Recibido / Received: 13/04/2020
Aceptado / Accepted: 01/08/2020

Para enlazar con este artículo / To link to this article:
http://dx.doi.org/10.6035/MonTI.2021.13.07

Para citar este artículo / To cite this article:
MEJÍAS-CLIMENT, Laura. (2021) "Corpus studies and localization: a research proposal for interactive material." In: Calzada, María & Sara Laviosa (eds.) 2021. *Reflexión crítica en los estudios de traducción basados en corpus / CTS spring-cleaning: A critical reflection. MonTI* 13trans, pp. 220-250.

CORPUS STUDIES AND LOCALIZATION: A RESEARCH PROPOSAL FOR INTERACTIVE MATERIAL

LAURA MEJÍAS-CLIMENT
lmejias@uji.es
Universitat Jaume I

Abstract

This article aims to analyze the dubbing synchronies used in a multimodal corpus composed of three video games, dubbed into Castilian Spanish, belonging to the interactive genre of action-adventure. Adopting a descriptive approach, the methodology triangulates qualitative and quantitative data obtained from the empirical analysis of the multimodal corpus on the one hand and, on the other hand, from direct contact with professionals in the industry through semi-structured interviews. Additionally, some previous approaches within corpus-based translation studies —closely linked to descriptive translation studies— will be reviewed along with the professional practice of localization from the perspective of audiovisual translation (AVT). The goal is thus to present how different methods and perspectives can be combined to analyze the AVT mode of dubbing in a multimodal and interactive product, which remains largely unexplored in academia so far, despite the efficacy that corpus studies have demonstrated for translation studies.

Keywords: Multimodal corpus. Interaction. Localization. Dubbing. Video games.

Resumen

Este artículo pretende dar cuenta de las sincronías empleadas en el doblaje al español peninsular de un corpus multimodal compuesto por tres videojuegos del género interactivo de la acción-aventura. La metodología, de enfoque descriptivo, triangula datos

cualitativos y cuantitativos obtenidos, por una parte, del análisis empírico del corpus multimodal y, por otra, del contacto directo con profesionales de la industria mediante entrevistas semiestructuradas. Asimismo, se revisarán algunos planteamientos previos de los estudios de corpus, estrechamente relacionados con los Estudios Descriptivos en Traducción, y de la práctica profesional de la localización, abordándola desde el enfoque de la Traducción Audiovisual (TAV). Se busca así exponer cómo combinar distintos métodos y perspectivas para analizar la modalidad de TAV del doblaje en un producto multimodal interactivo, aspecto escasamente investigado empíricamente en la esfera académica por el momento, a pesar de la utilidad que ya han demostrado los estudios de corpus en el panorama traductológico.

Palabras clave: Corpus multimodal. Interacción. Localización. Doblaje. Videojuegos.

1. The multifaceted framework of translation studies

One of the appeals of the field of translation is the variety of professional and research approaches, methods and areas that it encompasses. This allows us to design research models such as the one described in these pages, whose aim is to determine the types of synchrony used in the game situations of a corpus composed of three action-adventure video games: *Batman: Arkham Knight* (Rocksteady Studios 2015), *Assassin's Creed Syndicate* (Ubisoft 2015) and *Rise of the Tomb Raider* (Crystal Dynamics 2016). To this end, we will describe the theoretical approach and previous studies on which our design is based below, as well as the methodology used and the results obtained, both quantitative and qualitative.

Since Baker's seminal article in 1993 highlighting the usefulness of corpus linguistics for translation (Zanettin 2014), corpus-based translation studies have emerged rapidly. Corpus-based methodology has been closely associated with descriptive studies, which have been increasingly acknowledged in the academic world since the first publications in the 1970s (Hermans 2020). At present, numerous methodological proposals for the use of corpora and descriptive approaches have been presented. See Bernardini & Kenny (2020) and Hermans (2020) for a brief review of the main publications in both fields.

From the professional standpoint, the development of new technologies has brought about the establishment of localization as a powerful industry

aiming to adapt multimedia products fully, not only linguistically and culturally, but also legally and functionally (Jiménez-Crespo 2020). With origins dating back to the late 70s, localization has developed at a rapid pace since its maturing phase during the 80s and 90s to the present. It is used to adapt three groups of products: web content, software and video games (Mata Pastor 2005), in addition to small devices, as pointed out by Jiménez-Crespo (2013b).

These products, among many others, can be considered examples of multimodal texts (Kress & Van Leeuwen 2001) since they combine various semiotic modes that intertwine to create meaning as a whole. Although multimodality still raises some key issues on which to reach a consensus (Pérez-González 2020), it has enabled the holistic analysis of communication since its incorporation in the academic landscape during the 1990s (Jewitt, Bezemer & O'Halloran 2016). Multimodality entails taking into account not only the linguistic code but also every semiotic mode that accompanies and completes it, be it visual, acoustic, kinesic, etc. (Caple 2018).

In the current multimedia landscape, the convergence between multimodality and corpus-based research through the analysis of multimodal corpora or MMC (Soffritti 2018) has proven to be especially fruitful as it has made it possible to account for the full semiotic configuration of multimedia products. These pages will look at MMC with a selection of video games as a multimodal and interactive product in which many areas still need to be researched further (O'Hagan & Mangiron 2013).

Another area that needs to be mentioned —which is closely related to localization, the use of corpora and multimodality— is audiovisual translation (AVT). This field is a bit older than localization, since it emerged alongside the film industry (Díaz Cintas & Anderman 2009). Since then, it has proven to be flexible (Orero 2004) in adapting to the increasing and changing market of audiovisual products, not only as a professional practice but also offering a wide variety of research approaches (Chaume 2018a).

Taking advantage of the fact that translation is multifaceted, as stated above, all the aforementioned concepts and areas constitute the research framework of this article, whose aim is to use mixed methods to offer an

original approach to combine descriptive studies and corpus-based translation studies with localization and AVT.

Since localization and AVT encompass a wide variety of practices, this article focuses on a particular AVT mode, dubbing, which has remained underexplored within the professional area of localization (O'Hagan & Mangiron 2013). Similarly, the use of corpora in localization also seems to be an underexplored area (Jiménez-Crespo 2009), which is why the study proposed here is based on a multimodal corpus composed of the aforementioned three video games.

To delimit the study of this corpus, the analysis focuses on dubbing synchronies, one of the main features of dubbing. To begin, the controversial link between AVT and localization will be briefly reviewed in order to contextualize the particular methodology that has been designed to empirically analyze a multimodal corpus of video games. The originality of this methodology, compared to previous studies, lies in the consideration of an interactive dimension and the use of "game situations" as the unit of analysis.

In addition to the complexity that previous studies based on multimodal corpora show, in which various semiotic modes of communication must be taken into account (Soffritti 2018), in our case, a tactile channel is also considered. This additional channel has not been explored in empirical studies thus far. That is why we propose adapting the methodological approach here, considering the research goals and the idiosyncrasies of the product under study.

The incorporation of an interactive dimension makes this research even more complex than other studies based on MMC. It should be acknowledged that the design of this research, as Taylor and Marchi (2018: 11) point out, could influence the direction taken by the analysis and the results obtained. For this reason, data triangulation was also performed in order to complement the empirical data with information obtained from personal interviews with professional localizers. This is a preliminary proposal in which some strengths and weaknesses will be identified in the following pages, and it can be considered as a starting point to improve the methodology in the future.

