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Lexical Innovation in Warhammer 40.000

Translations: the Creation of New Words

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ABSTRACT

This dissertation conducts an in-depth analysis of lexical innovation within the Warhammer 40.000 science fiction *legendarium*. It primarily centres on quantitative and qualitative analysis of innovative examples that have been extracted, classified, and explored within Guy Haley's novel, *Dark Imperium*. The main aim of this paper is to understand how these new words are born and the most effective methods for their acceptance in our everyday vocabulary, both in English and Spanish. Initially, the study frames a theoretical discussion about lexical innovation and the characteristics of this grammatical process. This is followed by a description of the methods employed to analyse and interpret the distinctive terminology found in the novel. Following this, a quantitative scrutiny of all samples and a qualitative analysis of the most frequently used terms are performed. These findings exemplify how the process of creating new words is successfully achieved through the amalgamation of modern English and the ingenious handling of classical languages, mainly Latin and Greek. Thereafter, through the discussion section, it is made clear why innovation is important for the natural evolution of language and intercultural communication, especially in the science fiction context. Finally, the study ends with a brief conclusion reviewing the most important goals. The annexes present the raw data for all findings, alphabetically displaying each word's indexes, translation methods, and the used etymological origin.

Keywords: Lexical innovation, translation techniques, word-formation, etymology, authenticity, meaning, Warhammer.

RESUMEN

Este estudio conforma un análisis en profundidad de la innovación léxica dentro del *legendarium* de ciencia ficción de Warhammer 40.000. Se centra en un análisis cuantitativo y cualitativo de ejemplos innovadores que se han extraído, clasificado y explorado dentro de la novela de Guy Haley, *Dark Imperium*. El objetivo principal de este trabajo es comprender cómo nacen estas nuevas palabras y cuáles son los métodos más eficaces para su aceptación en nuestro vocabulario cotidiano, tanto en inglés como en español. Inicialmente, el estudio enmarca una discusión teórica sobre la innovación léxica y las características de sus procesos gramaticales. A continuación se describen los métodos empleados para analizar e interpretar la terminología característica de la novela.

Seguidamente se presentan los datos estadísticos de todos los hallazgos, exponiendo así los índices porcentuales aplicados en cada técnica de traducción y su origen etimológico. Tras el análisis cuantitativo de todos los ejemplos se realizará un análisis cualitativo de los términos más utilizados. Estos hallazgos ejemplifican cómo el proceso de creación de nuevas palabras puede lograrse con éxito mediante una amalgama entre el inglés moderno y, en el caso que aquí acontece, lenguas clásicas como el latín y el griego. Después, en la sección de la discusión se deja claro por qué la innovación es importante para la evolución natural del lenguaje y la comunicación intercultural, especialmente en el contexto de la ciencia ficción. Por último, el estudio termina con una breve conclusión en la que se repasan los puntos más importantes. La sección de los anexos expone todas las palabras nuevas ordenadas alfabéticamente, cada uno con su correspondiente índice de frecuencia, técnica de traducción y origen etimológico.

Palabras clave: Innovación léxica, técnicas de traducción, formación de palabras, etimología, autenticidad, significado, Warhammer.

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1. Introduction

The Warhammer 40k has emerged as a mass phenomenon during the 21st century. Its influence as a table top miniature wargame has dramatically increased since its inception in 1980 by the British company, Games Workshop (Games Workshop, n.d.). Forty-four years later, its lore has evolved into a massive narrative universe with numerous adaptations into novels, audio dramas, films, animations, and video games. Comparable to the influence of George W. Lucas's Star Wars, J.R.R. Tolkien's Lord of the Rings, H.P. Lovecraft's Cthulhu, or Frank Herbert's Dune, Warhammer 40k has left its mark on the collective imagination (Jon Cronshaw, 2024). Originally conceived as a political satire and as an anti-fascist work of fiction, Warhammer 40k's complex narrative, which to this date has never been rebooted or "retconned," presents a challenge for newcomers (Cass Marshall, 2023). Despite the shortage of research on Warhammer 40k, which primarily focuses on the design aspects of the original miniature-based wargame (Henry Jenkins, 2003), the innovative terminology it offers has nothing to envy from other franchises.

This project aims to give rise to lexical innovation within the Warhammer 40k saga, focusing on the creation of new words and their significance for contemporary and future literary creations, both in English and Spanish. By doing so, it seeks to establish the similarities and differences in form and content between the original English version and the Spanish translation, and, above all, to determine whether the chosen lexicon is innovative or not. The choice of this specific novel as the data source is due to Haley's expertise on the subject. Given the vast bibliography of the franchise, with hundreds of books and novellas written by dozens of authors, attempting to read all these military space operas would take years (Anna Marie Carrol, 2023). Including all the audio dramas, short stories, anthologies, and e-books, the average sum ascends to more than 400 official records.

Guy Haley, an accomplished author within the Warhammer 40k universe, possesses a robust understanding of its lore, themes, and language conventions. With over 30 novels set in the Warhammer fantasy universe and another 50 in the Warhammer 40K universe (Daniel Martín, 2024), his work provides a rich source for analysing language evolution within this fictional universe. At the same time, the work the translators had to do to match Haley's skilled pen is to be commended.

The act of translation carries immense responsibility, particularly when conveying innovative terms. Translation essentially involves two processes: analysis and synthesis by the translator. Analysis involves understanding, breaking down, and reconstructing the original text mentally. Synthesis involves applying various translation strategies and skills to create the final product (Ian MacKenzie, 2015). The implications of a word in English may drastically change in Spanish. This will be a key aspect throughout the research, as the Warhammer saga is renowned for creating new words to describe its races, technologies, and main concepts.

The first section entails a brief exposition on the context and parameters that the Warhammer 40k universe presents, followed by a clarification on what has constituted "language innovation" throughout history and the process of creating new words. The second section addresses the importance of the translation techniques within the chosen Warhammer context: pure or naturalized borrowings, calques, literal translation, descriptive translation, adaptation, or entirely new concepts. Also, it describes the importance of etymological origins and their implications for the creation of new words. The third section describes the methodology that the present study has adopted. In Section 4, the results are illustrated, attending first to the quantitative analysis and later to the qualitative. The most representative information is translated and commented on by segments, indicating the context, translational difficulties and their rationale. The next section analyses and compares the Spanish and English versions, evaluating their similarities and differences and assessing if they meet expectations in terms of adequacy. Finally, the findings obtained in this study are to be summarized and concluded in. This last part suggests a deeper reasoning about the scarcity of information related to this particular topic and the possible explanations for this lack of information.

2. Theoretical Framework

This project predominantly focuses on the contributions of Guy Haley (2009) in the field of lexical innovation to the Warhammer 40.000 saga (henceforth Warhammer 40k), given his significant authority within this area. Haley, an accomplished science-fiction journalist and critic, has held notable positions such as deputy editor for SFX magazine (Apr 1997 - Dec 2003) and editor for the video game magazines White Dwarf (Jan 2004 - Mar 2007). Additionally, he contributes to Games Workshop's Black Library

(Black Library, 2017), positioning himself as a pivotal figure in the expansion of this universe, alongside Dan Abnett (Black Library, n. d.).

2.1 The Concept of Lexical Innovation

For this study, it is crucial to have a definition of innovation that aligns with the subject and research being conducted. The Cambridge Dictionary simply defines innovation as “the creating and use of new ideas or methods” (Cambridge University Press, n.d.), however, Seaden, G. and Manseau, A (2017). made a finer approach of innovation by defining it as “the creative process whereby new or improved ideas are successfully developed and applied to produce outcomes that are practical and of value”. As both sources already mentioned, everything is based on a creative process: creativity and innovation go toe-to-toe.

From a morphological point of view, and considering the importance of the creative process, lexical innovation is not only about the creation of random new words. It often involves taking existing words and transforming them by providing new contexts and meanings as well. Bauer (1983) distinguishes two branches that deal with the internal structure of new words (Bauer, 1983; Quirk et al, 1985): the first type includes those words whose formation mechanisms cope with affixation-derivation, conversion and compounding. These three techniques are to be considered “predictable formations”. The second group, also known as “unpredictable formations”, incorporate clipping, blending, acronyms, stress shifts, etc. The definitions and characteristics of these techniques will be explained at the end of this section.

A thorough understanding of lexical innovation is defined by Christian Mair in *Twentieth-Century English, lexical innovation*, where she explains that this process involves the introduction of new words and phrases into a language. It is often the most visible form of linguistic evolution to the average collective. It encompasses the creation and assimilation of new lexical items to address dynamic communicative demands, societal developments, and advancements in technology (Mair, 2009). This makes sense, for it has been scientifically proven that every language is constantly evolving, ever so slightly. If this were not the case, we would all still be speaking ancient languages in their original form.

