

# The Challenges and Strategies Involved in the Netflix Arabic Subtitling of Humor in the Sitcom *The Big Bang Theory*

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**Abstract**—This research delves into the challenges involved in the Arabic subtitling of humor in the American sitcom *The Big Bang Theory (BBT)* as viewed on Netflix. The study also analyses the translation strategies employed to subtitle the humor instances in the *BBT*. While Arabic audio-visual translation is increasing steadily, humor subtitling within this context remains relatively unexplored. The taxonomy offered by Diaz-Cintas and Remael (2014) was employed to categorize the occurrences of humor and was also used to study the translation strategies present in these situations. The findings reveal that literal translation was the most used strategy in the analyzed data. However, this strategy often fails to capture the subtle humor nuances rooted in character personalities and often misses the intended meaning, requiring nuanced adaptations to convey the true cultural significance. Scientific humor presented unique challenges also. Translating the *BBT*'s humor for Arabic audiences proved a challenging feat also due to its heavy reliance on puns, wordplay, and references specific to English. Moreover, cultural allusions posed constant hurdles. Even subtitling constraints played a role, with limited space and time hampering attempts to convey scientific jargon and cultural nuances alongside the humor. Notably, Arab subtitlers, prioritizing subtitle conciseness, rarely opted for the addition strategy, despite its potential to bridge comprehension gaps. This study thus underscores the intricate interplay of linguistic fidelity, cultural adaptation, and technical constraints in navigating the tricky terrain of humor translation.

**Index Terms**—humor, Arabic subtitling, translation strategies, the sitcom *The Big Bang Theory*

## I. INTRODUCTION AND BACKGROUND

Humor is a complex cognitive and emotional phenomenon that has proven difficult to definitively characterize or explain (Mireault et al., 2018; Yue et al., 2016). It encompasses physiological responses, social cues, and psychological factors interacting in nuanced ways. As Yue et al. (2016) discuss, reacting to something humorous involves specific physiological responses like laughter as well as higher-order social, and cognitive processing to comprehend the humorous intent based on shared sociocultural knowledge and conventions. Moreover, as Tsakona and Popa (2011) explain, humor is fundamentally a sociocultural experience – it relies on common social frames of reference and is shaped by cultural context. Humor fulfills important social functions within a group, serving, for instance, as a means of gentle social correction, exerting social control, or facilitating social bonding.

Because humor is so grounded in sociocultural contextual factors, translating it effectively across linguistic and cultural barriers has proven exceptionally challenging (Arunsamran & Tungtang, 2015; Al-Duleimi & Aziz, 2016; Hadiati, 2018). This difficulty intensifies in subtitling humor, where translators must navigate different languages and switch from spoken to written modes. Subtitlers face stringent space and time constraints, limiting their ability to provide explanatory background often needed to convey humorous intent (Perego et al., 2016). For example, in subtitling humorous film/TV dialogue, audiences hear the original exchange and laughter, pressuring subtitlers to convey the humor so viewers comprehend the laughter despite the constraints.

As Audio-visual Translation (AVT) has expanded globally, studying English-Arabic translation practices has become increasingly relevant. However, despite growth, English-Arabic AVT scholarship remains limited, especially regarding humor translation strategies, representing a significant knowledge gap (Al-Adwan & Yahiaoui, 2018). Most Western sitcoms utilize complex humor involving wordplay, cultural references, and characterization. Yet humor's cultural specificity creates translation difficulties.

Therefore, investigating the Arabic subtitling of humor in *The Big Bang Theory (BBT)* provides informative insights into translating culture-laden comedy. An analysis is warranted given the increased Arab interest in US TV and the lack of sufficient research on subtitling this linguistic-cultural combination (Al-Adwan & Yahiaoui, 2018). Findings can enrich

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AVT scholarship and assist the practice by uncovering Arabic subtitlers' strategies for creatively overcoming humor translation challenges.

#### A. Theoretical Framework

Diaz-Cintas and Remael's (2014) multifaceted taxonomy provides a useful conceptual framework for categorizing different types of humor mechanisms as well as potential translation strategies. Their proposed taxonomy builds on the foundational work by Zabalbeascoa (1996) investigating factors that shape humor translatability. Diaz-Cintas and Remael's (2014) model encompasses the following:

1. International jokes – humor featuring universally recognizable references accessible to global audiences. This type often permits literal translation to be an effective strategy since it does not rely heavily on culture-specific allusions.
2. Culture/institution-dependent jokes – humor relying on cultural allusions only familiar to audiences from certain cultural backgrounds. These frequently require careful adaptation to corresponding references in the target culture substituting equivalent entities the local audience would recognize.
3. Community-based humor – jokes reflecting perspectives, biases, or experiences specific to a particular community. More involved localization strategies may be imperative for this type, potentially including cultural substitution or selective omission of niche references through deletion.
4. Linguistic jokes – wordplay, puns, or other humor exploiting language-specific structural features. These are intrinsically challenging to translate directly across linguistic differences in vocabulary and grammar.
5. Visual humor – comedy relying primarily on visual information, such as sight gags. Adaptation of textual elements is not needed but care must be taken with any textual components paired with visuals.
6. Aural jokes – Humor relying on accents, noises, or other auditory information where meaning is self-evident. Little adaptation is required.
7. Complex jokes – Multifaceted humor combining two or more of the other categories, necessitating adaptable translation approaches drawing from multiple strategies.

Diaz-Cintas and Remael (2014) also delineate several key translation strategies potentially applicable when dealing with culture-specific references in humor, including:

- Retention – Preserving the source cultural reference intact through literal translation.
- Specification – Adding supplementary clarifying information to explicate the cultural reference.
- Direct translation – Translating the cultural reference directly without adaptation.
- Generalization – Using more general or neutral references to make the joke more accessible.
- Substitution – Replacing the source cultural reference with an equivalent local reference more familiar to target audiences.
- Addition – Adding words, phrases, or information
- Omission – Deleting the cultural reference entirely.

