

Sensorial triad as a gateway to museums

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Abstract

Storytelling is acknowledged as an invaluable element when audiodescribing for the blind and visually-impaired be it for the screen or for other venues, such as museums and galleries or historical and archaeological sites. This technique allows cultural events to become accessible to these patrons by means of expressive, imaginative and vivid language entangled in description and narration, thus words become images in people's minds. There is no denying that it also enables to turn any cultural and aesthetic experience into emotionally significant. Many scholars have highlighted the danger of AD becoming too subjective, thus the American-European divide: on the one hand, the American tendency for objective AD (e.g. Snyder, 2004), whereas, on the other, the European that contends for a freer practice. In line with this inclination, we could mention Anne Hornby, an experienced British audiodescriber, who upholds that AD tells a story, and Neves (2008), a Portuguese researcher and practitioner, who has been carrying out 'soundpainting' experiments, an extra layer of meaning that allows feelings to be aroused. The latter pushes the boundaries of an already subjective tendency and underlines the importance of sound and careful choice of words, concerns stressed out in "Art Beyond Sight" (Axel et al., 1996), as well as in "Pictures painted in Words: ADLAB Audio Description Guidelines" (ADLAB, 2014). Notwithstanding, Guigue (2010), Confino-Rehder (2010) and Neves (2014) also mention another dimension of the necessary triad, that is to sounds and text we must add the object which, for lack of visual perception, must become a tactile material, so as to activate the audiences' sense of touch. We intend to retrieve examples from our doctorate research, which aimed at analysing a sample of audioguides offered in Portuguese museums, in order to ascertain the extent to which these texts would encourage this multisensorial experience.

1 Introduction

The activity of turning images into words has been given different names in accordance with the mainstream tradition of the countries that provide it, as well as emerging theoretical approaches. In Europe, the terminology that has come to be accepted is audiodescription (AD), although we could mention Piety (2003: 24) who alternatively suggested "visual assistive discourse" or Haig (2006: 2) who regards AD as a type of cultural translation and, as such, requires skills of cultural analysis. On the other hand, in the US, tradition points to the use of "descriptive video service" (connected with the birth of the service in the WGBH of Boston back in 1981) and "verbal description" (Snyder, 2004).

The difference in terminology results from a different practical approach to AD, what could be called the American-European divide, since the former strives for total objectivity (e.g. Snyder's WYSIWYD or what you see is what you describe), whereas the latter questions this dogma and allows for subjectivity. As stated in the "Talking Images" publication, "[y]ou can't be completely objective, it wouldn't mean anything, it

would be clinical but also you can't be too interpretative so that you go too far." (RNIB & VocalEyes, 2003: 31). The balance is thus imperative, though hard to achieve.

From Braun's (2007) viewpoint, AD can be defined as "a complex cognitive-linguistic and intermodal mediation activity" (p. 2), since its nature relies on "mediation, which is cross-modal, involving essentially a 'translation' of visual images into verbal text, that sets AD most distinctly apart from other forms of translation" (p. 15). Such nature enables the construction of a verbal discourse or narrative that describes essential visual elements, as well as other relevant ones, that make up a multimodal text. This concept has become central for the acknowledgement that verbal elements are not enough, but should be complemented with elements arising from the other senses: "multimodality research has begun to uncover how verbal utterances, visual images and sounds jointly create meaning" (Braun, 2008: 19).

Therefore, our premise in this paper is that for AD to perform its role and generate a truly multisensorial experience it should encompass a triad of elements: visual, audio and tactile, in line with what Guigue (2010), Confino-Rehder (2010) and Neves (2014) uphold.

All in all, AD involves processes of comprehension and production in which different semiotic dimensions jointly interact with individual knowledge, experiences and expectations of those who participate in this discourse (Braun, 2007: 3).

2 Related Work

AD has been put forth as a means of accessibility and inclusion of the utmost importance for the blind and visually impaired in all walks of life. Traditionally moving within various areas of knowledge, namely Audiovisual Translation and Disability Studies or even Multimodality (as suggested above), it becomes thus enriched by the contributions these areas can bring about.

