توطين ألعاب الفيديو في العالم العربي:

دراسة حالة لعبة The Witcher 3

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مقدمة

يُعدّ توطين ألعاب الفيديو العربية مجالًا ناشئًا في دراسات الترجمة، مع محدودية الأبحاث المتعمقة التي أُجريت حول هذا الموضوع. غالبًا ما تُركّز الدراسات الحالية على تحديات توطين لعبة واحدة أو تحليل ألعاب متعددة، مع التركيز بشكل أساسي على الجوانب اللغوية. تُقيّم هذه الدراسة توطين لعبة "ذا ويتشر 3" (The Witcher 3)، وهي لعبة مشهورة في العالم العربي، تقييمًا شاملًا. يُركّز التحليل على عنصرين رئيسيين في التوطين: واجهة المستخدم (UI) والمؤثرات السينمائية.

مشكلة البحث

تحتوي هذه الألعاب على كثير من المصطلحات و العبارات الغير لائقة و التي لا يتقبلها المجتمع العربي لذلك جاءت هذه الدراسة لوضع حلول لهذه المشكلة

اهداف البحث

تُعدّ توطين ألعاب الفيديو إلى اللغة العربية عمليةً معقدةً تتطلب توازنًا دقيقًا بين الاعتبارات الثقافية واللغوية والتقنية. يهدف هذا البحث إلى تقديم فهم أعمق لهذه العملية من خلال تحليل توطين لعبة "ذا ويتشر 3"، مع التركيز على التحديات التي تواجهها الصناعة وأهمية تقديم منتجات تتوافق مع تطلعات الجمهور العربي. من خلال معالجة هذه التحديات وضمان معايير توطين عالية، يمكن للمطورين ابتكار تجارب لعب أكثر غامرة واحترامًا

ثقافيًا للاعبين الناطقين باللغة العربية. تسعى هذه الدراسة إلى أن تكون مرجعًا أكاديميًا يُسهم في تحسين جودة التوطين وتعزيز تجربة اللعب للاعبين العرب مستقبلًا.

أهمية البحث

تكمن أهمية هذه الدراسة في تطبيق ظاهرة التوطين اللغوي للتخلص من الاستعمالات الغير لائقة في ترجمة الألعاب و هذه الدراسة ذات أهمية كبيرة لدارسي الترجمة و تحليل الخطاب و الدراسات اللغوية و الاجتماعية الأخرى ذات العلاقة.

منهجية البحث

يتبع هذا البحث منهجًا نوعيًا ووصفيًا، مع اعتبار العينة المصدر الرئيسي لجمع البيانات وتحليلها. ونظرًا لعدم توفر أجهزة بلاي ستيشن أو أجهزة الكمبيوتر الشخصية أو أجهزة إكس بوكس للباحث، فقد جُمعت البيانات من المراجعات والأفراد الذين عرضوا أسلوب لعبهم على قنواتهم على يوتيوب. وتمت مشاهدة ما يقرب من 50 فيديو، أي ما يعادل 100 ساعة من المحتوى لكل من النسختين الأجنبية والعربية لتسهيل المقارنة. وشمل ذلك أيضًا مراجعة جميع عناصر واجهة المستخدم. وتم التقاط لقطات شاشة من كلا النسختين لمقارنتها والتركيز على العناصر النصية أو المرئية التي قد تكون ذات صلة بعملية توطين العينة. وتم تحليل البيانات بناءً على لقطات شاشة متعلقة بواجهة المستخدم ومشاهد سينمائية. وتتضمن واجهة المستخدم القائمة الرئيسية، التي تظهر للاعب في بداية اللعبة، وتضم العديد من الخيارات مثل اللغة ومستوى الصعوبة ومستوى الصوت، إلخ.

الكلمات المفتاحية: توطين ألعاب الفيديو، التحديات اللغوية والقضايا التقنية، التكيف الثقافي، واجهة المستخدم، استراتيجيات الترجمة

Video game localization in the Arab world:
a case study of the Witcher 3

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Abstract

Arabic video game localisation is an emerging field in translation studies, with limited in-depth research conducted on the subject. Existing studies often focus on the challenges of localizing a single game or analyzing multiple games while primarily addressing linguistic aspects. This study comprehensively evaluates the Arabic localisation of The Witcher 3, a well-known game in the Arab world. The analysis focuses on two main localisation components: the User Interface (UI) and cinematics. A multimodal corpus of screenshots was collected from the game to achieve this. The analysis was conducted in two stages: first, the data was categorized into two main groups—UI and cinematics—and second, a linguistic, technical, and cultural evaluation was performed. The findings revealed that while the localisation was successful linguistically, it encountered serious shortcomings related to culture and technology. Several culturally sensitive visuals and themes were left unchanged, conflicting with the target audience's norms. Additionally, the UI and menus were not designed to accommodate right-to-left (RTL) script, leading to layout issues that negatively affected the gameplay experience. This study contributes to the growing body of research on Arabic video game localization. It also highlights the need for further research that can provide practical guidelines to assist localization professionals and game developers in producing high-quality Arabic localisations.

Keywords: Video game localisation, linguistic challenges and technical issues, cultural adaptation, user interface, translation strategies

1. Introduction

Translation is not just the process of transferring words from one language to another; it is an art and science that requires multiple skills. The translator must have a deep understanding of both the source and target languages and be able to grasp the cultural and social contexts of the translated texts. As Nord (1997) stated, translation is "the transfer of texts from one language to another while considering the cultural context." This includes written and non-written texts, such as images and cultural symbols that integrate within the overall context of the text. Therefore, translation becomes a complex process that demands a profound understanding of the cultural and social aspects tied to each language. (Nord, 1997)

The translation industry has undergone a significant transformation in recent years due to technological advancements. It has been reported that "The advent of translation technology has completely globalized translation and drastically changed how we process, teach, and study translation." Translation technology, encompassing software and digital tools, has enhanced efficiency and reduced the time required for translation processes. However, some theoretical aspects remain insufficiently explored and require further analysis, as some believe that integrating technology with human translation can improve the overall quality of translated texts (Chan, 2015).

This study aims at assessing the impact of localizing video games into Arabic, which is a complex process that requires a careful balance of cultural, linguistic, and technical considerations. It also aims to offer a deeper understanding of this process through the analysis of The Witcher 3 localization, focusing on the challenges faced by the industry and the importance of delivering products that align with the aspirations of Arab audiences. By addressing these challenges and ensuring high standards of localization, developers can create more immersive and culturally respectful gaming experiences for Arabic-speaking players. This study seeks to serve as an academic reference that contributes to improving localization quality and enhancing the gaming experience for Arab players in the future.

