

Research Article

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Strategies of Localizing Video Games into Arabic: A Case Study of PUBG and Free Fire

<https://doi.org/10.1515/culture-2022-0179>

received January 20, 2023; accepted June 16, 2023

Abstract: Video game localization is the process of adjusting a current video game to make it available, usable, and culturally appropriate to the target audience. This study aims to investigate the strategies that translators use in localizing *PUBG* and *Free Fire* video games into Arabic. The data were extracted from interfaces and in-game captions of the two video games. Due to space constraints, a representative subset of the collected data was then selected and analysed according to the translation strategies proposed by Díaz-Cintas, and Remael (2014). The analysis showed that the localizers have more often used transposition and literal translation strategies. They also tried to adapt the text to suit the target-language culture as much as possible. The findings of this study will be helpful to translators, localizers, and trainers. By adopting the most relevant translation strategies outlined in this article, game localizers will hopefully be better equipped with the mechanisms of video game localization. The current piece of work calls for investing more research efforts towards exploring and targeting a broader array of video game genres in Arabic.

Keywords: localization, video games, PUBG, Free Fire, translation strategies, audio visual translation

Introduction

Audio-visual translation (AVT) brings together verbal and non-verbal elements where a combination of sound, music, and pictures comes into play (Fong and Au). It is the act of transferring the verbal elements included in audio-visual works and products from one language to another (Chiaro). Remael et al. described AVT, with its different modes, as a newcomer to translation studies (TS). It can be interlingual between two languages (subtitling, dubbing, voiceover, and localization) or intralingual within the same language (mainly for the deaf and hard of hearing or for audio description).

Nowadays, audio-visual materials are believed to be one the best media sources to reach the target audience. According to the Global Games Market Forecast, as a universal market industry, video games are now part of the growing digital entertainment (Read).

Given the dearth of research about assessing the quality of video game localization in Arabic, video games can be investigated and approached from various angles and disciplines. From the perspective of TS, one of the most significant research interests is how the essence of games can be transmitted and sustained across cultures and how a specific impact on the target culture can be achieved through modifying the textual and non-verbal elements to the target audience.

The localization of video games in Arabic is a relatively new field of study. Arabic TS have rarely done any in-depth research on this subject. For example, Al-Bataineh and Alawneh analysed localized Arabic video games from 2005 to 2020 to identify standard practices adopted by developers when localizing games into

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Arabic. To the best of the researchers' knowledge, there are no records of previous research to have discussed the strategies that translators use in localizing *PUBG* and *Free Fire* video games into Arabic. With this background in mind, the current study sets to investigate the strategies translators use in localizing these two video games into Arabic and the gamers' reactions to this localization process, a gap that this study aims to bridge.

What are the strategies translators use to localize *PUBG* and *Free Fire* video games into Arabic?

Review of Related Literature

Currently, the translation of video games is in high demand as it allows gamers from different cultural, social, and linguistic backgrounds to enjoy their favourite video games, providing them with a great game experience. According to Nogueira (1), "The popularity of videogames has increased considerably in the recent decades due to the development of new technologies, and nowadays the videogame industry makes up one of the biggest entertainment markets in the world." Mangiron and O'Hagan (10) reported that "from its humble beginning in the 1970s, the video games industry has flourished and become a worldwide phenomenon. The globalisation of popular culture and the desire to expand to new markets have led most producers to localise their games into many target language versions."

Translation and AVT

Translation is an intellectual process in which the meaning of a given unit of discourse is rendered from one language to another. Nida and Taber argued that translation consists of reproducing in the target language the closest equivalence of the source language message, foremost in terms of meaning and secondly in terms of style. Catford proposed that translation aims to replace textual material in the source language with equivalent textual material in the target language. The rapidly growing demand for TS has put AVT at the forefront of all translation genres.

Newmark's *A Textbook of Translation* distinguished between translation strategies and procedures. He noted that while translation strategies are associated with the whole text, translation procedures are used for sentences and more diminutive language units. For him, the methods of translation include word-for-word translation, literal translation, faithful translation, semantic translation, adaptation, free translation, idiomatic translation, and communicative translation (Newmark's *A Textbook of Translation*).

Lately, AVT has established itself as a main element of TS. Subtitling and dubbing are typically considered the two main AVT modes, with voiceover third (Abdelaal; Al-Haroon and Yahiaoui; Al-Zgoul and Al-Salman; Ameri and Ghazizadeh; Haider et al.; Yahiaoui and Al-Adwan). However, there are new forms of AVT that share attributes with subtitling. These include surtitling for the stage (Mateo), subtitling for the deaf and hard of hearing (SDH) (Al-Abbas and Haider; Al-Abbas et al.; Neves), and its subcategory of live subtitling with speech recognition (Dawson).

Localization

Bernal-Merino discussed the various textual types that translators might deal with while working in the audio-visual entertainment technology field. He further explained how different video games might necessitate a variety of skills from translators, such as proficient TMT (*Translation Memory Tools*), good research techniques, and creativity. His theoretical framework denotes that video games are classified in a variety of ways. These classifications are based on labels used to describe new sorts of games that hit the market in the 1980s and 1990s. The categorization process was founded after a label was established, and most people continued to use it regardless of subsequent changes.

