Realia vs irrealia in non-fiction vs fiction texts: A case study of translation

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ABSTRACT: In response to the ever-growing globalization and intercultural exchange, the cultural aspects of translation are of the utmost importance. This article aims to examine and compare the translation procedures and strategies used to render culture-specific items, particularly realia and irrealia, in non-fiction and fiction texts. Realia, being culture-bound concepts in the real world, and irrealia, denoting similar concepts but in a fictional world, are challenging for translators since they have deep cultural ties. This study involves a translation analysis, comparative analysis, descriptive methods, and frequency calculations. This study employs a dataset of 400 culture-specific vocabulary items from the non-fiction book by L. Johnson What Foreigners Need to Know about America from A to Z and the apocalyptic novel Seveneves by N. Stephenson and their translations into Ukrainian. The analysis reveals that realia and irrealia are translated by employing different procedures, with calque being a popular choice for realia and contextual synonyms for irrealia. Notably, translation through neologisms has been found only in irrealia. Despite the contrast in translation procedures, both realia and irrealia were predominantly translated using a domestication strategy, boosting Ukrainian readers' cultural comprehension.

KEYWORDS: culture-specific vocabulary; realia; irrealia; foreignization; domestication; translation procedures

1. Introduction

Translation serves as an essential bridge between cultures, languages, and communities in a time characterized by globalization and an ever-increasing interchange of information. A crucial part of such intercultural communication is the translation of culture-specific vocabulary, which goes far beyond simply transferring words from the source language to the target language. The smallest units of culture-specific information, referred to as culturemes, play a crucial role in shaping a culture's identity and character. They encode culturally significant elements such as symbols, behaviors, practices, values, and norms, and are essential for understanding and representing the unique aspects of a particular culture. Because of the cultural and context-specific nature of these elements, their translation becomes a complex task aimed at achieving semantic equivalency, while preserving contextual nuances and cultural sensitivity. This requires a deep understanding of cultural differences, language nuances, historical background (Salmeri, 2014), and awareness of translation procedures that can be applied for adequate translation.

Newmark (1988), Baker (1992), Loponen (2009), Martinkovič (2022), Mizin et al. (2023) expressed their interest in the investigation of the translation procedures and strategies that are used to render culture-specific items in the target language. Realia, denoting objects and phenomena peculiar to a certain linguo-community, and irrealia, presenting similar items in fictional context, deserve special attention in terms of definition and the ways of rendering into the target text.

The purpose of the present article is to identify and compare the translation procedures and strategies used to render English realia in the book by Lance Johnson What Foreigners Need to Know about America from A To Z and irrealia in the apocalyptic novel Seveneves by Neal Stephenson in their Ukrainian translations.

2. Theoretical background

2.1. Language, culture, and translation

With the so-called cultural turn in translation research (Bassnett and Lefevere, 1990; Bassnett, 2012; Rudvin, 2021), the translation process has no longer been seen as a simple transfer of words from a source text into a target text, but as an intercultural mediation, since language and culture are deeply interconnected (Taibi, 2023).

It has been assumed that the unique character of a certain culture is revealed in culture-specific information, that is, information that is not found outside the community (Slavova and Borysenko, 2021). Language can sensitively and quickly reflect the development and change in life and thoughts in a particular society. Vocabulary serves as the storage of national culture (Zhou and Hua, 2021). The same thing or phenomenon might be expressed differently in language depending on the culture. This is because different nations and countries have unique traditions and customs, social and political systems, religious beliefs, social norms, and ecological environments.

Most culture-specific words are easy to notice because they are connected to a particular linguistic community and cannot be translated literally. Unless there is a cultural overlap between the source and target language, a translator is likely to experience translation problems because of the distance between cultures (Newmark, 1988). To render such specificity effectively, translators need to have intercultural communication expertise (Bedeker and Feinauer, 2006) and apply pertinent translation procedures to transfer extralinguistic information encoded in such vocabulary. Translation of culture-specific items presents a challenge for translators. Misinterpretation may result in misunderstanding and incomprehension (Salmeri, 2014). Realia and irrealia are two of these challenges.

2.2. Realia vs irrealia

A variety of terms is used to label culture-specific vocabulary. They include realia (Vlakhov and Florin, 1980; Zorivchak, 1989), cultural words (Newmark, 1988), culture-specific concepts (Baker, 1992), culture-specific items (Aixelà, 1996), lacuna (Morkovina, 2004; Slavova and Borysenko, 2021), and culture-specific elements (Klaudy and Heltai, 2020). This indicated that there is no unified approach for interpreting culture-specific vocabulary in contemporary language and translation studies. Although these terms are labeled differently, they all reflect the characteristic features of a certain culture. They are words or word combinations, including idiomatic phraseological units, that express the names of things, concepts, phenomena, common objects, and the distinctive geographical, cultural, social, and historical characteristics of a particular cultural community (Slavova and Borysenko, 2021). In translation studies, such vocabulary items are associated with a definite language, and may be

challenging to translate.

