

What you see and what you hear: experiencing a translated Chinese food documentary

Łukasz Bogucki ^a, Marcin Michoń ^b and Mikołaj Deckert ^c

^aDepartment of Translation Studies and Language Pedagogy, Institute of English Studies, University of Lodz, Lodz, Poland; ^bDepartment of German Linguistics, Institute of German Studies, University of Lodz, Lodz, Poland; ^cDepartment of Translation Studies and Language Pedagogy, Institute of English Studies, University of Lodz, Lodz, Poland

ABSTRACT

The paper discusses an experiment ($N=81$) on how audiovisual translation consumption configurations shape the viewing experience. The configurations we tested used either the original Mandarin audio that the viewers did not understand, or employed English dubbing that the viewers were able to follow. Importantly, in both these experimental conditions subtitles in the viewers' L1 (Polish) were provided along with the audio. We sought to establish what effects the setup has on viewer experience across three facets: cognitive load, comprehension and immersion. These questions are tested against a Chinese culinary documentary – 'Flavorful Origins' (2019) available from Netflix. While English dubbing could here be aiding comprehension that otherwise draws on subtitling only, it could be affecting immersion by introducing an aural component inconsistent with the film's conspicuous Chinese cultural context constructed multimodally. Immersion could then – conversely – be reinforced by access to the uninterpretable original Mandarin track. The effect that either reception configuration has on cognitive load analogously remains to be explored. As earlier studies contrasted revoicing and subtitling, we integrate self-reports, a performance measure and verbal input to offer novel user-centred insights, with a Chinese food documentary as a testing ground.

ARTICLE HISTORY

Received 8 March 2023
Accepted 25 September 2024

KEYWORDS

Viewer experience; subtitling; dubbing; food documentary; Chinese film; audiovisual translation and media accessibility

1. Introduction

In this paper, we discuss a reception study that attempts to tease out some of the links between processing the target text visually and auditorily. However, rather than comparing the experience of viewers engaging with a subtitled vs. revoiced film we are particularly interested in the implications of the choice of language for the audio layer – an option that is offered to viewers, for instance on streaming platforms. We specifically examine the case of a Mandarin Chinese show to see in what respects having access to

CONTACT Mikołaj Deckert  mikolaj.deckert@uni.lodz.pl

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the original audio track in a language the audience do not speak – alongside subtitles in their mother tongue – could be shaping their reception. As viewers in the experiment are invariably provided with subtitles in their L1 ensuring a level of comprehension, we sought to establish if the Mandarin input is going to enhance immersion, perhaps at the expense of comprehension or ease of processing. From a complementary perspective, we test whether access to English audio input in the case of a film conspicuously set in a non-English culture aids comprehension and decreases cognitive load but affects immersion.

2. A Chinese – Polish film perspective

In the Filmweb database of streaming (video on demand – VOD) platforms available in Poland¹, in the last week of May 2022, there were 4220 Chinese film productions and co-productions as well as 808 film series.² The list of entertainment shows available on Polish VOD platforms³ does not include any productions with which the People's Republic of China (PRC) was involved.

The 100 most-watched films in Poland made with the participation of Chinese filmmakers or producers are co-productions only. Most films in this group are co-produced with the USA (80), Hong Kong (23), the UK (15), Canada (18), France (13), Japan (10), Germany (7), Australia (5) and Taiwan (5). The most-watched Chinese co-productions are *Iron Man 3* (Gang Tie Xia 3, 2013) directed by Shane Black, *Once Upon a Time ... in Hollywood* (好莱坞往事, 2014) directed by Quentin Tarantino and *Fury* (狂怒, 2014) directed by David Ayer. The most popular film by a Chinese director is *Hero* (英雄, Ying Xiong, 2002) directed by Yimou Zhang from a screenplay by Feng Li, Yimou Zhang and Bin Wang.

The Polish viewer is a beneficiary of the PRC's financial and artistic involvement in the productions of international cinema, mainly from the USA, with a broadly universal message, referring mostly to popular culture. However, films co-produced by the PRC and incorporating Chinese culture also visibly attract the attention of the Polish audience.

Among the series (shows) listed by Filmweb, *Meteor Garden* (流星花园, Liu Xing Hua Yuan, 2018) offered by Netflix seems to be the most popular title. In the list of popular series, there are many which were made with the involvement of Chinese producers and filmmakers, including nature documentaries such as *Seven Worlds, One Planet* (2019) produced by the BBC with the participation of Sir David Attenborough.

We mention this at the outset to help the readers realise that similar productions are currently the most important audiovisual items offered to Polish viewers by the Chinese film industry. Chinese productions and co-productions released in Poland are mostly characterised by a universal or culturally underspecified message.