Since this analysis draws on various fields and approaches within translation studies, the following sections reflect the multifaceted base of our work: AVT and localization as the professional fields analyzed, corpus studies as a methodological approach and, finally, interactive texts as multimodal products that still offer many possibilities for further research.

2. Audiovisual translation and localization: convergences and divergences

Since the beginning of the century (Orero 2004) and even more today (Chaume 2018b), AVT seems to be used as an umbrella term under which many different translation modes can be situated. These modes are defined according to the technical methods used to transfer the linguistic code from a source audiovisual text to a target one (Chaume 2004a: 31) as well as the discourse mode of the source and target text (Hurtado Albir 2011: 69-70).

Typically, AVT encompasses those translation modes adding a new soundtrack to the original product (revoicing) and those modes based on adding text on the screen where the original audiovisual text is displayed (captioning) (Chaume 2018b). The following pages focus on the revoicing mode with the longest historical tradition in Spain: dubbing.

Orero (2004: viii) has already drawn attention to the flexibility of the concept of AVT encompassing as many diverse forms of multisemiotic transfer as the new technologies might give rise to:

> Audiovisual Translation will encompass all translations — or multisemiotic transfer — for production or postproduction in any media or format, and also the new areas of media accessibility […]. Technological developments which have changed paper oriented society towards media oriented society have also made Audiovisual Translation the most dynamic field of Translation Studies.

Nowadays, not only are inter- and intralinguistic transfers used, but intersemiotic transfer (Jakobson 2000) also takes place in AVT modes such as audio description or audio guides for museums. Transadaptation (Gambier 2003; Neves 2005; Pruys 2009), transcreation (O'Hagan & Mangiron 2013; Bernal-Merino 2015), transmedia narratives (Bernal-Merino 2015; Pujol Tubau 2015) and adaptations or remakes, as well as localization, can also

be situated under the umbrella term of AVT. This is why we should refer to the current debate on AVT and localization as closely related practices whose boundaries are not clear, if they ever were (O'Hagan & Mangiron 2013), and even less so as technological media advances bring about new products and genres.

On the one hand, a group of localization professionals argue that localization should be distinct from AVT because they conceive translation from a reductionist and purely linguistic position (Cadieux & Esselink 2004, Maxwell-Chandler & Deming 2012). Other professionals and some researchers also claim that the fields of localization and AVT are separate areas, the former being a particular industrial process that involves many more modifications and stages than translation (Jiménez-Crespo 2013b; Pym 2014; Muñoz Sánchez 2017; Méndez González & Calvo-Ferrer 2017).

On the other hand, authors such as Bernal Merino (2006) and O'Hagan & Mangiron (2013) adopt the use of the term localization, given its widespread use in the industry. However, they recognize that it incorporates nothing new which could not already be included in a broad sense of translation, so a strict separation into two distinct fields would not be necessary.

Given both positions, the key seems to lie in the perspective adopted: while professionals advocate the differentiation of localization, in academia it does not seem to be strictly necessary to create a new paradigm. In these pages, the term localization is understood as a practice entailing the full adaptation of a multimedia product (web content, software or video game) to a local target market, in line with the approaches of O'Hagan & Mangiron (2013) and Bernal-Merino (2015). Thus, localization differs from the professional practice of AVT in the products it deals with and the variety of procedures it entails, among other aspects.

Regarding the methodological approach of this study, as will be explained in section 4, the concept of localization used here does not prevent us from taking the same position adopted by Vázquez Rodríguez (2018). Considering the debate on the distinction between AVT and localization, this author proposes adapting the descriptivist methodology already employed in previous studies in AVT to incorporate particularities that the audiovisual and multimedia products under analysis may present —in this case, the main particular feature of the analyzed products is interactivity.

Therefore, localization and AVT are considered here as professional practices that traditionally deal with different products, but whose convergence in many aspects favors the adoption of common research methodologies.

3. Corpus-based translation studies and multimodal products

As Baños, Bruti & Zanotti (2013) highlight, corpus linguistics has largely demonstrated its usefulness in translation studies in general (Baker 1996; Olohan 2004; Laviosa 2012) as well as in AVT in particular (Mangiron 2017). This is illustrated, for example, by the contributions of Forchini, Baños, Valentini, Valirano, Jiménez Hurtado and Soler Gallego, and Bywood *et al*. in the aforementioned edition by Baños, Brutti & Zanotti (2013) on the application of corpus linguistics to AVT, among many other studies.

Despite the great advances that corpora have brought to AVT research in terms of descriptive generalizations and quality improvement, there are still aspects to improve, such as representativeness, size, comparability, transcription and annotation methods, and alignment of these audiovisual corpora (Pavesi 2018). Although the study presented in these pages is still a starting point in the analysis of a small interactive corpus and has several limitations in said categories, it can be considered a preliminary and original proposal that can lead to new perspectives in the study of multimodal corpora.

Analyzing video games in the framework of AVT offers the advantage that, in this field, the object of study has traditionally been approached from a multimodal perspective (Kaindl 2013: 263), explicitly taking into account both verbal and nonverbal elements. However, it should be noted that video games and their interactive dimension are even more recent than other audiovisual products, since their origins can be traced back to the early 1960s (Kent 2001; López Redondo 2014), and the methodology of study should be adapted to their interactive and multimodal particularities appropriately.

Mangiron (2017) draws attention to the need to undertake corpus studies in the field of localization. With these, a considerable amount of data on trends and regularities in video game localization could be retrieved. In this field, the processes (Maxwell-Chandler & Deming 2012; O'Hagan

& Mangiron 2013; Bernal-Merino 2015), constraints (Dietz 2007; Loureiro Pernas 2007; Muñoz Sánchez 2017) and translation strategies (Fernández Costales 2012) have been studied extensively, but empirical studies based on corpora are still scarce, compared to other types of audiovisual texts.

To date, several case studies have analyzed specific video games (Crosigniani & Ravetto 2001; Fernández Torné 2007; Mangiron 2010; Ensslin 2012; Müller Galhardi 2014 & Van Oers 2014; among others). However, as far as can be ascertained, video game corpora have only been used in the studies carried out by Pujol Tubau (2015) —although not exclusively since his analysis lumps transmedia production together, not only video games— and in the work of Vázquez Rodríguez (2018). Yet none of these studies use game situations as units of analysis (see section 4.1.), which adds originality to our proposal.

Since corpora were first used in translation studies in the early 1990s, it became evident that the adoption of new approaches beyond the purely descriptivist and linguistic was necessary to account for the complexity of translation. The framework of study needed to be broadened by contextualizing translation in closer detail and incorporating analytical tools from other areas (Olohan 2004). The integration of corpora and mixed translation process research methods has proven to be particularly fruitful (Malamatidou 2018). In recent decades, some research projects have been designed drawing on different methods, and some recent studies have expanded into areas that were previously ignored, perhaps because of their complexity and their relative recency (Bernardini & Kenny 2020: 113). Some examples are the studies carried out by Jiménez-Crespo (2013a, 2015), focused on the analysis of corpora composed of a translation mode (web localization) and genre (social network sites) that did not even exist when the study of trends in translation and the use of corpora began to be systematized.

The study described below aims to join these new approaches to research, in which one of the key aspects is the explicit consideration of the non-verbal dimension and the multimodal semiotic configuration of the analyzed products when designing the corpus. By combining multimodal theory and appropriate corpus design and management, research can account for the multisemiotic nature of the product and its impact on

translation. An integrative approach combining corpus linguistics with multimodal analysis and extralinguistic sources (interviews) —triangulating the data— will thus enable the study to account for the hybrid and complex nature of the product (Baños, Bruti & Zanotti 2013).

