

The 'danmu' phenomenon and media participation: Intercultural understanding and language learning through 'The Ministry of Time'

El fenómeno «danmu» y la participación mediática: Comprensión intercultural y aprendizaje de lenguas a través de «El Ministerio del Tiempo»

Leticia-Tian Zhang is Researcher sponsored by the Chinese Government in the Department of Translation and Language Sciences at Pompeu Fabra University in Barcelona (Spain) (leticatian.zhang@upf.edu) (<https://orcid.org/0000-0003-3905-5933>)

Dr. Daniel Cassany is Associate Professor in the Department of Translation and Language Sciences at the Pompeu Fabra University in Barcelona (Spain) (daniel.cassany@upf.edu) (<https://orcid.org/0000-0003-3494-5531>)

ABSTRACT

While research on Western multimedia platforms, such as YouTube, is prolific and interdisciplinary, Asian portals remain unknown. We explore this field by analyzing the juvenile and intercultural uses of a popular visualization system in Japan and China, known as “danmaku” or “danmu”. This technology inserts dynamic and contextualized comments on a photogram, with several typographical possibilities. Based on a corpus of 1,590 comments on “The Ministry of Time”, collected from a fandom platform with millions of users, we analyzed the topics that arouse the most interest among Chinese fans. We combine content analysis, which incorporates coding and counting techniques of the categories with the most interventions ($n > 16$), with multimodal discourse analysis (TV series, Asian platform and user comments). Results show that the viewers are most interested in the film genre (time travel), the characters, the plot, certain sociocultural contents, and the Spanish language. Their discussions address issues of interculturality, some topics that are taboo in China and the fandom culture in Asia. Our study illustrates the potential of participation, communication, and learning in Asian social media, and constitutes an interesting and innovative contribution to the field of media and digital literacy, with various suggestions to promote intercultural competence with the use of popular culture.

RESUMEN

Mientras la investigación sobre las plataformas multimedia occidentales, como YouTube, es prolífica e interdisciplinaria, los portales asiáticos siguen siendo desconocidos. El presente trabajo explora este campo analizando los usos juveniles e interculturales de un sistema de visualización popular en Japón y China, conocido como «danmaku» o «danmu». Esta tecnología inserta comentarios dinámicos y contextualizados sobre un fotograma, con varias posibilidades tipográficas. Partiendo de un corpus de 1.590 comentarios sobre «El Ministerio del Tiempo», recogidos de una plataforma de «fandom» con millones de seguidores, este artículo analiza los temas que despiertan más interés entre los fans chinos. El análisis de contenido, que incorpora técnicas de «coding and counting» de las categorías con más intervenciones ($n > 16$), se combina con un análisis del discurso multimodal (serie de TV, plataforma asiática y comentarios de usuarios). Los resultados muestran que los espectadores se interesan por el género cinematográfico (viaje del tiempo), los personajes, la trama, determinados contenidos socioculturales y la lengua española. Sus discusiones abordan cuestiones de interculturalidad, algunas cuestiones que son tabú en China y la cultura «fandom» en Asia. El estudio ilustra las potencialidades de participación, comunicación y aprendizaje en las redes sociales asiáticas, y supone una aportación interesante e innovadora al campo de la alfabetización mediática y digital, con varias sugerencias para fomentar la competencia intercultural con el uso de la cultura popular.

KEYWORDS | PALABRAS CLAVE

Social networks, audiovisual media, audience, participatory culture, knowledge building, interculturality, informal learning, discourse analysis.

Redes sociales, medios audiovisuales, audiencia, cultura participativa, construcción de conocimiento, interculturalidad, aprendizaje informal, análisis de discurso.



1. Introduction

1.1. "Danmu / danmaku" and participatory culture

While Western audiences are accessing a growing body of online video content through YouTube, in East Asia, another way of viewing called "danmu" is emerging. This technology uses a collaborative video annotation system (Howard, 2012), which allows viewers to post comments about specific frames. The comments are located on a text bar that runs across the screen from right to left (Figure 1). Each comment is synchronized and embedded in the image for subsequent visualizations. In this way a user can read and respond to previous comments, creating a sort of contextualized chat within the frame itself. Audiences can watch their favorite videos as they read, write and exchange opinions on a single screen, in a contextualized and dynamic instant chat.

This technology was first launched in 2007 on Nico Douga (meaning "Smiley Video"), a Japanese audiovisual platform that is popular among otakus (anime and manga fans). The military term 弹幕 (danmaku; fire curtain) was adopted to creatively describe it because sometimes an excessive number of comments covers the screen to the point of impeding easy viewing (Figure 1). After arriving in China in 2008, the term "danmu" (translated from the original term in Japanese) has become popular to designate both the system and each comment. Almost all video portals in China have now integrated this application; even cinemas stream comments sent from viewers' mobiles via wifi on the big screen. There is such a strong interest in this technology that many users prefer to watch videos with danmu rather than the traditional, danmu-free visualization (Chen, Gao, & Rau, 2017).

