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**TRANSLATION AND ANALYSIS OF SOME DOCUMENTS
FROM ENGLISH INTO SPANISH AND VICEVERSA FOR A
PUBLIC UNIVERSITY'S LIBRARY**

Thesis Submitted to Obtain the Bachelor in English

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APRIL 2022

Abstract

To achieve an accurate, faithful, and natural translation involves several steps such as the correct selection of translation methods and procedures. The required techniques are very important, as with their help the translator can accomplish their job and ensure the correct equivalence of each small unit of the texts. For this end, this research has the objective to translate two texts that will be applied to translation methods and various techniques. The research question that initiates this investigation is, “What is the effect of procedures and methods used to translate the documents *Anatomía de la lengua* from Spanish into English and *Language and learning in the digital age* from English into Spanish for a public university’s library during the 1st quarter of 2022?” The public university is Universidad Nacional and Joaquín García Monge is the library. This project is conducted under a qualitative method using a descriptive design to collect the data and analyze it. The data collection is carried out with the help of a text analysis chart, color-coding procedure, and glossary, as the instruments. With the assistance of these instruments, it was accomplished some findings such as selecting the semantic method for the translations, as well as six different translation procedures. In addition, it achieved to identify the frequency of their appearance in the texts and register complex terminologies to assure consistency in both translations. Eventually, this project demonstrates that the precise application of translation methods and techniques affects the accurate meaning transfer of both languages.

Resumen

Lograr una traducción precisa, fiel, y natural implica varios pasos como la correcta selección de los métodos y procedimientos de traducción. Las técnicas requeridas son de suma importancia, ya que con su ayuda, el traductor pueda cumplir su trabajo de garantizar la correcta equivalencia de cada pequeña unidad de los textos. Para este propósito, esta investigación tiene el objetivo de traducir dos textos a los cuales se les aplicarán varias técnicas de traducción. La pregunta que inicia esta investigación es, “¿Cuál es el efecto de los procedimientos y métodos utilizados para traducir los documentos *Anatomía de la lengua* del español al inglés y *Lenguaje y aprendizaje en la era digital* del inglés al español para la biblioteca de una universidad pública durante el primer trimestre del 2022?” La Universidad pública es la Universidad Nacional y la biblioteca es la Joaquín García Monge. Este proyecto se realizó bajo un método cualitativo utilizando un diseño descriptivo para recopilar los datos y analizarlos. La recopilación de datos se llevó a cabo con la ayuda de los instrumentos como una tabla de análisis del texto, un procedimiento de codificación por colores y un glosario. Con la asistencia de estos instrumentos, se logró algunos resultados como la selección del método semántico para las traducciones, así como la selección de seis diferentes procedimientos de traducción. Además, se logró identificar la frecuencia con que estas aparecen en los textos y registrar términos complejos para asegurar la coherencia en ambas traducciones. Finalmente, este proyecto demuestra que la precisa aplicación de métodos y técnicas de traducción repercute en la transferencia precisa del significado de ambas lenguas.

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Chapter I

Introductory Framework

Nowadays, in this globalized world, where technology has conquered nearly any human need in different fields, education is not the exception. In the past, if students and educators wanted to investigate something or look for sources to back up their classes and homework, it was necessary to walk to libraries to accomplish these needs. Further, the materials were not available for an extended period; instead, users had to fill out a form because libraries worked under a borrowing system. If students and professors were looking for books, they could buy them; however, most could not afford them because they had to pay for other essential things. For instance, most students lived far from their campus; thus, they traveled. This equates to food, transportation, and other costs required by the universities.

This panorama has changed in recent years thanks to the evolution of technology. Currently, people can access thousands of online libraries, and they do not have to be from their countries; they can be from all over the world. By just typing the keywords of sources people are looking for, thousands of thousands of available materials appear in a matter of seconds: from books, journals, articles, images, audiovisuals, and even papers or thesis done by other students. Technology has been a game-changer for students who live far from the university and libraries. Also, if people want to purchase books, they only have to access the online stores, and by choosing the book and typing the credit card numbers, the book will arrive at their door in a span of days or even hours.

Notwithstanding, with this incredible accessibility, it means that every day tons of sources are available to students and professors. Still, not all the materials are ready to be used in different languages. Fields such as language and education are prominent nowadays but not

precisely their study sources. Although cutting-edge technology is still fascinating, some professors and students like to go to the libraries and ask directly about the material because they know the scarcity of language availability in online libraries. Due to the pandemic, libraries such as Joaquín García Monge from Universidad Nacional de Costa Rica are working under a limited schedule, or people have to call to make a reservation on a specific day and hour. Accordingly, this research aims to translate content addressing language, facilitating students' and educators' learning and teaching process. Also, it intends to evaluate all the translation methods and procedures to render faithfulness, transparency, and accuracy when translating the texts.

1.1. Problem Statement

In Universidad Nacional de Costa Rica (UNA), a library is available for material and sources depending on the field. Usually, when looking for sources for an investigation, English is the language most encountered since it is a lingua franca. Although some students and instructors dominate a second language such as English, the other half of the population may struggle when realizing that the material they need is in English. Further, sometimes, some material could be available only in physical editions and not in online libraries even if students practice English. This means that even online sources are available at their fingertips, not all students and educators have the opportunity to take advantage of satisfying their needs.

Many learners have difficulty delivering their assessments because these issues added to the current pandemic, COVID-19. They have to expose themselves to get the material or take extra time translating the foreign documents because they are the only convenient sources. Students will usually opt for the most popular translation software called “Google Translate.” After all, they would not spend an exuberant amount of money just to have a professional translating school material for homework that may earn only a few percent of the grades.

As a result, this research will focus on language by translating some documents hoping they will be beneficial for future readers of the library. To this end, the goal of this investigation is to analyze: What is the effect of procedures and methods used to translate the documents *Anatomía de la lengua* from Spanish into English and *Language and learning in the digital age* from English into Spanish for a public university's library during the 1st quarter of 2022?

1.2. Objectives of the Investigation

The investigation's objectives are the desired results the researcher plans to accomplish with the study. According to Martins (2020)

Project objectives are a critical element of project management—without them, you do not have a succinct way to communicate your goals before and during the project, nor do you have a measurable way to evaluate your success after the project ends. (para.2)

The objectives have to be carefully planned because the process cycle will fall if they are unclear while conducting the research. Further, if it is teamwork, the members will feel disoriented because they do not know where the research is heading and the steps they have to follow. Hughes (2017) said that “Carrying out research without setting objectives is like going on a journey with no knowledge of the destination or how to get there.” (para.4). The objectives will guide the researchers toward the entire investigation even if they forget the direction during the process. It has to be clear that objectives are neutral statements avoiding any confirmation bias during data collection.

1.2.1. General Objective

To analyze the effect of procedures and methods used to translate the documents *Anatomía de la lengua* from Spanish into English and *Language and learning in the digital age* from English into Spanish for a public university's library during the 1st quarter of 2022.

1.2.2. Specific Objectives

- To translate the documents *Anatomía de la lengua* from Spanish into English and *Language and learning in the digital age* from English into Spanish for a public university's library.
- To apply various translation techniques to the documents to achieve natural, cohesive, and accurate texts.
- To evaluate the effect of the translation techniques applied on the documents.
- To create a glossary with the most relevant terminology found in both texts.

1.3. Justification of the Study

This investigation aims to analyze the possibility of using all the translation methods and techniques seen during the career in texts of informative nature. The accurate application of these procedures will ensure that future readers can use these texts for their needs. In other words, this requires mastering both source and target languages and a good command of the translation principles. Following translation criteria and methods proposed by leading translators and linguists such as Peter Newmark and Eugene Nida, who contributed to prominent definitions of translation. Newmark (1988) clearly stated that translation “is rendering the meaning of a text into another language in the way that the author intended the text.” (p.5). Even though the source-language texts to be translated are informative, many factors can be encountered during the translation process. The texts can have their jargon and chronotopic distance, forcing the

translators to employ precisely all the competencies: mastering both source and target language, having knowledge of the topic of the source-language text, being able to transfer the same message as the original text, and familiarizing with both source and target cultures.

On the other hand, Eugene Nida, famous for his equivalence theory, in which he and Charles Taber (1982) once stated that “The translator must strive for equivalence rather than identity.” (p.12). With this, Nida wants the same reaction from the target readers when reading the target text as the readers of the source text. When translators translate as close as possible to the original text, they overlook the readership and the actual purpose of the translation. Because of this, from the 1st century BC, the idea of translating word per word was slowly left behind, and meaning per meaning basis arose. With Nida’s equivalence theory, two equivalences, “dynamic” and “formal,” have replaced the long-term used words. By holding the same principles, Newmark and Nida’s objective is to have translators convey the message naturally and faithfully for an audience who may speak a different language and have a different culture, traditions, and customs.

The beneficiaries of these translations will be the students and professors of the library Joaquín García Monge of Universidad Nacional de Costa Rica. As mentioned before, the texts chosen are informative, and their topic evolves around language. Nowadays, written material is not used so much anymore; instead, thanks to the evolution of technology, learners and instructors do not have to go to libraries like years ago. Society has become more state-of-the-art with everything at its fingertips. Thanks to the internet, even heavy books with many pages, people can download them and keep them on all electronic devices, avoiding heavy carrying.

Due to the worldwide pandemic COVID-19, schools were closed, forcing students to take classes virtually. The National Center for Educational Statistics (n.d) indicated that “In spring 2020, some 87 percent of undergraduate students experienced any enrollment disruption or

changed at their postsecondary institution due to COVID-19, with 84 percent of students experiencing some or all in-person classes moved to online-only.” More than before, technology has become an essential tool for students and professors. The translated texts intend to serve the undergraduates and educators as supporting material available online in the public university library. The topic for the English text is about language, addressing how these topics behave in a digital era. For the Spanish text, the subject is about language by addressing its history and characteristics.

Although many university students have translated documents for the Joaquín García Monge’s library in the past years, this research aims to support the current generation of students passing through the pandemic. It is meant to facilitate their learning process, so they do not have to worry about exposing themselves to the library during the pandemic. Currently, the library works under a limited schedule posing a barrier for all the students and instructors who live far from the institution and other personal factors that make their visit inconvenient. Further, most of the information is in English when looking for principal sources, and not all university users dominate the language. Then, it demonstrates if it is possible to apply all the translation methods and procedures in one text.

Accordingly, this research will be addressed by rigorously using the processes, methods, techniques, and principles of translation. First, according to Newmark, an analysis of the text must be made so the translators know what translation criteria should be applied. The very first step of a translation process must be reading. Then, taking into account the intention of the text and the translator, who will be the readership, and based on that, what attitude and stylistic scales should be used. Following, the process of translation, which includes all the language functions, text categories, text types, translation methods, and some other translation procedures. Although the investigation's objective is to evaluate all the methods and procedures, semantic translation

will be used. As Nida replaced terms, Newmark replaced old terminologies such as the word for word, sense for sense, literal, free, and faithful translation by semantic and communicative translation. These two terms are precisely correlated with Nida's equivalence theory.

Communicative translation resembles Nida's dynamic equivalence, and semantic translation resembles the formal equivalence of Eugene Nida.

The texts are informative, so the focus should be on the material and on the understanding of the audience; however, these texts contain technical words related specifically to the field of linguistics. Further, the type of equivalence prioritized is the formal equivalence from Nida's theory where the content and the form of the original author is the first concern. Thus, it has to use the semantic translation in order to convey the structure and the technical vocabularies precisely. With this, the translation made is more literal. In contrast, Newmark's theory, communicative translation, or dynamic equivalence, where the author and the text are not the first concern but the audience. It intends to make the target-text readers understand the message of the source-language text. Therefore, when engaging in this type of translation, usually the translator has more freedom in terms of the structure and the form. After selecting the translation method, translation procedures will be chosen for smaller units of the texts. Translation procedures include transposition, modulation, omission, amplification, explicitation, and literal translation. All these terms will be discussed in Chapter II of this investigation.

Instinctively, Daniel Gile's Sequential Model of Translation ought to be followed during the translation process. The translation is not linear; instead, it involves several stages, making it more of a back-and-forth movement. Comprehension and reformulation are the two stages that comprise the model of translation. For the comprehension stage, the first step is called "Meaning Hypothesis," where translators go to their knowledge base and temporarily assign a meaning to the unit being worked on. Based on what they already know about the topic, what they can

logically infer, and what they can find out. In the second step, translators conduct a plausibility test to evaluate if the hypothesis is correct, and if not, translators have to return and assign a new hypothesis. However, if the translators read the text and it makes sense in context, the hypothesis is accurate so that translators can move to the second stage: The reformulation stage.

In the reformulation stage, "Target language reformulation," "Faithfulness/Acceptability test," and "Aggregate faithfulness/Acceptability test" are the three steps involved. The "Target language reformulation" step is where translators introduce a new formula to the product. Each language has its system; for instance, the syntax in Spanish is different from English. Therefore, when translating, a reformulation is being made to a unit by replacing its original formula with new terminology and style. Once this step is approved, the "Faithfulness/Acceptability test" step comes to appraise the accuracy and naturalness of the translation. It must sound natural in the target language and be faithful and accurate. As the last step, "Aggregate faithfulness/Acceptability test," if the translation seems to be three to four paragraphs long, translators make sure that the first paragraph of the translation does not contradict what is said in paragraph five. When reading the final product, if some grammatical mistakes are encountered, it is acceptable to go back and repeat the whole process until the final product is grammatically acceptable and plausible. In the translation process, knowledge base and knowledge acquisition are crucial for the translators must dominate the linguistic knowledge and extralinguistic language of both passive and active languages. Eventually, with the assistance of a thesis tutor, a grammar reader, and a philologist, the texts to be translated will be faithful and accessible to all the users from the university and possible outsiders.

1.4. Antecedents

Back in history, in the western world, the first major translation was the “Septuagint,” where the Hebrew Bible was translated into Greek in the 3rd century BCE. In 2008, Dave and Joshi wrote an article titled “An Overview of History of Translation in the Western World,” They discussed how translation evolved throughout all the periods of years in the western world. Also, their objective was to serve as a reference in the topic for future researchers. Dave and Joshi (2008) address that “The act of translation is as old as the human language” (p.13). With this reference, it understands that translation was prominent and coexisted with humans since the day they spoke; however, the term translation was not seen as a bridge since the beginning. This was accomplished until the last and the first decades of the 20th and 21st centuries. According to them, the earliest population in the western world who got involved in translation were the Romans, translating all the Greek works into Roman. Then, thanks to their multiple translated Greek texts, Cicero and Thoraces were known as the first translation theorists.

Further, well-known translation terms such as “word for word” and “sense for sense” translation came to the translation world due to Cicero. He also exclaimed the idea of receiving words from the source-language text into the target-language text. Horace later on also agreed that translators have to stop rendering so much to the original texts. Dave and Joshi addressed the bible translations by talking about John Wycliffe. He promoted the first complete Bible translation into English and concluded with a basic outline to translate any texts in other languages. Then, the renaissance translations were pointed out where thanks to the translated works of the English Earl of Surrey, the reader-oriented effect was more prominent than author-oriented. By the mid-seventeenth century, with Ovid translated into English, John Dryden exposed three translation methods: Metaphrase, Imitation, and Paraphrase; however, he gave more importance to “Paraphrase” assimilating his predecessor Cicero’s “sense for sense”

translation. Later, this theory also inspired Alexander Pope, who emphasized as well the result of reader-oriented than author-oriented. In the 18th century, the first study of translation arose, “The Principles of Translation (1791),” with its author, Alexander Tyler, a work that pointed out crucial principles translators must follow. For instance, translators must convey the text's original meaning to the target text and its writing rules.

Translation in the 18th century was the next period they addressed. In this period, translation was perceived in terms of imagination and rejected the idea of rationalism. For the 19th century, authors such as Matthew Arnold, Henry Wordsworth Longfellow, and Edward Fitzgerald, with their works, debated and concluded that a translated text is a new product, not a text taken out from the original one. The last period of the article was the twentieth century. In this period, linguistic theories arose. In the beginning, these theories were separated from the literary stream until the second half of the 20th century, when these two theories were considered together. Dave and Joshi (2008) finished their paper by summarizing all the periods and said, “Therefore, it can be said that translation is an integral part of language and literature studies around the world” (p.20).

Researchers usually focus on western and eastern world history because of their acknowledgment or facility of sources. Notwithstanding, in the Arab world, translation also has its development there. The translation is a practice that enables the communication between civilizations of different cultures, how translation served as a bridge between civilizations during periods of years. In 2014, Mohammad Issa Mehawesh conducted research titled “History of Translation in the Arab World: An Overview,” where he put together all the history of translation in the Arab world during five periods: Islamic Empire, Umayyad Period, Abbasid Period, school of Toledo, Ottoman period, and the 20th century. Mohammad Issa Mehawesh (2014) started his

paper by saying that “Had there been no translation, numerous cultures could not have flourished as they have.” (p.684).