4. Methodology: data triangulation with an interactive corpus

In the following paragraphs, we will describe the process of working with a small parallel corpus (Laviosa 2002) in which the types of synchronization have been analyzed in the English and Spanish (Spain) dubbed versions in the original segments and their corresponding translations (Toury 1995). This is a multimodal or multimedia corpus (Soffritti 2018) as it is composed of both videos (image and audio) and text. The corpus comprises 2635 records with text strings of between 2 and 300 words (1326 records in Spanish and 1309 in English) from a total of 76 hours of gameplay. The data extracted from the corpus analysis will be triangulated with information obtained from semi-structured interviews that will also be presented below.

Given the scarcity of academic studies that delve into the link between dubbing and video game localization, the starting point of this study is the following research question: What types of dubbing synchrony can be associated with each game situation in action-adventure video games? Since the analyzed corpus has been limited to a selection of three video games of the same genre, this corpus should be expanded in the future to confirm the results obtained here, which can be understood as a preliminary answer to the research question. The methods to employ in answering this question derive from the needs of the research question itself (Taylor & Marchi 2018: 3) and from the creativity required to approach such a particular corpus study (Taylor & Marchi 2018: 6).

4.1. Analyzing interactive texts: semiotics and corpus segmentation

When approaching the analysis of a corpus composed of video games within the broad framework of AVT, it is first necessary to delimit the concept and the particular semiotic configuration of the object of study in order to design the analysis according to its idiosyncrasy. Video games are the

most complex audiovisual (and multimodal) product nowadays, given the various modes that coexist in their semiotic configuration (Maietti 2004).

As multimedia products, video games fit into the already well-known definition of an audiovisual text. Audiovisual texts are those transmitted through both the acoustic and the visual channels, and whose semiotic codes intertwine to create the full meaning (Chaume 2012). In the case of video games, in addition to the acoustic and visual codes transmitted by said channels, the interactive dimension operates as well. This might be key to the worldwide success that video games have experienced in just a few decades (López Redondo 2014): they turn the passive spectator into an active protagonist in the events on screen. Thus, to the already known semiotic configuration of any audiovisual product, a tactile channel must also be added in video games (Pujol Tubau 2015), conveying bidirectional haptic codes (game ↔ player) when a controller or peripheral is used to play. See Mejías-Climent (2019) for a review of the tactile channel and other forms of gameplay without a controller.

In the case of the three video games that constitute our corpus, the player will receive information through the tactile channel in the form of haptic codes if the controller vibrates. The user will also send information back to the game system using the sense of touch (haptic codes in the form of button presses or lever movements on the peripheral). The game will interpret these movements according to the game rules and will react accordingly to complete the process of creating meaning in the video game.

In this type of interactive product, the development of the events thus depends on the constant actions performed by the player, who interacts with the game and causes a constant change in different game situations (Pujol Tubau 2015; Mejías-Climent 2017), which involve different levels of interaction. To be more precise, these game situations are tasks, dialogues, game action and cinematic scenes. The first two can occur during full or partial interaction (the player might be assigned different tasks or might exchange dialogue with other characters while acting fully or, on the contrary, his/her movements may be partially, but not completely, limited to make him/her pay attention to these instructions or conversations). Game action implies full interaction between the player and the product, while cinematics stop interaction completely and turn the player into a passive

spectator for a few seconds, displaying a traditional non-interactive (cinematographic) video clip.

The audiovisual structure of a video game, therefore, is not pre-established beforehand, unlike in the case of films or series. As a result, the analysis of a corpus composed of interactive products should take into account this particularity. Taking advantage of the different levels of interaction that the four aforementioned game situations entail, these will be used as the unit of analysis to structure the contents of the video game. This makes it possible to identify and situate the studied phenomenon within the corpus (in this case, the types of dubbing synchronies) instead of using time codes, as would be done in corpora composed of films or series, whose length and structure are established beforehand.

4.2. Dubbing as the key feature to delimit the corpus

In addition to being the specific phenomenon analyzed in this corpus, synchrony is one of the quality standards of the dubbing industry in Spain (Chaume 2007). It requires absolute coherence between the on-screen images and the acoustic components. It has been classified into three types for film and television: phonetic or lip synchrony (matching the lip articulation of the characters whenever they are seen in close-ups or extreme close-ups), kinesic synchrony (the translation must correspond with the movements and expressiveness of the characters) and isochrony (same duration of the original and translated utterances) (Chaume 2004b).

Several differences in the process and the materials available should be pointed out in video game dubbing, compared to the dubbing of non-interactive products (Mejías-Climent 2019). Especially worth mentioning is the fact that the videos are not available to either the translators —who often work with mere space restrictions indicated in the decontextualized text strings— or the agents in the dubbing studio (actors, dubbing director and sound engineers), whose only references, in most cases, are the original audio files and their corresponding audio waves.

Synchronization in video games should thus be understood as a gradation of restrictions that can be applied on up to five levels, i.e., there are five

types of synchrony used in video game dubbing (Pujol Tubau 2015; Mejías-Climent 2018, 2019, 2020). They consist of the following:

(1) Wild: no restriction applies (off-screen voices).
(2) Time constraint: the translated utterances must be more or less the same length as the original utterances, i.e., the translated text can be 10% or 20% longer or shorter than the original strings.
(3) Strict time constraint: the translated utterances must be exactly the same length as the original strings, but any pauses, specific intonation or tempo are not taken into account.
(4) Sound-sync: the translated utterances must be exactly the same length as the original strings and all pauses and prosody must be reproduced as well.
(5) Lip-sync: the translated utterances must be identical to the original audio waves, also reproducing lip articulation as much as possible, like in any non-interactive movie.

The recurrence of these types of synchrony will be checked in the corpus with the aim of identifying a relationship between game situations, which involve different levels of interaction, and types of synchrony, which can be more or less restrictive, as explained above. The data obtained from the corpus will be quantitative according to the relative frequencies (percentages) obtained for each type of synchrony identified in each game situation. This will allow us to also reach qualitative conclusions about the levels of restriction of the game situations in relation to the different dubbing synchronies. This information will be complemented with interviews with the agents involved in the localization process of the analyzed titles (see section 4.4.).

4.3. Design of the study: chart for analysis

To begin, an empirical study to track trends in the use of dubbing synchronies in a given sociocultural context requires a clearly defined corpus of analysis in which to detect patterns —in this case, in the Spanish dubbing of video games originally developed in English. It is thus a corpus that is parallel and multimodal, bilingual and unidirectional (English>Spanish) (Laviosa 2012). Later, a series of interviews with the main agents involved in

the translation and dubbing process will complement the information about the sociocultural context in which the corpus is situated.

Following the different methodological phases described by Laviosa (2012: 68), the criteria to select the corpus were first established. The corpus was to be chosen from among a total of 106 video games marketed in Spain between 2015 and 2016 which had Spanish dubbing available. To reduce this group to a smaller catalogue of titles, another requirement was that English had to be the source language in which the game was originally developed and thus the source language for the Spanish dubbing. The remaining 80 video games were in turn narrowed down by applying the following requirements: the interactive genre (Wolf 2005; Mejías-Climent 2019) was action-adventure; the mode, 3rd person perspective (meaning that the visual perspective could never alternate between 1st and 3rd person and, consequently, the visual perception of synchronies would be homogeneous) and single player (otherwise it would be more challenging to reproduce the exact same path in the game plot with more players involved); the developers and distributors had to be different; and, finally, the localization companies that carried out the translation and dubbing also had to be different to avoid detecting patterns associated with a particular corporate approach rather than with the type of video game chosen. In the end, just three video games were obtained: *Batman: Arkham Knight* (BAK), *Assassin's Creed Syndicate* (ACS) and *Rise of the Tomb Raider* (RTR).