2.1. Chinese-to-Polish translation?

The problem of translating audiovisual material from Chinese into Polish has not yet been the subject of extensive translational or sinological studies. This state of affairs results from the structure of the relevant translation workflow. A common practice in the Polish AVT landscape is that the movies originating from the PRC reach the

distributors in Poland accompanied by a matching English script. With English functioning as the pivot language, service providers do not generally offer direct Chinese-to-Polish screen translation or it has to be considered a very narrow market margin. This is mainly due to the satisfactory quality of translation, which – based on a well-prepared Chinese-to-English script – is skilfully adapted also to the material with a Chinese soundtrack. The economic aspect has also been important in shaping the current practices. In view of the small number of Chinese translators in Poland, commissioning translation from a Chinese script would be much more costly than employing audiovisual translators for English as a pivot language. Moreover, translating directly from Chinese would also entail more difficulties in the revision process. In this way, Chinese productions expand the already significant market for English-language audiovisual translation.

3. Reception studies in AVT

As far as our study's conceptual-methodological orientation goes, it is pertinent to mention that the interest in studying the reception of translations was mainly brought about by Descriptive Translation Studies (Toury, 1995). Previously, translated texts had been analysed from a linguistic point of view, with little regard to either the context or the target culture. The inception of empirical research offered a far more comprehensive outlook on the nature of translation. However, the main rationale behind reception studies, whether in AVT or translation studies in general, can already be found in one of the four approaches to translation quality assessment put forward in House's (1977) classic work. She distinguishes between mentalist views (anecdotal and subjective approaches), response-oriented psycholinguistic approaches, text-based approaches, and functional-pragmatic ones (House, 1977, pp. 197–200). The second type focuses on “the manner in which the receptors of the translated text respond to it” (House, 1977, 197). While it is based on Nida's (1964) seminal concepts of ‘dynamic equivalence’ and ‘equivalent effect’, at its core it stems from the idea that all translation is done for an audience, and therefore translation quality should be measured against what the audience think of the end product. Audience studies has rapidly become a research area in its own right (McQuail, 1997; Sullivan, 2013). Media audiences (including AVT audiences) are heterogeneous, while “media consumption happens [...] on an individual basis” (Di Giovanni, 2020, p. 397). Therefore, to bring back House's four approaches, mentalist views should accompany response-oriented research, to add an individual perspective to quantitative studies.

When it comes to the role of the audience, accessibility in the sensory sense (cf. e.g. Greco & Jankowska, 2020) can serve as a prototypical case within the broader paradigm of providing access to audiences where lingua-cultural incompatibility would be just one type.⁴ The audiences for whom sensorily-grounded accessibility is ensured have limited access to the polysemiotic audiovisual text, and therefore require the information present in the semiotic channels that they are prevented from accessing, to be relayed via the channels that are accessible to them. Thus, unlike in interlingual audiovisual translation, for instance, subtitling, a large amount of the information relayed via the semiotic channels of the audiovisual text is subject to interpretation by the audiovisual translator – this

interpretation can only be successful as long as the characteristics of the (vision/hearing-impaired) audience are brought to the equation. Reception studies in media accessibility involve the target audiences. For instance, the purpose of Pear Tree Project (Mazur & Chmiel 2012) was to investigate the perception of visual stimuli and potential differences in perception patterns across Europe. The study involved target audiences from 11 countries speaking a total of 12 different languages.

Two decades ago, when the volume of research into audiovisual translation was already significant, though the name was not household at the time, Yves Gambier remarked that “[v]ery few studies have dealt with the issue of reception in screen translation” (Gambier, 2003, p. 184). Indeed, reception studies in AVT are the preserve of recent works, especially due to technological affordances, for example as regards eye-tracking (Kruger et al., 2014; Szarkowska & Gerber-Morón, 2018) and some first attempts at utilising biometric indicators such as heart rate (Ramos Caro, 2015). However, as early as four years before the publication of Gambier’s text, de Linde and Kay already proposed a taxonomy of methods to study the reception of subtitling, including surveys, semi-controlled and controlled experiments (De Linde & Kay, 1999, p. 35). Classic qualitative, quantitative and mixed research methods (interviews, questionnaires or focus groups) remain as popular as ever, despite well-documented disadvantages regarding data collection, objectivity, researcher bias, etc. (see Litosseliti, 2018; Podesva & Sharma, 2014).

A recent text by Orrego-Carmona (2019) lists prospective research avenues within audiovisual translation reception. The inventory is new, but the pace of development of audiovisual translation studies is so rapid that many items on the list seem to have progressed from the ‘future’ category to the ‘current’ one. Orrego-Carmona (2019, p. 378) enumerates the following:

- shift of focus from subtitling to other AVT modalities;
- new variables, such as participants’ age or exposure to a certain modality;
- dissonance between audience preferences and their behaviour;
- knowledge of the original language as a relevant variable;
- use of big data, e.g. analyses of social media platforms;
- use of advanced methods such as machine learning and data mining;
- analysing the amount of cognitive effort involved in processing a translated audiovisual text.