Furthermore, Czech addressed some of the linguistic and cultural aspects of video game localization, focusing on the importance of context and lexicalization patterns in translation. He examined the function of transcreation in interactive entertainment software and how the medium's tight technological limits affect the end product of the translation process. Examples of the issues translators face in video game localization are discussed through using the *Call of Duty* video game as a case study.

Chronologically, Mandiberg discussed the history of localization in video games from the late 1970s to the mid-twentieth century, when "*Spacewar!*" was localized through migration and adaptation practices. The study challenges common industry and academic conceptions of game localization as a practice of multimodal semiotic alteration. More often than not, game industry groups alter linguistic, audio, and visual elements to make an otherwise global product more entertaining for a local audience. Instead, this study argues that game localization is a crucial practice that facilitates the fragmented migration of local texts. As a result, game localization has unwittingly contributed to a particular conception of games as global in the twenty-first century (Al-Ajarmeh and Al-Adwan).

Empirical Studies

This section reviews some empirical studies on the localization of video games in different languages and on video game localization in the Arab World. Fernández Costales reported that in 2009 the transaction of video games in Europe hit € 8 billion, with more than 95.2 million gamers in the 18 European countries covered by the survey. These figures may highlight the international importance of the video game sale and emphasize the relevance of adapting these products to different cultures to allow players to enjoy the games in their native language.

Lepre examined the main types of humour in video games and the methods used to translate them from English into Italian by emphasizing how the interactive nature of games may impact translation. Three well-known video games for their humorous dialogue and situations were examined in the study: *Day of the Tentacle* (1993), *Discworld* (1994), and *The Secret of Monkey Island* (1990/1995). The study paid particular attention to culturally based humour because it is more liable to have issues in a translated text. The researcher also discussed the game's retranslation. Finally, the study analyses whether and how translation choices have changed over time by contrasting the old and new translations of two games from the corpus.

Al-Ajarmeh examined the localization of religious and offensive references among the linguistic, visual, and interactive standards in the Arafiesta video game, the Arabic localized version of FiestaOnline. The information for this study was obtained from contrasting and comparing linguistic excerpts, visual screenshots, and video footage taken from the original games FiestaOnline and Arafiesta. The study adopted quantitative and qualitative approaches and found that the Middle East and North Africa (MENA) region is generally expanding its gaming market. This suggests that integrating game localization can be applied to game imports into the Arab world.

Moreover, Mahasneh investigated the video game *Tomb Raider's* translation operations. First, the researcher examined how far the translation of a few critical linguistic components in a previous video game may be necessary to incorporate what the term "localization" actually implies. Then he aimed to explain and evaluate the use of various different perspective translation methods in determining the scope of the translation and its intended audience.

In the same vein, Jooyaeian and Khoshsaligheh discussed the translation solutions used for Persian video game localization to assess the growing field of game localization in Iran. To this end, four video games localized by Darinoos, Iran's most famous game localization company, were selected. Their text documents were extracted and compiled into a corpus of 3,068 source-destination pairs. The results showed that the copying structure was the most constantly used solution, highlighting the importance of word-for-word translation. On the other hand, cultural correspondence received the lowest proportion pointing to the lack of creativity and failure to transfer culture-specific expressions. The findings revealed several inadequacies in video game localization into Persian.

Although several studies examined the translation of games across languages, including Arabic and English, little attention has been paid to similar studies in the context of *PUBG* and *Free Fire*.

Methodology

In this part, the Arabic and English texts of the two video games are extracted and examined to identify the differences with special emphasis on localization strategies.

Why PUBG and Free Fire?

PUBG is a well-known video game and one of the world's most downloaded games for its unique battle mode ROYALE (Stuart). The game went viral and took off in Arab countries, unifying all players by engaging them in direct contact over social media, console, PC, and smartphone applications and brands. This is where *PUBG ARAB* (the team) started their journey in 2018 with active players and gaming professionals to shape the future of the game in the Arab world. This drive was accompanied by giving facilities to players like giveaways, gaming tips, live streams, entertaining memes, top game-play videos, digital store merchants, blogs, and more, making a significant impact on the Arab gaming community. Now, *PUBG ARAB* has the largest entertaining *PUBG*-related pages in the Middle East with over 1 million followers, an online gaming store, and an educational verified blog. *PUBG* (PlayerUnknown's Battlegrounds) is a battle royale game developed by *PUBG Studios* and published by *PUBG*. It is widely spread among players worldwide. According to *Statista.com*, by the end of 2021, *PUBG* will have sold more than 75 million versions on personal computers and game consoles, making it the top-selling video game on PC and Xbox and the fifth best-selling video game every time.

Furthermore, the global version of *PUBG Mobile* has over 1 billion downloads and has earned more than \$8.42 billion on portable devices, which makes it the fourth top mobile game. In this regard, the highest number of active players, 3.24 million, was recorded in January 2018. Similarly, *Free Fire*, like *PUBG*, is a battle royale game. The game is only available on iOS and Android. However, the game had millions of users just a few months after its release. This is primarily due to its addictive nature, and it can be played smoothly on phones in the mid-range. According to *Esports*, the most downloaded game in the world in 2019 was *Free Fire*. However, *Google Play Store* rewarded *Free Fire* the "Best Popular Vote Game" in 2019. According to *VentureBeat* (the leader in covering transformative technology), it had 80 million daily active users as of May 2020. In addition to its popularity in the Arab World, the Egyptian megastar *Mohammad Ramadan* was chosen to be the first Arab character playable globally in *Free Fire*, which increased the number of active users of *Free Fire* in Arab regions to their favourite star *Ramadan*. The partnership with *Ramadan* expands on *Free Fire*'s goal of providing a localized experience and tailoring its content to appeal to fans in the MENA region.

