

Museum Audio Description: Multimodal and 'Multisensory' Translation: A Case Study from the British Museum

Monica Randaccio

Department of Legal, Language, Interpretation and Translation Studies, University of Trieste, Italy

Copyright©2018 by authors, all rights reserved. Authors agree that this article remains permanently open access under the terms of the Creative Commons Attribution License 4.0 International License

Abstract This paper first illustrates the major revisions, such as a new view of society, the nation, and education, introduced by the New Museology or Museum Studies in the 1980s and 1990s. These changes certainly favoured the development of museum audio description. As museum audio description can be included in the new forms of interactivity, the change of paradigm of interactivity in new museums is analysed and examples are given. Then, a general overview of audio description and its process creation are briefly illustrated in their strengths and limitations. This overview anticipates the two complementary studies on museum audio description as multimodal and multisensory translation. Both studies see the museum and its audio description as an interactive multimodal communicative event but the former focusses more on the grammar of multimodality, whereas the latter emphasises aspects of artistic fruition and the importance of a creative and interpretative language. The paper concludes with my analysis of a museum audio description from the British Museum, focussing in particular on cohesion and coherence.

Keywords Museum, Audio Description, Interactivity in Museums, Multimodal and Multisensory Translation, Ambiguity and Interpretation, Visual Culture, Cohesion and Coherence

1. Introduction

Audio description (AD) is an emblematic example of how specialised translation has changed over the years. In its pioneering beginning in the USA in the 1980s, AD was born as a tool to help people who are blind in the theatre (Pfanstiehl and Pfanstiehl 1985 [1]) and it began to be produced especially for screen media, attracting the interest of audio describers, production companies, and academics (Díaz-Cintas, Orero, Remael 2007 [2]). Since then, the

discourse of AD has been re-shaped within different discourse communities, domains and fields (Fairclough and Wodak 1997 [3], Kress and van Leeuwen 2001 [4], Wodak and Chilton 2005 [5], Fairclough 2013 [6]). Increasingly recognised as part of audiovisual translation (AVT), AD has been variously defined as ‘constrained intersemiotic translation’ (Mayoral *et al* 1988 [7]), ‘intersemiotic, intermodal or crossmodal translation or mediation’ (Braun 2008 [8]) ‘intersemiotic translation with an inverse definition – an interpretation of non-verbal signs system by means of verbal signs’ (Gambier 2004, [9] Orero 2006 [10], Díaz-Cintas, 2007 [11]). This process of re-shaping happened when AD moved on from being a mere service focussed on the clinical needs of the blind or visually impaired people, and became a modality in Translation Studies (Orero 2006 [10], Diaz-Cintas 2007 [11], Matamala and Orero 2017 [12]). In fact, AD has become the most ‘alive and kicking’ modality in academia, thereby revealing its transdisciplinary nature. Transdisciplinarity in fact asks “how a dialogue between two disciplines or frameworks may lead to a development of both through a process of each internally appropriating the logic of the other as a resource for its own development” (Fairclough 2005, 53 [13]). The result of this appropriation is that AD studies have flourished encompassing linguistic (Arma 2012 [14]), textual (Di Giovanni 2014 [15]), cultural (Matamala and Rami 2009 [16]), educational (Ibanez Moreno and Vermeulen 2013 [17], Walczak (2016 [18]) and cognitive (Holsanova 2016 [19]) perspectives and have contributed to investigate issues of accessibility and disability (Arma 2014 [20], Greco, 2016 [21], *Disability Directory* 2000 [22]).

In order to clarify how museum AD appropriates the new logic of the New Museology or Museum Studies, in the present paper, the main issues of accessibility in the agenda of the New Museology that play a crucial role for the development of museum AD will be presented. As museum AD can be inscribed in the new forms of

interactivity that the New Museology brought forward, examples of the changing paradigms of interactivity in museums will be given. After a brief illustration of what audio description is in general, its creation process and its strengths and weaknesses, two specific case studies of multimodal and multisensory museum AD will be shown. Finally, an analysis of a museum AD from the British Museum concludes the paper. Drawing on some earlier studies on discourse analysis, the verbal analysis seeks to see how cohesive and coherent the text is, given the crucial role that cohesion and coherence plays in audio description. This analysis also wants to determine if this text may represent a feasible and replicable model for the creation of other museum AD.

2. The New Museology or Museum Studies

Started in the 1980s in Britain and in the United States, New Museology or Museum Studies brought about a re-definition of the museum space, its capacity of attraction for new visitors, and made accessibility a priority on its agenda (Durbin 1996 [23], Andersen 1997 [24], Hein [1998] 2002 [25], Roberts 1989 [26], Hooper-Greenhill [1994] 1999 [27]). The passage from an 'old museology' to a 'new museology' represented the first step towards a critical rethinking of the museum. Peter Vergo expressed this change in his Introduction to *The New Museology*, an edited collection published in 1989. The new museology, he asserted, was a "state of widespread dissatisfaction with the 'old' museology, both within and outside the museum profession [...] what is wrong with the 'old' museology is that it is too much about museum methods, and too little about the purposes of museums [...]" (1989, 3 [28]). Relevant issues on accessibility neglected in earlier studies started to come forward.

A New Society

The first issue concerned museum accessibility from a social point of view. After a period of stagnation due to the policies of the New Right, led by Margaret Thatcher in the United Kingdom and Ronald Reagan in the United States, there was a radical change in the expectations and demands from the cultural sector. Instead of the previous 'proactive strategy of inequality' when "museums [were] exhorted to concentrate on 'the three Es': Economy, Efficiency, and Effectiveness" (Sandell 2005, 402 [29]) rather than on the museums' benefit to a wider public, museums began to be viewed as powerful means of combating social exclusion. Jocelyn Dodd and Richard Sandell in *Building Bridges: Guidance for Museums and Galleries on Developing New Audiences, Museums and Galleries* (1998) [30] were specifically engaged to identify the barriers that excluded different audiences and viewed museums as a resource of

social inclusion and urban regeneration.

For Sandell (2005 [29]), access means "the opportunities to enjoy and appreciate cultural services", thus creating "the opportunities an individual has to participate in the process of cultural production" (410). John H. Falk and Lynn D. Dierking devoted special attention to the visitors' needs in *The Museum Experience* (1992) and developed an innovative 'contextual model of learning' in *Learning from museums: Visitor experiences and the making of meaning* (2000) [31]. They list a series of indicators for assessing and improving visitors' experience, such as the location of the exhibits, the museum orientation and the role of the museum staff, but underline that the fundamental barrier in museums was still emotional and psychological access. Many sectors of the population and the public in those years felt a sense of alienation from museums as social institutions, where participation and community involvement was denied. Rebecca McGinnis (1999 [32]), for example, acknowledges that, in the case of disabled people, access means not only physical access, but conceptual, intellectual and multi-sensory access as well" (281 [32]). She claims in fact that sometimes attitudes towards disabled people represent a psychological barrier that "can be as impassable as physical and sensory barriers" (278 [32]). Sandell (2005, 411 [29]) therefore hopes for an inclusive museum to contrast social exclusion and promote accessibility in social and cultural terms.

A New Nation

The strong political and cultural bias of accessibility drew attention to museums as institutions and helped to forge future museum policies. Eilean Hooper-Greenhill argues that from its birth after the French Revolution, the public museum was shaped as an apparatus with two deeply contradictory functions: "that of the elite temple of the arts, and that of the utilitarian instrument for democratic education" (1989: 63 [33]). The public museum also had a disciplinary function that makes it the institutional site where citizens were constantly under control in order to comply with the established order (Bennett 1995, 59-98 [34]). This contradiction between elitism and democratic education was at the basis of the modernist museum and opened up the way to the deconstruction of Jean-François Lyotard's grand narratives upon which museums were founded, of those universal stories intended to enable mastery of a complicated real world. These grand narratives concerned questions of national identity, education, object display, and art perception.

