Leisure and culture accessibility

The OPERA Project

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Abstract

The OPERA-Project is a web portal for the evaluation and dissemination of accessible audiovisual resources pertaining to Spanish culture and heritage. It also contains an evaluation framework and model that not only detects malpractices but is also designed to raise quality standards for accessible resources. This project is an expansion and improvement of PRA2, a portal created in a previous R&Q Project (Plataforma de Recursos Audiovisuales Accesibles). Whereas PRA2 originally targeted audiovisual media accessibility, OPERA has a wider scope and also focuses on accessible tourism and museology. Project goals include the following: (1) evaluation of both new and existing accessibility resources by means of reception studies; (2) enhanced visibility of accessibility resources and of the agencies and professionals that create them; (3) publication of research project results for the effective transfer of knowledge to users of accessible audiovisual resources.

Keywords: Online reception studies, Audio description, SDHH, accessible Tourism and Museology.

1. Introduction

European countries have become increasingly aware that inequality paralyses the development of society, damages the economy, and reduces the capacity for innovation and research. The European Union is thus committed to providing citizens with equal access to education, leisure, and culture. This has led to initiatives to foment the dissemination of the cultural heritage of EU member states. For example, the H2020 Horizon program, which actively promotes ICT Research and Innovation for Creative Industries and Cultural Heritage, has following objectives:
EU research and innovation will address social exclusion, discriminations and various forms of inequalities. It will explore new forms of innovation and strengthen the evidence base for the Innovation Union, the European Research Area and other relevant EU policies. It will promote coherent and effective cooperation with third countries. Finally, it will address the issues of memories, identities, tolerance and cultural heritage.

Currently, there are many citizens at risk of social exclusion. This negative situation could be alleviated by fostering the cultural integration of different social groups. However, active participation in cultural life requires the creation of planned actions that motivate users, incite their curiosity, and capture their interest (Verdugo, 2015: 12). This signifies rethinking and redefining the concept of access.

Inclusion through cultural heritage entails a social identification that contributes to self-integration. In other words, people must seek to become an active member of society. A society is more inclusive when it promotes accessibility and universal design in its heritage plans. Nevertheless, an accessible culture is not always inclusive if it lacks a targeted social group and a specific communicative situation (Espinosa and Bonmartí, 2013).

Constant multimodal diversification in the creation of texts is a basic characteristic of communication strategies in modern society. Not surprisingly, the types and quantity of multimodal content have soared in the last ten years. Díaz-Cintas and Baños (2015: 1) write:

Today’s exposure to and interaction with audiovisual content is far greater now than ever before, and this has obvious repercussions for audiovisual translation (AVT), both as a professional practice and as an academic discipline.

The increased demand for audiovisual translation is a clear indication of the huge quantity of multimodal texts in our daily lives. When such texts are written, they have to be translated in order to reach a larger target audience. For example, tourism, education, computing, and businesses widely employ multimedia (and multimedia translation) for the international dissemination of their activities and products.

The cultural sphere has also adapted to this new reality. Most museums now provide audiovisual texts to guide and explain their on-site or virtual displays and exhibits. For this purpose, a wide range of semiotic modes is used. Museums are also experimenting with digital learning, and the use of “mobile technology from Wi-Fi in galleries and multimedia tours to smartphone apps and QR codes” with

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2 https://www.museumsassociation.org/museum-practice/digital-learning
a view to “enhancing the visitor experience and reaching new audiences”\(^3\). The same is true in the case of visitor centres for archaeological and heritage tourism where it is common to find audiovisuals with additional explanations and historical contextualisations (Binoy, 2011; Ponce and Romero, 2012).

One of the main purposes of these multimodal texts is to bring new social groups closer to their heritage. There is no doubt that they are also an important source of knowledge acquisition, given the fact that they are entertaining and thus capture the attention of users, inviting them to learn. However, the negative side is that this has created an unbridgeable gulf for other social groups such as senior citizens, who are not familiar with digitalisation and digital resources, people with sensory impairments (i.e. Blind and Deaf people), and even individuals that are cognitively diverse.