This study attempts to answer the following research questions:

1. What specific cultural elements required adaptation during the localization of *The Witcher 3* into Arabic?

2. What impact did these adaptations have on the overall narrative and gameplay experience?

3. What linguistic challenges were encountered in translating the dialogue, text, and terminology of *The Witcher 3* into Arabic, and how were these challenges overcome while maintaining accuracy and consistency?

4. What technical considerations, such as font support, text direction (right-to-left), and hardware compatibility, were addressed during the localization process, and how did these factors influence the final product?

5. To what extent did the Arabic localization of *The Witcher 3* resonate with Arabic-speaking players, and what feedback was received regarding the cultural appropriateness, linguistic quality, and overall enjoyment of the localized version?

As for the significance of this study, it identifies the intricate balance required between cultural sensitivity, linguistic accuracy, and technical feasibility. Focusing on *The Witcher 3* as a case study, it allows for a concrete examination of the challenges inherent in this process, moving beyond theoretical discussions to a specific, well-known example. It can measure the impact of localization and its success in identifying and articulating the above research questions. Thus, this study will provide a clearer framework for the investigation and allow for a more focused and impactful analysis of the challenges and opportunities associated with localizing video games into Arabic. This study holds significant potential to contribute to the academic understanding of localization studies and improve the gaming experience for Arab players. It also addresses the cultural sensitivity aspect across English and Arabic.

2. Localization

Localization is the process of adapting products and content to meet the needs of local cultures. As Dunne (2014) pointed out, "Localization is the process of adapting digital products developed in one locale for use in other locales." Localization goes beyond merely translating texts; it involves adjusting images, symbols, colors, and other aspects of the product to match the cultural expectations of the local market (Dunne, 2014).

2.1 The Importance of Localization in the Video Game Industry

Localization of video games is not just about translating in-game text; it requires a deep understanding of different cultures and how these cultures impact the gaming experience. With the growing number of players worldwide, it has become essential to localize games to ensure a comfortable and appropriate experience for users across the globe. Localization directly impacts a game's sales in international markets. This requires an accurate understanding of local culture and its requirements, whether in terms of text, images, or even names that may carry specific cultural meanings.

2.1.1 Challenges in Video Game Localization

O'Hagan (2013) noted that video game localization initially developed through trial and error in the 1980s and 1990s. Interestingly, frequent mistranslations did not significantly affect sales. She also mentioned that early video games, such as Tennis for Two, Spacewar, and Pong, contained few or no translatable words compared to modern digital games. As technological advancements continued to rise, games became more complex, and localization became a more intricate process. One of the primary challenges faced by translators in game localization is the frequent modification of game content. Translators frequently update translations continuously to accommodate changes in the game, rendering localization a lengthy and demanding process. (O'Hagan, 2013).

Game localizers require a variety of skills. In addition to linguistic and cultural knowledge, they must be creative in adapting texts in a way that feels natural to local users. They also need to be proficient in using specialized software tools to facilitate localization and ensure high-quality products. In today's gaming world, localization has become an integral part of the commercial success of digital products. Globalization and internationalization provide the framework for expanding games to new markets, while localization enhances the player's experience in those markets. Therefore, the gaming industry must be prepared to adapt to different cultures and languages to maintain its success in the global marketplace

2.1.2 Localization Process

Video game localization is a complex process that requires more than just translating the game's text. It involves adapting to the linguistic and cultural requirements of the target market (Mejía-Clemente, 2021, p. 84;

534

(Chaume, 2018, p. 94) This includes modifying texts, graphics, cinematics, and the user interface (UI) to render them culturally and linguistically appropriate. The goal is to deliver a gaming experience that mirrors the original product while preserving the core spirit and essence of the game—a process often referred to as achieving "equivalence of experience" (Mangiron & O'Hagan, 2013, p. 15). The extent of localization varies depending on several factors, including the budget allocated for localization, the target market, and technical constraints. For instance, some companies opt for partial localization to test the reception of their games in a new market, while others invest in full localization to ensure a product that fully meets the expectations of the audience

2.1.3   Importance of Localization in the Arab World

In the Arab world, video game localization has become a necessity due to the rapid growth in the number of Arab gamers, who now represent a significant portion of the global gaming market (Al-Batineh M. , 2021)However, localizing games into Arabic (AGL) faces numerous challenges that make it difficult to deliver an optimal gaming experience. These challenges are not limited to text translation but extend to cultural issues, such as addressing religious and social taboos, and technical challenges related to the unique properties of the Arabic script, such as its right-to-left (RTL) directionality and the use of appropriate fonts.

- **Technical and Linguistic Challenges**

Technical challenges are among the most significant obstacles faced by game developers when localizing their products into Arabic. Most games are originally designed to support left-to-right (LTR) languages, making their adaptation to RTL languages like Arabic a complex task.

This involves modifying the user interface to accommodate Arabic texts, ensuring font compatibility with the game design, and addressing issues related to bidirectional text alignment (Al-Batineh & Alawneh, Current trends in localizing video games into Arabic: Localization levels and gamers preferences, 2022, p. 7) Linguistically, translating into Arabic poses additional challenges due to the language's complex grammatical structure and the length of Arabic words compared to their English counterparts, which may affect UI design. Furthermore, translation errors can occur if the nuances between local dialects or the cultural context of certain words are not adequately considered

- **Cultural Challenges**

Culturally, localizing video games for the Arab world involves navigating a range of challenges due to differing values and social norms. Arab culture is considered conservative, emphasizing modesty and prohibiting depictions of excessive violence, sexual content, or alcohol consumption—common themes in many Western video games (Al-Ajarmeh & Al-Adwan,, 2022). Consequently, localizing games for Arab audiences requires modifying these cultural elements to align with the prevailing religious and social values of the region.

3. **Literature Review**

The translation of video games is increasingly in demand as it allows players from diverse cultural, social, and linguistic backgrounds to enjoy their favorite games, enhancing their overall experience. Nogueira (2019) notes that "the popularity of video games has significantly grown in recent decades due to advancements in technology, making the video game industry one of the largest entertainment sectors globally." Similarly, Mangiron and O'Hagan (Mangiron & O'Hagan, 2013, p. 269) observe that "since its modest start in the 1970s, the video game industry has expanded into a global phenomenon. The globalization of popular culture and the desire to enter new markets have driven most producers to localize their games into multiple languages.