Analytical Approach and Data Collection

This study adopts a qualitative approach. The data were extracted from interfaces (Appendices 1 and 2) and in-game captions of *PUBG* and *Free Fire* video games to be analysed (Appendices 3 and 4). Unfortunately, no platforms or websites could help compile the data from these two video games automatically, so the data were compiled from scratch by the researchers.

Translation Strategies

According to Molina and Hurtado Albir, translation strategies are techniques for analysing and classifying how translation equivalents might be applied to distinct units of language. They noted that translation techniques affect the quality of translation and can be used to find solutions for different types of translation challenges.

Several researchers have developed various models of translation strategies to analyse and examine the linguistic differences that a translator produces during the translation process. For example, Díaz-Cintas and Remael proposed six strategies for translation. These strategies are as follows: transposition, calque, literal translation, explicitation, cultural adaptation, and loan.

In this context, the researchers applied Díaz-Cintas and Remael's taxonomy to identify the strategies used in the in-game section. A classification of the strategies is given in Table 1.

Study Procedure

The procedures followed in this study are as follows:

- Selecting games that are translated into Arabic: (*PUBG* and *Free Fire* were selected).
- Manually extracting texts in the English and Arabic versions (see Appendices 1–4).
- Exploring the processes and strategies used in translating the English version of the game into Arabic.

Analysis and Findings

In this section, the researchers qualitatively examined the quality of the translation of the two video games under investigation, namely, *PUBG* and *Free Fire*. The data were categorized into two parts: interface and in-game. First, the researchers compared the source language texts (English) with the target language translated equivalents (Arabic), and then identified the translation strategies used to localize the two games into Arabic.

Interface

The interface of a video game is a set of visual elements that allow players to engage with the game story (narrative) and enter the game area (the fourth wall). The data were retrieved from the interfaces of the two

Table 1: Translation strategies proposed by Díaz-Cintas and Remael

No.	Translation strategies	Definition
1	Loan	Putting the cultural reference in the target text as-is
2	Calque	Minimizing the change that can affect the source text
3	Explicitation	Opting for the semantic meaning to make it easy for the viewers
4	Substitution	Replacing the term even if it exists in the target culture due to space constraints
5	Transposition (cultural adaptation)	Replacing the cultural reference with an accessible or neutral reference from the target language. This strategy is close to domestication
6	Lexical creation	Coining or inventing a new lexical item in the TL to stand for the SL term
7	Compensation	Over-translating to make up for a translational loss
8	Omission (deletion)	Excluding the culture-bound expression from the target text
9	Addition	Adding an explanation, which is close to paraphrasing

games and then classified into three categories, namely, technical issues, translation strategies, and morphological features.

Technical Issues

The technical aspects of the two video games, *PUBG* and *Free Fire*, are covered in this section. These include typos and incorrect use of abbreviations, as shown in Table 2.

Table 2 shows that there are a number of typographical errors in the target language interface of the two video games. Some Arabic words were misspelt by missing, adding, or replacing letters. In examples 1–5, the localizer misspelt the Arabic words *اللعبة* (game), *الاشتراك* (subscription), *زمل* (teammate), *المعسكر* (camp), and *الافتراض* (default) by missing some letters in Arabic. In example 6, the localizer misspelled the word الذخيرة (*ammo*) by adding the Arabic letter ح to it. In example 7, the letter ة in the Arabic word was incorrectly replaced with ى in the word مهمى* (mission مهمة). In addition to adding, missing, or replacing letters, the localizer in *PUBG* used an incorrect abbreviation in Arabic for the English word “sec,” which is the abbreviated form of the English “seconds” by using ثا in Arabic, which is a clipped-like form of the Arabic word ثانية. It is worth noting that this abbreviation does not exist in Arabic.

Translation Strategies

According to Molina and Hurtado Albir, translation strategies are techniques for analysing and classifying how translation equivalents might be applied to different units of language. They noted that translation strategies affect the quality of translation and can be used to find solutions for different types of translation challenges and problems. In most cases, rendering words from one language to another is direct and often done quite easily. In this section, the researcher discusses the linguistic aspects of the interface of the two video games by examining the translation strategies used in rendering English words and expressions.

Table 3 shows that the game localizers used various translation strategies such as literal translation, loan, addition, and transposition. In examples 1 and 2, the words *sprinting* and *aftermath* were rendered into Arabic by using the direct translation strategy. It is clear that translators tend to use this strategy when the source language’s structural and conceptual elements have direct equivalents in the target language.