Translation in the Arab Islamic Empire was the first-period Mehawesh focused on. The translation was known first with the birth of Islam in the seventh century, where Paganism’s heritage was translated into Arabic. One of the prominent translators of that time was Jarjas. The translation practice started to spread when the prophet Mohammed had to urge the society to adopt the new religion, and people of non-Arabic speaking were included. This advocated for the Muslim community to learn other languages and look for translators to spread the message. One of the notable translators who helped the prophet, Mohammed, propagate the messages was Zaid Ibn Thabet, who later translated into a few languages and more spoken languages of the area due to the empire's expansion to the Eastern Western civilization. Just like the bible is the central religious text in the western world, the Koran is the predominantly sacred text in the Arab world. The Holy Koran translation comprises the most important event in the history of Arabic translation. As well as the bible in the western world, Koran has been translated into all world languages. It is essential to highlight that the Holy Koran was translated using “sense for sense translation” because it was intended to have the audience understand the message of Islam. However, the Islamic civilization did not know this method until the 12th and 13th centuries. Unlike in the western world, in the Arab world, translation has been widely supported by society and government since the beginning.

Moving forward, the Abbasids dynasty ruled the Islamic Empire in 750, knowledge of literature and mathematics. In the period of Umayyad, the translation movement kept growing, and it was considered that the first translation of the period were the languages of Greek and Coptic into Arabic. This period contributed to the history evolution by practicing translation in science, arts, medicine, culture, and astrology. “Thousands and One Nights” was one of the most

well-known literary works been translated. Mohammad Issa Mehawesh (as cited in Baker, 1998) mentioned that in this period, two methods arose: the word-for-word translation and the sense-for-sense translation. Translators must find an equivalence for each unit of the target language (Arabic), and Greek words were translated as they were only if there was no valid correspondence. In the 13th century, thanks to the School of Toledo, the Arabic world was present in the Western world with the translations of successful works in the fields such as medicine, mathematics, astronomy, and astrology. Just like that, the Arabic system of numeration, algebra, and many other works and theories is still present nowadays. Mehawesh (2014) mentioned that “As can be seen, the Arabs undoubtedly are credited with initiating the first organized, large-scale translation activity in history. This activity started during the reign of the Umayyad and reached its peak under the Abbasid.” (p.689). All the Arabic knowledge was later taken in the west due to the Abbasid Caliphs’ translation program.

The Ottoman period set the fall of the Islamic Empire. Mehawesh (2014) said that “As far as we know, during this period, the Arab World underwent great suffering. Turkish was the dominant language and Arabs were not allowed even to use their language even in everyday contexts.” (p.689). Translation movements were remained by focusing more on official and legal documents. In 1805, groups of students were able to study in Europe due to the new governor, Mohammad Ali, who wanted students to become translators, so his army and administration were up to date. During this period, Rifaa Al-Tahtawi was the most important translation figure. The last period Mehawesh focused on was the twentieth century. By this century, even the Ottoman Empire was falling apart; therefore, the Arab world was under the command of foreign countries. The translation practice had its adjustments, and new theories came to assist translators. Mohammad Issa Mehawesh concluded his research by comparing the translation success of the Arab world with the Western world. Further, he drew attention to the current translation situation

in the Arab world by saying that it is not flourishing as in the past years with the dynasty of the Abbasids.

Nowadays, with all the exchanges of cultures and traditions, with people traveling around the world and business going from one country to another, translation has become an essential tool for everyone. Nonetheless, if people do not know an English term when shopping for groceries, they would not hire a translator to tell them about the equivalence in the other language. These days, people have potent devices at their fingertips: a cellphone, a computer, or a tablet. With the world creating new inventions every day to make people's lives easier, technology has created thousands and thousands of applications such as Google translate to help people when they do not understand specific foreign terms. In 2016, Agwu Uzoma Patience conducted research titled "Modern Technology in Translation: Contributions and Limits," in which she focused on how machine translation has come to this modern world to make the process of translation easier and also show its downsides. She pointed out that almost everything requires translation due to globalization, so people worldwide understand the service or system within a short period. Agwu Uzoma Patience (2016) said that:

These demands of our fast-paced tools and organizational methods that solved the nagging globalized knowledge society have left translators problem of poor translations, which used to be frequently struggling to keep pace with the increasing number of generated by incompetent people calling themselves requests for high-quality translation into many languages translators in the past, before these new, innovative and on short deadlines. (p.1118)

Due to this situation, even if translators want to humanize their translations, people's requests obligate them to opt for translation technology to quickly deliver and satisfy their clients. Patience addressed the history of translation technology and pointed out the creation of

systems such as Logos, the system created by the Pan-American Health Organization, and other systems produced by Japanese computer companies. Then, Translation Memory tools like Trados drove to Alta Vista's creation, an online machine translation service that offers multiple services in the desired language. Afterward, she showed the difference between machine translation (MT) and computer-assisted translation (CAT). The difference is that MT is a software that does not require human intervention; it does the whole work, while CAT is more realistic since humans can manipulate in case some terms do not fit the context.

Later in her paper, she discussed the impact of these modern technologies in today's world and on translators. Unlike years ago, currently, countries are trading goods, and people worldwide are exchanging communication more than before. Patience claimed that only translation technology would help translators meet the current world demand for translations. Agwu Uzoma Patience (2016) stated that "Secondly, we have seen translation technology increase human translator productivity by up to 400%" (p.1120). With the aid of these machines, translators can meet the deadlines and help translators' linguistic interference with the memory feature. As evidence, she talked about the language officer, Angelique Patrits, who declared that her organization must translate two million pages into 24 different languages every year. In other words, they cannot meet the goal without the aid of translation technology.

She showed some statements of professor Phillip Koehn. He put on the table the issue of whether translators became editors than actual translators due to translation technology are performing nearly everything. Translators cannot stop this evolution but rather accept it and learn how to evolve along with the technology tools. How translations technologies work and machine translation strategies are the following points, she argues. Translation technology provides translators with a preliminary version, and the revision state step where the unit to be translated is polishing to be meticulous and high quality. Afterward, a list of essential computer tools was

listed: Databases, concordances, online bilingual texts, translation memories, and limits of modern translation technology. At the end of the research, Mohammad Issa Mehawesh concluded by saying the importance of translation in this globalized world. He ended with a recommendation telling translators to welcome any future technology and learn how to use it in terms of productivity to deliver an accurate and qualified translation.

Shivnath Kumar Sharma did research titled “The Role and Scope of Translation Studies in the 21st Century,” where, as well as Mohammad Issa Mehawesh, this author analyzed how the practice of translation has evolved to the 21st century. He began by showing that the American scholar James S. Holmes was responsible for the foundation of the discipline “translation studies.” His introduction showed how "translation" has passed through different civilizations with different names and summarized the first translation worldwide. However, even though Sharma addressed globalization and translation technology like Mohammad Issa Mehawesh, he focused more on presenting translation as a vital role in the current world and interdisciplinary studies, including the perspectives from the country of India.

Although many people worldwide dominate more than one language, translation is a discipline that not anyone can practice accurately. According to Sharma (2001), “The scope of translation is bright and beautiful in the coming years because it is the only medium through different people come to know different works.” (p.1). Translating requires more than finding the equivalent term for the words of the target language. The translator has to render the original text and transfer the same feeling of the original author to the readership. As Sharma (2001) clearly said, “Translation is a production process of conveying meaning and information underlying in the source language into the target language with the help of linguistic and cultural conventions.” He talked about translation from Indian perspectives, where translation played a role in India thanks to Sanskrit’s classic and religious texts. Renowned scholars such as Saint Jerome and

Martin Luther King were also cited for their incredible contributions to the history of translation. Sharma expressed the issue of untranslatability, citing the author Roman Jakobson who said that the type of text impossible to be translated is poetry. After, machine translation and language institutions were addressed because a translation was recognized for all Indian languages thanks to these two in India. India is a rich country with twenty-three languages coexisting with different cultures, traditions, and customs.

Sharma talked about the lingua franca, English, and how it gives job opportunities worldwide thanks to globalization. His research mentioned the difference between a translator and an interpreter because these disciplines are closely related. Lastly, translation and the media were addressed since nowadays people want to be up-to-date, and the media is feeding that desire. In other words, all the media services must be ready when new events happen. The news must be translated already, so people understand what is happening. This is the same in India and every corner of the world. Sharma concluded his research by emphasizing again how important translation is, just as the lingua franca, English, because people could not communicate with the external world without translation.

Even though the translation has flourished throughout the world, in Costa Rica, the translation did not receive the same support. In a research conducted by Bianchinetta Benavides and Segura Adriana Zúñiga Hernández titled “EMPOWERING NATIONALISM: THE NEED FOR A HISTORIOGRAPHICAL APPROACH IN COSTA RICA’S TRANSLATION AND INTERPRETATION STUDIE,” showing that translators and interpreters did contribute to the history with many important participations. In Costa Rica, translators and interpreters do not receive the same approval or assistance as other professionals because there is no historical record of translation and interpretation in history. With this, in recent years, translators had to be self-taught in order to make an advance in these disciplines. Notwithstanding, nowadays,

universities such as Universidad Nacional de Costa Rica (UNA) encourage Costa Rican people to study this discipline thanks to its English-Spanish Translation Master's Degree program.

They started with a historical background of both disciplines by rectifying the understanding that interpretation comes after translation. The interpretation discipline was born first since people communicate in the past with other civilizations, so they build social, cultural, and economic relationships. Translators indeed have a crucial role in history. Segura and Hernández mentioned how American conquests were successful thanks to interpreters such as Cristobal Rodríguez. He helped Christopher Columbus when he faced the many languages when landing on American land. Unlike in the western world, Latin America does not have translation records people can rely upon. Therefore, Segura and Hernández argued that due to the lack of historical records of translation and interpreters, professionals of these fields are not wealthy in these disciplines and the null recognition from people towards these fields. They also pointed out that this is important to be addressed in universities. Hence, learners become professionals embraced with historical facts because by knowing this, current and future generations can enhance their methods and correct mistakes made in the past.

With the project "Historiographic Reconnaissance of Translation and Interpretation in Costa Rica: Analysis of the Contribution of these Disciplines to National Development," they want to achieve progress in the discipline of translation and interpretation. In this research, they proposed a project called "Historiographic Reconnaissance of Translation and Interpretation in Costa Rica: Analysis of the Contribution of these Disciplines to National Development," The goal is to provide professionals with the origins of translation and interpretation. This project is qualitative research, and data collection will be distributed between the two researchers from this paper. Visiting libraries, interviewing experts, and surfing online databases are the sources of data collection for this project. In the end, they concluded the research by specifying the

importance again for translators and the Costa Rican public to have a historical insight into these disciplines because people tend to underrate the work of these professionals.

1.5. Scope

- Evaluate the usage of translation methods and procedures during the translation process.
- Analyze the possibility of using all the translation criteria and procedures.
- Render the principles of translation proposed by prominent authors such as Peter Newmark and Eugene A. Nida.
- Produce a high-quality translation that is faithful, accurate, and natural.
- Serve as an aid for the current generation of students and other users of the public university during COVID-19.
- Expand the availability of Spanish and English documents for language fields for the library of Joaquín García Monge.

Chapter II

Theoretical Framework

The main objective of the research is to produce accurate, faithful, and natural translations for the future readership, and to prove this, this chapter of the research will explain all the methods and procedures to be used. As stated by Adom et al. (2018), “The theoretical framework, thus, aids the researcher in finding an appropriate research approach, analytical tools and procedures for his/her research inquiry.” (p.438). If the theoretical framework provides the correct definitions of the key points of the study, it will relate to the areas of knowledge being considered. With the definitions for the translation methods and procedures, the audience will comprehend better how the texts have been translated. Further, these concepts will let the readers critically evaluate the research areas.

This chapter will broadly address the definitions of text analysis, translation procedures, glossaries, and each category or process of each term to ensure complete comprehension.

Important to highlight that several authors will be consulted for each method and procedure works. As information sources, these authors will be consulted because their works will give significant confidence to this project since they are experts who have been inquiring in the field for many years. Further, with these scholarly works and theories, the investigator is connected to the existing knowledge that will serve as a basis for the hypothesis. Grant and Osaloo (n.d) clearly stated that “Without a theoretical framework, the structure and vision for a study are unclear, much like a house that cannot be constructed without a blueprint.” (p.13). In other words, with the theoretical framework built, it will serve as a structure for all the other points in the research design.

2.1. Text Analysis

Before translating, the unit to be translated has to be analyzed first. By analyzing the text, translators can define what methods and procedures to correctly transfer the source text's message into the target text. Nord (2005) clearly stated that "Most writers on translation theory agree that before embarking upon any translation the translator should analyze the text comprehensively since this appears to be the only way of ensuring that the source text (ST) has been wholly and correctly understood." (p.1). Further, translators can also determine barriers they will probably encounter during the process. The description of the source text's structure, content, and functions is the primary goal of text analysis. As Newmark (1988) once said, translators have to analyze the text as it will be replaced in another language where the readership has a different culture and traditions.

According to Newmark (1988), some beforehand tasks include reading the text, the intentions of the text and the translator, text styles, the readership, stylistic scales, attitude, setting, the quality of the writing, connotations, denotations, and the last reading. Further, the text functions have to be considered so translators can determine the core of the text being translated. By determining the text function, translators can identify which components of the utterance must be careful with. Translation's goal is to communicate; thus, translators have to become familiar with all the factors potentially influencing the translation process. Some definitions such as text styles, stylistic scales, and text functions will be addressed separately for a broader explanation and exemplification.

Reading the text is the first thing a translator must do from these beforehand steps. By reading, translators get familiarized with the text and investigate in advance for specific terms such as jargon that may lead to translation not being fluent. Seresová and Breveníková (2019) clearly stated in their article titled "The Role of Text Analysis in Translation" that:

At the first stage of the translation process, the translator has to read the text thoroughly. While understanding the source text, the translator first identifies the meanings of words and their relationships, first in sentences, then in paragraphs and individual parts of the text, and finally throughout the entire text. (p.1)

With this, general and close reading are the two steps translators engage when reading the unit to be translated. Translators have to identify if the content intends to inform or persuade the audience regarding the text's intentions. The translators' intention refers to the translator's purpose in translating that matches the author's intention. For readership, translators have to bear in mind that readers are the reason why translation occurs, and sometimes, translators can infer the types of readers they have.

Although the translation will be published, the factor setting is not that much of a concern. Usually, this is an aspect concern of the client. The quality of the writing depends on the writer of the text. If he has done poorly in writing the text, the translation will be poor. In translating, connotations and denotations have to be considered. Connotation means the secondary meaning, which can be found in definitive texts. Denotation means the actual meaning of a word found in informative texts. As the last step, translators have to consider the cultural aspects of the text, untranslated terms, neologisms, proper names, and institutional terms.

2.1.1 Text Styles

All texts are written with style, and translators need to follow the same style, so the readers perceive the text with the same purpose the original author wanted to convey as well as the style. Leech and Short (2007) define style as "In its most general interpretation, the word 'style' has a fairly uncontroversial meaning: it refers to how language is used in a given context, by a given person, for a given purpose, and so on." (p.9). Thus, the linguistic approach that the

translators acquire has to depend on the style of the given text. Further, thanks to Eugene Nida, it is possible to classify two types of texts: literary or non-literary, and despite the nature of the text, the style can be categorized into four types.

1) Narrative

In narrative texts, the style involves a sequence of events, and it focuses on the use of verbs plus verb-nouns or phrasal verbs. A narrative text aims to tell experiences, a story, and usually a resolution to a problem. According to Gabriel (2004)

Narratives are particular types of text. Unlike definitions, labels, lists, recipes, logos, proverbs, hypotheses, theories, or neurotic symptoms, buildings, clothes, musical instruments, cooking utensils, or numerous other texts all of which can be 'read,' narratives involve temporal chains of inter-related events or actions, undertaken by characters. (p.3)

Like any story, it has a beginning, a middle, and an end. However, according to Welliya (n.d.), the structure of a narrative text has orientation, complication, and resolution. Orientation introduces the characters and briefly explains the time and place. Complication refers to the climax that the plot of a story has. Usually, this refers to the challenges that the characters have to confront in the story. Finally, the resolution shows if the characters managed to solve the confrontation.

2) Description

When talking about descriptive texts, the purpose is to vividly make the audience sense the description. For instance, descriptions of a process, an event, a place, a person, an animal, or an object. Nurleni (2018) defines descriptive texts as “A good description is a word picture; the reader can imagine the object, place, or person in his or her mind. Description presents sensory information that makes writing come alive.” (p.29). A qualified recreation of feelings, objects,

sounds, and tastes through texts can vividly make the readers feel the story. Pardiyo (as cited in Santika, 2018) stated that in a descriptive text, three parts are comprised: Communicative purpose, rhetorical structure, and grammatical patterns. Communicative purpose addressed the description of either human or non-human objects. In rhetorical structures, identification and description are its two parts. Lastly, the grammatical pattern of this type of style emphasizes linking verbs, adjectives, and adjectival nouns.

3) Discussion

An issue will be placed on the table for discussion texts, ready to be analyzed, evaluated, and interpreted. In other words, different points of view will be shown when discussing. It tends to have differences between the sides. Husein and Pulungan (2017) said that “Discussion is a process to find the meet point between two different ideas. It is important to get the understanding between the two differences.” (p.1). Pro and contra viewpoints will be displayed as the issue is addressed. This text style centers on abstract nouns, verbs of thoughts, and texts written in the present tense.

