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# Media Accessibility Within and Beyond Audiovisual Translation

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#### **Abstract**

The chapter discusses the new position reached by media accessibility as a consequence of several shifts. After placing access as a necessary requirement for the enjoyment of human rights for all, the chapter summarises: (a) the shift from particularist accounts of accessibility to a universalist account; (b) the shift from maker-centred to user-centred approaches; and (c) the shift from reactive to proactive approaches. Greco and Jankowska then present a first classification of some modalities and services according to the universalist definition of media accessibility. Following this, the chapter highlights various pedagogical and theoretical implications. The chapter concludes by addressing the need for media accessibility to move beyond audiovisual translation and translation studies, and embrace its status as an area within the interdisciplinary field of accessibility studies.

#### 1. Introduction

Audiovisual media play a crucial role in the cultural life and leisure activities of modern society. In 1988, the British Film Institute carried out the One Day in the Life of Television project: 20,000 viewers were asked to record and report their experience of television on one day, 1 November 1988. The process was captured in a documentary broadcast exactly one year later on ITV (Kosminsky 1989), and the results were later discussed in a book (Day-Lewis 1989). Both clearly showed the degree to which television had permeated the daily lives of British people at that time. A few years later, following the introduction of satellite television in Britain, the British Film Institute decided to further the analysis by conducting a longitudinal study: 500 people filled out questionnaire-diaries over a period of five years. The book containing the analysis of the data showed how, more than ever before, television had increased its centrality in British society (Gauntlett and Hill 1999). Twenty years have passed since then, characterised by the advent of new technologies, which have produced new forms of creation, distribution and consumption of audiovisual content. Technologies that have also made audiovisual media central in contemporary societies, as exemplified by the proliferation of video-on-demand platforms and their disruption of traditional forms of production and enjoyment (Lotz 2014; McDonald and Smith-Rowsey 2016). At the same time, this technological boom has also

increased the risk of discrimination and the exclusion of people from enjoying media products and services. The framework within which this situation is addressed is identified by the concept of accessibility. Although accessibility has now come to play a leading role on the world's stage, it is not an entirely new concept to audiovisual translation (AVT). Just consider that, as far back as 2003, Gambier stated that "the key word in screen translation is now accessibility" (Gambier 2003). Since then, accessibility has become an ever more pivotal concept in AVT. Along the way, it has given rise to an area referred to as "media accessibility" (MA), which nowadays includes some of the liveliest and most socially relevant research topics in society. Initially, MA was considered to be a subdomain of AVT and was strictly confined within the borders of translation studies. Over time and through the formulation of different accounts, however, MA has been steadily moving beyond those borders, driving the process which has led to the emergence of a new interdisciplinary field, accessibility studies (Greco 2018).

## 2. Theoretical Foundations: Accessibility and Human Rights

In order to introduce the different accounts of MA, discuss their implications and sketch possible future paths, we shall briefly focus on accessibility within the human rights framework. Introducing the landscape of MA through a focus on human rights is relevant for at least three reasons. Firstly, because the discourse of human rights, though often restricted to persons with disabilities, has been frequently used to promote MA and has been central in its growth within and outside AVT. Secondly, because the proponents of various accounts of MA often justify them by framing them within specific interpretations of accessibility in relation to human rights. And thirdly, because highlighting the possible misunderstandings and risks lurking within specific interpretations of accessibility in the human rights framework will provide insights into some of the theoretical problems related to accessibility and translation, which will be discussed towards the end of this text.

At first glance, accessibility may seem to have become a kind of buzzword in the context of human rights. Is this merely a temporary trend or is it pointing to something more fundamental? In order to formulate a reply, a deeper look will help. An analysis of how accessibility is conceived within the human rights framework will allow us to identify two main positions, each with a radically different interpretation of accessibility. A situation that Greco (2016b) calls the Accessibility as a Human Right Divide (AHRD) problem. On the one side, we find those who interpret accessibility as being a human right per se. On the other side, there are those who interpret accessibility as an instrument for human rights.

Positions of the first type are based on variations of the claim that the approval of the Convention on the Rights of Persons with Disabilities in 2006 established accessibility as a human right, and frequently refer to the fact that Article 9 of the Convention focuses entirely on accessibility. Usually, supporters of this position first make this claim and then address it referring exclusively to some specific group, often persons with disabilities. An early case is the presentation by the then director of the Telecommunication Development Bureau at the 2010 Plenipotentiary Conference of the International Telecommunication Union (Al-Basheer Al-Morshid 2010). A more recent example can be found in the jointly published Work Programme 2017 of the European Committee for Standardization and the European Committee for Electrotechnical Standardization (CEN & CENELEC 2016). Both documents share two traits. They state that accessibility is a human right recognised by the aforementioned Convention, and they also exclusively limit it to some groups: the latter to persons with disabilities and the elderly, the former only to persons with disabilities. An even more extreme position is endorsed by the European Economic and Social Committee in an official Opinion adopted in 2015. In the document, the Committee "calls on the EU institutions to acknowledge that Article 9 of the United Nations Convention on the rights of persons with disabilities constitutes a human right in itself" (European Economic and Social Committee 2014: 1). Then it carries out its argument claiming we should consider "accessibility as a human right for persons with disabilities", as stated even by the very title of the document.

As critically analysed by Greco (2016b), positions of this first type lead to controversial conclusions. First, claiming that accessibility is a human right, either for all or for some specific groups, raises conflicts with other human rights. As acknowledged by Lakoff in his analysis of freedom as a metaphor, accessibility is crucial for freedom because one is "not free to go somewhere, get something, or do something if access is blocked, or if there is no path (or road or bridge) to it" (Lakoff 2006: 30). Interpreting accessibility as a human right would then imply that it is more essential than many, if not all other human rights, even those considered to be the very fundamental ones, such as freedom. That is, it would make accessibility a sort of uber-human right that trumps all the others. This leads to a contradiction, since it would require a complete reformulation of human rights theory, the very assumption upon which the argument is grounded. Even more controversial is the conclusion reached if one adopts the extreme version mentioned above, that is, if one considers accessibility to be a human right only for some specific group. Consider the case of persons with disabilities. Roughly put, human rights are rights one has because one is a member of humankind. The justification for one having human rights lies in their humanity. Claiming that there is a human right that is specific to only one group of people lies in sharp contrast with the definition of human rights. But beyond this, it also implies that the justification of that right is not rooted in the humanity of those people, but rather, in what sets them apart from other human beings, as otherwise every human being would share that right. Claiming that accessibility is a human right for persons with disabilities then means that they possess that human right not because they are human beings but because they have disabilities. This interpretation may be inspired by a willingness to highlight the vital importance of access for persons with disabilities. Nonetheless, the result is the use of human rights rhetoric to reinforce these same people's discrimination by setting them apart from the rest of humankind, thus producing or reinforcing a ghetto effect (Greco 2016a, b). The intentions may be good, but the effects are bad.

