

# **Comparing Translation Strategies for Idioms in Subtitles: A Reception Study of Domestication versus Foreignization**

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## **ABSTRACT**

Subtitlers often choose between rendering translations closer to the domestic audience or retaining features of the foreign language and culture. This study explored the impact of domestication and foreignization on recognition of idiom translations in subtitles. The independent variable was global-level translation strategy (domesticated vs. foreignized), and the dependent variable was translation form recognition, i.e., participants' ability to identify which idiom translations had appeared in the subtitles after viewing the video. Participants ( $n = 79$ ) watched a clip of the Australian movie "The Dish" containing domesticated and foreignized idioms and completed a subtitle processing and reception survey. Domestication yielded significantly higher translation form recognition. Participants who used audiovisual content for language learning showed stronger effects, suggesting that prior use of subtitles as a learning tool enhanced recognition. These findings indicate that domesticating idioms in subtitles may support learning contexts and other settings where recognising and remembering lexical forms are beneficial.

**KEYWORDS:** audiovisual translation, domestication and foreignization, idioms, subtitling, translation strategies

## **1. Introduction**

When interlingual subtitles are used, viewers access foreign audio and images with subtitles translated into their domestic language, exposing both similarities and differences between the source and target text. As Díaz-Cintas (2012:277) notes, "any 'obvious' discrepancies between oral and written text could be detected." Subtitlers must therefore balance accuracy in conveying the intended meaning of the source language with intelligibility and fluency in the target language, often choosing between options that align more closely with domestic or

foreign linguistic norms (Venuti 1995; Judickaitė 2009).

The deliberation between domestication and foreignization (Venuti 1995) remains central in both professional and academic subtitling practice. Professionally, fluency in the target language is often prioritised, with guidelines encouraging natural and idiomatic renderings for domestic audiences (Venuti 2001; Netflix 2020). In academic research, however, foreignization has been valued for preserving the authenticity of the source text. Empirical studies show that subtitling practice, particularly in mainstream entertainment, tends to favour foreignization, as limited budgets, short deadlines, and simplified workflows encourage literal translation and calques (Kuo 2015; Szarkowska et al. 2021). Such overreliance on the source text can result in formally accurate but semantically misleading subtitles (Perego and Bruti 2015), a tendency linked to production pressures and declining quality standards (Kuo 2015; Szarkowska et al. 2021).

For culture-loaded elements such as idioms, subtitlers often rely on personal judgement to decide how closely translations should adhere to domestic or foreign linguistic conventions (Matielo and Espindola 2011). Idioms are particularly relevant because they are frequent in everyday speech, semantically opaque, and crucial to expressing cultural meaning. Previous studies confirm that idioms consistently challenge subtitlers, requiring a balance between naturalness in the target language and fidelity to the source (Gottlieb 1997; Baker 2011). For this reason, idioms provide a useful and high-stake testing ground to investigate how the global strategies of domestication and foreignization (D/F) affect viewer processing and reception. For instance, the publicly available Netflix<sup>1</sup> Brazilian Portuguese Timed Text Style Guide (Netflix 2020) lacks direct mention to culture, domestication or foreignization strategies; those factors are indirectly addressed in the recommendations regarding the treatment of historical or mythical characters, plot relevant nicknames, published book and movie titles, foreign words, and brand names.

This investigation examines whether translation strategies influence how viewers process and perceive subtitles. Grounded in reception studies, it focuses on idiom recognition to provide

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<sup>1</sup> Chosen to illustrate this issue because they are “the strictest on the marketplace” (European Parliament 2017:15) and one of the main guidelines publicly available for consultation, since major content providers’ guidelines are restricted to internal use on their projects only and bound by confidentiality.

practical insights for subtitling professionals and educators seeking to enhance comprehension. Specifically, it addresses the research question “What is the effect of subtitling idioms using the global translation strategies of domestication or foreignization on viewers’ translation form recognition, that is, their ability to identify the translation presented in the subtitles?”

To our knowledge, this is the first empirical experiment directly testing the reception effects of D/F strategies on subtitle processing, as indicated in recent systematic reviews (Yonamine 2022). The study contributes empirical evidence on interlingual subtitle processing, identifying strategies that align with viewer preferences and support more accurate, audience-focused subtitling. Measuring translation form recognition under controlled conditions provides data relevant to professional subtitling practice and quality assessment based on audience reception.

The investigation was motivated by professional experience and gaps in empirical research on subtitle perception (Ghia 2012a, 2012b; Chaume and Díaz-Cintas 2018), audiovisual translation reception (Gambier 2013), and audience preferences on translation faithfulness (Szarkowska and Gerber-Morón 2019). While reception studies are key to understanding how viewers process subtitles, few explicitly link them to the D/F dichotomy. Most address these strategies indirectly within broader analyses (Yonamine 2022), though their outcomes can “feed back straight into professional practices and processes” (Díaz-Cintas 2020:7).

This paper is divided into the following parts: Section 2 outlines the background and definitions; Section 3 describes materials and methods; Section 4 reports results; and Sections 5 and 6 discuss findings, conclusions, and implications for future research.

## **2. Background to the Study**

### *2.1 Interlingual Subtitling*

The translation mode examined in this study is interlingual subtitling, defined as the rendering of verbal messages in filmic media into written text in another language, synchronised with the original dialogue (Gottlieb 2004); it is a diagonal mode, transferring speech in one language into writing in another (Gottlieb 2001).

Research on interlingual subtitling has examined its technical, linguistic, and increasingly

reception-oriented dimensions. Early work focused on process and product, including descriptive approaches to translation (Toury 2012) and analyses of complex linguistic and cultural elements such as idioms and cultural references (Gottlieb 1997; Pedersen 2007). Díaz-Cintas (2012) noted that relatively few studies addressed subtitle reception directly, though recent research has expanded this focus. Developments such as eye-tracking and mixed-methods designs have provided data on how viewers process and respond to subtitles (Orero et al. 2018; Ragni 2020). Reception-oriented studies (Ramos Pinto 2016; Alfaify & Ramos Pinto 2022) and systematic reviews (Yonamine 2022) further emphasise the importance of understanding how translation strategies shape audience interpretation.

Having established this scope, the following section examines how the global translation strategies of domestication and foreignization operate within subtitling.

## *2.2 Domestication and Foreignization in Subtitling*

Subtitling often requires translators to make deliberate strategic choices when dealing with complex cultural and linguistic challenges. When facing translation challenges demanding deeper deliberation and complex problem solving, translators can use strategic translating, “in which problem-solving is involved, whereas non-strategic translation is characterised by a problem-free, automatic replacement of source language text segments by target language text segments” (Lörscher 1991:88).

Among the strategic choices available, Venuti’s (1995) influential work described two global-level strategies of translation. The first is domestication, aiming to conform translation to the target culture and language, which may involve losing information from the source content. The second is foreignization, producing a translation closer to the source culture, preserving foreign terms and conventions to convey meaning, and consequently sometimes breaking cultural codes of the target culture. This study adopts Chesterman’s (1997) distinction between global and local strategies to clarify terminology. Domestication and foreignization are treated as global strategies that reflect ideological and cultural orientations, while micro textual decisions, for instance addition, paraphrase, and generalization, are referred to as local techniques or procedures (Delabastita 1990; Chaume 2012). This terminological precision avoids conflating broader theoretical frameworks with specific linguistic choices.