On balance, whether researched traditionally (e.g. with the help of questionnaires) or by means of high-tech methods, audience reception is a key factor contributing to the development of audiovisual translation studies. In today’s reality, AVT viewers are often consumers, so insight into their preferences can at the same time inform the process of creating audiovisual entertainment products.

Some of the specific findings from reception-centred research to date can help contextualise the current experiment. In a study comparing dubbing and subtitling versions of the same audiovisual text, Bairstow and Lavour (2012) found that dubbing provided optimal comprehension overall, but subtitling was not far behind. Perego et al. (2010) reported that the audience’s enjoyment and appreciation of audiovisual productions are similar in the case of dubbing and subtitling, but subtitling makes it easier to

“remember face-name associations and specific expressions of dialogues” (Perego et al., 2010, p. 8). Subtitling is widely regarded as superior to dubbing in terms of educational potential, in particular when it comes to language acquisition (Koolstra et al., 1997); the *Study on the use of subtitling*, done in 2011 by the European Commission, concluded that this AVT modality fosters language proficiency, provides motivation for language learning and tends to be preferable to dubbing in countries where foreign languages are widely spoken (Almeida & Costa, 2014, p. 1237). Alongside research that adopts a contrastive perspective on the choice of AVT mode, there is work that deals with specific issues in the reception of dubbing such as humour (Chiaro, 2004), cultural references (Antonini, 2007), Anglicisms and dubbese (Antonini, 2008; Bucaria, 2008), swearing (Pavesi & Zamora, 2022) or research that surveys several qualitatively different parameters including the implementation of domestication or censorship as well as the technical dimension (Ameri et al., 2018; Ameri & Khoshsaligheh, 2018). Eye-tracking has also been implemented (Di Giovanni & Romero-Fresco, 2019; Romero-Fresco, 2020b) making it possible to identify dubbing viewing patterns, among other things. By extension, Yuan and Jin (2023) raise the increasingly relevant question of machine translation efficiency in audiovisuals, researching automated dubbing in China. The current study aspires to add to that body of research by examining some of the so far unexplored translation reception configurations.

4. The study

4.1. Objective and research questions

The paper’s overarching question is about the influence that the choice between a film’s audio versions – employing different languages and as a consequence different voice actors – can have on the viewing experience. To shed light on reception, we examine three of its facets – cognitive load, comprehension as well as immersion. In doing so, we rely on what Orero et al. (2018, p. 133) categorise as ‘offline measures’. The authors observe in their position paper on AVT experimental research that these measures “include self-reported cognitive effort scales, presence or transportation scales, comprehension or retention questionnaires, narrative reports, interviews or focus groups” and they “are commonly post-hoc measures used directly after a participant has been exposed to a text” (Orero et al. 2018: 113). We also follow the recommendation voiced in the paper that “(w)here possible, it is advisable to use previously validated instruments or questionnaires. Such instruments can be modified if required and justified.” To that end we adopted indicators (for cognitive load), a performance measure (for comprehension) and a psychometric instrument (for immersion) that have been used in previous peer-reviewed studies on subtitling (Kruger et al., 2014; Szarkowska & Gerber-Morón, 2018; Perego et al., 2015; Szarkowska & Gerber-Morón, 2018; cf. Sections 5.1. and 5.2), and developed specifically with user studies in mind (Rigby et al., 2019; cf. Section 5.3.). The three main research questions (RQ 1-3) that the present paper seeks to answer are formulated below.

First, we will test how cognitive load is influenced by alternating the audio component (RQ1). It could be hypothesised that the audio input available in the English condition

will have a positive impact as it can aid processing by supplementing the visual input for the viewers who have a high command of English but speak no Mandarin (cf. Section 4.2.). Conversely, it could be argued that in the case of the Mandarin condition, the audio input will not be receiving the attentional resources that English input will receive – given that the viewers are not able to understand the Mandarin language. In that formulation, a smaller amount of interpretable stimuli would generally entail smaller effort.

Second, we seek to ascertain if comprehension is positively influenced in the case of English, as opposed to Mandarin, audio track (RQ2). Indeed, when it comes to comprehension we could anticipate the relationship between experimental variables to be rather straightforward. Given that none of our participants reported having any command of Mandarin and they were all advanced L2 users of English, the extra audio input in the English condition could benefit comprehension. Still, a viable line of reasoning, linking back to what was pointed out with respect to cognitive load, is that once viewers realise they are not able to retrieve much information from the Mandarin audio track, they are going to allocate less attention to that channel. Those ‘spare’ resources could then be reallocated to subtitles, resulting in deeper processing and better comprehension.

Finally, it remains to be seen whether immersion is traceably shaped (RQ3). It might be anticipated that the Mandarin condition would be more conducive to immersion than the English condition. One way to motivate such a hypothesis is that the Mandarin audio is congruent with the film’s setting and characters, as accessed by the receptors visually. This semiotic cross-feeding could be resulting in a fuller – more immersive – experience.