For this study, the term realia were adopted because of its popularity in Eastern European translation studies. The term refers to words (and word combinations) that denote objects peculiar to a definite nation (its everyday life, culture, social, and historical development) and, at the same time, alien to another nation (Vlakhov and Florin, 1980). Realia are also defined as mono- and polylexemic items, the primary meanings of which contain a complex of ethnic and cultural information unfamiliar to other cultures and languages (Zorivchak, 1989). These lexemes may lack absolute or partial equivalents in the target language and should be rendered with the help of special translation procedures (Slavova and Borysenko, 2021). Thus, realia represent another challenging aspect of translation, as it binds text to a specific culture, period, or location and poses difficulties for translators in terms of domestication and foreignization strategies (Loponen, 2009). They can be found in diverse types of texts (Salmeri, 2014).

However, when it comes to the fictional worlds and cultures described in literary texts, the term irrealia is used. From the perspective of translation studies, irrealia are defined as realia embedded in fictional contexts, whose function is to reflect and determine imaginary cultural, geographical, and historical settings (Loponen, 2009). This places them in opposition to realia, which are culture-bound concepts that are peculiar to a specific existing culture (Martinkovič, 2022). Irrealia present an even greater translation issue due to the factual non-existence of the referred cultures (Pettini, 2021). Despite their similar culture-specific meanings, there is a distinctive difference in context: real or irreal. In this study, realia and irrealia can be considered culture-specific vocabulary items of the real world and fiction world, respectively. Therefore, irrealia reflects fictional notions related to fictional cultures, whereas realia refer to the existing cultures of the real world.

Culture-specific vocabulary, including realia and irrelia, covers all spheres of life. Therefore, there are several classifications that categorize these vocabulary items depending on the sphere of life they reflect (**Table 1**).

Table 1. Classifications of culture-specific vocabulary.

Newmark (1988), culture-specific vocabulary	Vlakhov and Florin (1980), realia	Kyiak (2008), realia
Ecology (flora, fauna, winds, plains, hills)	Geographical realia	Nature (flora, fauna, landscapes)
Material culture (food, clothes, houses and towns, transport)	Ethnographical realia (food, housing, clothes, transport, labor, art and culture, holidays, ethnical objects, units of measure and money)	Everyday life (housing, tools, clothes food, jobs and occupations, units of measure and money)
Social culture (work and leisure)	Social and political realia (administrative and territorial structure, government and authorities, social and political life, military)	Social and political life (administrative and territorial structure, organizations, parties, trade, military)
Organizations, customs, activities, procedures, concepts (political and administrative, religious, artistic)	-	Ethnographical and mythological (ethnical social groups, dances, names of gods and mythological and fairy-tale characters)
Gestures and habits	-	Onomastic realia (proper nouns)
-	-	Symbols

As presented in **Table 1**, despite different titles, major categories overlap, namely culture-specific vocabulary for geographical features (light green), everyday life (green), and social and political aspects

(dark green) of a specific culture or nation. Consequently, this study focuses on these three major categories of English realia and irrealia and their translation into Ukrainian.

2.3. Translation procedures

Various methods suggested by linguists could facilitate the translation process. Scholars have examined the strategies and procedures used to translate culture-specific vocabulary, and they have proposed their various classifications. Translation procedures relate to sentences and the smaller units of language, rather than the whole text (Newmark, 1988). In a broader sense, they may be understood as tools of textual analysis that represent a process of searching for notable semantic and formal relations arising between the original and the target text (Gibova, 2012).

A wide range of translation procedures is used to render culture-specific vocabulary, including realia and irrealia, from the original to the target text. In order to highlight some of the distinctions and resemblances in the translation of realia and irrealia, the research findings of renowned scholars have been collected into the second table below (**Table 2**).

Table 2. Translation procedures for rendering realia and irrealia.

Vlakhov and Florin (1980), realia	Newmark (1988), culture-specific vocabulary	Baker (1992), culture-specific concepts	Aixelá (1996), culture-specific items	Kyiak (2008), realia
Transcription	Transference	Use of a loan word	Repetition/Orthographic adaptation	Transcription
Near equivalent translation (generalization of meaning)	Classifier	Use of a more general word	Limited universalization	Use of hypernym
-	Cultural equivalent	Cultural substitution	-	-
Functional equivalent	Neutralization (functional or descriptive equivalent)	Use of a more neutral/less expressive word	Absolute universalization	Denotative or connotative substitution
Word-for-word translation/calque/half-calque/adaptation	Through translation	-	-	Calque
Neologism	-	-	Autonomous creation	-
-	Label	-	-	-
-	Naturalization	-	Naturalization	-
Contextual synonym	Componential analysis	-	Synonym	Contextual/situational translation
-	Deletion	Omission	Deletion	-
-	Couplet	Use of a loan word and explanation	-	Combined renomination
-	Accepted standard translation	-	-	-
Explanation	Paraphrase, gloss, notes, etc.	Paraphrase (using a related/unrelated word)	Extratexual/intratextual gloss	Descriptive translation
-	-	Illustration	-	-
-	-	-	Linguistic (non-cultural) translation	-