Regarding previous studies, the systematic literature review of contemporary studies on D/F

in subtitling (Yonamine 2022) reported: a) no study in the review subscribed primarily to reception studies; b) the main topics covered were translation of humour and of informal and localised registers and terminologies; c) differences between dubbing or subtitling, fansubbing, cultural mediation aspects, power relationship between languages and cultures and cultural identity were also explored in the studies. Identifying which translation strategy enhances memory contributes to the development of subtitling practices that are better aligned with viewers' cognitive processing. This supports the creation of subtitles that are not only linguistically accurate but also more accessible and effective in conveying meaning, especially in fast-paced audiovisual contexts. These challenges become particularly visible when translating idioms, a linguistic feature that often forces subtitlers to choose between naturalness in the target language and fidelity to the source.

### *2.3 Translation of Idioms in Subtitling*

Idioms, or idiomatic expressions, are a distinctive and frequent feature of spoken language and therefore central to subtitling, where translators render spoken dialogue into written text. They can be defined as semantically opaque multi-word units whose figurative meaning cannot be inferred from their individual words (Sinclair 1991; Gottlieb 1997; Baker 2011). Because idioms often resist formal variation, they pose consistent challenges for translators working under the time, space, and multimodal constraints of subtitles.

Translating idioms requires balancing fidelity to source meaning with naturalness in the target language, often producing renderings that lean more toward domestic or foreign linguistic conventions. Academic research on idioms in audiovisual translation (AVT) dates back to Gottlieb's *Subtitles, Translation & Idioms* (1997), which analysed idiom translation quality and proposed strategies such as paraphrase, omission, and equivalence. Baker (2011) similarly outlined general options including omission, paraphrase, and use of equivalent idioms.

Because strict formal equivalence is rarely possible in subtitling, strategies such as cultural equivalence (Higashino 2001) enable translators to substitute culturally familiar expressions while preserving meaning. These considerations underscore why idioms provide a suitable testing ground for examining how global strategies of domestication and foreignization affect subtitle reception.

## *2.4 Reception Studies and Translation for Subtitles*

Audience reception research provides quantitative data to understand how viewers process subtitles and perceive their quality. Empirical evidence has the “potential of yielding results of an applied nature that the industry can easily factor into their *modus operandi* and academic institutions can embed into their curricula design” (Díaz-Cintas 2020:6).

Reception studies have frequently examined technical variables such as text chunking and line breaks (Rajendran et al. 2013; Szarkowska and Gerber-Morón 2019), shot changes (Krejtz et al. 2013), placement (Caffrey 2012) and presentation time (Szarkowska 2016; Szarkowska and Gerber-Morón 2018). Several findings have challenged long-standing assumptions, showing, for instance, that syntactically incoherent segmentation does not hinder processing (Perego et al. 2010) and that viewers can follow faster subtitles (Szarkowska and Gerber-Morón 2018).

A smaller body of work has focused on translation factors. One of the first studies was Ghia (2012b), which investigated the role of translation strategies in the perception of subtitled products. Ghia defines translation salience as the perceived prominence of linguistic items resulting from their distinctiveness and contrast within the surrounding context (2012b: 3). In her study, she compared subtitles with literal and non-literal translations to test whether such translational salience – caused by divergence between source and target texts – leads viewers to make comparisons detectable in their eye movements. She describes the literal option as “a translation that reproduces the original text as much as possible in both lexical and syntactic terms, and occasionally involves word-for-word rendering” (2012b: 167). The experiment found increased revisits to message components in the non-literal condition, suggesting greater processing effort and attention to perceived discrepancies (2012b: 175).

Ragni (2020) investigated how translation choices influence the noticing and memorisation of lexical items and grammatical structures in language learners. Comparing formal similarity (literal transfer) and discrepancy (non-literal transfer), the study found that formal similarity produced significantly higher verbatim recall and distinct eye-movement patterns between accurate and inaccurate responses.

In this study, translation form recognition refers to participants’ ability to recall the lexical formulation of translated idioms as presented in the subtitles. This construct measures

surface-level retention rather than semantic comprehension, allowing comparison of recall across translation strategies. The task draws on the word-recognition test (Perego et al. 2010) and the translation-recognition task (Bisson 2013). Because idioms depend on both meaning and form for comprehension and translation (Baker 2011), the analysis focuses on translation form recognition as the main outcome measure.

This investigation is positioned within reception studies to examine how viewers process and respond to global translation strategies of domestication and foreignization in subtitles.

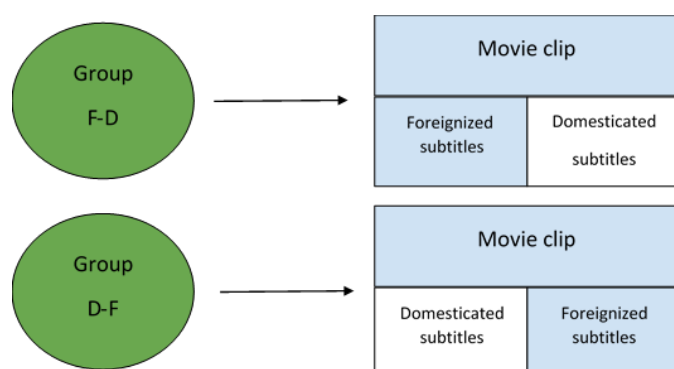
Although the dichotomy between these strategies is well established in translation theory, their reception effects remain underexplored. Linking these domains provides empirical evidence on how translation choices influence comprehension and recall in AVT.

### **3. Materials and Methods**

The present study employed sequential mixed-methods design (Kroll and Neri 2009) using quantitative and qualitative approaches to identify within-group differences, if any, using online surveying method. For example, the quantitative component consisted of a multiple-choice recognition test of 14 idioms (presented in Appendix 1) while the qualitative component included open-ended questions on participants' perceptions of the subtitles (presented in Appendix 2). The design allows qualitative results to assist in refining and interpreting the experiment's quantitative findings, which provide a general understanding of the research question. Survey-based research is well established in AVT (d'Ydewalle and Van de Poel 1999; Ghia 2012a), it is deemed a traditional method "of reputed validity in the social sciences" (Díaz-Cintas 2020:5).

The recruited participants were allocated to two experimental groups. The research design aimed at counterbalancing within-subjects confounding factors by presenting both groups with both translation strategies (Perego et al. 2010; Ghia 2012b; Ragni 2020), domesticated and foreignized subtitles, and each participant was randomly and exclusively assigned to one group. Both groups watched the same movie clip, but each group was exposed to different subtitles. Figure 1 illustrates the research design. Both groups were exposed to the same video clip, with alternating versions of the translation strategies in the subtitles.