This multidimensional taxonomy of humor categories and potential translation strategies is used as the conceptual framework guiding the design and methodology of this study analyzing English-to-Arabic subtitling practices for translating humor in the American sitcom *the BBT*.

Diaz-Cintas and Remael's (2014) model can facilitate a systematic qualitative analysis of the Arabic subtitle translations examined, enabling categorization of the diverse humor types observed in the show based on their linguistic, cultural, visual, or complex nature.

Overall, Diaz-Cintas and Remael's (2014) multidimensional theoretical model offers an invaluable guiding lens for this study's method of humor categorization and analysis of translation strategies used.

## II. REVIEW OF RELATED LITERATURE

### A. Constraints Involving Audio-Visual Humor Translation

Humor is a core element of many popular American sitcoms as it drives viewership, along with plot and characters. Language use is deeply intertwined with cultural context and sociocultural frameworks inherently shape how linguistic elements like humor are interpreted and understood (House, 2004).

Failure to appropriately consider relevant cultural factors tied to humor can negatively impact audience reactions and enjoyment. For example, the first season of the *BBT* incorporated jokes about US history topics like Native American genocide and slavery which presume audience familiarity with these events (Wang, 2020; Štefanac, 2022). Effectively translating such culture-dependent humor for audiences in other world regions requires thoughtfully navigating this presumed "insider" cultural knowledge and shared societal frames of reference.

In addition to broader cultural knowledge constraints, humor translators and subtitlers face more specific linguistic challenges when seeking to convey certain forms of comedy, especially complex wordplay, across languages. Effectively translating such wordplay requires not just conveying surface meaning but also grasping these key linguistic nuances of the source language, and then creatively finding ways to reconstruct similarly amusing wordplay within the lexical constraints of the target language.

Beyond cultural and linguistic factors, technical and textual restrictions tied to subtitling present additional barriers that humor translators must overcome. Technical constraints intrinsic to subtitling as a medium, such as strict character limits per line and restrictions on how much text can appear on screen simultaneously, also influence available humor translation options, as space is highly limited (Perego et al., 2016).

### B. Subtitling Humor in the *BBT*

Wang and Zou (2019) analyzed Chinese subtitling of the *BBT* using a functional equivalence framework encompassing linguistic, stylistic, and cultural dimensions. At a linguistic level, they found subtitlers tended to utilize phonetic, semantic, and pragmatic equivalence to convey emotions like those in the English source. Stylistically, omission and amplification were used to aid character and theme comprehension. Culturally, subtitlers adapted humor by incorporating Chinese four-character idioms and dialects (Wang & Zou, 2019).

Similarly, Cao et al. (2022) studied the *BBT* translation strategies through the lens of eco-translatology theory, which proposes adapting translation to the target language's linguistic, cultural, and communicative ecology. They found extensive use of adaptive selection techniques, with substantial linguistic, cultural, and contextual adaptation of English humor for Chinese audiences. This included replacing niche cultural references with more familiar ones. However, they note that some subtitlers used inappropriate modern slang or idioms incongruous with the *BBT*'s contexts (Cao et al., 2022).

These studies demonstrate that the Chinese subtitling of the *BBT* humor often involves considerable adaptation along cultural, stylistic, linguistic, and contextual dimensions. This underscores that cross-cultural humor translation requires cultural sensitivity to effectively bridge divides in background knowledge. It also highlights the risks of excessive adaptation distorting original meaning or using incongruous slang. Focusing also on the *BBT*, Gadže (2016) examined techniques Croatian subtitlers used to translate the *BBT*'s culture-bound humor. He notes that effectively rendering humor across languages requires considering linguistic and cultural distinctions. Interestingly, his findings showed Croatian subtitlers often opted for a more literal translation of stereotypes and cultural references rather than adaptation or substitution with local equivalents.

Collectively, these studies reveal that humor translation strategies are not a one-size-fits-all but rather depend on the subtype of humor, language pair, and directionality. This shows how approaches differ across target cultures and languages. As Yus (2012) notes, successfully conveying humor often requires bridging incongruities between source and target language rhythms, meanings, and cultural knowledge.

Subtitlers ultimately aim to reproduce a comic experience for target audiences comparable to that relevant to the source, prioritizing dynamic rather than formal equivalence (Delabastita, 1996). This requires creativity and cultural sensitivity to transpose humor across linguistic and cultural divides. Examining Arabic subtitling strategies for the *BBT* can reveal further insights into the navigation of these challenges to effectively translate sitcom humor.

### C. Statement of the Problem

Gamal (2019) indicates that thus far, the official translation of audio-visual content into Arabic has been subpar. The field of translation is still emerging in the Arab world, though progress has been made in audio-visual translation. Nevertheless, the body of research focused specifically on Arabic subtitling of humor remains quite limited.

The *BBT* provides a useful case study, as it contains frequent instances of verbal and situational humor, inside jokes, incongruities, and cultural stereotypes that pose translation challenges (Gadže, 2016). For instance, the core characters represent certain social, racial, and ethnic stereotypes that may not transfer easily across linguistic and cultural barriers. While some studies have examined humor translation in the *BBT* (Arunsamran & Tungtang, 2015; Cao et al., 2022; Wang, 2020; Yilmaz & Cakiroglu, 2020), no studies have yet focused specifically on official Arabic subtitling of humor in the *BBT*. Very few studies involve Arabic subtitling of humor; for instance, Alnusairat and Jaganthan (2022) analyzed Arabic subtitling of humor in the sitcom *Friends*.

This study aims to address this research gap through an in-depth investigation of the techniques and strategies employed to subtitle verbal and situational humor instances in the *BBT* into Arabic. It also aims to identify the specific humor categories utilized in the *BBT* through a detailed textual analysis of the dialogue in the first six seasons. It is hoped that findings will contribute to the still-emerging body of knowledge on Arabic subtitling of humor and offer practical implications for professional subtitlers.