Various scholars of video games have pointed out the technical, linguistic, and cultural challenges involved in localizing games into different languages. Bernal-Merino (2007) delves into the diverse textual elements in video games, such as manuals, packaging, "readme" files, official websites, dialogue for dubbing or subtitling, user interfaces (UI), and graphics with text, which can all be difficult for translators and localizers. He emphasizes that one of the primary difficulties is that video game assets are often provided to translators in spreadsheet format without enough contextual information.

Additionally, the non-linear nature of gameplay contributes to the fragmentation of the game's linguistic content. Bernal-Merino (2007, p. 5) notes that in video games, most events occur based on player actions, which means that textual data, like dialogue, appears during gameplay triggered by the player's actions rather than following a chronological order. This

results in fragmented information in the spreadsheets given to localizers, with textual elements often lacking chronological relevance to one another.

Bernal-Merino (2007) also sheds light on another hurdle video game translator encounter: the use of variables by developers. These variables, found in translatable strings, can include elements like name, gender, and nationality. For example, the string "/n nameofnation /n* is attacking you!" contains both translatable and non-translatable parts. The variable "/n nameofnation /n" changes based on the attacking nation's name. Translators must identify which strings are part of the game code and which are localizable assets (Bernal-Merino, 2007, p. 6). Moreover, some languages are synthetic, relying on inflections for syntax. In these cases, the grammatical gender and number of variables must align with other grammatical elements in the string to avoid awkward translations. This issue is further discussed in Bernal-Merino's (2020) article on game localization quality. He notes that while English syntax and morphology allow for easy sentence building using variables, other languages, like Spanish or German, with their gendered and inflected forms, cannot easily adapt to English-developed variables (Bernal-Merino,, 2020, p. 305) (Czech, 2013) also addresses challenges in game localization, particularly in translating **Call of Duty** into Polish. Czech identifies several linguistic issues in the Polish localization, especially with internal game terminology, which he attributes to insufficient contextual information (Czech, 2013, p. 14).

For example, the word "customs" can be misinterpreted without context, as it can refer to airport customs or cultural customs. Hard-coding and string automatization in video games further complicate localization. Some localization strings include both translatable and nontranslatable variables. These variables, adhering to specific syntactic types, genders, and numbers, can cause significant issues when localizing into languages with different syntactic systems. Grammar problems are inevitable due to string automatization, generating word strings based on player moves and choices. (Czech, 2013) also notes that Polish gamers, used to minimal localization, have absorbed English game terminology, creating a norm in

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*Game translators face challenges in distinguishing translatable text from code variables, such as "/n nameofnation /n," which represents the name of the attacking nation and changes dynamically within the game, while only fixed elements are translated. For more details, see Bernal-Merino, 2007, p. 6.)

gaming communities. Developers, however, insist on proper translation into Polish. This creates additional challenges for Polish localizers, who face the difficult task of dealing with borrowed lexical items (Czech, 2013, p. 20).Various scholars have explored the localization of video game linguistic and textual elements into Baltic languages. For example, (Šiaučiūnė, & Liubinienė,, 2011) conducted a comparative linguistic analysis of the Lithuanian localization of Magic Encyclopedia: The First Story (2008). They examined a dataset of 533 words, which included terms, menu items, and sentences, both simple and complex. Their findings indicated that the game's translation was predominantly literal and closely aligned with the source language. However, the researchers identified numerous issues, such as mistranslations, spelling errors, and stylistic inconsistencies, which negatively impacted the game's overall quality and playability. They attributed these problems to a lack of training programs and professional video game localizers in Lithuania.

In contrast, some researchers have focused on the localization of games into English. For instance, (Sharifi, 2016) analyzed the translation of Garshasp: Temple of the Dragon (2012), the first Persian video game localized into English. Sharifi used Vinay and Darbelnet's (1995) model of translation methods to conduct a qualitative and quantitative analysis of the game's text. He found that modulation and deletion were the most employed strategies, along with addition and literal translation. Similarly, (Mangiron, , 2012) examined the localization of Japanese video games into English. Her research focused on three case studies: Persona (1996–present), Phoenix Wright: Ace Attorney (2005–present), and Yakuza (2005–present). She explored how localization practices for Japanese games have evolved influenced by gamer feedback. Mangiron adopted a participant-focused approach, considering the roles of translators, editors, and producers, while also analyzing how players received the localized versions. Using a variety of sources like interviews, blogs, and forums, she found that Western gamers preferred localized Japanese games to retain elements of the original culture. This shift in gamer expectations has led developers to reduce cultural adaptation in their localization strategies, expanding their global fan base.

In her MA thesis, (Abu Kishek, 2016) examined the Arabic translations of Assassin's Creed: Syndicate (2015) and Tomb Raider (2013). She found mixed results, with some menu items effectively

translated while others remained untranslated or were translated literally, and this confuses players. Abu Kishek also highlighted examples of successful cultural adaptation in Arabic subtitles, such as replacing culturally inappropriate terms like "pig" with "sheep" and "Christ" with "heaven." Additionally, she noted that the Arabic-language user interface in both games did not conform to the right-to-left text orientation standard in Arabic.

In her 2018 PhD thesis, (Al-Mazrooa, (2018)) conducted an extensive study on Arabic video game localization, focusing specifically on the Arabic version of FIFA 15 (2014). Her research analyzed three key localization aspects: the game's packaging ("box and docs"), in-game text, and audio elements. She observed that the front cover of the game featured information in both Arabic and English, such as console details and age ratings, but noted that brand names like EA Sports and PlayStation remained in English. Furthermore, the European age rating was used, which she attributed to the lack of a unified Arabic rating system across the region. The back cover combined Arabic and English text, with promotional materials and information boxes in Arabic, but the alignment of the Arabic text was not consistent, an issue in Arabic localization. AlMazrooa also highlighted several misleading translations and omissions in the packaging translation. In her examination of the user interface (UI), Al-Mazrooa found issues with inconsistent terminology, where multiple Arabic terms were used to translate the same English term, causing confusion. This inconsistency was exacerbated by the fact that localizers often worked from disorganized lists of terms, making it difficult to interpret the correct meaning in context. She also addressed the issue of UI directionality, noting that while some elements were correctly right-aligned (mirrored from the English version), others were misaligned, leading to a disorienting presentation for Arabic players. Technical foreignization is a common issue in Arabic software and video game localization. The correct right-to-left (RTL) formatting of elements, such as menus and layouts is often neglected when adapting software into Arabic.