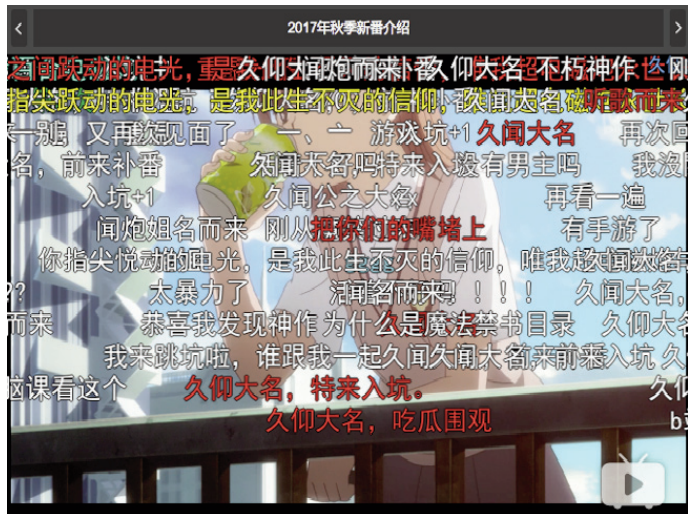


Figure 1. Anime frame with danmu.

Danmu constitutes a novel and illustrative example of participatory culture (Jenkins, 2006), in which young people take a proactive role in rewriting and transforming the audiovisual product in public, creative and powerful way. Comments serve several purposes: 1) to accompany the viewer into a "pseudo-synchronous" feeling (Johnson, 2013) of real-time interaction with other fans; 2) to provide information about the video content (e.g., background music and actors' names, historical background, etc.); 3) to entertain with humorous messages, such as complaints, parodies, and corrections (Hsiao, 2015); and 4) to express youth opinions by creating subcultural content that contributes to an authentic subculture of resistance and confrontation with the mainstream (Zheng, 2016). In the Chinese context, Zhang, Chang, & Chen (2014) have analyzed the novelty of danmu in relation to traditional media, and other studies have described the emergence of "the danmu community". In this sense, we highlight studies which understand it from a subcultural perspective (Chen, Cao, & Wang, 2013), gamification (Xie, He, & Feng, 2014) or parasocial interaction (Ma & Ge, 2014).

Finally, it is important to remember that another collaborative culture practice coexists within danmu platforms: amateur subtitlers or "fansubbers", which translate and upload television series and films to the website (Zhang & Cassany, 2016). Thus, Chinese fans read and publish danmu on frames previously subtitled and translated by another fan group (see bilingual subtitles in figures 3-5). Gee (2005) describes these affiliations as "affinity spaces" because they allow users to connect, interact and share their content in an informal, self-regulated and multimodal learning community (Jenkins, Clinton, Purushotma, Robison, & Weigel, 2009). Several recent studies confirm the potential of amateur subtitling ("fansubbing") for language learning and professional translator training (Orrego-Carmona, 2014), but there is still no research on the learning potential of the interactive practice with danmu.

In this article, we address this issue studying the danmu published by young Chinese followers of "The Ministry of Time", a Spanish television series subtitled by "fansubbers" and streamed on one of the most visited danmu platforms in China.

1.2. “The Ministry of Time” and “ministerics”

“The Ministry of Time” (“MoT”), created by Pablo and Javier Olivares (“Televisión Española”, 2015-2017) is a science fiction television series that narrates time travels of various Spanish officials to preserve history. It has been critically acclaimed as the best Spanish series in history (“El País”, 2017), inspiring the creation of the first Spanish “fanbase” with a level of development equivalent to that of other international fiction (Torregrosa-Carmona & Rodríguez-Gómez, 2017).

According to Rey (2015), this series constitutes a cultural item and a social phenomenon that goes beyond a mere audiovisual product. It proposes an original genre (time travel) that facilitates uchronias or alternative stories, with creative plots (Rueda-Laffond & Coronado-Ruiz, 2016) and frequent cultural and historical references, as well as complicated signs aimed at a niche audience. However, these authors also note that while the plot represents and reinforces the Spanish national identity, it is limited to summoning the traditional imagery (“Las Meninas”, the aqueduct of Segovia, etc.) and academic figures (Lope de Vega, Lazarillo, Lorca, etc.), with a simplified, idealized and conservative view of the past.

In addition, “ministerics” or fans of the series are the real key players behind the series social impact on various physical and digital spaces (Scolari & Estables, 2017). Fan communities organized “ministerial gatherings” on the filming locations, published numerous “fan works” (“fanfic”, “fanart”, “gif”, etc.) and created a number of transmedia narratives (Berlanga, Arjona, & Merino, 2018; Jenkins, 2003) to expand and complement the official production; they even launched campaigns to promote the renewal of the series. According to Estables & Guerrero-Pico (2017), many non-Spanish speaking fans became “ministerics” to learn the language and to follow its attractive time travel narratives.

The main fan activities occur on Twitter during the broadcast of certain episodes, with more than 50,000 tweets and several hashtags among the trending topics of the moment (Torregrosa-Carmona & Rodríguez-Gómez, 2017). Many viewers used a second screen (mobile, tablet, laptop) to share their emotions and opinions about what they were watching, leading to the emergence of a “social television” that enriches the audiovisual experience with the help of social media (Rodríguez-Mateos & Hernández-Pérez, 2015).

This social phenomenon coincides with our interest in investigating the impact of this series on China, where Hispanicism is developing strongly (Lu, 2008) with a growing number of young Spanish language learners. In this audiovisual scheme, and within the framework of participatory culture and fan studies, two research questions emerge: 1) Which aspects (knowledge, attitudes, and practices) arouse the greatest interest among Chinese “ministerics” and why they are relevant; 2) How Chinese fans use the potential of danmu technology to learn about Spanish language and culture.

We believe that “MoT” represents an ideal case study, given that 1) it is successful among international fandom with transmedia universes; 2) it evokes reactions towards the media portrayal of a linguistically and socioculturally distant country; 3) it serves as educational material in literary (Ruiz-Bañuls & Gómez-Trigueros, 2017) and interdisciplinary teaching (Rovira-Collado, Llorens-García, & Fernández-Tarí, 2016).