Figure 1: Groups x Stimulus



Regarding the crossover composition of subtitles in the stimuli, for group F-D the first batch of idioms were foreignized, while the second batch were domesticated. For group D-F, the order was reversed. This procedure was controlled for scene variables and individual factors, as each participant's behaviour is measured against both translation strategies (Ghia 2012a). Presenting the translation of batches of idioms in the subtitles in different orders in the same video, rather than showing it twice in full, avoided fatigue, repetition effects, and loss of ecological validity, while still ensuring that each participant was exposed to both strategies in a balanced manner.

### 3.1 Variables

The study's variables were based on a comparison between two global-level strategies of translation: exposure to domesticated or foreignized subtitles in the same film clip. The independent variable, translation strategy (with two levels: domesticated versus foreignized), was examined in terms of its impact on the dependent variable, viewer's recognition of translation form.

The covariates (Field, 2018) of the study were participants' demographic data (gender, age, and English level) and preferences for watching audiovisual content (combination of language in audio and subtitles and use of audiovisual content for language learning). These covariates were chosen based on empirical evidence in the literature, such as studies showing that proficiency and viewing habits influence subtitle processing and reception (Perego et al. 2010; Ghia 2012a; Orrego-Carmona 2015; Szarkowska & Gerber-Morón 2019), as well as



possible confounding factors affecting the experiment's variables.

### *3.2 Participants*

Participants were recruited through convenience sampling using university mailing lists, and social media groups over a two-month period. Recruitment advertisements specified eligibility criteria, including native proficiency in Brazilian Portuguese (PT-BR) and at least intermediate knowledge of English. Proficiency was self-reported using an adapted Common European Framework of Reference (CEFR) scale, with participants confirming they could follow general English conversation and media, reporting their viewing habits through the survey. The sample consisted of 79 participants (50 women and 29 men): all native PT-BR speakers, based in Australia, over 18 years of age, with at least an intermediate English level. They were watching the movie *The Dish* (2000) for the first time and did not have any experience as producers of translation or subtitling. All participants provided informed consent electronically via the Qualtrics survey platform before starting the experiment, in accordance with the Human Research Ethics approval (HC190155).

### *3.3 Stimulus*

The stimulus in this experiment was a subtitled movie clip with a duration of 11 minutes 37 seconds, embedded as part of the survey package before the questions. The movie *The Dish* (2000) was chosen because the study was conducted in Australia and the participants are familiar with Australian English. Along with the lack of translation reference material focusing on this variant of English. To begin this process, a selection of popular titles containing authentic Australian English dialogues were analysed, including *The Castle*, *Kenny*, *Crocodile Dundee* and the TV show *Kath and Kim*. *The Dish* was selected because it contains a higher incidence of idiomatic expressions. Although *The Dish* is an entertainment-oriented movie, its rich use of idiomatic expressions in authentic Australian English dialogue made it suitable for testing how D/F strategies affect idiom translation recognition. The study's findings have broader application beyond entertainment, as recognition of idiomatic translation forms is also important in educational contexts – where idioms are taught explicitly – and in didactic or public information materials, where clarity and retention matter. It is equally important for subtitling practice more broadly, where idioms often represent some of the most challenging translation units.

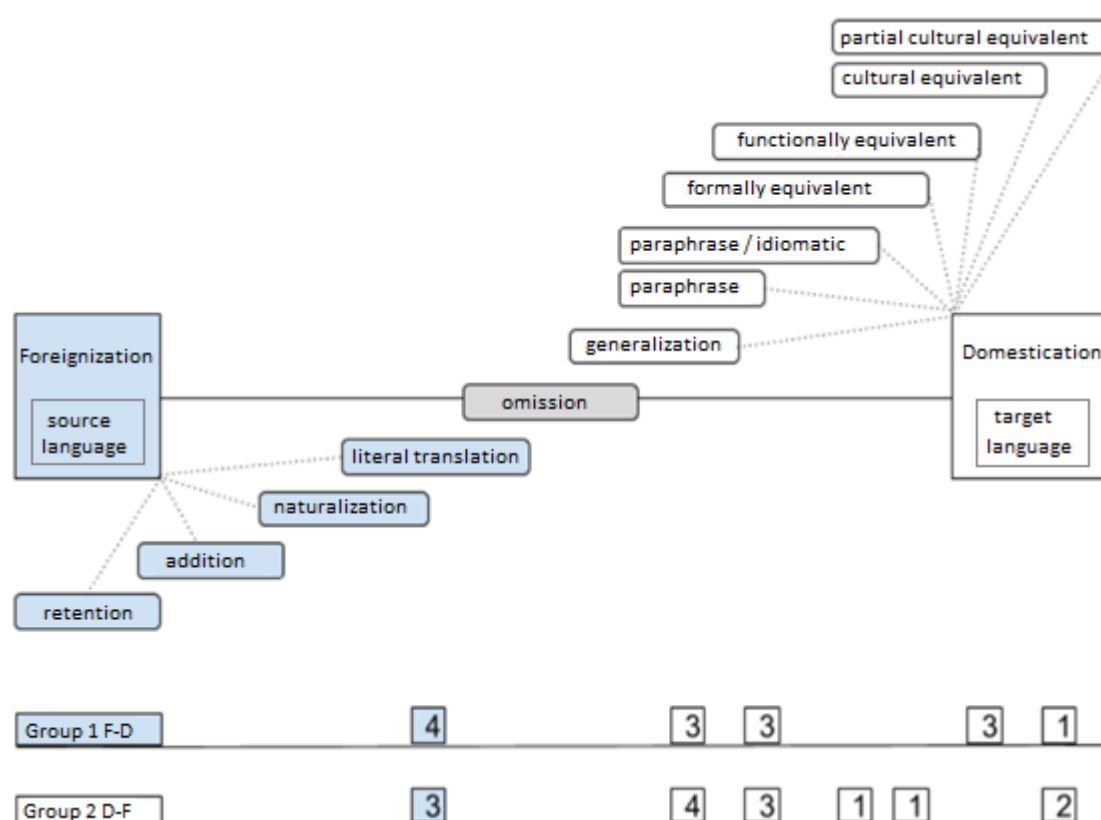
The movie clip was a combination of 16 selected excerpts from the feature film. Most excerpts were selected for their idioms, for e.g., “the icing on the cake”, “try keeping a lid on that”. The final scenes were included in the edit to give viewers a movie experience that resembled the complete storyline. The movie clip was designed to have a high frequency of idioms, featuring 14 idioms across 11 minutes, an average of 1.2 idioms per minute of stimulus. For reference, the frequency of idioms per minute for entertainment movies described in the study conducted by Hashemian and Arezi (2016:87) is lower, averaging 0.35 idioms per minute of video. The idioms selected for the investigation are currently used in Australian English, appearing in the major dictionaries consulted. Some of the idioms found in the dialogue analysis were discarded due to editing purposes, scene context, translation transfer issues that conflict with the aim of the present study, or presence of expletives.