On the other side of the AHRD problem lies the idea that accessibility is instrumental for the human rights of all, but neither a human right per se nor one pertaining only to some groups. This is the reason why human rights—for example, the right to education—are often expressed in terms of access—for example, using the formula "the right to access to education". This second interpretation permeates a vast array of very different documents, even some exclusively focused on disability. A clear case in point is indeed the aforementioned Convention on the Rights of Persons with Disabilities. The Convention is the result of years of careful discussion and working groups which involved major actors all over the world. The final text never states that accessibility is a human right, nor that it is a human right specific for persons with disabilities. It calls accessibility a "principle". It then goes on to reformulate the human rights already presented in the Universal Declaration in the case of persons with disabilities. Indeed, some are reformulated precisely in terms of "access", underlining how accessibility is an essential element for the achievement of human rights. A second case in point is the World Report on Disability. Given the topic, one would expect at least a chapter of the report to be exclusively focused on accessibility. This is not the case however. Recognising that the Convention "applies human rights to disability, thus making general human rights specific" (World Health Organization and World Bank 2011: 9), the Report defines accessibility as "the degree to which an environment, service, or product allows access by as many people as possible, in particular people with disabilities" (World Health Organization and World Bank 2011: 301). Accordingly, accessibility is discussed throughout the entire document in relation to the many barriers faced by persons with disabilities, from education to health services, and it is always presented as instrumental for overcoming them. It is worth noting that it says "as many people as possible, in particular people with disabilities" and not "exclusively persons with disabilities". The use of "in particular" simply highlights how crucial accessibility is for groups at higher risk of social exclusion, but it does not restrict it to these groups. Going back to Lakoff's metaphorical account of freedom as freedom of motion, "freedom requires not just the absence of impediments to motion but also the

presence of access" (Lakoff 2006: 30). It is to say that, as showed by Greco (2016b), access is a necessary requirement for the enjoyment of human rights for all.

In a nutshell: on the first side of the AHRD problem, accessibility is interpreted as being a human right and usually restricted to some specific groups, often only persons with disabilities. In doing so, this position reinforces their discrimination by reiterating a ghetto effect. On the other side, accessibility is considered an instrument for achieving the human rights of all. As we shall see in the next section, these two positions are intertwined with the different accounts of MA that have been formulated over the last few decades.

### 3. Media Accessibility: Accounts and Definitions

The history of MA as a recognised scholarly area is relatively recent. Clear signs include the steadily increasing number of: researchers who frame their work within this area, specialised publications and research projects supported by public funding. However, the explicit connection between accessibility and AVT goes back much further. Just consider that the first edition of The Arts and 504: a 504 Handbook for Accessible Arts Programming, published by the National Endowment for the Arts in 1985, dedicates substantial content to what it refers to as "captions" (i.e. subtitles for the deaf and hard of hearing, henceforth SDH) and "verbal description" (i.e. audio description, henceforth AD). That is, the practical history of the explicit connection between accessibility and AVT dates back to before the latter started to take its first steps as a proper area of translation studies. Its academic history, however, is quite different.

Accessibility started making its way into the scholarly environment of AVT between the late 1990s and the early 2000s, thanks to the work of some researchers who had long envisioned the theoretical and social relevance of accessibility for AVT. In time, scholars adopted different accounts of accessibility, which can be classified into two families: on the one hand, one that comprises a series of particularist accounts, on the other, a universalist account (Greco 2018). Particularist accounts are similar to the restricted interpretations of accessibility we discussed in the context of human rights. Actually, proponents typically base their accounts of MA on the implicit or explicit notion of accessibility as a human right for some groups. Particularist accounts narrow accessibility down to some specific groups or types of barriers, and ultimately limit MA to (some or all) translation-based modalities. On the contrary, the universalist account embraces the broader conception of accessibility as an instrument for the human rights of all (Greco 2016b). That is, it does not confine MA to any specific group of people or barriers, nor within the sole borders of translation studies. The movement from particularist accounts to a universalist one should not be considered a linear evolution. All these accounts still coexist nowadays, even though more and more scholars are increasingly embracing the universalist account, recognising the discriminatory traits of the particularist ones as well as the limitations they impose on notions of accessibility and translation. The analysis carried out in the following paragraphs is a testimony of the lively fermentation brewing within MA, as well as the commitment scholars in the field have been putting into the consolidation of this area.

In the introduction to a seminal special issue on "screen translation" by the journal The Translator in 2003, Gambier starts off by presenting a broad list of modalities, namely interlingual subtitling, dubbing, consecutive interpreting, simultaneous interpreting, voice-over, free commentary, simultaneous (or sight) translation, multilingual production, translating scenario/script, intralingual subtitling, live (or real time) subtitling, surtitling and audio description. He then moves on to discuss how they serve not only traditional audiences, but also migrants and, more generally, a "wide diversity of [...] audiences with different socio-cultural and socio-linguistic backgrounds and expectations (children, elderly people, various sub-groups of the deaf and hard of hearing, and the blind and visually impaired)" (Gambier 2003: 178). A few lines after, he states that "the key word in screen translation is now accessibility".

Around the same time, some AVT scholars began to adopt the term "media accessibility". Instead of referring to Gambier's broader list of audiences and modalities, albeit still restricted to specific groups, they used it to indicate a subdomain of AVT. It is in this period that expressions like "media accesibility [sic]: subtitling for the deaf and the hard of hearing and audio Description for the blind and the visually impaired" began cropping up (Orero 2004: VIII). This initial version of the first particularist account of MA applies a twofold restriction on both modalities and audience. It limits MA exclusively to AD and SDH and only to persons with sensory disabilities. Other variations have been advanced over time: from "media accessibility, i.e. audio description, subtitling for the deaf and hard of hearing and audio subtitling" (Orero 2012: 15), to "clean audio, [...] subtitling, audio description; spoken subtitles; sign language interpretation" (Moledo 2018: 8). While proponents may differ as to which modalities should be included in MA, they all narrow MA down to sensory disabilities.

In these very years, some AVT scholars began to note that "to lip-sync, to subtitle or to voice-over a programme shares as much the idea of accessibility as SDH or AD. Only the intended audiences are different. Whether the hurdle is a language or a sensorial barrier, the aim of the translation process is exactly the same: to facilitate the access to an otherwise hermetic source of information and entertainment" (Díaz-Cintas 2005: 4). This awareness led to a broadening of the previous definition of MA. According to this second particularist account, MA concerns both sensory and linguistic barriers. As for the first one, versions of this second account can still be found in our days, for example, "media accessibility has become a key concept in [AVT], devoted to studying how linguistic and sensory barriers can be overcome to make audiovisual products accessible" (Baños 2017: 485). While the first particularist account frames MA as a subdomain of AVT, the second particularist account makes it overlap with AVT itself. Given that the core of AVT is to translate audiovisual products to make them accessible to those who would otherwise face linguistic barriers—so the argument goes—then MA includes not only the modalities specific for persons with sensory disabilities but all AVT modalities. That is, all the variations of this second account share two points: (a) they restrict MA to linguistic and sensory access, thus still framing MA in terms of specific groups of people; and (b) they extend MA and make it coincide with AVT. Gambier's aforementioned account of AVT is a variation of this second particularist definition of MA. As we have seen at the beginning of this section, while he reinterprets AVT modalities under the light of accessibility, he still frames their scope in relation to some restricted types of groups. Even scholars who have, over the years, heavily supported the first particularist account (Remael 2010, 2012, 2014, 2015; Remael et al. 2016) have been moving towards the second particularist account as of late. While maintaining that "the development of standards and methods to make media content accessible falls within the domain of AVT research" (Remael 2012: 97), they have also acknowledged how the challenges posed by modalities like AD and SDH "blur the borders between what is traditionally considered (audiovisual) translation and media accessibility" (Remael et al. 2016: 256).