The strategy of loan was used in rendering examples 3–8. This strategy is opted for when translating proper nouns such as *Erangle*, *Solo*, *Livik*, *theme*, *Facebook*, and *lobby*. By using this strategy, a word that has been borrowed from a different language is incorporated into the native tongue without change. In example 8, the word *lobby* is translated in Arabic as لوبي. The loan word *lobby* has political connotations and is sometimes used in Arabic to refer to pressure groups. Therefore, translating *lobby* into Arabic using the strategy of loan

Table 2: Examples of typos in the Arabic script – interface

Technical aspects				
Comment	No.	ST (English)	TT (Arabic)	Game
Missing letter/s	1	Game	اللعبة	PUBG
	2	Subscription shop	متجر الاشتراك	PUBG
	3	Find teammates	ابحث عن زميل فريق	PUBG
	4	Camp hall	قاعة المعسكر	Free Fire
	5	Default backpack	حقيرة الظهر الافتراضية	Free Fire
Adding letter/s	6	Ammo type	نوع الذخيرة	PUBG
Letter replacement	7	BOOYAH mission	مهمى بوا	Free Fire
	8	Hobby	الهوايا	Free Fire
Incorrect use of abbreviation	9	3 sec	ثا 3	PUBG

Table 3: Translation strategies – interface

Strategy	No.	ST (English)	TT (Arabic)	Game
Literal translation	1	Sprinting	ركض	PUBG
Literal translation	2	Aftermath	ما بعد الصدمة	PUBG
Loan	3	Erangle	ارانغل	PUBG
Loan	4	Solo	سولو	PUBG
Loan	5	Livik	ليفيك	PUBG
Loan	6	Theme box	صندوق التيم	Free Fire
Loan	7	Facebook	فيسبوك	Free Fire
Loan	8	Lobby	لوبي	PUBG
Addition	9	UHD	دقة فائقة	PUBG
Addition	10	Pumpkin	قرع عيد الهالوين	Free Fire
Addition	11	In use	محدد و قيد الاستخدام	Free Fire
Addition and loan	12	Graphics	الرسومات الجرافيكية	PUBG
Transposition	13	Emote	رقصة	Free Fire
Transposition	14	Rules	تفاصيل الحدث	Free Fire
Transposition	15	Discoveries	خريطة	Free Fire
No translation	16	Loading	Loading	PUBG
No translation	17	Go boom	Go boom	Free Fire

may be misleading since the context plays a major role in determining the TL equivalent. Therefore, it is recommended to use direct translation and render the word as *ردهة*.

Examples 9–11 were translated into Arabic using the strategy of addition. This translation strategy is used when optional interpersonal, conceptual, or textual implications are added to the target text (Saldanha). In example 9, *UHD* (ultra high definition) was rendered into Arabic in an explicit way as *الدقة عالية* (*high resolution*). Similarly, in example 10, the word *Pumpkin* was translated as *قرع عيد الهالوين* by adding the word *عيد الهالوين*, which means Halloween in English. The localizer tried to make the word more explicit to the audience by explaining that pumpkin is used metonymically to refer to *Halloween*. Example 11, ‘*in use*’, was translated as *محدد و قيد الاستخدام* (*specified and in use*), where the word ‘*specified*’ is added to clarify the meaning.

The strategies of loan and addition were used in rendering example 12. The word *graphics* was translated into Arabic as *جرافيك* *graphics*, adopting the strategy of loan. Further, the word *رسومات arts* is added to the target text. Figure 1 shows how localizers translated the word *Graphics* *الرسومات الجرافيكية* into Arabic without taking spatial constraints into consideration.

Examples 13–15 were rendered using the strategy of transposition as they have undergone some adaptation in the Arabic version of the game. In example 13, the word *Emote* is a back-formation from the word *emotion*. In *Free Fire*, it is used in the game menu for a move. If clicked, the character will make moves like a dance to express his emotion of excitement. In the Arabic version, it was translated as *dance*, using the strategy of adaptation by replacing the SL term with another in the TL. In examples 14 and 15, the localizer adopted the words *rules* and *discoveries*. The word *rules* in Arabic means *أحكام*, but it was adopted as *تفاصيل الحدث* *event details*. In addition, the word *discoveries*, which means *اكتشافات* in Arabic, was translated as *خريطة* *map*.

Examples 16 and 17 were not translated. The words *loading* and *go boom* were copied, retaining the same English form without change. It is worth noting that the word *loading* can be translated into Arabic through direct translation as *تحميل*. Similarly, the translator chose not to translate the expression *go boom* and to keep it in the source language as is. Perhaps he was under the impression that by so doing, he might have a better effect on the audience.

Morphological Features

Pullum and Zwicky defined morphology as the study of the internal structure of words. In this section, the researchers discussed how the morphological aspects were reflected in the translation of the word *agree* in the interface section of *PUBG*, as shown in Table 4.