Despite being labeled differently, several of the analyzed translation procedures entail similar or the same transformations of the vocabulary from the source language into target language. Therefore, they were classified into corresponding sections according to their similarity. For example, transcription is defined as the rendering of a foreign word using graphic means of the target language that ensures maximum correspondence to the original phonetic form (Vlakhov and Florin, 1980; Kyiak, 2008). Similarly, the process of transliteration a word from a source language to a target language text is referred to as transference (Newmark, 1988) or orthographic adaptation (Aixelá, 1996). Baker (1992) explains the same translation procedure as borrowing an original word or expression in the target language, using the term "loan word" (Baker, 1992).

Table 2 displays the prevalent translation procedures distinguished by the researchers for translating realia and irrealia. These are transcription, use of a functional or descriptive equivalent, descriptive translation, generalization of meaning, use of contextual synonym, calque, omission, and combined renomination. Notwithstanding their variety, all translation procedures may be divided into two groups depending on the cultural background of the target audience (Volovyk, 2021). Some procedures are more source-language oriented, and they preserve the foreign nature of the text. In contrast, other procedures are target-language oriented and adapt culture-specific vocabulary for the readers of the target text. Hence, these are two common translation strategies: foreignization and domestication, respectively. The former makes the translator 'visible' for the target reader, while the latter makes them "invisible" (Venuti, 1995). Such translation procedures as transcription, calque, and neologism foreignize the target text, while descriptive translation, generalization, or use of an equivalent, contextual synonym, and deletion domesticate it. Sometimes, foreignization and domestication strategies can merge, as in the case of naturalization or combined renomination, when the translator uses elements of both strategies to render culture-specific vocabulary.

3. Data and methods

This study is based on the assumption that the same translation procedures are employed to render both realia and irrealia due to their similar nature. The book by American writer Lance Johnson "What Foreigners Need to Know about America from A to Z": How to Understand Crazy American Culture, People, Government, Business, Language and More and the English novel Seveneves by Neal Stephenson and their translations into Ukrainian served as the material for the research. The reasons for choosing these books are the following:

1) The book "What Foreigners Need to Know about America from A to Z" covers all spheres of everyday American life;
2) Seveneves is an apocalyptic novel, that describes the irreal world and society constructed by the author;
3) Both texts have their published Ukrainian translations.

The study was performed in four stages. At the first stage, realia and irrealia were selected from the source texts using the method of sampling, and their equivalents were found in the target texts. To determine whether a particular culture-specific item may be considered realia or irrealia, the semantic and contextual analysis were applied. The total number of culture-specific vocabulary items identified by us as realia and irrealia in the source texts is 400 with 386 instances of their translation in the target texts. Of them, realia accounted for 200 with 191 of their translation, and irrealia 200 with 195 of their Ukrainian equivalents. The second stage involved identifying the category the sampled culture-specific vocabulary belongs to, i.e., whether it reflects particular geographical features, aspects

of everyday life, or social and political ones. English dictionaries (Longman Dictionary of Contemporary English, Merriam-Webster Dictionary, Oxford Learner's Dictionary) and contextual analysis were employed to identify what culture-specific information the sampled vocabulary items represent. At the third stage, the translation of the Ukrainian equivalents in the target texts was analyzed and the applied translation procedures were determined based on translation and comparative analysis. This allowed us to determine the extent to which this culture-specific information was preserved in the target text: completely (Eng. robot geeks - ukr. роботозадроти, Eng. small talk - ukr. світські розмови), partially (Eng. food stamps - ukr. талони, Eng. orbiting space habitats - ukr. орбітальні житлові відсіки), or missing (Eng. coy-wolves - ukr. translation is missing, Eng. the haves, the have-nots - ukr. translation is missing). At the final stage, the method of frequency calculations was applied to identify the most frequently used translation procedures for realia and irrealia. Relying on these results, we identified the dominant translation strategy. To illustrate the examples of translation procedures and to present the results of the study, the descriptive method was used.

4. Results and discussion

To analyze and compare the translation procedures used to render English realia and irrealia into Ukrainian, we referred to various classifications of translation procedures presented in **Table 2** since they comprise a wide range of procedures and complement each other. The description of the common translation procedures under study and their examples in the investigated texts are outlined in **Table 3**.

Table 3. Examples of common translation procedures used to render realia and irrealia in the texts under investigation.