The third, more recent definition of MA differs radically from the previous two. According to the universalist account, MA concerns access to media and non-media objects, services and environments through media solutions, for any person who cannot or would not be able to, either partially or completely, access them in their original form (Greco 2016b, 2018, 2019a, b). This new definition diverges from the previous ones on a number of substantial points.

Firstly, as mentioned above, the two particularist accounts are grounded upon the idea that accessibility is a human right, often referring to the Convention on the Rights of Persons with Disabilities. In fact, it is not unusual to find proponents of the two particularist accounts stating that "accessibility to all aspects of life (including both to communication and information) is a human right recognised by the United Nations Convention on the Rights of Persons with Disabilities" (Matamala and Ortiz-Boix 2016: 12; see also Díaz-Cintas et al. 2010; Remael 2012) or, even more controversially, that "media accessibility is a human right" (Luyckx et al. 2010: 1; see also Matamala

and Orero 2007). This means that they ultimately face the same quandaries of the first side of the AHRD problem. Claiming that accessibility is a human right means confusing the means with the end. Even more so if the claim is restricted to MA, as in the latter case. Again, this is a problem that does not concern the universalist account, which is steadily grounded within the instrumental view of accessibility and does not limit itself to any specific group. The universalist definition focuses on the functional processes involved in the interaction between users' specificities, the particular contexts in which they act or are placed, and the means to address said specificities in those contexts. Thus, MA tools are instruments through which the vast majority of human rights—from information and communication to cultural life to education—can be guaranteed for all.

Secondly, particularist accounts firmly anchor MA within the borders of translation studies (Díaz-Cintas et al. 2007: 13–14; see also Remael 2012). That is, they restrict MA to solutions that involve translation, which is a position that bears major theoretical, pedagogical and practical hazards. We will address the former two in Sect. 6. From a practical point of view, limiting MA exclusively to translation-based solutions excludes a vast series of practices that are indeed media access, even if one restricts accessibility to persons with disabilities. Consider the case of clean audio, which has long been acknowledged as one of the main media accessibility services for broadcasting by scholars, industry, service providers, international bodies and organisations of persons with disabilities (e.g. Cappello 2014; European Telecommunications Standards Institute 2009; Focus Group on Audiovisual Media Accessibility 2013; NEM-ACCESS 2016; SENSE 2006; Shirley and Kendrick 2006; Slater et al. 2010; Varney 2013). Together with subtitling, AD, audio introductions, audio subtitles and sign language interpreting, clean audio has even been the subject of HBB4ALL, a multiyear project funded by the European Commission and led by translation studies scholars (Orero et al. 2015). Roughly put, clean audio is an audio mix that makes the different parts of an original soundtrack of an audiovisual product more intelligible, for example, by reducing background noise and enhancing the dialogue (Shirley and Oldfield 2015). There is no doubt that this is an instrument to make broadcasting media more accessible, yet it involves no forms of translation. Similarly, the design of an accessible mobile app may involve some forms of translation, but neither exclusively nor mainly. As we shall see in Sect. 6, limiting MA to forms of translation is not just a theoretical technicality. It bears a whole series of critical consequences, for example, at the pedagogical level.

### 4. Media Accessibility: Epistemological and Methodological Shifts

The movement from particularist accounts to a universalist account is but one of the shifts experienced by MA during its development as a research area. As in the case of the first shift, the others have also been having heavy repercussions on AVT. Although one with substantial implications on many levels, we could classify the shift towards a universalist account as ontological. Other shifts have been occurring at the epistemological and methodological levels as well. Here the distinction between ontological, epistemological and methodological levels should be considered as a mere matter of convenience. The creation of media artefacts, including audiovisual products, has long been based on the idea that "maker's knowledge was the only one that mattered. [That is,] the main assumption was that makers know best and that users had neither place, nor their knowledge any value for the design process" (Greco 2018: 212). In some other cases, artefacts were created on the maker's paternalistic speculation about users' needs and capabilities, ultimately providing users with "what [they] think they want or need or ought to want" (Thompson 2014: 79). This approach has generated an intricate array of gaps, such as the ones that Greco (2013b, 2018) calls the makeruser gap and the maker-expert-user gap, which place makers, experts and users at opposing ends of the design process. The increasing focus on accessibility and a long case history of failures have ultimately proved that users' knowledge cannot be ignored. The consequence has been a shift from maker-centred to user-centred approaches. While this is now a cornerstone of MA, where reception studies chiefly dominate the area, this shift has been having considerable repercussions on AVT as well. Let us return, yet again, to Gambier. In the 2003 paper mentioned before, he noted that "very

few studies have dealt with the issue of reception in screen translation, and even fewer have looked at it empirically, even though we continually make reference to readers, viewers, consumers, users, etc." (Gambier 2003: 184). The central role accessibility was gaining in AVT led him, a few years later, to forecast that it would have been precisely through accessibility that reception studies would come to play a key role in the field of AVT, because accessibility "can help us to better understand the effects of screen translation [...]. What we need now is to discern the needs of different users, to know the viewers' needs and reception capacity, whatever the modality of AVT being offered" (Gambier 2006: 5). Nowadays this is reality. Reception studies are now leading the way in AVT research and practices, casting new light on the most diverse corners of the field, stimulating "audience-based, empirical research even with reference to more traditional AV modalities" (Di Giovanni 2018: 226).

A third shift has been taking place at the methodological level and concerns the question "What is the place of accessibility in the process of creation of media artefacts?" If we classify the design process of an artefact into (a series of) ex ante, in itinere and ex post stages (Greco 2013b, 2018; Greco and Pedone 2015; Greco et al. 2012), it becomes a question of at which stage accessibility concerns should be placed. For quite some time, access issues have been addressed through reactive approaches, that is, at ex post stages. Once more, years of research and a long series of failures have shown the many shortcomings of reactive approaches. Dealing with accessibility after the artefact has been created drastically limits the range of actions one can take to make that artefact accessible. The result is often very partial access. In some other cases, it is not possible at all, for making it accessible would require re-creating that artefact from scratch. This has led to a shift from reactive to proactive approaches, which move accessibility concerns up to the ex ante stages of the design process and keep it constantly present during the in itinere stages, that is, for the whole duration of the process. AVT and MA are a case in point, where modalities like subtitling have been relegated to the ex post stages for years. Often, they are not even dealt with as part of a post-production phase, but relegated to distributors. Plenty of studies have shown how this has frequently led to the partial or complete alteration of the original artistic intention or to a radical change of its aesthetics, ultimately having a negative impact on the experience of the viewer (Romero-Fresco 2019).