## III. METHOD OF THE STUDY

### A. Data Collection

The data sample involves all the episodes from the first six seasons of the *BBT*. Occurrences of humor in the source language will be identified and categorized based on humor type. The data for analysis will comprise exemplar humorous dialog excerpts from the *BBT* episodes and corresponding professional Arabic subtitles from the Netflix version. The analysis will examine the Arabic subtitle translations of each humor instance to investigate the challenges that the translators could have faced during the Arabic subtitling. Drawing on Diaz-Cintas and Remael's (2014) taxonomy, challenges will be coded concerning cultural gaps, linguistic differences, space/time constraints, or other technical subtitle conventions. Next, the specific translation strategies utilized in the Arabic subtitles will be analyzed. Strategies (e.g.

omission and normalization) will be coded based on Diaz-Cintas and Remael's (2014) framework. Frequencies of specific challenge types and strategy categories will be calculated to find which strategies have been used more.

The findings can offer practical insights into Arabic subtitling approaches that best balance adaptation for cultural intelligibility with the preservation of the humorous style and meaning of the source text.

### B. Sample Selection

The data collection process for this study involved meticulous and purposeful sample selection to ensure the robustness and representativeness of the dataset. Several key criteria were employed for the selection of subtitle segments from the first six seasons of the *BBT*. These criteria can be represented as follows:

1. Episodic diversity: A comprehensive and diverse range of episodes spanning the first six seasons was carefully chosen. This diversity aimed to capture various comedic situations, interactions between characters, and forms of humor, ranging from intellectual wordplay to situational absurdity.

2. Relevance to humor: Subtitle segments were selected based on their direct relevance to humor translation. Specific segments were chosen to encompass a variety of humor types, as elucidated in the preceding sections.

3. Translational variation: To explore the intricacies of humor translation, the size of the sample was designed to include subtitle segments that employed a range of translation strategies such as normalization, addition, and adaptation. This strategic diversity was essential to examine how each translation approach impacted the preservation and transformation of humor within the context of the show.

### C. Data Extraction

Following the precise selection of subtitle segments, an elaborate data extraction process was undertaken. Each chosen subtitle segment was meticulously extracted from the selected season. The following information was documented for each segment: first, the original English dialogue which is the verbatim English dialogue that appears in the original sitcom of the *BBT*; second, the Arabic Translation which is the corresponding Arabic translation of the English dialogue as it appears in the subtitled version of the show; and, third, the context within the episode which is the context within which the subtitle segment appeared in the episode. This contextual information was essential for understanding how the humor was situated within the storyline and character interactions.

### D. Data Categorization

The categorization of humor occurrences in the investigated data from the *BBT* involved the following:

1. character-driven humor: Subtitle segments showcasing humor emanating from the distinctive personalities of characters like Sheldon and Leonard.

2. linguistic humor: This type of humor exploits the ambiguities or peculiarities of language, including wordplay, puns, and linguistic incongruities. It often requires a play on words and a clever use of language,

3. Cultural humor: segments that contained humor based on cultural references or specific cultural nuances were categorized as cultural humor.

4. scientific humor: humor segments that drew on scientific terminology, intellectual wordplay, or technical jargon were categorized as scientific humor.

In sum, the data collection process for this study was generally characterized by its comprehensive approach to sample selection, meticulous data extraction, and thoughtful categorization of subtitle segments.

### E. Data Analysis and Results

This study aimed to investigate the possible challenges that would have faced the subtitlers of the first six seasons of the popular sitcom the *BBT* and the strategies they employed to translate and subtitle humor from English to Arabic. This chapter presents the results that have emerged following that comprehensive analysis.

Analysis of the first six seasons of the *BBT* has led to finding 80 situations that belong to several types of humor that can be challenging to subtitle into Arabic. These are summarized in Table 1.

TABLE 1  
TYPES OF HUMOR IDENTIFIED IN THE FIRST SIX SEASONS OF THE *BBT* THAT CAN BE CHALLENGING TO SUBTITLE INTO ARABIC

Type of Humor	Frequency
Wordplay	27
Pun	15
Sarcasm	9
Satire	12
Irony	5
Deadpan	4
Parody	3
Situational	4
Self-deprecating	1
Total	80

The information in Table 1 shows that the most common type of humor that is identified in the collected data is wordplay (33.7%) followed by the occurrence of puns (18.7%). However, self-deprecating was the least common type of

humor (1.25%). The types of humor found in the investigated data demonstrate the diversity of comedic techniques used in the *BBT*'s verbal and situational humor. Identifying these humor types provided the foundation for analyzing the translation strategies applied in the Arabic subtitles.

In addition to these common forms of humor, there are also instances of other types of humor that add to the show's comedic texture. For instance, visual humor, where the humor is derived from visual elements such as slapstick comedy or facial expressions. However, these forms of humor were less frequent, and their translation did not present the same level of complexity as the more linguistically-based forms of humor.

The next step in the analysis involved identifying the challenges that these instances of humor presented for translation. In this regard, we found that linguistic differences, unfamiliar cultural references, and structural obstacles were the most significant hurdles, as shown in Table 2 below. After that, we analyzed the Arabic subtitles themselves to know the strategies that were used to translate the humor situations. Table 2 also provides examples of the translation challenges and the translation strategies that were employed by the subtitlers to translate different types of humor in the *BBT*.

Linguistic differences were the most common challenge that Arab subtitlers have encountered. The *BBT*, like many sitcoms, relies heavily on wordplay and puns, which are notoriously difficult to translate. These forms of humor often involve a play on words that is specific to the English language and does not have an equivalent in Arabic. As a result, the humor can be lost in translation, leading to a less enjoyable viewing experience for Arabic-speaking audiences.