Quantitative data obtained for cognitive load, comprehension and immersion will be supplemented by qualitative input as the participants were provided with the opportunity to share any feedback they might have had on the viewing experience or on the study itself. We intended this part of the questionnaire to be maximally unconstrained and therefore participants were not required to provide any verbal input in the first place, and no specific questions were asked since those could guide respondents as to what parts of the experience were likely to be more relevant than others. As a result, we obtained insights into some facets of the viewing experience that we might not have expected to draw participants’ attention. Also, participants commented on facets that they found to be particularly prominent, or that they felt most emotional about. On the other hand, this entailed that only a portion of participants chose to provide input, which is informative per se but also affects the representativeness of results in this component.

4.2. Participants, materials and procedure

Replies from a total of 81 participants are considered here – all of whom are native speakers of Polish, 64 are female, 16 are male and 1 is non-binary. These were BA-level university students from three Polish higher education institutions, with backgrounds in English philology/applied linguistics. It should be noted that the participants’ (high) English competence is an important consideration in the study. Similarly, it is pertinent that no participants reported they spoke Chinese. When it comes to age, $M(SD) = 20.75 (1.41)$.

Participants were tested onsite in smaller groups that ensured comfortable seating, with the use of a multimedia projector. They were assigned to one of two conditions: further referred to as ‘English’ (N = 36) and ‘Mandarin’ (N = 45). In both conditions, they watched the first episode of a culinary⁵ show titled ‘Flavorful Origins’ (episode ‘Mutton’, season ‘Gansu’, 2019), available from Netflix, with Polish subtitles. Only three participants in the Mandarin condition stated they had watched the show before but, given that this constitutes a mere 6.55% of participants in the condition and 3.7% in the entire participant pool, we decided not to exclude their answers, especially that we do not consider prior experience with the show (i.e. any of its multiple episodes) to be a confound. For instance, given the level of detail in the questions we used to test comprehension it is very unlikely that a participant’s performance would be influenced by prior experience with the programme.

Given the documentary genre, the film’s linguistic layer relies on a single off-screen narrator but there are occasional other voices of characters in the film (e.g. chefs) which are revoiced as well in what we refer to as the ‘dubbed’ version.

The episode lasted over 11 minutes and it is relevant to mention that participants watched the entire piece. The manipulation across conditions was which audio version was played to participants. The English condition featured English dubbing while the Mandarin condition used the original audio track, with Polish subtitles being displayed in both conditions. Directly after the screening participants were provided with an internet link to access the online questionnaire.

5. Results

5.1. Cognitive load

Cognitive load was examined with the use of three indicators (cf. e.g. Kruger et al., 2014; Szarkowska & Gerber-Morón, 2018) employing a 1–7 Likert-type scale for participants’ subjective estimations. The results are presented in Table 1.

These results are not statistically significant across conditions with $Z = 0.9796$ and $p = 0.3273$ for difficulty, $Z = 0.1747$, $p = 0.8613$ for effort, and $Z = 1.2926$, $p = 0.1962$ for annoyance in a two-tailed Mann–Whitney U test. This indicates that cognitive load was not influenced in a traceable way by manipulating the audio track (English vs. Mandarin) that participants processed alongside subtitles. It is also notable that cognitive load is consistently low, both across conditions and across indicators, as the means remain below 2 on a 1–7 scale.

Table 1. Mean scores and statistical results for indicators of cognitive load.

Indicator	English condition (N = 36) M(SD)	Mandarin condition (N = 45) M(SD)	Statistical results
Was it difficult for you to read the subtitles in this clip? [difficulty]	1.5(0.70)	1.36(0.61)	$Z = 0.9796$ and $p = 0.3273$
Did you have to put a lot of effort into reading the subtitles in this clip? [effort]	1.53(0.77)	1.53(0.87)	$Z = 0.1747$, $p = 0.8613$
Did you feel annoyed when reading the subtitles in this clip? [annoyance]	1.94(1.31)	1.62(1.19)	$Z = 1.2926$, $p = 0.1962$

Table 2. Comprehension success rates.

Item no.	English condition (<i>N</i> = 36)	Mandarin condition (<i>N</i> = 45)
1.	94%	89%
2.	86%	73%
3.	100%	100%
4.	72%	56%
5.	100%	98%
6.	67%	49%
7.	82%	85%
8.	83%	91%
9.	86%	95%
10.	74%	73%

5.2. Comprehension

Viewer comprehension was operationalised as success rate on a total of 10 items (cf. e.g. Perego et al., 2015; Szarkowska & Gerber-Morón, 2018) that are presented in Appendix 1. These were multiple choice and yes/no questions about the episode our participants watched, e.g. ‘What cuisine is the subject of the episode?’ (Korean/Thai/Chinese/Japanese) or ‘Is the name of the province mentioned in the episode’s opening fragment Gansu?’ (yes/no). The table above shows the success rate for individual items across experimental conditions.