### 5. A First Classification of Media Accessibility Modalities and Services

As showed by Greco (2019b), current classifications of MA modalities and services are influenced by particularist accounts. Although framed within a social model of disability, their categorization of MA modalities and services according to specific groups of users (and their impairments) may lead to a ghetto effect. The universalist account, conversely, allows for an access-based classification of MA modalities and services, which avoids the risk of discrimination. Rooted in what Greco (2013a, 2019a, b) calls a social model of accessibility, this classification "focuses on the processes involved in the interaction between users' specific needs, abilities, and capabilities, the particular contexts within which they act or are placed, and the means to address those specific needs, value those specific abilities, and empower those specific capabilities in such contexts" (Greco 2019b, 28). The various modalities and services included in the universalist definition of MA could then be classified according to different sub-criteria, being access the primary criterion. Discussing in detail the implications of the universalist classification, presenting an exhaustive list of MA modalities and services, and providing a detailed discussion in light of all the sub-criteria would require more space than that at our disposal. Given the venue that hosts this chapter—a handbook of AVT—its primary readership and introductory scope, we will briefly present only some modalities and services relevant for audiovisual media, organised according to only one of the many criteria, that is, translation. Following this criterion, MA modalities and services can be divided into two groups: translationbased and nontranslation-based. While the former group refers to the creation of new content through interlingual, intralingual or intersemiotic translation or interpreting, the latter refers to the provision of access through means that do not involve translation and interpreting, for example, via digital

processing of existing content (Jankowska 2019). Some services may blend translation and nontranslation factors, as in the case of enhanced subtitles presented in the next sub-section. However, it is possible to analyse a mixed service according to the translation-based vs nontranslation-based distinction by looking at its core features. Once more, in coherence with the scope of this handbook, we will focus more on the translation-based group and only mention a few cases from the nontranslation-based group.

Some of the MA services presented in this section are the subject of various chapters in this book. We refer the reader to the relevant chapter(s) for more detailed information as well as to Jankowska (2019).

#### 5.1. Translation-based

Taking canonical AVT and translation studies texts as a starting point, we may attempt to define translation-based modalities in terms of three major approaches: (1) the classical division of translation into interlingual, intralingual and intersemiotic (Jakobson 1959) (see Table 4.1); (2) the distinction between translation and interpreting (Pöchhacker 2004) (see Table 4.1) and (3) the well-rooted classification of four types of signs that compose an audiovisual text, that is, audio-verbal, audio-nonverbal, visual-verbal and visual-nonverbal (Chaume 2004; Delabastita 1989; Zabalbeascoa 2014) (see Table 4.2).

Table 4.1
Translation-based MA modalities according to translation type

	Translation	Interpreting	Interlingual	Intralingual	Intersemiotic
Audio description	<b>✓</b>		<b>√</b>		<b>✓</b>
Audio narration	<b>√</b>		<b>✓</b>		<b>✓</b>
Dubbing	<b>✓</b>		<b>√</b>		
Enriched subtitles	<b>✓</b>		<b>√</b>	<b>√</b>	<b>✓</b>
Extended audio description	<b>✓</b>				<b>✓</b>
Live audio description		✓			<b>✓</b>
Live subtitles		<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>
Sign language interpreting		✓	<b>✓</b>		<b>✓</b>
Subtitling	<b>✓</b>		<b>√</b>		<b>✓</b>
Transcripts	<b>√</b>		<b>√</b>	<b>√</b>	<b>√</b>
Voice-over			✓		<b>/</b>

Table 4.1
Translation-based MA modalities according to translation type

Translation Interpreting Interlingual Intralingual Intersemiotic
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Table 4.2
Translation-based MA modalities according to type of translated signs

	Source signs				Target signs			
	AV	ANV	VV	ANV	AV	ANV	VV	VNV
Audio description		<b>√</b>	<b>√</b>	<b>√</b>	<b>/</b>			
Audio narration		<b>√</b>	<b>√</b>	<b>√</b>	<b>/</b>			
Dubbing	<b>√</b>	<b>√</b>			<b>/</b>	<b>√</b>		
Enriched subtitles	<b>√</b>	<b>√</b>					<b>✓</b>	<b>√</b>
Extended audio description		✓	<b>✓</b>	<b>/</b>	<b>/</b>			
Live audio description		<b>✓</b>	<b>√</b>	<b>✓</b>	<b>✓</b>			
Live subtitles	<b>√</b>	<b>√</b>					<b>√</b>	<b>√</b>
Sign language interpreting	<b>✓</b>	<b>/</b>	<b>√</b>	<b>/</b>			<b>√</b>	
Subtitling	<b>√</b>	<b>√</b>					<b>√</b>	<b>√</b>
Transcripts	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>			<b>✓</b>	
Voice-over	<b>√</b>		<b>√</b>		<b>√</b>			

- 1. Audio description is a verbal description of (audio)visual media content. It can be prerecorded or delivered live—in both cases either by a human voice-talent or by text-to-speech
  software, which in that case is called TTS AD (Szarkowska 2011). AD can be classified as an
  intersemiotic translation practice in which audio-nonverbal, visual-verbal and visualnonverbal signs are translated into audio-verbal signs. If AD is created through script
  translation (Jankowska 2015), it can also be classified as interlingual translation and pivot
  translation, since in this case the (audio)visual material is the source text.
- 2. Audio narration is a verbal description of (audio)visual media content that provides access through an integrated and coherent narrative that, unlike AD, does not always follow the on-