According to ADLAB (the European project for lifelong access for the blind), AD can be described as:

a service for the blind and visually impaired that renders Visual Arts and Media accessible to this target group. In brief, it offers a verbal description of the relevant (visual) components of a work of art or media product, so that blind and visually impaired patrons can fully grasp its form and content. AD is offered with different types of arts and media content, and, accordingly, has to fulfil different requirements. (2014)

The requirements referred to above find their answer in the various guidelines put forth both in Europe and in the US, such as the British norms by the International Television Commission (2000), followed by the Spanish norm in 2005 (UNE 153020), the American (Audio Description Coalition from 2009 and American Council of the Blind from 2010), the Portuguese by Neves in 2011 and the European in 2014, via ADLAB. These various guidelines approach multiple contexts of application, such as the cinema, the theatre and the opera, dance and even museums, proposing rules for the description of visual elements, such as characters, clothes, scenery, action, colours, light, space, without overlooking the importance of the language to convey them. In the case of the performing arts, the verbal description is often complemented with a visit to the backstage, where the blind and visually impaired get to know the characters, feel up their outfits and other props used in the performances and may have access to a model or replica of the theatre, stage or scenery.

This interaction between visual, sound and touch is most intense in the context of museums, where you may be presented with static or dynamic images, two-dimensional and three-dimensional, as well as AD for exploration, which aids people to explore and understand the tangible world through their active senses, particularly touch, and finally spatial orientation AD that offers information and directions about the organisation of space (cf. Neves, 2011).

As a result, the transformation of the visual into verbal is crucial in all sorts of contexts, since the choice of words and the organisation of the texts must be creative enough to allow the creation of mental images close to reality, inducing seeing with one's ears. It is then in this sense that AD intends to work as a tool for social integration and inclusion by attempting to enable the blind and visually impaired to participate in daily life without any barriers.

Within the context of historical and cultural sites, it is also crucial to consider *Art Beyond Sight* (Axel et al., 1996) standards which come forth as the most thorough guidelines for audiodescribed visits in museums and exhibitions. These guidelines comprise 16 criteria, as follows: standard information (which equals the object's label); the general overview of subject, form and colour; spatial orientation of museum visitors by means of directions; technique and medium (and how meaning style arises from these); style (artistic school or movement, historical period); the use of specific words, which should be precise and clear, avoiding ambiguity and figurativeness, and always defined, such as perspective, focal point, background and foreground; vivid details about the objects; place of the piece within the museum or exhibition (meaningful for the object itself and its relation with the remaining pieces); reference to other senses as analogues for vision to enable the construction of more detailed impressions; explanation of intangible concepts by means of analogies (for instance, derived from daily experience); to encourage understanding through enactment (such as mimicking postures that may be a means to apprehend (as)symmetry, open and closed lines, flowing or angular lines); information about social and historical contexts; creative incorporation of sounds; permission to touch artworks, especially in the case of three-dimensional work; alternative touchable materials, namely samples of materials (e.g. marble, bronze, clay), canvas tools (e.g. paintbrushes, chisels, and hammers) and replicas of the objects depicted in the artwork; and, finally, tactile illustrations of the artwork, for instance, relief images and schematic diagrams that must be accompanied by a verbal narrative for guidance

From Secchi's viewpoint (2012), art accessibility should entwine audio and touch, so as to reach a balance of intellectual vision and sensorial perception. The verbal description ought to be understood as an aesthetic equivalent of the artwork through an informative and evocative discourse, enhancing the understanding of a particular piece but also of art in general, based on haptic exploration.

Moreover, Guigue's (2010) triad object-sound-text emphasises the relevance of sound, particularly music, as a third layer of meaning and emotion towards music itself and the various sound effects. It is also worth mentioning Neves's (2008) 'soundpainting' technique that allows for art to be regarded from a different

perspective by means of a poetic and ekphrastic description. However, as Neves (2008: 2) puts it: “[a] question must then be raised: how can an audio description offer that “extra layer” that is felt rather than spoken? How effective is an objective description of a piece of art, when art is meant to be subjective?” This author supports the idea that for the blind and visually-impaired that engage in the museum experience what is spoken is likened to what is seen, thus the importance of words, because words themselves become the art experience in itself – “language is used as a go-between” (p. 281). Neves believes that the ambiguity in the artwork should find its counterpart in sensorial ambiguity, namely in oral (verbal and non-verbal) and tactile terms.

In line with this, Wendy Moor, who attended an accessibility event in 2011 (i.e. SITAUI at the University of Granada), puts forth the mnemonic STILL when it comes to museum AD and the use of audioguides as its primary tool, which stands for smell, touch, investigate, look and listen.

Museums are thus places of experience, where all senses are summoned, be it hearing, touch or smell. As referred to above, tactile materials are of chief influence, as the case of Braille materials, high relief replicas, maquettes and maps that decompose two-dimensional pieces, to name just a few. However, smell appears to be the sense used the least, probably due to a historical obstacle that connotes smell with less appropriate behaviour. Fryer (2011, 2012) upholds that the reference to surprising smells in museums is an important detail in the textual information conveyed to the blind and visually-impaired.