Much of the wordplay humor in the *BBT* relies heavily on the phonetic properties of English for its comedic effect, through devices like rhyming, alliteration, and homophones, all of which, in association with double meanings, are intrinsically linked to English vocabulary and phonology. For instance, Leonard's utterance, "You're not sick, this is, but you are not," possesses a dual connotation, as 'sick' encompasses both a state of illness and a state of obsession. In this sentence, the words carry a figurative sense, indicating a condition of being overly fixated on something rather than referring to physical health. The linguistic properties central to why this is humorous in English do not readily translate directly into Arabic due to differences in lexical semantics and phonology between the languages. This poses challenges for conveying linguistic humor.

While linguistic discrepancies proved to be the most challenging obstacle, unfamiliar cultural references emerged as the second major difficulty encountered by Arab subtitlers. The *BBT* is deeply rooted in American culture, and many of the jokes and humorous situations rely on an understanding of this cultural context. The situations mentioned in Table 3 below show that the Arabic subtitling could not explain the allusions associated with the terms that are not common in Arab culture. Examples, as in Table 3, include comments alluding humorously to the iconic science fiction film 'Star Wars', the movie 'Sophie's Choice', 'Saturnalia Miracle' which is an ancient Roman festival celebrated in December renowned for its merrymaking, 'Corleone's' referring to the fictional Corleone crime family featured in the novel "The Godfather" and its subsequent film, and 'Bat-signal' in the American comic 'Batman' refers to the distress signal used by the Gotham City Police Department as a method of contacting and summoning Batman to their assistance. For many Arab audiences unlikely to possess background knowledge of niche U.S. films, TV shows, and cultural or national events and allusions these references and their related humor may be completely unfamiliar and opaque without supplementary explanation clarifying the allusion. Reliance on this presumed cultural literacy thus poses another major humor translation obstacle.

Similarly, structural obstacles also presented a challenge. These included differences in sentence structure and grammar between English and Arabic, as well as the constraints of subtitling, such as the need to keep subtitles concise and synchronized with the on-screen action.

In addition, the show's scientific jargon-filled banter already provides limited screen time for each joke. Attempting to preserve the nuanced language-based puns and cultural references in such exchanges under tight space caps, while still conveying plot vital information, severely restricts how much of the verbal humor can be reproduced intact.

Overall, translating the linguistically intricate wordplay, cultural allusions, and rapid-fire comic timing that typify the *BBT*'s humor within the unavoidable technical restrictions of the subtitling format poses considerable translation difficulties, requiring creative adaptation techniques. Further comparative analysis is warranted to determine which approaches prove most effective at successfully retaining the show's humor essence when rendered into Arabic subtitles.

#### F. Translation Strategies

The next step after identifying the core translation challenges is to study the strategies that have been employed by the subtitlers to try to overcome them. This comparative phase revealed the complexity of the translation decision process and the artistic license involved in attempting to skilfully subtitle nuanced humor for a different linguistic and cultural audience.

The subtitlers adopted a diverse range of strategies to translate the verbal and cultural humor elements in the *BBT* into Arabic. These included the following:

1. literal translation, which focuses solely on the literal meaning of individual words and phrases
2. omission, where certain untranslatable or potentially confusing humor elements were strategically left out of the target text
3. cultural adaptation, where U.S. cultural references were modified to allude to more familiar Arabic cultural elements that convey similar humor
4. addition, where information was added to the target text that is not present in the source text

5. compensation, where new humor elements were added in other parts of the text to try to compensate for humor that could not be effectively translated

6. normalization, where complex jokes were simplified and translated more straightforwardly to make the humor seem more accessible and 'normal' to the target audience despite losing nuance.

Further analysis below aims to dive deeper into comparing the effectiveness of these approaches for balancing fidelity and adaptation when translating different types of humor between English and Arabic languages and cultures. However, these initial findings reveal the necessity of creativity and problem-solving involved in the cross-cultural subtitling of comedy. Table 2 shows the frequency and percentage of the strategies employed by Arab subtitlers:

TABLE 2  
TRANSLATION STRATEGIES EMPLOYED IN THE ARABIC SUBTITLING OF HUMOR IN THE *BBT*

Strategy	Frequency
Literal Translation	40
Normalization	20
Adaptation	5
Addition	6
Compensation	6
Omission	3

The subtitlers employed a diverse range of strategies, each with its adjustments, to creatively adapt the humor for Arabic audiences. The omission of jokes was sometimes unavoidable due to space and timing constraints, but it risks losing humor. Adaptation enhances cultural relevance but strays from the original comedic intent. Normalizing and compensating might make the humor clearer, but they sacrifice the original style in which it was presented. Overall, the strategies demonstrated a commitment to preserving the sitcom's humor as much as translation limits allowed. The goal was clearly to reproduce an enjoyable viewing experience that can elicit similar laughter across linguistic and cultural boundaries.

Table 3 below shows a sample of data analysis; the table provides examples of all types and categorizations of humor alongside the corresponding Arabic subtitles in the investigated data. It also specifies the season, episode number, and translation strategy concerning each example:

TABLE 3  
TYPES AND CATEGORIZATIONS OF HUMOR AND TRANSLATION STRATEGIES EXEMPLIFIED BY A SAMPLE OF THE COLLECTED DATA FROM THE *BBT*