2.2. The Importance of Warhammer 40K in Science Fiction

The influence of Warhammer 40K extends further the board game hobby. It has given rise to hundreds of novels, acclaimed video games, and comic books. Its undeniable influence on the modern science fiction landscape has consequently seen Warhammer 40K permeate wider pop culture and media. References to its universe and lexicon pop up with surprising regularity among social media (Cronshaw, 2024), for example the recent acquisition of Warhammer 40k's intellectual property by Amazon studios, and video sharing websites such as YouTube and Twitch, a testament to its pervasive influence and dormant potential. This commitment to crafting a rich, immersive universe has set a high standard for world-building in fantasy and science fiction, inspiring creators to develop more detailed and lived-in universes where neologisms and original terminology are not only commonplace but essential. Just to mention some of the most acclaimed ones: Event Horizon has major 40K influences admitted by its creator. Dragon Age series setting with its fallen Gods and its own version of the *warp*. Blizzard Entertainment's popular titles such as Warcraft and StarCraft built its entire empire on Warhammer's fantasy and 40k foundations. Star Wars Expanded Universe draws inspiration from Warhammer dystopia, even Kentaro Miura, praised Japanese manga artist, cited 40k as a huge influence on Berserk as time went on.

2.3. Games Workshop as Patron of Innovative Content

After two centuries of development, science fiction has managed to establish itself comfortably in society, with multiple billionaire franchises making their debut. Planet of the Apes (1968) won the applause of critics and public alike, spawning four sequels and a television series. The same year, 2001: A Space Odyssey was released, possibly the most significant Science Fiction film of the 1960s. Soon after, science fiction writers and filmmakers worked together to bring to the big screen a great deal of unforgettable stories such as H.G. Wells' The war of the Worlds, Alien (1979), Star Wars (1977), Star Trek (1979), Terminator (1984), The Matrix (1999), among many others. Judging by the evidence, the second half of the 20th century saw a burst in the popularity of science fiction, the finest scenario from which to brew the birth of Warhammer by the British company Games Workshop back in 1975.

Much has changed since the foundation of Warhammer, for it started as an UK-based mail-order business importing popular fantasy roleplaying and board games. The company was baptized as “Games Workshop”, which, in the company's own words only narrowly beat the alternative: “Games Garage”. According to company records, The magazine *White Dwarf*, founded in 1977 and published the same year, quickly replaced its predecessor ‘Owl and Weasel’ (1975) as the UK’s leading magazine for table top and roleplaying hobbyists. However, it was not until 1986 and 1987 that the company took over the reins of the science fiction narrative with a range of sci-fi miniatures, amongst them, the armoured form of a crusading galactic hero - the Space Marine.

2.4. The Notoriety of Warhammer

Prior to the start of the science fiction saga, Games Workshop had focused his storytelling on a Tolkienian conception, with elements of high fantasy mixed with speculative fiction. Archetypal characters like graceful elves, sturdy dwarfs, belligerent orcs, and even vampires were designed to be used in roleplaying systems or simply collected on their own (Seri, 2022).

Based on the popularity of the Space Marine, Warhammer 40,000 *Rogue Trader* launched, and soon became the world’s most popular wargame to the present-day (Cass Marshall, 2023). This first manual is key to understanding the large number of neologisms, archaisms, linguistic borrowings and, in short, lexical innovation that Warhammer 40k would bequeath us. It lays the groundwork for authors such as Guy Haley, Dan Abnett, Graham McNeill and many other science fiction novelists to expand the universe of Warhammer 40k, and consequently, the linguistic development it entails.

Despite enjoying a privileged position in contemporary science fiction and the prestige it has accumulated over the decades, Warhammer remains largely unknown in the academic world. Its fantastic universe has stimulated the imagination of young people and adults for almost forty years, making a well-deserved place in the collective imagination and positioning itself as one of the most fashionable franchises. Through its novels, Warhammer has established an authentic canon, the perfect breeding ground for the lexical innovation and an opportunity to investigate an exotic repository of information from an academic perspective, and that's precisely what it will be done to Guy Haley's novel. *Dark Imperium* possesses a wealth of unique military vocabulary

along with its creative titles and ranks, weapons and equipment, technologies, supernatural concepts, and expressions which could be categorized into the scope of innovative material.

2.5. Types of Translations Applied to the New Words

Due to the fact that there are no specific translation techniques that are exclusive to the science fiction genre, Vinay & Darbelnet's classification model (1958) will be considered for its wide impact on the theory and practice of translation. The main techniques include the following:

1. **Literal translation or word-for-word:** This involves replacing SL syntactic structures, usually at the clause or sentence level, with TL syntactic structures that are both iso-morphic and synonymous in terms of content. According to V&D, literal translation is most common when translating between two languages of the same family and even more so, of the same culture. Literal translations between English and Spanish are linked together by a certain confluence of structure and thought which is shared among most of the European languages.
2. **Loan translation or calque:** defined by V&D (1958) as "a special kind of borrowing where the SL expression or structure is transferred in a literal translation" (p. 85). This is the literal translation of a foreign word or phrase from the SL into the TL.
3. **Borrowing:** this process entails transferring the SL word directly to the TL without formal or semantic modification. They are divided into two kinds; pure borrowing, when an expression or a word is taken over purely without any change, and naturalized borrowing, when it fits the spelling rules in the Target Language (Molina & Albir, 2002). This is, if not the simplest of all translation procedures, one of the most straight forward ones. Borrowings are used to fill a semantic gap in the TL and to add "flavour" or local colour.
4. **Modulation:** it is simply a variation of the form of the message which results due to a shift in the perspective. This change can be produced by replacing the concrete with the abstract and vice versa. V&D distinguish between obligatory and optional modulation.

5. Adaptation: finally, V&D define adaptations as special kind of situational equivalence. It involves changing the cultural reference of a situation of the ST because of socio-cultural differences between the SL and the TL communities. It is recommended to achieve a prosody similar to the SL.

In order to achieve a better understanding of the more specific translations found in the new coined terms, a wider variety of translation techniques have also been considered:

6. According to Peter Newmark, "Semantic translation [is] an attempt to render as closely as the semantic and the syntactic structures of the TL allow, the exact contextual meaning of the original, thus making it accurate but not a proper way to communicate" (Newmark, 1981, p. 39). It focuses on the word equivalence by maintaining the cultural aspect of the source language. This type of translation tries to transfer the contextual meaning of the source language as close as possible with the syntactic and semantic structure the target language.
7. In agreement with the existing definition given by A. Darwish, descriptive translation is "the use of a description to translate a term or a phrase in the source by characterizing it instead of translating it directly" (Darwish 2010, p. 142). Description technique replaces a term or expression in source language by giving a description or explanation (Molina & Albir, 2002).
8. Finally, minor examples of reduction can be explained by Molina & Albrir definitions. Reduction would act as the direct opposite to amplification, which refers to the act of omitting a specific item of the SL in the TL. It compresses the information from the ST into the TL.

2.6. The Importance of the Etymology in Innovative Lexical Translations

For millennia, ever so slightly, language has been changing and adapting to new times. It is defined not just by its vocabulary, but also by the intricate web of associations that anchor words to their roots, origin, culture and history. For educators and translators, language encompasses all forms of communication, including both verbal and non-verbal signs. It is a systematic tool for conveying ideas or feelings by using agreed signs, sounds, gestures, or signs that contain understandable meanings (Zadeh, 1975; Tseng, 2018). In short, language is alive, and like everything that lives, it had to be born at some point in

time. That is the reason why exploring etymology – the study of the origin and evolution of words – becomes incredibly relevant.

Etymology examines the origin and development of words, deriving from the Greek terms "etym," which means "true sense or original meaning," and "logia," which means "study of." Essentially, etymology is the study of a word's evolution from its earliest forms to its modern state. This involves analysing the root, prefix, and suffix of the word, as well as examining the semantic changes it has undergone throughout its lifespan (Frăţilă, 2011).

2.7. Word-Formation Processes for Lexical Innovation

Global Language Monitor reports that approximately 5,400 new words are created annually; However, only one out of five of these words is considered impactful enough to be published as new entries in official dictionaries. The following classification depicts list of word formation processes that occur in lexical innovation:

1. Derivation/affixation: It is the most common word-formation process (Yule, 2006, p,70) which is achieved through a large number of small bits called affixes added to a root word, e.g. “-ment, -ful, -er.” Some scholars (Bauer, 1973, p,225) state that as well as nouns, adjectives and adverbs are subjected to this process of word creation, minor cases can also be used as bases.
2. Compounding: the process by which two or more words merge to produce a brand-new word. This method is fairly popular in languages like Germanic languages. The juxtaposition generally gives birth to noun words, such as fiddlestick or claptrap, but other grammatical categories such as pronouns (nobody), verbs (daydream), prepositions (onto, into), or adjectives (space-born, bitter-sweet) can also benefit from it.
3. Borrowings and Loan-Translations: these are words taken directly from other languages. A special type of borrowing are loan-translations or calques. In this technique there is a direct translation of the word into the borrowing language, for instance the term 'loan-word' itself is likely to be calqued from the German word “Lehnwort” (Nordquist, 2019).