Although multidimensional and multimodal text types are initially designed to bring people closer to the cultural object, this does not always occur. Some of these texts are more successful than others. In many cases, it is a question of finding the optimal design for each user group. To promote accessibility for such users, cultural institutions are currently using traditional translation modalities that have been shown to partially eliminate communication barriers. Standard resources include audio description for blind and visually impaired people or subtitling and sign language interpreting for the deaf and hard of hearing. The question is whether these modalities are as helpful as they should be. This article presents a framework for the evaluation of cultural resources that target people with sensory impairments. The objective was to assess the quality of the information provided by multimodal texts.

### 2. Accessibility through translation

In a given cultural context, an accessibility plan is considerably more complex than simply explaining a static or dynamic image to a blind person via audio description, or subtitling an aural text to someone with hearing difficulties. There is an increasing demand for a more ambitious vision that not only encompasses the multimodality or multidimensionality of these texts, but which also understands each cultural experience as an experience that should be integrated in a global and socially inclusive process. Reich et al. (2011: ii) states\(^4\):

> Overarching findings from the focus groups indicate that participants who are blind or have low vision [...] value the positive feelings gained at museums from being socially involved, intellectually and emotionally stimulated, welcomed, and enabled to explore independently.

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\(^3\) [https://www.museumsassociation.org/museum-practice/mobile-projects](https://www.museumsassociation.org/museum-practice/mobile-projects)  
\(^4\) [https://www.imamuseum.org/sites/default/files/attachments/IMA_ABS_Speaking_Out_on_Art_and_Museums_Report_1.pdf](https://www.imamuseum.org/sites/default/files/attachments/IMA_ABS_Speaking_Out_on_Art_and_Museums_Report_1.pdf)
Sensory and cognitive accessibility should not be confined to the basic distinction between communicative events with barriers and those without barriers. This is not a matter of black or white, but rather of intermediate shades of grey because human competencies or capacities are measured in degrees. Furthermore, the sensory or cognitive capacity of a person can vary during his/her life. Accordingly, measures for eliminating potential barriers must be oriented towards this new conception of diversity and text recipient (Jekat et al., 2014).

Our proposal entails observing communicative barriers in cultural heritage accessibility from an innovative perspective. In other words, the umbrella of accessible translation should not only include subtitling for the deaf and audio description for the blind, but should also go one step further and reflect on the way that sensory impaired people achieve an aesthetic experience and to what extent translators are able to provide this experience for them. For example, the blind experience art in a unique way, and this is reflected in the language used to describe it.

Besides describing the high value they place on learning at museums, several [blind] participants also searched for words to express their meaningful intellectual, emotional, and aesthetic experiences with art (Reich et al., 2011: 44).

It would thus be necessary to analyse whether complex grammatical structures in a text make it difficult for sensory impaired end users to understand. If this were indeed the case, a possible solution would be to simplify semantic and syntactic structures to reduce the cognitive effort required to process them. This means that translators, language experts, and art specialists should join forces and work together because making culture accessible through translation is both an artistic and linguistic process. When the texts are multimodal, then the process is even more complex.

For this purpose, the OPERA project developed an online evaluation framework in order to ascertain the kind of artistic and cultural information that sensory disabled people can process. It also gathers information regarding their degree of satisfaction with the aesthetic and cultural experience provided by multimodal texts. Various types of instruments are used to collect these data. The project also organises meetings between art specialists, translators, and linguists in order to study artwork and analyse the aesthetic experience provided. Experts in art and language also discuss how this artistic experience can be most effectively recreated in language.
3. The OPERA project

As previously mentioned, OPERA is enhancing and improving the PRA2 platform\(^5\). PRA2 is a web portal that contains accessible audiovisual content for people with a sensory disability. To the best of our knowledge, it is the first online platform for the consultation and online assessment of accessible audiovisual resources for people with sensory impairments\(^6\). It maximises the visibility of existing resources and facilitates their evaluation by means of a series of online reception studies.