The 'nation' is one of the most powerful enduring narratives of the nineteenth century and museums were the major apparatuses for the creation of national identities. They promoted the nation as cultured, elevated in taste and paternal. Visual representations were not only the elements symbolizing and sustaining national communal bonds, but they were also creatively generating new social and

political formations. By the end of the nineteenth century the elitist view that the arts were separate from the everyday and accessible only to people with specific sensibility started to take hold. From a historical point of view, the nineteenth century was a time of expansion, enabling the consolidation of middle classes and their former disparate interests into a powerful unified culture, especially in colonial countries. It was a time of economic growth and colonial expansion. As nation-states became more powerful, so museums granted a solid perspective on history. A nation-state as England needed to be pictured in a way that it could be identified, understood and imagined as the heart of the Empire. As the peripheries of the nation started to be known in increasing detail through collections brought back by travelers, missionaries and colonial administrators and officials, the more it was necessary to “materialize the centre” (Hooper-Greenhill 2000a, 28 [35]).

But in 1990s the ‘nation’ proved to be an artefact and the single, unified community of many nations was only ‘imagined’ (Hobsbawm 1990 [36], Anderson 1991 [37]) as we all belong to different communities and our membership changes with times and circumstances. Some communities are ours by choice, others are ours because of the way others see us. Community is thus one of the most elusive words (Abercombie et al. 2000, 64 [38]) and for some “museum community is a meaningless expression” (Davis 1999, 59-60 [39]). Hooper-Greenhill, however, found a useful way of conceptualising the idea of communities in order to understand its multiple meanings within the museum setting. For her, there are fluid and unstable communities “located in relation to interpretative acts” and “recognised as by their common frameworks of intelligibility, interpretative repertoires, knowledge and intellectual skills” (Hooper-Greenhill 2000b, 121-122 [40]). Such communities in museums may be defined by different interpretation objectives, depending on their historical or cultural experiences, knowledge, socio-economic position, national, regional, local identities or identities related to sexuality, disability, age and gender (Mason 2005: 206-7 [41]).

A New Education

Education was another building block of the modernist nineteenth century museum, conceived as instrumental to the production and dissemination of authoritative knowledge directed to an undifferentiated audience, in which learning was “held apart from the popular culture of the everyday” (Hooper-Greenhill 2000a, 126-127 [35]). George Hein’s “constructivist museum” became an alternative model for the construction of knowledge in the late 1980s. According to the constructivist theories underpinning his model of museum, knowledge does not exist independently of the learners’ minds, but it is the result of the learners’ interaction with the world and the

focus shifts from the written word to learners’ active participation through interaction with objects” (Hein [1998] 2002, 6 [25]).

Another commonly held view on the modernist museum was that an ordered sequencing of the artefacts was more important than the visitor’s experience. Classification, encyclopedic knowledge, discourse of objectivity, objects as sources of knowledge in themselves were still the guiding principles of displays and exhibitions. In the ‘post-museum’, according to Hooper-Greenhill, knowledge results from the renegotiation of the relationship between the museum and its audience: “specialist knowledge remains important but is integrated with knowledge based on everyday human experience of visitors and non-specialists. Where the modernist museum transmitted factual information, the “post museum also tries to involve the emotions and the imaginations of visitors” (Hooper-Greenhill 2000a, 143 [35]).

The distinction between high-culture and low culture, typical of the modernist museum is also blurred in the post-museum. Pierre Bourdieu and Alain Darbel’s classic study of museum audiences, *The Love of Art* (1999), maintains that only audiences who possess enough cultural and economic capital can activate their attitudes, artistic preferences and cognitive competences. In a postmodern view, however, Bourdieu and Darbel fail “to account for broader patterns of culture and economy that stretch the visual arts beyond the confines of a limited culture elite”; and to acknowledge that “the aesthetic and the commercial are increasingly mashed” (Prior 2005, 132 [42]).

Another grand narrative of the modernist museum, perhaps the most powerful, is that museum is the privileged site of “seeing” and that seeing is intrinsically linked with learning and knowing. Hooper-Greenhill reminds us that “the assumption was that looking could enable the brain to absorb information more quickly than by any other means. Learning through the visual was thought to be more effective than learning through words, especially for those that had not had the benefit of lengthy schooling” (2000a, 14 [35]). This visual ethos represented the organizing principle of displays and exhibits whose function was to demonstrate and transmit the basic principles of citizenship through clean and ordered space. Furthermore, vision allowed the experience of objectivity, truth and reality: “In the museum, objects, or artefacts are put on display. They are there to be looked at. Museums are site of spectacle [...] Museums pride themselves on being places where ‘real objects’ can be seen. The notion of the real is a powerful and enduring one” (2000a, 14 [35]).

3. New Museology and Museum Studies: Interactivity

New Museology and its ideological frame of reference, to which audio description can be inscribed, however

required changing paradigms of interactivity in museums. New typologies in art in the 1980s and 1990s, including mass media interactivity models reshaped the museum visit. New expressions started to be coined such as 'museum text' and 'technological, spatial and dialogic interactivity'. Louise Revelli's *Museum Text. Communication Frameworks* proposes to analyse 'texts in museums' that are the texts that visitors and professionals are familiar with: labels, extended texts, catalogue entries, brochure description. Her frameworks seek to be the means of a "broader sense of communication that in museums encompasses all other institution practices which make meaning" (2007, 1[43]). This is reflected in the contextual pragmatic effect of whether or not "there is an admission charge, the impact of visitors on the building, the layout of the galleries or whether exhibitions are promoted as written texts on walls or written on a brochure" (2007, 2 [43]). Not only does she limit her scope to written texts, but she also looks at 'museums as text', i.e., the way a whole institution or exhibition within it, makes meaning, communicating to and with its public.

New forms of interactivity enlarged the horizons of communication in museums, such as those that Andrea Witcomb in *Re-imagining the Museum: Beyond the Mausoleum* (2003) divides into "technological, spatial and dialogical" (2003, 7 [44]). I share Witcomb's position that these new forms of interactivity are not simply positive or negative, but they can be either successful or not. These new forms of interactivity include, for example, an increase of information and didactic materials, differentiation of exhibition organization according to audience (adult, children, post-colonial subjects), changing role of the curator that can become more a promoter rather than an expert. Another form of interactivity is how corporate museums develop into "blockbuster", "superstar" museums. These museums promote tourism, the distinctiveness of (usually) big cities for prestige and a place in the global market and reflect the corporation image-marketing. McDonald calls it "promotional culture" and is best exemplified in the story reported by Charles Saumarez Smith that recounts the way in which a seventeenth-century doorway became the logo of V&A Enterprises, the Victoria and Albert Museum's commercial company (2006, 2[45]). A further form of interactivity is the integration of performance, dance, music, theatre and video into museum spaces. Started by the avant-gard movements, the introduction of increasingly intertwined modes of aesthetic creation have become an essential part of the museum mission to collect, conserve, and promote understanding of present and past art. At the same time, notions of art and their relation to the world are completely reshaped. A very recent example of this form of interactivity, called *Primitive Game* (2018), comes from the Guggenheim Museum. It is a performance that took place in the Guggenheim's Rotonda and was the result of a project that sought to investigate "What might happen when four seemingly divided groups are invited to debate

one another without using words? The event was followed by artist-led, movement-based workshops with participants from four groups, each with a unique relationship to gun violence: citizens impacted by street violence, military veterans, police officers, and recreational users of firearms. "Staged amid increasingly divisive national politics, *Primitive Games* gave performers and audience members alike an opportunity to reconsider their own place within contemporary debates" ("Performance of Shaun Leonardo's Primitive Game" [46]).