4. Conversion: it could be defined as the process by which a word switches its grammatical from one class to another without an affix. For example, the etymological dictionary lists the word “giant” as an Old French noun which translates into a "fabulous man-like creature of enormous size," and, at the same time, from Vulgar Latin *gagantem (nominative gagas). This switched after the early 17th century, when people began using it as an adjective (Online Etymology dictionary, n.d.).
5. Eponyms: Allan A. Metcalf defines them those words named after a person or place. Some famous examples are Alzheimer’s, cheddar, or boycott (Metcalf, 2010).
6. Stress Shift: the stress is shifted from one syllable to the other. The stress changes the grammatical category. E.g. ábs-tract / abs-tráct.
7. Blending: when two already-existing parts of words (not morphemes) are put together to form a new word, such as brunch (breakfast & lunch), or Spanglish (Spanish & English).
8. Neologism or Coinage: the invention of totally new terms. It is one of the least common word-formation processes, but reasonably accepted within the science fiction parameters. Famous neologisms such as "cyberspace" (widespread, interconnected digital technology), coined by Douglas Coupland from *Generation X: Tales for an Accelerated Culture*, “troll”, or “spam” are widely accepted in the modern culture.
9. Onomatopoeia: it is produced when the invented term is written like the sound they name or the entity that produces such noise. Onomatopoeia is simply the imitation of sound by sound. Terminology like crack, growl, hum, beep, ding-dong, roar, and squeak, are onomatopoeic words of frequent use (Ullman, 1979, p.84).

3. Methodology

This section provides a description of the methods employed to analyse and interpret the distinctive terminology used by Guy Haley in his book *Dark Imperium*. The book has a total of 398 pages in the physical English version, and 366 pages on the

Spanish one. The entire book was considered for the search and analysis of terminology. The data are selected and extracted manually, backed up by the online version of each novel for the quantitative analysis. The advantage of using official franchise publications, rather than fan-fiction or audio-visual material from Warhammer 40k users, is that the findings have already been validated, thereby facilitating their authenticity.

3.1 Quantitative and Qualitative Analyses

Analysing examples of lexical innovation in the novel involves identifying words or phrases that are unique to the Warhammer Universe, as well as those which have been adapted or coined within the context of Warhammer lore. Therefore, there are specific categories where the focus should be.

First, a quantitative analysis has been conducted in order to determine which innovative words were most frequently used according to their frequency of appearance throughout the novel. This scrutiny can help identify patterns, trends, and relationships that might not otherwise be so clearly detected. Creswell (2009) emphasizes that the goal of quantitative methods is to determine whether the predictive generalizations of a theory hold true. Next, regardless of their frequency, all words suitable for lexical innovation were classified according to their etymologies and the technique used by the translator to interpret them into Spanish. All potential candidates to be considered as new words have been roughly categorized according to the following variations:

1. Layout of words: the innovative words both in English and Spanish, attending to the spelling, similarities and differences.
2. Frequency: it states the number of appearances within the novel. Although a greater number does not necessarily mean greater relevance, in this context it is a determining factor when assessing its emphasis. The counting process was conducted through the PDF search tool. This minimizes the human error factor.
3. Type of translation: the classification of the words attending to translation techniques (see subsection 2.5). This would be part of the qualitative analysis.
4. Etymology and process of word-creation: various word-formation processes are involved for lexical innovation (see subsection 2.7). Every word subjected to these techniques will be noted and classified regarding its singular features. This

qualitative method assesses consistency, depth, and originality in the word's portrayal, connecting them to their foundations and the evolution process.

In order to carry out this study in a more appealing visual way, several tables corresponding to the sections mentioned above were made. The number of instances extracted from the books under analysis is 75 cases. However, for the sake of brevity and lack of space, only cases considered highly representative will be commented on in the results and discussion section, which make a total of 20 examples. To analyse these examples more effectively, they will be presented as shown in Table 1.

Table 1. Model table for each technique applied

No. of example	English version	Spanish version	Translation technique	Etymology
1.	Then thousand years have passed since the Primarch Horus turned to Chaos and betrayed the Emperor of Mankind, plunging the galaxy into ruinous civil war.	Han pasado diez mil años desde que el Primarca Horus recurriera al Caos y traicionara a su padre, el Emperador de la Humanidad, abocando a la galaxia a una desastrosa guerra civil.	Adaptation	Latin

Table 1 is a model that will be used to conduct the qualitative analysis of the cases in which lexical innovation is noticed and highly representative. It is composed of 5 columns which correspond to the number of the example, the context in which the example under analysis appears (English and Spanish), the etymology from where it draws its innovative meaning. The term or sentence under discussion will appear in italics in order to distinguish it from the rest of the sentence. Down below the table, the results of the translation will be classified based on its categorization, meaning, linguistic creativity, and a discussion on how the chosen method is appropriate for fulfilling the overall aims of the study.

4. Results

This section presents the results of data classification and analysis. As it was mentioned in the previous sections above, the creation of new words is a frequent and significant phenomenon in modern science fiction franchises, such as Warhammer 40k. This practice is particularly prevalent in the works of authors like Guy Haley, whose book "Dark Imperium" exemplifies this trend.

These innovative linguistic techniques are crucial for world-building, as they help to establish unique cultures, technologies, and societies within the narrative. Furthermore, by coining new terms authors enrich the fictional universe and also engage readers more deeply, fostering a sense of immersion and authenticity. The lexical innovation in science fiction reflects the genre's imaginative nature and its capacity to explore concepts beyond customary terms.

4.1. Quantitative Results

The quantitative analysis overviews the examples of lexical innovation in Guy Haley's Dark Imperium where the translation techniques and word-formation processes discussed in the theoretical framework are applied. However, not all the translation techniques and word-formation mechanisms discussed previously will appear as some of them are simply not applied in the translation of the words under analysis.

Table 2 shows a preview of all the examples found that merit lexical innovation. The data set is represented by seventy-five alphabetically ordered innovative terms, and the number of appearances of every single one of them throughout the novel, regardless of the context. Descriptive statistics, represented by the type of translation and the etymology of the corresponding words, are also presented alongside in the established order.

A cursory analysis of the table (see Table 3. in annexes) suggests that this data set has a reasonably asymmetrical distribution, with no clusters nor centred distribution of the words. While the most frequently used words exceed a hundred examples, most of the innovative terms have a rate of 1 to 10 times. Asymmetrical distributions are, by no means, rare. As a matter of fact, this is something completely normal in natural language usage.

A representative feature of all the examples shown in the table is their grammatical function, since all of them have the category of noun, with some exceptions that may work as adjectives (*xenos*, *warp-born*) or verbs (*vox*). This makes sense since nouns are the most fundamental grammatical category in all languages of the world, together with verbs (Christelle Maillart, Christophe Parisse, 2019).

Given the breadth of the sample and its asymmetric distribution, for the sake of simplicity and lack of space, only the first twenty most common terms will be analysed in greater depth. Table 4 shows the twenty's most innovative words out of the seventy-two instances that the previous table has exhibited.

Table 2. List of the most common innovative terms in Guy Haley's *Dark Imperium*

Place	English Version	Number of appearances	Percentage
1	Primarch	248	13,60
2	Space Marine	178	9,76
3	Daemon	149	8,17
4	Imperium	125	6,86
5	Mortarion	86	4,72
6	Warp	85	4,66
7	Ultramarine	75	4,11
8	Primaris	74	4,06
9	Vox	64	3,51
10	Chaos	62	3,40
11	Adeptus	61	3,35
12	Terra	48	2,63
13	Adeptus Astartes	41	2,25
14	Cathedrum	39	2,14
15	Archmagos	35	1,92
16	Bolter	34	1,87
17	Tetrarch	32	1,76
18	Belisarius	31	1,70
19	Servitor	22	1,21
20	Servo-skull	22	1,21

As shown in table 3 the top twenty positions of the study represent more than an eighty percent of the occurrences: this is 1823 out of the 2.214 total number of utterances found in the book. The examples are ordered from highest to lowest by frequency, being the word *Primarch* the most important asset with a total rating of 248 times, and *servo-skull* the least labelled with a rating of 22 times.

Common nouns like "Primarch," "Space Marine," "Daemon", "Imperium", and "Warp" are the most repeated terms in the table because they are central to the theme and plot of the novel. Some other repeated terms like "Mortarion" and "Ultramarine" are also fairly frequent, although, due to the nature of the first as proper noun and the former as collective noun appellative, it is only logical that both reach a high counting. Given the context of the Warhammer 40k universe, these terms are integral to the story's narrative, characters, and conflicts. This gives us an overview of the main topic, emphasizing the epic scale of the conflict and the significance of these characters and entities within the plot.