The assessment of the quality of accessibility resources has been a priority ever since the initial implementation of audio description, subtitling for the deaf, and sign language interpreting in culture and communications media. However, previous research on assessment, mostly focused on audio description and subtitling for the deaf in film and television.

In audio description for television, the first studies were performed in the 1990s. They targeted the use of audio description in audiovisual media. After collecting data on the preferences and habits of potential users, they evaluated the reception of audio descriptions (Peli et al., 1996; Navarrete, 1997). In the last ten years, this research has been complemented by studies performed in the academic sphere (Bourne and Lachat, 2010; Luque, 2009; Cabeza, 2013; Iglesias et al., 2015; Ramos, 2013) and the professional sector (Fryer and Freeman, 2012).

In 2012, the European project, DTV4All (Digital Television for All), assessed subtitling, audio description, audio subtitling and sign language interpreting services in four EU member states. In line with this research, the Pear Tree Project (Mazur and Kruger, 2012) studied the reception of audiovisual material with a view to creating a set of pan-European audio description guidelines.

Regarding subtitling for the deaf in television and film, the SUBORDIG project developed and evaluated criteria to create subtitles for people with impaired hearing. Reception studies were also designed and subsequently implemented in a pilot study in Spain. They were also employed in D’Artagnan, a research project within DTV4ALL on subtitling for the deaf (Romero Fresco, 2010). Furthermore, in Pereira (2010), the reception studies on subtitling for the deaf focused on technical, orthotypographical and linguistic parameters in order to formulate recommendations for best practices. Although our previous project focused on audiovisual communication (e.g. DVD, TV), OPERA broadens these horizons, and includes accessible exhibitions or partially accessible exhibits at museums and tourism events.

New studies are based on the social model of disability and the principles of Universal Design. They are also in consonance with the theory-methodology of emancipating research into disability (Darcy et al., 2010; Buhalis and Darcy, 2011;

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\(^5\) In Spanish, *Plataforma de Recursos Audiovisuales Accesibles.*

\(^6\) http://pra2.es/nueva/index.php
Oliver et al., 2006; Shakespeare, 2010), which underlines the lack of research that actually gives a voice to visitors with disabilities and allows them to assess the accessibility of museum institutions. Moussouri (2007: 90) argues:

Museum professionals have long held the view that their institutions can play a central role in supporting learning and inclusion but evidence seems to be in short supply in the case of visitors with disabilities. Until recently, most of the work conducted in museums relating to learning and access for this particular visitor group has been about developing products and services rather than assessing their impact. The lack of research in this area reflects the slow development of disability studies as a distinct field.

Within the OPERA framework, accessible audiovisual resources on the web portal are analysed and revised from a multidisciplinary perspective. Our methodology focuses on Tourism and Heritage Interpreting (Alcainiz and Simó, 2004; Moscardo, 1996), and the History of Art, Artistic Education, Museology and visitor studies (Everett and Barrett, 2009; Asensio et al., 2001; Falk and Dierking, 2000). Pérez (2016: 13) points out that in today’s world, user studies have become increasingly important in museology. This is a reflection of the dynamicity and democratisation of museums as cultural spaces. Our methodology improves and extends reception studies (Helal et al., 2013; Filippini-Fantoni et al., 2011; Fleming et al., 2011; Stein, 2010; Castellanos, 2008). In line with this, Dawson and Jensen (2011: 127) write:

Research and theory from education, sociology, and cultural studies extends existing visitor research approaches by acknowledging complexity, change over time, and the interwoven and developmental nature of sociocultural variables influencing visitors’ appropriation of new ideas and experiences (Dawson and Jensen, 2011: 127).