Calculated based on the above per-item rates, the composite mean success rate scores for comprehension are $M(SD) = 84.4(11.34)$ in the English condition and $M(SD) = 80.9(17.65)$ in the Mandarin condition. There is no statistically confirmed difference between conditions with $Z = 0.1134$ and $p = 0.91$ in a two-tailed Mann–Whitney U test which suggests that comprehension was not significantly benefited or hindered by the choice of audio.

At the same time, as can be seen in Table 2 above, participants watching the Mandarin version of the film seem to have found items 4 and 6 particularly challenging, with merely 56% and 49% of participants, respectively, giving correct answers. These represent the lowest proportions of correct answers across all the items in both conditions. While participants in the English condition also found these two questions to be the most challenging ones (with a success rate of 72% and 67%, respectively), their answers were on average 17% more often correct. These preliminary observations need more empirical support as the difference is not statistically significant in a z-score test for two population proportions for either item 4 ($z = 1.5435$ and $p = 0.12$) or item 6 ($z = 1.605$ and $p = 0.11$).

5.3. Immersion

To examine viewer immersion we utilised a validated self-report instrument developed by Rigby et al. (2019). It comprises 24 items (cf. Table 3) drawing on a 1–7 Likert-type scale answer format (e.g. ‘When it was over, were you disappointed that you had to stop watching?’), with three questions being reverse scored and therefore recoded to compute results (e.g. ‘To what extent did you feel consciously aware of being in the real world whilst watching?’). The items cover four factors: captivation (twelve items), real-world dissociation (three items), comprehension (four items) and transportation (five items).

Table 3. Mean scores for immersion items.

Items	English condition (N = 36) M (SD)	Mandarin condition (N = 45) M (SD)
To what extent did the film hold your attention?	4.61(1.84)	4.58(1.57)
To what extent did you feel you were focused on the film?	4.75(1.5)	5.00(1.46)
How much effort did you put into watching the film?	4.06(1.51)	3.93(1.84)
Did you feel that you were trying your best to follow the events of the film?	4.58(1.65)	4.73(1.88)
To what extent did you feel consciously aware of being in the real world whilst watching?	5.17(1.46)	4.64(1.63)
To what extent were you aware of yourself in your surroundings?	5.22(1.38)	4.8(1.74)
To what extent did you notice events taking place around you?	4.61(1.63)	4.31(1.94)
To what extent could you picture yourself in the scene of the events shown in the film?	2.58(1.38)	2.62(1.79)
To what extent did you feel like you were separated from your real-world environment?	2.64(1.5)	2.76(1.54)
To what extent did you feel that the film was something you were experiencing, rather than something you were just watching?	3.00(1.77)	3.2(1.56)
To what extent was your sense of being in the environment shown in the film stronger than your sense of being in the real world?	2.5(1.42)	2.91(1.58)
To what extent did you find the concepts and themes of the film challenging?	3.47(1.89)	3.27(1.88)
To what extent did you feel motivated to keep on watching?	3.97(1.96)	3.66(1.95)
To what extent did you find the concepts and themes easy to understand?	5.83(1.52)	6.00(1.26)
To what extent did you feel like you were making progress towards understanding what was happening, and what you thought might happen at the end?	5.03(1.56)	4.67(1.64)
How well do you think you understood what happened?	5.78(1.59)	6.27(1.27)
To what extent were you interested in seeing how the events in the film would progress?	3.86(2.14)	4.29(1.96)
How much did you want the events in the film to unfold successfully for the main characters involved?	3.67(2.14)	4.00(1.78)
Were you in suspense about how the events would unfold?	2.69(2.00)	2.82(1.51)
At any point did you find yourself become so involved that you wanted to speak to the film directly?	1.83(1.13)	2.07(1.42)
To what extent did you enjoy the cinematography, graphics and/or imagery?	4.69(1.83)	5.11(1.80)
How much would you say you enjoyed watching the film?	4.06(2.01)	4.11(1.86)
When it was over, were you disappointed that you had to stop watching?	2.36(2.06)	2.6(1.67)
Would you like to watch more of this, or similar content, in the future?	3.69(2.27)	3.73(1.89)

The mean scores for immersion are $M(SD) = 3.53(2.05)$ in the English condition and $M(SD) = 3.86(1.98)$ in the Mandarin condition. The difference is statistically significant in a two-tailed Mann–Whitney U test with $Z = -3.4977$ and $p = 0.0005$. This indicates that the choice between Mandarin and English audio versions indeed influenced reception, with viewers being more immersed when the Mandarin audio track was used.

5.4. Verbal feedback from viewers

5.4.1. English condition

In the final part of the questionnaire, respondents could share any other thoughts related to the viewing experience or the study itself. A total of 16 comments were provided, 8 in each of the conditions.