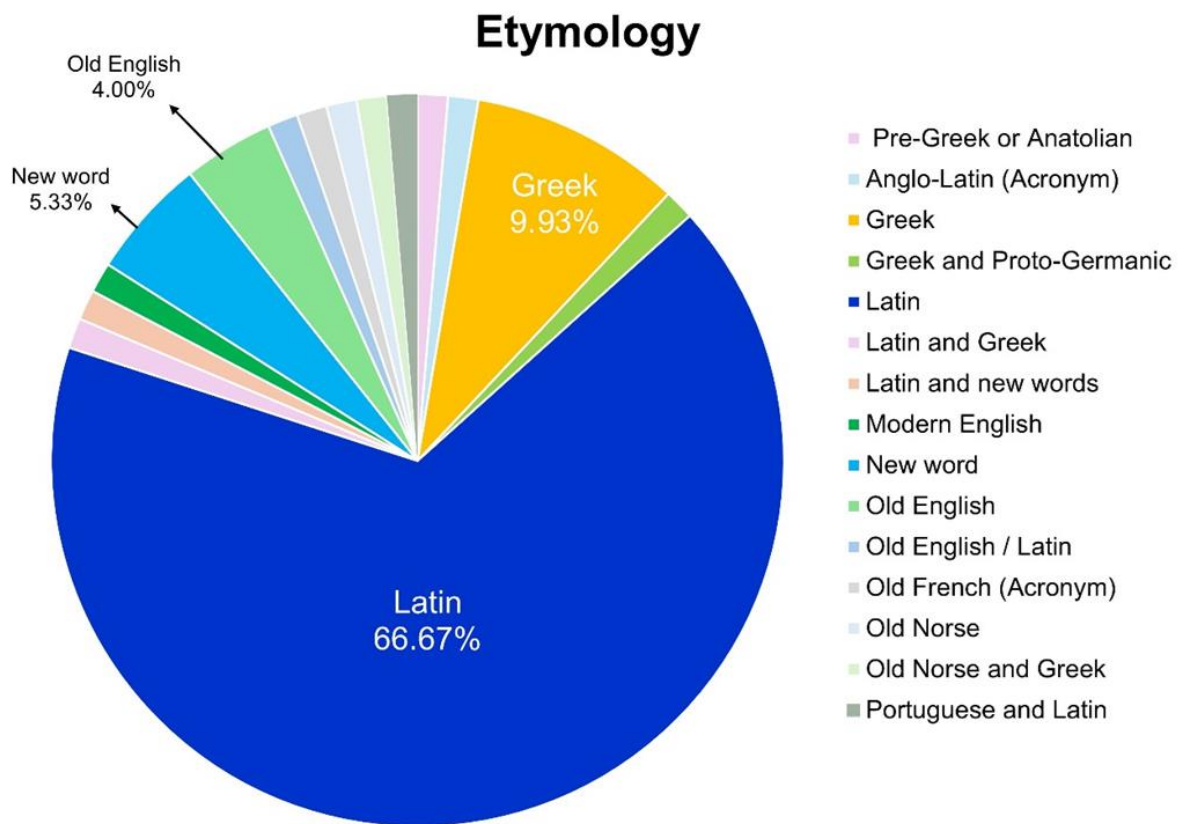


Figure1: Percentage of innovative word etymologies

A quantitative analysis of the origin of the innovative words in the book was also carried out (Figure 1), where the etymological terms were classified by Latin, Greek, Anatolian, Anglo-Latin, Greek and Proto-Germanic, Modern English, Old English, Old French, Old Norse, and neologisms that do not fit with the above mentioned.

As can be seen in Figure 1, Latin accounts for the majority of the etymological origins, representing more than two-thirds of the entire dataset. This indicates that Latin

is the predominant source of inspiration in the creation of new words and world-building aspects.

Greek is the second most prevalent origin, constituting nearly 10% of the words. This suggests a notable influence of Hellenisms, although not as influential as Latinisms. Not explicitly provided in the chart, but visibly as a small segmentation, are words that combine Greek with other origins such as Latin, Anatolian, and Proto-Germanic.

New words, or neologisms, form a relatively small, but significant portion, of the dataset, accounting for one in twenty-five words. These are likely recent additions to the language, reflecting ongoing lexical evolution and originality. Despite all words taken in consideration in the analysis here could be named as “new words” (depending on the concept or meaning associated with the term), only neologisms stand out for their novelty and linguistic independence. Since they do not rely on the historical baggage of Latin or Greek, they enjoy certain flexibility and adaptability in their usage.

Words derived from Old English make up just over four percent of the dataset, highlighting the historical Germanic roots of some parts of the vocabulary. The sum of these four major etymological classifications results in an eighty-six percent of the overall. The rest of the etymologies, although not negligible, contribute minimally to the dataset.

Type of translation

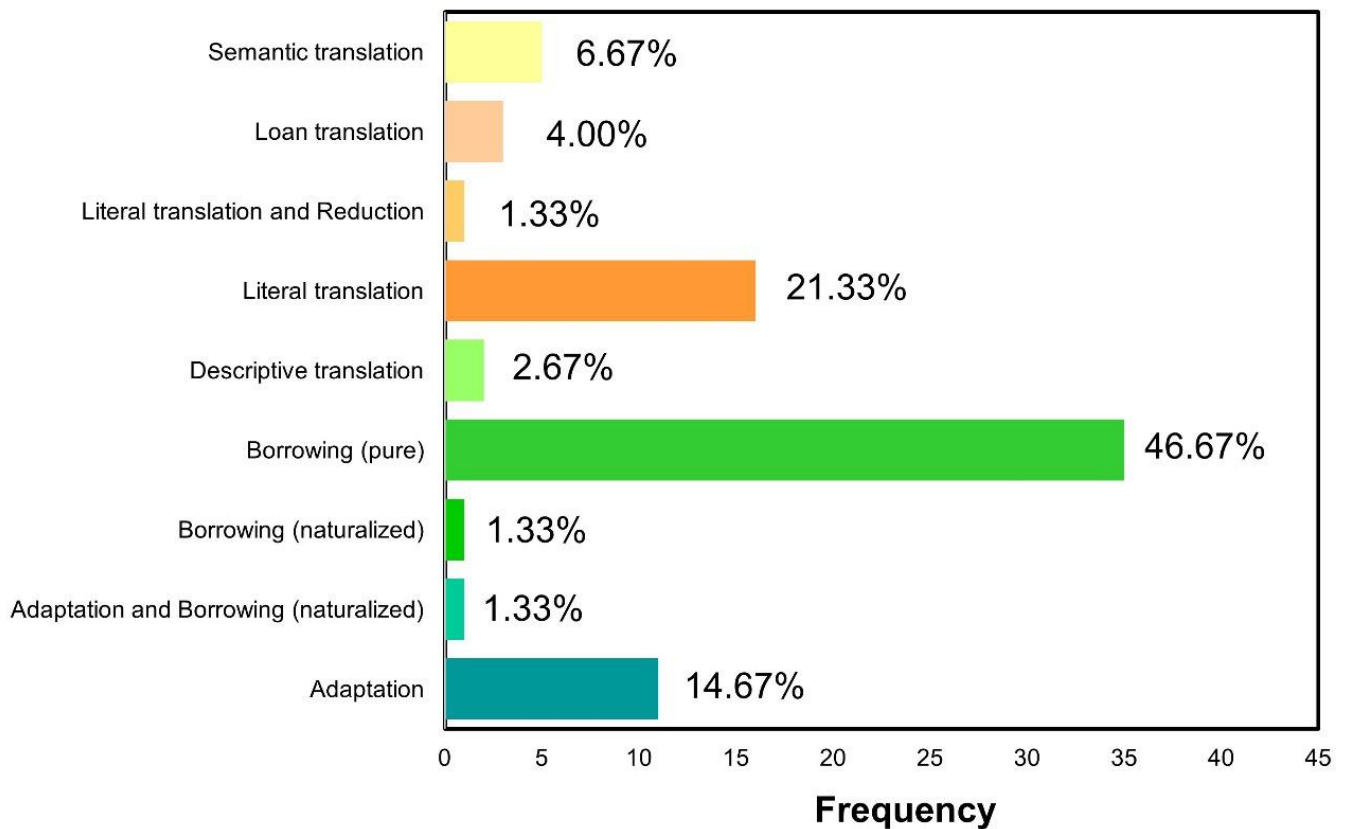


Figure 2. Percentage of translation techniques applied to innovative words

Figure 2 presents the quantitative analysis of the translation techniques. This distribution reflects the various strategies employed in translating terms, balancing between the direct transfer of terms from English to Spanish and necessary adaptations for cultural or contextual reasons.

Pure borrowings and literal translations are the dominant techniques, with a recurrence of 50 instances, suggesting a preference for direct methods that preserve the original term or its exact meaning as intended by the author.

Adaptation and loan translation show moderate usage, 20 instances, indicating some need for cultural or contextual adjustments in translation.

Semantic translation, reduction, descriptive translation, and naturalized borrowing are used less frequently, highlighting specific contexts where these methods are necessary. The four categories together make a total of 15 examples.