In conclusion, however, the most disruptive and controversial form of interactivity is that with the new media. New media have started to appear everywhere in museums in the form of hand-held information device, information kiosks, installation art, display supports, and archiving systems, as a means to reorganize working practices, and to keep track of visitors. They are used to create "virtual museums" to represent the things in existing museums (Hanning, 2006, 303, [47]). The new media, some of which require a high involvement of visitors, have been hailed as a means to democratize knowledge, to modernize, popularize and increase the efficiency of museums as old-fashioned institutions. However, the boast of attendance, the flexibility and the encouragement of increased social interaction expected by the introduction of new media, have left some skeptical. Their criticism is on the ground that audiences uncritically absorb media messages and that media shape perception and manage attention. The debate is still open and as both Michelle Hanning and Witcomb suggest, it would be more sensible to look at successful or unsuccessful examples of new media use in the museums. Hanning considers an interesting and innovative use of new media the access to the collection. *Orbis Pictus Revised* made by Tjebbe van Tijen and Milos Vojtechovsky which toured Germany, the Czech Republic and the Netherlands between 1991 and 1996: "This art installation combined three-dimensional, "hands on" experiences with computer touch screens, and was based on a seventeenth-century schoolbook, *The Orbis Sensualium Pictus* (The World Explained in Pictures)" (Hanning, 2006, 309, [47]). According to her, "The *Orbis Pictus Revised* gave meaning and direction to users' interaction, while the use of objects and sound introduced new dimension to sensation" (2006, 309, [47]). In contrast to this, Witcomb reports an unsuccessful example of how interactive technology at the Museum of Tolerance in Los Angeles, has limited the museum ability to move away from the traditional and authoritative museum narrative. The interactivity used in that model of didactic communication, limit visitor opportunities to engage with the theme of intolerance and prejudice at social level, thus preventing any possibility of historical understanding (2003, 7 [44]).

4. What is Audio Description?

Audio description also belongs to the use of interactive

technology. As shown in the Introduction many definitions has been given, but it still lacks critical common understanding over the countries. In general terms, AD explores the verbal description of the relevant (visual) components of a work of art or media product to the benefit of the visually impaired. AD is used for different media contents and fulfils different requirements. Descriptions that are 'static' like those for visual art, such as sculpture and painting, can be offered live, as part of a guided tour in recorded form or as part of an audio guide. Descriptions that are 'dynamic' must be descriptions of essential visual elements of films, TV series, opera, theatre, musical and dance performances or sports events and inserted into the "natural pauses" in the original soundtrack of the production. In order to create AD that is a coherent and meaningful 'text', these descriptions work only in combination with the original sounds, music and dialogues. AD for dynamic products – the most studied so far - can be recorded and added to the original soundtrack (as is usually the case for film and TV), or it can be performed live (as is the case for live stage performances). In the case of museum exhibition, static descriptions can also be accompanied by touch tours or other tactile information. The creation of AD is a complex process with the theoretical principle of giving its audience an experience that tells a story or a narrative. Aline Remael, Nina Reviere and Gert Vercauteren are well aware of this principle: not only do they see AD as the process of the collaboration of multiple professionals from different fields: audio describers, voice talents or voice actors, sound technicians and users, but they also show the various steps of the production process described as follows (2015, 10-11[48]):

- (1) Writing the AD script:
 - Viewing and analysing the source material (henceforth called "Source text", (ST). This can include a blind viewing.
 - Writing the descriptions in what is called the AD script (or "target text", TT) and timing them so as not to cause overlap with the other channels on the soundtrack, especially the dialogues.
 - Reviewing the AD script while viewing the film. This can be done together with a blind or visually impaired collaborator.
- (2) Rehearsing the descriptions with the voice talents and making final changes where appropriate. Sometimes the writer of the AD script and the voice talent(s) are one and the same person.
- (3) Recording the AD with voice talents or synthetic voices.
- (4) Mixing the AD with the original soundtrack in the appropriate format (different for DVD, cinema, festivals, etc.).

These guidelines are far from giving a final word on audio description: Vercauteren himself has underlined that there is still no agreement among perhaps the too many guidelines available (2007, 139-150 [49]). Audio

description differs greatly in each European country with Germany, Spain, and UK leading the way and other subtitled countries like Belgium (Flanders) and Portugal proceeding to a slower pace. The greatest difference is however with the American tradition: Joel Snyder, known internationally as one of the world's first "audio describers", recommends in his pioneering article, "Audio Description: The Visual Made Verbal" (2007, 99-104, [50]), that description must be entirely objective and 'what you say is what you see'. On the other hand, the European approach is more flexible in order to save time and possible misunderstanding. For example, if a person on screen is smiling, the American audio describer describes the person's face (the lip spread and the eyes sparkle) whereas the European describers would simply say that the character is smiling. Some problems may also arise in the selection process. In 2007 Sabine Braun lamented that more research was required into audience expectations with regard to type and amount of information in the descriptions. She also maintained that little was known about the overall narrative or 'story-telling' preferences of AD audiences, register variation in AD in relation to film genre/style and the use of metaphorical language. She also highlighted that analysis of the macro structures of AD lack of a narratological framework (2007, 7-9 [51])

This maybe explains the exponential outgrowth of studies on AD in recent times, attracting attention to at least two important social and legal issues that have become unavoidable in contemporary society. First, audio description is a strong response to against the drawbacks of the information society, such as marginalization. In the technological society access is crucial for participation in the benefits of globalization and economic and cultural growth. Exclusion from information is "the result of age (the fast growing elderly population in Europe), (remote) geographic location, and/or lack of funds and financial means. Such exclusion leads to social marginalization" (2007, 12 [52]). Second, audio description has contributed to draw attention on access and accessibility as common human right through a legislation that has tried to eliminate any kind of 'barriers'. This is historically shown in the development of this legislation over the last thirty years, which starts with the Disability Discrimination Act (DDA, 1995) and the Americans with Disabilities Act (ADA, 1990) and arrives to *The United Nation Convention on the Rights of Persons with Disabilities* (CRPD) that came into force in 2008.

5. Museum AD as Multimodal and Multisensory Translation

Museum AD and museum visits for the blind and visually impaired has become an emerging topic only in very recent years (Smith 2003 [53], De Coster and Muhleis 2007 [54], Vilatte 2007 [55], Holland 2009 [56], Neves

2012 [57], Hurtado, Siebel, Gallego and Diaz, 2012 [58], Hurtado, Gallego, 2013 [59], Eardley, Fryer, R Hutchinson, M Cock, Ride, Neves 2017 [60], Perego 2018 [61]). Studies and projects on museum audio guides have been conducted in England (the *Talking Images* project, 2001-2003 [62]), France (Vilatte 2007 [55]), Portugal (Martins 2012), [63] Spain (Gallego and Nunez 2014) [64] and Poland (Szarkowska, Jankowska, Krejtz, Kowalski 2016[65]).

I will now try to define museum AD as multisensory translation, in line with the idea that museums have lost their primary function as sites of seeing and privileged places where to experience objectivity. Recently, David Howes [66] in his introduction to *The Senses and Society* enthusiastically welcomed the rediscovery of the 'sensorium' across disciplines in the humanities and social sciences. This discovery has brought key insights into the sociality of sensation and the cultural contingencies of perception, challenging the dominance of the psychological approach in this area. The most outstanding result of this return of senses is the emergence of 'sensory museology' that has rehabilitated, first of all, the sense of touch, and then, the senses of smell and taste, traditionally classified as 'base'. Sensory museology is intrinsically linked to multimodality and multi-sensoriality and it constructs meaning through the interaction of different modes and semiotic resources, i.e. the linguistic mode (use of different languages), the visual mode (2D images, either still or dynamic, gesture and body language), the aural mode and the tactile mode for 3D works of art such as sculpture. At present, studies on museum AD have been conducted from two different but complementary perspectives, one focusing more on the grammar of multimodality, the other more on artistic multisensory translation. Those scholars who privilege the first perspective start from of the notion of museum accessibility, which is further classified as "accessibility to museum's physical environment" and "accessibility to museum content", comprising appropriate exhibition techniques and resources for different types of visitors. Museum AD has become one among the many resources available to visually impair and the museum itself is considered as an interactive multimodal communicative event. Catalina Jiménez Hurtado, Claudia Seibel, Silvia Soler Gallego and Susi Herrero Díaz describe the structure of the multimodal discourse as follows (2012, 7) [58]:

- a). a macro-level of the text (the exhibition as a genre)
- b) a micro-level of the text (the exhibits and the relationships between them as texts that are the realization of text types), both levels being linked to a specific situational macro-context (the museum).