No.	English Text	Season & Episode	Humor categorization	Type of Humor	Arabic subtitle	Translation Strategy
1.	Sheldon: I was going to get my mail. Penny: Okey. Are you hoping to get it telepathically? Sheldon: I think you mean telekinetically.	S3 E20	Scientific	Wordplay	شيلدون: اردت ان اخذ بريدي بييني: حسنا. هل تأمل أن تأخذ بشكل تخاطري؟ شيلدون: أظنك تعين بالتحريك اليعادي.	Compensation
2.	Howard: What is going on, day dwellers?	S3 E3	Cultural	Parody	هاورد: ما الأخبار يا ساكني النهار؟	Literal translation
3.	Sheldon: I'm not insane, my mother had me tested.	S3 E2	Character-driven	Pun	شيلدون: لست مجنوناً، اجرت لي امي فحصاً	Literal translation
4.	Leonard: Sheldon, you're not sick, this is, but you are not.	S1 E11	Linguistic	Pun	ليونارد: لست مريضاً يا شيلدون، هذا سلوك مريض لكنك لست كذلك	Addition
5.	Howard: A time machine from the movie The Time Machine? Leonard: No, a time machine from Sophie's Choice	S1 E14	Cultural	Sarcasm	هاورد: آلة زمنية من فيلم "الآلة الزمنية"؟ ليونارد: لا بل آلة زمنية من "خيار صوفي"	Literal translation
6.	Leonard: I have a solution, but it only works for spherical chicken in a vacuum.	S1 E9	Scientific	Sarcasm	ليونارد: لدي حل لكنه مناسب للدجاج الكروي في الفراغ	Literal translation
7.	Raj: You're the guy we're trying to get away from Sheldon: I am the guy from whom you're trying to get away	S3 E22	Character-driven	Wordplay	راج: انت الشاب الذي نحاول الهروب منه شيلدون: أنا الشاب الذي نحاولون الابتعاد عنه	Normalization
8.	Sheldon: (AS CHILD) Mommy, why are you crying? (AS MOTHER) Because I'm gonna miss you, Shelly Bean even though you creep the bejesus out of me.	S4 E14	Cultural	Parody	شيلدون: أمي، لماذا تبكين؟ لأنني سأشتاق إليك يا صغيري "شيلي"، مع أنك تفقدني صوابي.	Normalization
9.	Amy: If your friends are unconvincing the year's donations might go to the Geology Department. Sheldon: Oh, dear, no, not the dirt people.	S4 E15	Scientific	Satire	إيمي: إن كان صديقك غير مقتنعين، قد تذهب تبرعات هذه السنة إلى قسم الجيولوجيا. شيلدون: يا للهول، لا ليس لرجال التراب.	Normalization
10.	Sheldon: Since you seem to have forgotten the reason, we live together we're best friends. And I got your back, Jack.	S4 E15	Linguistic	Wordplay	شيلدون: بما أنه يبدو أنك قد نسيت، سبب عشنا معاً هو لأننا صديقان مقربان. و أنا في ظهرك	Omission
11.	Mrs. Latham: Hello, Leonard. I hope you're hungry. Leonard: I'm very hungry. For food, right?	S4 E15	Linguistic	Pun	السيدة لاثام: مرحباً يا "ليونارد". أمل أن تكون جائعاً. ليونارد: أنا جائع جداً. للطعام، اليس كذلك؟	Literal translation

The examples in Table 3 are discussed below. Based on the analysis of the occurrences of humor that can present challenges when subtitled into Arabic in the investigated episodes of the *BBT*, these occurrences can be categorized as follows:

(a). *Character-Driven Humor*

Following is an example of this category of humor:

“I’m not crazy, my mother had me tested” which was subtitled as ‘لست مجنوناً، أجرت لي أمي فحصاً’

This line is spoken by Sheldon Cooper, a character known for his unique blend of intellectualism and social unawareness. Amidst a comic bookstore argument, Raj advised Howard to cease the argument, stating, “give it up, you’re arguing with a crazy person.” Sheldon responded, “I’m not crazy. My mother had me tested.” This statement exemplifies the humor derived from his literal and deadpan delivery, coupled with his socially oblivious personality. Implicit in his response is a constricted and technical understanding of sanity, defined merely as the absence of clinically diagnosed mental illness.

The comedic element arises from the absurd disparity between Sheldon’s excessively rigid interpretation and the audience’s more nuanced comprehension of psychological well-being. This statement humorously exposes Sheldon’s generalized difficulty in grasping abstract and subjective concepts. The task of translating Sheldon’s dialogue into Arabic presents a multifaceted challenge for Arab subtitlers, primarily due to the intricate nature of Sheldon’s character. Sheldon is characterized by a unique set of mental idiosyncrasies that encompass his clinical worldview, social obliviousness, and deadpan communication style.

Arab subtitlers are confronted with the intricate challenge of not merely converting words from one language to another but effectively transposing the essence of Sheldon’s mental peculiarities. These idiosyncrasies include his rigid and literal interpretation of concepts, his seemingly robotic adherence to routine, and his distinct lack of social awareness. In the context of the specific line, “I’m not crazy, my mother had me tested,” the humor arises not only from the words themselves but also from the way Sheldon delivers the m. His deadpan tone, devoid of emotional nuance, adds an extra layer to the comedic effect. Arab subtitlers must navigate the linguistic nuances to preserve not just the meaning but also the tone and subtleties inherent in Sheldon’s expression.

The literal translation strategy as evident in the Arabic subtitling of the line “I’m not crazy, my mother had me tested” failed to capture the humor embedded in Sheldon’s statement due to several critical reasons. The literal translation, while logically accurate, may miss the opportunity to highlight these traits effectively. The subtleties associated with Sheldon’s comedic obliviousness to implied meanings and the absurdity of his clinical perspective may not be as apparent in the Arabic version, thus limiting the audience’s ability to fully appreciate the intended humor.

(b). *Linguistic Humor*

In Season 1, episode 11, we find an instance of a subtitling challenge involving linguistic structure; the conversation between Leonard and Sheldon goes as follows:

Leonard: what are you doing

Sheldon: I am making Petri dishes to grow throat cultures

Leonard: With lime Jell-O

Sheldon: I need a growth medium, and someone polished off the apricot yogurt

Sheldon: here. Swap my throat

Leonard: I don’t think so

Sheldon: Leonard, if I am going to get ahead of this, I need to find out what’s growing in my throat

Leonard: Sheldon, you’re not sick, this is, but you are not = لست مريضاً يا شيلدون، هذا سلوك مريض لكنك لست كذلك

The humor within this specific scene derives from the juxtaposition of two seemingly unrelated elements: Sheldon’s fixation on inspecting his throat and the simultaneous growth of bacteria within that same throat. This incongruity of serious concern and absurdity, presented in a single scenario, contributes significantly to the comedic essence of the scene. Sheldon’s intense focus on self-examination, typically associated with health concerns, is instead redirected toward the microscopic inhabitants of his throat.