Al-Mazrooa (2018) also examined voiceover as part of her study on FIFA 15 (2014). Four types of voice presentations are featured in the game: sideline commentator, career-mode radio announcer, general commentary, and public announcer. Of these, only the commentary was re-recorded in Arabic, with Esam El-Sha'waly, a well-known Tunisian football

commentator, providing the voice. Al-Mazrooa argues that the Arabic commentary feels authentic, enhancing the gaming experience for Arabic-speaking players. Building on earlier research by Abu (Abu Kishek, 2016), Mahasneh and Abu Kishek (2018) revisited the Arabic localization of Tomb Raider (2013). Their analysis focused on the Arabic user interface (UI), subtitles for cutscenes, and voiceovers. They found that many main menu items were translated too literally, overlooking their communicative purpose, and concluded that detachment from context negatively impacted the quality and function of these translations. This issue mirrors what Al-Mazrooa found in the localization of FIFA 15.

Despite some success in translating menu items, especially those related to weapons, Mahasneh and Abu Kishek pointed out that the game's English acronyms were retained in the Arabic version, making it less accessible to non-English speakers. Their analysis also addressed how cultural taboos, idioms, and metaphors were handled. Profanity and religious terms were toned down, and idioms were domesticated by providing functional equivalents, leading to a more localized Arabic version. However, the study did not cover the technical aspects of localization, which remain a significant challenge, including text orientation, font usage, and script directionality.

4. Methodology
4.1 Research Methodology

This research employs a qualitative and descriptive approach, with the sample serving as the primary source for data collection and analysis. Due to the researcher's limited availability of PlayStation, personal computers, or Xbox devices, the data was collected from reviews and individuals who showcased their gameplay on their YouTube channels. Approximately 50 videos were watched, amounting to 100 hours of content for both the foreign and Arabic versions to facilitate comparison. This also included reviewing all user interface elements. Screenshots from both versions were taken to compare them and to focus on textual or visual elements that might be relevant in the localization process of the sample.

The data was analyzed based on screenshots related to the user interface and cinematic scenes. The user interface includes the main menu, which appears to the player at the start of the game, featuring several options such as language, difficulty level, volume, etc.

540

The second stage of data analysis involves linguistic, cultural, and technical analysis to determine the success of the localization in terms of conveying information and storytelling to provide the best player experience. Successful linguistic localization involves accurate translation and style appropriate to the original content. Culturally, successful localization must adapt to the cultural and regional context of the target area, considering local customs and audience preferences. Finally, from a technical perspective, it involves attention to text direction, user interface adaptation, and ensuring the language is easily accessible to the target audience.

4.2 Core Concepts of Localization

- User-Centered Localization: This aspect focuses on the needs and preferences of the users, who are the players in this case. The goal is to ensure that the localized content is accessible to the largest number of the target audience and meets their cultural and linguistic expectations.

- Functional Localization: This involves adapting the game elements not just linguistically but also ensuring that players in the target market can interact with the game efficiently and effectively. This approach aims to make the player's experience in the localized version as enjoyable and interactive as in the original version.

4.3 Game Assets and Their Function and Translation

The game assets demonstrate certain functions, which have their impact upon the translation product. These include:

1. User Interface (UI): The UI serves an informative function, consisting mostly of short texts or text fragments used to navigate video game settings and gameplay options. When translating, space constraints and the function of UI items should be prioritized. The translation should be pragmatic and functional to address space limitations. Translators should find solutions to overcome space constraints and "to reflect an edgy feel often imbued in in-game text in terms of expressions and naming of certain items" (Mangiron & O'Hagan, 2013, p. 155).

2. Audio and Cinematic Assets: These assets are usually revoiced or subtitled in the target language. They have an informative and expressive function "to provide a clue or a backstory in a dramatized manner" (Mangiron & O'Hagan, 2013, p. 156)

When translating these assets into other languages, the translator should prioritize lip synchronization and space constraints. The translation

should be fluent and flow naturally in the target language, with the correct register and style (Mangiron & O'Hagan, 2013, p. 156)

4.4 Research Framework

This research relies on the classification by Mangiron (2013) and O'Hagan for story-oriented video game texts, with a focus on each element of the game in the target language. Mangiron (2021, p. 3) states that "video game localization is a type of functional translation that centers around the player, where priority is given to the players and their gaming experience. The main goal of game localization is to provide a version that allows the target audience to experience the game as if it was originally developed for them."

- Linguistic Analysis: The collected data is analyzed through the lens of skopos theory, focusing on the source text and the function it provides in the target text.

- Technical Analysis: This addresses matters related to localization, such as the user interface, in-game texts, and subtitling.

- Cultural Analysis: It includes cinematics and the language used in voice-overs and cutscenes.

The framework by (Mangiron, , 2012) and O'Hagan addresses the cultural dimension of game localization by emphasizing the expressive function of audio, visual, and cinematic assets. This means that the sounds and cinematic scenes in the game must convey culturally appropriate messages to the target audience. Regarding the framework that defines the cultural perspective, it involves the study of culturalization, which includes modifying content to be in harmony with the cultural norms and values of the target audience. This can include changes to characters, dialogues, symbols, and visuals to ensure they align with the local culture without offending or alienating players. In summary, the goal is to provide a fully integrated and culturally appropriate gaming experience, making players feel as if the game was specifically created for them, with respect and appreciation for their values and culture.

4.5 Sample

"The Witcher 3: Wild Hunt" is an RPG game from the popular "The Witcher" series, beloved by many video game players. Developed by CD Projekt Red, it is classified as an action role-playing game set in an open world environment. The game is available on various platforms, including Microsoft Windows, Mac, PlayStation, and Xbox. The game has been

released in multiple languages, including Arabic, where the interface menus and dialogues have been translated into Arabic by Loc and More. The game is played from a third-person perspective, where players control the protagonist, Geralt of Rivia, a monster hunter known as a Witcher. Geralt embarks on a long journey through the Northern Kingdoms, fighting monsters and enemies using swords and magic. Players can interact with game characters to complete side quests and main quests to progress through the story. The game received positive feedback in its first six weeks and won more than 200 Game of the Year awards from various gaming sites.

5. Data Analysis

Three main parts will be discussed here. The first and second parts provide a linguistic and technical analysis of the user interface in The Witcher 3, while the third part will be dedicated to the localization of cinematic scenes into Arabic from a linguistic, cultural, and technical perspective.