- screen action (Kruger 2010). Audio narration can be classified as an intersemiotic translation in which audio-nonverbal, visual-verbal and visual-nonverbal signs are translated into audio-verbal signs.
- 3. Dubbing refers to the replacement of the original track of source language dialogues with a track with dialogues translated into the target language (Chaume 2012), which tries to reproduce the original timing, phrasing and lip movements (Luyken et al. 1991). Dubbing can be defined as an interlingual translation of audio-verbal and audio-nonverbal signs into audio-verbal and audio-nonverbal signs.
- 4. Enriched subtitles are subtitles that contain verbal and non-verbal information of an audiovisual product and refer to what is more commonly known as SDH or closed captions (Neves 2019). They are a restricted case of the so-called enhanced subtitles (Jankowska 2019; Brewer et al. 2015), that is to say, subtitles supplemented with additional information such as definitions of acronyms, foreign terms, difficult language, idioms, jargon, cultural references as well as links to email addresses or phone numbers. Enriched subtitles can be edited or verbatim; they may be open (burnt in permanently) or closed (superimposed); they can be prerecorded or delivered live; and they may contain verbal as well as non-verbal information (e.g., emotions, sounds, accents, speaker identification). Enriched features can be introduced with the normal display as an overlay, a call out or a hyperlink. They can be classified as intersemiotic, interlingual or intralingual translation in which audio-verbal and audio-nonverbal signs are translated into visual-verbal and visual-nonverbal signs.
- 5. Extended audio description is a verbal description of (audio)visual media content. As opposed to Standard AD, extended AD uses "freeze-frame" to pause the audiovisual media and introduce longer and more detailed descriptions (Jankowska 2019; Brewer et al. 2015). Extended AD is usually pre-recorded either by a human voice-talent or by text-to-speech software. Similar to AD, extended AD can be classified as an intersemiotic translation in which audio-nonverbal, visual-verbal and visual-nonverbal signs are translated into audio-verbal signs.
- 6. Live audio description is a verbal description of (audio)visual media content. It is both created and delivered live, and this is why it can be classified as intersemiotic interpreting from audiononverbal, visual-verbal and visual-nonverbal signs into audio-verbal signs.
- 7. Live subtitles, also known as real-time subtitles, are a way of providing immediate access to the media content by real-time speech to text conversion. They can be either inter- or intralingual. Live subtitles can be created, amongst other methods, through velotype, stenography, respeaking or automatic speech recognition (Romero-Fresco 2012). They can be classified as interlingual or intralingual interpreting in which audio-verbal and audio-nonverbal signs are rendered as visual-verbal and visual-nonverbal signs.
- 8. Sign language interpreting is used to transfer spoken, written and audio content into sign language (Leeson 2009). Sign language interpreting can be either pre-recorded or performed live. It can be classified as interlingual interpreting from audio-verbal, audio-nonverbal and visual-verbal signs into visual-verbal signs.
- 9. Subtitling consists of written text that recounts the original dialogue in the target language as well as other discursive elements contained in the image and the soundtrack. Subtitles are usually presented as two lines of text placed on the lower part of the screen; however, in some languages, they may be presented vertically (Díaz-Cintas and Remael 2007). If needed, subtitles might be raised or moved to the left or right. They can also be designed in a creative way and placed in other parts of the screen, in order to be more integrated with the action and story. In this case, they are sometimes framed as an instance of enhanced subtitles (Zdenek 2015). When used in theatre, opera or during film festivals, they may be displayed under or in/above the stage. Subtitles are pre-recorded but they may be delivered live. They may be open (burnt in permanently) or closed (superimposed). Subtitling may be classified as an

- interlingual translation in which audio-verbal and visual-verbal signs are rendered as visual-verbal signs.
- 10. Transcripts are textual versions of the (audio)visual media content that, aside from spoken word, may include on-screen text as well as key visual and key audio elements. They can be classified as an interlingual or intralingual translation from audio-verbal, audio-nonverbal, visual-verbal and visual-nonverbal signs into visual-verbal signs.
- 11. Voice-over involves the translation of the original dialogues into a target language, where the new audio track overlays the original one, which is played at a reduced volume level. It can be classified as an interlingual translation of audio-verbal and visual-verbal signs into audio-verbal signs.

#### 5.2. Nontranslation-based

As mentioned before, the universalist account extends MA beyond translation and includes nontranslation-based modalities and services. Below are a few cases limited to audiovisual media.

- 1. Audio introductions are usually short pieces of prose that provide information about the (audio)visual content. They often include details about characters, costumes, cast, filmic language or even the plot or the creative team (Fryer 2016; Fryer and Romero-Fresco 2014).
- 2. Audio subtitles, also known as spoken subtitles, consist of vocal rendering of interlingual subtitles. They are usually combined with audio description (Remael 2014). They can be prerecorded or delivered live by either a human voice talent or text-to-speech software.
- 3. Clean audio is a selectable audio track enhanced through signal processing to improve intelligibility of dialogue and vital non-verbal information with regard to ambient noise (Brewer et al. 2015; Shirley and Kendrick 2006).
- 4. Speech rate conversion allows broadcast speech rate to be decreased (or increased) while maintaining the original sound quality and immediacy since the processed speech still fits within the broadcasting time. While slow reproduction improves listening experience and understanding, fast reproduction is in high demand since many listeners seem able to efficiently receive and process information delivered faster than at the usual broadcasting speed (Takagi 2010).
- 5. Screen reading is an umbrella term used to describe a vast array of software solutions that allow visual information to be conveyed through non-visual means, such as text-to-speech and refreshable braille display (American Foundation for the Blind n.d.).
- 6. Tactile reproductions are three-dimensional representations of (audio)visual media content, for example, three-dimensional printed figures of the main characters or of some story-relevant objects.

## 6. Theoretical and Pedagogical Implications

Discussing the position of MA in relation to AVT, and to translation studies in general, is not a merely trivial exercise. It has considerable implications at many levels. In this section we will briefly discuss some of the impacts at the theoretical and pedagogical levels.<sup>2</sup> Let us start off with some of the pedagogical issues. Consider the Master of Arts in Audiovisual Translation offered by the Autonomous University of Barcelona (MUTAV). On the website of the course, the section on career opportunities states that graduates might find "work as a freelance translator or staff member for specialized agencies in the fields of audiovisual translation, such as dubbing, subtitling, voice over, multimedia translation and videogame translation, as well as media accessibility, that is, audio description and subtitling for the deaf".<sup>3</sup> This is then instantiated in the programme course with a module titled "Audio Description and Subtitling for the Deaf and Hard of Hearing". Even more

explicit is the case of the Master of Arts in Audiovisual Translation at the University of Roehampton, which includes a module called "Media Access: Audiodescription, Subtitling for the Deaf and Respeaking". <sup>4</sup> A similar trait can be found throughout all the major courses on AVT currently being offered, which shows that they have been designed with the most restrictive version of the first particularist account of MA in mind. They limit accessibility as pertaining to persons with disabilities and restrict MA to a few modalities, specifically framed as only related to sensory disabilities. As recently shown by a study of the 2018-2019 students of the Barcelona course, this may lead to controversial outcomes (Greco 2019b). Within the module "Theory of AVT" of that academic year, MA was explicitly introduced from a universalist perspective. The aforementioned study was conducted some months later, at a time in which students had completed most of teaching programme and thus had already been extensively exposed to the main concepts, theories and practices of the MUTAV curriculum. Despite having been presented MA from a universalist account, all students but one were shown to have embraced one of the particularist accounts. Actually, the vast majority of them displayed to have set their mind on the most restrictive version of the first particularist account. For example, when asked to define accessibility in relation to AVT and MA, many replied along these lines: "accessibility is whatever makes it easier for people with visual or hearing difficulties to use these products". Some students displayed use of controversial, discriminatory language. Following the analysis of the different accounts of MA presented in Sect. 3, we can infer that, after having completed nearly all of the programme, the vast majority of students displayed a biased mindset. A mindset that could potentially overlook, accept or even produce discriminatory practices, because these courses train the researchers, practitioners and policy-makers of the future. This evidence indicates the need for a complete curriculum overhaul in education and training courses. Part of this reform requires the inclusion of critical learning spaces within AVT and MA courses (Greco 2019b). Such spaces should: (a) become the backbone upon which the other modules and topics are placed and (b) permeate the other modules. Critical learning spaces are where students can acquire, practice and sharpen the critical attitude required by the theoretical and social implications of accessibility. They also serve as a red line connecting the critical attitude through all modules, and as such, are necessary to avoid the formulation of a biased mindset.