The subtitles for the experiment totalled 224 subtitle events (i.e., individually time-coded units in the subtitle file, each corresponding to a single subtitle on screen), totalling around 1,500 words. Although 224 subtitle events in approximately 12 minutes can be denser than average entertainment subtitling, this figure is consistent with the stimulus design, which maximised idiom frequency. The average reading speed of 14 to 16 characters per second remained well within accepted subtitling guidelines. Each idiom selected was part of a distinct subtitle event, resulting in 14 subtitle events (6% of the stimulus) diverged between stimulus options which contained either domesticated or foreignized translations for the idioms. For example, when the audio dialogue contained the idiom “pack of galahs”, the subtitle event was “You treat us like a pack of galahs.” The domesticated version was translated as “*Nos trata como um bando de jericos*”, using a PT-BR idiom, and the foreignized version was translated as “*Nos trata como um bando de cacatuas-galah*”, a more literal translation maintaining the Australian animal. For consistency, the 14 idioms selected were first translated into PT-BR in two versions, domesticated and foreignized (presented in the Appendix 1), and subsequently used in the subtitles created for the study. The translation and subtitling were developed by the author, a certified translator and experienced subtitler and then revised by a professional subtitler. Categorisation of each translation followed the adapted continuum, also conducted by the author, ensuring transparent global-level quantification and comparison.

In this study, D/F were operationalised by adapting existing models for categorising local

translation techniques into a global-level continuum (Judickaitė 2009). They were combined and adapted using insight from literature on translation of idioms (Gottlieb 1997; Baker 2011), degree of fidelity in subtitling culture-specific items (Gottlieb 2009) and cultural equivalence (Higashino 2001). Combining and adapting the three graphic representations referenced resulted in a model developed for working on the idioms of the investigation. Figure 2 represents the model developed and illustrates this continuum, showing how each local translation technique was positioned, in terms of meaning and fluency, along a scale ranging from foreignization (in blue) to domestication (in white) in relation to the source and target language of the translation. The use of techniques for both groups in this experiment is plotted below the continuum. The first line represents the number of times each local translation technique was used in the subtitles for Group F-D, and the second line displays the count for the subtitles for Group D-F.

Figure 2: Continuum of domestication and foreignization for idioms



### *3.4 Survey*

The experimental instrument was a survey comprising demographics, subtitle processing, and reception questions, with 41 short items. It was based on relevant previous empirical studies on subtitles and adapted to the specific aims of this study (Ghia 2012a; Szarkowska and Gerber-Morón 2018) and idioms (Cacciari and Tabossi 1988). The survey is presented in Appendix 2.

The 14 multiple-choice questions testing idiom translation form recognition (Perego et al. 2010; Bisson 2013) asked the participants to recognise the translation they saw in the movie clip for the idioms selected for the study. Participants were not instructed to focus thoroughly on the subtitles, to avoid influencing their regular watching behaviour for entertainment purposes. Therefore, the task measured incidental form recognition after exposition to the subtitles.

Each multiple-choice question presented participants with four types of response options: domesticated translation, foreignized translation, a distractor, and an “I don’t remember” option. The first three options were presented in randomised order, while the fourth option was always fixed as the last choice. For example, when the audio line was “You treat us like a pack of galahs”, participants were presented with four options: A. *Nos trata como um bando de jericos* [domesticated translation], B. *Nos trata como um bando de cacatuas-galah* [foreignized translation], C. *Nos trata como um bando de idiotas* [distractor], and D. *Não me lembro* (“I don’t remember”). The order of options A, B and C was randomised, while option D was always the last choice.

### *3.5 Data Collection and Analysis*

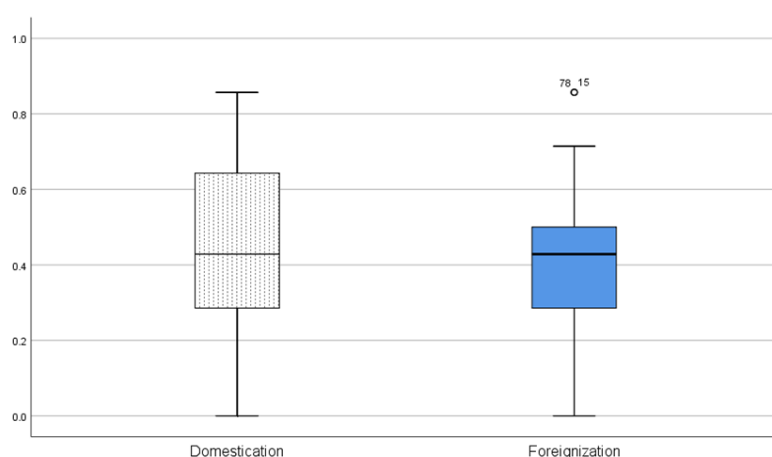
In the data collection, eligible participants received a link by email to access the survey hosted on the Qualtrics platform. The session took approximately 30 minutes, including watching the embedded video clip and answering the survey questions. The experiment was conducted in accordance with Australia’s National Statement on Ethical Conduct in Human Research. Ethical approval was obtained from the university’s Human Research Advisory Panels B: Arts, Humanities & Law - Reference Number: HC190155.

For analysis, the collected responses were treated to generate measurement scores. The score for translation form recognition was calculated using the following system: marking the same translation option seen in the stimulus signalled recognition and accounted for one point; marking the three other options signalled no recognition and accounted for zero points. Each participant's total translation form recognition score was calculated as the average of points awarded across the 14 questions. Each participant's domestication or foreignization translation form recognition score was calculated using the average of points across the seven questions assessing each translation strategy. Therefore, the highest score possible would be 1 (one), in the case where the participant recalled all the stimulus and the lowest would be 0 (zero) for marking all the answers differently from the stimulus. After processing, the data were prepared for statistical analysis using IBM SPSS software (version 25), with tables created to organise the necessary information.

#### **4. Results**

The following analyses were conducted to examine the effects of D/F strategies for subtitling idioms on the viewers' recognition of translation form. The total average form recognition score for domestication was 0.48 out of 1, and for foreignization was 0.39 out of 1. Figure 3 illustrates the distribution of results for each translation strategy in a box plot representation. In this figure, each box shows the interquartile range, the horizontal line inside the box indicates the median, the whiskers mark minimum and maximum values within 1.5 times the interquartile range, and points beyond represent outliers. The higher median and tighter distribution for domestication indicate that participants more consistently recognised domesticated translations, while the broader spread and skew toward the lower quartile in the foreignization condition reveal greater variability and lower recognition. Two outliers, participants 78 and 15, were identified in the foreignization condition (their scores fell below 1.5 times the interquartile range due to the skewness of this distribution). Their data was reviewed to confirm whether they represented the target population, and the analysis deemed their scores valid and therefore retained them. Although the same scores appeared in the domestication condition, they were flagged as outliers only in the foreignization condition due to the skewness of that distribution.

Figure 3: Box plot average form recognition for translation strategies



Since the research design included crossover use of the independent variable, the analysis started by testing whether the order of strategies affected the results distribution in each condition. A one-way repeated measures within-subject ANOVA was deemed most suitable, as the measures were obtained from the same participants. To aid interpretation, a one-way repeated measures ANOVA is a statistical test used to determine whether differences between related groups (e.g., participant responses across conditions) are statistically significant. The test of within-subject effects indicated  $F = 2.569$  and  $p = 0.113$  (greater than the critical value of 0.05) for the interaction between strategy and order. This means that the order in which participants saw domesticated and foreignized idioms did not significantly affect their scores. Therefore, these results suggest there is no strong evidence that the order of presentation caused statistically significant differences in translation form recognition scores.