5.1 Arabic Main Menu

5.1.1 Linguistic Analysis

Upon starting the game, the main menu appears in English and contains four options

FIGURE1: Main Menu in English and Arabic

Each menu item contains a sub-menu with options to control specific elements in the game, such as difficulty level, controller, and audio settings. In the Arabic version, the function of each menu item has been preserved with a focus on accurately conveying the meaning of each term. For example, in the difficulty level options, the translator provided a clear Arabic translation that reflects the precise meaning.

FIGURE 2. Gameplay Menu in English and Arabic

Literal translation can cause a lack of clear understanding of terms,

Source	Length in words	Target	Length in words
HUD	1 (3)	وحدة العرض الرئيسي	3 (17)
RESCALE HUD	1 (11)	إعادة مقياس العرض المساعد	4 (25)
NPC Chatter	2 (8)	عرض المحادثات بين الشخصيات التي لا يتحكم فيها اللاعب	9 (52)
GUI	1 (3)	واجهة المستخدم الرسومية	3 (23)

which in turn can negatively impact on the gaming experience since

544

control settings directly influence the gameplay style. When analysing the sub-menus in both English and Arabic, it is evident that the Arabic translations are longer, due to the length of the target terms. (Chandler & & Deming, 2012, p. 24)

point out that "the translated text is naturally longer than the original text by about 20% to 30%". (Al-Batineh M. , 2021) mentioned this issue in his investigation of video game localization problems.

TABLE 1: Arabic Translation of Some Acronyms Taken from The Witcher 3

As for the translation of acronyms in the main menu, they took up more space because the acronyms were translated into their full form in Arabic, rather than in their abbreviated form. For instance, "NPC Chatter" was translated into Arabic using nine words, which requires three times the space of the original term. Conversely, leaving the terms in their abbreviated form would make it difficult for Arab players to understand the meaning correctly.

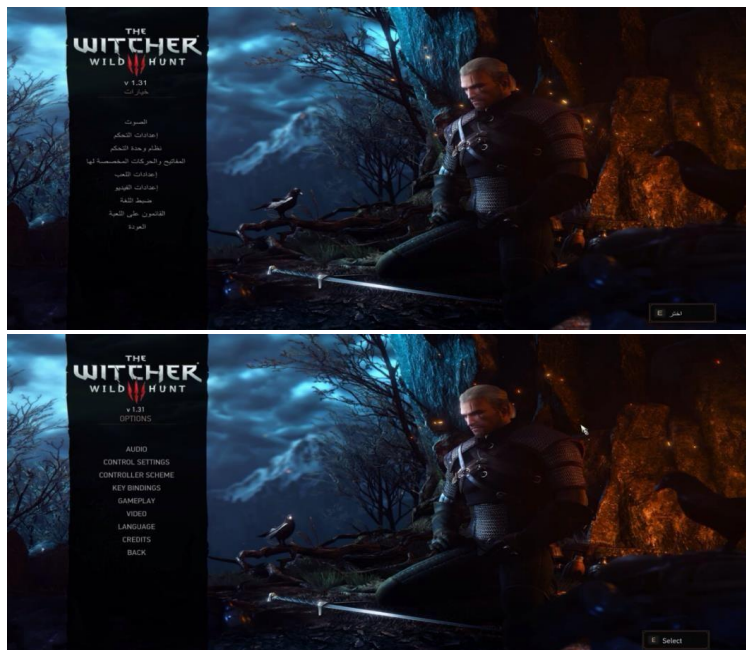To make the translation of Arabic terms clearer, the translator added some additional terms.

FIGURE3. Settings Menu in The Witcher 3

The process of adding more Arabic terms to clarify meanings is an effective strategy for translating elements. Using this strategy for clarification makes the Arabic language appear more natural and easier to understand. Explicitation involves making the embedded meaning in the source language explicit and ensuring the target sentence conveys the intended concept (Vinay & Darbelnet, 1995, p. 170). However, this strategy can have some negative effects, especially if the game does not support expansion to accommodate Arabic translation. Linguistically, the menu appears as if the game was originally designed in Arabic, which is one of the main goals of game localization.

5.1 Technical Analysis

The Witcher 3's interface was designed to support potential language expansions, fitting Arabic translations without any visible overlap or cutoff. However, the menu's layout and orientation remain Western, appearing on the left-hand side of the screen. This is referred to as "technical foreignisation" by (Al-Mazrooa, (2018)), indicating the inclusion of Western technical elements without adapting them to the target culture's norms. This approach can create a disconnect between the localized content and the native user's expectations. While this doesn't affect the linguistic function of the menu, it impacts on the overall look and feel of the game for Arabic-speaking players.

5.1.1 Inventory Screen

The Arabic language is written from right to left (RTL), but game companies often overlook this when it comes to directing texts and menus in this manner. Localizing a game designed for a left-to-right language into Arabic can cause problems when merging Arabic texts with UI elements such as images, icons, and buttons. The Arabic version retained the English screen layout for the inventory screen, which led to issues affecting the arrangement and clarity of information on the screen.

FIGURE4. Inventory in English.   FIGURE5. Inventory in Arabic.

In the English UI of the localized Arabic version, the interface appeared flipped, displaying information incorrectly. For example, the English description of the "GRANDMASTER FELINE SILVER SWORD" is presented in a specific order. The same order was used in the Arabic version, but since Arabic is read from right to left, the information is displayed in reverse. This causes a mismatch in the presentation of information, leading to confusion for Arabic-speaking players.

String	[plus, or minus sign] [Number%] description [red down, or green up arrow] [Number%]
English Example	+0% Attack power versus Elemena -10%
Arabic localization	10%- قوة الهجوم ضد الوحوش العناصرية 0%+
Arabic back localization	-10% Attack power versue Elemena +0%

Table2: String with Mirrored Variables in Arabic

The English text indicates that the sword the player uses is 10% less effective when fighting Elementa compared to the sword in the inventory, and it adds no additional power. However, the Arabic version presents this information in reverse. The Arabic text states that the sword being used decreases power by -10% and adds no power compared to the equipped sword. In such cases, the player faces a line of text and numbers and must rearrange the information to make sense of it correctly. This issue appears in many places on the inventory screen. These kinds of localization

problems affect gameplay and player immersion*. Arabic-speaking players will spend more time trying to understand the descriptions of the menu items. Additionally, the incorrect Arabic layout could negatively impact on the player's gaming experience and lead to misunderstandings.