There are also other elements which are not included in the traditional senses, but are essential for multisensorial convergence, such as the sense of space (e.g. clapping to allow for an understanding of size, acoustics and even surrounding materials) or body movement (such as the re-enactment suggested by *Art Beyond Sight*, Axel et al., 1996).

To sum up, AD comes forth as the story told which entails descriptive and narrative elements that must incite patrons to see, but also fully experience through smelling, touching, looking and listening.

3 Methodology

The doctorate research we conducted between 2010 and 2015 encompassed two stages. On the one hand, we gathered information about audioguides made available in Portugal in institutions such as museums, national palaces, historical sites, interpretation centres and aquaria, a classification that followed the typology used by the National Statistics Institute in Portugal for their annual questionnaire. According to this institute, museums are further classified into the following

categories: art, archaeology, natural sciences and natural history, science and technology, ethnography, anthropology, specialised, history, territory and mixed or pluridisciplinary. Apart from the abovementioned audioguides, we also found reference to guides used in sightseeing city visits, which we chose not to include in our study.

The listing of these audioguides was based on a number of different sources, such as searches on the Internet (i.e. pportodosmuseus.pt) and on the institutions that both offered the audioguides (i.e. museums and the like) and rendered the service (e.g. FCO, Realizac  es and To Guide), along with word-of-mouth information among specialists and scholars.

On the other hand, our study case also concerned itself with selecting a sample of 20 audioguides to analyse from a macro- and a microstructural perspective, according to technical, institutional and content-based criteria, partially supported on the proposal by Gebbensleben et al. (2006). These institutions were afterwards visited and this visit enabled us to gather information about the audioguides, as well as to use them so as to transcribe relevant commentaries and experiment their various options. From these, we selected a corpus of 35 texts, representative of three different typologies: spatial orientation (e.g. maps and plans, outdoor and indoor spaces), two-dimensional work and three-dimensional pieces.

Our final aim was thus to characterise the country’s state of the art as far as accessibility is concerned, namely information and sensorial accessibility (cf. Dodd & Sandell, 1998 and Sassaki, 2005) by means of the offer of audioguides within the context of museums. Furthermore, we also intended to ascertain to what extent these audioguides could comply with the needs of blind and visually-impaired visitors.

The following tables 1 to 4 present the criteria we applied to our sample of audioguides and commentaries.

Institutional criteria	
1. Type of museum	
2. Organisation running the museum	
3. Information on the website about audioguides	
4. Virtual visit online	
5. Accessibilities on the official page	
6. Guided visits for groups in different languages	
7. Offer of guides identified at the Reception	
8. Museum staff’s knowledge of audioguides	
9. Museum staff’s knowledge of how to use the audioguides	
10. Fee for using the guide	
11. Different guides for different visitors	
12. Audioguides in foreign languages	
13. Printed map for the audioguide	
14. Request of feedback (i.e. questionnaire)	

Table 1. Institutional criteria for the analysis of audioguides

Technical criteria	
1. Type of museum and manipulation	
2. Activation type	
3. Earphones required	
4. Company that rendered the service	
5. Authorship of texts	
6. Testing on focus groups	

Table 2. Technical criteria for analysis of audioguides

Macrostructure	
1. Instructions for using the guide	
2. Description of the place's security: obstacles, emergency exits and hazardous spots	
3. Identification of entrances and exits of the rooms and the building	
4. Localisation of facilities and resources	
5. Description of the building in historical, architectural and iconic terms	
6. Description of the space: museum map and possible itinerary; localisation of objects in the room; manner of exhibiting objects	
7. Clear and unequivocal permission for touching; existence of special smells and textures	
8. Identification of the number of pieces described and reasons for this choice and for the perspective chosen	
9. Description of the history of the place: type of institution, its evolution and mission and total number of pieces in collection	
10. Description of each room: name, shape and dimension, lighting, ceilings, walls and floor, features and type of pieces	
11. Second and third level information	
12. Main text typology	
13. Audiodescription	
14. Sound: voices, music, sound effects, dramatisation	

Table 3. Macrostructural criteria for the analysis of audioguides

Microstructural analysis	
1. Elicitation of the aim of the commentary	
2. Localisation of the piece	
3. Standard information	
4. Technique and material	
5. Style	
6. Information about social and historical contexts	
7. Sequential and coherent description of visual elements	
8. Spatial orientation applied to description	
9. Use of technical terms with(out) resorting to paraphrases and explanations	
10. Suggestive, vivid, imaginative and metaphorical language	
11. Summoning other senses	
12. Explanation of ambivalent concepts through analogy with other senses	
13. Personal recreation of the pieces	
14. Sound: voices, sound effects and music	
15. Tactile materials	
16. Intertextuality	
17. Syntactic structure	
18. Duration and extension	