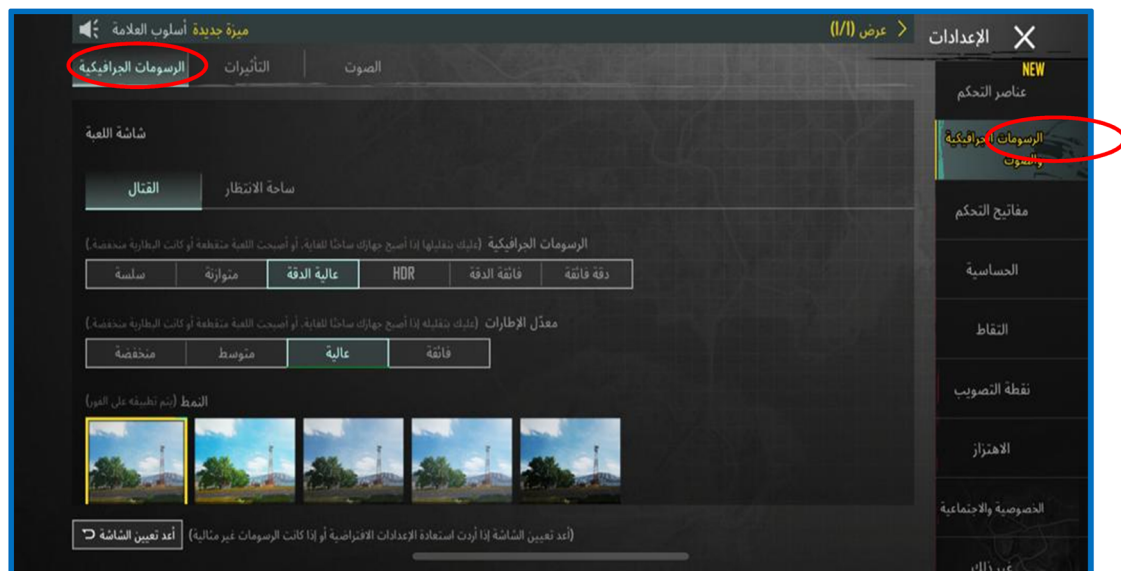


Figure 1: A screenshot from *PUBG* settings section.

Table 4: Morphological aspects – *PUBG* interface

No.	ST (English)	TT (Arabic)	Game
1	Agree	(موافق ة)	PUBG

In Arabic, gender is marked by inflectional suffixes that are added to the end of the word, such as ة, ت. It was clear that the game localizers of *PUBG* tend to include an unmarked form of words to males and females, as shown in Table 4. The word (موافق ة) gives both male and female gamers the option to choose the way of reading it. Incidentally, this strategy was only used in the translation of this word, and the researchers could not detect any other words that were translated similarly, whether in the in-game section or the game's interface.

Figure 2 shows how localizers reflected gender in their translation of the word (موافق ة) (*Agree*) by adding the feminine marker ة between brackets after the word موافق.



Figure 2: A screenshot from *PUBG* video game.

In-Game

The “in-game” section discusses all the elements that occur or exist within a game. This includes the narrative part of the video game. The researcher collected some examples from the in-game sections and categorized them based on the translation strategies used, as shown in Table 5.

In today’s world of global communication, translation is essential for exchanging information between cultures. Table 5 shows six translation strategies that were used by the localizers of the two video games. These include *loans*, *literal translation*, *transposition*, *addition*, and *explicitation*. In the following sections, the researchers discuss each strategy in detail.

Loan/Borrowing

There is no doubt that borrowing words is a widespread phenomenon, and no language is entirely free of borrowed/loan words (Darwish). Borrowing is a common and normal practice between language communities, in which case the new words are integrated into the target language and are usually referred to as borrowings or loan words. One example of a loan strategy from English into Arabic is found in Table 6.

Table 6 shows an example of loan strategy that was used by localizers in *PUBG*. In example 1, the word *banned* was translated into *تنبذ*. This word has been integrated into the Arabic language and has undergone morphological changes. The word *banned* could be translated as *يحظر* or *يلغى*. However, the localizers translated it as *تنبذ* because this word is commonly used in the gaming community, especially among speakers in the Arab Gulf countries.

Literal Translation

According to Newmark “Non-Literary in the Light of Literary Translation,” literal translation is an approach to translating a text from one language into another by finding the direct equivalence. Venuti and Baker referred to literal translation as a direct translation. This translation approach is frequently used in legal, technical, medical, business, and recently in localization as well. Examples of literal translation from *PUBG* and *Free Fire* are given in Table 7.

Table 7 gives examples of the literal translation strategy from the two video games. The localizers used literal translation to make the TT look as natural as possible. However, in example 5, there is a technical problem with the text in the English and Arabic versions of the game, i.e., it appeared in the Arabic form when it should have been in English and vice versa. In this example, the localizer used the Arabic expression *اللعبة النظيف* in the two versions. Perhaps, the game was intended for gamers in the Arab region, which made the localizers borrow the word and render it as is.

Transposition

Transposition occurs when the translator reproduces the message of the SL text to render the same meaning in the TL text. It is a change in the form of the message obtained by adjusting the SL’s point of view. For example, the statement “*it is not complicated to understand*” can be rendered in Arabic as *إنها سهلة الاستخدام* (*It is easy to understand*). Although the two statements have the same meaning, *easy to understand* conveys *easiness*, whereas *not complicated to understand* implies a *prior assumption of difficulty*. This technique is helpful to the readers, leading them to believe that this is exactly how things are said in their language. Relevant examples derived from *PUBG* and *Free Fire* are found in Table 8.