5.3 Localization of Cutscenes into Arabic

Many modern video games rely on cutscenes, which are dialogue scenes between characters, to enhance the storyline and increase player immersion (Bernal-Merino, Translation and localization in video games: Making entertainment software global., 2015a, p. 280) When these cutscenes are localized into other languages, subtitles or dubbing are usually added. It's often necessary to modify some scenes to suit the target culture, which means adjusting the original video. (Mangiron & O'Hagan, 2013, p. 169). The Witcher 3 heavily relies on cutscenes and character dialogues. Many of the game's quests are based on these dialogues, requiring players to make decisions that affect the game's progression. Therefore, translating or dubbing these in-game cutscenes is crucial for providing an engaging experience in the target language and culture.

This section addresses how the cutscenes and dialogues have been adapted from technical, linguistic, and cultural perspectives in the Arabic version:

- Linguistic Aspects: The translation strives to flow naturally, as if the texts were originally written in Arabic. It incorporates Arabic literary features and idiomatic expressions to enrich the dramatic and narrative aspects of the game. Using the correct and idiomatic language is essential for player engagement.
- Technical Aspects: Texts and dubbing must be adjusted to match the timing in the cutscenes, avoiding any overlap or delay. This includes lip-syncing for scenes with voice dubbing.
- Cultural Aspects: Adjustments aim to make the content suitable for the local culture, such as modifying scenes or dialogues that may not align with the cultural values and norms of the Arabic audience. This may involve changing some names or expressions to prevent misunderstandings or inappropriate messages.

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* Is when a player becomes deeply engaged in a game, feeling fully absorbed in its world. This happens through story, visuals, sound, and gameplay, making the experience feel real.

548

Applying these adaptations ensures a culturally and linguistically immersive gaming experience, making players feel as if the game was designed specifically for them. In the linguistic context of game translation, dialogues are often rendered in a natural and smooth style, making them appear as though originally written in Arabic, with minor exceptions for character and place names, which are generally preserved in their original form. Translators tend to incorporate Arabic literary styles and local idiomatic expressions, enhancing the dramatic and narrative aspects of the text and adding familiarity for Arabic-speaking players. (Mangiron, , 2012, p. 3), notes that using correct language rich in idiomatic expressions plays a fundamental role in enhancing player engagement with the game, as clear and familiar language is essential to capturing their attention.

　　Similarly, (Sharifi, 2016) emphasizes the importance of producing a localized and transparent translation, aiming for fluidity and naturalness to make it feel as if it belongs to the local cultural environment. The creativity of the translators is evident in the Arabic translation of the examples in Table 2, where their approach reflects an effort to present dialogues in a style that authentically represents the Arabic cultural context, creating a more authentic experience and deepening player interaction with the game.

English	▦
Sub1: King of Beggars truly did reward Geralt handsomely <u>For the services rendered</u> to his subordinate.	قام ملك المتسولين بمنح (جيرالت) جائزة قيمة <u>نظير الخدمات التي اسداها</u> للاشخاص التابعين له
Sub 2: Geralt is <u>hardly an ace gambler</u>. He has had a few <u>good runs</u> in dice poker tournaments, true, but these were always Local affairs against <u>opponents whose skill level left much to be desired</u>	لم يكن (جيرالت) مقامرا <u>بالمعنى الحرفي للكلمة.</u> <u>لقد حظي بعدة انتصارات</u> في بطولات لعب البوكر، هذا صحيح، ولكن لم تكن هذه الانتصارات سوى فرصا محلية ضد خصوم متوسطي المستوى.
Sub 3: Mercenaries are usually the ones getting paid for killing things. This time, However, <u>the shoe was on the other foot</u>...	عادة مايتخذ المرتزقة اجرا على القتل، <u>لكن انقلب الحال في هذه المرة</u>...
Sub 4: A tournament in the world's greatest metropolis— <u>now that was a horse of an entirely different color</u>.	ولكن لو تحدثنا عن بطولة في اعظم مدن العالم، <u>فهذه قصة مختلفة كلية</u>

Table3 :Sample of English Subtitles and their Arabic Translation

The Arabic translation of the three examples effectively retained the original meaning of the source text while presenting a fluent and idiomatic Arabic version. This resulted in suitable Arabic expressions that flow naturally and are easily understood by Arabic-speaking audiences. The Arabic translation of the underlined sections in Sub 2 also demonstrated the translators' skill in choosing appropriate Arabic alternatives. They opted to move away from literal translation, rephrasing the text idiomatically to reflect the functional meaning of the English source while achieving a stronger linguistic and cultural connection to Arabic. Additionally, the translators showcased their ability to adapt English idiomatic expressions into Arabic, creating equivalents that resonate with Arabic language and culture. For example, the phrases "a horse of an entirely different color" (Sub 3) and "the shoe was on the other foot" (Sub 4) were rendered as Arabic idiomatic expressions that match the context and convey the intended meaning of the original text.

Overall, the Arabic translation of the cutscenes featured idiomatic Arabic, which facilitated the understanding of the ideas and storyline within the video scenes. This made the dialogues flow as though they were originally written in Arabic. In this way, the translator successfully achieved localization goals by producing a cohesive and smooth text that aligns with the tone and style appropriate for Arabic content.

5.4. Cinematic Scenes: A Cultural Perspective

The game The Witcher 3 includes several themes that contradict cultural and religious norms in Arab societies, such as sexual scenes, depictions of naked women, alcohol consumption, and the role of prostitution.

(Al-Batineh M. , 2021, p. 61) pointed out that "Arab culture is very conservative regarding sex, alcohol, and profanity... where many games have been banned in Arab countries due to their content that conflicts with Arab traditions and cultural standards." As a result, The Witcher 3 has been banned in several Arab countries, including Saudi Arabia, which represents an important market for locally available Arabic games. (Al-Batineh M. , 2021)

The English version of the game contains scenes that depict nudity, such as the opening scene where Geralt is shown in a bathtub with a naked woman. Additionally, the game addresses topics like prostitution, allowing players to visit brothels and engage in sexual

activities with various characters. However, these scenes have been retained in the local Arabic version, which contradicts Arab culture and traditions. To mitigate the impact of these themes, women in the Arabic version are covered only in lingerie. Data analysis revealed that some scenes include illustrations of naked women, either as part of the brothel setting or as tattoos on the bodies of certain characters, and these illustrations remained unchanged in the Arabic version. Regarding alcohol consumption, it is prohibited in Arab culture. The Arabic version of the game includes a controversial mission that requires the player to drink alcohol to complete a confrontation with a character named "the Maestro." If the player refuses to drink, the Maestro refuses to fight, leading to an incomplete mission. Given that alcohol consumption is considered forbidden in the Arab world, the presence of such missions in the Arabic version may spoil the gaming experience for many Arab players, as "the interactive nature of video games makes players heroes within the game world, increasing their sensitivity to details compared to reading a book or watching a movie" (Bernal-Merino, 2019). (Al-Batineh M. , The localization of food- and drink-related items in video games: The case of The Witcher 3 in Arabic, 2023)discussed the issue of translating alcoholic beverages in The Witcher 3, revealing that the Arabic version downplays the negative connotations associated with these drinks by providing ambiguous translations that do not specify the type of beverage but instead offer a general translation for "drink."