Translation procedure and its definition	Examples of realia	Examples of irrealia
Transference (transcription or transliteration)	Eng. yuppie - ukr. "яппі"	Eng. TerReForm - ukr. ТерРеФорм
Use of a more general word (generalization of the source language item in the target text)	Eng. bread winner- ukr. годувальник	Eng. battered and reforged continents - ukr. ушкоджені та спотворені континенти
Cultural equivalent (approximate translation, i.e., a cultural word from the source language is translated by a cultural word of the target language)	Eng. donut - ukr. бублик	Eng., I wish for privacy now - ukr. Наразі прошу мене не турбувати (about special hand gestures)
Functional/descriptive equivalent (use of a culture-free, more general word present in the target language with the emphasis either on function or description of the source language word)	Eng. counter (help) - ukr. працівники за прилавком	Eng. Grabbs - ukr. Хапи
Calque (word-for-word translation)	Eng. American Dream- ukr. американська мрія	Eng. The Great Chain - ukr. Великий Ланцюг
Neologism (creation of a new word or word combination)	n/a[1]	Eng. Flivver - ukr. Лемоліт
Naturalization (transference and adaptation to the morphology of the target language)	Eng. babyboomers - ukr. бебібумерів	Eng. Dinans - ukr. Дінини (the name of the race)
Contextual synonym (translation depending on the context, usually different from the standard translation found in dictionaries)	Eng. Gallup Poll - ukr. Інститут Геллопа	Eng. Endomement - ukr. Коронація
Deletion (a source language word is omitted in the target text)	Eng. the haves - ukr. n/a	Eng. the dead Earth - ukr. Земля
Combined renomination (transference and descriptive translation or use of a more general word)	Eng. greenback - ukr. greenback, зелені	Eng. Piper Cub - ukr. Пайпер-Каб, Piper Cub - легкий двомісний літачок, один із найпоппулярніших навчальних та приватних літаків у США
Accepted standard translation (literal translation, usually of some institutional terms, that is considered common)	Eng. Bill of Rights - ukr. Біль про права	Eng. a spinning, ring-shaped city - ukr. рухоме місто у формі кільця
Descriptive translation (explanation of a culture word from the source text in the target text)	Eng. caregiver - ukr. жінка виховувала дітей	Eng. sleek ears - ukr. притиснуті до черепа вуха (a characteristic feature of one of the new races)

[1]Out of the realia sampled for this study, no examples of such translation procedures were found.

When it comes to realia, calque appeared to be the most frequent translation procedure employed by the translator (61 out of 200 instances, or 30.5%). In addition, the translator also used the combination of calque and transference in some cases (12 out of 200, or 6%). In total, calque was the translation procedure used to render 37% of the culture-specific vocabulary items under investigation. Such a frequent use of calque can be explained either by the translator's lack of knowledge about the culture or by her intention to preserve the cultural specificity of the source text. The former seems unlikely because of the popularity of American culture. The following examples illustrate how this procedure was applied:

Eng. You may have heard a popular term "American Dream" that refers to a concept that through hard work, courage, and determination one can achieve prosperity (Johnson, 2015).

Ukr. Ви, напевно, чули популярне словосполучення *«американська мрія»* [Americal Dream], яке базується на тій ідеї, що за допомогою тяжкої праці, мужності та цілеспрямованості кожен може досягти успіху (Джонсон, 2015).

A well-known American concept *American dream* is translated word-for-word into Ukrainian *«американська мрія»* (Americal Dream). In addition, the translator adds inverted commas that foreground the foreign nature of the phrase. The sentence in the source text also contains an explanation of this culture-specific concept, and accordingly, the target text also interprets this notion.

Eng. […], our lowest point is barren *Death Valley* in our western state of Nevada at 86 meters below sea level. (Johnson, 2015).

Ukr. […], так і наша неплідна западина *Долина Смерті* (Death Valley) в західному штаті Невада лежить на 86 метрів нижче рівня моря (Джонсон, 2015).

Death Valley is a desert covering part of the US states of California and Nevada, the lowest land in the western hemisphere, with very high temperatures (up to 50° Celsius) (Oxford). In the Ukrainian translation, the calque *Долина Смерті* (Death Valley) is presented the way it is given in the source text, hence preserving the cultural significance of the realia.

The second most frequently used procedure was descriptive translation (24 out of 200, or 12%), which consisted in explanation of realia that could not be rendered in one word/short word combination or its equivalent in the target text:

Eng. Today, both parents often hold jobs, so adequate daycare for children is necessary for our *dual-earner families*. (Johnson, 2015).

Ukr. Сьогодні, зазвичай*, і чоловік, і дружина мають роботу* (both husband and wife work), тому таким сім'ям необхідні дитячі садки і групи продовженого дня в школ. (Джонсон, 2015).

Eng. Within these party ranks are *moderates* who sometimes work with the other party. (Johnson, 2015).

Ukr. У партійних рядах ще є *люди, які дотримуються поміркованих поглядів* (people with moderate views) та інколи співпрацюють з іншими партіями. (Джонсон, 2015).

In Ukrainian, there are no lexemes that mean *dual-earner families* and *moderates*. Therefore, the translator uses descriptive translation to render the meaning of the source-text realia in the target text and thus make them more comprehensible for the readers.