Table 8 shows four examples of transposition strategy. In example (6), the sentence “*how you see yourself?*” was translated into Arabic as *كيف تقيم نفسك* (*Lit. how you assess yourself?*). In example (7), the localizers used the strategy of transposition, perhaps to suit the situation. In *PUBG*, there is a button called “*powered gear*”

Table 5: Translation strategies – *PUBG* and *Free Fire* in-game section

Translation strategies				
Strategy	No.	ST (English)	TT (Arabic)	Game
Loan	1	Your account is banned	لقد تبند حسابك	PUBG
Literal	2	Default parachute follow can be enabled/disabled in the settings	يمكنك تمكين/تعطيل متابعة مظلة الهبوط الافتراضية في الإعدادات	PUBG
Translation	3	Underworld guardian has arrived	وصول حارس العالم السفلي	PUBG
	4	Bind account currently unlock rank system at Lv.12 Bind Account Unlock rank system and obtain rewards at Lv.8	ربط الحساب حاليا فتح نظام الترتيب في المستوى 12 ربط الحساب افتح نظام المصنف و احصل على مكافآت عند المستوى 8.	Free Fire
Transposition	5	قادمة 7! مباراة اللعب التنظيف شاهد المباراة في تطبيق بوياه و أحصل على واحدة من هذه الجوائز	Match 7 is coming! اللعب التنظيف Watch on BOOYAH and win one of these rewards	Free Fire
	6	Kelly: First, tell me how you see yourself?	كيلي: أولا اخبرني كيف تقيم نفسك؟	PUBG
	7	My heart is powered gear-driven	يستمد قلبي طاقته من سرعة التدوير	PUBG
Addition	8	Demon wheel Demon wheel guaranteed you The ultimate weapon!	عجلة الشر عجلة الشر ستضمن لك الحصول على سلاح حصري	Free Fire
	9	Choo-choo! All aboard! Next stop: the safe zone!	تشو-تشو! لبصعد الجميع! المحطة التالية هي ساحة اللعب	PUBG
	10	Hey! I'm hurt gimme a hand!	أنا أتألم! ساعديني	PUBG
Explication	11	Go to default and change the settings	اذهب الى الإعدادات الافتراضية و غير في الإعدادات	PUBG
Explication	12	Equip to display special effects during matchmaking, on profile page and in MVP .	تجهيز لعرض المؤثرات الخاصة اثناء التوفيق بين اللاعبين وعلى صفحة الملف الشخصي و في إعلانات	Free Fire
	13	Survivors! BOOYAH! Delivers another fantastic event, just for you! Watch any livestream on BOOYAH for 30 min to stand a chance to win rewards.	أبها الناجون! تطبيق بوياه! يقدم حدثا رائعا اخر، فقط لأجلك! شاهد أي بث مباشر على تطبيق بوياه! لمدة 30 دقيقة للحصول على فرصة الفوز بالجوائز	Free Fire

driven” that changes the lives of the characters that the gamer plays with. Furthermore, in example (8), the word *safe zone* was translated as *ساحة اللعب* (Lit. *playing yard*). *Safe zone* in Arabic means *منطقة الأمان*, but the localizers translated the meaning of ‘*safe zone*’ in *PUBG* as this is the area where gamers can play away from a storm that might kill their characters, so that is why it is called ‘*safe zone*’. The word *ultimate* in example (9) was translated in the TT as *حصري* ‘*exclusive*’, whereas its Arabic equivalent is *نهائي*. However, the localizers modulated the word *ultimate* because the weapon is exclusive, especially for gamers who will join “*the demon wheel*,” a feature for gamers of the *Free Fire* video game.

This strategy is sometimes used in translating idiomatic expressions in the source text, making them clearer and more general in the target language. In example 10, the idiomatic expression *gimme a hand* in the ST was translated into *ساعديني* ‘*help me*’ in Arabic, making the idea easier to understand in the TT.

Addition

This strategy is used when words are added to maintain meaning, which might be the result of lexical differences. In other words, addition occurs when the target language takes up more space than the source language. For example, an English-to-Arabic translation may produce a similar number of words, but Arabic has longer, compound words that take up more space, as shown in Table 9.

Table 6: Loan strategy

No.	ST (English)	TT (Arabic)	Game
1	Your account is banned	لقد تبند حسابك	PUBG

Table 7: Literal translation strategy

No.	ST (English)	TT (Arabic)	Game
2	Default parachute follow can be enabled/disabled in the settings	يمكنك تمكين/تعطيل متابعة مظلة الهبوط الافتراضية في الاعدادات	PUBG
3	Underworld guardian has arrived	وصول حارس العالم السفلي	PUBG
4	Bind account Currently Unlock rank system at Lv.12 Bind Account Unlock rank system and obtain rewards at Lv.8	ربط الحساب حاليا فتح نظام الترتيب في المستوى 12 ربط الحساب افتح نظام المصنف و احصل على مكافآت عند المستوى 8.	Free Fire
5	مباراة 7 قادمة! اللعب النظيف شاهد المباراة في تطبيق بوياه و أحصل على واحدة من هذه الجوائز	Match 7 is coming! اللعب النظيف Watch on BOOYAH and win one of these rewards	Free Fire