Briefly moving on to some theoretical implications, let us start by saying that the universalist account of MA does not imply that AVT is now a subfield of MA. Claiming that accessibility is a form of translation or vice versa (Díaz-Cintas et al. 2007; Remael 2012) may work as a catchy metaphor, but it becomes rather controversial when taken literally. While accessibility and translation are deeply connected, we must avoid falling into a situation that Greco (2019a) calls the hypernym game, which can lead straight into a hypernym trap. We should avoid the temptation of considering translation as subordinate to accessibility or vice versa. That is, we should avoid strong ontological commitments to translation and accessibility, and privilege minimalist/intuitionistic accounts. If we consider translation a form of accessibility under a strong ontological commitment, then accessibility runs the risk of becoming an uber-concept (like in the case of human rights discussed in Sect. 2). A similar problem, though now the other way around, occurs if we consider accessibility a form of translation. The hypernym game could be reiterated for many other cases. For example, one could say that design is a form of translation or that engineering is a form of translation. Taken literally, the fields of design and engineering would then become subfields of translation studies. In turn, translation and translation Studies would become too vague, so as to become useless. Since Tymoczko's call for the need to enlarge translation theory beyond traditional boundaries (Tymoczko 2014), many scholars have discussed or even proposed more complex, refined and wider interpretations of translation (e.g. Blumczynski 2016; Marais 2014, 2018). However, none of them ascribe to translation, nor to translation studies, such a powerful status.

Accessibility and translation pertain to different fields: the former to accessibility studies, the latter to translation studies. It is not a matter of which one is the subfield of the other, but how they can fruitfully interact and help humanity progress.

### 7. Future Prospects: Towards Accessibility Studies

Given the picture presented so far, what lies ahead of MA? Recently, this area has witnessed a number of proposals about concepts like "integrated access" (Fryer 2018) or "participatory accessibility" (Di Giovanni 2018). Having explained in the previous pages the main traits of MA, speaking of "integrated access" or "participatory accessibility" may seem redundant. Actually, from a general point of view, it is as such, for accessibility always entails the participation of both users and experts as well as its integration from the conception phase. "Partial accessibility" is the term that should be given when participation and integration are either ignored or limited. Still, referring to "integrated access" or "participatory accessibility" does have some value. First, by having those terms in their names, they constantly remind us of the importance of integration and participation for pursuing accessibility. Most importantly, they are signs of a growing movement that lies at the core of the current status of MA and speak about its future.

The shifts discussed in the previous pages are not exclusive to MA. They can be found in a variety of very different fields, where accessibility has slowly but steadily become one of their most fruitful concepts. In doing so, accessibility has created new areas within those fields, precisely like MA within AVT and translation studies. Over time these areas have been detaching from their original fields and moving towards one another, intertwining and cross-contaminating, producing a wealth of new methods and models. One of the areas where this process is clearly evident is that of MA. This convergence process has slowly but steadily led to the rise of a new field, namely accessibility studies, defined as "the research field concerned with the critical investigation of access problems and accessibility processes and phenomena, as well as the design, implementation and evaluation of accessibility-based and accessibility-oriented methodologies" (Greco 2018: 219). The unprecedented changes brought about by information and communication technologies are radically changing not only the world, but also the ways in which we access it. Many of these changes fall within the scope of MA. In order for its potential to blossom and successfully address the many challenges faced by our society, MA needs to move beyond translation studies. It should fully embrace its status as an area of accessibility studies and proactively contribute to the consolidation of this new field. What lies ahead of MA may be a demanding task, but it is indeed a necessary one.

## 8. Suggested Reading

Fryer, L. (2018). Staging the Audio Describer: An Exploration of Integrated Audio Description. Disability Studies Quarterly, 38(3).

Gambier, Y. (2003). Introduction. Screen Transadaptation: Perception and Reception. The Translator, 9(2), 171–189.

Gambier, Y. (2006). Multimodality and Audiovisual Translation. In M. Carroll, H. Gerzymisch-Arbogas, & S. Nauert (Eds.), Audiovisual Translation Scenarios: Proceedings of the Marie Curie Euroconferences MuTra: Audiovisual Translation Scenarios, Copenhagen 1–5 May 2006 (pp. 91–98). Saarbrücken: MuTra.

Greco, G. M. (2016). On Accessibility as a Human Right, with an Application to Media Accessibility. In A. Matamala & P. Orero (Eds.), Researching Audio Description. New Approaches (pp. 11–33). London: Palgrave Macmillan.

Greco, G. M. (2018). The Nature of Accessibility Studies. Journal of Audiovisual Translation, 1(1), 205–232.

Greco, G. M. (2019). Towards a Pedagogy of Accessibility. The Need for Critical Learning Spaces in Media Accessibility Education and Training. Linguistica Antverpiensia, 18, 23–46.

Jankowska, A. (2019). Audiovisual Media Accessibility. In E. Angeone, M. Ehrensberger-Dow, & G. Massey (Eds.), The Bloomsbury Companion to Language Industry Studies (pp. 231–260). London: Bloomsbury Academic Publishing.

### Acknowledgements

Gian Maria Greco is the first author of this text. We are grateful to Łukasz Bogucki and Mikołaj Deckert for their support during the editorial process and to Teressa Canosa for skilfully copyediting the final draft. This work has received funding from the European Union's Horizon 2020 research and innovation programme under the Marie Sklodowska-Curie grant agreement No. 752659 (project UMAQ) and the Polish Ministry of Science and Higher Education under the Mobility Plus funding scheme, grant agreement No. 1311/MOB/IV/2015/0 (project ADDit!).

### References

Al-Basheer Al-Morshid, S. (2010, October). BDT Activities on Promoting e-Accessibility for Persons with Disabilities. Paper presented at the Plenipotentiary Conference of the International Telecommunication Union. Plenipotentiary Side Event: Accessible ICTs for Persons with Disabilities. Session SE3, Guadalajara, Mexico.

American Foundation for the Blind. (n.d.). Screen Reading Technology and Refreshable Braille Displays. Retrieved from https://www.afb.org/blindness-and-low-vision/using-technology/assistive-technology-videos/screen-reading-technology

Armstrong, M. (2016). From Clean Audio to Object Based Broadcasting. BBC White Paper WHP272.

Baños, R. (2017). Audiovisual Translation. In K. Bedijs & C. Maaß (Eds.), Manual of Romance Languages in the Media (pp. 471–488). Berlin: De Gruyter.

Blumczynski, P. (2016). Ubiquitous Translation. New York: Routledge.

Brewer, J., Carlson, E., Foliot, J., Freed, G., Hayes, S., Pfeirrer, S. & Sajka, J. (2015). Media Accessibility User Requirements. W3C Working Group Note. Protocols & Formats Working Group of the Web Accessibility Initiative. Retrieved from https://www.w3.org/TR/media-accessibility-reqs.