To analyse the effect of D/F in the translation of idioms, a one-way repeated ANOVA test was conducted in SPSS to test for statistically significant differences between the related sample means. The one-way repeated ANOVA was used because the same participants provided data for both measures and both measures were matched and linked to the same individual (Field, 2018).

The test of within-subject effects indicated  $F = 9.781$ , partial  $\eta^2 = 0.111$ , and  $p = 0.02$  for both translation strategy form recognition scores, lower than the significance level of 0.05 set for the experiment (confidence level of 95%). In other words, participants recognised domesticated idioms significantly more often than foreignized idioms. Therefore, the results

indicate that the use of domestication or foreignization for subtitling idioms leads to a statistically significant difference in translation form recognition scores, with domestication promoting higher recognition (total average form recognition score = 0.48).

In terms of effect size, the partial  $\eta^2$  of 0.111 indicates that the translation strategy in the stimulus is responsible for 11% of the variation in form recognition scores. Cohen's  $d$  of 0.43 indicates that the effect size in the population is medium (Field 2018:115) based on the means (domestication = 0.479, foreignization = 0.389), standard deviations (domestication = 0.24, foreignization = 0.23) and sample size of 79 participants. This shows a moderate but meaningful advantage for domestication.

A one-way repeated ANCOVA of the translation form recognition scores was conducted to check the effects of the demographic covariates (age, gender, English level), as well as the viewing preferences covariates (combination of language in audio and subtitles and stated use of audiovisual content for language learning). The only covariate that showed a statistically significant interaction was stated use of audiovisual content for language learning, with  $F = 9.756$ , partial  $\eta^2 = 0.118$ , and  $p = 0.003$ , lower than  $\alpha = 0.05$ . The partial  $\eta^2$  value was 0.118, indicating that 11% of the variance was explained by reported use of audiovisual content for language learning. This means that participants who reported using audiovisual content for language learning were better at recognising domesticated idioms. The results for the other covariates were as follows: age  $F = 1.670$ , partial  $\eta^2 = 0.022$ , and  $p = 0.2$ ; English level  $F = 1.042$ , partial  $\eta^2 = 0.014$ , and  $p = 0.311$ ; gender level  $F = 0.064$ , partial  $\eta^2 = 0.001$ , and  $p = 0.801$ ; combination of language in audio and subtitles  $F = 0.032$ , partial  $\eta^2 = 0.0$ , and  $p = 0.858$ . Given all the  $p$ -values are greater than 0.05, the differences observed are likely due to chance rather than reflecting a real effect. The partial  $\eta^2$  values are very low (near 0), indicating that these factors account for almost none of the variation in participants' scores. These values indicate that age, English level, gender, and language-subtitle combination did not have a significant effect on recognition scores.

Table 1 presents the list of findings of this study, indicating the analyses conducted along with the results for statistically significant difference. In terms of overall interpretation, none of the variables (age, English level, gender, or subtitle-audio combination) showed statistically significant effects. This means that these factors did not influence participants' recall performance in a measurable way.

Table 1: List of findings of the study: Analyses x Results

#	Analysis	Statistically significant difference
1	Order of presentation of translation strategies versus translation form recognition scores	NO
2	Domesticated/foreignized translation versus translation form recognition scores	YES
3	Covariance of stated use of audiovisual content for language learning with domesticated/foreignized translation versus translation form recognition scores	YES
4	Covariance of age, English level, gender, and preference for combination of language in audio and subtitles with domesticated/foreignized translation versus translation form recognition scores	NO

Note. The table presents the variables analysed and an indication of the statistically significant findings.

The null hypothesis stated that there would be no significant difference in translation form recognition between exposure to idiom domestication or foreignization in the subtitles. The alternative hypothesis stated that a significant difference in translation form recognition would be observed between both translation conditions. The null hypothesis was therefore rejected, as a statistically significant difference was found between exposure to the strategies with the domestication condition correlated with higher translation form recognition scores.

## 5. Discussion

The ANOVA analysis indicated a statistically significant difference between D/F options, with domestication resulting in significant higher translation form recognition. The total average form recognition score for domestication was 0.48 out of 1, that is 23% higher than the total average form recognition score for foreignization, which was 0.39 out of 1.

Considering the closest points of comparison for the present study, few evidence-based AVT studies focusing on linguistic features of translation for interlingual subtitling were found in the literature. As previously mentioned, none of them investigated D/F. The empirical studies



most closely aligned with the present study – also investigating the effects of translation strategies and employing a crossover counterbalanced research design – were those by Ghia (2012b) and Ragni (2020). Ghia's study found greater attention allocation – indicating comparison to the non-literal translation condition, which corresponds more closely to the domesticated translation in this study, than to the literal translation condition, which aligns with the foreignized translation in this study. Ragni (2020) used reversed subtitles, with audio in English (viewers' L1) and subtitles in Italian (viewers' L2), and tested translation using formal similarity versus formal discrepancy, finding greater word for word recognition after participant's exposure to subtitles translated using formal similarity. Ragni's (2020) study used a multiple-choice subtitle recognition test combined with eye-tracking technology.

Returning to the findings of the present study, it could conceivably be hypothesised that the statistically significant higher translation form recognition upon seeing domesticated idioms' translations relates to the findings of Ghia (2012b). Reflecting on the experiment of the present study, it is possible to conclude that the domesticated translation that its more non-literal and divergent, activated comparison in the viewers. Thus, the domesticated translation would gather more attention than the foreignized translation, which could explain the higher translation form recognition scores.

The findings of the present investigation contrast with those of Ragni (2020), who found greater word for word subtitle recognition following participant's exposure to subtitles translated using formal similarity, compared with the formal discrepancy condition. The domestication strategies adopted in the present study, that correlated with statistically significant higher translation recognition scores, these are similar to the discrepant strategies used in Ragni's study. A possible explanation for the contrasting results may be the use of reversed subtitles in Ragni's experiment, while this study's experiment used conventional interlingual subtitles with audio in English (viewers' L2) and subtitles in PT-BR (viewer's L1). Adding to this discussion, however, Ragni worked with a broader range of linguistic features, as all 110 subtitle events differed by a maximum of three words, with changes in lexical items or grammatical structures. Whereas the present study focused on 14 idiomatic expressions contained in 220 subtitle events, a linguistic feature that challenged the translation options in Ragni's study because formal similarity often renders meaningless translations for idioms. It is worth noting that in Ragni's experiments, in-depth analysis of the

main findings indicated that some specific lexical items were recalled well in the formal discrepant translation, “further reinforcing that discrepancy can be mnemonically effective” (Ragni 2020:119). Unlike Ragni’s experiment, which tested recall of subtitles in the learners’ L2, this study assessed participants’ memory of subtitle content rendered in their native language (Portuguese). The questionnaire items were based exclusively on the Portuguese subtitles. Spoken English lines were not included in the recall test.