To begin with, in the English condition, one commenter pointed out that the experience would be better if English subtitles were used (instead of Polish ones). Another respondent openly admitted he found the film's topic uninteresting, which affected both his viewing experience and his answers. Three other commenters shared some more specific observations about the show's theme and its portrayal:

The film was unsavoury, which made it hard to concentrate.

I am not a fan of such direct scenes of meat processing but generally I didn't find it difficult to watch the film itself.

Some viewers might have found the images of preparing the meat disturbing.

Critically, two participants in the English condition remarked specifically about the audio layer of the film as follows:

I guess the English dubbing when the character spoke broke the immersion in a way. It's not something I would expect when watching a documentary about foreign culture when the subtitles are already provided.

Generally speaking, it was fun to learn something new about the cuisine in China, but I would rather that the video had been in Chinese for a better experience.

These two comments are particularly remarkable since they directly relate to the sonic variable we tested in the study. In line with our hypothesis, these respondents argue that English dubbing affects immersion and that having access to the original soundtrack would improve the quality of the viewing experience. The arguments provided by our participants uncover that a major factor at play could be the mismatch between the (Chinese) culture presented in the film and the (English) language being used alongside. The mismatch appears to be at least partly created, or reinforced, by the genre itself which can be generating expectations of authenticity and consistency.

5.4.2. *Mandarin condition*

Similarly to what was the case in the English condition, viewers comment on the audio. Consistently with those who offered their feedback in the English condition, a commenter here is positively disposed to the audio being Mandarin.

the film was fun to watch in its original language

Once more we receive input about the film at different levels of granularity – also, this time both negative and positive.

I personally prefer other films and shows but I found this one interesting and I could watch it again.

The presented dishes were superb. I got hungry while watching.⁶

Then, in the comment below the material itself is mentioned as well but it is evaluated against reflections concerning the experience of watching the subtitled episode. While the subtitles were in Polish, this participant also mentions that having them in English, her L2, would not affect the experience either.

The problem was not with subtitles, but the boring, not engaging film. Subtitles are completely fine and watching even Asian films with English subtitles makes no problem to us.

In a similar vein, the following comment refers to the choice of subtitle language as well as the film itself.

I personally prefer watching (non-English) films with English rather than Polish subtitles. The film was quite interesting. I thought it would be longer. (...)

Another participant also reflects on the reception aspects of subtitles, additionally praising their quality.

Very professional subtitles, pleasant to watch.

However, we also received some valuable input that is at loggerheads with the positive comments about the experience of watching the Mandarin version with subtitles:

The only downside of subtitles was not being able to completely focus on the imagery, but rather on reading the subtitles.

Perhaps If I was used to watching non-English films (or non-Polish films) it would be easier to follow the subtitles. The first few minutes were difficult, but I think I got used to it at the end and it was progressively easy to follow the subtitles, while also focusing on the images. (At first it was difficult to focus on both)

While the first comment above pertinently brings up one of the questions on which subtitling research has been predicated – that of receptor attention allocation – the other comment highlights the role of habit. Here it is interesting to note that even a short time span appears to be sufficient for the viewer to be able to process subtitled film more optimally. At the same time, that comment feeds into an emerging trend of productions in languages other than English enjoying a spike in popularity on streaming platforms.

6. Discussion

While we have no access to VOD user statistics on the specific viewing variants we are interested in, our line of reasoning is that the set-up deserves attention if only because it is commonly available on streaming platforms and can be used by some viewers. Even more importantly, on another level, the rationale for and significance of the research reported in the paper lies in the fact that the experimental design isolates the audio variable and is thus able to provide insight into how it functions within the larger semiotic complex of a subtitled film. Analogous AVT/MA experiments have already been conducted where participants watched subtitled videos with the soundtrack removed, with or without the background video (Liao et al., 2021, 2022), or with subtitles at a speed of 28 cps (Kruger et al., 2022), all of which ‘deviate’ from how users typically consume audiovisual content in translation. Such studies are conducted to single out and capture specific aspects of processing, and these approaches are productive even if there is some degree of mismatch between typical consumer practices in everyday life and how participants are required to consume material during an experiment.

With the documentary as our testing ground, we offer a reception perspective that is informed by the genre’s realistic orientation. The very fact that the film we used featured real places (e.g. landscapes corresponding to locations whose culinary traditions were characterised, restaurants, kitchen interiors) and people (non-actor individuals like cooks and shepherds) could be feeding into the viewer’s experience including the translation layer. Here, it needs to be mentioned that in the early descriptive approach, the film was considered an occurrence based on a fictional concept brought to life by the filmmaker. Due to this understanding, film studies considered the documentary an oxymoron for its focus on the non-fiction content. But going back to the origin of the

film itself brought to life by Lumière, it was considered a ‘creative treatment of actuality’ (Grierson, 1933, p. 8). That is a rather idealistic way to see the documentary, considering the ‘creative treatment’, that has to occur in the footage arrangements – for instance, the influence of the equipment at the surroundings and the protagonists of the scene (cf. Winston, 2013, pp. 6–7). Even though the documentary is considered an art of storytelling and not journalism (Saunders 2010, pp. 15–16), it is a form of a dialogue with the audience that has the potential to activate emotions, stimulate cognition and give the viewers a chance to understand (even difficult and complex) circumstances (Kopczyński, 2023, p. 9).