4.2. Qualitative Results

Through the exploration of qualitative aspects of translation, this study delves into the intricate processes and strategies that underpin the adaptation of new terms between languages. Rather than focusing solely on quantitative data, the qualitative approach seeks to uncover the nuances of the choices made by authors and translators to convey meaning, context and cultural relevance.

By examining the variety of translation techniques and etymologies employed in the creation of new words, this analysis aims to illuminate the complexities and creative decisions involved in lexical innovation. Through detailed examination and comparative analysis, the study reveals how both Guy Haley and the translators who worked on his novel navigate the delicate balance between preserving the original meaning and ensuring comprehensibility and resonance.

For this section, the twenty most common terms from the previous tables will be considered, as the percentages show that this is a sufficiently representative sample for a qualitative review.

Table 3. Twenty most common new words in context

No. of example	English version	Spanish version	Translation technique	Etymology
1.	Then thousand years have passed since the <i>Primarch</i> Horus turned to Chaos and betrayed the Emperor of	Han pasado diez mil años desde que el <i>Primarca</i> Horus recurriera al Caos y traicionara a su padre, el Emperador de la	Adaptation	Latin

	Mankind, plunging the galaxy into ruinous civil war.	Humanidad, abocando a la galaxia a una desastrosa guerra civil.		
2.	The <i>Space Marines</i> were lords of the galaxy, designed to reunite the human race and shepherd it to a glorious future.	Los <i>Space Marines</i> eran los señores de la galaxia, diseñados para reunir a la raza humana y guiarla hacia un futuro glorioso.	Borrowing (pure)	Latin
3.	‘We must be swift, before their sorcerers bring forth <i>daemons</i> to aid them.’ ----- He could hear Fulgrim’s silken, <i>daemonic</i> laughter drawing nearer.	- Debemos darnos prisa antes de que sus hechiceros conjuren demonios para ayudarlos. ----- Podía oír la sedosa y <i>demoníaca</i> risa de Fulgrim acercándose.	Semantic Translation	Greek
4.	For one hundred centuries <i>the Imperium</i> has endured xenos invasion, internal dissent, and the perfidious attentions of the dark gods of the warp.	Durante cien siglos, el <i>Imperio</i> ha sufrido de la invasión de especies xenos, discrepancias internas y las pérdidas atenciones de los dioses oscuros de la disformidad.	Literal Translation	Latin
5.	And when one considers the <i>warp</i> , the nightmare realm skulking behind that of touch, sound, and sight, well...	Y ya cuando uno tiene en consideración a la <i>disformidad</i> , ese reino de pesadillas que merodea tras la esfera del tacto, el sonido, y la vista, pues...	Semantic translation	Old English

6.	Disease is rife where <i>Mortarion's</i> dogs go.	Las enfermedades proliferan allá donde van los perros de Mortarion.	Borrowing (pure)	Latin
7.	“I am proud”, said Thiel, “to be an <i>Ultramarine</i> ...”	Estoy orgulloso — dijo Thiel —. Orgulloso de ser un <i>Ultramarine</i> ...	Borrowing (pure)	Latin
8.	With Imperium Sanctus shored up, the days of the great armies of <i>Primaris</i> Space Marines were done.	Con el Imperio Sanctus apuntalado, los días de los grandes ejércitos de los Marines <i>Primaris</i> habían acabado.	Borrowing (pure)	Latin
9.	‘Doors opening, doors opening, doors opening,’ droned a machine voice over the <i>vox</i> .	– Apertura de puertas, apertura de puertas, apertura de puertas – repitió con tono monótono una voz mecánica por el <i>comunicador por voz</i> .	Descriptive translation	Latin
10.	The Emperor of Mankind had tried and failed to unite humanity’s scattered so that the species might survive the supernatural threat of <i>Chaos</i> .	El Emperador de la Humanidad había intentado, sin éxito, unificar los dispersos mundos de la humanidad para que la especie como tal pudiera sobrevivir a la amenaza sobrenatural del <i>Caos</i> .	Literal Translation (Personification)	Greek
11.	Crisis after crisis have battered the foundations of the Imperium, and the <i>Adeptus Custodes</i> have retreated further from view with each one.	Afrontar una crisis tras otra había puesto en cuestión los fundamentos mismos del Imperio y, con cada una de ellas, el <i>Adeptus Custodes</i> se	Borrowing (pure)	Latin

fue apartando cada vez más del ojo público.

12.	The Emperor sits immobile upon the Golden Throne of <i>Terra</i> , a psychic bastion against infernal powers.	El Emperador permanece sentado, inmóvil, en el Trono Dorado de <i>Terra</i> , un bastión psíquico contra los poderes infernales.	Borrowing (pure)	Latin
13	Roboute Guilliman might talk of the <i>Adeptus Astartes</i> ' potential for peacetime activity, but war was what they were made of.	Roboute Guilliman podía hablar del potencial de los <i>Adeptus Astartes</i> para el desempeño de sus actividades en tiempos de paz, pero estaban hechos para la guerra.	Borrowing (pure)	Latin
14.	The <i>cathedrum</i> enclosed a huge volume to fit the enormousness of the people's faith.	La <i>catedral</i> albergaba un espacio acorde a la enormidad de la fe de su pueblo.	Adaptation	Latin
	----- 'We are not to be side-tracked. We make for the <i>Cathedrum Magnifica</i> at the centre of the city as fast as possible,' he told his men.	----- – No podemos distraernos. Debemos llegar a la <i>Cathedrum Magnifica</i> en el centro de la ciudad lo más rápido posible – les explicó a sus hombres.	----- Borrowing (pure)	
15.	For ten thousand years he had slept, his body preserved in stasis upon his home world of Macragge, until Archmagos <i>Belisarius</i>	Había dormido durante diez mil años, y su cuerpo había sido preservado en un campo de estasis en su mundo natal de Macragge hasta que el archimago <i>Belisarius</i> Cawl,	Borrowing (pure)	Latin

	Cawl, aided by the alien aeldari and a saint said to be the personification of the Emperor's will, had awoken him to a galaxy tormented by war.	asistido por la raza alienígena de los eldar,		
16.	<i>Bolters</i> were thrown down and <i>bolt</i> pistols drawn.	Soltaron los rifles <i>bólter</i> y empuñaron las pistolas <i>bólter</i> .	Adaptation	N/A
17.	'Before we came here, I had Tetrarch Felix lead an expedition to the Palace Spire of Hive Creostos on Ardiium,' said Guilliman.	– Antes de venir aquí, pedí al <i>tetrarca</i> Felix que liderara una expedición a la Torre del Palacio de la Colmena Creostos en Ardiium – explicó Guilliman.	Literal Translation	Greek
18.	<i>Archmagos</i> Belisarius Cawl had been good to the oaths he had made before the primarch's death...	El <i>archimago</i> Belisarius Cawl había cumplido los juramentos hechos antes de la muerte del primarca...	Literal Translation	Greek
19.	The Space Marines of the Second Company were in standard power armour and were being equipped with tall breaching shields by the arming <i>servitors</i> .	Los marines de la 2ª compañía conservaban sus servoarmaduras estándar, que los <i>servidores</i> de armamento equipaban con altos escudos de abordaje.	Literal Translation	Latin
20.	... whether in person or as one of the ghostly hololiths projected by the <i>servo-skulls</i> swarming above the throng.	... ya fuera en persona o a través de uno de los fantasmales hololitos proyectados por los <i>servocráneos</i> que sobrevolaban a la multitud.	Literal Translation	Latin

As previously mentioned, Table 4 is composed of the twenty most frequent items in the novel that qualify for lexical innovation. Eighteen of the twenty examples were placed within a sentence in which they appear in the novel, since they only possess a grammatical function and, thus, a meaning. There is only one exception of a term (*vox*) that can function either as noun, adjective or verb, and a second word (*Cathedrum*) whose translation differs depending on whether it appears alone or along an adjective.

In the Warhammer universe, words can take on specific meanings depending on the races, factions, technologies, and events characteristic of that fictional world. Context becomes especially relevant when we find words that already exist in real life but have been given a new fictional meaning. For example, specific terms such as "adept" or "psychic" may be relatively common words, easily traced in every dictionary, and yet this specific literary context transforms them into new words. It is crucial to highlight how they are rooted in the narrative, the fictional culture and the construction of the world created by the authors of the novels.

4.2.1 Pure Borrowings

As the table 3 shows, eight examples share both their etymology and translation technique: Latin and pure borrowings, respectively. There are two main reasons why the translator has chosen to apply this translation technique: This is often done when (1) there is no equivalent term in the target language and (2) the original term carries specific connotations or significance that, otherwise, would be lost in translation. In these particular cases, the translator opted for a direct approach to the SL term, leaving the terms unchanged and consequently maintaining their authenticity.