To sum up their multi-layered structuring, they consider the exhibition as a set of conceptual objects that act as a first translation of the exhibition discourse. According to

genre analysis, the first step is then to determine the functional and pragmatic elements to establish communication, i.e., the communicative and social-semiotic context. Museum types – science museums, archaeological museums, contemporary art museums – will be viewed as the socio-cultural context of exhibition, whereas the specific time and space in which the exhibition takes place will be viewed as the situational context of exhibits. Once contexts (museum types) and genre (exhibition type) have been studied, the next step is to analyse the exhibits as the source text (ST) par excellence in museums. These exhibits use a specific type of multimodal grammar determined by their visual, acoustic and linguistic nature. They give the example of a multimodal grammar applied to museum multimodal texts. They show how in videos, for example, the ST analysis includes a semantic analysis of the objects appearing in an image; a morphosyntactic analysis including the object morphology (colour, texture, size, etc.); a syntactic analysis describing the time-space relation between the objects as they appear in the video and the setting where they appear. Moreover, the study of images requires a pragmatic and discourse analysis which focusses on the perspective from which objects are shown in an image. Their multimodal grammar of video can also be applied to other exhibits that use non-verbal visual codes, such as paintings, sculptures, illustrations, etc.... According to their grammatical analysis of images, the visually impaired visitors will be able to receive information about the image type (graphic, natural, animated or real), the conceptual objects in the image (object type), their morphology (colour, texture, size); and the syntax of the image, showing their interrelationship. This multimodal grammar can also "show if movement occurs in a non-marked (left-right) or a marked way (other type of camera movement), or if the shot angle is eye-leveled (or eye-angled) or non-eye-leveled (high or worm's eye angle)" (Hurtado, Seibel, Gallego, Diaz, 2012, 8 [58]). This approach to museum AD comes from the idea that the combination of multimodality and multimediality gives rise to new methods of universal access to knowledge (Ventola and Kaltenbacher, 2004, 1-6 [67]). As noted, "the study of this phenomenon requires a detailed description of the new modes and their semiotic function as reflected in their discourse combination. This means that it is necessary to re-examine and re-formulate traditional theories of text analysis so that they can be used to obtain new insights into these text types" (Hurtado, Gallego 2015, 577 [68]).

Another approach to museum AD focusses more on aspects of artistic fruition and creative response to it and emphasizes the importance of using creative and interpretative language in AD. In fact, museum AD has no "original text" but a "non-verbal text" which determines the nature and structure of the description. There is "a variety of open co-texts that requires contextualization and interpretation and, above all, selection" and therefore there

is less concern with “when to say”, and a greater emphasis on “how” and “what” to say “about what” (Neves 2015, 69 [69]). This approach that has its roots in art studies has been informed by influential art historians and theoreticians such as Erwin Panofsky and E. H. Gombrich. The German-born art historian Panofsky, whose writings were rich in allusion to philosophy, history and literature, dealt with some problems of art studies such as “style”, “forms of beholding”, “artistic volition”, “symbol” and “symbolic form” (Białostocki 1970, 71 [70]). Central to my purpose is his notion of “seeing”. Panofsky makes a distinction between seeing as a physiological process that does not change along the centuries and the interpretation of what is seen as the result of an aesthetic choice. This choice is therefore a psychological process expressing a certain attitude of the human mind towards the visual world. This is the reason why there are different modes of art representations in various epochs that are the product of an active interpretation. For Panofsky, “seeing alone only furnishes the mind with visual elements; it has nothing to do with expression and has no influence on style. Style is shaped only by the interpretation of visual impressions...stylistic features are not a reflection of changes in the ‘form of beholding’ independent of the human mind, but a reflection in changes in the interpretation of the world as we see it” (Białostocki 1970, 72 [70]).

Art as interpretation and independent from the act of seeing was also Gombrich’s starting assumption in *Art and Illusion: A Study in the Psychology of Pictorial Representation* (1960). In *Art and Illusion* Gombrich expresses his idea that artists do not copy what they have in front of them but make pictures by manipulating inherited ‘schemata’ that categorise reality and knowledge according to conventions. On the one hand, the history of art is the result of the artist’s correction to this ‘schemata’, when he/she compares a pictorial schema to direct observation of the world. This correction in turn enters the numbers of available formulae until some later artists compare it to the world and makes further adjustments. On the other, beholders, in turn, make their own sense of the picture according to what they see on the canvas, their knowledge of the world and from other paintings. (Wood 2009, 836 [71]). Thus, both the artist and the beholders do not begin with their visual impression but with their idea or concept. Gombrich “emphasizes the ‘beholder’s share in interpreting an image: successful representation depends on the viewer’s ability to make connection and to draw on the store of patterns and images that she holds in her mind” (Gaiger 2008, 48 [72]). He also gives prominence to the well-known duck-rabbit drawing, which he claims, offers the ‘key to the whole problem of image reading’. The drawing shows that we do not have a prior visual experience that we interpret in two different ways but interpretation informs the way in which we actually see the object. Thus, the duck-rabbit drawing is the example of the

flexibility of our interpretations and of how we cannot be visually aware of the ambiguity of the drawing. In fact, we are not allowed to experience both readings at the same time, as we either see the depiction of a rabbit or the depiction of a duck.

Panofsky’s and Gombrich’s suggestions have undoubtedly informed the earliest studies on museum AD. According to Karin De Coster and Volkmar Mülheis (2007 [54]), every work of art deals with signs, which can be either clear or ambivalent. Clear signs are those signs that give clear pieces of information and are perfectly translatable into words. Ambivalent signs instead have more layers of meaning and, although they can still be put into words, they are difficult to translate, especially if the visual effects cannot be represented through other senses. An example of an ambiguous sign is Gombrich’s duck-rabbit drawing, evoking two different images within one structure. This image is a visual phenomenon with strong intensity but, if it cannot be translated into another sensorial phenomenon (touch or hearing), its ambiguity remains purely visual. According to De Coster and Mülheis, this ambiguity, which can still be rendered in words, must find a counterpart in another sensorial field in order to prove effective. For them, “every sign or meaning of an object of a work of art that can be clearly identified can be translated into words, but one can give an idea of visual ambiguity only if a comparable ambiguity exists in another sensorial field (touch, hearing)” (193 [54]). De Coster and Mülheis claim that museum AD is interpretative and multisensory and this type of AD represents one of the central concerns of visual culture which, for its intersemiotic nature, “encourages reflection between visual and verbal signs, and the ratio between different sensory and semiotic modes” (170 [54]).

The major proponents of visual culture (Mitchell 1986 [73] Jenks 1995 [74], Rogoff 1998 [75], Mirzoeff 1999 [76]) define it as the study of visual cultural sites/sights in terms of what they mean for personal and social life. Visual imagery extends beyond images and is concerned with the social, political and economic context of images, their production and the life experience of those who view and interpret them. As William J. T. Mitchell observes, not only does visual culture define its object as the social construction of the visual field, but it also explores “the chiasmic reversal of this preposition, the visual construction of the social field. It is not just that we see the way we do because we are social animals, but also that our social arrangements take the forms they do because we are seeing animals” (Mitchell 2002, 171 [77]). In his anxiety to dispel some misconceptions about visual culture, he clarifies that “we do not live in a uniquely visual era” and that “the visual or pictorial turn is a recurrent trope that displaces moral and political panic onto images and so-called visual media” (170 [77]). In fact, the relationship between visual and verbal signs seem to have been a central concern in different epochs, as many studies on ekphrasis reveal over

the centuries. Ekphrasis was originally used as a rhetorical device in ancient Greece to bring the experience of an object to a listener through detailed descriptive writing: the most often quoted example comes from Homer's *Illiad* where the description of Achilles' shield appears as part of the narrative. Contemporary debate defines ekphrasis as "the verbal representation of graphic representation" (Heffernan 1991, 299 [78]), which is applied to the imitation in literature of plastic arts (Heffernan 1993 [79]) but some have also seen it as the endless struggle of Western civilization to reconcile the 'natural signs' of visual arts with the 'arbitrary signs' of verbal languages (Krieger 1991, 300 [80]). Interestingly, for Mitchell ekphrasis does not entail a conflict between the verbal and the visual as all arts and media share text and image: "The image/text problem is not just something constructed "between" the arts, the media, or different forms of representation, but an unavoidable issue within the individual arts and media. For him, all arts are "composite" arts (both text and image) and all media are mixed media, combining different codes, discursive conventions, channels, sensory and cognitive modes" (Mitchell 1994, 94-95 [81]). The wider implication is that visual culture "entails a meditation on blindness, the invisible, the unseen, the unseeable, and the overlooked; also on deafness and the visible language of gesture; it also compels attention to the tactile, the auditory, the haptic, and the phenomenon of synesthesia" (179[77]).