What our results suggest could be to an extent counter-intuitive. When it comes to cognitive load (RQ1) we find that it is not significantly different across the experimental conditions. It should be additionally pointed out that it is consistently low. However, the numerical findings are not unambiguously corroborated with (admittedly limited) verbal feedback from participants whereby two comments specifically refer to processing effort.

With respect to RQ2, comprehension was overall not reshaped either. While the results indeed indicate that the experimental manipulation did not significantly influence viewer comprehension, more evidence is necessary because we have seen that questions are differently likely to uncover comprehension (and memory) mismatches. As was pointed out in Section 5.2., in the case of questions 4 and 6 an interesting pattern might be emerging. It should be noted that these items inquired about details that were retrievable from a single lexeme in the film and are among elements that are hardest to store in one’s memory – they were specifically a numerical value (of temperature) in the case of item 4 and a (family) name in the case of item 6. Therefore, by additionally accessing the audio input participants in the English condition might have been at an advantage compared to viewers in the Mandarin condition who relied exclusively on subtitles in terms of both registering the relevant piece of information and then storing it in memory for later retrieval. A larger set of comprehension items can be designed for future experiments to produce a more systematic and fine-grained explanatory account.

As far as RQ3 goes, we find that the choice between Mandarin and English audio tracks influenced immersion. Consistently with what we hypothesised, immersion was higher in the Mandarin condition. These results remarkably dovetail with what we learned from our participants’ verbal feedback (cf. Section 5.4.) where English dubbing was reported to negatively influence (or ‘break’) immersion whereas watching the video in the original version was expected to produce a ‘better experience’. What these two bits of viewer insight critically uncover is that the dynamics of this effect remain to be captured. The proportion is unclear between the degree to which the identified effect is conditioned by the Mandarin audio track boosting immersion, on the one hand, and the English audio track disrupting it, on the other.

On the whole then, with immersion as a case in point, the study offers evidence that translation – or more precisely the viewing configuration with respect to the translated audiovisual product – can shape viewer experience. This brings a range of intriguing questions and possible implications. First of all, it would be valuable to know how viewers actually make choices as to how they consume translated audiovisual content – to what extent and under what circumstances these choices are conditioned by the need to minimise cognitive effort and reduce the unfamiliar, on the one hand, and

how much and when, on the other hand, viewers are inclined to invest extra effort and be exposed to the foreign. A productive way of framing this can be in terms of different viewer's profiles, with a working hypothesis that viewers with different educational or professional backgrounds, but also different personality traits, will choose to differently engage with translated audiovisual media and therefore their experiences will be variably (dis)analogous.

From a complementary perspective, it could be reasoned that filmmakers typically have a vested interest in knowing how the variable viewing configurations available to users can be influencing the reception, and appreciation, of their work. Leaving aside that film industry stakeholders are variably aware of the significant role that translation plays in (re)shaping the reception of films, and the consciousness-raising needs to continue (cf. Romero-Fresco, 2019, 2020a), we could ask whether filmmakers should be given an opportunity to recommend translation consumption configurations that they believe – perhaps taking advantage of research evidence – will be most optimally aligned with their authorial intentions. While it might be postulated that the viewer should be completely unconstrained in whether they choose to watch a film set in China with audio in Chinese or another language, some degree of ‘implicit recommending’ appears to already be in place as it happens that a streaming platform plays the film selected by the user with a choice of translation mode that does not always appear to be straightforwardly based on the user's previous choices, e.g. voice-over being activated by default even if the user previously used subtitling. Such concealed recommendations appear to be more dubious – if only by virtue of their non-ostensive character and habit-forming potential – than ostensible recommendations from creators, but the pros and cons, as well as the feasibility, of the latter would need to be realistically estimated in the first place.

7. Concluding remarks: further research

While this study has provided some first results with the use of audiovisual stimuli and questionnaire-based user input, a welcome extension would be to implement ‘online’ measures (Orero et al., 2018, p. 113) to probe the relevant reception configurations. Other natural extensions would be, for instance, to consider other film genres or specific films – with the numerous variables that this would bring – and language pairs, or the influence of nonverbal stimuli on the reception of either language version. Another facet to be explored – one that our experiment might have touched upon indirectly – are the characteristics of voices employed in the original vs. translated version as well as features of pronunciation and accents. Along these lines, some voice actors will be preferred over others, sometimes likely due to mere exposure. As we have brought up the notion of choice which is increasingly with the viewer, it would also be interesting to examine how meta-cognitively aware viewers are, for instance when it comes to the actual effect that their preferred configuration(s) of audiovisual content consumption (e.g. different audio tracks, L1 vs. L2 subtitles) might have on their viewing experience.