First of all, the terms *Space Marine* and *Ultramarine*, in examples 2 and 7, address the company's flagship and most important assets in its fictional universe. Despite the previous existence of the terms "space" and "marine" separately, it is the compounding of the two that achieves an innovative meaning. The relationship between the signifier, the form which the defined object takes, and the signified, the concept it represents, is referred to as 'signification' (Saussure 1983, 67; Saussure 1974, 67). Thus, according to Saussure's theory, the signification of *Space Marine* includes both the visual representation of the letters and the auditory pattern when the term is spoken (the two words form a singular unit), and the concept or idea that triggers the mental image of a

futuristic soldier operating in space, often equipped with advanced technology and engaged in interstellar warfare.

Given the fact that Spanish already possesses terms like "Marine Espacial," choosing to leave "*Space Marine*" unchanged would likely be a deliberate choice for consistency and recognizability within the specific context of the Warhammer 40K universe. The same reasoning applies to example 7, *Ultramarine*, but this time the changes from English to Spanish are non-existent. Leaving Ultramarine unchanged in the Spanish version is a deliberate choice of borrowing, aimed at maintaining the term's specific identity and ensuring that the unique branding of the Warhammer 40K universe is preserved for Spanish-speaking audiences. Furthermore, it avoids possible misconceptions with the Spanish term "ultramarino," whose meaning has nothing to do with the concept of a starfighter.

Moving on, we encounter *Adeptus* (no. 11) and *Astartes* (no. 13), two complementary terms. According to the Oxford English Dictionary, the first mention of "adept" dates back to 1655–65; from Medieval Latin *adeptus* "one who has attained (the secret of transmuting metals)," noun use of Latin past participle of *adipiscī* "to attain to" (ad- "toward" plus -ep- combining form of ap- in *aptus* plus -tus past participle suffix); ad-, apt (Online Etymology Dictionary, n.d.). In order to maintain the rhyme and parallelism with the Ancient Roman Empire, an Anglicised form of faux Latin merges, preserving the meaning of adept in its English form, "an expert, one who has attained knowledge," but presented to the reader in its Latin form.

The Spanish translation follows a similar strategy, with "adepto-ta" translated as "supporter or follower of a person or an idea." As a means to preserve the same connotations, the term was translated without any alteration, maintaining consistency across languages. By following this technique, the original meaning and cultural significance of the term are preserved in both languages.

It is common in the novel to see the terms *Adeptus* and *Astartes* together. The second part of the set alludes to the military rank, office, or purpose that each adept possesses in the background of the novel. *Mechanicus* would stand for mechanics or machines, resulting in *Adeptus Mechanicus*, *Custodes* as guardian or keeper, *Adeptus Custodes*, *Ministorum* as someone related to the government, *Adeptus Ministorum*, and, of course, *Astartes* as the representation of star warriors. The combination of both words

(Adeptus plus x) completes the creative process by compounding, giving birth to a brand-new entity.

In case 12, both English and Spanish derive *Terra* from Latin, where it means "earth" or "land." Since the word exists in both languages with the same meaning and similar form, it can be seamlessly retained in translation. In the Warhammer 40k universe, "Terra" refers specifically to Earth, carrying connotations of historical and mythological significance that did not exist for this particular word previously.

In example 14, *Cathedrum Magnifica* derives its meaning from the union of cathedral church (c. 1300) "principal church of a diocese," a phrase partially translating Late Latin *ecclesia cathedralis* "church of a bishop's seat," and a back-formation from Latin *magnificentior*, comparative of *magnificus* "great, elevated, noble." It is curious to notice that this particular example translates *Cathedrum* into "catedral" when it appears alone in the novel, but it becomes a borrowing after appearing with a qualifier, like *Cathedrum Magnifica*. Considering that, from the context, the building named remains the same with or without a qualifying adjective, the fact of switching from adaptation to loan presents a lack of consistency.

Finally, the fifteenth term, *Belisarius*, was left unchanged in both the Spanish and English versions. This term fits perfectly as a direct reference to Flavius Belisarius, commander of the Byzantine Empire under the emperor Justinian I and instrumental in the conquest of the Western Roman Empire (Encyclopaedia Britannica, n.d.). According to its grammatical function as an adjective, early mentions of this word date back to the early 15th century, meaning "inclined to fighting. It derives from Latin *bellicosus* "warlike, valorous, given to fighting," from *bellicus* "of war," from *bellum* "war" (Old Latin *duellum, dvellum*).

Although Warhammer 40k makes frequent use of artificial Latin expressions to mimic the language spoken in that universe, called High Gothic, Games Workshop has not made any official statement about their true meanings; therefore, it is left to the reader's discretion to interpret the signification. This bastardization of Latin sounds foreign enough that we can pretend it truly is High Gothic, while being relatable enough to English vocabulary and, therefore, easy to find a meaning with minimal reasoning. However, despite not being completely faithful to the ancient Latin grammar, many of its rules are correctly applied in both languages, such as affixation. On the one hand, nouns of the first declension with a nominative in -a, like *Adepta Sororita*, are feminine. On the

other hand, “-um” is the neuter singular ending declension, like in *Adeptus, Ministorum, Mechanicus, Maledictus, Imperium*, and so on (Wolfgang, de Melo, 2022).

4.2.2 Adaptations

The most important feature shared by all the examples of adaptation is their phonological and cultural switch from the SL to the TL. Any word that has been phonologically adapted must have adjusted its spelling to fit the phonetic and orthographic rules of the TL while preserving the original sound.

For instance, the word *bolter* (case 16) has been adapted to Spanish to achieve a prosody similar to the English pronunciation. Spanish typically places stress on certain syllables to match natural pronunciation patterns. If a word ends in a consonant other than 'n' or 's', the stress usually falls on the last syllable unless otherwise indicated by an accent mark. In order to maintain the original pronunciation of *bolter*, the accent is placed on the 'o' to ensure it is pronounced correctly by Spanish speakers. Adding the accent mark makes sure that Spanish speakers pronounce the word as intended, closely resembling the English pronunciation. Without the accent, Spanish speakers might naturally stress the last syllable, resulting in "bolter" being pronounced differently.

This is a curious example of originality, since there are no etymological records of this word or derivatives of it. Neologisms capture new realities that traditional classical languages may not have specific terms for, in this case, a singular weapon used by space warriors.

Lastly, the most representative word within this study is, without a doubt, the word "primarch" (case 1). It is a term coined to describe the genetically engineered leaders of the *Space Marine* Legions. With this definition in mind, its etymological meaning might be a straightforward mashing together of two existing terms, "prim" and "arch." As a prefix, "prim" is derived from *primus* in Latin via French (and incidentally, the same root as "prime"). The suffix "arch" is more clearly traceable from Latin *archa/archēs* to Greek *ἀρχη/ἀρχή* (incidentally, the latter of which is derived from *ἀρχω*, the root for "archon"). (Online Etymological Dictionary, n.d.) By a logical process of compounding and affixation, a new word is born, retaining the ancient Latin meaning of “prim” as "first/foremost" and the Greek interpretation of "arch" as "ruler": first in command.

4.2.3 Literal Translations or Word-for-Word Translations

Literal translations, while not always the best option, can be useful and beneficial when the context requires it. They ensure accuracy in terms of content, as they aim to closely match the original text word-for-word. Also, they preserve cultural references and idiomatic expressions that might be lost or altered in a different translation technique.

Chaos (case 10), with a capital letter, takes on a substantially different meaning and significance compared to its traditional use in English. In everyday usage, "chaos" typically refers to a state of disorder, confusion, or unpredictability. It conveys a sense of disarray and a lack of order. However, in the Warhammer 40K literary universe, Chaos transcends its simple definition. By appropriating and redefining "Chaos" with a capital letter, it transforms its lexical meaning from "disorder" to "a cosmic, metaphysical force of evil and corruption," conveying a deep semantic shift. Chaos becomes an entity, not merely a concept, evoking layer after layer of potential meanings. Maintaining the capital letter in the TL equally transfers the symbolism, even when the translation is literal.

According to the Online Etymology Dictionary, the noun *Imperium* (case 4) draws its meaning and origin from Latin roots, imperium "command, supreme authority, power". Despite the existence of the modern English word "Empire", The term Imperium possesses a unique weight and significance that distinguishes it from its more general modern equivalent. It evokes a sense of grandiosity, ancient authority, and a unique political structure that is crucial to the Warhammer 40k universe. Its historical resonance adds depth and a sense of timelessness to the setting. For this reason, although the Spanish version alternates between *Imperium* and Imperio, the English version maintains the Latin term with the suffix -um always.

The words *Servitor* (case 19), and *Servo-skull* (case 20) share both translation techniques and etymological origins, therefore they can be analysed as a whole since the characteristics of one apply to them all. The two words come from the word "serve", which the dictionary traces its origin from late 12c., Middle English *serven*, "to render habitual obedience to, owe allegiance to," and formerly from Latin *servire* "be a servant, be in service, be enslaved;" figuratively "be devoted; be governed by; comply with; conform; flatter," originally "be a slave," related to *servus* "slave," which is of uncertain origin (Online Etymological dictionary, n.d.).