The article addresses two current issues which have not yet been investigated: 1) The educational possibilities of “danmu”/“danmaku” technology (unknown in Europe) which enables users to comment and share a series by writing and reading dynamically in the frame itself; 2) Chinese fan’s reception of “The Ministry of Time”, within a fan platform with millions of followers, under the official censorship and aiming at learning Spanish language and culture.

2. Materials and methods

2.1. Context

The data analyzed here originate from Bilibili.com, a Chinese platform created in 2009 and inspired by the

Japanese commentary prototype (Figure 2). Anyone can access the platform and view the content, but to publish danmu one must pass a test of 100 questions about fandom and cyber etiquette rules (to avoid ads, spoilers, personal attacks). Bilibili offers anime, comics, and video games, as well as television series and programs, movies, video clips of music and fashion. It also facilitates interaction among its members and encourages fans to show their talent by making fan art, editing fan videos or playing games. As of March 2017, there were 100 million active members, 75% of whom were under the age of 25 (<https://bit.ly/2xMpAyy>).



Figure 2. Bilibili home page.

Figure 3 shows Bilibili's interactive user interface. It features a media player, with a textual space underneath and a multifunctional control panel. Viewers can know how many people are watching the video in real time, the message history (right column) or the published danmu. However, these are always anonymous. They can also customize their viewing experience by adjusting the quantity, transparency, and speed of messages, sorting them by keyword, or hiding them to reduce visual distraction. There is also a separate comment section, with far less participation (Wu, Sang, Zhang, & Huang, 2018), which we have not considered.



Figure 3. Fansub for "The Ministry of Time" on Bilibili

Chinese and Spanish bilingual subtitles and have tens of thousands of danmu.

For our analysis, we chose the 70-minute pilot episode, released in Spain in February 2015 and uploaded to Bilibili in September of the same year. It is a representative sample, given that the first episode tends to attract a broader and more heterogeneous audience, beyond the Hispanic world. Despite the fact that there are eight subsequent uploads of the same episode, with different translations and resolutions (high or low) and around 1,000 danmu for each one, our study focused on the first publication, which contains the most danmu (1,590).

We collected danmu for this publication shortly after 7-15-2017, when foreign content on Bilibili was officially shut down due to the Chinese political censorship. We retrieved comments from the web source code using 'jiji' software (jijidown.com), a powerful tool designed by fans for fans, which enables the download of videos and danmu to recreate offline viewing. It is worth mentioning that the data collected is part of a larger corpus of the first author's doctoral thesis, which aims to investigate the role of danmu in linguistic comprehension and cultural understanding. The fact that the data we analyzed are no longer public does not affect the results or interest of this work, which recreates a technology used in many other series and contexts.

2.2. Corpus

Using labels such as "Spanish" and "TV series", we found the Hispanic products on Bilibili, such as "Angel or Demon", "The Time Between Seams" or "Isabel", among others. Perhaps the most popular is "Grand Hotel", with almost one million views. For "MoT" we found the first two seasons, in addition to the "making of" program "The Ministry Archives", trailers, interviews with actors, etc. All the contents are "fansub", i.e., subtitled by fans; we even found two parallel versions of the series, produced by different fansub communities. Both incorporate

2.3. Methodology

To analyze the danmu, we combined content analysis and discourse analysis. Firstly, we used the “coding and counting” method, to classify the entire danmu corpus by subject and to quantitatively select the most representatives of the interests and reactions of the spectators. Secondly, we proceeded to analyze this selection globally (commentary within the frame, in the context of the series and the fan platform) using the theoretical apparatus of Computer-mediated Discourse Analysis (Herring, 2004), characterized by its linguistic approach and by the adoption of Discourse Analysis techniques to study online interactions. This combination enables the understanding of emerging issues and their statistical relationships, as well as the underlying phenomena behind the digital discourse (ideology, culture, among others).

The first step in the analysis was to identify the most frequently discussed topics among Chinese fans. To do so, we visualized the corpus three times in two weeks, identifying the interventions that refer to the same topic. We established a provisional inclusion criterion: if they constituted more than 1% of the 1,590 danmu we collected (i.e., $n > 16$), we took an item of analysis and registered it for coding. To test the reliability of the technique, we conducted a pilot study focusing on the first 15 minutes of the episode, which resulted in 4 different topics with more than 16 danmu (similar products, main actors, learning and speaking).

We applied the same sampling method to the remaining corpus and obtained a total of 15 topics with 550 danmu (we are unaware of the number of participants because they are anonymous); we discarded 1,040 non-representative danmu, which dealt with issues that did not merit more than 16 comments. Some of the 550 selected danmu coincide in specific frames, discussing their content (e.g., a conversation); others disperse throughout the episode and are updated with some visual stimulus (e.g., an actor), but they are thematically related and have been counted conjointly. Since the original danmu use Chinese, with some interference from Spanish (e.g., character names), we translated the selected danmu into English. The first author is a danmu user and a follower of more videos on the platform, so she is familiar with the proper Chinese register used in this context. If in doubt, she consulted specialized dictionaries, for example, “Moegirlpedia” (an online encyclopedia that compiles and presents knowledge of Chinese and Japanese fandom). In order to verify the quality of the translation, a Spanish-Chinese translator checked the quoted danmu.

We classified all 550 danmu and the 15 topics into five categories using an inductive approach (Table 1). Our analysis was inspired by the work of Torrego & Gutiérrez (2016) on youth tweets posted during the viewing of two films. To reduce subjectivity, the first author coded and translated the doubtful fragments for discussion with the second author. Coding was conducted three times to achieve an agreement between the two researchers. Below we exemplify the categories with representative quotations, explaining the knowledge, attitudes and social practices that are assumed based on the portrayed reality, and the differences that caused these impressions or opinions. In some cases, we illustrate the case with an extract of key sequences, including our translation.