Table 8: Transposition strategy

No.	ST (English)	TT (Arabic)	Game
No.	ST (English)	TT (Arabic)	Game
6	Kelly: First, tell me how you see yourself?	كيلي: أولا اخبرني كيف تقيم نفسك؟	PUBG
7	My heart is powered gear-driven	يستمد قلبي طاقته من سرعة التدوير	PUBG
8	Choo-choo! All aboard! Next stop: the safe zone!	تنشوا- تنشوا! ليصعد الجميع! المحطة التالية هي ساحة اللعب!	PUBG
9	Demon wheel Demon wheel guaranteed you The ultimate weapon!	عجلة الشر عجلة الشر ستضمن لك الحصول على سلاح حصري	Free Fire
10	Hey! I'm hurt gimme a hand!	أنا أتألم! ساعديني	PUBG

Table 9 shows one example of the addition strategy that was extracted from *PUBG*. The word *default* was translated as 'الإعدادات الافتراضية' *default settings*. This expansion of the TT helps the audience understand the meaning of the text. However, the localizers could have translated the TT without adding the word 'settings' because it is already added at the end of the sentence 'الإعدادات الافتراضية', to save some space. Perhaps, localizers have added the word 'الإعدادات الافتراضية' to *default* because the Arabic word *default* افتراضية may confuse the audience.

Explicitation

Explicitation is the act of making the ST message clearer. This strategy is used to fill gaps in translation by inserting additional explanatory phrases, spelling out implicatures, or adding semantic connectors to improve the logical flow and readability of the new text (Al-Anbaqi). Table 10 gives two examples of this strategy.

In example 12, *MVP* stands for *Most Valuable Player*. This is a common term in sports games. However, in the gaming world, it is widely used among gamers. *MVP* in *Free Fire* refers to the best player in a game, so when gamers face an enemy with an *MVP* title, they think twice before facing that player. In example 12, the acronym *MVP* was mistranslated into Arabic. Apparently, the localizers meant to make this term more explicit to the target audience, but they were not clear about what it originally stands for, which resulted in rendering

Table 9: Addition strategy

No.	ST (English)	TT (Arabic)	Game
11	Go to default and change the settings	اذهب الى الإعدادات الافتراضية و غير في الإعدادات	PUBG

a faulty TL equivalent. In example 13, the word *BOOYAH* is a name of an application in *Free Fire* that delivers a specific feature for gamers. The localizers added the word application and translated it as *تطبيق بويه*.

Conclusions and Recommendations

The present study has probed into the way and means processes and strategies that contribute significantly to improving the quality of translation rendered by game localizers. The ultimate goal is to maximize the research endeavours to bridge the gap and the dearth of research in this particular vital domain.

To this end, the researchers have qualitatively assessed the quality of localizing the two video games: *PUBG* and *Free Fire*. As indicated earlier, the data were collected manually and then categorized in accordance with the research strategies localizers have used. Our research findings showed that the localizers were more inclined to using transposition and literal translation strategies more often. However, it was noticeable that they also tried to adapt the text to suit the target language culture as much as possible. To obtain more accurate results, the researchers divided the data into two parts: the Games' Interface and the In-game. The translation strategies used in the interface section of the two video games can be summarized in the following: direct translation, transliteration, loan/borrowing, explicitation, and addition. However, localizers identified direct translation as the most frequently used strategy in this section.

On the other hand, in the in-game section of the two video games, the translation strategies used can be summed up in the following: loan, transposition, literal translation, addition, and explicitation. It is worth noting that localizers have mainly used the strategy of transposition in the in-game section of the two video games. Given the aforementioned findings, the results of the qualitative analysis have most clearly answered the research question set forth in this study, namely, "What are the strategies translators use to localize *PUBG* and *Free Fire* video games into Arabic?"

The fact that the researchers investigated a corpus of data that were collected manually from the two games has posed some challenges. Consequently, the current piece of research has some limitations, which are outlined in this section.

Considering that the current study has only investigated the localization of *PUBG* and *Free Fire* into Arabic, further research endeavours in the localization domain are needed to unveil and pinpoint other areas of weakness and challenges which hinder research attempts of game localization into Arabic. For example, localization specialists and researchers can investigate video game localization with various genres and types. This can cover a massive research ground in the humanities and social sciences, among others. Comparative studies between different areas of specialization and languages seeking game localization may be another rich area of investigation.

Table 10: Explicitation strategy

No.	ST (English)	TT (Arabic)	Game
12	Equip to display special effects during matchmaking, on profile page and in MVP	تجهيز لعرض المؤثرات الخاصة اثناء التوفيق بين اللاعبين وعلى صفحة الملف الشخصي و في إعلانات	Free Fire
13	Survivors! BOOYAH! Delivers another fantastic event, just for you! Watch any livestream on BOOYAH for 30 min to stand a chance to win rewards	أيها الناجون! تطبيق بويه! يقدم حدثا رائعا اخر، فقط لأجلك! شاهد أي بث مباشر على تطبيق بويه! لمدة 30 دقيقة للحصول على فرصة الفوز بالجوائز	Free Fire

Such research endeavours will contribute significantly to improving the quality of localizing the two main parts of video games, namely, interface and in-game. By so doing, researchers can help gamers have a more rewarding and enjoyable gaming experience. Likewise, it is deemed necessary to help localizers avoid the drawback, shortcomings, and challenges of pausing technical and language-related difficulties in the localization process.