Just as the previous examples, Latin bestows a sense of antiquity and formality, suggesting that the institutions and technologies in Warhammer 40k are ancient, established, and venerable. Latin is particularly effective when conveying specific meanings. For example, "servitor" implies a being that serves, often in a servile or mechanized way, while "servo-skull" clearly suggests a skull augmented with servomechanisms, reflecting both the technological and macabre aspects of the universe.

Cases 17 and 18 exemplify the second most used etymological source in Warhammer 40k for the creation of new terms: Greek. Both words, *Tetrach* and *Archmage* benefits from the use of affixation by adding the prefix tetra-, meaning "four," and the affix -arch, Latinized form of the Hellenic arkh-, arkh- "first, chief, primeval," combining form of arkhos "a chief, leader, commander," and arkhein "be first, begin". (Online Etymological dictionary, n.d.). By using a simulation of Greek terms, the author maintains the same grandiose and historical atmosphere of the setting that Latin accomplishes, enriching the storytelling and world-building of the franchise.

4.2.4 Semantic and Descriptive Translations

As discussed in Section 2.1, semantic translation aims to render as closely as the semantic and syntactic structures of the TL allow. It focuses on word equivalence by maintaining the cultural aspect of the source language and transferring the contextual meaning of the SL as close as possible to the TL. This is particularly remarkable in the examples explained below.

Case 5 clearly exemplifies the application of this technique. By choosing "la disformidad," the meaning of the message is maintained, and consequently, no information is lost. The translator emphasizes contextual meaning instead of a literal word-for-word translation.

In a broad sense of the word, it could be established that Guy Haley uses "warp" as a broader or more general term: the root word from which all other words that share the same meaning derive. The reason behind this decision is given by the number of times the word "warp" is repeated throughout the novel, far exceeding its variations. "Hyponymy refers to the sense relation between a more general, more inclusive word and a more specific word" (Dai Weidong & He Zhaoxiong, 2013). The word that is bigger, broader, or more general in meaning, in this case "warp," could be considered the

superordinate or hypernym, while the more specific words such as “Realm of Chaos”, “realm of souls”, and “the empyrean”, alternative versions of the Warp, are its hyponyms. Although they are not exactly synonyms, they all refer to the same entity.

The word warp has a significant weight in the process of innovation and creativity. Its origins date back to the Old English verb *weorpan* and the noun *wearp*, of Germanic origin. It is related to German *werfen* ‘to throw’, but the meaning of ‘bend’ dates from late Middle English. The noun was originally a term associated with weaving and referred to the threads on a loom over and under which other threads (the weft) are passed to make cloth. (Oxford Dictionary, n. d.). It is, however, its definition as a noun like “a twist or distortion in the shape of something” where Warhammer 40K draws its true meaning.

"The Warp" becomes a term that refers to an alternate dimension where the concepts of time and space cease to have meaning. It's a complex notion associated with chaos, instability, and supernatural forces—a sort of hell in the Christian sense of the word. Despite its new connotation and background, it does not lose the essence of the original definition: something distorted, irregular, or amorphic. From the combination of both, something new is born, yet familiar. A similar approach follows other definitions of warp found in the novel, like the empyrean, where the meaning of “the highest part of heaven, thought by the ancients to be the realm of pure fire” (Oxford Dictionary, n. d.) makes a lot of sense when compared with the background offered by this fictional universe.

Finally, the word *vox* (case 9) from Latin, literally "voice," which is the source of *vocare* "to call", translates to the noun "voice" in English and "comunicador de voz" in Spanish. As it was stated in the types of translations, descriptive translation involves conveying the meaning or function of a term rather than providing a direct linguistic equivalent. "Vox" in its Latin form directly means "voice," but when used in specific contexts like technology or communication devices, the direct translation might not clearly convey the function. "Comunicador de voz" specifies the device's purpose – to communicate via voice – which might be more informative to the user.

In its simple nominal form the word *Vox* does not undergo any change, since it was taken directly from the Latin. However, when it appears as a verb (*voxed*) or when accompanied by a suffix (*voxmitter*) a neologism by derivation is produced. This technique is quite common in English, being one of the most recurring sources of

neologisms on Massively Multiplayer Online Role-Playing Games (or MMORPGs) (Daniel Nilsson, 2009).

5. Discussion

As demonstrated in the analysis in Section 4, not all the translation techniques that were mentioned in the theoretical framework section have been applied in the translation of the selected words of Guy Haley's novel, *Dark Imperium*. Out of a total of 20 examples analysed in detail, 6 belong to literal translations, 9 to pure borrowing, 2 to semantic and descriptive translations, and 3 correspond to adaptations.

Taking these data into account, the most commonly used technique, accounting for slightly less than 50% of the analysed cases, is pure borrowed translation. This seems to make sense since borrowed translations, especially those derived from ancient or classical languages, help create a sense of antiquity and otherworldliness.

Latin and Greek, for example, are often used in *Warhammer 40K* to give a sense of grandeur, tradition, power, and mysticism, aligning well with the dark, gothic, and baroque aesthetics of the universe. Also, the use of borrowed translations allows for the creation of specific cultural and factional identities within the universe. For instance, the use of High Gothic, as mentioned in 4.2.1, (a fictional language heavily inspired by Latin) and Low Gothic (a more modern, colloquial tongue), helps differentiate between the classes and societies within the Imperium of Man, adding depth to the world-building and assessing a certain degree of innovation by comparison.

Another good reason for the choice of borrowing is the consistency with the already-existing background. By maintaining cohesion and coherence in the naming of conventions and terminology, it is easier to recognize and connect with the already established lore. As discussed in the theoretical background, *Warhammer 40K* is a vast and complex universe, founded on almost 40 years of stories interwoven one with the other. Despite belonging to a literary genre often treated with disdain among the elite of the literary community, science fiction has been, is, and will always be an important asset to literature. As Carl Freedman states in *Critical Theory and Science Fiction*, science fiction is, of all fictions today, “the one that bears the deepest and most interesting affinity with the rigors of dialectical thinking” (Freedman, Carl, 2000, p. xi).

To sum up, the use of borrowed translations in Warhammer 40K serves to enrich the narrative, enhance the atmosphere, and maintain consistency within its expansive lore. Despite the dissatisfaction of some authors with the inclusion of borrowings as an acceptable translation system, stating that “they cannot be called a translation procedure in the narrower sense of the word” (Wills, 1982: 100), borrowings help create a deeply immersive and thematically resonant world that captivates its audience, while at the same time giving science fiction authors the opportunity to innovate with language by breaking out of a dull, conventional lexicon.

Although literal translation is not the most recommended strategy, it should not be categorically avoided, as it possesses its own set of advantages and appropriate contexts. The conclusion that can be drawn from the examples categorized as literal translations is that a good translation often requires finding equilibrium between staying true to the original source and adapting the target text to make it resonate naturally with the target audience. Attempt to translate complicated concepts such as *archmagos* and *servo-skull* while preserving the stylistic and structural elements of the SL can become an incredibly risky task, as an error in the translation could spoil the original meaning of the word. In fields where precision is paramount, a literal translation can ensure accuracy and consistency of terminology. Sometimes, the viewer’s understanding is prioritized over the accuracy of the translation.

In terms of adaptation, three examples fit perfectly into the correct implementation of this technique. This approach is particularly effective for terms considered innovative or unique because the words resonate with the cultural and contextual nuances of the target audience, transmitting the full weight of lexical innovation from one language to another. In the case of the word bolter, completely innovative, it plays a crucial role in the game's lore and identity. Its acknowledgment and adaptation in translations, such as "bólder" to maintain pronunciation, highlight its significance. This approach ensures thematic consistency, enriches the narrative, and fosters a unified global community, all while respecting the creative origins of the game. The "bolter" is not just a weapon; it comes with a backstory, technological specifications, and a role in the universe’s history, contributing to the narrative depth. Over time, symbolic weapons such as bolters or fictitious minerals like ceramite could perfectly take their place in the collective imagination in the same way that J. R. R. Tolkien's Mithril or Marvel's Adamantium and Vibranium have done.

The particular case of the word *vox* establishes an ingenious use of classical terminology in the creation of new words. The adaptation of "vox" into various forms such as "voxed," "vox-bead," "vox-cast," and "vox-channels" illustrates how language, especially in specialized fields like technology and communication, evolves to meet new needs and contexts. The verbal form "Voxed" means to send a voice message or to communicate via voice. This form does not have a direct equivalent in Spanish, where the action would typically be described more explicitly, such as "dijo por el comunicador". Creating compound words by combining "vox" with other terms helps specify different functionalities or aspects related to voice communication. This is a feature which the English Language exceeds, but not as common in Spanish. Thus, the descriptive translation of this term serves to match its versatility.

This study explored a comprehensive and organized list of elements that could perfectly be considered creative and innovative; however, long-term studies over the following years may be needed to confirm (or disprove) its authenticity. For a study on lexical innovation, there are several potential limitations that could arise and should be addressed.