4) Dialogue

Dialogues are the most common communication tool—the interaction between two or more people who share ideas and even introduce new knowledge of everyday situations. Dialogues use language and nonverbal signals or transactions. The conversation is another term that, along with dialogue, is used interchangeably. According to Brennan (2010), "A conversation is not simply a sequence of messages expressed as speaking turns, produced by speakers, and received and decoded by addressees. Conversations are structured into adjacency pairs, with first and second parts produced by different speakers” (p.1). Dialogues focus on colloquialisms and fanaticisms since they are small talk between people who understand each other and interact socially.

2.1.2. Stylistic Scales

When transferring the source message into the target language, the author's style is vital to consider. Sawant (2015) stated that an author's style is essential to address because, from the writing style, it can comprehend why the author chose to write the work in that way. Every content and material is neutral; writers are the ones who give that authenticity to it and make the readers perceive the material differently from other writers. According to Leech and Short (2007), "Stylistics, simply defined as the (linguistic) study of style, is rarely undertaken for its own sake, simply as an exercise in describing what use is made of language." (p.11). The major concern is how and why the author integrates the content through the language since stylistic analysis is interested in expression, not the content and material being used.

Sawant, in his research, mentioned two types of writing styles authors might have. They are "Hypotactic style" and "Paratactic style." The thesis exemplifies a "Hypotactic style" in which words and phrases link the sentences. On the contrary, in the "Paratactic style," the connective "and" serve as the connector in sentences. Further, Sawant mentioned that literary period and tradition are also categories in which styles can be classified. Metaphysical, Restoration prose, and scientific styles are examples and even styles from distinguished authors such as the Shakespearean or Miltonic. Apart from the types of styles an author can have, a scale in stylistics measures three factors in which the content has been incorporated through the language by the author. They are classified into the scale of formality, the scale of generality or difficulty, and the scale of emotional tone. With these stylistic scales, translators can deliver the message of a passage accurately, rendering the author's style. Further, this will lead the target readership to have the same feeling as the readers from the source-language text had.

2.1.3. Scale of Formality

Two authors can write the same document, but each author expresses the message will be different. Depending on their backgrounds, the register and style will differ. Similarly, the scale of formality will be addressed differently depending on the author and the content's audience. According to Heylighen and Dewaele (1999), a theoretical definition of formality is missing, but people have their insight in differentiating between formal and informal. When it comes to something that the judge reads in a trial, people consider it formal and informal dialogues between friends and family. This does not define formality because mentioned above are situations, not the mere structure of formal and informal language.

Heylighen and Dewaele (1999) refer to formality as the achievement of non-ambiguity because an expression is context-independent and precise. They proposed “Formality Score (F-Score)” as a scale to measure formality based on the number of deictic and non-deictic words. Deictic words have to be anchored or attached to something meaningful because alone can mean different things, making it ambiguous. On the contrary, non-deictic words are the additional information, but without them, an expression cannot be precise. In other words, they can also be defined as context-dependent or context-independent expressions. Depending on the parts of speech, the F-score measures the frequency these categories appear in a sentence. Heylighen and Dewaele (1999) said that:

The formal, non-deictic category of words, whose frequency is expected to increase with the formality of a text, includes *nouns, adjectives, prepositions, and articles*. The deictic category, whose frequency is expected to decrease with the increasing formality of speech styles, consists of *pronouns, verbs, adverbs, and interjections*. (p.14).

Even though the F-score is an effective tool in measuring the scale of formality, there is another scale proposed by Martin Joos. Joos (1962), in his book "The Five Clocks," proposed five styles: frozen, formal, consultative, casual, and intimate.

Joos said that the frozen style is for print and declamation. Further, this style develops its functions. Since it is printed, what is said cannot be distorted, and it has to have one meaning. The advantage of this style is that the audience can reread, meaning, rethinking the text even after reading it a couple of days later. For formal style, participation is absent, and its purpose is to inform. People in this style speak or write in the third person; therefore, they have to plan, such as writers who have to prepare an outline before starting writing. He addressed the consultative style as the most common style when talking to strangers. This can relate to Heylighen and Dewaele's non-deictic words or context-independent expressions. Speakers or writers use this style when addressing strangers because they do not know each other; therefore, complete information must be given. As Martin Joos mentioned, sooner, strangers will become acquaintances. Then, the speaker or writer will use a casual style. Ellipsis and slangs are the two features of casual style that Joos mentioned; however, slang is strict. For intimate style, extractions and slangs are the two features of it. There is a code between speakers in an intimate style, so public information is null. Speakers will even create a code that only they understand.

From these five styles of Martin Joos, Newmark (1988), in his book "A Textbook of Translation," proposed eight scales of formality: Officialese, official, formal, neutral, informal, colloquial, slang, and taboo. For instance, the statement, "The consumption of any nutriments whatsoever is categorically prohibited in this establishment," represents the largest scale of formality. This same statement using the lowest formality scale, which is taboo, will be, "Lay off the fucking nosh." In this translation project, the scale of formality chosen can be from official to

neutral since the documents selected are educational. The purpose is to convey messages so that professors and students can comprehend the content accurately.

2.1.4. The scale of Generality or Difficulty

The scale of generality or difficulty is another scale, but this one measures the text's complexity. It evaluates the complexity of the terminologies and vocabulary used in the text. Depending on the nature of the content, the author may determine how complex the terminologies will be. Further, apart from the content, the audience is a factor to be considered since the readership is the why the text is written. Further, Newmark (1988), in his book "A Textbook of Translation," proposed a range of five scales of generality or difficulty: simple, popular, neutral, educated, and technical.

The scale of neutral generality used in a document refers to the difficulty balance where vocabularies are not too complex or too straightforward. At the level of simple generality, the low difficulty of terminologies is used in texts, so the audience comprehends better since the vocabulary used is simple and general. For popular complexity, the level of complexity in which the terminologies are used in a narrative is also simple since it uses the vocabulary of the moment. For educated complexity, the terminologies are proper for most of the audience since they are documents for institutions or universities with educational purposes. Lastly, for the scale of technical generality, as its terms clearly say, it is meant for technical purposes. This scale is divided into two types of difficulty: technical and opaquely technical. Technical generality is found in documents that contain technical vocabulary, such as in a manual for an electronic appliance. Opaquely technical differs from the technical one in that this type of vocabulary is only understandable to an expert in the field or topic.

As mentioned before, depending on the type of audience and the nature of the material, authors can determine the level of complexity they will use. For instance, if the audience is children, the level of complexity will be simple. However, if the material is about epidemiology and Coronavirus, the level used will be technical since the document will contain specific jargon of the subject. The translators also have to ensure that the range of difficulty chosen matches with the original text or matches with the client's request. The scale of generality or difficulty is chosen for this research is educated and technical since it has terminologies specifically for the subject of translation.

2.1.5. The scale of Emotional Tone

The last category of the stylistic scale is the scale of emotional tone. This refers to the tone in which words or vocabulary are used in the text. Ji (2020), in her book "Translating and Communicating Environmental Cultures," addressed four psychometric scales with words of psychologically relevant categories, one of which is emotional tones. This scale comprises positive and negative emotions where higher than 50 is positive and lower than 50 is negative. Men Ji shows that multimedia-based public posts have a score of 79.5 because they use high-frequency positive emotional words such as important, brave, true, care, create, improve, agree, inspiring, surprising, amazing, accept, respected, bravery, impressed, hope, freed, incentives, and among other that she mentioned in her book.

On the other hand, she mentioned news-based public posts as negative emotions because they have a score of 28.89. Some expressions associated with negative emotions are weak, denial, pity, greed, alarming, problem, strange, sad, desperate, disaster, incompetent, destroy, damage, destruction. From these two types of posts, it can conclude that multimedia-based public posts use high-frequency positive emotional words because their purpose is to call people's attention to

inform them about something important, to persuade them to follow or not to follow some social movements, or to remind them about a certain product that they can purchase. On the contrary, news-based public posts use low-frequency negative emotional words because they want to inform people about issues happening at the moment, so the audience is aware of the current situation in case they have to make certain changes according to what the posts said.

According to Peter Newmark, the emotional tone scale can be classified depending on the intensity of the vocabulary employed in the texts. Newmark (1988), in his "Textbook of Translation," mentioned three different scales: intense, warm, and factual. Intense emotional tone is characterized by the exuberant use of intensifiers to convey a message. For instance, instead of "This is wonderful," the intensifier will be used to emphasize the idea, "This is wonderful." The text tends to convey a message with gentle vocabulary in a warm tone. For instance, "They love to stay under the sunset to enjoy this heart-warming melody." Lastly, Newmark addressed this tone using the adjective "cool" and listed several expressions that can be used in a text to convey the message: significant, exceptionally well-judged, personable, presentable, and considerable.

2.2. Text Function

Whether a function encodes a writer or a translator, the language they employ. Also, the content they compose has a purpose and an intention, whether it is emphasized in the author or the readership. Nord (1995) stated that:

Texts have no inherent function(s), but they are usually intended for the author or sender's function or set of functions. In the act of reception, the recipients decide which function(s) the text has for them. This means that a text which has been intended for a particular function by its sender (in the light of his/her communicative situation) can be used for quite a different function by the

recipients (in their communicative situations, possibly distant in time, certainly in place, from that of the sender). (p.2)

Language is a code of symbols and words. Whenever people transmit a message, they encode the message in a certain format, and the receivers of the message have to decode it. Depending on the type of function, the text has a different purpose. Therefore, the type of function will determine the style, the register, the attitude, the setting of the text, and other aspects that a text has.

In “A Textbook of Translation,” Newmark used the theory of language proposed by Bühler that later was adapted by Jakobson. Bühler introduced three main functions that language texts must have; however, Jakobson later suggested three more functions: the aesthetic, the phatic, and the metalingual. This research will use the three main text functions proposed by Bühler because every narrative aims to inform, call to action, or express a message.

Notwithstanding, Newmark mentioned that all texts have these three functions, but only one of them will be more prominent than the others. Further, the expressive function is there unconsciously in vocative and informative texts.

2.2.1. Informative Function

The informative function of language has the goal of communicating information. The emphasis of this function is the message, the content of the material. Kerpedjiev (1992) said that “Informative texts differ from descriptive texts (studied in [113]) in that they are not intended to create permanent long-term memory traces about certain conceptual structures; instead, they draw a mental picture of a particular situation.” (p.1024). Descriptive texts are usually misunderstood because people assume that descriptive and informative are the same. However, descriptive texts are meant to recognize things.

In contrast, informative texts help to increase the readership's understanding, educate people on a certain topic, or inform about some realistic situations of the social world. The domains of this function can be technology, science, media. Also, Newmark (1988) mentioned that the facts of the content material have nothing related to the language itself. It is merely the world outside of the language.

In this case, the author is irrelevant since the core is the message that the material is trying to convey. Further, in terms of format, according to Newmark (1988), “The format of an informative text is often standard: a textbook, a technical report, an article in a newspaper or a periodical, a scientific paper, a thesis, minutes or agenda of a meeting” (p.40). Therefore, these texts employ neutral and formal language styles to communicate the content using technical terms in textbooks, academic papers, or articles. These texts are the most common material available to people. Similarly, Newmark mentioned that any translator translates these texts from big companies and institutions. Due to its accessibility and vast availability, most informative texts are poorly written. In the end, translators are the ones who correct the facts and the style of the original work besides translating it. Newmark mentioned that although literary texts show value judgments, they are classified as definitive texts.

2.2.2 Expressive Function

Expressive function language aims to convey the feelings, emotions, and ideas of the originator of the utterance. The emphasis of this function is the mind of the author. As stated by Williams (1993), the function of communication and expression are the two basic linguistic functions that are universal and complement each other. However, the expressive function is more predominant than the communication function because Williams (n.d) explained that “In the act of speech, the encoding of the thought is often spontaneous: no sooner does the thought

come to mind, than the speaker utters it, giving it verbal form.” (p.94). Expression comes first since the speaker or writer has to express the idea verbally, and then it becomes verbally communicated. The domains of this function can be entertainment, literature, music, art.

Hassan and Jabbar (n.d) “The speaker or writer try to express his feelings. He or she reflexes his or her impression. This function could give a clear image for the personality of the speaker or writer.” (p.16). The core is the writer's mind, so the audience's response is not concerned. For instance, definitive texts can be poetry, stories, song lyrics, essays, or films. In written works, the receptors are the audience and not the interlocutors because the readership, in this case, is not crucial. However, the authors do not expect to receive any response from the readers. Further, usually, readers do not reply to the authors once they finish reading a book or an essay.

Specifically, Peter Newmark, in his book, presented three characteristics text-types of this type of function for purposes of translation: Serious imaginative literature, authoritative statements, autography, essays, personal correspondence. Serious imaginative literature comprises lyrical poetry, short stories, novels, and plays. Examples of authoritative statements are legal documents and other written works such as scientific, philosophical, and academic subjects. Further, they have a stamp from the authors, and the content is delivered denotatively. Lastly, for autography, essays, and personal correspondence, Newmark (1988) said that “These are expressive when they are personal effusions, when the readers are a remote background.” (p.36). The job of the translators is the convey the message. However, the predominant task is to deliver the individual components of the text so the audience can identify the feelings, emotions, and ideas that the author wants them to perceive.

2.2.3. Vocative Function

The last type of text function addressed in this research is the vocative function. The goal of this type of text function is to influence behavior, to call to action. Unlike the informative and expressive text functions, the emphasis of these types of texts is the audience, the receptors of the message. Newmark (1988) stated that since the texts are addressed to a readership, the language must be easily understandable. For instance, if people buy a kitchen appliance and do not know how to install it, they will use the manual as a guide for the installation. Nonetheless, if the manual has many technicians that only experts will understand, the manual did not accomplish its job in leading the readership to act as the text intended.

Further, before giving it a pragmatic impact, the source language text has to be precisely reviewed in terms of linguistic and cultural level. Hence, the text matches the comprehension level of the readership. Tourism, advertising, politics, religions are some of the domains of this type of function. According to Glušac and Čolić (2017), the vocative function does not work as monosemic; instead, Glušac and Čolić described it as a morphological, syntactic, and pragmatic-semantic category. Furthermore, it mentioned that there are six linguistic functions in the communicative process. One of them is the conative function, and its orientation is the recipients.

Further, to accomplish its purpose, the vocative function has its role in helping achieve this job. Vocative does not only have its position in conative function. It also performs other linguistic functions, especially the poetic function.

As mentioned before, the goal of this type of text is to call to attention, and some genres or text varieties can be advertisements, sacred texts, political documents, instructions, and other types of texts. For instance, advertisements will call people to purchase something. Sacred texts will tend to persuade the audience to follow some religious movements or rituals, political documents such as political propaganda will convince people to vote, instructions such as the

manual that provide people with instructions on how to install or use a device. In order to achieve the objective, the expressive function will usually refer to the readership or interlocutor by addressing their names. Lyons (1977) referred to the function of naming, saying that "By the vocative* function of names is meant they are being used to attract the attention of the person being called or summoned." (p.217). With this, people know that the sender is referring to them specifically. Further, authors can use rhetorical and interjections and questions in writing since they do not expect any response, but there is an obvious answer that readers will agree with. Translators deliver the exact message, so the target-language readers perceive the same appealing sense as the original text.

2.3. Translation Methods

Translation methods are techniques used to translate whole units of texts. Newmark (1998) defined eight methods of translation: word-for-word translation, literal translation, faithful translation, semantic translation, adaptation, free translation, idiomatic translation, and communicative translation. Notwithstanding, Newmark said that semantic and communicative translation achieve accuracy and economy, which are the two purposes of translation. According to Kellou (2020), "A method of translation encompasses various techniques and strategies applied at the textual level to transfer a text from a source language into a target language in the light of a translation assignment and a contextual situation of communication." (p.3). This arose from whether to translate as close as possible to the original text or to translate as easily as possible for the readership. The first one refers to literal translation and the second one refers to free translation.

In order to determine which translation method has to be used, translators have to evaluate the text type of the translation unit. Text types are within one of the steps translators have to

follow in choosing the adequate translation method. Nevertheless, Toury (as cited in Schaffner, 1999) established three norms that translators must adhere to before deciding the correct translation method. They are initial norms, preliminary norms, and operational norms. Initial norms refer to whether the translator must follow the source text or the target culture. These factors are key before the translation method decision.

The conditions mentioned can be defined as domestication or foreignization. Venuti (1955) said that “Under the regime of fluent translating, the translator works to make his or her work “invisible,” producing the illusory effect of transparency that simultaneously masks its status as an illusion: the translated text seems “natural,” i.e., not translated.” (p.5). Domestication makes the translation reader-friendly, so readers enjoy the content with no strangeness. On the contrary, foreignization is where the translation maintains some foreign features. For instance, some terms are not known in the target language, and therefore, translators have to transfer the term as it is. Preliminary norms are where the translators decide the texts to be translated and the strategy to be used for the unit.

Lastly, the decisions made during the translation process refer to operational norms. This can also be the micro-techniques applied to words or expressions at word and sentence levels. Translators must carefully select the methods since it will determine if the text will be translated focusing on the reader or the author. Further, according to Nida and Newmark, regardless of the selection of the translation method, the equivalence effect is crucial. If the semantic translation cannot accomplish the equivalence effect, then the communicative translation should be selected. For this project, the semantic translation is chosen because it intends to convey the specialized terminologies of the content.