Overall, the visual and thematic taboos in The Witcher 3 have not been adequately adapted to align with Arab culture. It would have been preferable to modify these themes to fit the cultural standards of the target market, viewing this as a form of adaptation rather than "censorship" (Bernal-Merino, 2020, p. 311) (Bernal-Merino, Key concepts in game localisation quality. In L. Bogucki & M. Deckert (Eds.), The Palgrave handbook of audiovisual translation and media accessibility, 2020, p. 311). The analysis by Al-Ijramah and Al-'Uqda (2022, p. 78) of the Arabic version of Fiesta Online serves as a successful example of adapting visual and thematic elements to align with Arab culture, as prohibited themes and side scenes were modified to meet cultural standards. When translating culturally sensitive conversations and profanity in the game, it is crucial to employ a distinct and careful approach. Particular attention must be paid when converting such content into Arabic to ensure it respects cultural

norms. Table 3 provides various examples from cutscenes to illustrate the handling of these sensitive topics.

This ensures that the localization process not only maintains the game's integrity but also aligns with the cultural values and expectations of the target audience.

English source	Arabic translation	Back translation of the underlined part
Used to be an arrow'd come flying towards your <u>arse</u> every two steps, now it's dead quiet.	كنا قد سئمنا من هجوم السهام على <u>رؤوسنا</u> كلما خطونا خطوة، لكن الهدوء قد ساد الآن	..heads..
<u>Son of a whore!</u>	<u>يا لهذا اللعين!</u>	Damned one!
<u>Ploughing syphilitic</u> son <u>of a poxy whore</u>. I lost the first map I prepared for Professor Atimstein in a game of Gwent.	<u>اللعنة</u>، لقد أضعت الخريطة الأولى التي أعددتها للأستاذ (اتيمشتاين) في لعبة (جونيت).	Damn!

Table 4: Sample of English Subtitles with taboos and their Arabic Translation

Most of the offensive language was adapted into expressions more acceptable to an Arabic-speaking audience, taking into consideration the target culture and providing translations that suitably convey the intended meaning. For example, translating "arse" as (رؤوس) (heads) was a clever choice; it not only conveyed the functional meaning of the English term but also added an idiomatic touch appropriate for Arabic. Similarly, phrases like "Son of a whore!", and "Ploughing syphilitic son of a poxy whore" were rephrased to reflect their functional meaning while maintaining cultural sensitivity. Linguistically, the Arabic version of *The Witcher 3* is effective in delivering functional translations for offensive language, aligning well with Arabic cultural standards. This approach is a common and recognized practice in Arabic audiovisual translation, as highlighted by Jerrah and others. (Jarrah & Haider, 2023)

5.5 Cutscenes: Detailed Technical Perspective

The textual translation of the game presented several technical challenges that affected the clarity and readability of the translation, and consequently, the gaming experience. These challenges include font type, color, size, text length, and the absence of proper formatting. The translation is usually displayed at the bottom of the screen, providing written text for dialogue or voice-over comments occurring during cutscenes. One of the main technical issues in the Arabic version of The Witcher 3 was the small font size, lengthy texts, and non-compliance with text segmentation standards, which impacted readability.

Given the nature of the Arabic language, where letters are connected and their shapes vary depending on their position in the word, this posed a significant challenge. Additionally, Arabic includes precise diacritical marks that play a crucial role in determining the meaning of words. When the translation is too long, it becomes difficult for the player to read, potentially diminishing their enjoyment of the game. Other issues included the timing of text appearance, where subtitles might appear before the character starts speaking, disrupting the synchronization between text and image. In some quests, multiple pieces of information are presented within a single long text, reducing the suspense element in cutscenes. For example, when a character speaks with significant dramatic pauses, the entire Arabic translation appears at once, disregarding the importance of these pauses in adding depth and dramatic tension to the scene.

FIGURE 6: Screenshot of a long subtitle with small Arabic font taken by the researcher

The Arabic subtitles in The Witcher 3 faced several technical challenges, including font size and subtitling conventions. In terms of font size, the subtitles were displayed in small fonts, making them difficult to read, especially on smaller screens. In some video games, players can change the font size of subtitles, which is particularly helpful for those with vision impairments. However, in The Witcher 3, this option was not available, exacerbating the difficulty of reading long texts.

Additionally, there were issues with translating texts on images. For instance, shop names and wall advertisements were translated as if they were part of regular dialogue subtitles, without punctuation marks indicating that the player was reading translated text on the screen. This could lead to confusion, especially for deaf players, as they might mistake these texts for dialogue subtitles.

There were also problems related to timing and synchronization; subtitles sometimes appeared before the character started speaking, disrupting the synchronization between text and image. In some quests, a large amount of information was presented in a single long subtitle, without considering dramatic pauses in the dialogue, reducing the cinematic impact on players. Moreover, linguistic challenges were noted

554

in the correct use of Arabic, where precise diacritical marks are essential for determining the meaning of words. The long texts made reading difficult, negatively affecting the gaming experience. Although there are no fixed conventions for audiovisual translation in Arabic, consistent and unified use of conventions is crucial for ensuring clarity and readability, thereby enhancing the gaming experience for the target audience. In addition, translators should consider the interpersonal component in any text type, such as rendering video games (Jabir, 2020).

6. Conclusion

The localization of video games into Arabic can impact players' experiences in several ways. Linguistic and technical issues may hinder playability, while cultural aspects can negatively affect game sales in the Arab world, leading to financial losses for developers and marketers (Al-Batineh M. , 2021). Many games have been successfully translated into Arabic, but there are still issues related to space constraints in menus, user interface alignment incompatibility with Arabic, and other technical problems that affect the overall gameplay experience.

From a cultural perspective, some offensive terms have been addressed in text translations. However, certain themes that contradict Arab cultural values remain unchanged, potentially causing discomfort for some players.

