____. 2015. "Experiencing Heritage". In Brown, Claire; Knoop, Riemer (eds.). *The Public: Heritage Reader 1*. Amsterdam: Reinwardt Academy, Amsterdam University of the Arts, 2015. 33-46
- Stewart, Dafina-Lazarus. "Language of Appeasement". *Inside HigherEd*. March 30, 2017. Accessed January 06, 2020. <https://www.insidehighered.com/views/2017/03/30/colleges-need-language-shift-not-one-you-think-essay>
- Vi, Chi Thanh; Ablart, Damien; Gatti, Elia; Velasco, Carlos; Obrist, Marianna. "Not just seeing, but also feeling art: Mid-air haptic experiences integrated in a multisensory art exhibition". *International Journal of Human-Computer Studies* 108 (2017): 1-14.
- Wilson, P. F., Scott, J., Warnett, J. M., Attridge, A., Smith, M. P., Williams, M. A. 2017. "Evaluation of Touchable 3D-Printed Replicas in Museums". *Curator The Museum Journal*, volume 60, number 4, 445-465. Wiley Periodicals Inc.: 2018.

ANNEXES

ANNEXE 1

NOTES ON CALLS WITH HOËLLE CORVEST

24/05/2019

Musée Omero - Tattile Statale

<http://www.museoomero.it/>

- research about it
 - programs
 - approaches
 - etc

About audio description and videos accessibility to blind people

- Audio description only works as a tool to accessibility. It needs to be presented alongside with another support when it comes to the full understanding of an image.
 - That's because visually disabled people need to be able to acquire concrete information in order to build knowledge around what's being heard from the audio description (image described by words: only words can, most of the time, be very abstract)
- Audio descriptions can be very comfortable to museums. Nevertheless, they need more mediation around it than just the verbal description itself in order to transmit a correct and fair non-visual "picture" of the material presented.
 - museums usually think that only audio descriptions are good enough for a non visual access to exhibits. Therefore they can "excuse themselves" from not creating any tactile kind of support

Blind people exclusion reality

- Visually impaired people have been educated listening that they are forbidden to touch most of the things, especially when it comes to visiting museums or historical places. "The touch will damage it," they are told so. Therefore they don't touch anything and end up excluded to whatever it is that's in front of them.
- They miss the real interaction with what's being shown. They miss the real interaction with art works for example. Since we are only allowed to use the sight inside most of the museums, visually impaired people have nothing left to gain access to what's being exhibited.

How to bring out the forms that are being described by audio as well as their spatial organization shown in the image?

- That's the real challenge to be faced once the audio description is done.

Thematic orientation about universal actions

- Choose works (videos in the B&G case) that relate to the themes.
- This is a way of exploring productions from different production periods as well as diverse geographical localizations.

- After exploring and discovering common elements about the themes, each work / production can be explored and understood inside its own context and in relation with it (specific elements that are not only provenient from the universal actions)
- After this pattern of exploration, people can perceive an artistic quality of the material through a non-visual experience, being able to understand what's being shown to them, creating their own interpretation and being able to develop their own intellectual judgement (and not through someone else's interpretation).
- This type of orientation allows people to go through a non-visual discovery of typical identity elements present in each of the work / productions (in case of videos).

When it comes to explore caricatures

- When something is represented through caricature, some shapes and features are exalted in detriment to others. So how to make people understand it in a non visual way?
 - We can present a tactile image of the regular shape, another one with the distorted features, guiding the discovery and encouraging the comparison between the two images, showing what's different
 - Another option is to use a soft and thick rubber board with a special plastic sheet that adheres to it. One can draw with a regular ballpoint pen on the sheet. The person can be guided and encouraged to draw the forms as they are and, after that, to try to draw them with the distortions that appear in the caricature. The special plastic sheet allows the lines drawn to be touched, since they pump out the surface once it is pressured by the ballpoint pen.

How to provide a non-visual discovery of a video?