2.3.1. Semantic Translation

Semantic translation is a method where the intention is to render the author, so its translation is as close as possible to the original text. According to Newmark (1988), “Semantic translation is personal and individual, follows the thought processes of the author, tends to over-translate, pursues nuances of meaning, yet aims at concision in order to reproduce pragmatic impact.” (p.41) Suppose the translator finds the author has deviated from the source-language norms. In that case, semantic translation will correct the deviation to have a well-written text in the target language. Semantic translation provides readers with appropriate meanings that are acceptable and natural but still have a strong bias towards the author. Further, Newmark determined three main types of texts: Informative, evocative, and expressive: however, he mentioned that this method is more convenient for definitive texts since this type of text focus on the author's mind, so semantic translation helps to render its expressive components closely.

Semantic translation focuses more on the aesthetic value of the source-language text. Usually, the final version of the translation is awkward and complex. It remains with the source culture, and it is accurate in reproducing the significance of the source text. According to Anderman and Rogers (2003), semantic translation is concerned with procedures because when translators attempt to transfer the meaning of the source text into the target text, sometimes it will be approximations, so translators use procedures to reduce those semantic losses. As mentioned in the justification of the study, the semantic translation resembles Nida's formal equivalence. Semantic translation can be confused with the literal translation in that both respect the source text. Although semantic translation renders as close as possible the source text, it intends to convey the contextual meaning while literal translation translates word for word in its extreme version literally. Notwithstanding, Newmark suggested that literal and word-for-word translation

are the two basic translation procedures because they are employed in the pre-translation process, so translators start there.

2.3.2. Communicative Translation

The other translation method is communicative translation. Unlike semantic translation, this method is reader-centered. Newmark (1988) stated that “Communicative translation is social, concentrates on the message and the main force of the text, tends to under-translate, be simple, clear and brief, and is always written in a natural and resourceful style.” (p.48). The purpose is to produce the same effect of reading in the target language as reading the original text. In this case, communicative translation is for informative and vocative texts since these texts focus on the readers or the content. Thus, communicative translation aids in translating the content, using simpler vocabulary, ensuring that the readers understand the message.

In semantic translation, the cultural aspects remain with the source text, while in communicative translation, the cultural content is more accessible to the readership. Unlike the semantic translation, where the final product is awkward and complex, communicative translation is better than the original text. Further, this method has similarities with Nida’s dynamic equivalence in which it intends to produce the same effect in the target text readers. Anderman and Rogers (2003) “Communicative translation, by contrast, is not about procedures. Its conceptual status is on a much higher level of abstraction. Every text, whether it is a poem or a prosaic message, is a communicative event.” (p.71). Therefore, communicative translation is concerned with intentions.

Although this translation method seems to have more freedom in the translation process, translators have to respect the form of the source language text. Zheng (2017) addressed that:

Communicative translation addressed itself solely to the second reader, who does not anticipate difficulties or obscurities, and would expect a generous transfer of foreign elements into his own culture and language where necessary.

Nevertheless, even here, the translator still has to respect and work on the form of the source language text as the only material basis for his work. (p.628)

Furthermore, translators must achieve the principle of equivalence effect when translating vocative texts using communicative translation. Suppose the translation does not convey the same effect as the original. In that case, the audience will not know how to follow the instructions of a manual, or propaganda and commercials will fail to persuade people to purchase their products or vote for a political candidate. In terms of informative texts, the equivalence effect is also desirable. Newmark mentioned that, unlike vocative texts, informative texts contain their vocabulary to deliver facts to the readers, so they are translated more closely than vocative texts. In the end, achieving an accuracy of communication of the source text in the target text is the job of communicative translation.

2.4. Translation Procedures

Translation methods are for general reading, but translation procedures are in charge of close reading. With these techniques, the translation will be a high-quality work sealed with translation methods and translation procedures. To define, translation procedures are techniques used to apply to specific words and expressions within the text. Depending on the author, it may go as far as eight procedures or more in nature. In their book, "STYLISTIQUE COMPARÉE DU FRANÇAIS ET DE L'ANGLAIS," Vinay and Dalbenet (1972) mentioned seven translation procedures, and they can be used in isolation or a combined state. Further, direct or literal, and oblique translations are the two ways translators can opt for.

Vinay and Dalbenet addressed these two types of translations, explaining that when the source language text's structural, lexical, and morphological patterns match perfectly in the target text, it refers to the direct or literal translation. This is because it is based on parallel categories (structural parallelism) or parallel conceptions (metalinguistic parallelism). On the other hand, the other case is where source language text structural or metalinguistic divergences lead to certain stylistic effects that cannot be transferred to the target language text. This refers to the other type of translation, the oblique translation. The structural, lexical, morphological, and even cultural background equivalence cannot be achieved.

Another characteristic of direct or literal translation is that the equivalence mentioned before is achieved only if the two languages are close. At the same time, word-for-word translation is impossible for the oblique translation since the patterns do not match. Vinay and Dalbenet proposed different translation procedures for the two types of translation. Borrowing, calque, and literal translation are the three translation procedures determined for direct or literal translation. Lastly, transposition, modulation, equivalence, and adaptation are the four procedures for oblique translation. As one of the objectives proposed, this translation project will attempt to employ all the translation procedures; however, only transposition, modulation, and literal translation will be the principal of the stylistic execution. Further, it will introduce omission, amplification, and explicitation of the three other translation procedures that complement the principal translation procedures. Also, punctuation changes and glossaries will be defined and explained in this chapter to create accurate, faithful, and natural translations.

2.4.1. Transposition

Transposition is the first translation procedure of oblique translation. This technique can be defined as structure changing by replacing one grammatical category with another. According

to Ayora (1977), oblique translation replaces not only the units but also the structures, and Ayora used the phrase “changing the vehicle,” referring to the notion that one vehicle of ideas is different from one language into another. Therefore, this product comes to be the soul of translation. The “changing the vehicle” can be exemplified as having a verb in the target text with a noun in the source text. However, it is crucial to highlight that these modifications do not alter the message's meaning. Transposition can be mandatory when translators find it is the only way to achieve a correct translation. Nevertheless, sometimes, some translations achieve accuracy and natural without applying transpositions.

Ayora (1977) mentioned in his book “Introducción a la traductología: Curso básico de traducción” that the purpose of transposition is to accomplish naturalness in terms of lexicon, structure, and wording, but always following the principle of keeping the same semantic strength and density. In the translation process, translators can make any changes as long as those adjustments do not alter the meaning of the text or its naturalness. Thus, if the text's message deviates during the process, translators have to reevaluate the idea of using this procedure or reconsider the replacement of the grammatical categories. Ayora presented seventeenth varieties of transpositions translators can practice when engaging in the translation process, and some of them are transposition of adverb into verb, noun, adjective; transposition of the verb into a noun, adjective, adverb; transposition of a noun into a verb; transposition of adjective into a noun, verb; transposition of that. For instance, a transposition of adverb into a verb will be, “I merely asked his name,” the word “merely” is the adverb that a verb in the target language will replace: “Me contenté con preguntarle el nombre,” the word “contenté” is the verb that the translator used to adapt the message in the target language.

2.4.2. Modulation

The second translation procedure that belongs to oblique translation is modulation. According to Vinay & Darbelnet (1972), the purpose of this technique is to achieve variation in the message of the text by changing the point of view, the perspective, and the category of thought. Just like in transposition, modulation can be optional or compulsory. Further, it mentioned fixed modulation and free modulation. Fixed modulation refers to the one that is recorded in bilingual dictionaries. In contrast, free modulation is the one that is not recorded yet in the dictionaries, and it is employed by the translators when literal translation is rejected in the target language.

Translators must dominate how to use modulation since it is the most dangerous procedure of oblique translation. Ayora (1977) mentioned that usually, when the final version of the translation is inaccurate and contains flaws, it is due to the lack of this procedure. He also mentioned that sometimes, amateur translators use modulation, but the result turned into transposition. Transposition works on grammatical species, while modulation works on categories of thought. That is why it is an intervention of logical categories. Another characteristic that Ayora mentioned was that the more advanced the procedure, the more dangerous its application and modulation is an advanced technique requiring a translator's language and style knowledge. Indeed, modulation is the most delicate technique of the oblique translation, plus it tends to intervene in the translator's subjectivity.

In both books, *Stylisue Comparéé du Français et de L'anglais* from Vinay and Darbelnet, and *Introduccion a la traductología: curso básico de traducción*, integrates the theoretical and practical aspects of translation from Ayora, a variety of modulations were mentioned, and they are identical. The different cases of modulation that the book mentioned were nine. Some of them are, for instance, the modulation of abstract for concrete, part for the

whole, one part for another, reversal of terms, active for passive, negated contrary. To give an example, modulation of abstract for concrete can be, "You can bet your life" translated into the target language will be, "Puedes apostar la cabeza." In the source language, the author used "life," but for the readers, this can be too abstract as life is too broad; however, in the target language, the translator used "cabeza" which means head so the readers can perceive the message more concretely and concisely.

2.4.3. Omission

The third procedure to mention is omission. This procedure does not belong to the principal translation procedures of the stylistic execution; however, it serves as a compliment, and it can combine the other procedures. Ayora (1977) addressed that this technique is often ignored and poorly used. Ayora said that omission is essential in any translation procedure, and sometimes, its application is compulsory. However, this is a procedure that translators can use to reach oblique translation. Indeed, as Ayora mentioned, most translators believe that their job is to transfer accurately and faithfully everything of the unit given. Nonetheless, sometimes by translating anything, translators overwhelm the readership by showing them strange elements that should have been removed in the process of translation.

The goal of translation is to convey the message of the ST into the TT naturally, so if the translation made is cluttered and not understandable, it fails its principle. Further, for translators to apply a particular omission, they have to analyze the content closely first and assure that the omission will not suppress or deviate from the content's original message. Ayora discussed ten most common causes of omission that translators could produce in the process of translation and mention some of them are, for example, the omission of abusive redundancies, the omission of simple repetitions, the omission of the auxiliary can with verbs of perception, the omission of

some prepositions that only make the expression idiomatic in English but have no semantic value in Spanish. As an illustration, the last omission can be considered a common one since a statement can be idiomatic in English, but in Spanish have no semantic value. Ayora proposed the example of “Hurry up” with its translation in Spanish, “Apresúrate.” The preposition used in English was “up,” but if the translator had translated this preposition literally in Spanish would not make sense because “hurry” does mean hurry but “up” means above, over, so these two words together would not convey the message in the target language.

2.4.4. Amplification

Amplification is another translation procedure that complements the principal procedures to do their job. Sometimes, when translating the original message, translators realize that some words or sentences are not conveying the meaning properly due to the target language’s different grammatical and cultural structures. In order to solve this problem, translators can opt for amplifying the structure of the words or sentences. Sometimes, translators may consider that adding more words or sentences is inadequate and disrupt the principle of being accurate and faithful. However, translation procedures were created to help translators fight problems of small units of the texts and serve as a bridge between two languages. So, translators do not have to fear using them; instead, they should find ways for readers to understand the message better.

According to Vinay and Darbelnet (1972), amplification refers to using more words in the target language than the source language to express the same idea. Further, it can also fill the gap where there is a syntactic deficiency, but in both cases, the purpose is to make the idea clearer.

Although it mentioned that the purpose of this procedure is to make the meaning of a word or sentence clearer, translators have to be cautious when applying it. If translators do not use this technique carefully, it can lead to the problem feared by all translators, making the

translation wordy and confusing; instead of accurate and understandable. The nature of English is to be direct and concise, so messages tend to be shorter, so speakers receive the message faster. On the other hand, Spanish is a romance language, and speakers tend to be more polite and warm when talking, assuring that their message is clear for the receiver. According to Ayora (1977), there are six types of amplification, and some of them are, for instance, the amplification of adverbs, verbs, adjectives, pronouns. To show an example of amplification of verbs, Ayora used the sentence “I don’t know what you mean” where the translator amplified the verb “mean” in the target language achieving the result of “No sé lo que quieres decir,” in this way, the readers understand that a certain speaker does not understand what the other speaker just said.

2.4.5. Explicitation

Explicitation is the last complementary procedure that translators can use to combine with the principal techniques proposed by Vinay and Darbelnet. Unlike amplification that focuses on the structure, explicitation modifies the elements depending on the semantic and the situation. Due to this, it makes the explicitation optional and the amplification compulsory. According to Vinay and Darbelnet (1972), explicitation introduces implicit details of the source language into the target language, but this need of the procedure emerges from the context or the situation. With this procedure, the interpretation of the text will be facilitated.

The result of this technique is to have more explicative and specific content for the future readership to comprehend the message better. Ayora (1977) stated that this is another kind of expansion that mainly obeys semantic reasons. If content elements are not conveyed explicatively and specifically enough, the message will be obscure and imprecise. Sometimes, elements are implicit in the source language because the author has written the text with the anticipated situation experience because of the writer’s linguistic habits and cultural aspects. The writer has

extralinguistic knowledge of the situation, but that does not mean that the readership also comprehends the situation. For instance, this often happens in conversations where two speakers are talking about a birthday party, and a third speaker comes in when the two initially speakers are talking about the location and the time of the party. Immediately, the third speaker will ask for details of which party they are talking about.

Although translators have the free access to make elements of the content clearer, that does not mean that translators have all the freedom to make implicit elements explicit in the target language. They must respect elements such as the reticence, the suspensions, the ellipsis, the opacity, and all effective work resources. Overall, as with any other translation procedure mentioned, it is advised to apply it after analyzing the need for explanation or specification of the details for the target readers. One of the numerous examples that Ayora illustrated was the explication of the sentence, "Living for the moment," in which the translator conveys the message into Spanish in this way: "Viviendo solo por el momento presente." It can be seen that the translator explicated "moment," referring to it as just the present, the current moment.

2.5. Literal Translation

The literal translation is the only translation procedure that belongs to the direct translation mentioned in this research. As mentioned before, procedures of direct translation are used only if the two languages are close to each other. The source language grammatical constructions are converted to their nearest target language equivalent. Vinay and Darbelnet (1972) said that literal translation often happens between languages of the same family or same culture, such as French-Italian. Similarly, Ayora (1977) explained that literal translation is a precise correspondence of structure and meaning between two languages, such as English and

Spanish. Ayora also pointed out that translators do not have to fear using this procedure because readers or clients will criticize them by commenting that their translation work was “too literal.”

On the other hand, Newmark considers literal translation not useful as a translation procedure for the large public, but as a pre-translation technique is acceptable. As a pre-translation process to make things easier for translators since they start from there. Newmark (1988) “I believe literal translation to be the first basic translation procedure, both in communicative and semantic translation, in that translation starts from there.” (p.70). Vinay and Darbelnet presented different examples of literal translation and Newmark; however, the examples of Vinay and Darbelnet are in French, so it will use the ones from the book of Ayora to illustrate the procedure. One of the examples is "She is reading," where the translator conveyed the message translating it literally into Spanish, “Ella está leyendo.” It used literal translation, but it can see that the two languages indeed have an equivalence in their grammatical structure. By translating the sentences literally, the message's meaning did not deviate; instead, they fit correctly message clear.

Interestingly, one of the first pioneers in translation studies, Jean-Paul Vinay, has a different point of view of literal translation from the person who translates an academic study, Peter Newmark. For Vinay and Darbelnet, literal and word-for-word translation is the same since they started the definition of this procedure, saying “Literal translation or word-for-word translation.” On the contrary, in his book, Newmark (1988), “A Textbook for Translation,” defines literal translation and word-for-word translation as two different terms. Word-for-word translation follows a strict syntactical order of the source language. The purpose is intended to show how the original text was made and how the word order occurs; instead, literal translation is when the meaning of the SL corresponds to the TL.

2.6. Punctuation Changes

So far, it has mentioned all the translation procedures and methods that translators can employ in order to elaborate their translations accurately, faithfully, and naturally. However, punctuation is also a crucial aspect that determines the quality of a translation. Vinay and Darbelnet (1972) talked about punctuation but referred first to the spoken language's remarks, such as intonation and pauses. However, in written language, this is presented by punctuation marks. Signs of punctuation help readers read the content fluently by making necessary pauses within the text.

Translators must analyze the punctuation system of the target languages. According to Newmark (1988), "Punctuation can be potent but is so easily overlooked that I advise translators to make a separate comparative punctuation check on their version and the original" (p.58). Further, Newmark mentioned that punctuation serves sentences and clauses as a semantic indication; however, depending on the language, punctuation will be different. For instance, the punctuation marks are different in English and Spanish. The most common cause is the exclamation marks and question marks. In English, these marks are placed only at the end of a sentence, "Are you hungry?". On the contrary, these marks must be at the beginning and the end of a sentence, "¿Tienes hambre?". Therefore, translators have to analyze and evaluate the texts closely to determine which punctuations signs must stay and which ones must be removed to match the target language structures.

Extralinguistic knowledge is a requirement that translators must have and dominate to achieve equivalence and accurate transference of all the correct punctuations signs from the source language

into the target language. Indeed, punctuation can be needed or removed in different languages, but there are cases in which one punctuation can have a different meaning from one

language into another. Newmark explained this topic by giving several examples showing that suspension points indicate a pause in French while English signifies the omission of a passage. In other cases, exclamation marks draw the audience's attention in German or commas are employed as conjunctions in French.