Another widely employed translation procedure was transference (23 out of 200, or 11.5%) to render primarily geographical names and units of measure and money:

Eng. The southern states are *Alabama* [ahl-a-BAM-ah], *Arkansas* [are-CAN-saw], *Delaware* [DELL-uh-ware], *Florida* [FLOOR-ih-duh], [...]. (Johnson, 2015).

Ukr. Південні штати - це *Алабама, Арканзас, Делавер, Флорида*, [...]. (Джонсон, 2015).

To render the names of American states, the translator uses transcription, which is regarded as a common way to transfer geographical and topographical names (Newmark, 1988).

Eng. *Dime* (Johnson, 2015).

Ukr. *дайм* (Джонсон, 2015).

The same procedure is applied to translate the word *dime*, a coin of the US and Canada, worth one tenth of a dollar (Longman). Since the suggested translation *дайм* sounds unfamiliar to Ukrainian readers, the translator preserves the foreign nature of the realia. The source text contains a chart with the names of different US coins and an indication of their value. Accordingly, this chart is also available in the target text. Thus, target readers are able to understand culture-specific information even though the word *дайм* in Ukrainian translation looks foreign.

Another translation procedure often utilized by the translator was combined renomination (15 out of 200, or 7%):

Eng. [...], it was a predominantly white *bedroom community* (people live there but work elsewhere) [...] (Johnson, 2015).

Ukr. [...], тут був переважно білий *bedroom community* (*спальний район* [residential area], місце, де люди лише мешкали, а працювали в іншому) [...] (Джонсон, 2015).

Eng. A *dude* is someone who surfs or skateboards, but has come to mean a young man of a similar status as you (Johnson, 2015).

Ukr. «*Дуд*» - це той, хто катається на дошці по воді чи по снігу, але стало вульгарною назвою хлопця: *піжон, братан, пацан* [slang and colloquial words that mean a young man in Ukrainian] (Джонсон, 2015).

In the examples above, the translator uses a combination of transference and descriptive translation, which helps preserve the foreignness of the realia and, at the same time, explains culture-specific information encoded in it. In the first example, the translator even preserves the foreign spelling of the realia *bedroom community* and adds extra information in brackets, which was absent in the source text - *спальний район* (residential area). In the second example, the word *dude* is transferred into Ukrainian and presented in inverted commas. In addition, the translator provides three colloquial words in Ukrainian that have a similar meaning: *піжон, братан, пацан* (slang and colloquial words that mean a young man in Ukrainian).

Concerning irrealia, the most frequently used translation procedures differ. In most cases (41 out of 200, or 20.5%), the translator applied contextual synonyms. Instead of looking for a direct equivalent that may be unclear to target readers, the translator suggested a synonym depending on the context to make the text more comprehensible. For example:

Eng. Though some efforts had been made to camouflage their essential nature, they were really just *guns* for shooting humans, albeit humans strapped into comfortable, pressurized bullets (Stephenson,

2015).

Ukr. Хоча, їхню природу намагалися бодай трохи замаскувати, технічно це були *гармати* [cannons], які стріляли людьми, хай навіть запакованими в комфортні герметичні снаряди (Stephenson, 2018).

The source text uses the polysemic lexeme *gun*, which may be interpreted in different ways: a) a piece of ordnance usually with high muzzle velocity and comparatively flat trajectory; b) a portable firearm (such as a rifle or handgun); c) a device that throws a projectile (Merriam-Webster). But the translator adapts the irrealia for the target reader, relying on its function and size: гармата [cannon]—артилерійська довгоствольна вогнепальна зброя з пологою трає́кторією, призначена для ураження живої сили і бойової техніки противника, руйнування оборонних споруд тощо [Artillery long-barreled firearm with a gentle trajectory, intended for defeating the enemy's manpower, and military equipment, destroying defensive structures, etc.] (SUM).

The following example also illustrates the translation of irrealia by contextual synonym.

Eng. The two *hangers* formed a bolo, rotating around each other to keep the tether stretched tight between them (Stephenson, 2015).

Ukr. Два *ангари* формували боло та обертались одне відносно одного, підтримуючи сталий натяг кабель-троса (Stephenson, 2018).

According to the context of the source text, these facilities hung in the atmosphere of the space station, which explains their name—a device by which or to which something is hung or hangs (Merriam-Webster). Meanwhile, in the target text, the translator used the contextual synonym ангар-приміщення, де стоять літаки і де проводиться їх поточний ремонт [the premises, where the planes are parked and their current repairs are carried out] (SUM). This lexeme explains their other function - they were used as a parking place for different flying vehicles. Thus, the Ukrainian equivalent preserves culturally important information about this irrealia, although a part of this information is lost.

The translator also employed accepted standard translation in many cases (35 out of 200, or 18.5%). For example:

Eng. […] *the seven races* were going to be around forever (Stephenson, 2015).