- choose a scene/ situation
- describe
 - the scene,
 - the characters in it,
 - the context,
 - the environment they're in
- Attention to not ask people if they know what something is (an object or action for example); they're most likely gonna say "yes" - because they really think they know what it is -, but they actually don't concretely know it (they have an abstract idea, but not a concrete idea)
 - instead of asking, show it. How?
 - making drawings in the special plastic sheet on rubber
 - showing a replica or reproduction or similar of what's being talked about
 - show variations presented in the scene (in the case of a caricature or satira, for example)
- each person has a different way of describing the same object / situation / scene.
 - *"words are incapable of precisely describing forms, dimensions and the orientations of an object"*
 - When we share a concept using specific vocabulary, things are going to be described in a very particular and individual way.
 - When it comes to words used for describing, they make reference to things that are not necessarily known by the people that are listening to them. Therefore, audio description is not a type of accessibility: it is complementary to it.
 - Audio description should be used as part of a mediation process and not as the only mediation tool presented.
 - Only description doesn't give real access to anything.

04/06/2019

About thematic discovery

- When discovering something, first explore the symbol and then the symbolical aspects related to it.

About visually impaired people and their access to heritage in general

- *“Since you cannot see it, you don’t know it. Therefore, you cannot know if it’s beautiful or not”*
 - That’s what people usually say to visually impaired people whenever they want to take place at any type of “negotiation table” (usually where decisions are made and knowledge is produced)
 - That’s how visually impaired people are left out of a lot of discussions regarding heritage, arts, etc.
 - That’s why it’s important to give the visually impaired the right keys in order for them to understand the heritage / art work and, therefore, be able to know it. After this, they’re gonna have the right tools to absorb the knowledge being communicated, developing their own opinion and appreciation about the subject. -> PASS ON ELEMENTS TO BUILD KNOWLEDGE and not “ready-made knowledge”.

Alternatives to explore audiovisual archives

- Discover and - maybe - put on costumes related to scenes / videos / concepts
- Mimic certain positions and gestures

ANNEXE 2

WORKSHOPS WITH STAFF

*** First ideas ***

1. Audio description

Workshop given by Scribit (discuss with them the possibilities)

- a. What is it?
- b. How does it work?
- c. Scribit
- d. ... (any other aspects they would like to present)

2. Audio description as a tool

Workshop to start the awareness of a multi-sensory approach. Now that they know what audio description is and how it works, they are going to use it as a tool for knowledge construction and understanding. The goal is for them to experience and realize how the use of audio description alone doesn't give a real opportunity to access: it is an important tool, but it needs to be combined with other types of mediation.

- a. *Only audio description is not enough*
 - Why?
- b. Work on descriptions: *imaginary image X reality* (when you see it)
 - Activity to demonstrate how the same thing can be described in many different ways, using divergent perspectives (by the same person and by different people).
 - Activity where blindfolded sighted people are given different descriptions of the same object / scene. At the end, they get to see what was described and analyse if it matches what they had imagined / pictured in their heads.
 - Show Zeeuws museum contemporary exhibition as an example.
 - After activity, compare results and talk about the importance of giving the right tools (and not only one) for visually impaired people to construct their own knowledge about form, dimensions and orientation. From real data, they can then create their own point of view / perspective about what's presented (instead of beginning to work with "corrupted by imagination" data).

3. Multi-sensory discovery

Workshop combining audio description and other senses (touch, smell, sound, taste...): the "*other types of mediation*" mentioned in the previous workshop. Bellow, a suggestion of activity development with blind folded sighted people:

- a. Play audio description.
- b. Use reproductions, models and objects that appear in the scenes.
- c. Is there a smell that could "represent" the place shown? If so, show it.
- d. Are there sounds that would be characteristics to the scene and that are not clear in the video? If so, present them separately.
- e. Are there specific gestures or attitudes that could be reproduced through mimics in order to make them understand the scene better? If so, make them mimic the gestures / poses.
- f. Play audio description again and compare impressions from the first time it was played.
- g. Take off the blindfold and show the fragment of the video.
- h. Discuss / exchange / observe reactions and impressions

- i. Compare mental image construction quality (imagination X reality) from workshop 2 (“audio description as a tool”) and workshop 3. Suggestions for discussion:
- Did you understand the subject of the video?
 - Did workshop 3 give you enough intel / info to enable a good construction of mental image?
 - Was the mental image created by you through the activity closer to the reality than the one created during workshop 2 (the one built only through audio description)?