Table 4. Microstructural criteria for the analysis of audioguides

4 Experimental Results

As far as the first stage of our research is concerned, between 2010 and 2015, we found reference to 83 audioguides being offered in Portugal, of which only 54

were within museums and similar institutions. Considering that the Portuguese National Statistics Institute identified 353 museums in 2013 (INE, IP, 2014) that complied with its strict criteria, the number of audioguides offered at that time represents about 15% of the total number of museums in the country, clearly unsatisfactory.

These audioguides are geographically organised in the following manner: 8 in the north of the country, 8 in Porto, 10 in the centre, 20 in Lisbon and the remaining 8 found in Alentejo, Algarve and the Azores, being that Madeira did not have any guides at the time of the study. From these 54, a sample of 20 institutions was selected, as table no. 5 shows.

Identification of the institution	Localisation	Date of visit
Museu do Fado (music)	Lisbon, Lisbon	28/08/2010
Museu da Presidência da República (history of the PT republic)	Lisbon, Lisbon	28/08/2010
Casa das Histórias Paula Rego (art – painting)	Cascais, Lisbon	02/09/2010
Museu do Douro (territory)	Peso da Régua, North	09/10/2010
Museu de Arte Contemporânea, Casa e Parque de Serralves (art)	Porto	10/10/2010
Museu da Comunidade Concelhia da Batalha (territory)	Batalha, Lisbon	10/03/2011
Centro de Interpretação da Batalha da Aljubarrota (historical site)	Batalha, Lisbon	10/03/2011
Museu Nacional Machado de Castro e Criptopórtico (art and history)	Coimbra, Centre	25/05/2012 & 9/08/2013
Museu de Aveiro (religious art)	Aveiro, Centre	08/08/2013
Palácio e Parque da Pena (national palace)	Sintra, Lisbon	10/08/2013
Museu de José Malhoa (art – painting)	Caldas da Rainha, Centre	11/08/2013
Museu Calouste Gulbenkian (art and history)	Lisboa, Lisbon	01/09/2013
Museu Nacional do Azulejo (history of tiles)	Lisboa, Lisbon	08/11/2013
Museu e Fábrica da Pólvora Negra (history of powder)	Loures, Lisbon	08/11/2013
Palácio e Parque de Monserrate (national palace)	Sintra, Lisbon	08/11/2013
Convento dos Capuchos (religious history – convent)	Sintra, Lisbon	08/11/2013
Museu do Abade de Baçal (territory, history, archaeology)	Bragança, North	20/12/2014
Santuário de Panóias (religious history – sanctuary)	Vila Real, North	21/12/2014
Mosteiro de São Martinho de Tibães (religious history – monastery)	Braga, North	22/12/2014
Museu dos Transportes e Comunicações (mixed)	Porto, Porto	23/12/2014

Table 5. Selected institutions for our analysis.

After conducting our two-level analysis of the sample, it was possible to ascertain that only the *Museu da Comunidade Concelhia da Batalha* and the *Museu Nacional do Azulejo* presented themselves as accessible, clearly directed to blind and visually-impaired visitors, whereas the remaining institutions aimed at general audiences. Thus, it is not at all surprising that these two institutions integrated AD in their commentaries. However, despite this fact, we identified other texts which would meet the needs of these patrons, especially those which make use of a more poetic and suggestive (and ekphrastic) language, such as the commentaries about the stained-glass panel at the *Palácio e Parque da Pena* (presented below) and about the oxcart at the *Museu do Douro*.

Vitrais

É possível fazer a leitura do vitral desta capela como se de uma banda desenhada se tratasse. No topo figuram as armas reais portuguesas e de Saxe Coburgo-Gotha, associadas à esfera armilar e à cruz de Cristo, respetivamente acima e abaixo, recuperadas da gramática dos Descobrimentos portugueses, epopeia muito valorizada por D. Fernando.

No painel superior esquerdo, a Virgem que poderá querer simbolizar a Nossa Senhora da Pena. No painel superior direito, a figura de S. Jorge, ilustrado com o característico dragão sobre os pés e o estandarte representativo da ressurreição na imaginária cristã parece acompanhar a Virgem. S. Jorge tornou-se no santo padroeiro de Portugal durante o reinado de D. João I, em substituição de S. Tiago que é igualmente evocado pelos espanhóis durante as batalhas.