Nonetheless, there is a lack of research that analyses the reception of audio description, subtitling for the deaf and hard of hearing (SDHH), and sign language interpreting (SLI) in the spheres of museography and accessible tourism (Soler and Chica, 2014). An exception in this regard is pioneering work such as The Multi-site Museum Accessibility Study, in which an audience research study was performed based on focus groups of visitors who had low vision or who were totally blind.

Another study was carried out by the RNIB (Royal National Institute of Blind People) and VocalEyes, in which groups of blind people evaluated the quality of the resources in museums and English heritage (RNIB & VocalEyes, 2003). The findings highlight the urgent need for accessible technology.

These findings illustrate that when done well, an audio guide can be an excellent way to improve access for visitors with sight problems. Just
because a guide is in audio, however, does not necessarily mean that it will be accessible to blind and partially sighted people. Inaccessible technology, badly written descriptions, poor recording quality or added acoustic features made for frustrating visits. (ibid. 64)

Despite these initiatives, such resources have traditionally been categorized as audiovisual media, namely, television programmes or DVDs of films or documentaries with audio description or subtitling for the deaf, and sign language interpreting. As an innovation, OPERA not only covers new areas (e.g. accessible tourism), but also accessible resource types such as sign guides, audio descriptive museum guides, as well as audio guides of monuments and natural spaces. This wider scope is known as Access to Heritage.

4. The PRA2 platform

4.1. Assessment of film, TV, and documentaries

The PRA2 platform includes the translation modalities of audio description (AD), subtitling for the deaf (SDHH), and sign language interpreting (SLI). In the near future, easy-to-read texts and simplified language will be incorporated for users with cognitive diversity.

When users first access the platform, depending on their type of impairment, they are asked to choose between visual accessibility and hearing accessibility (Fig. 1).

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This home page is currently being redesigned.
Once they have clicked on their choice, they access a survey that collects their personal data. Variables measured include the type and degree of disability, education level, and profession. The survey also includes general questions related to cultural consumption and the use of new technologies. These questions only appear the first time that the users access the platform since the data provided are saved with a user code and password. The survey is in Spanish though an English version of the platform will soon be implemented. Examples of items include the following.

1. **How old are you?**
   a. 5-11
   b. 12-25
   c. 26-40
   d. 41-64
   e. 65 and over

2. **What level of education do you have?**
   a. None
   b. School leaver
   c. Secondary school
   d. Vocational training
   e. University

3. **What type of sight loss do you have?**
   a. Totally blind
   b. Serious visual deficiency
   c. Moderate visual deficiency

After the survey has been completed, users are then redirected to the resources that correspond to their functional diversity. More specifically, if they are blind, they only access audio description resources, and if their hearing is impaired, they only access resources containing SDHH or sign language interpreting (SLI). This part of the platform is divided into two sections:

The first section of the platform contains accessible audiovisual resources assessed by users on our platform and resources provided by user associations. These resources are given as examples of accessible tools. This has the advantage of enhancing their visibility and increasing public awareness of their existence (Fig. 2).

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9 English translation.
Fig. 2. Screenshot of positively assessed resources.

The second section of the platform contains reception studies (RSs). Users who wish to evaluate resources are encouraged to rate their accessibility. Until very recently, this section only had resources on media accessibility, but recently it has been enhanced with resources on museum accessibility and accessible tourism.

Once users agree to participate in the reception study, they must select one of the following: (i) audiovisual media (films and documentaries); (ii) accessible museums; (iii) accessible tourism. Depending on their choice, they then answer another short questionnaire with items pertaining to their tastes. This questionnaire provides information about their cultural habits. It includes questions such as the following:

1. Do you watch films often?
   a) Yes, often (1 or 2 per week)
   b) Yes, sometimes (1 or 2 per month)
   c) Only during holidays
   d) No, never

This questionnaire does not reappear in subsequent visits to the website since presumably the cultural habits of the users will not vary from one visit to another.
As an example, the following diagram shows the initial data collected in a pilot study of blind subjects for the previous question.