2.7. Glossaries

Every field has its language, and when writing documents, authors would use these technical words to convey the content. However, sometimes most of the terminologies will be unfamiliar to non-technical readers. The author's job is to clarify these terms so readers can understand and consult them, so the readership will not disrupt their reading and look for the meaning of the words they do not comprehend. According to Tackabery (2005)

To define new terms for non-technical users, technical communicators can use glossaries to compile lists of specialized word definitions as a reference for users unfamiliar with the new terminology while allowing technical users to use those same documents without interrupting their reading. (p.427).

Apart from the technical terminologies, researchers can also find other standard terms that they consider difficult for the audience's comprehension during the research process. Further, by storing these terminologies, the writer can use them as a reference in the future. Glossaries can be a reading tool for the audience; however, writers, investigators, and even translators can create glossaries that will serve as future references. Just like machine translation stores the terms correctly translated, so the subsequent translations can be done quicker, glossaries can help investigators, writers, and translators to accelerate their working process.

For translators, indeed, glossaries can be relevant for them because, as mentioned before, they can increase the quality of their works. To define a glossary, according to Ament (2003),

“Glossaries are alphabetized definition lists that explain technical terms found in a document.”

(p.81). Glossaries help translators increase the speed of the translation process by storing words translated into different target languages. Further, it will help translators deliver the final version before the deadline because glossaries help lighten the process. With this, translators will have better time management to have a balance between work and personal situations. Gapper (2008) mentioned that in many fields such as translation, interpretation, language teaching for specific purposes, and other similar fields, the creation of glossaries is a must to comply with international standardization requirements, computing, and other fields such as education and commerce. Standardizing terms can be applied to translators who work as a team. This will guide the other translators to use the correct terms during the entire text, so the final version is homogeneous at the end.

Apart from the features mentioned above, glossaries help build consistency during the translation process. Translators have to deal with different languages, and most of the time, one term can have different meanings depending on the country, the language, and the culture. For instance, one word can have different synonyms but also different definitions. Sometimes, translators tend to use synonyms, so readers do not feel tedious by coming across the same word the entire text; nonetheless, this can lead to inconsistency because the synonym has another concept. Therefore, the word appears as a synonym to the original word, but it could distort the content's message if it has a different definition. In order to avoid this situation, translators will investigate to ensure the trustworthiness of the synonym, but this is time-consuming. However, by having a glossary with the corresponding definitions and translations in multiple target languages, translators can save time and achieve consistency in every translation.

Now that this instrument's definition and relevance have been addressed, it will explain how to create a glossary. According to Gapper (2003), glossaries have macrostructure and

microstructure. Macrostructure refers to the general structure that a glossary should have. This structure must consider the relevance of including a preface, users' indications, and a table of abbreviations or appendices. The glossary has to be divided into different languages and topics.

On the contrary, microstructure refers to the design of each entry's structure and the information that each entry or article has. Gapper pointed out that before creating a glossary, it has to study and analyze previous glossaries that serve as examples and a solid base for the glossary to build. For the elaboration of a helpful glossary, Gapper listed a guideline.

The first step is to determine the nature of the glossary by considering the audience, the intention, and the setting. Then, which terminologies, definitions, and other information will be included in the glossary. This step has to set some criteria to analyze closely which terms are relevant to be included in the glossary due to their technical nature. Further, in creating the glossary, what information must be included so the future audience can better comprehend the term: grammatical category, the definition, the synonym or the antonym of the word, the equivalence in the target language. Suppose it is a term used in the scientific or commerce field, singular or plural, and any other information that authors can add to a glossary. Lastly, as the final step, it will determine the format of the glossary: the type of letter and size of the letters, the order in which each word will appear in the glossary. This instrument has to be considered beneficial and not a waste of time. Considering all the features mentioned, translators should put this instrument in practice to deliver high-quality works to their clients without compromising the level of readability because the audience will genuinely enjoy the text regardless of the technical words because they have a glossary at their fingertips.

Chapter III

Methodological Framework

A methodological framework is a tool that will lead the investigator to the correct steps to complete a procedure. McMeekin et al. (2020) clearly stated that "a methodological framework provides structured practical guidance or a tool to guide the user through a process, using stages or a step-by-step approach" (p.2). Researchers have to justify the aspects developed in the investigation, and the methodological framework will define these aspects. By separating methodology from the framework, according to McMeekin et al. (2020), "Methodology is defined as the group of methods used in a specified field, and framework is defined as a structure of rules or ideas." (p.2). The possible procedures to which investigators can stick to are observations and data collection. This section of the investigation is crucial because it aids the researcher in formulating the hypothesis, solving the problems, and conducting fundamental research. In terms of hypothesis, it will be the proposed translations done to the three informative texts. In order to prove their validation, the methodological framework will do the job of ratifying that the translations render the original texts and deliver the source message to the target audience accurately, naturally, and faithfully.

3.1. Research Approach

When investigators establish the research question, the type of data needed to respond to the problem has to be determined. If researchers want to use numerical data, they may opt for the quantitative method, and for more textural data, they may opt for the qualitative method. However, a mixed-method is applied if numerical and textural data are used to prove the question. For a broader definition of quantitative, qualitative, and mixed methods, Creswell (2014) stated that "Qualitative research is an approach for exploring and understanding the

meaning individuals or groups ascribe to a social or human problem.” (p.32). This is also known as the inductive style, where data is collected in the participant’s setting. In terms of the quantitative method, Creswell (2014) said that “Quantitative research is an approach for testing objective theories by examining the relationship among variables.” (p.32).

As mentioned before, the quantitative approach is for numerical data, meaning determined instruments are needed. The most common way to conduct this method is by interviewing participants with questions using platforms such as Google Forms. In the end, the numerical results are analyzed automatically by the software. Lastly, for the mixed method, according to Creswell (2014), “Mixed methods research is an approach to an inquiry involving collecting both quantitative and qualitative data, integrating the two forms of data, and using distinct designs that may involve philosophical assumptions and theoretical frameworks.” (p.2). Combining both methods can have a broader scope for searching solutions for the objectives proposed in the investigation.

This project does not require numerical data; instead, the research focuses on analyzing translation methods and procedures in texts. This is a translation project; even though it is more of a mixed-method, the qualitative approach will be selected instead of the mixed approach. The qualitative approach focuses on expressed words, and with this project, the goal is to understand the use of the different translation methods and procedures. Another reason for choosing the qualitative research is that the questionable nature of this research is an open-ended question, and this is a method featured in the qualitative approach. This approach wants to evaluate the correct use of all the methods and procedures of translation in the three informative texts. Further, it attempts to dissect the texts to analyze, interpret, and categorize how each method and procedure was used in the translation process.

A justification for applying each method, procedure, and principle will be accomplished during the text analysis to ensure that the translations rigorously follow the criteria and principles. Some basic principles of qualitative method researchers have to follow rigorously, according to Cropley (2015), are “Research question,” “Philosophy of research,” “Method of gathering data,” “Role of researcher and subject,” and “Data analysis.” Further, qualitative data is collected through narratives or called a narrative review. Most researchers opt for narratives in online works such as articles, journalistic works, case studies, or other thesis and investigations published by other authors.

3.2. Research Design

Now that the research approach is determined, it also has to establish the research design. Researchers can use different types of research designs, but only one will be chosen, and the investigator will stick to the design so there will not be a bias between the other designs. Mishra and Alok (n.d.) can determine six types of research designs: Descriptive, correlational, semi-experimental, experimental, review, and meta-analytic. By giving a small insight of all of them, a descriptive research design is when the data can be collected by case study, naturalistic observation, and survey. Correlational is a design where a case-control study or observational study is conducted. The semi-experimental design comprised field experiments and quasi-experiments. Experiment design refers to an experiment with random assignment. Literature review and systematic review have to do with the review design. Lastly, meta-analysis refers to the meta-analytic design.

Specifically, there are six qualitative research designs: Phenomenological, Ethnographic, Grounded theory, Historical, Case study, and Action Research. By giving a small insight of all of them, phenomenological studies are a design where investigators apply the process called

“Bracketing” by collecting data from individuals. However, researchers have to put aside personal feelings to make a precise analysis of the problem. Ethnographic studies are a design where the investigators are studying live with them. For grounded theory studies, the data is collected, but the theory came from the same data collected by the investigators. Then, historical studies gathered historical data, but the data collected must be precise and authentic. In the case of studies, investigators examine communicatively people, groups of people, and institutions. Lastly, action research is a design where an action is taken, and the study participants and researchers work together in the process.

Although qualitative research is selected, quantitative research designs can also be mentioned. Four designs can be determined: descriptive research, correlational research, Causal comparative/quasi-experimental research, and experimental research. Descriptive research design can be used with a qualitative approach within these designs. According to Gall et al. (as cited in Nassaji, 2015), “The goal of descriptive research is to describe a phenomenon and its characteristics. This research is more concerned with what rather than how or why something has happened.” (p.131). In this type of research, the hypothesis arose after the data was collected. Thus, through the data analysis, a test is provided for the hypothesis made. In this translation project, two texts will be translated using different procedures, methods, and principles of translation to convey the message of the original texts correctly for users of the public university library. The problem is to analyze the procedures and methods applied to the unit. Therefore, the descriptive research design will be selected to describe all the translation methods and principles used. Further, since the data will be the texts to be translated and the hypothesis will be the translations with the translation procedures and methods, it will investigate the same information to determine if the principles, methods, and procedures evaluate the meaning hypothesis

correctly. This design will provide information on the variables, and the variables will be the original texts and the translations.

3.3. Information Sources

When conducting research, the origin where investigators get the information is known as information sources. According to Jeyapragash (n.d), depending on the sources, it can address two broad sources: documentary and non-documentary sources. The difference between these two types of sources is that documentary is recorded in the form of documents. On the contrary, non-documentary information is not recorded, so humans, organizations, mass media are included in these types of sources since they are life sources. For each source type, categories of sources are listed depending on the information and organizational content.

For documentary sources of information, the level of content is classified into primary, secondary, and tertiary content. Primary sources are known as first-hand information. This contains the original information, and as Jeyapragash (n.d) said, this type of information has not been interpreted, reanalyzed, and reevaluated by a second or third party. Some examples of content are articles, journalistic papers, books, newspapers. Notwithstanding, secondary sources have been reused for a new purpose in the second research. In other words, it depends on the original data for its existence. Usually, the original data is not used as a whole; instead, second parties would use only part of the information helpful for their papers. For instance, most research background information is secondary sources because they will always mention information taken from primary sources that have history useful for the background information. Lastly, tertiary sources are the sources that guide people to use the primary and secondary sources. Directories are one example of tertiary sources.

Non-documentary sources are classified into formal and informal. In the formal category, organizations, universities, industries are examples. For the informal category, some examples are conversations or discussions between people. In this project, primary sources are dominant. For chapter I, most information comes from primary sources such as books, although a few statements come from secondary sources because some works of the primary sources cannot be read. This is the same for chapters II and III; it only uses primary sources such as articles and books. It intends to use at least 15 sources to support all the claims made in the research. Regarding the translation, those books and articles are categorized as primary sources because second parties were not rearranged or reevaluated.

3.4. Analysis Categories

Analysis categories refer to the approach in which the specific objectives will be accomplished. Even though the research design, the research approach, and the information sources are critical, the analysis category is also crucial in the methodological framework because it will establish the definitions required to accomplish the research. This is a translation project; therefore, the primary and essential analysis category will be the diverse translation methods and procedures accurately used to convey the correct message from the source language into the target language. As mentioned before in Chapter I, semantic translation is the method selected since the objective is to transfer the technical words of the texts. In addition to the translation methods and techniques, glossary and text analysis are also analysis categories employed during the project.

3.4.1 Translation

According to Newmark (1998), since translators are using another language to transfer meaning into another language, the translation made must achieve the intention of the author by rendering the meaning of the text into another language.

3.4.2 Translation Methods

Now that translation is defined, methods and procedures are the next to be explained since they are the main analysis categories in the research. Kellou (2020) stated that translation methods are techniques and strategies used at the textual level, that is to say, to the entire text from an SL into a TL in the light of a translation assignment and a contextual situation of communication.

3.4.3 Translation Procedures

Newmark (1998) defines translation procedures by mentioning that translation methods focus on the entire text while translation procedures work on smaller units of the text. It is worth mentioning that Vinay and Darbelnet (1958) stated that although the unit of translation is the smallest segment of the utterance, translators must not translate words but the ideas and feelings; thus, they cannot translate the union of signs separately.

3.4.4 Glossary

Ament (2003) mentioned that a glossary is a list with alphabetized definitions of technical terms found in a document. Thanks to this index, future readers can search for technical or unknown terms that they do not comprehend. Also, it will be easier for translators to work on future translations since this index of terminologies will ease the process.

3.4.5 Text Analysis

Lastly, text analysis is when the translator analyzes the source text to transfer the meaning accurately. As Newmark (1988) once said, translators must analyze the text to replace it in another language where the readership has a different culture and traditions.

3.6 Data collection Instruments

In order to achieve the objectives and find a solution to the problems proposed, research must have several data collection instruments that will help to do the job of collecting data and analyzing the data gathered. As mentioned previously in the research design, the color-coding systematic procedure will be used as an instrument to collect and analyze the information. Also, a text analysis chart and a glossary will be the other two data collection instruments employed because they can help analyze the translations of the texts and serve as a reference to the translator and readers.

3.6.1. Color coding

This instrument will help the investigator and the readers by categorizing all the translation procedures applied to the units of texts so their application can be evaluated and justified later. Seven translation procedures will be attempted to apply to the texts with their corresponding color. This procedure will be used to 30 paragraphs from the translations (15 paragraphs from the English text and 15 paragraphs from the Spanish text). Important to highlight that each of the paragraphs will have nearly 100-150 words so that the analysis will be concise. Moreover, each procedure paired with its unique color will be displayed in a chart at the beginning of the paragraphs. If one word has two translation procedures, the translator will use symbols or characters such as parenthesis, brackets, slashes, bars, or underlying to differentiate the multiple procedures employed.

Table 1

Translation Procedure	Color Assigned
Transposition	Yellow
Modulation	Brown
Omission	Orange
Amplification	Green
Explicitation	Purple
Literal translation	Pink

Table 1 shows each technique with corresponding colors in the color-coding systematic procedure—source: Researcher's creation.

3.6.2. Text Analysis Chart

This is an instrument where a chart is used to classify the texts to be translated into several factors. These factors are text style, text function, the generality or difficulty of the texts, the scale of the emotional tone of the texts, and the translation method. In this case, the two texts (English and Spanish) selected will be placed in the chart with their corresponding analysis. With this, the translator has a concept of the difficulty of the text and how to translate it for the correct type of audience.

Table 2

Text Analysis	Language and Learning in the Digital Age	Anatomía de la lengua historias, curiosidades y porqués del idioma
Text Style		
Text Function		
Scale of Formality		

Scale of Generality or Difficulty		
Scale of Emotional Tone		
Translation Method		

Table 2 shows each factor the texts will be analyzed before being translated—source: Researcher's creation.

3.6.3. Glossary

As a final instrument, the translator will use a glossary to register relevant terminologies for the advantage of the readers and the translator. When readers come across a certain unknown terminology, they will have this glossary to help them, so they do not have to reach any translation software to cut their reading enjoyment. This index or database will be truly helpful for the translators because it will facilitate their future translations by providing them already the information of the utterance in doubt. For this research, the terms will be placed in a chart where they will be in the source language and the target language. Then, the grammatical category and the definition will be provided. Further, it will be one glossary for the English text and one for the Spanish text.

Table 3

English into Spanish Text Title			
Término en el idioma de partida	Término en el idioma de llegada	Categoría gramatical	Definición

Table 3 shows the chart with the factors used to categorize and classify the terms to create the Spanish glossary—source: Researcher's creation.

Table 4

Spanish into English Text Title			
Term in Source Language	Term in Target Language	Grammatical Category	Definition

Table 4 shows the chart with the factors used to categorize and classify the terms to create the English glossary—source: Researcher's creation.

3.7. Collection data process and data analysis

When starting to translate, the first step of every translator must be reading the unit given—carefully applying general and close reading to get familiarized with the text. General reading gives the translator an overall view of the main topics and subjects, while close reading focuses on words from challenging texts, either inside or outside of them. In this very first step, the translator must search for possible issues such as jargon and other technical words that, when translating, may not match in the target language. If translators skip this part of the process by selecting the translation techniques and starting the process without reading, they may later realize that the techniques or methods they chose did not convey the message.

Once this step is accomplished, the translator will determine the text analysis and its factors. In this step, the translator will use the first data collection instrument, the text analysis chart, to determine the text's complexity and type of audience. Then, the different translation procedures and methods will be selected to accurately transfer the source text's message into the

target language. After the translations are done, the translator will go back to check for punctuations that may not have to change into the target language during the translation process. Also, the translator will check for accuracy, faithfulness, naturality, and fluency when reading the texts translated. If one of these elements fails, that means that the translation did not pass the plausibility test; thus, the translator will have to go back and evaluate the utilization of the translation techniques until these features are fully accomplished.