An analysis of covariance examining participants’ demographic characteristics and viewing preferences alongside the independent and dependent variables revealed that the only covariate showing a significant interaction with translation form recognition was the reported use of audiovisual content for language learning ( $p = 0.003$ ). The other covariates tested did not show significant interaction, namely the demographic covariates (age, gender, English level), and the combination of language in audio and subtitles. The result drew attention the link between participant’s English proficiency and the results was considered as a given to some extent in the research design, due to its relationship to vocabulary range and listening comprehension. Distinct processing patterns for different proficiency levels in L2 were discussed in relevant literature (Ghia 2012b; Orrego-Carmona 2015). Controlling the participant sample within a specific proficiency level was considered but ultimately not implemented due to recruitment constraints. Nevertheless, no correlation was found between English proficiency and translation form recognition scores in the present study. The covariance analysis examining participants’ preferences for watching audiovisual content also revealed no significant difference in recognition scores. This was also an unanticipated finding because familiarity with watching content using interlingual subtitles can play a role in subtitle processing (Orrego-Carmona 2015:214). Education level and reading skills were not directly measured as covariates; however, given that participants were adult volunteers with at least secondary-level education and self-reported intermediate or higher English proficiency, baseline reading ability in their L1 can be reasonably assumed. Future studies could incorporate direct measures of reading proficiency to evaluate their potential influence. These data should be interpreted with caution, as some participants reported in the open-ended questions that, due to limited experience with subtitled content, they had difficulty reconciling audio and subtitles in different languages during the experiment, which triggered comparison and confusion. The difficulty reported by these participants may be a case of simultaneous presentation of information causing the viewer to process both sensorial

channels leading to cognitive overload (Doherty 2020).

## **6. Conclusion**

The study addressed the question: “What is the effect of subtitling idioms using the translation strategies of domestication or foreignization on viewers’ translation form recognition, that is, their ability to identify the translation presented in the subtitles?” Results showed that using domestication or foreignization to render idioms produced a statistically significant difference in recognition performance. Participants recognised translated idioms more accurately after viewing domesticated subtitles.

This research contributes to AVT by filling three empirical gaps: examining linguistic aspects of subtitle translation (Ghia 2012b), testing the reception of D/F strategies in interlingual subtitles (Gambier 2013), and exploring audience preferences on translation faithfulness (Szarkowska and Gerber-Morón 2019). It offers evidence on how these strategies affect viewers’ processing of idioms, showing that domestication increases form recognition. Although comprehension was not directly tested, recall patterns suggest that domesticated idioms were retained more consistently, aligning with recommendations favouring domestication in translation.

Findings should be interpreted with caution. While participants met the eligibility criteria, prior familiarity with the idioms could not be controlled. Random sampling ensured a range of English proficiency levels, but further stratification by proficiency could yield more detailed insights. The online survey enabled wide participation but prevented standardised viewing conditions, as participants used different devices.

Adopting a domesticated approach appears to enhance recognition of idiom translations and may benefit subtitling contexts where retaining the translated form is important. This could inform subtitling guidelines for language learning or educational media, recommending equivalent idioms, paraphrases, or generalisations when suitable for timing and space constraints. Although based on an entertainment film, the results are relevant for subtitling in educational, public-information, and training materials where clarity and retention are crucial. These results also support earlier findings that interlingual subtitles can reinforce comprehension and recall (Pavesi and Perego 2008; Ghia 2012a; Ragni 2020).

Language educators could incorporate subtitling tasks in foreign-language classes to highlight how idiom meaning and form interact, promoting awareness of translation strategies and their effects on comprehension. In this experiment, participants viewed Portuguese-language subtitles and identified previously seen translations; while English recall was not tested, the recognition data indicates that subtitle translation can aid the retention of key narrative and linguistic elements. The findings may help subtitlers, project managers, and teachers apply translation strategies more consistently and purposefully, and provide developers of subtitling guidelines with an empirical basis for recommending strategy use according to communicative goals.

Future research could use mixed-methods designs combining quantitative and qualitative approaches to deepen understanding of D/F reception effects (Doherty 2020). The cognitive load associated with different strategies could be explored with eye-tracking, EEG, galvanic skin response, or heart-rate measures (Orero et al. 2018), revealing how attention and processing relate to comprehension and recall (Ragni 2020). Longitudinal studies could further test outcomes such as language acquisition and retention (Orero et al. 2018). Empirical measures of viewer processing – cognitive load, immersion, and enjoyment – may have “direct implication for defining and assessing quality in AVT” (Doherty and Kruger 2018:189).

Participant attitudes and expectations about subtitles also warrant further study, for example through surveys examining perceptions of subtitle quality. Manchón and Orero (2018) illustrate such an approach by analysing end-user preferences for personalised subtitles and their impact on comprehension.

## **Acknowledgments**

Funding: This work was supported by UNSW HDR Faculty Funding Scheme.

## **Disclosure Statement**

The author reports there are no competing interests to declare.

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## Appendix 1

Table 2: List of the idioms used in the stimulus and their respective meanings

#	Idiom	Meaning
1	the icing on the cake	the most enjoyable or advantageous aspects of a job or situa <del>on</del> ; the finishing touch; something wonderful at the end of something good
2	to big-note yourself	to boast of or promote (oneself); exaggerate one's importance or achievements. "Origin 1940s: a reference to large-denomina <del>on</del> banknotes which, in pre-decimal currency, were also larger in size than the smaller denomina <del>ons</del> ". (Oxford Dic <del>on</del> nary)
3	pull it off	to succeed in achieving or performing; to succeed at what you are trying to do
4	busy as a bee	very busy; hard working; "totally full of ac <del>ivity</del> and on the go in a purposeful and pleasant way" (The Idioms)
5	keep it under your hat	secret, confiden <del>al</del> ; to keep something secret
6	raring to go	very eager to start doing something "This idiom uses raring for rearing and alludes to a horse standing on its hind legs when it is anxious to get moving. [ Early 1900s]" (Dic <del>on</del> nary.com)
7	two-way street	a situa <del>on</del> in which people reciprocate; a benefit to one being matched by a benefit to the other; a situa <del>on</del> in which two people or two groups of people need to work together
*	over the moon	highly delighted
8	big wig	an important person, a president etc., VIP, someone who knows what <del>one</del> it is, a leader of a group. "Origin: Early 18th century; so named from the large wigs formerly worn by dis <del>tinguished</del> men." (Oxford Dic <del>on</del> nary)
9	pack of galahs	idiots (literal: a group of birds)
10	playing funny buggers	playsilly (or funny) buggers; to engage in <del>one</del> -was <del>ing</del> ac <del>ivities</del> and frivolous behaviour
11	take a shot	to attempt or try something.
12	to get off somebody's back	telling someone to stop cri <del>es</del> ing you or pu <del>ing</del> pressure on somebody
13	to pull the pin	to make the decision to bring to a project, investment, etc., to a close; to make the decision to withdraw from an ac <del>ivity</del> , employment, etc.; to close (an opera <del>on</del> , an organisa <del>on</del> , etc.); "means to set into mo <del>on</del> an event or series of events that once begun, cannot be stopped. It originated with the pulling of the safety pin from a hand grenade; once you pull the pin, you must throw the grenade."
14	try keeping a lid on that	to keep something under control

Note: \*The expression "over the moon" was excluded from the initial selection because in the scene context it was also used as a play on words with humorous effect, adding the restriction of humour to the translation of the term. Since translation of humour is not the focus of this experiment, the expression was excluded from the initial selection.