The second phase is the segmentation of the corpus and the alignment between source and target segments (Laviosa 2012: 68). As explained, this multimodal corpus is divided according to the continual change in game situations in each of the three games analyzed. With a few exceptions due to the arbitrariness inherent to any interactive product, the alignment of the source and target segments, performed manually by recording the data in consecutive Excel columns, was successful, despite the laborious task of playing in both the Spanish and English versions trying to reproduce exactly the same steps in each of the three games. This, however, may constitute one of the main limitations in an analysis of interactive material, as the arbitrariness of the game might cause original and target segment mismatches. However, in our corpus, non-coincidental cases are minimal and,

therefore, not quite representative (the original and target versions in BAK coincide at 96.75%; in ACS, 100%; and in RTR, 99.73%).

To structure this segmentation in such a way that the corpus could be easily accessed later, the gameplay of each video game in both versions was recorded on video and each video fragment was conveniently labeled, manually, and this label was included in the corresponding spreadsheet cell. A total of 300 GB of video was obtained, a bit more than 76 hours of gameplay, containing 2635 records of text strings (1326 in Spanish and 1309 in English for the three games together). This Excel spreadsheet (one for each video game) constitutes the basic chart for analysis, structured as follows:

Story moment	Game situation	Type of synchrony (ES)	Type of synchrony (EN)	Contents of the text string	Comments and video code (ES)	Comments and video code (EN)

Table 1. Chart for analysis

In the third phase, once the data extraction had been carried out, some first-level generalizations were made about the trends observed in both the source and target segments. These generalizations are presented in the following section. As Laviosa (2012: 68) points out, these results should be confirmed by expanding the corpus in the future. This would allow us to achieve higher levels of generalization that point to clearer trends in the use of dubbing synchronies in video games.

The main limitations that a corpus of these characteristics may present, in addition to the one already mentioned (size), refer to its representativeness, segmentation and transcription conventions, as well as annotation methods accounting for the semiotic complexity of the analyzed product (Baños, Bruti & Zanotti 2013; Pavesi 2018).

Representativeness may be somewhat limited compared to other large corpora of hundreds of thousands of words. However, it should be acknowledged that the representativeness criteria applied to other corpora (multimodal or exclusively composed of written text) are not necessarily valid for this particular case, given the significant amount of material and data that

a multimedia corpus generates (Soffritti 2018: 340). Therefore, following the recommendations given by Soffritti, the requirements listed above were applied to reduce the initial catalog of video games to a more limited corpus that could be handled easier. Although the scope of the data is limited, the corpus has been selected according to the analyzed phenomenon and allows us to draw preliminary generalizations that could be explored further in future studies, as has been done previously in many other descriptive studies with audiovisual corpora.

Segmentation, as explained, is based on game situations, which represent the unit of analysis of the dubbing synchronies and are caused by the interaction created by the video game world. Each game situation contains one or several text strings. The alignment presents certain inevitable limitations associated with any product subject to a considerable degree of arbitrariness. In other words, despite reproducing the same path in the original and translated versions exactly, the game does not always react in the exact same way. As Wolf (2005: 7) explains:

> Instead of fixed, linear sequences of text, image, or sound which remain unchanged when examined multiple times, a video game experience can vary widely from one playing to another.

Nevertheless, this paper focuses on dubbing synchronies, a phenomenon that depends on the linguistic code but is not limited to it, which allows us to analyze segments, in terms of synchronies, whose linguistic content is not exactly the same.

Transcription and annotation (see Figure 1) were done in the spreadsheet containing the analysis (Table 1) simultaneously to gameplay and recording as well as afterwards. Excel sheets allow the use of the filters tool to make quick queries. The annotations covered all the communication channels: visual aspects relevant to the configuration of the synchronies and also acoustic matters and those interactive features that may have influenced synchronization. For the time being, this is the only option for managing and analyzing translatable audio components in a corpus composed of video games since the original spreadsheets received by the translators or the script "as recorded" are not available. A complete transcription of the text is also impossible to obtain since it does not even exist before playing the interactive and dynamic material. Instead, it is created while the

interaction between the player and the game is taking place, changing from one game situation to another. Likewise, this type of analysis dealing with multimodal corpora has the limitation that the text cannot be processed by any software, at least at the moment. Instead, it needs to be analyzed manually, which is a somewhat slow and less precise process. Figure 1 shows four sample records annotated for BAK.

1	Momento argumental	Situación de jueg	Ajuste (ES)	Ajuste (EN)	Cadena text	Comentarios (ES)	Comentarios (EN)
372	Objetivo: Devolver a los infectados por el Joker a su celda 14	Acción	Libre	Libre	Enunciados breves PNJ	Harley Quinn amenaza a Batman continuamente. Ejemplo de enunciado muy natural: «Por supuesto. ¿Te has enterado, pedazo de cabrón? ¡Vamos a por ti!». [BAK10_ES 00:36:38]	«You hear that, Bat-freak!? We're coming to get you!» [BAK7_EN 00:57:12]
373	Objetivo: Devolver a los infectados por el Joker a su celda 15	Tarea	Libre	Libre	Instrucciones del personaje para el jugador	[BAK10_ES 00:38:40 + 00:39:32]	[BAK7_EN 01:00:02]
374	Objetivo: Devolver a los infectados por el Joker a su celda 16	Cinemática	Sonoro	Sonoro	Enunciado breve PNJ	*Quick-time event* para contraatacar a la infectada que se lanza sobre el jugador. [BAK10_ES 00:40:14]	[BAK7_EN 01:00:35]
375	Objetivo: Devolver a los infectados por el Joker a su celda 17	Diálogo	Libre	Libre	Diálogo en acción de juego	Robin se queja del ataque. Incoherencia en la respuesta de Batman: «R: ...Sé, sincero, ¿qué pinta tengo? B: Tan lento como tú». [BAK10_ES 00:40:35]	Ni siquiera mueven los labios. En inglés: «R: …Be honest. How's it look? B: Like you're too slow». [BAK7_EN 01:00:55]

Figure 1. Four sample game situations segmented and annotated for BAK

4.4. Triangulation of data: interviews with the translation agents

In the search for trends in the use of dubbing synchronies, the context from which the studied texts emerge has also been analyzed. Triangulation, as Taylor & Marchi (2018: 10) point out, is a valuable method to complete the analysis since it provides complementary information that usually broadens the perspective of the data collected and also serves as the basis of more solid research that analyzes the phenomenon as a whole (Malamatidou 2018). In this case, triangulation will not be based on the combination of different types of corpora, but rather on the combination of quantitative (the empirical study) and qualitative (interviews) methods, in the words of Malamatidou (2018).

In addition to the necessary review and preparation of the theoretical and interdisciplinary framework, the empirical analysis of textual sources is complemented with semi-structured interviews (Kvale & Brinkmann 2009) that account for the extra-textual factors related to the production of the analyzed material.