Ukr. […] *сім рас* таки залишаться назавжди (Stephenson, 2018).

Eng. *The old ecosystems* would never return (Stephenson, 2015).

Ukr. *Старих екосистем* уже не повернути (Stephenson, 2018).

This procedure was applied to render irrealia expressed by common names, which usually have accepted equivalents in dictionaries.

Calque was the third most frequently used translation procedure to render irrealia into Ukrainian (33 out of 200, or 16.5%):

Eng. But when humans weren't looking, or when the environment shifted, all manner of *coy-dogs* and *coy-wolves* and *wolf-dogs* appeared (Stephenson, 2015).

Ukr. Але за відсутності людського втручання чи за умов суттєвих змін у довкіллі з'являлися найрізноманітніші *койдоги* та *вовкособаки* (Stephenson, 2018).

In order to keep the names of new species in the unchanged form and present them faithfully in the

target text, the translator appealed to calque. Interestingly, only two species names out of three are present in the translation. This might have happened accidentally, or the translator tried to avoid using too many unfamiliar species within one sentence not to overload readers' imagination.

To render irrealia from the apocalyptic novel, the translator also used more general words (20 out of 200, or 10%):

Eng. Outside of the Great Chain, the rest of the Eye was *lightly infested with human beings, heavily so with robots* (Stephenson, 2015).

Ukr. За межами Великого Ланцюга решта Ока була помірно *населена* [populated] *людьми і дуже густо - роботами* (Stephenson, 2018).

Eng. Amalthea had been noticed five years earlier by *a swarm of telescope-wielding satellites* sent out by Arjuna Expeditions [...] (Stephenson, 2015).

Ukr. Альматею помітили за п'ять років до цих подій за допомогою *групи* [group] *обладнаних телескопами супутників, запущених* «Арджуана Експедішнз» [...] (Stephenson, 2018).

In the target text, the lexemes have a more general meaning than those in the source text. To compare: *infest-to exist in large numbers in a particular place, often causing damage or disease* (Oxford), while *населяти* [populate]-*займати поселеннями, жителями якусь місцевість, приміщення і т. ін.* [to occupy some area, premises, etc. with settlements, inhabitants] (SUM). In this example, the former has a negative connotation, whereas the latter is a more general word with a neutral connotation. In the second example, the Ukrainian noun *група* [a group], in the meaning *кілька осіб, тварин або предметів, що знаходяться разом, близько один біля одного* [several people, animals or objects that are together, close to each other] (SUM), is a hypernym to the English noun *swarm—A large group of insects, especially bees, moving together in the same direction* (Oxford).

Other translation procedures used to render English realia in the target text included accepted translation, naturalization, cultural equivalent, deletion, use of a more general word, functional or descriptive equivalent, and contextual synonym. As for irrealia, these were descriptive translation, transference, naturalization, functional or descriptive equivalent, cultural equivalent, deletion, neologism, and combined renomination. The frequency of the investigated translation procedures used to render realia and irrealia is presented in **Figure 1**.
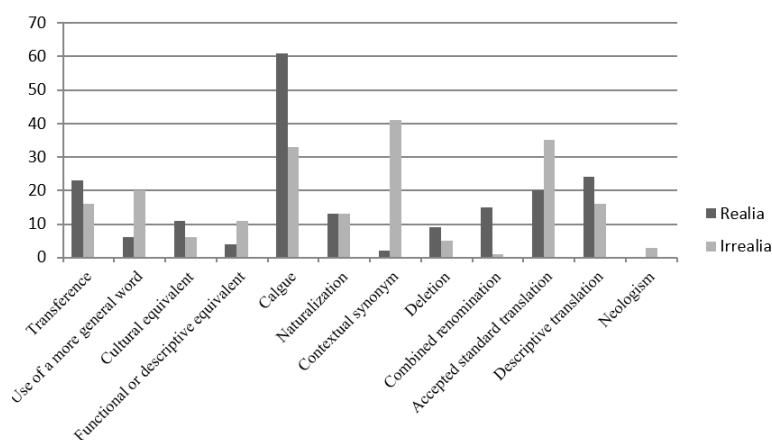

Figure 1. Frequency distribution of the translation procedures used to render culture-specific vocabulary.

From the data in **Figure 1**, it is apparent that procedures applied by translators to render realia and

irrealia differ significantly, although there are several similarities. What stands out is that calque was extensively used to render realia, whereas about half as many instances of irrealia were translated in that way. For irrealia, the use of contextual synonyms outnumbered all other procedures and was hardly ever applied to translate realia under investigation. A similar trend is observed with the use of a more general word and combined renomination. The former was much more often employed with irrealia, while the latter with realia. As for the other procedures, the difference in their frequency was not that significant or their frequency was almost equal.