These notions inform Josalia Neves's 'multisensory approach to the audio description of visual arts and her radical view of what museum AD is. Neves first underlines the 'personal narrative' that the museum represents for the visually impaired, and then indirectly replies to De Coster and Mülheis's idea that the ambivalent signs that are difficult to be translated into words can nonetheless be explained in words. She thinks instead that the ambiguity of a work of art must be kept and that, far from explaining the meaning of the ambivalent signs, audio describers should find in words the same 'sensorial ambiguity' that may be found in sound or touch. She calls this approach "soundpainting", which is consistent with the tradition of poetry and ekphrasis. Audio describers therefore should suggest more than explicitate (2012, 290[57]):

Carefully chosen words and a careful direction of the voice talent to guarantee adequate tone of voice, rhythm and speech modulation can all work together with specific sound effects and music to provide the "story (ies)" and emotions that a particular piece of art may offer.

Museum AD thus becomes openly subjective and interpretative in nature and can be seen as employing transcreative strategies, similar to those employed in marketing, in the context of the visual text. A visual text can become a truly "alternative work of art" and "give way to a new sound-based multi-sensory text that recreates the style and emotions of the first, suggesting, guiding people

through tactile readings (should there be a tactile reproduction to be used) and yet still allowing for interpretation and the "rewriting" of yet another personal text" (2012, 290 [57]). All these complex multimodal, multi-sensory solutions belong to the 'sensory museum' as an interactive multimodal communicative event.

6. Coherence and Cohesion in Museum AD: A Case Study from the British Museum

Although the analysis of museum AD as "soundpainting" can be highly creative, poetic and fascinating, Neves herself warns us about the complexity of the multisensory and multimodal text. For this reason, in order to analyse the audio description of Burnished Pots (Africa Room 25 OBJ2595"), I have mainly focussed on its verbal organization. In particular, I have drawn on notions of coherence and cohesion as reworked by Pilar Alonso in a discourse analysis perspective in *A Multi-dimensional Approach to Discourse Coherence: From Standardness to Creativity* (2014). I will also highlight when the text proves especially relevant for visually impaired and to what extent it complies with the *Art Beyond Sight* (ABS)'s guidelines for verbal description (Salzhauer Axel, Hooper, Kardoulis, Stephenson Keyes, Rosenberg, [82]). Although the number of guidelines for creating more easily accessible audio description have increased recently, sometimes with contradictory indications, the ABS guidelines remain a basic but valuable tool for well describing painting and sculpture.

Coherence and cohesion are not new topics in audio description, especially for film AD (Braun 2011 [83], Taylor 2014 [84], Taylor 2017 [85]). In particular, Sabine Braun notes how in multimodal discourse coherence needs to be achieved across different modes of communications and makes a distinction between 'local coherence' created within individual scenes, and 'global coherence' that reaches out across scenes (2011, 650, [83]). She also shows how coherence in film emerges from links within and across different modes of expression (e.g., links between visual images, image-sound links and image-dialogue links). Consequently, she outlines a new model of coherence which embraces verbal and multimodal texts and which underlines the importance of source text author and target text recipients in creating coherence (Braun 2011, 647-652 [83]). Similarly, from a functional systemic perspective, Christopher Taylor sees "the audiovisual text such as a film... still governed by cohesive ties of both a verbal and visual nature". Specifically, "in the case of audio descriptions (ADs), the text is written to be read and needs to be both linguistically cohesive within itself and cohesive with the visual content it describes" (Taylor 2014, 42 [84]).

Although partly sharing some of Braun's and Taylor's

theoretical background, Alonso's basic assumption is that both cohesion and coherence should be seen as interactive constituents of text and discourse structure. For this purpose, she claims that there is not a stark opposition between coherence and cohesion and asserts that "meaning relations and properties existing in any text which are not cases of cohesion, are expressions of coherence". (Alonso 2014, 52 [86]). Then, in line with some early studies on discourse coherence (van Dijk 1977 [87], 1980 [88], 1985 [89], van Dijk and Kintsch 1983 [90]) she sees how these relations can be made explicit or implicit with or without linguistic markers. As Van Dijk states: "natural language discourse, unlike formal discourse, is not fully explicit. Relationships between sentences or propositions may exist without being expressed" and they are the so-called "missing links" (1977, 95, [87]). From this, she then moves to see coherence at a local or global level. Local coherence, which accounts for microstructural level relations, refers to "the meaning relations expected to hold between individual propositions or portions of texts which are normally physical adjacent to one another" (Alonso 2014, 53 [86]). Van Dijk refers to this sequential connectivity of the adjacent portions of text as microstructure. At this microstructural level, relations may be of different types (chronological, general-particular, cause-effect, explanation, expansion) and may be marked by cohesive devices (explicit relations) or by different semantic operations (hierarchical ordering, choice of syntactic correlations, identity or difference relations, topic recurrence, etc...). The macrostructure of a text is instead characterised by the many semantic relations co-existing within large portion of a text or discourse and they are not easy to trace. As theoretical objects designed to recover the most essential and general content of a discourse, they involve aspects of discourse topic, such as thematization, discourse continuity, expansion, etc....and display a high degree of subjectivity for the complex elements that need to be controlled. For this reason, the interdependence between microstructure and macrostructure is of fundamental importance for coherence. Drawing on Van Dijk and Kintch (1983: 150-51 [90]), Alonso asserts that the microstructural level analysis gives a step-by-step treatment to discourse, whereas the macrostructure recovers meaning as a result of the arrangements chosen and the selection made. Importantly, the semantically interrelated propositions found in a text, "do not develop independent topics or pursue independent goals, but function together towards the construction of the general message or the achievement of a communicative plan as represented by the totality of the text" (Alonso 2014, 54-55 [86]).

My analysis will therefore first illustrate how cohesive relations in this museum AD contributes to create coherence, thus enhancing the construction of meaning, either explicitly or implicitly. I will then focus on how local coherence, i.e., the microstructural relations of the text is

interdependent with global coherence, i.e., the macrostructure of text and discourse, and I will finally attempt to see what the overall 'communicative' plan of the text is.

The three ancient pots, whose audio description is six-paragraph long, are located in the Africa room of the British Museum. The first paragraph operates thematically as it provides the topic – "three burnished pots" - and the contextual frame of the subsequent paragraphs (See APPENDIX). In this respect, the deictic "these" in "these three burnished pots" orients the audio description users towards the real space of the museum room (ABS's guideline 3: orientation of the viewer with direction). "Ganda people" and "what is now Uganda" are instead semantically related and their metonymic relation implicitly provides further information on the antiquity of the pots. The paragraph then indicates the parameters of shape and size of these pots and the description of their making (ABS's guideline 1: standard information). Meaning relation is constructed according to a pattern that can be summarised as follows: 1) shape expressed through similes; 2) processes as actions linked through lexical and semantic coherence; 3) design and size. The pots are "in a shape of calabash bottles..." inspired by the shape of a gourd – with a rounded bottom and a plump, swelling body tapering to a narrow neck". They are compared to "calabash bottles" and to "a gourd", which are synonyms. The description of the gourd in its components, the "bottom" and the "body" described in detail in the prepositional phrase, shows instances of lexical cohesion (superordinate). It is interesting to note that from "calabash bottles" to "rounded bottom" and "plump, swelling body tapering to a narrow neck", the audio description becomes more detailed in order to create increasingly defined objects, which can be more accessible for the visually impaired (ABS's guideline 4: describe the importance of technique and medium).