Given the strict confidentiality under which professionals work in the field of video games (Mangiron 2017: 85-86), the names of those interviewed will be omitted. They constitute the entire chain of agents involved in the translation and dubbing process for the video games in question. The initial approach was to interview all the agents involved, from the moment the translation order is placed until it is delivered, i.e., the client and administration agents (project managers) during project preparation; translators and reviewers during production; and dubbing directors and actors, as well as sound technicians, during the post-production of the translation. However, the clients were ultimately discarded because it was impossible to get in touch with them. Of the remaining 18 agents, 16 were interviewed by phone call or videoconference, and these conversations were later transcribed to conveniently analyze the information.

The interviews were designed according to three main groups of questions: the person's profile, the indications received in the translation brief and the description of the translation process, and finally the dubbing phase in the studio.

The aim of this research tool was to integrate (Malamatidou 2018: 9) qualitative information with the empirical collection of data in order to complement such data. In other words, the goal was to determine whether the observed trends actually corresponded to the way in which all these professionals intentionally applied synchronies or whether, on the contrary, only some of the agents were responsible for the use of dubbing synchronies.

5. Analysis of dubbing synchronies in the multimodal corpus

Now that the corpus has been determined and the analyzed phenomena and methodological tools have been described, the results obtained will be described in the following sections. The quantitative information resulting from the empirical analysis will be complemented by the qualitative approach offered by interviews with the agents involved in the translation and dubbing process of the three video games studied.

5.1. Quantitative data collected from the corpus analysis

As explained above, the total time played ended up being a bit more than 76 hours. Of these, 26 correspond to the original (13 hours) and Spanish dubbed (13 hours) versions of *Batman: Arkham Knight* (BAK); 35 hours to the English (17 hours) and Spanish (18 hours) versions of *Assassin's Creed Syndicate* (ACS); and, finally, 15 hours were spent on *Rise of the Tomb Raider* (RTR) in English (7 hours) and Spanish (8 hours).

The information extracted from the corpus was sorted using the Excel filters tool in the spreadsheet. The quantitative data obtained figures for the recurrence of game situations identified in each version (Spanish and English) of each video game (BAK, ACS and RTR) as well as the types of synchronies observed in each game situation. To summarize this information, the types of synchrony (wild, time constraint, strict time constraint, sound-sync and lip-sync) detected in each game situation (tasks, action, dialogues and cinematics) in BAK, ACS and RTR are shown below in Figure 2 and Table 2:

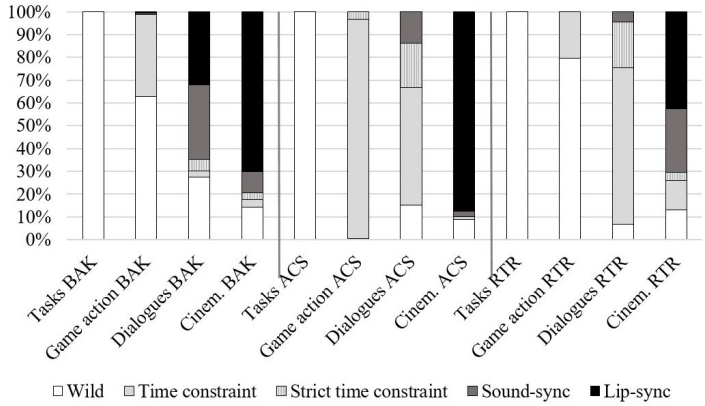

Figure 2. Types of synchrony in each game situation in BAK, ACS and RTR

		Wild	Time constraint	Strict time constr.	Sound-sync	Lip-sync
BAK	Tasks	100%	0%	0%	0	0%
	Game action	63.62%	36.32%	0%	0.53%	0.53%
	Dialogues	27.59%	2.87%	5.17%	32.76%	32.18%
	Cinematics	14.29%	3.06%	3.06%	9.18%	69.39%
ACS	Tasks	100%	0%	0%	0%	0%
	Game action	0.62%	96.27%	3.11%	0%	0%
	Dialogues	15.15%	51.51%	19.7%	13.64%	0%
	Cinematics	8.98%	1.2%	0%	2.39%	87.42%
RTR	Tasks	100%	0%	0%	0%	0%
	Game action	79.75%	20.24%	0%	0%	0%
	Dialogues	6.67%	68.9%	20%	4.44%	0%
	Cinematics	13.04%	13.04%	3.49%	27.83%	42.61%

Table 2. Types of synchrony in each game situation in BAK, ACS and RTR

As the data shows, there seems to be a relationship between certain game situations and the types of synchrony in these three action-adventure video games. In all three titles, tasks always use wild synchrony; that is, no restrictions apply, which is understandable since they are always diegetic messages transmitted to the player as off-screen voices. There also seems to be a preference for lip-sync, the most restrictive type of synchrony, in the cinematics of the three games, which evidences the traditional audiovisual nature of these scenes in which the video game completely suppresses interactivity and brings the player to short, non-interactive cinematic clips. Some examples of wild synchrony can also be found in cinematics, given that off-screen narrations are used in all of the games.

Game action is a somewhat more diverse situation. In BAK and RTR, there seems to be a preference for wild synchrony and a strong presence of time constraint, while, in the case of ACS, the use of time constraint is predominant. This may be due to the very nature of the game. In BAK and RTR, the characters usually use walkie-talkies and intercoms to talk to each other while the player is controlling them, which motivates the use

of wild synchrony for such off-screen voices. In the case of ACS, set in a historical environment —mid-19th century Victorian London— communication needs to take place face-to-face, so time constraint represents the most useful synchrony in the dynamic and interactive setting of the game action with relatively visible characters.

Finally, dialogues reflect their hybrid nature. In all three games, they occur alternately with certain interaction restrictions, in the case of dialogues that the player must necessarily listen to, or without any restriction, allowing full interaction, when they are irrelevant background conversations. Thus, there is no clear pattern in this game situation and all five types of synchrony are found during them.

This quantitative analysis represents a starting point for further research in larger corpora. Given the trends identified here, it would be interesting to expand the corpus to include more action-adventure titles in order to see if the trends are similar in other games. On a related note, games belonging to other interactive genres could be analyzed to determine whether similar or completely different trends can be found.

Furthermore, in a group of action-adventure video games, the variable of the medium[1] (setting) could be introduced in the corpus to identify whether trends in the use of synchronies vary depending on the setting in which the action-adventure video games take place (historical, modern-day, fantasy or superheroes, etc.). From the data collected here, it can be assumed that there might be a certain relationship between the restrictions of the video game and the contextual and narrative situation.

1. It should be noted that "medium" is not understood here as the TV or interactive system where some events take place, but as one of the classification criteria that can be used to classify video games (Wolf 2005). Medium is defined here as the stylistic, narrative, thematic and iconographic conventions in which the events take place (Wolf 2005: 114). This concept can be similar to the traditional taxonomy of audiovisual or literary genres, which is not applicable to video games as these add interaction as one of their multiple features. As a result, video games can be classified more accurately according to different criteria such as the interactive genre (in this case, action-adventure, but other examples include combat, racing, simulation, strategy, etc.), the game mode (1st or 3rd person perspective, and single or multiplayer), and the medium (war, sports, fantasy, horror, etc.), but not according to the traditional narrative medium (Wolf 2005; Mejías-Climent 2019: 51-66).