**Table 3: Foreignized translation strategies used to translate idioms and back translation**

#	English	Brazilian Portuguese	Translation strategy	Back translation	Literal (literal)
1	-That's [the icing on the cake]	-É [cobertura no bolo]	literal translation	the icing on the cake	
2	to [big-note yourself]	para [se promover]	paraphrase	to promote yourself	
3	you'll never [pull it off]	nunca vai [conseguir]	paraphrase	succeed	
4	Bob, [busy as a bee]	[Ocupada como uma abelha], be Bob	literal translation	busy as a	e
5	-Can you [keep it under your hat]?	-Consegue [guardar debaixo do seu chapéu]?	literal translation	keep it under your hat	
6	-They're [raring to go]	-[Prontos para dar a largada]	paraphrase	ready to start racing	
7	[Two-way street]	É uma [rua de duas mãos]	literal translation	street with two hands	
8	What do I care if some [big wig]	E eu ligo se um americano [importante]	paraphrase	important	
9	You treat us like a [pack of galahs]	-Nos trata como um [bando de cacatuas-galah]	literal translation	pack of cockatoos – galah	
10	Oh, who's [playing funny buggers]?	Quem está [pregando peças idiotas]?	literal translation	pl	buggers
11	[Take a shot]	[Arrisque]	paraphrase	to risk	
12	We just need you to [keep NASA off our backs] for a while, that's all	Só precisamos que [de a NASA das nossas costas]	literal translation	to	SA) off our
13	-[Pull the pin]?	[Acabam com a gente]?	paraphrase	to finish us	
14	Try [keeping a lid on that]	Não teria como [controlar a repercussão]	paraphrase	control the	repercussion

Note. Literal back translations into English are provided as a reference for those who are not familiar with Brazilian Portuguese.

**Table 4: Domesticated translation strategies used to translate idioms and back translations**

#	English	Brazilian Portuguese	Translation strategy	Back translation (literal)	Back translation (meaning)
1	-That's [the icing on the cake]	-É [a cereja do bolo]	functionally equivalent/ equivalence – similar meaning + similar idiom (semantic field)	the cherry on the cake (idiomatic expression – the great finishing element)	the perfect finishing touch
2	to [big-note yourself]	para [contar vantagem].	paraphrase / colloquialism/slang	to report advantage	to boast
3	you'll never [pull it off]	nunca vai [levar isso a cabo]	paracultural equivalent / insufficient – paracultural meaning + similar/different idiom	to take with a cable	to carry out, to finish
4	Bob, [busy as a bee]	[Com a corda toda], Bob	paracultural equivalent / insufficient – paracultural meaning + similar/different idiom	all wound-up (referring to wind-up clock or toy mechanism)	very excited
5	-Can you [keep it under your hat]?	-Consegue [guardar segredo]?	paraphrase / colloquialism/slang	keep a secret	keep a secret
6	-They're [raring to go]	-[Mais do que prontos]	paraphrase / colloquialism/slang	more than ready	more than ready
7	[Two-way street]	É uma [via de mão dupla]	formally equivalent – congruence = similar meaning + same idiom	two-way route	to give to receive
8	What do I care if some [big wig]	E eu ligo se um [figurão] americano	paraphrase colloquialism/slang	/ big figure	big shot, important person
9	You treat us like a [pack of galahs]	-Nos trata como um [bando de jericos]	cultural equivalent / correspondence – similar meaning + different idiom	pack of jennets	
10	Oh, who's [playing funny buggers]?	Quem está [bancando o engraçadinho]?	paraphrase / colloquialism/slang	act as a funny person	act as a funny person
11	[Take a shot]	[Pode chutar]	paraphrase / colloquialism/slang	you can kick	risk, try to come with an answer
12	We just need you to [keep NASA off our backs] for a while, that's all	Só precisamos que [de a NASA do nosso pé]	cultural equivalent / correspondence – similar meaning + different idiom	to make (NASA) let go of our feet	to make (NASA) leave us alone
13	-[Pull the pin]?	-[Cortam nossas cabeças]?	paracultural cut our heads off equivalent / insufficient – paracultural meaning + similar/different idiom	cut our heads off	to fire someone
14	Try [keeping a lid on that]	Não teria como [abafar o caso]	cultural equivalent/ correspondence – similar meaning + different idiom	see the case	to hide something

Note. Back translations are provided as a reference for readers not familiar with Brazilian Portuguese. Literal back translations focused on form and meaning are provided due to the use of many idioms in the translation.

## Appendix 2

### Survey

Q What is your age?

- ☐ 18 to 24 (1)
- ☐ 25 to 34 (2)
- ☐ 35 to 44 (3)
- ☐ Above 45 (4)
- ☐ Prefer not to say (5)

Q What is your gender?

- ☐ Female (1)
- ☐ Male (2)
- ☐ Prefer not to say (3)

Q Are you a native speaker of Brazilian Portuguese?

- ☐ Yes (1)
- ☐ No (2)
- ☐ Prefer not to say (3)

Q How would you describe your knowledge of the English language?

	Beginner: I have limited knowledge (1)	Intermediate: I have an effective command of the language (2)	Advanced: I am a competent bilingual (3)	Highly advanced: I am fluent or a native speaker (4)
English knowledge	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q Video1. Please watch the following 11:36 minute video clip. It contains scenes extracted from the Australian movie The Dish with the audio in English. Subtitles are provided in Brazilian Portuguese. Please watch the full video clip with the sound turned on and only once.

When you have finished, please click Proceed<sup>2</sup> to answer a few comprehension questions about the video clip.

<sup>2</sup> (button appeared 11.36 minutes after page loaded) - Timer. This question lets you record and manage how long a participant spends on this page. This question will not be displayed to the participant. Browser Meta Info. This question will record the recipient's browser information. It will not be displayed to the user. Browser / Version / Operating System / Screen Resolution / Flash Version / Java Support / User Agent



Please answer the following questions about the video clip you have just seen.

Q What is the name of the town shown in the movie?

- ☐ Parkes (1) (exhibition randomized)
- ☐ Canberra (2) (exhibition randomized)
- ☐ I don't know (3)

Q What is the dish featured in the movie title?

- ☐ A plate to serve food (1) (exhibition randomized)
- ☐ A satellite antenna (2) (exhibition randomized)
- ☐ I don't know (3)

Q Which US agency is working with the Australian technical team?