4. Talk with Hoëlle Corvest (Suggestion to be discussed)

Hoëlle Corvest was the responsible for the development of inclusive accessibility to the visually impaired public at *Cité des Sciences et de l'industrie* and at *Palais de la Découverte* (both in Paris, France) for 30 years (1986-2016). Blind since her childhood, she became a specialist on tactile image, coordinating the collection of works *À Voir et à Toucher* edited by the Cité des Sciences. She also collaborated with tactile publications from *Musée du Louvre* and *Éditions du Patrimoine*.

- This would be an inspiring talk where she would have the opportunity to share her experience on working for 30 years in two big public institutions and museums aiming to make them become completely accessible to visually impaired visitors. Some of the points discussed could be:
 - * How her journey in these institutions began.
 - * The main challenges she faced.
 - * The best results she achieved (or the most important accomplishments, whether they are related to activities implemented or to policy changes).
 - * Her challenges for the future now that she's an independent professional.
 - * Her advice / word or inspiration to the Sound and Vision staff.

Overall discussion

1. The importance of giving people the right tools to access content.
2. Access and interpretation are a process that needs to be built and constantly discussed (no one is born knowing to “decodify” images, forms, orientation, dimensions, etc., either visually nor through other senses)
3. Why do we choose to focus on some visitors over others?
 - Who's the main target public of the collection?
 - If the collection is not effectively available to everyone (contrary to what the institution's mission states), then why / what makes people choose some people's profiles over others?
 - Why do you think visually impaired people have been denied access to so many basic things for so long?
4. What would be the benefits to give access to the B&G collection to the visually impaired?
 - How could people that already have access to the B&G collection (sighted people) could benefit from the inclusion of visually impaired into this “community”?
 - What would be the benefits to the institution (B&G) and to its staff to start working taking these inclusivity aspects into consideration?
5. Why not also use this opportunity to explore different perspectives of discovery also with sighted people?

ANNEXE 3

“MAKING SENSE”: A LABORATORY FOR EXPLORING THE AUDIOVISUAL AT THE SOUND AND VISION THROUGH MULTI-SENSORY EXPERIENCES.

The Making Sense Lab was created with the objective to investigate multi-sensory approaches in order to make audiovisual material fully accessible to visually impaired people (VIP). The goal is to learn through experience, trying out different ways to translate into touch, smell, hearing and taste the key forms / images / messages delivered by audiovisual samples.

Outline:

<p>Session 1.</p> <p>Title: Meet up.</p> <p>Date: September 26, 2019.</p> <p>Start Time: 14:00.</p> <p>End Time: 17:00.</p> <p>Duration: 3h.</p> <p>Location: Beeld en Geluid (B&G).</p> <p>Responsible: Camila (B&G).</p>	<p>Description.</p> <p>Moment for the volunteers joining the LAB to meet each other:</p> <ul style="list-style-type: none"> ● what brought them to this “adventure”? ● what is their background? ● what do they know about audiovisual? ● what’s their relation with audiovisual (radio, tv, cinema...) ● what are their expectations with this lab? <p>Visit together to the Experience @ B&G.</p> <p>Discussion and assessment of “expectations vs. reality” of the visit to the experience.</p>
<p>Session 2.</p> <p>Title: Audio Description (AD) workshop.</p> <p>Date: October 17, 2019.</p> <p>Start Time: 13:00.</p> <p>End Time: 16:00.</p> <p>Duration: 3h.</p> <p>Location: Beeld en Geluid (TBD).</p> <p>Responsible: Annick de Lange (Scribit).</p>	<p>Description.</p> <ul style="list-style-type: none"> ● Work on 5 coronation videos from the Dutch Royal Family. <p>Scribit workshop:</p> <ul style="list-style-type: none"> ● part I: explanation of Scribit AD technology; ● part II: making the audio description of the 5 coronation videos. <p>The activity aims to:</p> <ul style="list-style-type: none"> ● give awareness to the B&G staff about the need of inclusivity and accessibility to the institution’s collection; ● teach all the parts involved how to make AD on their own through Scribit (so they can eventually contribute to making the B&G collection available on AD); ● make the coronation videos the first 5 samples in the collection available on AD.