Table 1. List of 15 topics grouped into five categories

Categories	Topics	Number of danmu	Quotes
Film genre (time travel)	Similar products	63	“I cannot resist this topic”.
	Cell phone	42	
	Time doors	34	
Characters	Physical appearance	40	“This is where the lead character in ‘Isabel’ appears hahahaha”
	Face confusion	38	
Plot events	Tampons	54	“The lesbian thing is great”
	Romance	36	
	Sex	50	
Sociocultural content	Velázquez	46	“The Velázquez painting!!!!!!!”
	Greetings	34	
	Crisis	17	
	Stereotype	22	
	Football	21	
Spanish language	Learning	35	“They speak so quickly”
	Speech	18	
Total		550	

3. Analysis and results

The categories that feature the most danmu relate to the sociocultural content of the series as well as the plot, with the same number of comments (140 of the 1,590 danmu; 8.8%). They are followed by the film genre category with 139 danmu (8.7%). With fewer entries, we find the characters category, which feature 78 messages (4.9%), and the Spanish language category with 53 messages (3.3%).

3.1. Film Genre

This film genre has captured the interest of many spectators and time travel fans. They associate the series with similar products, such as “Doctor Who” and its spin-off “Torchwood”, “Warehouse 13”, among others, as well as video games and web serials (literature available only on the web) of historical science fiction. They use East Asian emoticons like “QAQ” (crying), “_(:3)∠_” (lying on the floor) and “_ (▽) _” when they remember related narratives. This discussion contains 63 danmu, and it is the most popular topic in the corpus.

The audience also shows curiosity regarding the use of travel-related artifacts, such as cell phones (42 comments) and time gates (34 comments). There are questions about the telephone network, with messages like “Even the cell phone signal can travel in time? What a pirate technology this is” and “To my knowledge, the signal traveled with the person so that they can use their cell phone”. They also question the logic of doors, for example, “Yes, being able to go back to the past means being able to go to the future, so the series has an error”, even using jargon: “Time and history are nothing more than a form of matter vibrations, with a frequency converter you can travel as you like”.

Meanwhile, other fans adopt a more open attitude (“If you can already travel, stop worrying about the details”), and they enjoy imagining (“Open the door and find me”), I have been expecting you for so long, why don’t you come = = [Asian emoji that denotes disappointment]) or recontextualizing the adventure in Chinese history: “Perhaps you open the door, and you enter the era of the Fourth Prince, hahahaha”. The Fourth Prince, or Yongzheng, is one of the emperors during China’s last dynasty, and the main character of several popular television adaptations, including one featuring time travel.

3.2. Characters

Regarding references to the characters, 40 comments focus on the physical appearance of the main actors. Many viewers recognize the same actors from “Isabel” and “Angel or Demon” and compare their appearance between series; for example, “The dude has not even changed his haircut”... and “He has not even cut his beard. Maybe they filmed both plays at the same time and used the funds for drinking”. It should be



Extract 1. 0:33:49-0:34:18 (Subtitles: What a shame, my God.)

(1) 留过学的就是没有底线

“Those of you who have studied abroad, of course you don't have limits.”

(2) 左边直男癌吗请问关留学什么事了??

“The male chauvinist on the left, is it possible to know how this relates to studying abroad??”

(3) 哈哈，没想到能看见活的“老古董”

“Hahaha, I didn't think I would see a live ‘antiquity’”

(4) 什么叫没有底线？你觉得月经是很羞耻的事情吗？

“What does having no limits mean? Do you think menstruation is something very shameful?”

(5) 女性一个月要经历一次的事情，比受伤普遍多了，有什么不可以谈论的

“This is something that women experience every month, much more frequent than injuries. Why can't it be discussed?”

Figure 4. Tampon scene.

noted that in China, given its sheer size and cinematographic output, it is rare for the same actor to appear in many series. The comparison even extends to some stereotypes: “The protagonist has an American face”, “But it is the prototypical Spanish beard” and “I should say that many Americans have a Spanish face”.

However, for the other half of the audience (38 danmu), the faces seem similar, which causes confusion and hinders understanding of the plot. Thus, when the leading character returns to the past to live with his wife, a danmu asks “But does he realize that he was made a cuckold?” and other contributors correct and accuse him of “face blindness”. This term comes from Chinese fandom and refers to the effect of consuming a lot of anime, in which characters usually have the same facial base and are distinguished only by their garments and hair.

3.3. Plot

Some specific events in the plot prompted numerous interventions. The subcategory with 54 danmu, the second highest, is a heated discussion about a present-day tampon shown to a nineteenth-century character (Figure 4). Its use is not common in China, and it is even less likely for it to appear on television. Thus, many contributors offer insights, sharing their experience and comparing different feminine hygiene products. Meanwhile, other viewers find its mention “incomprehensible” and even “horrible”, which causes considerable displeasure and arouses criticism (Extract 1).

Similarly, we found 31 reactions to a sex scene and 19 reactions to a joke about it. Sex is a taboo subject in China, and it is often censored in the media. Consequently, many danmu show astonishment (“My God, the plot twist”), use vulgarity (“Fuck, it is not even pixelated”) or try to distance themselves from it (“Hahahahaha, I act as if I didn’t understand”, and “I may have seen something I shouldn’t see”). There are also complaints about the personal viewing context, such as “Shit, I do not wear headphones in the subway, and there are people behind me”... and “The sex scene just now embarrassed me at the office watching it at noon”.