A study analyzed the localization and translation of translatable assets in *The Witcher 3*, focusing on linguistic, technical, and cultural aspects. The results showed that linguistic elements such as the user interface and menus were fluently translated into Arabic, maintaining the original function of the texts. Translators employed an "explicitation" strategy to ensure clarity, improving readability and comprehension. However, this approach may be impractical in some cases due to character limit constraints in menus, requiring creative solutions to maintain the original function of textual elements while adapting to available space.

For audio and cinematic assets, the study found that dialogue translation and dubbing into Arabic were fluent, preserving the dramatic depth of the texts. Some phrases were adapted to align with Arab culture by softening profane language and removing inappropriate references. However, certain scenes contained themes that did not align with cultural and religious values in the Arab world and remained unchanged, potentially causing discomfort for some players.

Technically, Arabic texts in the game were relatively long with small font sizes, which could impact gameplay experience and weaken the dramatic effect of some scenes. Additionally, the user interface and menus were not designed to accommodate right-to-left text direction, reflecting a lack of strategic planning for linguistic and cultural compatibility. Some game development studios adopt a "fit-for-purpose localization" approach that gives priority to linguistic translation while overlooking technical issues that require significant resources to resolve.

The study highlights the importance of adopting an integrated approach to video game localization into Arabic, incorporating linguistic accuracy, cultural adaptation, and technical adjustments to ensure a seamless gaming experience that meets Arab players' expectations. These issues can be mitigated by implementing an effective strategy that considers cultural, linguistic, and technical adaptation during the early stages of game development.

A dedicated development team familiar with Arabic localization challenges is essential to ensuring high-quality translations that cater to the Arab audience. Video game localization is not limited to translation but also involves modifying visual content and gameplay mechanics to suit the localized version in line with Arab players' expectations and cultural requirements. Moreover, collaboration between game developers and translator training programs is crucial to building a new generation specialized in video game localization. Many existing challenges stem from the lack of experienced developers and translators in this field. Establishing training programs and specialized courses in video game localization into Arabic would enhance localization quality and popularity, ultimately boosting sales.

Overall, further research on video game localization into Arabic is urgently needed, not only to identify linguistic, cultural, and technical challenges but also to develop effective strategies that ensure smooth and comprehensive gaming experience. Such research could greatly benefit developers and localizers by helping them create games that meet Arab players' expectations, thereby expanding and strengthening the video game industry in the region.

References

H .Sharifi .(2016) .Norms governing the localisation of video games ., .*The Journal of Internationalization and Localization.*73–61 ,(1)3 ،

M Bernal-Merino .(2020) .,*Key concepts in game localisation quality. In L. Bogucki & M. Deckert (Eds.), The Palgrave handbook of audiovisual translation and media accessibility (pp. 297–314) ..:*UK: Springer International Publishing.

,D .Czech .(2013) .Challenges in video game localization: An integrated perspective. Explorations . , :*A journal of language and literature* ,1 ،pp. 3-25.

,M .Abu Kishek .(2016) .*The Arabic localization of video games: An analysis of translation and localization practices of selected linguistic assets* .Jordan: Master's thesis, Yarmouk University.

Al-Batineh, M. (2021). issues in Araic video game localization: Adescriptive study. *Translation and interpreting, 23*(2), pp. 45-64.

Bernal-Merino, M. (2020). *Key concepts in game localisation quality. In L. Bogucki & M. Deckert (Eds.), The Palgrave handbook of audiovisual translation and media accessibility.* Switzerland: Springer International Publishing.

C. Mangiron .(2012) . ,The localization of Japanese video games: Striking the right balance .*The Journal of Internationalization and Localization* , ، .20–1 ,(1)2

Chan, S.-W. (2015). The impact of technology on translation. *The Routledge Encyclopedia of Translation Technology. The Journal of Specialized Translation*, pp. 298-301.

Chaume, F. (2018). *Is audiovisual translation putting the concept of translation up against the ropes?* JosTrans.

Dunne. (2014). Definition of localization and its role in adapting digital products. *Game texts: Studies about languages*, pp. 46-55.

H Chandler و ،S & Deming .(2012) .*The game localization handbook*2 الإصدار) nd ed .(USA:: Jones and Bartlett Publishers.

Jabir, J. K. (2020). The interpersonal component in Qur'anic paratactic projections: Critique of translation into English. *Scientific research is the gate of construction and progress* (pp. 39-76). Baghdad: Journal of the college of Basic Education, University of Mustansiriyah.

Jakobson, R. (1959). On linguistic aspects of translation. (R. A. Brower, Ed.) *On Translation*.

Jarrah, S. e. (2023). strategies of localizing video games into Arabic: A case study of PUBG and Free Fire. *Open Cultural Studies* , pp. 1-14.

Jarrah, S., & Haider, A. (2023, july 9). strategies of localizing video games into Arabic: A case study of PUBG and Free Fire. *Open Cultural Studies*, pp. 1-14.

K. Dunne .(بلا تاريخ) .Definition of localization and its role in adapting digital products .*Game texts: Studies about languages*.104-84 الصفحات ،(19)

M Al-Batineh .(2023) .The localization of food- and drink-related items in video games: The case of The Witcher 3 in Arabic .*Digital Translation* ,(1)10 ، 56–36.

M Al-Batineh و، R Alawneh .(2022) .Current trends in localizing video games into Arabic: Localization levels and gamers preferences .*Perspectives* ، 342–323 ,(2)30.

M Bernal-Merino2015) .a .(*Translation and localization in video games: Making entertainment software global* .London: Routledge.

Mangiron, C., & O'Hagan, M. (2013). *Game localisation: Translating for the global digital entertainment industry.* John Benjamins Publishing Company.

N. Al-Mazrooa .((2018)) .*Arabic localization: Key case studies for Translation Studies* .UK: Unpublished doctoral dissertation, Cardiff University.

Nord, C. (1997). *Translating as a purposeful activity:Functionalist approaches explained.* Mnachester: St.Jerome.

O Al-Ajarmeh و ،A .Al-Adwan .() .(2022) .,Insights into blending game localisation in the Arab world: Arafiesta as a case study .*The Journal of Internationalization and Localization*.84–61 ,(1)9 ،

O'Hagan, M. &. (2013). *Game localisation: Translating for the global digital entertainment industry.* John Benjamins Publishing Company.

V Šiaučiūnė و ،,V. Liubinienė .(2011) .,Video game localization: The analysis of in-game texts . .*Studies about languages*.19 ،