Session 3.	Description.
<p>Title: <i>Exploration, Discovery and Understanding</i>: is everything making sense?</p> <p>Date: October 21 or October 24, 2019.</p> <p>Start Time: 14:00.</p> <p>End Time: 17:00.</p> <p>Duration: 3h.</p> <p>Location: Beeld en Geluid.</p> <p>Responsible: Camila (B&G).</p>	<p>Identifying elements that give meaning to the video:</p> <ul style="list-style-type: none"> ● context; ● theme; ● form; ● how the forms make sense in the context inside the theme. <p>Identify elements that are important to the video and a way to explore them other than visually:</p> <ul style="list-style-type: none"> ● objects to touch? ● reproductions? ● specific sounds? ● architectural models? ● specific smells? <p>Multi-sensorial discovery of the elements.</p>
<p>AND</p> <p>Date: October 31, 2019.</p> <p>Start Time: 15:30.</p> <p>End Time: 17:00.</p> <p>Duration: 2,5h.</p> <p>Location: Beeld en Geluid (during Kenniscafé)</p> <p>Responsible: Camila (B&G).</p>	<p>Try to understand the solemnity (the pomposity, the formality) of the coronation moment through discovering and analysing:</p> <ul style="list-style-type: none"> ● costumes; ● postures; ● tension; ● ceremony; ● Royal behaviour and expressions... <p>Try to connect the experiences in order to complement the information acquired through AD from the videos:</p> <ul style="list-style-type: none"> ● listen to ADs again, now with a different perspective after the multi-sensory experiment; ● place the forms, smells, sounds, positions, etc. discovered into the context presented in the videos. <p>Assessment of activities.</p> <p>Brainstorm of what should be included in the guideline for future workshops:</p> <ul style="list-style-type: none"> ● other videos with different themes; ● same theme with other VIP.

Further work:

Write down a first guideline to AV multi-sensory discovery taking in consideration the learning experience - exploration, analysis and conclusions - lived by the group engaged in the Making Sense Lab.

ANNEXE 4

VISIT TO EXPERIENCE SMALL SUMMARY FROM OCTOBER 2, 2019

- A. Visually impaired people should come with a companion.
- B. 2 possibilities for a more inclusive visit:
 - Provide them with adapted audio guides (for the visually impaired) for an independent visit ' with Speech synthesis of the texts.
 - Do a guided tour visiting 5 main installations as shown in order of visitation below (See Experience map with legend indication on Annexe 5):
 1. Go to A (*De wereld: een dorp*) and listen to audio;
 2. Go to C (*Kijkbuis kinderen*), touch the wooden structure, enter the cocoon and listen to testimonials;
 3. Go to B (*Sterrenshow*) and experience how it would feel to be on a stage of an entertainment show (camera, stage position, lighting, audience noise). Explore:
 - I. How to behave in front of the public?
 - II. How to prepare a presentation?
 - III. Try to pay attention to facial expressions (e.g. smile), gestures, body language and not just the speech.
 - IV. What is the feeling of being watched instead of watching?
- 4. Go to N (*Zuilen en zenders*) and try to identify the radio events presented in the time tunnel. Check if they identified any of them;
- 5. Go further at N (camouflated war news space) and impersonate a news reporter (interview other participants about how they lived or what they remember from the 4 events listened to previously). Explore how news can be seen from different angles.

Obs.: take into consideration: prepare the visitors rings in advance due to lack of accessibility to totems and their cacophonia; use the elevator instead of stairs.

ANNEXE 5

MAP OF MUSEUM "EXPERIENCE"

A De wereld: een dorp
Radio, televisie, internet, mobiele telefonie; de communicatietechnologie heeft ons leven ingrijpend veranderd. Ten goede? En wiens leven eigenlijk? Dat is het onderwerp van de centrale show, te bekijken vanuit de stoelen. Op de kleine schermen vertellen kinderen uit alle windstreken over de rol van media in hun leven.

B Sterrenshow
Een schatkamer vol met Nederlandse sterren, amusement, drama en satirische. Bekijk je lievelingsprogramma's op het Sterrenplein. Waan jezelf een ster en maak een showopkomst of speel een spannende achtervolgingscène!

1 SHOWDEUR
2 IN DE ACHTERVOLGING
3 FOTO MET BN-ER

C Kijkbuis kinderen
Ti-to Tweenaar, Theo en Thea en Telekids. Herinner jij ze nog? In twaalf jukeboxen boordvol fragmenten kun je zelf op zoek naar programma's uit jouw eigen kinderjaren. Of maak met stop-motion techniek je eigen Buurman en Buurman animatie!