Conversely, other fans express their enthusiasm using typical fandom expressions such as “High energy alert” and “Welfare ahead” to indicate a few seconds before that a surprising and welcome scene is about to take place in the plot; some even announce “The day we can see porn on Bilibili is just around the corner!”.

Finally, 36 messages focus on the romance between characters, typical among fans of other fiction. They guess the “official coupling” based on plot details and request more “affectionate episodes”. The most commented relationship is lesbian or its euphemism “Yuri”, a Japanese word meaning lily. The term emerged in Japan in the 1970s and is now widely used in fan communities to refer to female homosexuals (Zheng, 2016). Although some contri-



Extract 2. 0:21:07-0:21:28

- (1) 宫娥?
“Las Meninas?”
- (2) 卧槽! 名画!!
“WTF! Famous painting!!”
- (3) Velazquez 的画!!!!!!
“Velazquez!!!!!! Painting by Velazquez!!!!!!”
- (4) 啊啊啊啊啊!!!! las minas
“Ahhhhh!!!! Las minas”
- (5) 他俩居然正好在画最后门口画家的自画像位置
“Surprisingly both of them happen to be in the background of the painting, where the self-portrait of the painter.”
- (6) 那个不是画师把自己手画进去的作品么?
“Isn't that the piece in which the painter drew his own hand?”

Figure 5. Las Meninas scene.

butors say they are not prepared to see a kiss between two women, others point out that “I come to see the lily” or that they are excited: “Damn you! Leave the girl alone and allow me”.

Along the same lines, we also found messages like “yoo” or “yoooooooooooooooooooo”. This exclamation became popular thanks to a YouTube video (“Don’t Watch An Anime Called Boku”) and spread throughout Chinese fandom to express the excitement of watching homosexual scenes. Some people are unaware of it and criticize its use, wrongly stating that it corresponds to the first person pronoun in Spanish: “Oh, my God, don’t those who said yoooooooooooo know that yo means I (in Spanish)?”.

3.4. Sociocultural content

A substantial group of comments goes beyond the plot and recognizes the sociocultural references incorporated in the series, decoding the signs for the audience. For example, when two contemporary characters attend the creation of *Las Meninas* (Figure 5), 16 messages recognize that it is the making of a masterpiece. As Extract 2 illustrates, they talk about the name of the painting and its painter, in Chinese and Spanish (sometimes incorrectly spelled), and provide information to understand the historical background. Later on, Velázquez appears, and 30 messages emerge laughing at the plot, confirming their suspicions (“Fuck it really is him”; “I was right, hahahaha”) and expressing more interest towards the series (“Hahahahahaha, I have decided to follow the series”).

Secondly, participants talk about Spaniards and their customs. Different greeting styles in different historical periods cause amusement (34 danmu), with various reactions such as the abbreviation “h h h h” (from “hahahaha”, laughter in Chinese), typical fandom expressions such as “233” (or “23333333”; laughing out loud) or using ideograms. Among these, some indicate the corresponding social etiquette, such as “hand-kissing” and “kiss on the cheek”, and contrast them with the Asian environment, which prefers another type of greeting: “There is no one who gives a handshake”.

Likewise, a conversation about the so-called Spanish style (“But what’s the plan?”, – “We are Spanish, aren’t we? Improvise”) produced 22 danmu. Aside from the laughter in different linguistic codes, some viewers are confused and ask for clarification, such as “True or false” or “Hahahaha, what the hell is this?”; but other fans understand the irony and confirm it: “This sarcasm is perfect” and “The Spanish national character”.

Finally, fans are also aware of the news mentioned in the series. For example, from a newspaper headline “Atleti Champion”, 21 football fans identify themselves (e.g., “I am merengue”; “That merengue don’t you leave hahaha”) with cheers of encouragement, such as “Visca el Barça” and “Aupa Atleti!”.

The remaining 17 interventions comment about a dialogue between the main characters (“The world was ours... Now... are we sovereign or do we pay homage to someone?” – “Yes, to the European Central Bank”). Some fans empathize with the situation, like “Hahahahahahaha, sadness of the old-time worldwide hegemony”. However, more messages refer to the economic crisis, like “Hahahahahahaha who allowed you to have so many debts” and “The PIGS, hahaha”, and they remember sociopolitical news: “United Kingdom has left Europe, hahahahaha”.

3.5. Spanish language

The last category consists of 53 language-related comments. 35 focus on learning Spanish as a foreign language, which constitutes a reason for many viewers to watch the series. They consider the series to be “one of the best materials for learning Spanish”, and it is common to find messages such as “I have come to study” or “I also go over my Spanish by watching the series”.

The conversation between learners strikes other participants as strange (“Everyone who watches the series learns Spanish. Is the series that unpopular?”). In response to them, many people point out that language is irrelevant to them, even though they are now more interested: “I do not study Spanish either, and I am watching the Spanish series for the first time, but now I kind of feel like learning”. However, the given answers are negative: “Don’t learn it, it will ruin you”; – “Can I master Spanish by watching series?” “No”.

Another linguistic issue that raises curiosity is the spoken language (18 comments). While some are surprised by the speed of the conversation, such as “Damn, this girl, speak at a slower pace please”, others point out the normality of the reaction: “The girl’s speed is exactly that of the listening comprehension tests” and “That’s why they say never argue with a Spanish woman”. We also found a brief discussion in grammatical terms: – “Wow, Spanish sounds like labulalabulalabula” – “Because la is the female form of the definite article, and all the verbs end in R” – “Because in Spanish all nouns must come after el and la, and the direct and indirect objects also use la”.