5.2. Qualitative data obtained from the interviews with the translation agents

In addition to analyzing the corpus empirically, as explained, this project also included qualitative interviews to identify whether there is an explicit intention by the translators or any agent involved in the translation and dubbing process to apply different synchronies in the text dubbed into Spanish. Thus, a methodological triangulation was used to obtain complementary results (Taylor & Marchi 2018: 7), i.e., they complement the quantitative information obtained from the empirical analysis.

The semi-structured interviews shed light on how each of the agents involved in the translation and dubbing process worked (namely project managers, translators, text reviewers, dubbing actors and directors, and sound engineers) and on the three main stages into which the process is divided: preparation and management, translation and linguistic review and finally dubbing in the studio.

In the three video games, the materials received for translation are limited to spreadsheets containing the text strings that will eventually be dubbed in the studio, in addition to some complementary information about the video game (plot, characters and features, game mechanics, technical specifications, setting and some screenshots in certain cases, among other information).

Considering the materials that are available, and as shared by project managers, translators and reviewers, it is not possible to apply specific dubbing synchronies to the text since the videos in which such text will be used (as voiced dialogues) often have not even been created yet. Therefore, during the pre-production and translation phases, dubbing synchronies are limited to space constraints associated with the type of text string. These strings are not exactly categorized as "game situations", according to the research terminology used here, but simply as audio and cinematic content (the translation must be as similar as possible to the length of the original) and on-screen text, in which constraints will be indicated as a maximum number of characters or words (this is the text that will be displayed on the game interface).

It is during the dubbing phase that the five types of synchrony identified in our corpus are used, although, surprisingly, the last agent in the dubbing

process, the sound engineer, seems to assume the main responsibility of synchronizing the dubbed audio waves to the original ones as closely as possible, depending on the situation in question. It is worth mentioning that there are still no final videos available for the audios that are dubbed at this stage, although, in some cases, the dubbing agents could access motion capture videos (Kines 2000) or limited or low-quality videos to get a better idea of the context in which certain conversations take place.

Dubbing directors are aware of the importance of synchronizing the audio waves to the originals more or less strictly depending on the type of text in question, although, as stated above, they do not use the same terminology for game situations classified according to tasks, action, dialogues and cinematics, but rather categorize these contents as action and onomatopoeia blocks, on the one hand, and cinematic scenes on the other hand. They also do categorize dialogues in RTR. The use of dubbing synchronies seems to respond mainly to the previous experience that these agents (voice talent, directors and sound engineers) have in the dubbing field, having worked on similar projects.

The basic reference in the dubbing studio are the audio waves, since there are no videos available, which would never be the case when dubbing movies or series. The type of synchrony is determined by the dubbing directors according to the level of restriction of the text. Game action and onomatopoeias should resemble the original waves with a certain flexibility (time constraint). In some cases, the restrictions are more rigid (strict time constraint) and if the text is identified as belonging to a cinemac scene or as an important dialogue, the original audio waves are preferably reproduced with absolute precision, including pauses, specific intonation and even lip articulation (sound- and lip-sync).

As mentioned, depending on their previous experience and the type of audio waves, the sound engineers end up editing and synchronizing the dubbed audio waves as much as possible and return to project managers a folder and audio structure that is identical to the one they received, but they never get to see the final result of the dubbed and complete video game, as happens in movies or series, where the target product leaves the dubbing studio as it will be marketed.

All this information, in addition to complementing the data obtained from the empirical analysis, corroborates the preliminary relationship that has been detected in the corpus between game situations and types of dubbing synchronies, although the terminology used in this analysis and previous studies, and that used by professionals, does not seem to be exactly the same in terms of game situations. The five types of synchronies are identified, although in the case of the three video games that constitute the corpus, they were not responsibility of the translator, who intervenes at the beginning of the translation and dubbing process in video games and works only with written text strings instead of videos, unlike in film dubbing.

6. Conclusions

In these pages, the analysis of a multimodal corpus (Soffritti 2018) has been presented. This corpus is composed of three action-adventure video games and has been selected to answer the research question of what types of synchrony are used in each game situation displayed in the analyzed games. As explained, the design and analysis of the materials is more complex here than with other multimodal corpora since this corpus displays a series of particularities (interactivity being the most prominent), and the aim was to account not only for what happens in the linguistic code, but also in each segment —in this case, game situation— in terms of its complete audiovisual configuration, conveyed through different semiotic modes (Kress & Van Leeuwen 2001). To be more precise, the analysis has focused on the types of synchrony used in the dubbing of each of the four game situations into which the games can be divided, thus representing the units of analysis of the corpus.

The empirical analysis has provided data suggesting a certain relationship between game situations, involving different levels of interaction and game dubbing synchronies, which are understood as different levels of constraint. In particular, wild synchrony seems to be the preferred type for tasks while lip-sync is typically used in cinematics in combination with wild synchrony if off-screen voices are used. Game action seems to depend on several factors determined by the game configuration itself and the medium or setting where the story takes place as the preferred type

of synchrony seems to vary between time constraint and wild synchrony. Finally, dialogues do not show any clear preference, representing a hybrid situation whose configuration changes considerably in each game.

This data has been complemented with qualitative information obtained from semi-structured interviews with the main professional agents involved in the translation and dubbing process of the three video games studied. The results show that the synchronies mainly depend on the last phase of production, i.e., dubbing in the studio, and are associated with different types of contents in the video game. These contents are not strictly identified as game situations, but rather classified as game action and onomatopoeia, cinematics, and sometimes dialogues.

It should be noted, as mentioned above, that this analysis still has several limitations and represents only a starting point for future analysis expanding the corpus. With regard to these limitations, some of those typically associated with an audiovisual corpus were identified (Baños, Bruti & Zanotti 2013): the corpus needs to be recorded on video while being played and is supported by annotated spreadsheets, consequently generating a huge amount of data. This data has to be conveniently analyzed, but at present, no software is available to do so, so the filters tool in the Excel spreadsheets was used instead. In this case, the segmentation of the text was based on game situations, whose alignment between the source and target versions may not be entirely accurate depending on the arbitrariness of the game responses, which is caused by interactivity. This limitation, however, would imply minor changes in larger corpora.

In addition to expanding the corpus with more video games belonging to the same genre of action-adventure, it would be enriching to use different corpora composed of other video game genres in order to determine whether the trends in the use of dubbing synchronies vary or are reproduced in other genres. In fact, a preliminary case study carried out in a video game belonging to the interactive subgenre of graphic adventure (Mejías-Climent 2020) already suggests that there may be certain differences, not only in the use of synchronies, but also in the number of game situations into which the corpus is structured, depending on the nature of the video game.

Finally, it should be highlighted that it would be extremely helpful for corpus studies to have access to the original spreadsheets that were used in

the translation process. However, especially in the field of video games, this is never the case given the strict non-disclosure agreements under which developers and localization companies work. Cooperation between the industry and academia would be enormously beneficial to ensure the creation of quality corpora on which to conduct empirical studies whose results would, in turn, be useful for the professional world. Given this impossibility to access such original materials, for the time being, the design of a multimodal corpus using game situations aims to offer an original methodology suited to the multimodal and interactive idiosyncrasies of the product. This methodology can be verified with future analysis.

References

BAKER, Mona. (1996) "Corpus-based translation studies: The challenges that lie ahead." In: Somers, Harold (ed.) 1996. *Terminology, LSP and translation: Studies in language engineering in honour of Juan C. Sager*. Amsterdam & Philadelphia: John Benjamins, pp. 175-86.