Leonard’s statement, “You’re not sick, this is, but you are not,” serves as a pivotal comedic point in the scene. It hinges on a clever pun and the manipulation of the term “sick.” The humor in Leonard’s line arises from a linguistic play on the word “sick” and the context in which it is used. The denotative interpretation of “sick” relates to physical illness, suggesting that Sheldon is not well. However, the connotative interpretation, as signified by the phrase “but you are not,” cleverly alludes to Sheldon’s peculiar and often eccentric behavioural tendencies. This dual meaning, executed with linguistic finesse, underscores the wit of the dialogue and contributes to the humor. The translation challenge faced by Arabic translators is noteworthy. They had to tackle the inherent complexity of humor stemming from homonymy, where a single word carries multiple meanings. To maintain the integrity of this linguistic facet, they had to employ the term “مريض” (sick) twice within the sentence. The primary difficulty was in ensuring that the same word effectively conveyed two distinct meanings without losing the essence of the humor.

To deal with this linguistic hurdle, Arabic translators adopted the addition strategy. This strategy aimed not only to preserve the humor but also to clarify it for the target audience. In this process, they introduced the phrase “هذا سلوك مريض” ‘this is a sick behaviour’, adding a layer of explanation to emphasize the pun within the context. By doing so, they

successfully translated both the intended meaning and the nuanced comedic undertones encapsulated within this sentence without compromising the naturalness of the translated Arabic, ensuring that the humor of the original scene was effectively communicated to Arabic-speaking viewers.

Translating humor into Arabic presents several challenges, including the need to capture subtle linguistic nuances. Translating sarcasm can be challenging, as the intended tone and subtleties of the sarcasm may not always carry over effectively to another language. Arab subtitlers need to capture the indirect and sarcastic nature of Leonard's response accurately.

### (c). Cultural Humor

In an example (in season 5, episode 11) of the challenges concerning the subtitling of language use involving cultural connotations, Leonard experiences bullying from a former schoolmate, eliciting anger and, according to his words, murderous intent. In response, Sheldon, despite unease, offers unwavering support, invoking the persona of "The Dark Knight." The dialogue goes as follows:

Sheldon: I'm not going to say I told you so, but we could have killed him = لكن كان بإمكاننا قتلته.

Leonard: I might kill him right now = قد أقتله الآن

Sheldon: The Dark Knight has your back. He's scared, but he has your back. = الفارس الأسود يدعمك. يشعر بالخوف، لكنه يدعمك.

The humor in the scene is primarily derived from Sheldon's culturally specific reference to "The Dark Knight," a well-known nickname for the superhero character 'Batman' within American pop culture. This humor hinges on the ironic juxtaposition between Sheldon's support of Leonard as "The Dark Knight," a figure associated with power and bravery, and Sheldon's stated fearfulness while offering his support. The reliance of humor on this cultural reference creates a potential barrier to comprehension for viewers unfamiliar with the American cultural significance of "The Dark Knight".

This presented a challenge for Arabic subtitlers who needed to translate the humor effectively for an audience potentially unacquainted with the reference. Further compounding the challenge is the inherent constraint of limited space and time in subtitles, demanding concise delivery of both the meaning and cultural context of "The Dark Knight." Their choice of a literal translation, "الفارس الأسود" (Dark Knight), fails to convey the intended cultural reference and consequently diminishes the impact of humor on the audience reading the Arabic subtitling.

Notably, even Arabic viewers familiar with American pop culture might find "الفارس الأسود" (the Black Knight) confusing, as Batman is consistently translated as "فارس الظلام" (the Dark Knight) or as 'باتمان' in Arabic comics, movies, and other media. Consequently, the Arabic translation proved inadequate in conveying the intended meaning, the smooth-flowing language, and the inherent humor of the scene. The chosen translation lacks the depth and cultural connotations associated with "The Dark Knight" in American pop culture, neglecting the powerful associations of strength, mystery, and heroism crucial for the scene's humor. Furthermore, it disrupts the ironic juxtaposition between Sheldon's character and the image of "The Dark Knight," eliminating the element of surprise and weakening the humor's impact. Ultimately, the chosen translation failed to introduce Arabic audiences to this significant element of American pop culture and left the reference and humor largely unexplained.

### (d). Scientific Humor

The fourth category of humor that has been found to create challenges when subtitling from English to Arabic in the *BBT* involves the usage and manipulation of scientific jargon and terminology in the dialogues. An example is the following dialogue between Sheldon and Penny:

1. Sheldon: I was going to get my mail = أردت أن آخذ بريدي

Penny: Okay = حسناً

Penny: Are you hoping to get it Telepathically = هل تأمل أن تأخذه بشكل تخاطري ؟

Sheldon: I think you mean Telekinetically = أظنك تعنين بالتحريك البعادي

In this scene, an observation is made as Sheldon situates himself at a distance from Penny to retrieve his mail. Paradoxically, despite his intent, Sheldon remains immobile in his current location. Penny, in a somewhat sarcastic tone, questions whether Sheldon intends to obtain the mail telepathically. In response, while Sheldon maintains his immobility, he retorts, "I believe you meant telekinetically".

The humor here hinges on the use of specialized terminology. Within the realm of parapsychology, the term "telepathy" pertains to the transmission of thoughts, while "telekinetic" is associated with the capacity to manipulate objects through the power of the mind. Translating these specialized terms into Arabic proves to be a challenging endeavour. The challenge lies in accurately conveying the precise technical definitions related to parapsychology in Arabic within a limited time and space. Furthermore, the humor hinges on the contrast between these two specialized terms, which may lack direct equivalents in Arabic, thereby potentially diminishing the humorous impact. Consequently, the challenge encompasses both the accurate translation of the technical terms and the preservation of the humor arising from the juxtaposition. Arab subtitlers used the compensation strategy to translate "telekinetically" as "التحريك البعادي" (telemetry-moving). Besides, both terms begin with the prefix 'tele-' suggesting 'from a distance' and this feature could not be expressed in the Arabic terms subtitling. This translation may fall short in conveying the exact technical meaning and

preserving the naturally flowing language. Unfortunately, these Arabic translations do not manifest a pronounced phonetic resemblance or rhyme, thereby diminishing the intended humorous impact.