4. Discussion and conclusions

The above results answer our two research questions. First of all, these topics interest Chinese “ministers” the most: 1) Doubts or misunderstandings about the series (plot, actors, cultural references); 2) Intercultural and socio-linguistic differences between Spain and China (stereotypes, speech speed, courtesy treatments, greetings); 3) Taboo issues in China such as sex (erotic scenes, public kissing, homosexuality), relationships (infidelities) or certain products (tampons). The longest exchanges occur because of disagreement among the fans, causing the danmu to extend beyond the corresponding frames. In these instances, the interest in the comment thread is greater than in the series itself.

Secondly, fans use the potential of danmu to “appropriate” the series in their fandom environment. Using danmu, they interpret the series from their ethos (Jenkins, 2010), helping less informed fans (integrating newcomers). They also emphasize the interesting points for a young Chinese audience that has not left the country and has little practical information about everyday life in Spain. They use the possibilities of the commentary on each frame and their shared knowledge of series and fandom to create ironies, opinions and a sub-culture that is an alternative to mainstream, avoiding censorship.

They write in colloquial Chinese, unusual in public communication, with short sentences, vulgar expressions, specific signs in their fandom, jumping into Spanish when necessary, reacting to a scene or another comment, creating brief exchanges. They use danmu as a contextualized chat, with deictic references to the photogram (“They are at the bottom of the picture”, “That was not the piece”) or to other danmu (“That merengue do not you leave”). We also observe

Extensive literature corroborates the fact that subtitled audiovisual materials (television series and films) foster foreign language learning. Several experimental studies have inquired into the benefits of interlinguistic or standard subtitles, which translate the original into the viewer’s native language, and intralinguistic subtitles, that is, transcriptions of the original soundtrack. Our study explores an even more complex new environment of bilingual, fan-made subtitles and free, dynamic, overlaid commentary.

other features of the quasi-synchronous digital conversation (Herring & Androutsopoulos, 2015), such as the separation of adjacent pairs, the “addressivity” (“the male chauvinist on the left”). Undoubtedly, danmu is particular in that it takes advantage of contextual information (photograms of the series) and the shared context (the fan platform) to facilitate commenting, that can be much more direct, brief and well placed.

Extensive literature corroborates the fact that subtitled audiovisual materials (television series and films) foster foreign language learning (Caimi, 2013). Several experimental studies have inquired into the benefits of interlinguistic or standard subtitles, which translate the original into the viewer’s native language (Ghia, 2012), and intralinguistic subtitles, that is, transcriptions of the original soundtrack (Vanderplank, 2010). Our study explores an even more complex new environment of bilingual, fan-made subtitles and free, dynamic, overlaid commentary.

In a multimodal and informal context, Chinese youth construct meanings through media representation, confirming or rejecting their previous knowledge and stereotypes about Spain (Nikitina, 2017). Not only do they “respond to” or “understand”, but they carry out complex activities such as comparing and identifying socio-cultural similarities and differences, recontextualizing the plot in China, and even building collective intelligence about the projected reality. These practices provide good examples for promoting intercultural competence (Yang & Fleming, 2013; Benson, 2015). The fact that danmu are anonymous also facilitates collaboration, because it inhibits the responsibility to give correct answers or to be concerned about one’s personal image before the group.

Beyond illustrating the potential for participation, communication, and learning, our study also offers an

interesting and innovative contribution to the field of media and digital literacy. Popular culture products, such as “The Ministry of Time”, are not simply entertainment, but embody cultures, values and shared knowledge of the other, eliciting reactions from adolescents (Torrego & Gutiérrez, 2016; Ugalde, Martínez-de-Morentín, & Medrano, 2017). As Tuzel and Hobbs (2017) point out, social networks and other virtual environments facilitate intergroup dialogue, which helps cultivate intellectual curiosity and develop a civic voice along with learning about people and cultures from around the world.

Finally, there are three limitations to this work. First, it uses a single episode of a series, which is insufficient to make generalizations about danmu uses. Despite that, we have pointed out an important function, that is, as a space for discussion and intercultural and language learning. We hope to contrast these observations and the danmu categorization undertaken with more far-reaching studies in the future. It will enable us to verify whether themes and categories are repeated (and whether this analysis is then sufficiently saturated and valid).

Secondly, like other papers on new digital genres, we run the risk of subjectively inferring the meaning of short, anonymous messages from multiple authors such as danmu. In order to gain an emic understanding of the emerging and collaborative practices developed by young people, we hope to triangulate our interpretation through ethnographic interviews with danmu authors on Bilibili, studying their viewpoints and their appropriation of technology in relation to language and cultural learning. It will also be suggestive to see whether skills acquired in a leisure context can be recontextualized, i.e., dissected, enriched and reused in authentic settings, leading to “seamless” learning (Wong, Sing-Chai, & Poh-Aw, 2017).

Furthermore, we have not addressed the barriers to the pedagogical use of this technology: 1) The visual disarray that it creates for some users; 2) The love-hate attitude of educators towards mass media, popular culture, and digital media (Tuzel & Hobbs, 2017); 3) The inadvertent consequences of media globalization (reinforcing/-breaking national stereotypes, highlighting social inequality, and reproducing ideological conflict) that urge the conscious and reflective participation of teachers and other social actors in digital literacy.

Funding Agency

Research supported by the Chinese Scholarship Council (CSC n° 201608390036), and included in the “Defandom” project, financed by the Queen Sophia Center for Adolescence and Youth, and in the “ICUDEL” project, financed by the Spanish Ministry of Economy and Competitiveness EDU2014-57677-C2-1-R.