To conclude, future research can investigate a more specific aspect of video game localization quality, such as the quality of the dubbed versions of video games. To recap, further scholarly research on video game localization is needed as it most forcefully responds to the calls for a more refined game localization quality. Once video game localization culminates to the optimal level, it will offer invaluable returns to the game industry, audio-visual translators, game localizers, and the gaming community at large.

Funding information: This work was supported by the Literature, Publishing and Translation Commission, Ministry of Culture, Kingdom of Saudi Arabia (No. 135/2022) as part of the Arabic Observatory of Translation.

Conflict of interest: Authors state no conflict of interest.

Data availability statement: All data generated or analysed during this study are included in this published article.

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Appendix 1 Interface data compilation (PUBG)

Source language (English)	Target language (Arabic)
The lobby	لوبي
Game	اللعبة
Erangle	ارانغل
Livik	ليفيك
Loading	Loading
Sprinting	ركض
Spectating	بصدد المشاهدة
Eliminations	مرات القتل
Aftermath	ما بعد الصدمة
Graphics	الرسومات الجرافيكية
UHD	دقة فائقة
Royal Metro	المترو الملكي
x-suit	بذلة x
Agree	موافق(ة)
Solo	سولو
Knock	نوك
Push	هجوم

Appendix 2 Interface data compilation (Free Fire)

Source language (English)	Target language (Arabic)
Theme box	صندوق الثيم
Top-up event	حدث الشحن
Emote	رقصة
Default backpack	حقيبة الظهر الافتراضي
Greek side	كريكسايد
Observatory	اوبسيرفاتوري
Pumpkin	قرع عيد الهالوين
Rules	تفاصيل الحدث
Luck Royale	luck royale
Top-up Joseph	اشحن يوسف
Discoveries	خريطة
Go boom	go boom
Redeem code	استبدال الكود
Follow Facebook	فيسبوك
In use	محدد وقيد الاستخدام

Appendix 3 In-game data compilation (PUBG)

Source language (English)	Target language (Arabic)
Your account is banned	لقد تبند حسابك
Let's play as a clan	هيا بنا نلعب مع الكلان
Default parachute follow can be enabled/disabled in the settings	يمكنك تمكين/تعطيل متابعة مظلة الهبوط الافتراضية في الاعدادات
If you quit, your character will be removed from the game and it will be counted as a death. You will not receive any gold and experience, or progress in any events and challenges. Rank points will be given according to your current placing.	إذا خرجت من اللعبة، فسيتم استبعاد شخصيتك من اللعبة و سيتم احتسابها على
Kelly: First, tell me how you see yourself?	كيللي: أولا اخبرني كيف تقيم نفسك؟
Get it now!	اغتنم الفرصة الآن
Underworld guardian has arrived	وصول حارس العالم السفلي
You don't look half bad. dude	لا تبدو بهذا السوء يا صاح
My heart is powered gear-driven	يستمد قلبي طاقته من سرعة التدوير
Hey! I'm hurt gimme a hand!	أنا أتألم! ساعديني
Choo-choo! All aboard! Next stop: the safe zone!	تشو-تشو! ليصعد الجميع! المحطة التالية هي!ساحة اللعب
Go to default and change the settings	اذهب الى الإعدادات الافتراضية و غير في الإعدادات

Appendix (4) In-game Data Compilation (Free Fire)

Source language (English)	Target language (Arabic)
Survivors!	أيها الناجون!
BOOYAH! Delivers another fantastic event, just for you!	تطبيق بويه! يقدم حدثاً رائعاً آخر، فقط لأجلك!
Watch any livestream on BOOYAH for 30 min to stand a chance to win rewards	شاهد أي بث مباشر على تطبيق بويه! لمدة 30 دقيقة للحصول على فرصة الفوز بالجوائز
go on an adventure and discover all the unknowns and show off your achievements!	اذهب في مغامرة واكتشف المجهول و اظهر إنجازاتك!
Demon wheel	عجلة الشر
Demon wheel guaranteed you	عجلة الشر ستضمن لك الحصول على سلاح حصري
The ultimate weapon!	تجهيز لعرض المؤثرات الخاصة أثناء التوفيق بين اللاعبين وعلى صفحة الملف الشخصي و في إعلانات
Equip to display special effects during matchmaking, on profile page and in MVP.	ربط الحساب
Bind account	حالياً
Currently	فتح نظام الترتيب في المستوى 12
Unlock rank system at Lv.12	ربط الحساب
Bind Account	افتح نظام المصنف و احصل على مكافآت عند المستوى 8.
Unlock rank system and obtain rewards at Lv.8	لديك فرصة للفوز بهذه المكافآت المثيرة:
Stand a chance to win these exciting rewards:	بطاقة ارض الحرف
Craftland Room Card	قم بركل القمر
Moon flip	ليون
Leon	روبو
Robo	بدلة الدجاجة
Chicken suit	Match 7 is coming!
مباراة 7 قادمة!	اللعب النظيف
اللعب النظيف	Watch on BOOYAH and win one of these rewards
شاهد المباراة في تطبيق بويه وأحصل على واحدة من هذه الجوائز	