The first and most significant limitation would come with the sample size and diversity constraints. Small sample sizes and lack diversification in terms of demographics might be a problematic setback. Warhammer lore remains a niche nowadays: very suitable for some and completely unknown for others. Also, data collection methods may result slightly unpredictable. These methods may have inherent biases or limitations in capturing the full range of lexical innovations due to the very nature of the matter.

Ironically, another conceivable obstacle could be the technological and social media influence. Digital platforms and social media can be a source of information and disinformation at the same time. Considering the constant fluctuation of emerging raw materials, it would not be surprising if they were to undergo changes in a short period of time.

Finally, methodological rigor could be questioned. Lack of replicability or potential biases in data analysis are impediments hard to avoid. Although Warhammer possesses certain dogmas, there is nothing written in stone. This burden rests on the shoulders of the company that elaborates the source material and points in the direction of its lore, Games Workshop.

Throughout the 21st century society has experienced unprecedented advances in technology, audio-visual media and, ultimately, global communication. Internet has made available the perfect breeding ground for the spread of ideas, the blending of cultures and consequently, the evolution of language, either by cultural clashes or subtle and ongoing influences enhanced by social trends. This language growth is already being studied in academia through language studies.

Recent studies on lexical innovation such as “English Neologisms in Modern Times,” developed by Ortiz in 2022 conclude that “many neologisms have been added to the English language because of the many developments in fields such as technology and science, among others, and, the birth of the Internet (...) has facilitated the spread of these words.” (p. 26). The notion of language evolution fits perfectly with the aim of the present study, for many of this new terminology can only be known through the popularity of the franchise.

Warhammer 40K counts with an extraordinary vast library, with hundreds of potential candidates to enter the hall of fame of terms adopted by the popular imagination. Despite its ever-growing popularity on the Internet and social networks, Warhammer still has a long way to go to become a science fiction classic, something that only time will tell.

6. Conclusion

In the present study, an analysis of lexical innovation in Guy Haley's Warhammer 40K novel *Dark Imperium* has been accomplished, considering both technical and theoretical aspects of all innovative terminology found in the book. First, fundamental concepts like the meaning of “innovation,” how it affects the evolution of the language through the passing of centuries, and the different techniques used to identify these terms were discussed in the theoretical framework in order to establish a solid foundation for the field.

All 75 innovative elements that were analysed quantitatively. Every single one of the cases was classified according to their etymology, the frequency with which they appeared, and the technique used by the translator for their conversion into Spanish. Once the quantitative analysis has been carried out, 20 of the most representative examples (based on frequency) are selected to undergo an in-depth qualitative analysis.

On the one hand, the results show that the three most common translation techniques in non-coined terms are pure borrowings, literal translations, and adaptations. On the other hand, most of the new words found in the novel endure a process of affixation, compounding, or slightly modified calque in order to weave Latin and Greek etymologies among mundane words.

With all this in mind, it can be concluded that the novel *Dark Imperium* constitutes a rich source of innovative terms and definitely has a positive influence on the development of new words. *Warhammer 40K* stands as a landmark to the power of dark, totally immersive narratives and expansive world-building, something from which lexical innovation can benefit greatly. It is a great opportunity to contribute to morphological development and, ultimately, to enrich our languages.

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Appendix

No.	English Version	Spanish Version	Frequency	Etymology	Type of translation
1	Adepta sororitas	Adepta sororitas	1	Latin	Borrowing
2	Adeptus	Adeptus	61	Latin	Borrowing
3	Adeptus Astartes	Adeptus Astartes	41	Latin	Borrowing
4	Adeptus Astra Cartographica	Adeptus Astra Cartographica	1	Latin	Borrowing
5	Adeptus Custodes	Adeptus Custodes	14	Latin	Borrowing
6	Adeptus Mechanicus	Adeptus Mechanicus	15	Latin	Borrowing
7	Adeptus Ministorum	Adeptus Ministorum	13	Latin	Borrowing
8	Aeldari	Aeldari	8	New word	Adaptation
9	Apothecary	Apotecario	5	Latin	Literal translation
10	Archmagos	Archimago	35	Greek	Literal translation
11	Astra Militarum	Astra Militarum	11	Latin	Borrowing
12	Astronomican	Astronomicón	2	Latin	Adaptation
13	Auspex	Auspex	10	Latin	Borrowing
14	Belisarius	Belisarius	31	Latin	Borrowing
15	Black Carapace	Caparazón negro	5	Latin	Literal translation
16	Blackstone	Roca negra	1	Old English	Literal translation and Reduction
17	Bolter	Bólter	34	New word	Adaptation
18	Boltgun	Pistola bólter	10	New word	Adaptation
19	Cathedrum	Catedral	39	Latin	Adaptation
20	Ceramite	Ceramita	14	New word	Adaptation
21	Chaos	Caos	62	Greek	Literal translation
22	Cicatrix Maledictum	Cicatrix Maledictum	5	Latin	Borrowing
23	Codex Astartes	Codex Astartes	6	Latin	Borrowing

No.	English Version	Spanish Version	Frequency	Etymology	Type of translation
24	Codicier	Codicario	13	Latin	Literal translation
25	Concilia Psykana	Concilia Psykana	1	Latin and Greek	Borrowing
26	Cryo-cask	Criobarril	1	Greek	Literal translation
27	Cyber-cherubs	Querubines cibernéticos	1	Greek	Literal translation
28	Daemon	Demonio / Demoníaco	149	Greek	Semantic translation
29	Departemento Munitorum	Departemento Munitorum	3	Latin	Borrowing
30	Dreadnought	Dreadnought	1	Modern English	Borrowing
31	Empyrean	Empíreo	8	Pre-Greek or Anatolian	Borrowing (naturalized)
32	Enginarium	Enginarium	4	Latin	Borrowing (pure)
33	Ferrocete	Ferrocemento	2	Latin	Loan translation
34	Gene-seed	Semilla genética	10	Greek and Proto-Germanic	Literal translation
35	Hololith	Hololito	16	Greek	Literal translation
36	Imperium	Imperium	125	Latin	Borrowing
37	Imperium Sanctus	Imperium Sanctus	8	Latin	Borrowing
38	Indomitus	Indomitus	21	Latin	Borrowing
39	Invictarus Suzerains	Suceranos Invictarus	5	Latin	Adaptation and Borrowing (naturalized)
40	Juventia	Juventia	1	Latin	Borrowing
41	Lascannon	Cañón láser	9	Old French (Acronym)	Adaptation
42	Lasgun	Rifle láser	10	Anglo-Latin (Acronym)	Adaptation
43	Locus lock	Fijar la ubicación	1	Latin	Descriptive translation
44	Melta	Melta	5	Old Norse	Borrowing
45	Mortarion	Mortarion	86	Latin	Borrowing

No.	English Version	Spanish Version	Frequency	Etymology	Type of translation
46	Navigatorium	Navigatorium	1	Latin	Borrowing
47	Nihilus	Nihilus	6	Latin	Borrowing
48	Novamarines	Novamarines	6	Latin	Borrowing
49	Officio Logisticarum	Officio Logisticarum	2	Latin	Borrowing
50	Orks	Orcos	1	Old English / Latin	Adaptation
51	Palatine Aquila	Águila Palatina	1	Latin	Literal translation
52	Pariah Nexus	Nexo Paria	1	Portuguese and Latin	Literal translation
53	Plasteel	Plastiaceró	7	Old Norse and Greek	Loan translation
54	Power armour	Servoarmadura	9	Latin and N/A	Loan translation
55	Primarch	Primarca	248	Latin	Adaptation
56	Primaris	Primaris	74	Latin	Borrowing
57	Primaris Lexicanium	Primaris Lexicanium	1	Latin	Borrowing
58	Psyker	Psíquico	7	Latin	Semantic translation
59	Redemptor	Redemptor	1	Latin	Borrowing
60	Sensorium	Sensorium	1	Latin	Borrowing
61	Servitor	Servidor	22	Latin	Literal translation
62	Servo-skull	Servocráneo	22	Latin	Literal translation
63	Space Marine	Space Marine	178	Latin	Borrowing
64	Terra	Terra	48	Latin	Borrowing
65	Tetrarch	Tetrarca	32	Greek	Literal translation
66	Tyranids	Tiránidos	1	Greek	Adaptation
67	Ultima Founding	Fundación Última	3	Latin	Literal translation
68	Ultramar Auxilia	La Auxilia de Ultramar	4	Latin	Literal translation
69	Ultramarine	Ultramarine	75	Latin	Borrowing

No.	English Version	Spanish Version	Frequency	Etymology	Type of translation
70	Victrix	Victrix	11	Latin	Borrowing
71	Vigil Opertii	Vigil Opertii	5	Latin	Borrowing
72	Vox	Comunicador de voz	64	Latin	Descriptive translation
73	Warp	Disformidad	85	Old English	Semantic translation
74	Warp-born	Nacido de la Disformidad	3	Old English	Semantic translation
75	Xenos	Xenos	14	Greek	Literal translation