The process of pottery making draws attention on itself and on what happens to the clay, as suggested by the use of the passive voice ("are made...", "clay has been glazed...", and "rubbed"). The prepositional phrase "After firing" in thematic position highlights the importance of the beginning of the process which allows the other actions ("glazed and rubbed") to be accomplished, and will result in the creation of a "metallic-grey surface". Lexical cohesion then establishes semantic meaning relations throughout the paragraph: "burnished pots", "metallic-grey surface" and "pewter". The analogy between 'metallic-grey surface' and 'pewter' helps, as in the case mentioned above, to better define the material of these pots for visually impaired.

The second paragraph recalls the topic and the contextual frame as in the first paragraph, but the latter becomes here more explicit. The glass case is "in a diagonal row", "towards the right and further from us" are spatial references which clearly establish the world of the

museum room for visually impaired. The description of the decorated ornamental pot rings, and the reference to the “tallest pot” anticipates how discursive coherence is achieved in the next three paragraphs.

The third, fourth and fifth paragraph, in fact, have the same structure, which is related to the second one in terms of 1) container/content (the pots as containers of the ornamental pot rings are the topic described in detail) and 2) hierarchical ordering from the perspective of the audio description users. Thus, the third paragraph describes the size of the first pot (“a large melon”) its decoration (“It’s decorated around the lower part of the neck with plain bands alternating with a herring bone pattern”) and closes with a simile (“the funnel of an old-fashioned gas lamp”), which helps the visually impaired visitors. The fourth paragraph is shorter than the others and the description of the second pot focusses on its shape (“with a long narrow neck that widens into a goblet-shape at the top”). The fifth paragraph describes the third pot and its neck with a simile (“like a pumpkin stalk”). Furthermore, the repetition of “neck” throughout the three paragraphs contributes to enhance local discursive coherence. With reference to the ABS’s guidelines, these three paragraphs avoid ambiguous and figurative language, provide vivid and particularized descriptions (guideline 6: use specific words; guideline 7: provide vivid details). There are also objective descriptions so the visually impaired can form an image in their minds and the use the similes enable them to construct a highly detailed sensory expression of the pots (guideline 9: refer to other senses as analogues for vision). The hierarchical ordering of the pots furthering local cohesion is also signaled in the initial sentence of each paragraph: “The tallest pot has a body about the size of a large melon”, “The middle pot is a little smaller...”, “The nearest pot is the smallest of all”.

The final paragraph has a different style and from description moves to narration. It recounts when and where the pots were made. This shift in style is signalled by the only modal in the text (“would have been produced”). Local coherence builds on semantic meaning relation of lexical cohesion (“the royal court”, “important people”, “the Royal potters”, “the Kujona”) which accounts for the important status of both pottery making and potters. Another pattern of semantic meaning relation, which links “dry season” with its antonyms “rainy season”, “Africa”, “the heat of the sun”, “dry”, “firing”, draws attention on the weather conditions that allow the process of pottery making to be successful. More importantly, however, this paragraph shows how local coherence interdependent with the global coherence of text and discourse. In fact, the meaning relation in this paragraph is organised around: 1) pottery making and 2) potters. This last paragraph follows the inverted order of the first paragraph, in which potters and then the process of pottery making are mentioned. Therefore, it is only when the semantic relations which co-exist in these two paragraphs are revealed, that

coherence emerges at global, macro-structural level. Thus, the “Ganda people”, who were in “what is now Uganda” (first paragraph), were “Royal potters” called “Kujona, a special group who received land in exchange for pottery”. Similarly, pots “glazed with graphite and rubbed with peanut butter” in order to create “a metallic-grey surface” (first paragraph) were “produced for the Royal court” only in the “dry season” as happens “in many parts of Africa” and they were let dry to harden “before firing” (first paragraph). Therefore, global coherence seems to suggest that the macrostructure of this text may represent a possible model of how museum AD can be constructed at discursive level.

7. Conclusions

This article has traced how the New Museology or Museum Studies have opened up the way to accessibility in society, in the nation and in education. The introduction of new paradigms of interactivity also changed museums and audio description has become a useful tool for those who are blind in the museum context. .

Against this backdrop I have shown how museum AD has been approached either as an interactive multimodal communicative event from an exclusive multimodal grammar perspective; or from the more traditional perspective of art history and visual studies. Finally, I have analysed in detail the audio description *Burnished Pots* (Africa Room 25 OBJ2595) from the British Museum to see whether this text may prove a replicable model for the creation of other museum AD.

Appendix

Burnished Pots (Africa Room 25 OBJ2595)

These three burnished pots were made by the Ganda people – in what is now Uganda. The pots are made in the shape of calabash bottles. After firing, the clay has been glazed with graphite and rubbed with peanut butter, creating a metallic-grey surface that resembles pewter. Each pot is made to a slightly different design, but all three are about 30 centimeters high, and inspired by the shape of a gourd – with a rounded bottom and a plump, swelling body tapering to a narrow neck.

The pots are displayed in a glass case. They’re set in a diagonal row, with the tallest pot towards the right and furthest from us. Each pot stands on an ornamental pot ring – a short tapered cylinder woven from vegetable fibre, decorated with diagonal patterns in shades of brown.

The tallest pot has a body about the size of a large melon. It’s decorated around the lower part of the neck with plain bands alternating with a herring bone pattern. Above this, the neck swells a little, before tapering in again. It

resembles the funnel of an old-fashioned gas lamp.

The middle pot is a little smaller, with a long narrow neck that widens into a goblet-shape at the top.

The nearest pot is the smallest of all. Its rounded bottom could be cradled in the palm of one hand. Its neck curves right over, like a pumpkin stalk and comes to a rounded point at the tip. Access to the contents of this pot can only be gained by a hole in the centre of the body.

Although their organic shapes make them look strikingly modern, the pots are about a hundred years old. They would have been produced for the royal court, and other important people. Pottery making is carried out in the dry season in many parts of Africa for practical and symbolic reasons. The heat of the sun is required to dry them to a certain hardness before firing, otherwise cracks appear. During the rainy season people work in the fields, leaving little time for pottery. It is also considered important that pots are fired during the dry season to avoid supernatural consequences such as the destruction of pots. Unusually for sub-Saharan Africa, in Uganda the Royal potters are men - the Kujona - a special group who received land in exchange for pottery.