![Frequency data regarding film viewing.](image)

**Fig. 3. Frequency data regarding film viewing.**

After completing the questionnaire, users must then select a film segment that they wish to assess. Needless to say, all images and resources links have audio description and are accessible for the blind.

![Screenshot of webpage for the assessment of audiovisual media](image)

**Fig. 4. Screenshot of webpage for the assessment of audiovisual media**
Users must choose one film segment from a selection of ten to twelve. After watching/hearing it, they then respond to a series of questions on what they have perceived. Each resource is linked to a specific assessment questionnaire that is composed of a set of closed-ended questions. The items not only evaluate access to a particular element but also assess a specific variable. The questionnaire is divided into three sections, depending on the independent variable that is the target of measurement:

(a) This part of this questionnaire focuses on opinion and rating. It contains general evaluation questions about the resource as well as specific questions regarding its content and language, as well as the lexical and syntactic difficulty perceived by the user.

Fig. 5. Extract of the audiovisual media assessment questionnaire

Examples of questions are the following:

1. VALORA LA CALIDAD GLOBAL DE LA AUDIODESCRIPTIÓN.
   - a. Muy mala
   - b. Mala
   - c. Aceptable
   - d. Buena
   - e. Muy buena

2. VALORA EL LENGUAJE DE LA AUDIODESCRIPTIÓN.
   - a. Demasiado fácil
   - b. Fácil
   - c. Adecuado
   - d. Difícil
   - e. Demasiado difícil

3. VALORA LA CANTIDAD DE INFORMACIÓN DE LA AUDIODESCRIPTIÓN.
   - a. Muy poca
   - b. Algo escasa
   - c. Adecuada
   - d. Mucha
   - e. Excesiva
(2) The length of the audio-description was:
   a) Too long
   b) Just right
   c) Too short

![AD Length Pie Chart]

Figure 6. Results for question on audiodescription length

(3) The speech extracts were:
   a) Too long and complex
   b) Just right
   c) Too concise

![Speech Extract Length Pie Chart]

Fig. 7. Results of question on speech extract length.
(b) The second part of this questionnaire consists of closed questions that rate the quality of the recorded information in the segment. An example is shown below.

(4) Where are they playing ping-pong?
   a) In the garden
   b) In the courtyard
   c) In the living room
   d) I don’t know

![Fig. 8. Results of question on location of ping-pong game](chart)

(c) This part of the questionnaire is composed of closed-end questions that assess user comprehension of a certain element in the film segment. The items focus on a specific aspect that corresponds to a linguistic, textual, translational, or technical variable. An example is shown below.

(5) Which audio description do you prefer?
   a) She lights a cigarette with a tilt of her head. She looks at Chris and half-opens her mouth, provocatively.
   b) She lights a cigarette with a tilt of her head. She looks at Chris and half-opens her mouth.
   c) She lights a cigarette. She looks at Chris.
Fig. 9. Results for question on audio description preference.

At the end of the study, users can access the resource sheet with information regarding the resource as well as information about the study. Users do not receive this information beforehand so that it will not bias their responses. Questionnaire results are automatically saved by the platform and made available to researchers. Companies can also have access to the results upon request.

Until now, these reception studies have been used to evaluate the methods implemented to create accessible resources and ascertain whether existing guidelines were respected (AENOR 2005). They have also been used to validate the tool by verifying whether the users were able to successfully access the information. Finally, the reception studies facilitated the collection of data pertaining to audience preferences concerning audio description techniques, strategies or types of language used in SDHH, etc.

4.2. Improving research methods and expanding the project scope

OPERA is currently dealing with new challenges. The first challenge is the improvement of previous research methods, and the second is the expanded scope of the project. This means that it is necessary to adapt our research framework to include new areas of study.