After the translations are carefully revised, the next step is to apply another data collection instrument: the color-coding systematic procedure. As mentioned before, the translator will choose 15 paragraphs of each text, and then, it will start highlighting when a translation procedure of the list has been applied to the utterance. As previously mentioned, if one utterance has more than two procedures applied, the translator will use symbols or characters. The instrument will be used only for the translated version. Once the color-coding instrument has been applied correctly to the texts, the translator will move to the data analysis and interpretation of the results. Here, the researcher will display the results of the text analysis chart used before the translation and the paragraphs with the colors. Further, the last instrument, the glossaries, will be built here since the translations are done and the two previous instruments are accomplished.

Chapter IV

Translations

4.1 Translation from English into Spanish

**Lenguaje y
aprendizaje en la era digital**

**James Paul Gee y
Elisabeth R. Hayes**

Lenguaje y aprendizaje en la era digital

En el *Lenguaje y aprendizaje en la era digital*, el lingüista James Paul Gee y la educadora Elisabeth Hayes lidian con las fuerzas desencadenadas por los medios digitales de hoy, las cuales son fuerzas que están transformando el lenguaje y el aprendizaje para bien y para mal.

Ellos argumentan que en los debates sobre los medios digitales casi siempre se malinterpreta el papel del lenguaje oral. Tal como en las invenciones anteriores de la escritura y la imprenta, los medios digitales, en realidad, “potencian” o mejoran los poderes del lenguaje oral.

Gee y Hayes lidian también con las actuales transformaciones digitales del lenguaje y la alfabetización en el contexto de una creciente crisis de la escolarización tradicional en los países desarrollados. Con la llegada de nuevas formas de medios digitales, los niños se sienten cada vez más atraídos por los videojuegos, las redes sociales y las formas alternativas de aprendizaje. Gee y Hayes exploran la forma en que estos métodos alternativos de aprendizaje puedan ser una fuerza para un cambio de paradigma en la escolarización.

Esta es una lectura atractiva y accesible tanto para estudiantes de grado y posgrado como para los eruditos del lenguaje, la lingüística, la educación, los medios de comunicación y los estudios de comunicación.

James Paul Gee es profesor de la cátedra presidencial Mary Lou Fulton de estudios de alfabetización en la Universidad Estatal de Arizona, Estados Unidos. Además, es miembro de la National Academy of Education y autor de numerosos libros, entre los que destacan el más vendido *An Introduction to Discourse Analysis* (Routledge, 3ª ed., 2011) y su título complementario *How to do Discourse Analysis* (Routledge, 2011).

Elisabeth R. Hayes es profesora de inglés en la Universidad Estatal de Arizona, Estados Unidos.

"*Lenguaje y aprendizaje en la era digital* es un libro fundamentado y sabio a la vez. La perspectiva de Gee y Hayes mira hacia atrás tanto como hacia adelante y tiene un lugar en la estantería o en el lector digital de todos, para que podamos hacer un balance de lo lejos que hemos llegado (y lo lejos que tenemos que ir)."

Jennifer Rowsell, *Cátedra de Investigación de Canadá sobre Multiliteratura, Universidad de Brock, Canadá.*

"Un relato estimulante y muy legible sobre cómo los nuevos medios de comunicación están cambiando la forma en que nos comunicamos y para ello aprendemos un antídoto contra los diversos pánicos morales que rodean a las computadoras, el internet y la cultura juvenil. Este libro debería ser de lectura obligada para cualquier persona que trabaje actualmente en educación".

Rodney Jones, *City university de Hong Kong.*

LENGUAJE Y APRENDIZAJE EN LA ERA DIGITAL

James Paul Gee y Elisabeth R. Hayes

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1**INTRODUCCIÓN**

En un título como *El lenguaje y el aprendizaje en la era digital*, la palabra “lenguaje” parece menos moderna que la palabra “digital”. Acertadamente, estamos impresionados por nuestras nuevas herramientas digitales en donde sus peligros y posibilidades también son nuevas. Por otro lado, el lenguaje parece tan antiguo y mundano que sus peligros y posibilidades han sido olvidados desde hace tiempo. Sin embargo, vamos a argumentar que los peligros y las posibilidades de los medios digitales son en efecto, especies de los mismos peligros y posibilidades que encontramos en la historia del lenguaje oral y escrito.

Los medios digitales son un interesante híbrido de las propiedades del lenguaje oral y escrito. El lenguaje oral es interactivo, pero efímero (el sonido se desaparece rápidamente), ya que en una cadena de comunicación, este no viaja con precisión debido a que cada persona puede modificarla rápidamente. Por otra parte, la alfabetización es menos interactiva, pero es permanente porque los pedazos de papel o libros, además de viajar a lo largo y a lo ancho, se transmiten a través de una cadena de personas, lo cual hace que sean más difíciles de cambiar.

Cuando los medios digitales son portadores del lenguaje, este puede ser interactivo, por ejemplo, en una sala de conversación, a través de mensajes de texto o en un tablero de publicaciones de la red social Twitter, pero también de manera permanente. Este puede viajar a lo largo y a lo ancho, pero puede modificarse incluso mucho más rápido y a fondo que un rumor, ya que cada usuario tiene la oportunidad de modificarlo y un ejemplo es wikis. Argumentaremos que los medios digitales “potencian” o mejoran los poderes del lenguaje, así como lo hizo el lenguaje escrito con el lenguaje oral.

Los lectores pueden decir que los medios digitales no son solo portadores del lenguaje, aunque el propio lenguaje es y siempre ha sido una mezcla de sonidos, palabras, imágenes que se crean en la mente y gestos que se usan en contextos llenos de objetos, sonidos, acciones e interacciones. El lenguaje siempre ha sido “multimodal” (combinación de palabras, imágenes y sonidos) al igual que muchos mensajes que se tramiten a través de los medios digitales y por supuesto, en muchos otros medios actuales.

Sin embargo, hoy más que nunca, la multimodalidad es más dominante, diversa e importante. Una comparación entre un libro de texto o un periódico de los años 50 y de hoy en día, mostrará que los actuales contienen muchas más imágenes (Lemke, 1998). Tanto los libros de texto como los periódicos actualmente suelen estar disponibles en internet, donde los acompañan aún más imágenes y videos.

La multitarea, llamada “generación digital” es muy discutida y es otro fenómeno dominante e importante en la actualidad. Por ejemplo, el lenguaje oral siempre ha exigido la multitarea y como veremos, en el habla tenemos que prestar atención a un sinfín de cosas. Lo mismo ocurre con la caza temprana y la recolección de nuestros antepasados. Por buenas razones darwinianas, murieron hace tiempo los últimos humanos quienes no pudieron realizar múltiples tareas. Sin embargo, hoy se requiere de la multitarea más que nunca y la capacidad de saber cómo, cuándo y dónde realizarla se está volviendo fundamental.

Los medios digitales son un sistema de comunicación para el lenguaje (y otras cosas), al igual que un carro es un sistema de entrega para los humanos. El lenguaje escrito fue un sistema de comunicación temprana para el lenguaje. Dificilmente podemos entender un sistema de comunicación si no entendemos qué porta y por qué. Si bien puede parecer que trivializamos los medios digitales y el lenguaje escrito al llamarlos sistemas de comunicación, en realidad, no hacemos tal cosa. Los carros, camiones, aviones y tanques son sistemas de entrega para los

humanos, pero ellos han transformado el mundo y a los seres humanos tanto para bien como para mal.

Este libro se trata del *lenguaje* en la era digital, por ende, hablemos del lenguaje. El lenguaje oral fue un regalo para los humanos de parte de la evolución, la cultura, o Dios (dependiendo de su punto de vista). Fue un regalo de verdadera igualdad, ya que todos, salvo trastornos muy graves como terribles circunstancias sociales, adquieren un lenguaje nativo (Chomsky, 1986; Pinker, 1994). Además, todo ser humano es a la vez productor (orador) y consumidor (oyente) cuando se trata del lenguaje oral (o lenguaje de señas, en su caso).

Las culturas, con toda seguridad, al poco tiempo de surgir, tuvieron un problema con esta igualdad. En muchas culturas, sucedió que los poderosos restringieron a otras personas el derecho a hablar. Además, se erigieron como los portavoces oficiales de la cultura. Los reyes, ancianos y chamanes llegaron a producir el discurso oficial y poderoso en las culturas. Cuando el discurso era realmente importante, la gente común se convertía en consumidores (oyentes) y no en productores (oradores). En cuestiones de importancia, a menudo fueron silenciados.

En occidente, en la Edad Media la sociedad estaba completamente organizada en una “gran cadena del ser” (Lovejoy, 1933) con reyes y obispos en la cima, caballeros y señores por debajo de ellos, seguidos por los propietarios de tierras y comerciantes y, en la base, estaba la mayoría de la población y campesinos. Esta era una cadena tanto sobre quién tenía la autoridad para hablar y decir la verdad y quién no, como de valor interno. Se trataba de quién debía escuchar a quién. En la base, los campesinos escuchaban a todos los demás y no hablaban con autoridad a nadie.

La escritura creó un nuevo desafío a la autoridad y dio un nuevo golpe a la igualdad. Cuando alguien habla, la autoridad puede identificar fácilmente y alcanzar a esa persona para imponer su poder. Sin embargo, cuando se trata de alguien que escribe en una pared, un edificio o

un trozo de papel, estos pueden ser anónimos y para cuando las autoridades lean lo que escribieron, ya ellos pueden estar a kilómetros de distancia.

La escritura volvió a ofrecer la posibilidad de que todos pudieran ser a la vez productores (escritores) y consumidores (lectores). Además, esto ofreció a las personas la capacidad de enfrentarse a la autoridad desde el anonimato y desde lejos. Cuando llegó la imprenta, las posibilidades simplemente se ampliaron infinitamente, ya que ahora los libros podrían producirse de manera más fácil, fabricarse de forma más barata y distribuirse a muchas más personas. No obstante, la alfabetización nunca estuvo destinada a funcionar así, salvo en circunstancias especiales.

Tanto en el caso de los manuscritos como en el de los libros impresos, la lectura estaba restringida en la mayoría de los países a las personas acomodadas, educadas y poderosas hasta la época moderna, (Graff, 1979, 1987). Cuando países como Suecia lograron la lectura casi universal (en el siglo XVI), se fomentó la lectura para que todos pudieran leer la biblia, los ministros visitaban los hogares para asegurarse de que todos estaban leyendo “correctamente” (Johansson, 1977). En las sociedades modernas, incluso cuando la lectura se hizo casi universal, la escritura se extendió mucho más lenta y nunca llegó a ser universal. En la actualidad, muchas personas no pueden escribir tan bien como leen. Casi desde el principio de la impresión, las imprentas y editores controlaron lo que se podía publicar oficialmente (a menudo junto con las autoridades estatales). Una vez más, la gente común fue destinada a consumir (leer) y no producir (escribir y desde luego no publicar).

De nuevo, los medios digitales nos ofrecen una oportunidad para la igualdad, al permitir a todos ser productores además de consumidores. Con los medios digitales, las personas a menudo pueden evitar las instituciones oficiales y la supervisión para producir sus propios medios, conocimientos, productos, servicios y textos. Ellos pueden distribuir fácilmente sus producciones

en todo el mundo. Ellos pueden hacer anuncios, películas y videojuegos para competir con los “profesionales” o para criticar a las fuentes “dominantes”. A través del internet, incluso las personas que alguna vez fueron consideradas “marginales” o no “convencionales” pueden encontrar a muchos otros como ellos en todo el mundo y agruparse. Las personas sin credenciales oficiales pueden debatir con los que sí la tienen y competir con ellos para producir conocimientos e ideas.

Dado que sabemos que, tanto con el lenguaje oral como con la alfabetización, la capacidad de los que no tienen poder para producir y no solo consumir se vio limitada, restringida y vigilada, aunque nunca con éxito total. Y podemos sospechar que surgirán fuerzas para frenar la marea de producción y participación cotidiana que han desatado los medios digitales además desospechar que surgirán fuerzas para frenar la marea de producción y participación que los medios digitales han desencadenado. Tales medios son todavía lo suficientemente nuevos en cuanto a la forma que adoptarán estos controles pues no está del todo claro, ni siquiera para los poderosos; tampoco podemos estar seguros de que esta vez la igualdad no se imponga.

La igualdad es un gran problema para todos nosotros, no solo para aquellos que quieren tener el poder sobre los demás. Si todos tienen un punto de vista y la capacidad de expresarlo (o escribirlo), en un grupo lo suficientemente grande, no habría tiempo ni atención suficiente para que todos sean escuchados. No todo el mundo puede conseguir una audiencia significativa y aquellos que sí, ganarán más estatus y poder. Ciertamente, hasta ahora, la igualdad y la verdad no han sido determinadas por sí mismas, ni quién obtiene una gran audiencia, estatus y poder.

El mismo problema surge de una forma aún más dramática con los medios digitales, ya que hoy, las audiencias pueden ser globales. En una época en la que todos pueden producir y atraer a todo el mundo por una audiencia; algunas personas ganan una audiencia grande y algunos no. Esto es debido a que ninguno de nosotros podemos prestar atención ni siquiera a una pequeña

fracción de la producción, información y comunicación que circula actualmente en nuestros medios globales e interconectados.

Sin embargo, es cierto que gracias a lo grande que es el público potencial en estos días (a saber, todos con un dispositivo informático, móvil o no y una conexión a internet), incluso las pequeñas causas, los chiflados y las personas con habilidades y conocimientos poco comunes pueden encontrar una audiencia significativa, aunque no masiva. Todos los que aman hacer cabezas de muñecas con huesos de aguacate, pueden encontrarse el uno al otro en todo el mundo y agruparse como "personas como nosotros" o "personas con una pasión compartida" (que otros no entienden). Antes se sentían solos entre los que pensaban que eran raros, especiales o marginales.

Esta capacidad de conseguir un público en absoluto, aunque no sea masivo, es en muchos aspectos buena y hay que alentarla y aplaudirla. En la actualidad, las personas que padecen de enfermedades raras o que tienen causas perdidas pueden encontrar y obtener el apoyo de los demás. Los jóvenes pueden conseguir lectores para sus ficciones de fans alrededor del mundo. Su número de lectores no se comparará con el de los autores populares publicados, pero a menudo no les importa, ya que escriben por amor a ello y adoran tener lectores.

Sin embargo, también existe una desventaja potencial. A medida que aumenta la capacidad de las personas para encontrar a otros con los mismos intereses o pasiones, también aumenta el número de grupos. Las personas pueden dividirse e incluso polarizarse en torno a sus pasiones, valores e incluso puntos de vista políticos favoritos, comunicándose solo con otros que comparten sus pasiones, valores y puntos de vista. La ironía es que en un mundo en el que todos pueden producir y encontrar una audiencia, "todos" se convierten no en un verdadero espacio público o civil, sino en un montón de grupos "haciendo lo suyo". La igualdad se ve aún más

comprometida en este mundo cuando algunas personas tienen mejor acceso que otros a los grupos cuyos intereses o pasiones conducen a un mayor estatus y éxito en la sociedad.

Hoy, a pesar de la proliferación de grupos en internet y de la fuerte polarización política en Estados Unidos y en algunos otros países (causada en parte por el crecimiento de los medios de comunicación y de los sitios de grupos que permiten que todo el mundo personalicen lo que oyen solo con lo que ya creen), hay muchos casos en los que personas de diferentes grupos han utilizado el internet y los medios sociales para participar en causas públicas a gran escala, ya sea luchando contra dictadores o ayudando a personas en catástrofes. Queda por ver cómo se desarrollará la tensión entre la tendencia a dividirse en muchos grupos diferentes y cargados de valores y la oportunidad de que las personas se organicen para grandes causas de forma más espontánea que nunca.

Tenemos esperanza y miedo. La esperanza de que la diversidad y lo común, así como la producción y el consumo puedan finalmente encontrar un matrimonio feliz. El miedo a que se reestablezcan el control sobre los productores cotidianos, a que los grupos se dividan y polaricen, y a que la causa común y la esfera pública (tanto a nivel nacional como mundial) se erosionen o pasen a estar dominadas únicamente por la élite tecnológica.

Existe un punto crucial que queremos señalar antes de que los lectores comiencen este libro en serio. En la actualidad es popular que las personas escriban libros para decir que algún aspecto de los medios digitales (las redes sociales, el internet, los videojuegos, etc.) es malo o está arruinando nuestra cultura o poniendo en peligro nuestra civilización (por ejemplo, entre muchos otros, Bauerline, 2008 o Carr, 2010). Y otros piensan que los medios digitales son una panacea, por ejemplo creen que con solo dar a los niños pobres computadoras e internet, podríamos cerrar la brecha en el rendimiento escolar entre los ricos y los pobres (pero véase Stross, 2010).

Ninguna tecnología (libros, televisión, computadoras, videojuegos o internet) hace por sí misma a las personas buenas o malas, inteligentes o tontos. Estas tecnologías tienen efectos solo en términos de cómo, cuándo, dónde y por qué se utilizan. Además, tienen efectos diferentes en diferentes contextos de uso. Pueden ser fuerzas para el bien o para el mal. Una computadora conectada a internet en manos de un niño con buena asesoría es a menudo una fuerza para el aprendizaje, aunque puede que no lo sea en otras circunstancias. Por tanto, la verdadera cuestión es social, es decir, quién tiene y quién no tiene asesoría, no la tecnología por sí sola. Lo mismo ocurre con los libros y el lenguaje, como veremos.