4 BUURMAN EN BUURMAN STUDIO

D Het Klokhuis TijdLab
Hoe zie jij jouw toekomst? Maak hier zelf met de hulp van de mensen van Het Klokhuis een televisie-Item over jouw toekomstvisie.

5 IETLAB
6 HOONLAB
7 REISLAB
8 INTERVIEW

E Mediawijzer.net
Wat weet jij van de media? Wat kun je er mee en wat vind je ervan? In Mediawijzer.net kun je testen hoe mediawijs je bent. Doe de scan en laat je door een mediatraining heen coachen.

9 MEDIATRAINER

F POPstudio
Hoor je die beat en de bas? Herken je deze melodie? In POPstudio is de Nederlandse popmuziek te horen én te zien. Het is de plek van Toppop, Ad en Penney, van clips en Countdown. Maak hier zelf muziektelevisie als regisseur of vj. Of ga lekker dansen!

10 PLAYBACK
11 VJ-STUDIO
12 DJ-STUDIO

G Animal Crackers
In Animal Crackers kun je diertjes de gekste dingen laten zeggen, door jouw stem en grappige teksten onder de filmpjes te zetten, krijgen de beesten open menselijke trekjes. Laat maar eens zien hoe geestig je kunt zijn!

13 ANIMAL CRACKERS

H Macht en media
De media bepalen welke mensen en gebeurtenissen aandacht krijgen. Maar de politici en de burgers proberen ook de media voor hun karretje te spannen. In dit paviljoen zie je hoe dat gebeurde, vroeger en nu. Test je kennis in de quiz!

I Ben ik in beeld
Realitysoaps, gluur-tv en spraakmakende talkshows maken de kijker actief en zichtbaar. Ben ik in beeld toont hoe de tv steeds meer van het privéleven van mensen laat zien en steeds intimer wordt. Sommige mensen smullen ervan, anderen vinden dat het veel te ver gaat. Wat vind jij?

14 BEN IK IN BEELD

J Tv tycoon
Altijd al zelf willen bepalen wat er op tv komt? Stap in de schoenen van een netmanager en stel je ideale tv-avond samen. Lukt het jou om de kijkers tevreden te houden?

L Dit is het nieuws
Hoe komen nieuws- en actualiteitenprogramma's tot stand? Maak hier kennis met de journalistieke principes achter het nieuws. Of lees zelf een journaal voor van de autocue en leer het nieuws beter te begrijpen. In de Gouden Doos zie je een actueel overzicht met hoogtepunten uit nieuws en sport.

15 MAAK HET NIEUWS
16 LEES HET NIEUWS

M Medialounge
Stap in de Buis & Haard Lounge en raad welke BN'er bij welke huiskamer hoort. Of neem plaats in één van de Medialounges en kies je favoriet uit de ruim 35.000 programma's uit het archief van Beeld en Geluid.

N Zoulen en zenders
Hier presenteren de omroepen zichzelf. Leer meer over de omroepen en de geschiedenis van het bijzondere Nederlandse omroepstelsel.

O Muzieklounge
Neem plaats in de Muzieklounge, luister en kijk naar honderden Nederlandstalige liedjes uit het archief van Beeld en Geluid.

SPOTLIGHTS
Op zoek naar actie? Kies de Spotlight-activiteiten. Het zijn er 16.

Trappen
Lift
Inlogstation



ANNEXE 6

REPORT THINKING ABOUT FULL ACCESSIBILITY AND INCLUSIVITY FOR ALL PUBLIC AT THE INSTITUTE FOR SOUND AND VISION - Collection, Building and Exhibition -

After the visit through the “depot” aiming a non-visual multi-sensory discovery of the collection from Beeld en Geluid, some aspects about accessibility and inclusivity for everyone emerged. A few considerations about its physical and intellectual aspects are presented below, as a way to start thinking about the subject and, in the near future, to start acting towards a collection and a museum that are really accessible to everyone through an inclusive environment.

Considerations about visits focused on a non-visual multi-sensory discovery:

- 4 visits of 1 hour each with the following focus:
 1. Audio visual media support (films, film cans and vinyl) [*depot*]
 2. Tv shows, props, radio shows and sound effects [*depof*]
 3. Radio and tv history and development through objects [*depof*]
 4. Exhibition (news, history and tv shows) [*BenG Experience*]

Obs.: All visits should start with a brief discovery of the building history and physical aspects since it is an important component of BenG through, for example:

- touching glasses from the exterior and interior of the building;
- exploring the difference of sound reverberation on different spaces such as atrium and offices;
- exploring the difference between underground and upper floors;
- bringing awareness to the variety of smells that are going to be encountered (vaults x experience x offices);
- etc.