- ☐ NASA (1) (exhibition randomized)
- ☐ FBI (2) (exhibition randomized)
- ☐ I don't know (3)

You heard the following English expressions in the movie clip dialogues, please choose the translation you saw in the subtitles:

Q "The icing on the cake" was translated as:

- ☐ a cereja do bolo (1) (exhibition randomized)
- ☐ a cobertura no bolo (2) (exhibition randomized)
- ☐ sobremesa gelada (3) (exhibition randomized)
- ☐ I don't remember (4)

Q "To big-note yourself" was translated as:

- ☐ contar vantagem (1) (exhibition randomized)
- ☐ se promover (2) (exhibition randomized)
- ☐ receber uma nota alta (3) (exhibition randomized)
- ☐ I don't remember (4)

Q "Pull it off" was translated as:

- o levar a cabo (1) (exhibition randomized)
- o conseguir (2) (exhibition randomized)
- o puxar tudo (3) (exhibition randomized)
- o I don't remember (4)

Q "Busy as a bee" was translated as:

- o com a corda toda (1) (exhibition randomized)
- o ocupada como uma abelha (2) (exhibition randomized)
- o sendo abelhuda (3) (exhibition randomized)
- o I don't remember (4)

Q "Keep it under your hat" was translated as:

- o guardar segredo (1) (exhibition randomized)
- o guardar debaixo do chapéu (2) (exhibition randomized)
- o passar o chapéu (3) (exhibition randomized)
- o I don't remember (4)

Q "Raring to go" was translated as:

- o mais do que prontos (1) (exhibition randomized)
- o prontos para largar (2) (exhibition randomized)
- o um pedido raro (3) (exhibition randomized)
- o I don't remember (4)

Q "Two-way street" was translated as:

- o via de mão dupla (1) (exhibition randomized)
- o rua de duas mãos (2) (exhibition randomized)
- o encruzilhada (3) (exhibition randomized)
- o I don't remember (4)

Q "Big wig" was translated as:

- o figurão (1) (exhibition randomized)
- o importante (2) (exhibition randomized)
- o força na peruca (3) (exhibition randomized)
- o I don't remember (4)

Q "Pack of galahs" was translated as:

- o bando de jericos (1) (exhibition randomized)
- o bando de cacatuas-galah (2) (exhibition randomized)
- o bando de galãs (4) (exhibition randomized)
- o I don't remember (4)

Q "Playing funny buggers" was translated as:

- o bancando o engraçadinho (1) (exhibition randomized)
- o pregando peças idiotas (2) (exhibition randomized)
- o fazendo caretas engraçadas (3) (exhibition randomized)
- o I don't remember (4)

Q "Take a shot" was translated as:

- ☐ o chutar (1) (exhibition randomized)
- ☐ o arriscar (2) (exhibition randomized)
- ☐ o tirar uma foto (3) (exhibition randomized)
- ☐ o I don't remember (4)

Q "Off our backs" was translated as:

- ☐ o tirar do nosso pé (1) (exhibition randomized)
- ☐ o tirar das nossas costas (2) (exhibition randomized)
- ☐ o tirar um peso das costas (3) (exhibition randomized)
- ☐ o I don't remember (4)

Q "Pull the pin" was translated as:

- ☐ o cortar cabeças (1) (exhibition randomized)
- ☐ o acabar com alguém (2) (exhibition randomized)
- ☐ o extrair o pino (3) (exhibition randomized)
- ☐ o I don't remember (4)

Q "Try keeping a lid on that" was translated as:

- ☐ o tentar abafar o caso (1) (exhibition randomized)
- ☐ o tentar controlar a repercussão (2) (exhibition randomized)
- ☐ o tentar achar a tampa da panela (3) (exhibition randomized)
- ☐ o I don't remember (4)

Q Please select the following movie character's name:



- ☐ o Bob (1) (exhibition randomized)
- ☐ o Mitch (2) (exhibition randomized)
- ☐ o Cliff (3) (exhibition randomized)
- ☐ o I don't know (4)

Q Please select the following movie character's name:





- ☐ May (1) (exhibition randomized)
- ☐ Pearl (2) (exhibition randomized)
- ☐ Janine (3) (exhibition randomized)
- ☐ I don't know (4)

Q Please select the following movie character's name:



- ☐ Glenn (1) (exhibition randomized)
- ☐ Cliff (2) (exhibition randomized)
- ☐ Mitch (3) (exhibition randomized)
- ☐ I don't know (4)

Q Please select the picture that was shown in a scene of the video clip you just watched:



o(1) (exhibition randomized)



o(2) (exhibition randomized)

Q Please select the picture that was shown in a scene of the video clip you just watched:



o(1) (exhibition randomized)



o(2) (exhibition randomized)

Q Which subtitle was used in the video clip?

- o Para falar a verdade, eles ligaram. (1) (exhibition randomized)
- o Na verdade, já ligaram. (2) (exhibition randomized)
- o I don't know (3)

Please answer the following questions on the experience of watching this video clip and its subtitles.

Q What was your experience with the spoken dialogue in English when watching this video clip?

- o I didn't miss any words (1)
- o I didn't miss a lot of words (2)
- o I missed some of the words (3)
- o I missed a lot of words (4)

Q What percentage of the subtitles did you read while watching the movie clip?

- o 0% to 25% (1)
- o 26% to 50% (2)
- o 51% to 75% (3)
- o 76% to 100% (4)

Q Did you have a preference for the subtitles BEFORE or AFTER the scene in which Janine brings sandwiches to the tech team?

- o I preferred the subtitles BEFORE that scene (1)

If this option was marked, this question was exhibited:

Q If you wish, could you please briefly describe what you liked about the subtitles BEFORE the scene?

- o I preferred the subtitles AFTER that scene (2)

If this option was marked, this question was exhibited:

Q If you wish, could you please briefly describe what you liked about the subtitles AFTER the scene?

- o I don't have a preference / They were both at the same level for me (3)

Q On a scale from 1 to 5, how would you rate the quality of the subtitles?

	1 Very bad (1)	2 (2)	3 (3)	4 (4)	5 Very good (5)
Quality (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q How difficult it was to follow the subtitles?

	1 Very easy (1)	2 (2)	3 (3)	4 (4)	5 Very difficult (5)
Difficulty to follow subtitles (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q How much effort was needed to follow the subtitles?

	1 Very little effort (1)	2 (2)	3 (3)	4 (4)	5 A lot of effort (5)
Effort to follow subtitles (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q How satisfied did you feel about the subtitles in this video clip?

	1 Very dissatisfied (1)	2 (2)	3 (3)	4 (4)	5 Very satisfied (5)
Satisfaction with subtitles (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q Did you notice any mismatch between spoken dialogue and subtitles?

	1 No mismatch (1)	2 (2)	3 (3)	4 (4)	5 A lot of mismatches (5)
Mismatch audio and subtitles (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q Did you become involved in the story while watching the video clip?

	1 Not involved at all (1)	2 (2)	3 (3)	4 (4)	5 Very involved (5)
Involvement (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q Did you forget you were in the middle of an experiment while watching the video clip?

	1 Not at all (1)	2 (2)	3 (3)	4 (4)	5 Very much (5)
Immersion (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q Did you have any difficulty watching the video clip?

Q How do you usually watch audiovisual media that is in English, e.g., movies, TV series, and online videos?

- o With subtitles in English (1)
- o With subtitles in Brazilian Portuguese (2)
- o With audio in Brazilian Portuguese (dubbing) (3)
- o Without subtitles or dubbing (4)
- o Other - please describe (5)
- o Prefer not to say (6)

Q Do you watch audiovisual media in English for the purposes of language learning?

- o Yes, regularly (1)
- o Yes, a few times (2)
- o No (3)
- o Prefer not to say (4)

Q Do you have any other comments?

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