BAÑOS, Rocío, Silvia Bruti & Serenella Zanotti. (2013) "Corpus linguistics and Audiovisual Translation: In search of an integrated approach." *Perspectives: Studies in Translatology* 21:4, pp. 483-90.

BERNAL MERINO, Miguel Ángel. (2006) "On the Translation of Video Games." *JoSTrans - The Journal of Specialised Translation* 6. Electronic version: <https://www.jostrans.org/issue06/art_bernal.php>.

BERNAL MERINO, Miguel Ángel. (2015) *Translation and localisation in video games. Making entertainment software global*. New York : Routledge.

BERNARDINI, Silvia & Dorothy Kenny. (2020) "Corpora." In: Baker, Mona & Gabriela Saldanha (eds.) 2020. *Routledge Encyclopedia of Translation Studies*. London & New York: Routledge, pp. 110-15.

CADIEUX, Pierre & Bert Esselink. (2004) "GILT: Globalization, Internationalization, Localization, Translation." *Globalization Insider* 11:1.5. Electronic version: <http://www.i18n.ca/publications/GILT.pdf>.

CAPLE, Helen. (2018) "Analysing the multimodal text." In: Taylor, Charlotte & Anna Marchi (eds.) 2018. *Corpus Approaches to Discourse. A Critical Review*. London & New York: Routledge, pp. 85-109.

CHAUME, Frederic. (2004a) *Cine y traducción*. Madrid: Cátedra.

CHAUME, Frederic. (2004b) "Synchronization in dubbing: A translational approach." In: Orero, Pilar (ed.) 2004. *Topics in Audiovisual Translation*. Amsterdam & Philadelphia: John Benjamins, pp. 35-52.

CHAUME, Frederic. (2007) "Quality standards in dubbing: a proposal". *Tradterm* 13, pp. 71-89.

CHAUME, Frederic. (2012) *Audiovisual Translation: Dubbing*. Manchester: St. Jerome Publishing.

CHAUME, Frederic. (2018a) "An overview of audiovisual translation: Four methodological turns in a mature discipline." *Journal of Audiovisual Translation* 1:1, pp. 40-63.

CHAUME, Frederic. (2018b) "Is audiovisual translation putting the concept of translation up against the ropes?" *JosTrans – The Journal of Specialised Translation* 30, pp. 84-104. Electronic version: <http://jostrans.org/issue30/art_chaume.php>.

CROSIGNIANI, Simone & Fabio Ravetto. (2001) "Localizing the Buzz! Game Series (Or how to successfully implement transcreation in a multi-million seller video game)." *Trans. Revista de Traductología* 15, pp. 29-38. Electronic version: <http://www.trans.uma.es/pdf/Trans_15/29-38.pdf>.

DÍAZ CINTAS, Jorge & Gunilla Anderman. (2009) *Audiovisual Translation: Language Transfer on Screen*. Houndmills, Hampshire & New York: Palgrave Macmillan.

DIETZ, Frank. (2007) "How Difficult Can that be? The Work of Computer and Video Game Localisation." *Tradumàtica* 5. Electronic version: <http://www.fti.uab.es/tradumatica/revista/num5/articles/04/04art.htm>.

ENSSLIN, Astrid. (2012) *The Language of Gaming*. New York: Palgrave Macmillan.

ESSELINK, Bert. (2000) *A Practical Guide to Software Localization*. Amsterdam: John Benjamins.

FERNÁNDEZ COSTALES, Alberto. (2012) "Exploring Translation Strategies in Video Game Localisaton." *MonTI* 4, pp. 385-408.

FERNÁNDEZ TORNÉ, Anna. (2007) "Anàlisi de la localització de Codename: Kids Next Door - Operation V.I.D.E.O.G.A.M.E." *Tradumàtica* 5. Electronic version: <http://www.fti.uab.es/tradumatica/revista/num5/articles/08/08art.htm>.

GAMBIER, Yves. (2003) "Screen transadaptation: perception and reception." *The Translator* 9:2, pp. 171-89.

HERMANS, Theo. (2020) "Descriptive translation studies." In: Baker, Mona & Gabriela Saldanha (eds.) 2020. *The Rotutledge Encyclopedia of Translation Studies*. London & New York: Routledge, pp. 143-47.

HURTADO ALBIR, Amparo. (2011) *Traducción y Traductología. Introducción a la traductología*. 5th ed. Madrid: Cátedra.

JAKOBSON, Roman. (2000) "On Linguistic Aspects of Translation." In: Venuti, Lawrence (ed.) 2000. *The Translation Studies Reader*. London & New York: Routledge, pp. 111-18.

JEWITT, Carey, Jeff Bezemer and Kay O'Halloran. (2016) *Introducing Multimodality*. Oxon & New York: Routledge.

JIMÉNEZ-CRESPO, Miguel A. (2009) "El uso de corpus textuales en localización." *Tradumàtica* 7. Electronic version: <http://www.fti.uab.cat/tradumatica/revista/num7/articles/05/05.pdf>.

JIMÉNEZ-CRESPO, Miguel A. (2013a) "Crowdsourcing, Corpus Use, and the Search for Translation Naturalness: A comparable corpus study of Facebook and non-translated social networking sites." *Translation and Interpreting Studies* 8:1, pp. 23-49.

JIMÉNEZ-CRESPO, Miguel A. (2013b) *Translation and Web Localization*. Oxon: Routledge.

JIMÉNEZ-CRESPO, Miguel A. (2015) "Testing explicitation in translation: Triangulating corpus and experimental studies." *Across Languages and Cultures* 16:2, pp. 257-83.

JIMÉNEZ-CRESPO, Miguel A. (2020) "Localization." In: Baker, Mona & Gabriela Saldanha (eds.) 2020. *The Routledge Encyclopedia of Translation Studies*. London & New York: Routledge, pp. 299-304.

KAINDL, Klaus. (2013) "Multimodality and translation." In: Millán, Carmen & Francesca Bartrina (eds.) 2013. *The Routledge handbook of translation studies*. London: Routledge, pp. 257-69.

KENT, Steven L. (2001) *The Ultimate History of Video Games*. New York: Three Rivers Press.

KINES, Melianthe. (2000) "Planning and Directing Motion Capture for Games." *Gamasutra* (19 January). Electronic version: <https://www.gamasutra.com/view/feature/131827/planning_and_directing_motion_.php>.

KRESS, Gunther & Theo Van Leeuwen. (2001) *Multimodal discourse. The modes and media of contemporary communication*. London & New York: Oxford University Press.

KVALE, Steinar & Svend Brinkmann. (2009) *Interviewing: learning the craft of qualitative research interviewing*. Los Angeles: Sage.

LAVIOSA, Sara. (2002) *Corpus-based translation studies: Theory, findings, applications*. Amsterdam & Atlanta: Rodopi.

LAVIOSA, Sara. (2012) "Corpora and Translation Studies." In: Hyland, Ken; Chau Meng Huat & Michael Handford (eds.) 2012. *Corpus Applications in Applied Linguistics*. London & New York: Continuum International, pp. 67-83.

LÓPEZ REDONDO, Isaac. (2014) *¿Qué es un videojuego? Claves para entender el mayor fenómeno cultural del siglo XXI*. Sevilla: Héroes de Papel.

LOUREIRO PERNAS, María. (2007) "Paseo por la localización de un videojuego." *Tradumàtica* 5. Electronic version: <http://www.fti.uab.es/tradumatica/revista/num5/articles/03/03art.htm>.

MAIETTI, Massimo. (2004) *Semiotica dei videogiochi*. Milan: Unicopli.