El Nuevo Testamento (Juan 1:1) dice: “En el principio era la Palabra, y la Palabra estaba con Dios, y la palabra era Dios”. Para los humanos, esa primera palabra fue pronunciada. El lenguaje oral es nuestro don original, el lenguaje escrito llegó mucho más tarde y los medios sociales aún más tarde. Durante siglos, por medio del espíritu o el alma y la lengua que hablaban con su humanidad única, las personas identificaron el aliento con el que hablamos. Después, el lenguaje escrito lo congeló, permitiéndolo viajar a lo largo y ancho, además del crecimiento de ciudades, imperios e instituciones. Sin embargo, los medios digitales lo han descongelado de nuevo, creando una voz que puede viajar lejos y rápidamente entre “las personas comunes” y, para bien o mal, desafiar el poder de los expertos, imperios e instituciones. ¿Qué pasará? Solo el futuro lo dirá.

2

LENGUAJE

¿Qué es el lenguaje?

La palabra “lenguaje” puede significar diferentes cosas. Una forma en que podemos pensar sobre el lenguaje es como algo que está en nuestras cabezas. Podemos pensarlo como un

set de “reglas” en nuestras mentes o cerebros que nos dicen cómo hablar “gramaticalmente”. En este sentido, el lenguaje es un fenómeno cognitivo (Clark, 1996).

También podemos considerar el lenguaje como algo físicamente presente en el mundo. Está presente en forma de habla, grabaciones de audio y escrituras. En este sentido, el lenguaje es un objeto material.

Otra posibilidad es que podemos considerarlo como un conjunto de convenciones sociales compartidas por un grupo de personas sobre cómo comunicarse (Duranti, 1997). Más bien, esto es como el béisbol, ya que se basa en un conjunto de reglas y mientras éstas están en las cabezas de las personas y en los libros, lo que más importa es que las personas las siguen cuando están jugando el juego.

Por supuesto, las convenciones del lenguaje oral no están realmente en un libro de reglas de ningún tipo. Algunos libros de gramática nos cuentan cómo creen sus autores que las personas deberían (pero no siempre) hablar, mientras que otros libros buscan describir cómo realmente las personas hablan. Los niños no leen libros de ningún tipo para aprender a hablar.

Las convenciones que los niños aprenden a seguir al hablar son sociales (Halliday y Hasan 1989). Son sociales en el sentido de que nos damos cuenta de ellos, en gran parte, imitando a otras personas (aunque con alguna variación).

El lenguaje se puede considerar como algo cognitivo, material o social, pero es por supuesto, todos estos al mismo tiempo. Además, es tanto individual como social. Parece que el lenguaje nos pertenece como individuos (algo que podemos utilizar de distintas maneras) y, sin embargo, también parece estar moldeado por convenciones sociales que están más allá de nuestro control individual. Como individuo, puedo decir lo que nadie ha dicho antes: mi lenguaje, mi manera de comunicarme, parece ser mío. Por ejemplo, puedo decir: “Las vacas azules condenan la metafísica los martes” y probablemente, esto no lo haya dicho (ni escrito) nunca nadie antes.

Al mismo tiempo, mi lengua (inglés) estaba aquí mucho antes de que yo llegaré a la escena. Muchos otros lo han utilizado antes que yo y yo sigo en gran medida las mismas convenciones que otros han seguido. Utilizo muchas palabras y frases que he escuchado o leído antes. Por consiguiente, cuando dije “Las vacas azules condenan la metafísica los martes” seguí un patrón gramatical que otros angloparlantes han seguido durante mucho tiempo (Sujeto-Verbo-Objeto). Además, me influyó una frase que el lingüista Noam Chomsky (1957:15) una vez escribió (logrando prácticamente el mismo punto que yo estaba tratando de hacer con mi oración “novedosa”: las personas pueden decir cosas totalmente novedosas): “Las ideas verdes duermen furiosamente”. Cuando escribí mi frase, pensé que “condenar la metafísica” era bastante novedoso, pero después me di cuenta de que la frase tiene 151 visitas en Google.

Lo sepa o no, el lenguaje de otras personas está dentro de mi cabeza. Visto de esta manera, el lenguaje es un recurso comunitario del que todos pedimos, tomamos prestado y robamos. Las personas hablan como los demás y, sin embargo, cada uno de nosotros tenemos nuestro propio estilo único (Bakhtin 1981, 1986).

Lenguaje oral y escrito

A menudo, distinguimos entre “lenguaje oral”, “lenguaje escrito” y “lenguaje” (como un término que incluye tanto el lenguaje oral como escrito). Incluso podemos utilizar el término lenguaje para “lenguas” que no son humanas, como en “el lenguaje de las abejas” o si son humanas, lenguajes que no son “naturales”, como en “el lenguaje de las matemáticas”.

Para los humanos, el lenguaje fue oral mucho antes de ser escrito. El lenguaje oral ha existido desde los albores de la humanidad. Por otro lado, el lenguaje escrito se inventó mucho más recientemente, las estimaciones oscilan entre los 3000 hasta 8000 años antes (Sampson, 1990), y solo fue inventado por unas pocas culturas diferentes (Goody, 1986, 1988).

Todos los grupos humanos tienen lenguaje oral, pero no todas las culturas han tenido o tienen, incluso, un lenguaje escrito. El lenguaje oral fue la primera y principal forma del lenguaje. Distinguir entre el lenguaje oral y el escrito y, pensar en el lenguaje oral como en cierto sentido, algo primario, es necesario para identificar los rasgos distintivos de cada uno.

¿Quién o qué creó el lenguaje?

Sabemos que las personas inventaron las convenciones del béisbol conscientemente (por eso las llamamos “reglas”). Ellos también acuerdan en cambiarlas de manera consciente y tras una discusión abierta. Dadas estas reglas, algunas personas son buenas en el béisbol y otras no.

El lenguaje no es como el béisbol en ninguno de estos aspectos. Ningún grupo de humanos se reunió y decidió conscientemente cuáles serían las convenciones (o reglas) del lenguaje. Además, todos los humanos son buenos aprendiendo su primera lengua y pueden aprender cualquier otra lengua del mundo con la misma facilidad con que aprendieron el primero (Chomsky, 1989; Pinker, 1994).

Todas las lenguas humanas comparten propiedades de diseño básico (Chomsky, 1957, 1986; Comrie, 1981; Greenberg, 1978). Todos ellos tienen vocales, consonantes y sílabas. Todos ellos tienen sustantivos, verbos, oraciones y cláusulas gramaticales. Todos ellos tienen “recursividad” (la posibilidad de crear oraciones cada vez más largas insertando una frase o cláusula en otra, como en: “John piensa que Mary cree que Sue afirmó que Bob le advirtió a Jane de no creer que los chimpancés son nuestros antepasados”; evidentemente esto podría continuar para siempre). Todas las lenguas pueden formular preguntas, hacer afirmaciones y dar órdenes y, las formas en que ellos hacen estas cosas son similares en algunos aspectos. Hay otros universales lingüísticos aún más profundos que quedan fuera de nuestro alcance.

Es muy probable que todas las lenguas humanas se hayan desarrollado a partir de una lengua original. Durante un largo periodo, a medida que los diferentes grupos de humanos se

extendían alrededor del mundo y se comunicaban solos entre sí; esta lengua original cambió de diferentes maneras en distintos lugares. Esto dio lugar a la gran diversidad de lenguas humanas que vemos actualmente y que alguna vez fue aún más rica (antes de que se extinguieran tantas lenguas).

El lenguaje evolucionó como una capacidad en los seres humanos junto con el crecimiento de las culturas humanas. No sabemos cómo fueron las primeras etapas del lenguaje humano, ya que no quedan lenguas tempranas o “primitivas”. Todas las lenguas humanas son complejas y las habladas por culturas sin alfabetización no son sintácticamente menos complejas que las habladas por culturas con alfabetización (Gee, 2004; Pinker, 1994).

Salvo graves discapacidades o problemas sociales, todos los humanos adquieren el lenguaje como una base central o básica de su humanidad. La forma de lenguaje que adquieren podemos llamarla "vernáculo" (Gee, 2004). Una variedad vernáculo del lenguaje es la forma de lenguaje que las personas utilizan en su “diario” vivir cuando no están hablando como especialistas o expertos de ningún tipo. Incluso los expertos hablan una variedad vernáculo de su lenguaje cuando no están hablando o actuando como expertos.

El estilo vernáculo de las personas varía según el dialecto (así, la forma vernáculo del inglés es diferente en distintas partes del país o entre distintos grupos sociales). Sin embargo, la variedad vernáculo de todo el mundo es igualmente de compleja e inglesa (o de cualquier otra lengua que haya adquirido).

A lo largo de la historia, las personas han inventado nuevos estilos de habla y de escritura para fines especiales específicos. Ellos tenían un trabajo específico que hacer y diseñaron cambios a la lengua para conseguirlo. Las variedades de una lengua utilizan recursos gramaticales de las variedades vernáculo, pero son variedades especializadas que no todo el mundo aprende o conoce (mientras que todos tienen una variedad vernáculo).

Así, por ejemplo, imagina que una cultura quiere realizar algún tipo de ritual religioso. Han diseñado (culturalmente) ciertas ceremonias, entornos y artefactos para sus rituales. También pueden diseñar cambios en su lenguaje para poder utilizarla en sus rituales, pues como ellos utilizan sus ceremonias, ambientes y artefactos. Y crean un "lenguaje religioso" o un "lenguaje ritual", como formas de utilizarlo con fines rituales o religiosos.

Más adelante en la historia, las personas (como grupos, culturas, sociedades, instituciones e incluso clubes) han creado un número masivo de lenguajes. Ellos han cambiado su lenguaje básico para dedicarse a las variedades lingüísticas de las matemáticas, la ciencia, el derecho, la medicina, la ingeniería, el diseño de juegos, el fandom del anime y muchas otras cosas.

En resumen, el lenguaje se desarrolló como una capacidad en los humanos (y no en otros animales) en el curso de la evolución humana, luego fue transformado por las culturas al inventar nuevas variedades de lenguaje para fines especiales. Los niños adquieren una variedad vernácula de su primera lengua como parte del proceso de socialización en sus familias y comunidades. Ellos son igualmente de buenos en esto, ya que el proceso está parcialmente controlado por su capacidad biológica de adquirir lenguas, una capacidad especial de los humanos. Más adelante, todos los niños tienen que aprender las variedades especializadas del lenguaje, como el lenguaje de los físicos o de los carpinteros, más abiertamente y con más variaciones entre los aprendices.

Lenguaje oral

Acabaremos argumentando en este libro que los medios digitales son una fuerza poderosa, no para disminuir la importancia del lenguaje, sino para "subir de nivel" o mejorar el lenguaje. Además, los medios digitales "potencian" (mejoran y amplían) las capacidades que el lenguaje ya tiene, y le dan nuevas capacidades o nuevos poderes. De ese modo, están haciendo con el lenguaje lo que las culturas humanas han hecho siempre desde que heredaron el lenguaje.

Pero ahora, de nuevo, es importante detenerse y hablar de lo que entendemos por "lenguaje". El lenguaje surgió primero como habla (lenguaje oral). El lenguaje oral es la forma original y primaria del lenguaje, además, fue el que evolucionó en la especie humana.

El lenguaje oral surgió hace mucho tiempo, lo suficiente para que la evolución lo transformara. Sin embargo, a diferencia del lenguaje oral, la escritura no fue así. La escritura es una invención relativamente reciente (Goody, 1986, 1988). Por consiguiente, no ha existido el tiempo suficiente para ser un producto de la evolución. Fue una invención puramente cultural (¡como lo es el lenguaje de las matemáticas o el de Yu-Gi-Oh!). Fue una invención de muy pocas culturas que luego se extendió a otras. Inicialmente, todas las culturas y la mayoría de las culturas históricamente eran "culturas orales" en el sentido de que no tenían escritura. De hecho, todavía existen algunas culturas orales en la actualidad.

Durante la mayor parte de la historia humana, el lenguaje oral se utilizaba para la comunicación cara a cara, en donde las personas eran copresentes entre sí en el espacio y el tiempo. No obstante, piensen en qué pasó cuando los seres humanos inventaron la tecnología de grabación de audio. Ahora las palabras habladas se podrían usar para la comunicación a través del tiempo y el espacio, cuando las personas no estuvieran cara a cara o copresentes. Incluso podrían escuchar la voz grabada de una persona muerta.

Los teléfonos celulares también permitieron a las personas hablar y responder a distancia (aunque no si estaban muertos). En la actualidad, el chat de voz a través de computadoras (en un juego como World of WarCraft o en algo como Skype) permite a las personas hablar con otras de todo el mundo en tiempo real en grupos pequeños o grandes sin estar físicamente copresentes. Si le añadimos video al chat de voz, obtenemos una nueva forma de copresencia a distancia. Es todo lenguaje oral, pero muy mejorado y potenciado en comparación de "comunicación copresencial cara a cara en el espacio local y en el tiempo".

Aunque son mejoras y potenciadores en algunos sentidos, estos cambios tecnológicos en el lenguaje oral implican pérdidas. Veremos que todos los cambios tecnológicos implican tanto ganancias como pérdidas. Una persona puede hablar en una cinta, pero precisamente no podemos hablar con esa persona. No se les pueden desafiar y no pueden responder. Por estas razones, se ha perdido una propiedad dialógica de la comunicación cara a cara. Los teléfonos celulares pierden las señales visuales e incluso el chat de voz con video mejorado pierde parte de la sincronización y la personificación cercana que es importante para la comunicación cara a cara.

Por supuesto, no hemos renunciado a la comunicación local copresencial cara a cara y seguimos cosechando sus beneficios. Sin embargo, las nuevas formas de comunicación mejoradas tecnológicamente cambian la "ecología" de esa comunicación local copresencial cara a cara. Por ejemplo, muchas personas pasan más tiempo hablando con personas del otro lado del mundo a través de chats de voz, Skype (programa de software de teleconferencia) y salas de chat que hablando con sus vecinos en la forma de comunicación local copresente cara a cara.

En el próximo capítulo analizaremos más a fondo la naturaleza del lenguaje oral. Allí argumentaremos que "oral" no es realmente una palabra adecuada en este caso. También hay lenguas humanas (que tienen todas las características del diseño original de la lengua) que no son por medio del habla, sino por medio de señas. Todos podemos pensar con el lenguaje en nuestra mente y no decirlo (aunque pensar el lenguaje es algo así como decirlo mentalmente o usando señas para uno mismo).

La base espacial del significado en el lenguaje y el pensamiento

Cuando el lenguaje evolucionó en el ser humano, ¿cuáles fueron sus propiedades fundamentales o esenciales? Los orígenes del lenguaje se remontan a un tiempo tan lejano que no sabemos casi nada de ellos. Los primeros humanos eran cazadores y recolectores, y seguramente, cuando surgió el lenguaje, lo utilizaban para comunicarse cara a cara y para hablar del aquí y

ahora y de las cosas físicamente presentes a su alrededor ("Mira, antílope, allí" acompañado de un gesto). Este aspecto del aquí y ahora es, y siempre ha sido, la base del lenguaje humano.

Con certeza, los primeros seres humanos no se sentaron alrededor del fuego a hablar de metafísica o de los matices emocionales (o la falta de ellos) del cerebro masculino. Por adoptar una conocida frase de Thomas Hobbes, la vida en esos primeros tiempos era "desagradable, brutal y corta". Nuestros antepasados se centraban en la supervivencia y es casi seguro que el lenguaje primitivo solo se utilizaba para comunicar asuntos concretos en el aquí y ahora, no asuntos abstractos.

Así pues, una función inicial del lenguaje era permitir a los seres humanos hablar de cosas concretas en el aquí y el ahora mientras estaban cara a cara con los demás. El gesto fue probablemente un importante acompañante del lenguaje en ese momento (como lo sigue siendo hoy). Llamemos a esto como Spatial Property of Language. Una propiedad fundamental del lenguaje es su uso para la comunicación cara a cara sobre cosas concretas en el aquí y ahora.

A medida que el lenguaje fue evolucionando y finalmente fue transformado por la cultura humana, esta Spatial Property original se hizo más poderosa de una manera interesante. Los humanos aprendieron a hablar de cosas abstractas y mentales, y lo hicieron hablando de ellas como si fueran cosas en el espacio y el tiempo. A través del lenguaje, las personas comenzaron a tratar cosas que no son realmente concretas y en el aquí y ahora como si lo fueran, a través de la metáfora (Anderson, 1971; Lakoff, 1987; Lakoff y Johnson, 1980; Lyons, 1977). Las personas también piensan en cosas abstractas como si fueran concretas, ya que la gente suele utilizar el lenguaje para pensar (Lakoff, 1987). Al hablar y pensar, las personas pasan de lo concreto a lo abstracto.

Por ejemplo, cuando digo "perdí mis llaves", estoy hablando de una cosa física en el espacio. Cuando digo "perdí la cabeza", "perdí mi integridad", "perdí el hilo de mis

pensamientos" o "perdí las elecciones", estoy hablando de cosas más abstractas que mis llaves y no físicas (o al menos de una cosa física simple) como mis llaves. Todas estas son metáforas. Tratamos las mentes, la integridad, el pensamiento y las elecciones como si fueran cosas que puedo extraviar en el espacio (Lakoff 1987; Lakoff y Johnson 1980). Hay muchos ejemplos de estas metáforas espaciales:

Físico

Se me cayeron las llaves.