#### IV. DISCUSSION

Translating humor poses a complex challenge requiring linguistic precision, cultural insight, and creative ingenuity to successfully convey comedic meanings and effects across language barriers. As evidenced in this study's analysis of English-to-Arabic subtitle translation practices for the popular sitcom the *BBT*, effectively rendering humor in another language calls for adaptable translation approaches tailored to differing genres and contexts of comedy. Though a translator's creativity and proficiency are so important to produce the best subtitles possible, we cannot ignore the fact that a few aspects of language use may not be adequately translatable especially if the source and target languages are non-cognate languages, as is the case of English and Arabic.

The analysis in this study of humor types in the first six seasons of the *BBT* reveals a predominance of wordplay and puns, highlighting the show's reliance on English language nuances. Translating this humor into Arabic presented several challenges, with linguistic differences and unfamiliar cultural references emerging as the most frequent hurdles. Furthermore, the structural constraints of subtitling posed significant difficulties in conveying the show's humor effectively. The limited space and time available for subtitles often hampered attempts to accurately translate scientific and cultural references. Striking a balance between conveying technical jargon and cultural nuances while preserving the humor's essence proved to be a complex task.

Interestingly, our findings suggest that addition, the strategy of adding explanatory words or phrases to the subtitles, was the least frequently employed technique by Arab subtitlers. This reluctance stems from structural limitations, as adding text can disrupt the subtitle's flow and readability on screen. A predominant finding from the research was the extensive use yet inherent limitations of literal word-for-word translation as a strategy for humor translation. Abundant evidence revealed its shortcomings in conveying multi-layered humor predicated on linguistic features, cultural references, character traits, and relationships, or implications left unspoken.

For verbal jokes whose comedic payload stems primarily from explicit linguistic or semantic content, with minimal reliance on cultural specificity or character nuances, literal translation proved ineffective in carrying over source humor. Arab subtitlers employed strategies such as compensation, addition, adaptation, and normalization to overcome linguistic challenges.

For culture-dependent jokes, literal meaning transfer lacked the flexibility to successfully bridge assumed gaps between source cultural schemas and target audience knowledge as the 'The Dark Knight' example illustrates. Translations needed to transcend verbatim accuracy and inject supplemental explanations or adaptations that actively transported Arabic viewers into the intended humor arising from English cultural contexts.

Meanwhile, for character-driven comedy, translations grounded strictly in linguistic fidelity frequently failed to transmit implied humorous insights about eccentric personalities. Conveying such humor demanded interpreting behaviours and dialogue on a deeper connotative level to recreate jokes' undercurrents in Arabic using equivalent cultural metaphors and character tropes. A prime example involved Sheldon's remark about his mother having him tested for mental illness. Its humor hinged subtly on revelations about Sheldon's clinical personality. Yet literal translation neglected the absurd disconnect between his statement and broader humanistic understandings of psychological health. The joke's essence was lost. Perhaps the subtitlers could have devised a technique of creative re-engineering using linguistic and cultural tools to reconstruct Sheldon's unconventional psychology in terms that resonated with Arabic audiences.

Additionally, translating scientific humor presents a unique challenge, demanding rigorous precision in selecting terms that faithfully reflect the intended meaning and comedic intent of the original dialogue. For example, Sheldon's witty quip about 'telekinesis' hinges on precise, contrasting terms - a challenge for Arabic subtitles. While the chosen translation seems to capture the humor for most viewers, it sacrifices technical accuracy and phonetic playfulness due to the rarity of similar-sounding Arabic words with differing meanings to function in this situation.

In summary, this research study highlighted multifaceted challenges inherent in cross-cultural humor translation while revealing insights into navigating its complexity. Both systematic analysis methodology and empirical findings offered valuable guidance for future scholarly investigation and professional practice regarding rendering embedded comedy, whether rooted in language, culture, or character, accessible for new linguacultural contexts. The study indicated that realizing humor's transferability across global linguistic and cultural boundaries demands translators to operate as comedic engineers and polycultural mediators. They must inhabit cultural vantage points creatively to build linguistic and explanatory bridges that enable humor to spark equivalent joyful insights in audiences lacking innate access to the source's schema and allusions.

While intrinsically complex, humor translation remains a vital capability for nurturing cross-cultural social bonds and enriching global entertainment through foreign media. As audio-visual translation expands worldwide, the capacity to skilfully adapt humor across languages grows ever more valuable. By illuminating the techniques and obstacles involved, it is hoped that this study can provide a productive foundation for future research to continuously advance comedy translation practices between English and Arabic.

#### V. CONCLUSION

This research conducted an in-depth investigation into humor translation practices between English and Arabic subtitles (Netflix version) in the popular sitcom the *BBT*. Through systematic analysis of dialogue exchanges in the first six seasons, the study aimed to uncover translation techniques utilized to effectively render comedy across linguistic and cultural boundaries for Arabic audiences reliant on subtitles.

Several salient findings emerged from this qualitative textual analysis concerning prevalent translation strategies and obstacles faced in transferring multifaceted humor based on language, culture, relationships, and science. The predominant finding was that literal word-for-word translation operated as the most frequent strategy employed yet demonstrably limited tactic, indicating a need for more creative localization approaches tailored to genres. The study revealed literal translation's capabilities and constraints. It proved moderately effective for linguistic humor directly translatable without losing semantic content vital to the joke. However, severe shortcomings arose regarding culture-dependent, character-driven, or allusional comedy premised on untranslated references and nuances. Literal translations frequently failed to reproduce such layered humor arising from implied cultural frames, personalities, and intertextuality. Findings highlighted the imperative of supplementing verbatim translation with strategies like normalization, compensation, addition, omission, and adaptation to clarify contexts and adapt humor to resonate in the target culture.