Interestingly enough, instances of using neologism as a translation procedure to render culture-specific vocabulary were found only in the translation of irrealia in the apocalyptic novel and were not utilized to translate realia. The genre of the studied text may be the reason behind it. Because the author described an imaginary apocalyptic world in the distant future, there is sure to be irrealia, denoting things or phenomena that do not exist and are completely unknown to contemporary readers. One of the examples of using neologism in the target text is the translation of the name of a spacecraft:

Eng. […] they were able to see through the round orifice of a port into the vehicle docked to its far side: a Flivver, or Flexible Light Intracloud Vehicle (Stephenson, 2015).

Ukr. […] вони вже бачили прохід - круглий люк, що вів у корабель, пристикований до кінця проходу: Лемоліт, чи то Легенький Мобільний Внутрішньохмарний Космоліт [Lemolit - Light Mobile Intracloud Spacecraft] (Stephenson, 2018).

Since the author created a neologism Flivver to denote an imaginary spacecraft, the translator similarly coined a new word Лемоліт [Lemolit], which looks like an abbreviation from Легенький Мобільний Внутрішньохмарний Космоліт [Light Mobile Intracloud Spacecraft]. Therefore, the newly created noun is much more comprehensible for the Ukrainian reader.

Quantitative analysis of the studied translation procedures has allowed us to determine the dominant translation strategy. Although the most frequently used translation procedures to render realia and irrealia are different, almost all of them fall within the domestication strategy. In quantitative terms, instances of domestication strategy for realia account for 55% (110 out of 200). For rendering irrealia it reaches the value of 66.5% (133 out of 200). The extensive use of this strategy in both target texts contributes to a better understanding of the culture-specific information by Ukrainian readers, thus narrowing the gap between cultures.

However, translation is a creative process, hence every translator relies on their own background knowledge and experience of working with various texts and translation procedures. Moreover, the choice of translation procedures or strategies, used to render culture-specific vocabulary, depends on the translator's personality and is rather subjective.

Contrary to expectations set at the beginning of this study, the translation procedures employed to render realia and irrealia appeared to be different. Despite that, there is no difference in the prevailing translation strategy. This result may be explained by the fact that the sample included culture-specific vocabulary belonging to different categories, namely geographical features, everyday life, and social and political aspects. The results are likely to differ if a certain category is analyzed separately, or the shares of these categories in the sample are changed.

5. Conclusions

This study set out to determine whether the same translation procedures and strategies are used to

render English realia and irrealia into Ukrainian, particularly those concerning geographical features, everyday life, and social and political aspects. Although both realia and irrealia have similar culture-specific meanings, they differ in terms of the context they are used in. The results show that realia are most often translated with the help of calque, descriptive translation, transference, and combined renomination, while irrealia are frequently rendered through the use of contextual synonyms, accepted standard translation, calque, and use of a more general word. Unlike realia, neologisms were applied to translate irrealia. When describing culture-specific information from the source texts, both translators appeal to the domestication strategy, which is revealed through descriptive translation, contextual synonyms, accepted standard translation, cultural, functional, or descriptive equivalents, and the use of a more general word. The empirical research findings contribute to solving the issues of cultural gaps in translation. Such translation procedures as accepted standard translation, descriptive translation, and combined renomination are more effective means for dealing with culturemes, preserving the cultural significance of realia and irrealia, while other procedures, such as cultural equivalent, contextual synonyms, use of a more general word, deletion, fail to transfer the meaning of culture-specific vocabulary from the source text into the target text, preserving it only partially or not transferring the meaning at all. Accordingly, the role of the translator is of utmost importance in producing accurate and effective translation that does not pose a comprehension problem to the target reader. The knowledge of the possible cultural gaps and the most effective translation procedures that can cope with them is a part of the translator's cultural competence, which acquires special importance in solving the issue of cultural gaps. The perspectives for further research lie in identifying the categories of realia and irrealia that are most distant in terms of culture and to establish the most effective translation procedures that enable the translator to achieve an equally influential result of the source and the target texts.

Author contributions

Conceptualization, KR and MM; methodology, KR and MM; formal analysis, KR and MM; investigation, KR and MM; resources, KR and MM; data curation, KR; writing—original draft preparation, KR and MM; writing—review and editing, KR and MM; visualization, KR and MM; supervision, KR and MM. All authors have read and agreed to the published version of the manuscript.

Conflict of interest

The authors declare no conflict of interest.

References

Aixelá J (1996). Culture-specific items in translation. In: Álvarez R, Vidal C (editors). Translation, Power, Subversion. Cleveland/Bristol/Adelaide. Multilingual Matters. pp. 52-78.

Baker M (1992). In Other Words. A Coursebook on Translation. Routledge.

Bassnett S (2012). The Translator as Cross-Cultural Mediator. Oxford University Press.

Bassnett S, Lefevere A (1990). Translation, History and Culture. Printer Publishers.

Bedeker L, Feinauer I (2009). The translator as cultural mediator. Southern African Linguistics and Applied Language Studies 24: 133-141. doi: 10.2989/16073610609486412

Busch D (2023). The Routledge Handbook of Intercultural Mediation. Routledge.