To improve this discovery exercise through making the knowledge acquired less abstract to the visually impaired, a maquette of the building would be a great tool for tactile exploration.

A maquette from the whole Media Park would also be important if we want to communicate the extension of the complex where BenG is inserted in (this could be a conjoint project / investment from everyone present in this complex).

References of maquettes in this context:

- 1. Public 3D plan of London Tower Bridge Quartier (London)



2. The diversity of tactile models produced by the company Ducaroy-Grange for several French museums



Considerations about physical accessibility:

- There are too many doors to open manually. If they can all be automatically opened through badge, like the ones in front of the lift in the underground floors, the transit around the underground floors would be facilitated;
- The visually impaired visitors cannot find their way on their own around the building. A simple solution would be to install handrails or simple floor relief signalisation tapes;
- No vocal instructions in the elevators. Visually impaired visitors can't know when the door is about to close or in which floor they are at;
- There are no computers with voice over at the client service room. This means that visually impaired visitors are not welcome to consult independently the material available to "everyone".

Bartiméus, for example, has experts on the subject that could collaborate with BenG in order to find simple and non-costly solutions for physical accessibility.

Considerations about collection accessibility and inclusivity for visually impaired and deaf audience:

A work on voice over accessibility to the website is urgent if we want to start working on audio description and subtitles for the videos. It is a matter of programming and coding. Ash Marriott from Europeana is an expert on it and he could collaborate with BenG to find the appropriate solutions. On a first contact, he did a quick analysis of the current interface where videos are available to the general public and identified some easy adjustments that can be done on the programming.

It is important to start spending human and financial resources to make audio description only after the website is accessible through voice over otherwise visually impaired audience won't be able to find the videos they want online, even if they are available with audio description. It is crucial that they are first able to navigate the website in order to search for the material they want, and then consult the material.

If we want to work towards full accessibility, we have to keep in mind that audio description is only part of it. Further mechanisms need to be researched, developed and implemented in order for the accessibility and inclusivity to be successful.

Considerations about accessibility and inclusivity of deaf and visually impaired audience to the new Experience:

Voice over and subtitling

It is fundamental to work on making the content of a new exhibition accessible since its conception. This accessibility and, consequently, inclusivity of sensorial disabled visitors can be made combining some of the aspects already presented above, such as the adjustment of the programming of the content in order for it to show automatic subtitling for deaf visitors and voice over for blind visitors. Both of these technologies are already available and are not hard or expensive to implement while the coding and programming are still being developed. Nevertheless, it is more complicated and more expensive to change and adapt all the content once it's already done and implemented.

Physical accessibility

It is also essential to work with the exhibition designers in order to make the space physically accessible to the visually impaired audience. With the implementation of some simple solutions, visually impaired visitors will be able to walk around independently through the exhibition space. If these solutions are developed together with the exhibition designer during the conception phase, they can be incorporated in a way that they will dialogue with the entire expography project, without interfering with the concept. If it is applied later, as an "adaptation", it will probably stand out visually, taking the risk of compromising the exhibition design, looking like an improvised solution.

Mission and Vision of Beeld en Geluid

Sound and Vision's **mission** is to *"Improve people's lives in and with media by archiving, exploring and contextualising it, whereby the freedom of thought and expression in text, image and sound is paramount."* Along with it, the Institute also presents in its **vision** that *"Sound and Vision will actively promote the use of its extensive collection and open it up as much as possible, for everyone – from professionals to people with a more casual interest. To inspire them and help them excel. In this way, Sound and Vision will help to build a more media literate world. To achieve this, Sound and Vision will seek collaboration with all the relevant stakeholders and take the lead where necessary. Through its building, its collection and its museum, it will do everything in its power to create free thinking in media."*

In order for the Netherlands Institute for Sound and Vision to keep working on achieving its mission and vision, it is urgent to start thinking about the inclusivity of the sensorial disabled audience, acting towards giving them access to what the institution has to offer to the community.

ANNEXE 7

WORKSHOPS PHOTOS

Workshop 1



Workshop 2



Workshop 3