MALAMATIDOU, Sofia. (2018) *Corpus Triangulation. Combining Data and Methods in Corpus-Based Translation Studies*. London & New York: Routledge.

MANGIRON, Carme. (2010) "The Importance of not being Earnest: Translating Humour in Video Games." In: Chiaro, Delia (ed.) 2010. *Translation, Humour and the Media*. London: Continuum, pp. 89-107.

MANGIRON, Carme. (2017) "Research in game localisation." *The Journal of Internationalization and Localization* 4:2, pp. 74-99.

MATA PASTOR, Manuel. (2005) "Localización y traducción de contenido web." In: Reineke, Detlef (ed.) 2005. *Traducción y localización: mercado, gestión y tecnologías*. Las Palmas: Anroart Ediciones, pp. 187-252.

MAXWELL-CHANDLER, Heather & Stephanie O'Malley Deming. (2012) *The Game localization handbook*. 2nd ed. Sudbury, Massachussets: Jones.

MEJÍAS-CLIMENT, Laura. (2017) "Multimodality and dubbing in video games: A research approach." *Linguistica Antverpiensia, New Series: Themes in Translation Studies* 17, pp. 99-113. Electronic version: <https://lans-tts.uantwerpen.be/index.php/LANS-TTS/article/view/463>.

MEJÍAS-CLIMENT, Laura. (2018) "El ajuste en videojuegos: el doblaje de *Assassin's Creed Syndicate*." *Trans - Revista de traductología* 22, pp. 11-30.

MEJÍAS-CLIMENT, Laura. (2019) *La sincronización en el doblaje de videojuegos. Análisis empírico y descriptivo de los videojuegos de acción-aventura*. Castelló: Universitat Jaume I. PhD Dissertation.

MEJÍAS-CLIMENT, Laura. (2020) "La evolución de las tecnologías en la confluencia de la interacción y el cine. El doblaje en una aventura gráfica."

inTRAlinea.online Translation Journal 22. Electronic version: <http://www.intralinea.org/archive/article/2509>.

Méndez González, Ramón & José Ramón Calvo-Ferrer. (2017) *Videojuegos y [para]traducción: aproximación a la práctica localizadora*. Granada: Comares.

Müller Galhardi, Rafael. (2014) "Video Games and Fan Translations: A Case Study." In: Mangiron, Carme; Minako O'Hagan & Pilar Orero (eds.) 2014. *Fun for all: translation and accessibility practices in video games*. Bern: Peter Lang, pp. 175-95.

Muñoz Sánchez, Pablo. (2017) *Localización de videojuegos*. Madrid: Síntesis.

Neves, Joselia. (2005) *Audiovisual Translation: Subtitling for the Deaf and Hard of Hearing*. London: Roehampton University. PhD Dissertation.

O'Hagan, Minako & Carme Mangiron. (2013) *Game Localization: Translating for the Global Digital Entertainment Industry*. Amsterdam: John Benjamins.

Olohan, Maeve. (2004) *Introducing Corpora in Translation Studies*. London: Routledge.

Orero, Pilar. (ed.) (2004). *Topics in Audiovisual Translation*. Amsterdam & Philadelphia: John Benjamins.

Pavesi, Maria. (2018) "Corpus-based audiovisual translation studies. Ample room for development." In: Perez-González, Luis (ed.) 2018. *The Routledge Handbook of Audiovisual Translation*. London & New York: Routledge, pp. 315-333.

Pérez-González, Luis. (2020) "Multimodality." In: Baker, Mona & Gabriela Saldanha (eds.) 2020. *The Routledge Encyclopedia of Translation Studies*. London & New York: Routledge, pp. 346-351.

Pruys, Guido Marc. (2009) *Die Rhetorik der Filmsynchronisation*. Cologne: Eigenverlag.

Pujol Tubau, Miquel. (2015) *La representació de personatges a través del doblatge en narratives transmèdia. Estudi descriptiu de pel·lícules i videojocs basats en El senyor dels anells*. Barcelona: Universitat de Vic - Universitat Central de Catalunya. PhD Dissertation.

Pym, Anthony. (2014) *Exploring Translation Theories*. London & New York: Routledge.

Soffritti, Marcelo. (2018) "Multimodal Corpora and Audiovisual Translation Studies." In: Pérez-González, Luis (ed.) 2018. *The Routledge Handbook of Audiovisual Translation*. London & New York: Routledge, pp. 334-349.

TAYLOR, Charlotte & Anna Marchi. (eds.) (2018) *Corpus Approaches to Discourse. A Critical Review*. London & New York: Routledge.

TOURY, Gideon. (1995) *Descriptive translation studies and beyond*. Philadelphia: John Benjamins.

VAN OERS, Annelies. (2014) "Translation Strategies and Video Game Translation: A Case Study of Beyond Good and Evil." In: Mangiron, Carme; Minako O'Hagan & Pilar Orero (eds.) 2014. *Fun for all: translation and accessibility practices in video games*. Bern: Peter Lang, pp. 129-48.

VÁZQUEZ RODRÍGUEZ, Arturo. (2018) *El error de traducción en la localización de videojuegos. Estudio descriptivo y comparativo entre videojuegos* indie *y no* indie. Valencia: Universitat de València. PhD Dissertation.

WOLF, Mark J. P. (2005) *The Medium of the Video Game*. 3rd ed. Austin: The University of Texas Press.

ZANETTIN, Federico. (2014) *Translation-Driven Corpora: Corpus Resources for Descriptive and Applied Translation Studies*. Oxon & New York: Routledge.

BIONOTE / NOTA BIOGRÁFICA

LAURA MEJÍAS-CLIMENT holds a PhD in Translation by the Universitat Jaume I (UJI) and a Bachelor's degree in Translation and Interpreting by the Universidad Pablo de Olavide (UPO). She teaches at UJI, where she also works as a postdoctoral researcher and member of the research group TRAMA. She holds three Master's Degrees: in Audiovisual Translation, Translation and New Technologies, and Secondary Education and Languages (MAES). She taught at UPO and ISTRAD, as a lecturer for the Master's Degree in AVT (Universidad de Cádiz) and the master programs in Specialized Translation (UIMP). She participates in the Expert Diploma in Video Game Translation and Localization (ISTRAD) as well as the Master's Degree in AVT at Universidad Europea de Valencia. She also taught in the USA thanks to a Fulbright scholarship, and worked as a translation project manager and a professional translator, specialized in the field of audiovisual translation.

LAURA MEJÍAS-CLIMENT es doctora por la Universitat Jaume I (UJI) y licenciada en Traducción e Interpretación por la Universidad Pablo de Olavide.

Trabaja en la UJI como docente e investigadora mediante una beca postdoctoral y forma parte del grupo TRAMA. Ha cursado másteres en Traducción Audiovisual, Traducción y Nuevas Tecnologías y enseñanza secundaria e idiomas (MAES). Además, ha impartido clases en la Universidad Pablo de Olavide y en ISTRAD, como profesora del Máster en TAV (Universidad de Cádiz) y los másteres en Traducción Especializada (Universidad Internacional Menéndez Pelayo). Participa en el Experto en Traducción y Localización de Videojuegos (ISTRAD) y en el Máster en TAV de la Universidad Europea de Valencia. Trabajó en la University of St. Thomas, en Estados Unidos, mediante una beca Fulbright, y reúne experiencia como traductora professional y como gestora de proyectos de traducción, especializada en la traducción audiovisual.