REFERENCES

- [1] M. Pfanstiehl, C. Pfanstiehl. The play's the thing-audio description in the theatre, *British Journal of Visual Impairment*, Vol. 10. No. 3, 91-92, 1985.
- [2] J. Díaz-Cintas, P. Orero, A. Remael (eds). *Media for All: Subtitling for the Deaf, Audio Description, and Sign Language*, Rodopi, Amsterdam, 2007.
- [3] N. Fairclough, R. Wodak. Critical discourse analysis. In: T. van Dijk (ed). *Discourse as Social Interaction*, Sage, London, 1997, 258-84, 1997.
- [4] G. Kress, T. van Leeuwen. *Multimodal Discourse: the Modes and Media of Contemporary Communication*, Hodder Arnold Publication, New York, 2001.
- [5] R. Wodak, P. Chilton (eds). *A New Agenda in (Critical) Discourse Analysis. Theory, Methodology and Interdisciplinarity*. John Benjamins, The Netherlands, 2005.
- [6] N. Fairclough. *Critical Discourse Analysis: the Critical Study of Language*, Routledge. London and New York, 2013.
- [7] R. Mayoral, D. Kelly, N. Gallardo. Concept of constrained translation. Non-linguistic perspectives of translation, *Meta: journal des traducteurs/Meta: Translators' Journal*, Vol. 33, No. 3, 356-367, 1988.
- [8] S. Braun. Audio description research: state of the art and beyond, *Translation studies in the new millennium*, Vol 6, 14-30, 2008.
- [9] Y. Gambier. La traduction audiovisuelle: un genre en expansion, *Meta: journal des traducteurs/Meta: Translators' Journal*, Vol. 49, No. 1, 1-11. 2004.
- [10] P. Orero. Audiovisual translation: A new dynamic umbrella. In: P. Orero (ed.), *Topics in Audiovisual Translation*, John Benjamins, Amsterdam and Philadelphia, vii-xiii. 2006.
- [11] J. Díaz Cintas. Traducción audiovisual y accesibilidad. In: C. Jiménez Hurtado (ed.) *Traducción y accesibilidad. Subtitulación para sordos y audiodescripción para ciegos: Nuevas modalidades de traducción audiovisual*, Peter Lang, Frankfurt am Main, 9-23. 2007.
- [12] A. Matamala, P. Orero. Audio Description and Social Acceptability, *Rivista Internazionale di Tecnica della Traduzione*, Vol. 19, 7-12, 2017.
- [13] N. Fairclough N. Critical discourse analysis in transdisciplinary research. In: R. Wodak, P. Chilton (eds.) *A New Agenda in (Critical) Discourse. Analysis, Theory, Methodology*, John Benjamins, Amsterdam and Philadelphia, 53-71. 2005
- [14] S. Arma. Why can't you wear black shoes like the other mothers? Preliminary investigation on the Italian language of audio description. In: E. Perego (ed.) *Emerging topics in translation: Audio description*, EUT, Trieste, 37-55. 2012.
- [15] E. Di Giovanni. Audio Description and Textuality", *Parallèles*, Vol. 26, 69-83, 2014.
- [16] A. Matamala. N. Rami. Análisis comparativo de la audiodescripción española y alemana de Good-bye Lenin, *Hermeneus*, Vol. 11, 249-266, 2009.
- [17] A. Ibanez Moreno A, A. Vermeulen. Audio description as a tool to improve lexical and phraseology competence in foreign language learning. In: D. Tsagar, G. Floros (eds.) *Translation in language Teaching and Assessment*, Cambridge Scholars Publishing, Newcastle upon Tyne, 45-61. 2013
- [18] A. Walzack A. Foreign Language Class with Audio Description. In: A. Matamala, A. P. Orero (eds.) *Researching Audio Description. New Approaches*, Palgrave Macmillan, London, 187-204. 2016
- [19] J. Holsanova. A Cognitive Approach to Audio Description. In: A. Matamala, P. Orero (eds.) *Researching Audio Description: New Approches*, Palgrave Macmillan, London, 49-74. 2016.
- [20] V. Arma. L'audiodescrizione: Stato dell'arte e prospettive di mercato in Italia. In: E. Perego (ed.) *L'audiodescrizione filmica per i ciechi e gli ipovedenti*, EUT, Trieste, 59-71, 2014.
- [21] G, M, Greco. On Accessibility as a Human Right, with an Application to Media Accessibility. In: A. Matamala, P. Orero (eds.) *Researching Audio Description. New Approaches*, Palgrave Macmillan, London, 11-34, 2016.
- [22] *The Disability Directory for Museums and Galleries*. http://www.accessibletourism.org/resources/uk_museumsandgalleries_disability_directory_pdf_6877.pdf, 2000 (last accessed 25 September 2018).
- [23] G. Durbin. *Developing museum exhibitions*, Museum and Gallery Commission, Stationery Office, London, 1996.
- [24] D. Andersen. *A common wealth: museums and learning in the United Kingdom*, Department of National Heritage,

- London, 1997.
- [25] G. E. Hein. *Learning in the Museum*, Routledge, Abington, [1998]2002.
- [26] E. Hooper-Greenhill E., Education, communication, interpretation: towards a critical pedagogy in museums. In: E. Hooper-Greenhill (ed.) *The Educational Role of the Museum*, Leicester Readers in Museum Studies, Routledge, London and New York, 3-27, [1994] 1999.
- [27] L. Roberts. Museums and knowledge: The responsibility to open minds, *The Journal of Museum Education*, 9-12, 1989.
- [28] P. Vergo. Introduction. In: P. Vergo P (ed.) *The New Museology*, Reaktion Books, London, 1-5, 1989.
- [29] R. Sandell. Museums as agents of social inclusion, *Museum management and curatorship*, Vol 17, No. 4, 401-418, 1998.
- [30] J. Dodd, R. Sandell. *Building Bridges: Guidance for Museums and Galleries on Developing New Audiences*, Museums and Galleries Commission, London, 1998.
- [31] J. H. Falk, L. D. Dierking. *Learning from museums: Visitor experiences and the making of meaning*, Altamira Press, Lanham, 2000.
- [32] R. McGinnis. The disabling society. In: E. Hooper-Greenhill (ed.) *The Educational Role of the Museum*. Leicester Readers in Museum Studies, Routledge, London and New York, 278-287, 1999.
- [33] E. Hooper-Greenhill. The Museum in the Disciplinary Society. In: J. Pearce (ed.) *Museum Studies in Material Culture*, Leicester University Press, Leicester, 61-72, 1989.
- [34] T. Bennett. The Exhibitionary Complex. In: T. Bennett. *The Birth of the Museum. History, Theory, Politics*, Routledge, London, 59-98, 1995.
- [35] E. Hooper-Greenhill. *Museums and the Interpretation of Visual Culture*, Routledge, Abington, 2000.
- [36] E. J. Hobsbawm. *Nations and Nationalism Since 1780: Programme, Myth, Reality*, Cambridge University Press, Cambridge, 1990.
- [37] B. Anderson. *Imagined Communities*, Verso, London and New York, 1991.
- [38] N. Abercrombie, A. Warde, R. Deem, S. Penna, A. Sayer, K. L. Soothill, J. Urry, S. Walby. *Contemporary British Society*, Cambridge, Polity Press, 2000.
- [39] P. Davis P. Pace Exploration: museums, identity, community. In: S. Watson S (ed.) *Museums and their Communities*, Routledge, Abington, 53-75, 2007.
- [40] E. Hooper-Greenhill. Interpretative Communities, Strategies and Repertoires. In: S. Watson S (ed.) *Museums and their Communities*, Routledge, Abington, 76-94, 2007.
- [41] R. Mason. Museums, galleries and heritage: sites of meaning-making and communication. In: G. Corsane (ed.) *Heritage, Museums and Galleries*, Routledge, London and New York, 2005.
- [42] N. Prior N. A question of perception: Bourdieu, art and the postmodern, *The British Journal of Sociology*, Vol. 56, No. 1, 123-139, 2005.
- [43] L. Revelli, *Museum Texts. Communication Frameworks*, Routledge, London and New York, 2007.
- [44] A. Witcomb, *Re-imagining the Museum: Beyond the Mausoleum*, Routledge, London and New York. 2003.
- [45] S. McDonald, Expanding Museum Studies. An Introduction. In S. McDonald (ed.) *A Companion to Museum Studies*, Blackwell Publishing, Malden, Oxford, Victoria 2006, 1-12.
- [46] "Performance of Shaun Leonardo's Primitive Game" <https://www.guggenheim.org/video/performance-of-shaun-leonardos-primitive-games> (last accessed 23 September 2018).
- [47] M. Hanning, New Media. In S. McDonald (ed.) *A Companion to Museum Studies*, Blackwell Publishing, Malden, Oxford, Victoria 2006, 302-318.
- [48] A. Remael, N. Reviers, G. Vercauteren, A. Remael, N. Reviers, G. Introduction: basic Audio Description concepts. In Vercauteren (eds), *Pictures painted in words: ADLAB Audio Description guidelines*, Trieste, EUT Edizioni Università di Trieste, 2015, 9-18.
- [49] G. Vercouten, Towards a European Guideline for Audio Description. In P. Orero and A. Ramael (eds.), *Media for All: Subtitling for the Deaf, Audio Description and Sign Language*, Amsterdam, Rodopi, 2007, 139-150.
- [50] J. Snyder, Audio Description: the Visual made Verbal. *The International Journal of the Arts in Society*, vol. 1 No. 2, 99-104.
- [51] S. Braun S. Audio Description from a discourse perspective: a socially relevant framework for research and training, *Linguistica Antverpiensia*, No. 6, 2007. <https://lans-tts.uantwerpen.be/index.php/LANS-TTS/article/vw/197/128>. Last accessed 15 January 2018.
- [52] J. Diaz Cintas, P. Orero, A. Ramael. Media for All: a Global Challenge. In P. Orero and A. Ramael (eds.), *Media for All. Subtitling for the Deaf, Audio Description, and Sign Language*. Amsterdam, Rodopi, 2007, 11-20.
- [53] R. D. Smith. Museums and verbal description, *A Research Project of the Art Education Department*, Jyväskylä University, Finland, 2003.
- [54] K. De Coster, V. Mühleis. Intersensorial translation: visual art made up by words. In: J. Díaz Cintas, P. Orero, A. Ramael (eds.) *Media for all: subtitling for the deaf, audio description, and sign language*, Rodopi, Amsterdam, 189-200. 2007.
- [55] Vilatte J. C. (2007), *Audioguides et musées*. https://www.lmac-mp.fr/telecharger.php?id_doc=111. Last accessed 30 May 2017.
- [56] A. Holland. Audio Description in Theatre and the Visual Arts. In: J. Diaz Cintas, G. Anderman (eds.) *Audiovisual Translation. Language Transfer on Screen*, Palgrave Macmillan, London, 170-18, 2009.
- [57] J. Neves. Multi-sensory approaches to (audio) describing the visual arts, *MonTI. Monografías de Traducción e Interpretación*. Vol. 4, 277-293, 2012.