References

- Benson, P. (2015). Commenting to learn: Evidence of language and intercultural learning in comments on YouTube videos. *Language Learning and Technology*, 19(3), 88-105. <https://bit.ly/2nfD7uB>
- Berlanga, I., Arjona, J., & Merino, A. (2018). Semiotica digital en la serie de ficción ‘El Ministerio del Tiempo’. *Signa*, 27, 233-262. <https://doi.org/10.5944/signa.vol27.2018.18413>
- Caimi, A. (2013). Subtitles and language learning. In Y. Gambier, & L.V. Doorslaer (Eds.), *Handbook of Translation Studies* (v. 4) (pp. 167-173). Amsterdam, Philadelphia: John Benjamins. <https://doi.org/10.1075/hts.4.sub2>
- Chen, Y., Cao, S.Q., & Wang, T. (2013). Toushi danmu wangzhan yu danmu zu: Vige qingnian yawenhua de shijiao. *Qingnian tansuo*, 6, 19-24. <https://doi.org/10.13583/j.cnki.issn1004-3780.2013.06.006>
- Chen, Y., Gao, Q., & Rau, P.L.P. (2017). Watching a movie alone yet together: understanding reasons for watching Danmaku videos. *International Journal of Human Computer Interaction*, 33(9), 731-743. <http://doi.org/10.1080/10447318.2017.1282187>
- El País (Ed.) (2017). ‘El Ministerio del Tiempo’, mejor serie española de la historia según la prensa especializada, 2017-12-05. <https://bit.ly/2Ma6Q62>
- Estables, M.J., & Guerrero-Pico, M.D.M. (2017). Los fans como traductores y distribuidores de contenido en el ecosistema transmedia: Promocionando series de televisión españolas en el extranjero. In S. Torrado Morales, G. Rodenas-Cantero, & J.G. Ferreras-Rodríguez (Eds.), *Territorios transmedia y narrativas audiovisuales* (pp.59-73). Barcelona: UOC.
- Gee, J. (2005). Semiotic social spaces and affinity space. In D. Barton, & K. Tusting (Eds.), *Beyond communities of practice: Language, power, and social context* (pp. 214-232). Cambridge: Cambridge University Press. <https://doi.org/10.1017/CBO9780511610554.012>
- Ghia, E. (2012). *Subtitling matters: New perspectives on subtitling and foreign language learning*. Oxford, New York: Peter Lang. <https://doi.org/10.3726/978-3-0353-0390-2>
- Herring, S.C. (2004). Computer-mediated discourse analysis: An approach to researching online behavior. In S. A. Barab, R. Kling, & J.H. Gray (Eds.), *Designing for virtual communities in the service of learning* (pp. 338-376). New York: Cambridge University Press. <https://doi.org/10.1017/CBO9780511805080.016>
- Herring, S.C., & Androutsopoulos, J. (2015). Computer-mediated discourse 2.0. In D. Tannen, H.E. Hamilton & D. Schiffrin (Eds.), *The handbook of discourse analysis* (pp. 127-151). Malden: Wiley Blackwell. <https://doi.org/10.1017/CBO9780511805080.016>
- Howard, C.D. (2012). *Higher order thinking in collaborative video annotations: Investigating discourse modeling and the staggering of participation (doctoral dissertation)*. ProQuest Dissertations and Theses database. (Accession Order No. 3550821).