Cappello, M. (Ed.). (2014). Enabling Access to the Media for All. Strasbourg: European Audiovisual Observatory.

CEN & CENELEC. (2016). Work Programme 2017. European Standardization and Related Activities. Brussels: European Committee for Standardization and European Committee for Electrotechnical Standardization.

Chaume, F. (2004). Film Studies and Translation Studies: Two Disciplines at Stake in Audiovisual Translation. Meta: Journal des traducteurs, 49(1), 12.

Chaume, F. (2012). Audiovisual Translation: Dubbing. Manchester: St Jerome.

Day-Lewis, S. (1989). One Day in the Life of Television. London: Grafton.

Delabastita, D. (1989). Translation and Mass-Communication: Film and T.V. Translation as Evidence of Cultural Dynamics. Babel, 35(4), 193–218.

Di Giovanni, E. (2018). Audio Description for Live Performances and Audience Participation. The Journal of Specialised Translation, 29, 189–211.

Díaz-Cintas, J. (2005). Audiovisual Translation Today. A Question of Accessibility for All. Translating Today, 4, 3–5.

Díaz-Cintas, J., Matamala, A., & Neves, J. (2010). Media for All: New Developments. In J. Díaz-Cintas, A. Matamala, & J. Neves (Eds.), New Insights Into Audiovisual Translation and Media Accessibility (pp. 11–22). Amsterdam: Rodopi.

Díaz-Cintas, J., Orero, P., & Remael, A. (2007). Media for All: A Global Challenge. In J. Díaz-Cintas, P. Orero, & A. Remael (Eds.), Media for All: Subtitling for the Deaf, Audio Description and Sign Language (pp. 11–20). Amsterdam: Rodopi.

Díaz-Cintas, J., & Remael, A. (2007). Audiovisual Translation: Subtitling. Manchester: St. Jerome Publishing.

European Economic and Social Committee. (2014). Accessibility as a Human Right for Persons with Disabilities. Opinion No. 2014/C 177/03.

European Telecommunications Standards Institute. (2009). Digital Video Broadcasting (DVB); Specification for the Use of Video and Audio Coding in Broadcasting Applications Based on the MPEG-2 Transport Stream. RTS/JTC-DVB-258, Sophia Antipolis, European Telecommunications Standards Institute, France.

Focus Group on Audiovisual Media Accessibility. (2013). Final Report of Activities: Working Group C "Visual Signing and Sign Language" and D "Emerging Access Services" on Common Topics. Geneva: International Telecommunication Union.

Fryer, L. (2016). An Introduction to Audio Description. A Practical Guide. London; New York: Routledge.

Fryer, L. (2018). Staging the Audio Describer: An Exploration of Integrated Audio Description. Disability Studies Quarterly, 38(3).

Fryer, L., & Romero-Fresco, P. (2014). Audio Introductions. In A. Maszerowska, A. Matamala, & P. Orero (Eds.), Audio Description: New Perspectives Illustrated (pp. 11–28). Amsterdam; Philadelphia: John Benjamins Publishing Company.

Gambier, Y. (2003). Introduction. Screen Transadaptation: Perception and Reception. The Translator, 9(2), 171–189.

Gambier, Y. (2006). Multimodality and Audiovisual Translation. In M. Carroll, H. Gerzymisch-Arbogas, & S. Nauert (Eds.), Audiovisual Translation Scenarios: Proceedings of the Marie Curie Euroconferences MuTra: Audiovisual Translation Scenarios, Copenhagen 1–5 May 2006 (pp. 91–98). Saarbrücken: MuTra.

Gauntlett, D., & Hill, A. (1999). TV Living: Television, Culture and Everyday Life. London: Routledge.

Greco, G. M. (2013a, June). The normative dimension of cultural accessibility. Paper presented at the First Italian Workshop on Cultural Accessibility, Lecce, Italy

Greco, G. M. (2013b, September). Come e perché organizzare un evento culturale accessibile: Dalla teoria alla pratica. Paper presented at the conference ArtLab13, Lecce, Italy.

Greco, G. M. (2016a, February). Accessibility, Human Rights, and the Ghetto Effect. Paper presented at the conference Wounded Places. On the Integrity of the Body, Beirut, Lebanon.

Greco, G. M. (2016b). On Accessibility as a Human Right, with an Application to Media Accessibility. In A. Matamala & P. Orero (Eds.), Researching Audio Description. New Approaches (pp. 11–33). London: Palgrave Macmillan.

Greco, G. M. (2018). The Nature of Accessibility Studies. Journal of Audiovisual Translation, 1(1), 205–232.

Greco, G. M. (2019a). Accessibility Studies: Abuses, Misuses, and the Method of Poietic Design. In C. Stephanidis (Ed.), HCII 2019 (Lecture Notes in Computer Science, 11786) (pp. 15–27). Cham: Springer.

Greco, G. M. (2019b). Towards a Pedagogy of Accessibility. The Need for Critical Learning Spaces in Media Accessibility Education and Training. Linguistica Antverpiensia, 18, 23–46.

Greco, G. M., & Pedone, L. (2015). Accessibilità e sicurezza dei luoghi di spettacolo. Note su criteri impositivi, criteri prescrittivi e buone prassi. Lecce: AGM.

Greco, G. M., Pedone, L., Monsellato, E., Rizzo, B., & Spinelli, E. (2012). Guida per eventi accessibili ed ecosostenibili. Lecce: Social Sound & Puglia Sounds-Regione Puglia.

Jakobson, R. (1959). On Linguistic Aspects of Translation. In R. A. Brower (Ed.), On Translation (pp. 232–239). Cambridge, MA: Harvard University Press.

Jankowska, A. (2015). Translating Audio Description Scripts Translation as a New Strategy of Creating Audio Description. Frankfurt am Main, Berlin; Bern; Bruxelles; New York; Oxford; and Wien: Peter Lang.

Jankowska, A. (2019). Audiovisual Media Accessibility. In E. Angeone, M. Ehrensberger-Dow, & G. Massey (Eds.), The Bloomsbury Companion to Language Industry Studies (pp. 231–260). London: Bloomsbury Academic Publishing.

Kosminsky, P. (Producer). (1989). One Day in the Life of Television [Documentary film]. UK: Yorkshie Television.

Kruger, J.-L. (2010). Audio Narration: Re-narrativising Film. Perspectives, 18(3), 231–249.

Lakoff, G. (2006). Whose Freedom? The Battle Over America's Most Important Idea. New York: Farrar, Straus and Giroux.

Leeson, L. (2009). Signed Language Interpreting. In M. Baker & G. Saldanha (Eds.), Routledge encyclopedia of translation studies (2nd ed., pp. 274–279). London: Routledge.

Lotz, A. D. (2014). The Television will be Revolutionized (2nd ed.). New York: New York University Press.

Luyckx, B., Delbeke, T., Van Waes, L., Leijten, M., & Remael, A. (2010). Live Subtitling with Speech Recognition: Causes and Consequences of Text Reduction. Artesis VT working papers in translation studies, Artesis University College, Antwerp.