Em baixo, à direita, vemos Vasco da Gama, as respetivas armas, um cavalo e a Torre de Belém, em pano de fundo. Segurando na mão o modelo do Mosteiro da Pena, o rei D. Manuel I observa o regresso da armada de Vasco da Gama da Índia. No seu conjunto, este vitral representa o magnífico símbolo da gramática romântica e a releitura da história do século XIX.

[original text]

Stained-glass window

It is possible to read this stained-glass window as if it were a comic strip. On top, we can see the royal Portuguese arms and those of the Saxe Coburg-Gotha, associated to the armillary sphere and Christ's cross, respectively above and below, retrieved from the Portuguese Discoveries grammar, the epic very much appreciated by King D. Fernando.

On the upper left panel, the Virgin may symbolise our Lady of Pena. On the right panel, the figure of Saint George is illustrated with the typical dragon on his feet and the characteristic banner for the Resurrection in Christian symbology that seems to accompany the Virgin. Saint George became the patron saint of Portugal during the reign of D. João I, replacing Saint James, equally invoked by the Spanish during battles.

Below, on the right, we see Vasco da Gama and his arms, a horse and the Tower of Belém, as background. Holding the model of the Monastery of Pena on his hand, King D. Manuel I watches the return of Vasco da Gama's fleet from India. On the whole, the stained-glass window represents the magnificent Romantic grammar and the re-reading of 19th-century history.

[our translation]

Considering the triad text-sound-touch (cf. Confino-Rehder, 2010; Guigue, 2010; Neves, 2014), the sense used the most is in fact hearing, since most commentaries analysed in our sample integrated considerable richness of sound, namely the alternation of female and male voices, music and various sound effects, for instance the bleating of sheep, water running, as well as voice dramatisation of historical figures. There were a few cases of real voices, particularly those of the directors of some institutions or people from the local communities.

Nevertheless, a truly multisensorial experience must involve the other senses besides sound. In our sample, no commentary activated the senses of smell or of taste (though some institutions gathered the conditions to do so), but there are a number of examples where touch was actively engaged. As far as tactile materials are

concerned, we could mention the use of tactile plans or maps for the institutions (e.g. *Museu da Comunidade Concelhia da Batalha* and *Museu Nacional do Azulejo*), replicas of objects (e.g. *Museu Nacional do Azulejo*), maquettes (e.g. *Museu Nacional de Machado de Castro & Criptopórtico* and *Mosteiro de São Martinho de Tibães*) and also tactile illustrations (e.g. for a painting at the *Museu da Comunidade Concelhia da Batalha* and for an Assyrian low relief at the *Museu Calouste Gulbenkian*). In terms of Braille materials, these were restricted to a limited number of institutions, especially a set of 17 relief replicas with Braille subtitles available at the *Museu Nacional do Azulejo*, but also others, for instance, at *Museu de José Malhoa*, *Museu dos Transportes e da Comunicação* or *Museu da Presidência da República*. A final point about tactile resources is related to hands-on experiences which allow visitors to touch and get to know real objects through touch, usually managed by the educational services of these institutions.

5 Conclusion

AD comes forward as a descriptive and narrative technique that makes use of suggestive and vivid language (often more subjective and poetic than some scholars and practitioners uphold) and thus triggers off mental images that are strong enough to make up for the absence of sight. In the context of museums and similar institutions, as pointed out above, AD is rendered by means of audioguides, equipment that stores commentaries about objects, spaces, plans and the like aimed at the blind and visually impaired.

Notwithstanding, in order to accomplish a truly multisensorial experience, AD will have to be complemented by other elements. The whole experience requires a holistic approach to accessibility (cf. Dodd & Sandell, 1998; Sassaki, 2005), by means of which all senses are engaged, namely hearing and touch, though smell and taste should not be neglected for their role in consolidating memories and bringing about meaningful learning. This approach corroborates our initial premise, based on Guigue (2010), Confino-Rehder (2010) and Neves (2014), that we must carry out a sensorial triad text-sound-touch, in order to bring about a multisensorial experience.

Our case study that stemmed from our doctorate research was two-fold: list and gather information about the audioguides on offer in Portuguese museums and analyse a sample of audioguides and their commentaries in accordance with macro- and microstructural criteria. This study enabled us to reach conclusions about the mainstream approach of Portuguese museum as far as accessibility is concerned, namely in terms of the offer of information and sensory accessibility, which is still considerably unsatisfactory.

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