The study reveals principles crucial for effective humorous subtitle translation, including prioritizing conveying implicit meaning over formal accuracy, the need for artful localization to elicit native laughter responses, and avoiding over-explication that disrupts comic timing. Consequently, this research makes key contributions to the underexplored territory of humor translation between English and Arabic. Both the methodology and findings offer valuable insights to guide future studies and practice seeking to overcome inherent challenges in creatively rendering embedded comedy where meaning extends beyond mere lexical semantics.

#### REFERENCES

- [1] Al-Duleimi, A., & Aziz, R. (2016). Humor as EFL learning-teaching strategy. *Journal of Education and Practice*, 7(10), 105-115. Retrieved August 19, 2023, from <https://api.semanticscholar.org/CorpusID:54993013>
- [2] Alnusairat, S., & Jaganthan, P. (2022). Humor in translation from English into Arabic: Subtitles of the comedy sitcom *Friends*. *Theory and Practice in Language Studies*, 12(7), 1447–1456. doi.org/10.17507/tpls.1207.27
- [3] Al-Adwan, A., & Yahiaoui, R. (2018). Comedy under fire: Subtitling *Two and a Half Men* into Arabic. In R. Irene, & Z. Serenella (Eds.), *Linguistic and cultural representation in audiovisual translation* (pp. 85–100). Routledge.
- [4] Arunsamran, P., & Tungtang, P. (2015). Analyzing linguistic and cultural barriers to English-Thai translation of sarcasm in *The Big Bang Theory*. *International Conference on Language, Literature, Culture, and Education* (pp. 195–2006). ICSAI.
- [5] Cao, J., Mansor, N., Ang, L., & Ujum, D. (2022). Subtitle translation of American sitcom *The Big Bang Theory* from the perspective of eco-translatology. *Journal of Language Teaching and Research*, 13(2), 377-385. doi:10.17507/jltr.1302.19
- [6] Díaz-Cintas, J., & Remael, A. (2014). *Audio-visual translation: Subtitling*. Routledge.
- [7] Gadže, K. (2016). *Subtitling humor- the case study of The Big Bang Theory* (Doctoral dissertation, University of Zadar. Department of English). Retrieved September 18, 2023, from <https://repozitorij.unizd.hr/islandora/object/unizd%3A467/datastream/PDF/view>
- [8] Gamal, M. Y. (2019). Audio-visual translation studies in the Arab world: the road ahead. In S., Hanna, H., El-Farahaty, & A., Khalifa (eds.), *The Routledge handbook of Arabic translation* (pp. 205–220). Routledge.
- [9] Hadiati, C. (2018). Humor in some linguistic perspectives. *Universitas Jenderal Soedirman* (pp. 1-10). Universitas Jenderal Soedirman.
- [10] House, J. (2004). Culture-specific elements in translation. In H. Kittel, A. P. Frank, N. Greiner, T. Hermans, W. Koller, W., J. Lambert, & F. Paul, (Eds), *Übersetzung ein internationales handbuch zur übersetzungsforschung*, 1(1), pp. 494–504. De Gruyter.
- [11] Mireault, G. C., Crockenberg, S. C., Heilman, K., Sparrow, J. E., Cousineau, K., & Rainville, B. (2018). Social, cognitive, and physiological aspects of humor perception from 4 to 8 months: Two longitudinal studies. *British Journal of Developmental Psychology*, 36(1), 98-109.
- [12] Perego, E, Laskowska, M., Matamala, A., Aline, A., Robert, I., Szarkowska, A., Vilaró, A., & Bottiroli, S. (2016). Is subtitling equally effective everywhere? A first cross-national study on the reception of interlingually subtitled messages. *Across Languages and Cultures*, 17:2, 205-229. <http://dx.doi.org/doi:10.1556/084.2016.17.2.4>
- [13] Pettit, Z. (2009). Connecting cultures: Cultural transfer in subtitling and dubbing. In J. Diaz-Cintas, (Ed.), *New trends in audio-visual translation* (pp. 44–57). Multilingual Matters.
- [14] Štefanac, S. (2022). *Translating culture-specific humor in subtitling The Big Bang Theory*. University of J.J. Stockmeyer.
- [15] Tsakona, V., & D. Popa. (eds.) (2011). *Studies in political humor: In between political critique and public entertainment*. Amsterdam: John Benjamins.
- [16] Wang, L. (2020). Analysis of the characteristics and translation skills of American slang in *The Big Bang Theory*. *Theory and Practice in Language Studies*, 10(10), 1248–1253. Doi:10.17507/tpls.1010.09
- [17] Wang, J., & Zou, J. (2019). Subtitle translation of *The Big Bang Theory* based on the functional equivalence theory. *US-China Foreign Language*, 17(5). Doi:10.17265/1539-8080/2019.05.003
- [18] Yilmaz, U. A., Cakiroglu, K. (2020). “The *Big Bang Theory*” (“Büyük Patlama”) Dizisinin Türkçe Altyazı Çevirisinde Mizah Aktarımı. *İstanbul Üniversitesi Çeviribilim Dergisi – [Istanbul University Journal of Translation Studies]*, 13, 23-46. Retrieved August 2, 2023 from <https://doi.org/10.26650/iujts.2020.13.0002>
- [19] Yue, X., Jiang, F., Lu, S., & Hiranandani, N. (2016). To be or not to be humorous? Cross cultural perspectives on humor. *Frontiers in Psychology*, 7, pp. 1-10.
- [20] Yus, F. (2012). Relevance, humor and translation. In E. Walaszewska, & A. Piskorska (Eds.), *Relevance theory: More than understanding* (pp. 117–45). Cambridge Scholars Publishing.

[21] Zabalbeascoa, P. (1996). Translating jokes for dubbed television situation comedies. *The Translator*, 2(2), pp. 235-257.

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