Luyken, G.-M., Herbst, T., Langham-Brown, J., Reid, H., & Spinhof, H. (1991). Overcoming Language Barriers in Television. Manchester: The European Institute for the Media.

Marais, K. (2014). Translation Theory and Development Studies. A Complexity Theory Approach. London: Routledge.

Marais, K. (2018). A (Bio)semiotic Theory of Translation. The Emergence of Social-Cultural Reality. London: Routledge.

Matamala, A., & Orero, P. (2007). Accessible Opera in Catalonia. In J. Díaz-Cintas, P. Orero, & A. Remael (Eds.), Media for All: Subtitling for the Deaf, Audio Description and Sign Language (pp. 201–214). Amsterdam: Rodopi.

Matamala, A., & Ortiz-Boix, C. (2016). Accessibility and Multilingualism: An Exploratory Study on the Machine Translation of Audio Descriptions. Trans, 20, 11–24.

McDonald, K., & Smith-Rowsey, D. (2016). The Netflix Effect. Technology and Entertainment in the 21st Century. New York: Bloomsbury Academic Publishing.

Moledo, A. (2018, February). Accessible Communication Today!. Paper presented at the seminar ACT: Accessible Communication Today, Brussels.

NEM-ACCESS. (2016). Opening Doors to Universal Access to the Media. Retrieved from https://nem-initiative.org/wp-content/uploads/2016/03/NEM-ACCESS-Policy-suggestions.pdf

Neves, J. (2019). Subtitling for the Deaf and Hard of Hearing Audiences: Moving Forward. In L. Pérez-González (Ed.), The Routledge Handbook of Audiovisual Translation (pp. 82–95). London: Routledge.

Orero, P. (2004). Audiovisual Translation: A New Dynamic Umbrella. In P. Orero (Ed.), Topics in Audiovisual Translation (pp. VII–XIII). Amsterdam: John Benjamins Publishing Company.

Orero, P. (2012). Film Reading for Writing Audio Descriptions: A Word is Worth a Thousand Images? In E. Perego (Ed.), Emerging Topics in Translation: Audio Description (pp. 13–28). Trieste: EUT Edizioni Università di Trieste.

Orero, P., Martín, C. A., & Zorrilla, M. (2015). HBB4ALL: Deployment of HBBTV Services for All. In 2015 IEEE International Symposium on Broadband Multimedia Systems and Broadcasting (pp. 1–4). Ghent: IEEE.

Pöchhacker, F. (2004). Introducing Interpreting Studies. London: Routledge.

Remael, A. (2010). Audiovisual Translation. In Y. Gambier & L. van Doorslaer (Eds.), Handbook of Translation Studies (Vol. 1, pp. 12–17). Amsterdam; Philadelphia: John Benjamins Publishing Company.

Remael, A. (2012). Media Accessibility. In Y. Gambier & L. van Doorslaer (Eds.), Handbook of Translation Studies (Vol. 3, pp. 95–101). Amsterdam; Philadelphia: John Benjamins Publishing Company.

Remael, A. (2014). From Audiovisual Translation to Media Accessibility. Live-Subtitling, Audio-Description and Audio-Subtitling. In A. Arnal & A. Gentile (Eds.), AUSIT 2012—Proceedings of the 'JubilaTlon 25' Biennial National Conference of the Australian Institute of Interpreters and Translators (pp. 134–144). Newcastle upon Tyne, UK: Cambridge Scholars Publishing.

Remael, A. (2015). Combining Audio Description with Audio Subtitling. In A. Remael, N. Reviers, & G. Vercauteren (Eds.), Pictures Painted in Words: ADLAB Audio Description Guidelines (pp. 61–64). Trieste: EUT Edizioni Università di Trieste.

Remael, A., Reviers, N., & Vandekerckhove, R. (2016). From Translation Studies and Audiovisual Translation to Media Accessibility. Target, 28(2), 248–260.

Romero-Fresco, P. (2012). Respeaking in Translator Training Curricula: Present and Future Prospects. Interpreter and Translator Trainer, 6(1), 91–112.

Romero-Fresco, P. (2019). Accessible Filmmaking: Integrating Translation and Accessibility Into the Filmmaking Process. London: Routledge.

SENSE. (2006). Memorandum. In M. a. S. C. House of Commons—Culture (Ed.), Analogue Switch—Off. Second Report of 2005–2006. Volume II. Oral and Written Evidence (pp. 297–298). London: The Stationery Office Limited.

Shirley, B., & Kendrick, P. (2006). The Clean Audio Project: Digital TV as Assistive Technology. Technology and Disability, 18(1), 31–41.

Shirley, B., & Oldfield, R. (2015). Clean Audio for TV Broadcast: An Object-Based Approach for Hearing Impaired Viewers. Journal of the Audio Engineering Society, 63(4), 245–256.

Slater, J., Lindstrom, J.-I., & Astbrink, G. (2010). Broadband Solutions for Consumers with Disabilities. Ultimo, NSW, Australia: Australian Communications Consumer Action Network.

Szarkowska, A. (2011). Text-to-Speech Audio Description: Towards Wider Availability of AD. The Journal of Specialised Translation, 15, 142–162.

Takagi, T. (2010). Speech Rate Conversion Technology as Convenient and Understandable to All the Listeners. Broadcast Technology, 42, 11.

Thompson, I. H. (2014). Landscape Architecture. A Very Short Introduction. Oxford, UK: Oxford University Press.

Tymoczko, M. (2014). Enlarging Translation, Empowering Translators. London: Routledge.

Varney, E. (2013). Disability and Information Technology: A Comparative Study in Media Regulation. Cambridge: Cambridge University Press.

World Health Organization and World Bank (2011). World report on disability. Geneva: World Health Organization.

Zabalbeascoa, P. (2014). The Nature of the Audiovisual Text and Its Parameters. In J. Díaz-Cintas (Ed.), The Didactics of Audiovisual Translation (pp. 21–37). Amsterdam; Philadelphia: John Benjamins Publishing Company.

Zdenek, S. (2015). Reading Sounds: Closed-Captioned Media and Popular Culture. Chicago, IL: University of Chicago Press.

<sup>&</sup>lt;sup>1</sup> For a more in-depth discussion of the three shifts, see Greco (2018).

<sup>&</sup>lt;sup>2</sup> For a more detailed discussion, we refer the reader to Greco (2019a, b).

<sup>&</sup>lt;sup>3</sup> Emphasis added. The original text reads: "las principales salidas profesionales son trabajar como traductor autónomo o en plantilla para agencias y estudios especializados en los campos de la traducción audiovisual, como el doblaje, la subtitulación, las voces superpuestas, la traducción multimedia y la traducción de videojuegos, así como la accesibilidad a los medios, es decir, el audio descripción y la subtitulación para sordos"; see https://www.uab.cat/web/estudiar/la-oferta-de-masteres-oficiales/informacion-general/x-1096480309770.html?param1=1345695508608.

<sup>&</sup>lt;sup>4</sup> See https://www.roehampton.ac.uk/postgraduate-courses/audiovisual-translation.