- [58] C. J. Hurtado, C. Seibel, S. S. Gallego, S. H. Diaz. Museum for all. Translation and Interpreting for Multimodal Spaces as a Tool for Universal Accessibility, *MonTI. Monografías de Traducción e Interpretación*, No 4, 349-383, 2012
- [59] C. J. Hurtado, S. S. Gallego. Museum accessibility through translation: a corpus study of pictorial audio description. In: J. Díaz Cintas, J. Neves (eds.) *Audiovisual Translation. Taking Stock*, Cambridge Scholars Publishing, Newcastle upon Tyne, 277-298, 2015.
- [60] A. F. Eardley, L. Fryer, R. Hutchinson, M. Cock, P. Ride, J. Neves. Enriched Audio Description: Working towards an inclusive museum experience, In S. Halder, L. C. Assaf, *Inclusion, Disability and Culture. An Ethnographic Perspective Traversing Abilities and Challenges*, New. Publisher/Verlag: Springer, Berlin, 195-207, 2017
- [61] .E. Perego, A corpus-based study of the language of museum audio descriptions, *Hermes. A Journal of Linguistics*. (2018) (forthcoming).
- [62] RNIB and VocalEyes. Talking Images: Museums, galleries and heritage sites- Improving access for partially sighted people, London, RNIB and VocalEyes, 28, 2003.
- [63] C. S. M. Martins. Museum audio guides as an accessibility enhancer. In Á. de Morales, Cristina; C. Limbach, L. M. Olalla, *Accesibilidad en la nueva era de las comunicaciones Profesionales y universidad: un diálogo imprescindible.: Tragacanto*, Granada. 101-115. 2012.
- [64] S. Gallego, A. J. Chica Núñez. Museos para todos: evaluación de una guía audiodescriptiva para personas con discapacidad visual en el museo de ciencias, *Revista Española de Discapacidad*, Vol. 2, No. 2, 145-167, 2014.
- [65] A. Szarkowska, A. Jankowska, K. Krejtz, J. Kowalski. Open Art: Designing Accessible Content in a Multimedia Guide App for Visitors with and without Sensory Impairments. In: A. Matamala, P. Orero (eds.) *Researching Audio Description. New Approaches*, Palgrave Macmillan, London, 301-320, 2016.
- [66] D. Howes. Introduction to the Sensory Museology, *The Society*, Vol. 9, No. 3, 259-267, 2014.
- [67] E. Ventola, C. Charles, M. Kaltenbacher (eds.), *Perspectives on Multimodality*, John Benjamins Publishing, Amsterdam/Philadelphia, 2004.
- [68] C. J. Hurtado, S. Gallego. Multimodality, translation and accessibility: a corpus-based study of audio description, *Perspectives: Studies in Translatology*, Vol. 21, No. 4, Routledge, London and New York, 577-594, 2013.
- [69] J. Neves. Descriptive guides: Access to museums, cultural venues and heritage sites. In: A. Ramael A, N. Reviere, G. Vercauteren (eds.) *Pictures painted in words. ADLAB Audio Description guidelines*, EUT, Trieste, 68-72, 2015.
- [70] J. Białostocki. Erwin Panofsky (1892-1968): Thinker, Historian, Human Being, *Simiolus: Netherlands quarterly for the history of art*, Vol. 4, No. 2, 68-89, 1970.
- [71] C. S. Wood. EH Gombrich's' Art and Illusion: A Study in the Psychology of Pictorial Representation, 1960. *The Burlington Magazine*, Vol 151, No. 1281, 836-839. 2009.
- [72] J. Gaiger. *Aesthetics and painting*, Continuum, London and New York, 2008.
- [73] W. J. T. Mitchell. *Iconology, Image, Text, Ideology*, University of Chicago Press, Chicago, 1986.
- [74] C. Jenks. *Visual Culture*, Routledge, London and New York, 1995.
- [75] I. Rogoff. Studying visual culture. In: N. Mirzoeff (ed.) *The Visual Culture Reader*, Routledge, London and New York, 24-36, 1998.
- [76] N. Mirzoeff. *An Introduction to Visual Culture*, Routledge, London and New York, 1999.
- [77] W. J. T. Mitchell. Showing seeing: a critique of visual culture, *Journal of Visual Culture*, Vol. 1, No 2, 165 -181, 2002.
- [78] Heffernan J. (1991) "Ekphrasis and Representation", in *New Literary History*, 23.2 pp. 297-316.
- [79] J. Heffernan. *Museum of Words. The Poetry of Ekphrasis from Homer to Ashbery*, Chicago University Press, Chicago, 1993.
- [80] M. Krieger. *Ekphrasis. The Illusion of Natural Sign*, The John Hopkins University Press Hopkins University Press, Baltimore and London, 1991.
- [81] J. W. T. Mitchell, W. *Picture Theory: Essays on Verbal and Visual Representation*, Chicago University Press, Chicago, 1994.
- [82] E. Salzhauer Axel, .V. Hooper, T. Kardoulias, S. Stephenson Keyes, and F. Rosenberg. ABS's Guidelines for verbal description..<http://www.artbeyondsight.org/handbook/acs-guidelines.shtml>. Accessed 15/3/2018. Last accessed 25 September 2018.
- [83] S. Braun S. Creating Coherence in Audio Description, *Meta*, Vol. 56, No. 3, 645-662, 2011.
- [84] C. Taylor Textual cohesion. In: A. Maszerowska, A. Matamala, P. Orero (eds.) *Audio description: New perspectives illustrated*, John Benjamins Publishing Company, Amsterdam/Philadelphia, 41-60. 2014.
- [85] C. J. Taylor. Reading Images (including moving ones), *Routledge Handbooks in Linguistics*, 575-590, 2017.
- [86] P. Alonso. *A Multi-dimensional Approach to Discourse Coherence: From Standardness to Creativity*, Peter Lang, Bern, 2014.
- [87] T. A. Van Dijk. *Text and Context. Explorations in the Semantics and Pragmatics of Discourse*, Longman, London, 1977.
- [88] T. A. Van Dijk. *Macrostructures: an interdisciplinary study of global structures in discourse, interaction, and cognition*, L. Erlbaum Associates, New York, 1980.
- [89] T. A. Van Dijk. Semantic Discourse Analysis. In: T. A. Van Dijk (ed.) *Handbook of Discourse Analysis*, Vol. 2, Academic Press, London, 103-136, 1985.
- [90] T. A. Van Dijk, and W. Kintch. *Strategies of Discourse Comprehension*, Academic Press, New York, 1983.