The results obtained in the past showed that even though our questionnaires were reasonably well adapted to research goals, there was room for improvement. More specifically, one issue was the language of the questionnaires since certain sensory-impaired users claimed that it was sometimes difficult to understand the
items. For this reason, the questions are currently being rewritten in more simplified language.

On the other hand, OPERA has widened its focus to include accessible museum exhibits and accessible tourism. This means that it was necessary to contact museums and cultural institutions with accessible resources for sensory-impaired people in order to compile a corpus. Each resource was associated with a questionnaire composed of items pertaining to the following: (i) general quality of the accessible resource; (ii) elements in the segment that the users remembered; (iii) information regarding a specific variable. In what follows, we describe how subjects access the area of accessible museology and give their opinion on a specific resource.

Users that wish to enter the platform to assess museums must select Museum accessibility. They are then asked to fill out a questionnaire that collects information about their general habits when they visit museums. The following is an example of one of the items:

(6) When you visit a museum, what type of visit do you prefer?  
   a) Independent visit with an audio description guide  
   b) Guided audio-described visit  
   c) Guided audio-descriptive visit with tactile exploration  
   a) Other [________________]  

As in the case of audiovisual media, this questionnaire only has to be filled out once. Users who return to the platform will not see it again. The following diagram shows the results for this question.

![Fig. 10. Results of question on museum habits](image-url)
(7) What type of navigation do you prefer?
   a) Button panel
   b) Touchscreen with screen reader

Fig. 11. Results of question on navigation preferences.

Although these are only preliminary results of a pilot study, they are indicative of the preferences of blind people in Spain, who visit the platform. In the next stage, users view a resource on accessible museology. For example, if they are blind, they listen to an audio description of a painting, such as the following:
Fig. 12. The Lane from East Bergholt to Flatford (John Constable, 1812). Museum of the Fundación Lázaro Galdiano (Madrid, Spain).

The Lane from East Bergholt to Flatford was painted by John Constable in 1812. It is a small rectangular oil painting on linen paper, which is wider than it is tall. It shows a rural landscape. In the centre of the painting is a curve in the road between East Bergholt and Flatford, two small villages in England […] The painting is divided into various horizontal planes. The lower part is the space nearest to us. Higher up in the painting, the distance between our position and that of the objects in the painting increases. This makes them seem smaller and less clear-cut. In the space nearest to us at the centre of the painting, there is a yellow-coloured path that disappears as it curves to the right. On the left, there is a person sitting on the grass. On the right, there are bushes and two tall trees on each side of the path. Behind the person on the grass, there is a stone wall about one meter high that runs from left to right along the path. Beyond the wall, there is the English countryside with a scattering of trees. The countryside stretches to a far-off forest that occupies the farthest horizontal area of the canvas. Above this forest, there is the sky.

The audio description is played as an accessible audio file. After listening to it, users answer the items in a questionnaire centred exclusively on the painting and its audio description. As in the case of the film segments, the questionnaire for the painting has three sections. The items in the first section focus on the quality of the audio description. The questions in the second section test the users’ ability to

10 Translation of the original Spanish text.
remember aspects of the painting, and those in the third section pertain to a research variable directly related to the painting and its audio description. All questions are formulated in easy-to-read language. The first section on the users’ general impression of quality is the same in all of the questionnaires. Examples of items in the second section are the following:

(8) What element appears in the first horizontal plane?
   a) Path
   b) Forest
   c) Country side
   d) I don’t know

(9) What element appears in the second horizontal plane?
   a) Path
   b) Forest
   c) Countryside
   d) I don’t know

In the third section of the questionnaire, which targets a specific variable, the items vary. In reference to the Constable painting, this section consists of true-false questions. The objective was to analyse whether the perception strategy in the text helped users to discern perspective.