Notes

1. Filmweb, the Polish audiovisual database, available at www.filmweb.pl, is the second largest site of its kind in the world after IMDb.com.

2. Understood as entertainment and mockumentary shows and series.
3. The search includes Netflix, HBO Max, Canal+ Online, Canal+ Premiere, Player, TVP VOD, Prime Video (Amazon), Viaplay, Chili, Play Now, Apple TV, Apple TV+, Polsat Box Go, Loomi by Opera, vod.mdag.pl, Five Tastes at Home (VOD platform with Asian cinema), Nowe Horyzonty VOD, Kino Pod Baranami, Ninatka, mojeekino.pl, Cineman, vod.pl, Entcklick, Play Kraków, Katoflix, Outfilm, 35mm.online, WFDiF.ONLINE, Playstation Plus Video Pass, DAFilms.pl.
4. A relevant differentiation here is that of ‘particularist’ accounts and a ‘universalist’ account (Greco, 2018).
5. While food terminology itself is not central to the study in hand, it is perhaps worth noting that culinary topics (in particular those pertaining to world-famous cuisines like Chinese, Spanish or Italian) are gaining in popularity, which has recently contributed to increasing research into food discourse (see e.g. Barrientos-Báez et al., 2021; Blanco-Pérez & López-Redondo, 2021 or Jiménez-Marín et al., 2022 for the Spanish context).
6. This comment could tentatively be interpreted as indicative of the viewer’s immersion. An interesting avenue of experimental investigation could be to test such ‘physiological’ facets of film processing as they could be differently influenced by variables such the one examined in this paper.

Acknowledgements

We wish to thank the individuals who took part in the study and Dr. Aleksandra Matysiak who helped us recruit participants.

Disclosure statement

No potential conflict of interest was reported by the author(s).

Notes on contributors

Łukasz Bogucki is a Full Professor and Head of the Department of Translation Studies and Language Pedagogy at the University of Lodz, Poland. He has been involved in researching and teaching translation since 1993 and audiovisual translation since 2001, making him one of the pioneers of this dynamic sub-discipline within Translation Studies. His recent publications include the edited volume *The Palgrave handbook of audiovisual translation and media accessibility* (Palgrave Macmillan, 2020, with Mikołaj Deckert) and the monograph *A relevance-theoretic approach to decision-making in subtitling* (Palgrave Macmillan, 2020).

Mikołaj Deckert is an associate professor at the University of Lodz, Institute of English Studies, in Poland. His research is primarily in interlingual translation, AVT/MA, and more broadly in language and cognition. He serves as peer-review editor for the *Journal of Specialised Translation* (JoSTrans), has recently co-edited *The Palgrave handbook of audiovisual translation and media accessibility* (Palgrave Macmillan, 2020, with Łukasz Bogucki) and co-authored *On-screen language in video games: A translation perspective* (Cambridge University Press, 2022, with Krzysztof W. Hejduk).

Marcin Michoń is an assistant professor at the University of Lodz, Institute of German Studies, in Poland. His research is in translation - including interlingual and transmedial transfer - and media discourse analysis. He has recently co-edited *Texte und Medien Linguistische Zugänge zu Textmanifestationen in medialen Spielräumen* (Lodz University Press, 2021) and authored *Berichterstattung deutschsprachiger Lokalzeitungen an der Wende des 19. und 20. Jahrhunderts - die Lodzer Zeitung und der Gießener Anzeiger im Vergleich* (Lodz University Press, 2020).

ORCID

Łukasz Bogucki  <http://orcid.org/0000-0003-0543-5890>

Marcin Michoń  <http://orcid.org/0000-0002-5670-9559>

Mikołaj Deckert  <http://orcid.org/0000-0003-1569-2399>

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Appendix 1. Comprehension items

1. Is the name of the province mentioned early in the film *Gansu*? [yes/no; correct answer: yes]
2. What cuisine is the focus of the film? [multiple choice; correct answer: Chinese]
3. What meat is primarily talked about in the film? [multiple choice; correct answer: mutton]
4. At what temperature does the fat mentioned in the film start to solidify? [multiple choice; correct answer: below 40 degrees Celsius]
5. What was the white substance used to make skewers? [multiple choice; correct answer: suet]
6. Is the name of the herder family *Cairang*? [yes/no; correct answer: yes]
7. What do herders use to marinate fresh meat? [multiple choice; correct answer: salt]
8. Do stones reach a temperature of over 300 degrees Celsius after staying in the fire for over an hour? [yes/no; correct answer: no]
9. Is the cooking/baking time of the last dish 45 minutes? [yes/no; correct answer: no]
10. What is the Tibetan term for cooking with the use of hot stones? [multiple choice; correct answer: *daoshihe*]