- Hsiao, C. (2015). The verbal art of tucao and face-threatening acts in danmu screening. *Chinese Language and Discourse*, 6(2), 109-132. <https://doi.org/10.1075/cld.6.2.01hs>
- Jenkins, H. (2003). *Transmedia storytelling: Moving characters from books to films to video games can make them stronger and more compelling*. <https://bit.ly/22v1yRK>
- Jenkins, H. (2006). *Convergence culture: Where old and new media collide*. New York: New York University Press.
- Jenkins, H. (2010). Afterword. In M. Knobel, & C. Lankshear (Eds.), *DIY media: Creating, sharing and learning with new technologies* (pp. 231-254). New York: Peter Lang.
- Jenkins, H., Clinton, K., Purushotma, R., Robinson, A.J., & Weigel, M. (2009). *Confronting the challenges of participatory culture: Media education for the 21 century*. Cambridge: The MIT Press.
- Johnson, D. (2013). Polyphonic/pseudo-synchronic: animated writing in the comment feed of nicovideo. *Japanese Studies*, 33(3), 297-313. <https://doi.org/10.1080/10371397.2013.859982>
- Lu, J. (2008). Distancia interlingüística: partida de reflexiones metodológicas del español en el contexto chino. *México y la Cuenca del Pacífico*, 11(32), 45-56. <https://bit.ly/2PnrqP5>
- Ma, Z.H. & Ge, J.P. (2014). Riben donghua de danmu pinglun fenxi: yizhong zhun shehui jiaowang de shijiao. *Guoji xinwen jie*, 36(8), 116-130. <https://doi.org/10.13495/j.cnki.cjic.2014.08.008>
- Nikitina, L. (2017). Language learners' representations of Spanish-speaking countries: How can they inform language pedagogy? *Signos*, 50(93), 50-70. <http://doi.org/10.4067/S0718-09342017000100003>
- Orrego-Carmona, D. (2014). Using non-professional subtitling platforms for translator training. *Rivista Internazionale di Tecnica della Traduzione*, 15, 129-144. <https://bit.ly/2vj5Qci>
- Rey, A. (2015). La puerta de los seriéfilos. In C. Cascajosa (Ed.), *Dentro de 'El Ministerio del Tiempo'* (pp. 3-6). Alcalá de Henares: Léeme Libros.
- Rodríguez-Mateos, D., & Hernández-Pérez, T. (2015). Televisión social en series de ficción y nuevos roles del documentalista audiovisual: El caso de 'El Ministerio del Tiempo'. *Index.Comunicación*, 5(3), 95-120. (<https://bit.ly/2Kw3966>).
- Rovira-Collado, J., Llorens-García, R.F., & Fernández-Tarí, S. (2016). Una propuesta transmedia para la educación literaria: el Ministerio del Tiempo. In M.T. Tortosa-Ybáñez, S. Grau-Company, & J.D. Álvarez-Teruel (Eds.). *XIV Jornades de Xarxes d'Investigació en Docència Universitària. Investigació, innovació i ensenyament universitari: enfocaments pluridisciplinaris* (pp. 569-584). Alicante: Universidad de Alicante.
- Rueda-Laffond, J.C., & Coronado-Ruiz, C. (2016). Historical science fiction: From television memory to transmedia memory in 'El Ministerio del Tiempo'. *Journal of Spanish Cultural Studies*, 17(1), 87-101. <http://doi.org/10.1080/14636204.2015.1135601>
- Ruiz-Bañuls, M., & Gómez-Trigueros, I. M. (2017). Herramientas innovadoras para futuros docentes de enseñanza Secundaria: El Ministerio del Tiempo como herramienta metodológica interdisciplinar. In J.M. Antolí-Martínez, J.E. Blasco-Mira, A. Lledó-Carreres, N. Pellín-Buades, & R. Roig-Vila (Eds.), *Redes colaborativas en torno a la docencia universitaria* (pp. 554-562). Alicante: Universidad de Alicante.
- Scolari, C., & Estables, M. (2017). El Ministerio Transmedia. Expansiones narrativas y culturas participativas. *Palabra Clave*, 20(4), 1008-41. <http://doi.org/10.5294/pacla.2017.20.4.7>
- Torrego, A. & Gutiérrez, A. (2016). Ver y tuitear: reacciones de los jóvenes ante la representación mediática de la resistencia. [Watching and tweeting: youngsters' responses to media representations of resistance]. *Comunicar*, 47(XXIV), 9-17. <https://doi.org/10.3916/C47-2016-01>
- Torregrosa-Carmona, J.F., & Rodríguez-Gómez, E. (2017). Comunidades de fans y ficción televisiva. Estudio de caso: El Ministerio del Tiempo (TVE). *El Profesional de la Información*, 26(6), 1139-1148. <https://doi.org/10.3145/epi.2017.nov.13>
- Tuzel, S., & Hobbs, R. (2017). El uso de las redes sociales y la cultura popular para una mejor comprensión intercultural. [The use of social media and popular culture to advance cross-cultural understanding]. *Comunicar*, 51(XXV), 63-72. <https://doi.org/10.3916/C51-2017-06>
- Ugalde, L., Martínez-de-Morentín, J., & Medrano, C. (2017). Pautas de consumo televisivo en adolescentes de la era digital: un estudio transcultural. [Adolescents' TV viewing patterns in the digital era: A cross-cultural study]. *Comunicar*, 50(XXV), 67-76. <https://doi.org/10.3916/C50-2017-06>
- Vanderplank, R. (2010). Déjà vu? A decade of research on language laboratories, television and video in language learning. *Language Teaching*, 43(1), 1-37. <https://doi.org/10.1017/S0261444809990267>
- Wong, L., Sing-Chai, C. & Poh-Aw, G. (2017). Aprendizaje de idiomas «sin costuras»: Aprendizaje de segundas lenguas y redes sociales. [Seamless language learning: Second language learning with social media]. *Comunicar*, 50(XXV), 9-21. <https://doi.org/10.3916/C50-2017-01>
- Wu, Q., Sang, Y., Zhang, S., & Huang, Y. (2018). Danmaku vs. forum comments: understanding user participation and knowledge sharing in online videos. In A. Forte, M. Prilla, & A. Vivacqua, (Eds.), *Proceedings of the 2018 ACM Conference on Supporting Groupwork* (pp. 209-218). New York: AMC. <https://doi.org/10.1145/3148330.3148344>
- Xie, M., He, J., & Feng, Y.L. (2014). Dazhong chuanbo youxi lilun shijiao xia de danmu shipin yanjiu. *Xinwen jie*, 2, 37-40. <https://doi.org/10.15897/j.cnki.cn51-1046/g2.2014.02.009>
- Yang, L.H., & Fleming, M. (2013). How Chinese college students make sense of foreign films and TV series: Implications for the development of intercultural communicative competence in ELT. *Language Learning Journal*, 41(3), 297-310. <https://doi.org/10.1080/09571736.2013.836347>
- Zhang, C., Chang, X., & Chen, Y. (2014). Qianxi danmu dui dazhong chuanbo moshi de gexin yu yingxiang. *Dongnan Chuanbo*, 12, 12-14. <https://doi.org/10.13556/j.cnki.dncb.cn35-1274/j.2014.12.004>
- Zhang, L.T., & Cassany, D. (2016). Fansubbing del español al chino: organización, roles y normas en la escritura colaborativa. *BiD*, 37, 1-12. <http://doi.org/10.1344/BiD2016.37.16>
- Zheng, X. (2016). *Borderless fandom and contemporary popular cultural scene in Chinese cyberspace (doctoral dissertation)*. University of Washington, Seattle. <https://bit.ly/2vENxaQ>