(10) Elements that are closer are of larger size and are represented in greater detail.
   a) True
   b) False

(11) Elements that are farther away are of smaller size and are represented in less detail.
   a) True
   b) False

As an added feature, OPERA includes descriptive studies as well as reception studies. Descriptive studies are centred on a certain feature from one of the following groups:

- linguistic features (vocabulary, syntax, spelling)
- paralinguistic features (voice),
- textual features (coherence, cohesion, discursive organisation, extension),
- translation-related features (translation and interpreting techniques for each specific modality)
technical or presentation-related features (typology, colour, subtitle segmentation and exposure time, location of the SLI window).

These elements are the dependent variables of the studies, and are directly related to the communicative context. As such, they include the characteristics of the end users as well as those in existing guidelines (AENOR, 2005; Royal National Institute for the Blind, 2003; Snyder, 2010) with a view to formulating research hypotheses on the adaptation of translation modalities and the possibility of employing alternative techniques (Di Giovanni, 2011; Jiménez et al., 2010).

As part of the OPERA project, we have thus begun to reflect on whether the information accessed is the most artistically relevant. Above all, an aesthetic experience should be evaluated as a process that can be enjoyed and which the user finds enriching. Enhanced access to the cultural object will undoubtedly add to the attractiveness of the heritage that it belongs to.

Research in the first stage of the project is currently being performed by a multidisciplinary team composed of museologists, museum educators, art specialists, experts in museological mediation, and directors of tourist agencies. The first step is the analysis and revision of reception studies based on the questionnaires designed.

This signifies a workflow that is the object of experimentation. In the initial phase, art experts analyse the source text (i.e. the artistic object). These experts generate a report that specifies the key artistic elements in the resource, as well as the semantic and pragmatic elements necessary to successfully process and understand the object.

A team of translators and translation experts then use this report to create new questionnaires. These questionnaires are subsequently revised by the experts, to confirm that the items effectively target the most relevant semantic, functional, and artistic elements. In the final stage, a team of linguists analyses the language used in the questionnaires to verify its simplicity and appropriateness for visually impaired and hearing-impaired users.

In our opinion, these new questionnaires will ultimately provide valuable insights into the capacities of sensory-impaired individuals from a formal perspective (linguistic formulation of the questions), as well as a functional perspective (pragmatic-communicative and artistic elements in the original text).

5. Conclusions

A commitment to cultural inclusion signifies that European citizens must become more socially integrated. Both functional sensory and cognitive diversity, and the adaptation of heritage to different social sectors require accessible translation, which is multisensory and multimodal. Once this need is acknowledged, it is then necessary to reflect on what it means to access artistic and
heritage elements. Although translating semantic and discursive information is a priority, translating the potential enjoyment of aesthetic experience is just as crucial.

At present, both the governments/institutions that control accessibility tools in multimedia environments and the companies that create these tools need to better understand the purpose and function of these resources. Moreover, there is little information that indicates whether what is being offered is optimal in terms of the degree and level of accessibility provided. In this regard, OPERA plays a vital role since it assesses different resources from widely diverse cultural spheres and from different quantitative and qualitative perspectives.

The dissemination of the results and the participation of businesses, institutions, and end users contribute to the accurate evaluation of the process and the effectiveness of the evaluation. This in turn means that improvement and innovation are guaranteed.

Achieving OPERA project goals will not only contribute to the wider use of existing resources, but will also facilitate the evaluation and management of their quality. The social impact of the results will allow companies that create accessible audiovisual products to assess the reception of users. The ultimate goal is for researchers, institutions, and entrepreneurs to combine efforts to create quality standards in this specific production area.

The platform will also promote communication between cultural institutions (e.g. museums, exhibition galleries, town halls, cultural foundations, and tourist routes), private companies dedicated to the dissemination of art and culture (film, TV and DVD producers, tourism promoters) and consultants and development services for accessibility to leisure and culture.

The social impact of OPERA will foster a wider dissemination of the principles of universal accessibility. This will benefit institutions and businesses that promote of culture and knowledge, and considerably increase measures to improve access to their products and services for people with disabilities.

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