Johnson L (2012). What foreigners need to know about America from A to Z. In: How to Understand Crazy American Culture, People, Government, Business, Language and More. A to Z Publishing.

Johnson L (2015). What Foreigners Need to Know about America from A to Z. In How to Understand Crazy American Culture, People, Government, Business, Language and More (Ukrainian). Kyiv: Publishing House "Osnovy".

Klaudia G (2012). Translation Procedures in the Non-literary and Literary Text Compared (based on an analysis of an EU institutional-legal text and novel excerpt "The Shack" by William P. Young). Books on Demand GmbH.

Klaudy K, Heltai P (2020). Re-domestication, repatriation, and additional domestication, in cultural back-translation. Across Language and Cultures 21(1): 43-65. doi: 10.1556/084.2020.00003

Kyiak T, Naumenko A, Ohui O (2008). Translation Studies (German-Ukrainian) (Ukrainian). Publishing House "Kyivskyi Universytet".

Longman (2023). Longman dictionary of contemporary English. Available online: https://www.ldoceonline.com/ (accessed on 28 November 2023).

Loponen M (2009). Translating irrealia: Creating a semiotic framework for the translation of fictional culture. Chinese Semiotic Studies 2: 165-175. doi: 10.1515/css-2009-0117

Markovina I (2004). Method of establishing lacunae in researching ethno-psycho-linguistic specificity of cultures (Ukrainian). Voprosy psikholingvistiki 2: 58–64.

Martinkovič M (2022). Genre-specific irrealia in translation: Can irrealia help define speculative fiction sub-genres? English Studies at NBU 8(1): 73-92. doi: 10.33919/esnbu.22.1.5

Merriam-Webster (2023). Merriam-webster dictionary. Available online: https://www.merriam-webster.com/ (accessed on 28 November 2023).

Mizin K, Slavova L, Khmara V (2021). The equivalence of terms denoting the emotion concepts of Ger. angst and A.-S. fear: A corpus-based method. Lege artis. Language Yesterday, Today, Tomorrow 6(2): 69-104.

Mizin K, Slavova L, Letiucha L, et al. (2023). Emotion concept disgust and its German counterparts: Equivalence determination based on language corpora data. Forum for Linguistic Studies 5(1): 72–90. doi: 10.18063/ fls.v5i1.1552

Newmark P (1988). A Textbook of Translation. Prentice Hall.

Oxford (2023). Oxford learner's dictionary. Available online: https://www.oxfordlearnersdictionaries.com/ (accessed on 28 November 2023).

Pettini S (2021). The Translation of Realia and Irrealia in Game Localization: Culture-Specificity between Realism and Fictionality, 1st ed. Routledge.

Rudvin M (2021). The cultural turn in community interpreting. A brief analysis of epistemological developments in community interpreting literature in the light of paradigm changes in the humanities. Linguistica Antverpiensia, New Series—Themes in Translation Studies 5: 21-41. doi: 10.52034/lanstts.v5i.150

Salmeri C (2014). The translator as an intercultural mediator. Translation and cultural influences. Lebende Sprachen 59(1): 78-86. doi: 10.1515/les-2014-0002

Slavova L, Borysenko N (2021). Culture-specific information encoded in lacunae: The author's and translators' strategies of representation. Studies about Languages/Kalbų studijos 38: 17-28. doi: 10.5755/j01.sal.1.38.27396

Stephenson N (2015). Seveneves. William Morrow and Company.

Stephenson N (2018). Seveneves. Navchalna knyha-Bohdan.

SUM (2023). The Ukrainian Language Dictionary (Ukrainian). Available online: http://sum.in.ua/ (accessed on 28 November 2023).

Taibi M (2023). Intercultural mediation in translation and interpreting studies, The Routledge Handbook of Intercultural Mediation. Routledge.

Venuti L (1995). The translator's invisibility. A history of translation. Routledge.

Vlakhov S, Florin S (1980). Untranslated in Translation (Ukrainian). Mezhdunarodnye Otnosheniya.

Volovyk A (2021). Culture-specific items from Ukrainian and Russian fairy tales: a daunting challenge for translators. Studies about Languages/Kalbų studijos 39: 19-32. doi: 10.5755/j01.sal.1.39.27577

Vozna M, Slavova L (2022) Rendering Ukrainian historical terminology of the old RUS' period into English. English Studies at NBU 8(2): 183-202. doi: 10.33919/esnbu.22.2.2

Zhou X, Hua Y (2021). Culture-loaded words and translation equivalence. Theory and Practice in Language Studies 11(2): 210-215. doi: 10.17507/tpls.1102.14

Zorivchak R (1989). Realia and Translation (A Case Study of the English-Language Translations of Ukrainian Prose) (Ukrainian). Vydavnytstvo Lvivskoho Universytetu.