¡Tira el arma!

Me fui de casa.

Volví a casa.

Exploré el parque.

Moví el libro.

Encontré un billete de un dólar.

Me resbalé en el hielo.

John creció 15 centímetros.

Gané en estatura (altura).

El taxi me llevó a casa.

No hay nada en la caja.

Empujé el carro.

Los pájaros vuelan.

Abstracto o mental

La idea simplemente se me salió de la cabeza.

¡Deja ese tema!

Me volví loco.

Volví a mis cabales.

Exploré el álgebra.

El discurso me conmovió

emocionalmente.

Encontré la verdad.

La idea se me escapó.

John creció como estadista.

Gané en estatura (reputación).

Me vuelve loco.

Nada está en su cabeza.

Yo fomenté la idea.

Esa propuesta no va a volar.

Con el tiempo, el Spatial Property (la capacidad de hablar de cosas concretas en el aquí y ahora) fue también la base para hablar de cosas mentales y abstractas a través de metáforas. Una

vez que los humanos dieron con este truco metafórico de hablar de cosas mentales y abstractas como si fueran cosas en el espacio y el tiempo, estaban en el camino de poder hablar de metafísica, de mentes y de los matices emocionales (o la falta de ellos) del cerebro de los hombres. El paso de hablar de cosas concretas en el aquí y el ahora a hablar de cosas mentales y abstractas fue un paso importante en el desarrollo de la mente, la cultura y el lenguaje humano.

En este libro hablaremos de muchos otros cambios importantes en el lenguaje. Veremos cómo el lenguaje se vuelve más poderoso, igual que cuando se utilizaban metáforas espaciales para hablar de cosas abstractas y mentales. Veremos que los medios digitales están provocando importantes cambios en el lenguaje; pero la mejora más poderosa del lenguaje en la historia de la humanidad fue la alfabetización: el lenguaje escrito. Al igual que los medios digitales, la alfabetización es una tecnología y, hasta ahora, sus efectos empujan los de los medios digitales; una de las claves que los medios digitales han transformado y transformarán el lenguaje es la transformación o sustitución de la alfabetización en diversos ámbitos y prácticas. En el próximo capítulo hablaremos de la alfabetización.

Estar personificado y situado

Aunque la creencia popular era que los humanos pensaban a través de abstracciones y generalidades, en realidad, los humanos piensan a través de imágenes y experiencias (Clark, 1989; Gee, 2004). Considere la diferencia entre "El café se derramó, vaya a buscar un trapeador" y "El café se derramó, vaya a buscar una escoba" (Clark, 1989). Para entender estas frases es necesario recordar un mundo de experiencias, no solamente definiciones de palabras.

Cuando necesitamos entender abstracciones, o cosas que son demasiado pequeñas, demasiado grandes o complejas para que las percibamos o entendamos fácilmente, a menudo recurrimos al poder de las metáforas para describirlas. Por ejemplo, vemos una célula biológica como una pequeña habitación llena de pequeñas máquinas que fabrican cosas. Nos imaginamos

el interior de un átomo como si estuviera compuesto por pequeños planetas que orbitan alrededor de un cuerpo central (el núcleo). Imaginamos el ADN como si fuera el plano de una casa.

Nuestras metáforas pueden meternos en problemas, pero, sin embargo, son a menudo esenciales para la comprensión humana. Los modelos de los científicos son con frecuencia como metáforas, por ejemplo, el modelo de alambre de la doble hélice del ADN, un modelo de avión en un túnel de viento, un diagrama de las fuerzas que inciden en un objeto en movimiento, la imagen de un árbol ramificado para representar la evolución.

Para los seres humanos, la comprensión en el pensamiento y el lenguaje es, ante todo, personificada y situada. Vemos y entendemos las cosas a través de la perspectiva de nuestros cuerpos (encarnados) y en términos de contextos específicos y variaciones entre contextos (situados). Para los seres humanos, comprender cosas muy pequeñas (como los átomos) y muy grandes (como las galaxias) es difícil, ya que están más allá de nuestros medios ordinarios de percepción. Nos resulta mucho más fácil entender cosas que están más accesibles a nuestros sentidos. En cambio, para entender lo muy pequeño y lo muy grande, hemos tenido que inventar herramientas muy especiales.

Nos hemos liberado, aunque solo en cierto sentido y con limitaciones reales, de nuestros cuerpos, de la concreción y del aquí y ahora. Disponemos de herramientas para tratar la abstracción que ya no están ligadas a la metáfora (por ejemplo, varias ramas de las matemáticas). La tecnología que más nos liberó del aquí y ahora fue la alfabetización. Además, permitió el lenguaje desvincularse de la conversación entre humanos en contextos específicos de uso y permitió la invención de lenguajes especializados para tratar cosas abstractas y complejas.

Los medios digitales (como los mensajes de texto, la red social Twitter y otras redes sociales) están, en cierto modo, devolviendo al lenguaje sus fundamentos conversacionales, interactivos del aquí y ahora. También están devolviendo las imágenes y experiencias concretas,

así como las metáforas, para comprender lo abstracto y lo complejo. Por ejemplo, a través de las simulaciones y los videojuegos. Pero lo hacen de forma muy diferente a como lo hacía el lenguaje oral.

Con los medios de comunicación social y los mundos virtuales actuales, las personas pueden “chatear” (por escrito o por chat de voz) con otros alrededor del mundo. En una nueva manera, estas interacciones son personificadas, situadas y cara a cara.

Los medios digitales también crean nuevas maneras de utilizar los modelos y metáforas para el entendimiento. En una simulación o un juego, ellos nos permiten convertirnos en un electrón y movernos por un campo electromagnético, ser un virus que entra en un cuerpo, el líder de una manada de lobos o una luciérnaga que le hace señales a su pareja. La escala de nuestros cuerpos humanos ya no es la limitación que era antes. Podemos utilizar simulaciones y juegos como modelos o metáforas para el entendimiento (Gee, 2007b, 2007c).

Con la alfabetización, el lenguaje se separa de los cuerpos, pero con los medios digitales, a menudo, el cuerpo regresa, pero de forma desplazada y virtual. Entendemos un campo electromagnético a través de una experiencia concreta personificada, pero nuestro cuerpo (sustituto) es un electrón. Además, comprendemos la guerra moderna en campo de batalla, pero el campo es virtual, y el cuerpo es un avatar que controlamos a través del espacio y tiempo de manera virtual.

El lenguaje vuelve al paisaje de la voz, al aquí y al ahora, a las comprensiones concretas personificadas, a las imágenes y metáforas, y a las interacciones individualizadas "cara a cara", pero se trata de un paisaje diferente al anterior.

3

Alfabetización

“Qué es el lenguaje? ¿Qué es la alfabetización?”

La palabra "alfabetización" se utiliza de muchas maneras diferentes y, nosotros lo utilizaremos en un sentido estricto y tradicional. Por "alfabetización" nos referiremos a la lectura y a la escritura del lenguaje humano.

Los usos más amplios del término (por ejemplo, "alfabetización informática", "alfabetización emocional", "alfabetización científica") están bien para otros fines. Sin embargo, en este libro, mantenemos la noción de la alfabetización estricta y tradicional para que podamos entender primero el papel de la alfabetización y luego el de los medios digitales en el cambio del lenguaje. Es importante entender cómo la alfabetización como tecnología, ha influido en el lenguaje para entender después cómo los medios digitales como tecnologías, influyen en el lenguaje.

Antes de poder hablar de forma coherente acerca de la alfabetización, necesitamos (quizá sorprendentemente) tener en claro qué entendemos por "lenguaje oral". Irónicamente, el lenguaje oral no siempre es oral (audible, hablado). Como hemos mencionado en el capítulo anterior, podemos hablar con nosotros mismos en silencio y a menudo utilizamos el lenguaje para pensar (lo que puede ser en sí mismo una forma de hablar en silencio).

La lengua de signos americana (ASL) es por medio de señas, no por medio del habla, pero es una lengua real tal como el inglés o el español (Gee y Goodhart, 1988; Grosjean & Lane, 1980). Por cierto, no estamos hablando del "inglés de signos", sino del ASL adquirido como lengua materna por los niños con pérdida de la audición.

Ya sea el lenguaje que se habla a otros en voz alta o a uno mismo en silencio, es inherentemente interactivo o dialógico. Si me digo o pienso: "¿Hay alguna razón para que me presente hoy?", la propia forma de mi enunciado silencioso es una pregunta que invita a una respuesta, es decir, a una respuesta a la pregunta, que, por supuesto, podría o no darme a mí

mismo. Si me digo o pienso: "Ese tipo es realmente un tonto", mi enunciado silencioso es una afirmación que invita a responder a preguntas como "¿Cómo lo sabes?" "¿Estás siendo demasiado duro con él?", etc. De nuevo, pueda que me salte la respuesta o entable un diálogo interno, pero el lenguaje está hecho para ser interactivo e invitar ciertos tipos de respuestas o diálogos.

Hablar es solo una forma de expresar el lenguaje, pensar es otra forma y hacer señas es otra forma más. Hablar, pensar y hacer señas son diferentes *sistemas de comunicación* del lenguaje, y no son en sí mismos un lenguaje. La alfabetización es otro sistema de comunicación del lenguaje y en sí misma, tampoco es un lenguaje. Entonces, ¿qué es el "lenguaje", esa cosa que se puede transmitir oralmente, mediante el pensamiento, por señas o por escrito?

El lenguaje es un conjunto de convenciones sociales sobre cómo combinar palabras, frases, cláusulas y oraciones para comunicar significados. Estas combinaciones gramaticales de palabras ("oraciones gramaticales") se transmiten o se expresan mediante el pensamiento, los signos o la escritura y la forma oral. El lenguaje es un "sistema" de convenciones sobre cómo elaborar significados que pueden expresarse o transmitirse de diferentes maneras.

Para los seres humanos, la forma original y primaria del lenguaje es el lenguaje en forma oral (o por medio de señas) a los demás (Gee, 2004, 2008a; Pinker, 1994). La escritura es una forma tardía y existe para transmitir el lenguaje que es o se puede pensar, expresar en forma oral o por medio de señas (Botha & Knight, 2009; Gee, 2004; Goody, 1986, 1988; Olson, 1996; Snow, 1991).

No todo el lenguaje en forma oral se puede expresar mediante sistemas de escritura. Por ejemplo, las subidas y bajadas del tono de voz que caracterizan los contornos de entonación en inglés no tienen símbolos sistemáticos en el sistema de escritura inglés. Tampoco los cambios de acento que distinguen una palabra como "registro" (Guardé un registro de nuestra conversación)

y "grabar" (No grabaré nuestra conversación). Ningún sistema de escritura puede captar todos los rasgos del habla (o del pensamiento o de las señas) que son relevantes para la comunicación y el significado.

La escritura es un sistema de comunicación secundaria, lenguaje que se puede pensar, expresar en forma oral, o por medio de señas. Para el resto de este libro, utilizaremos el término "lenguaje oral" para referirnos al lenguaje que se transmite mediante el habla, el pensamiento o por medio de las señas, y el término "lenguaje escrito" para referirnos al lenguaje que se transmite por la escritura. Decir que la escritura es secundaria no quiere decir que la alfabetización no sea importante, sino que el lenguaje oral es más fundamental para la alfabetización y su aprendizaje, más de lo que muchas personas creen (Gee, 2004; Hart & Risely, 1995; Heath, 1983; Scollon & Scollon, 1981).

Al afirmar que la alfabetización es un sistema de comunicación del lenguaje oral, y además secundario, puede parecer que se le resta importancia, pero, en realidad, no es así. Considere los automóviles que son un "sistema de entrega" para los seres humanos. En sí, los automóviles no son seres humanos, pero han cambiado radicalmente la forma en que los humanos actúan, interactúan, piensan, planifican y valoran. El impacto económico, cultural y medioambiental que han tenido en nuestras ciudades y en el mundo, es enorme. Lejos de ser triviales, ya que son "solo" un sistema de entrega, los automóviles son transformadores. Por eso, la alfabetización también ha transformado tanto el lenguaje como los seres humanos.

4.2 Translation from Spanish into English

Anatomy of the Language

Stories, curiosities, and why of the language

A project of
molino de ideas

VOX

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Cover design, layout, and prepress
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First edition: 2016
Langmenow, S. L.
LAROUSSE EDITORIAL. S. L.
Mallorca, 45, 2nd floor
08029 Barcelona
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www.vox.es

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ISBN:978-84-9974-213-7
DL: B-8922-2016
1E11

Of sun and of language

I was once asked why I am involved in directing scientific outreach programs. I replied in a certainly not very polite way but, in return, very effective way: with another question.

—Why does the sun shine?

The speaker, a man who is well-read and proud of his readings, smiled, cleared his throat uncomfortably, unnecessarily repositioned the rimmed glasses in the air, and replied to me saying that the sun is a star, no doubt about it, and that the stars are... in short... bright.

—I said yes, it is quite clear that the stars are bright, but why?

He had no choice but to surrender. I then explained to him that the sun's brightness is due to the nuclear fusions that take place inside it, and that the fact that something like this is not vox populi, not even among more or less educated people, more than justifies all the efforts to popularize science.

If we are concerned about the general lack of knowledge surrounding scientific knowledge, we should be no less concerned about the lack of knowledge surrounding language. Let's see. Why do we call the sun, sun, and not table or car or umbrella? Where do those and others come from? Why in the heck it is accepted by the Real Academia Española, and pifostio (mess) is not? Am I writing in a wrong way if I use pifostio (mess)? What the heck is pifostio (mess)?

Anatomía de la lengua answers all these questions and many others and does so in an original and amusing way. During and after reading it, you will surprise yourself by telling your friends anecdotes and jokes about language. And when you do, you will be doing your bit to the linguistics dissemination.

The authors of *Anatomía de la lengua* say that language is a living entity and that therefore, it should not be confined within the walls of academicism. There is no such thing as

“bad speech,” but only “different speaking” because just like the sun, language belongs to everyone, and like the sun, without it, neither you nor I would be here.

Jose A. Pérez Ledo

Columnist, novelist and science disseminator

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*The memory of Daniel Cabrera Espinar,
with great affection and gratitude*

Language, cadavers, and anatomy classes

Galen was a Greek physician who lived in the 2nd century AD. He was a tireless researcher who contributed to the scientific knowledge of that time with countless anatomical and physiological discoveries about human body. His work was outstanding, so his descriptions became reference works for medieval medicine in Europe. However, some of his descriptions were not accurate and contained errors, but they were more than understandable because during Roman times the dissection of human cadavers was strictly forbidden. Due to this, Galen and the anatomists of that time had to settle with dissecting pigs and other animals, and by extrapolate the anatomical arrangement they found to the human anatomy.

In medieval Europe, the dissection of human cadavers was permitted and was part of the education of physicians in the incipient universities. The professor would read aloud Galen's classical texts while dissecting the body in question. When there was a disagreement between the anatomy of the cadaver and Galen's text, the professor would solemnly proclaim: "The cadaver is wrong, not Galen." It was not until the 16th century that a young student, Vesalius, questioned the method of study of human anatomy in force at that time. Without considering the canonical texts, Vesalius began to dissect human cadavers and elaborated new descriptions based exclusively on his experience. His anatomical treatise *De humani corporis fabrica* revolutionized the study of anatomy because in it, he placed observation before veneration for the classical sources. The Renaissance had arrived in medicine and today, the humanist Vesalius is considered one of the fathers of the modern anatomy because he introduced the scientific approach to the study of the human body.

This anecdote from the medicine's history sums up quite well the difficulties we humans have in questioning our beliefs and our faith in authority's sources, even when reality clearly leads us to the contrary. Before the arrival of Vesalius, anatomy consisted of studying and

corroborating texts that were inevitably flawed and incomplete. In the Middle Ages, the only purpose of performing human dissections was to confirm what a man had said 1000 years before and, if the reality did not corroborate it, it was discredited before the source. Vesalius' revolution consisted in questioning that approach, which defended that studying a discipline consisted in venerating a text, instead of observing the reality.

Although in a very different field, the people who form *Molino de Ideas* share the Vesalian worldview. In the language field, there are still many positions defending an approach based on authority and tradition. Moreover, the worrying thing is that this way of understanding language is the one we have often been taught at school and it is also the majority approach in society. Usually, when news about language appears in the media, it is to warn of the bad use we make of the language, of the rampant impoverishment of Spanish, and of how careless we are as speakers. Underlying this notion (that language institutions tend to transmit, and the media are quick to amplify) is the idea that language is an immutable good created by divinity and that we humans have corrupted. In its secular version, instead of being a divine gift that we have broken, it is today's speakers who have betrayed are our glorious ancestors, who did express themselves with true correctness and decorum.

Language is much more than correction and blows on the head, and it is not a divine gift that we have perverted with our use. Language belongs to us, it is ours, no one has lent it to us. In addition, it is a collective creation made by all speakers, possibly one of the most democratic and fascinating works we humans have ever built, and we are losing it. While we spend our time arguing the validation of the word *empower* and tearing our hair out for the Anglicisms that come into the language every day, we are depriving ourselves of the immense pleasure in truly paying attention and understanding how we speak and why we speak the way we do. There is so much language to discover and to enjoy, that it is incomprehensible that correctness and doomsaying

positions are the only ones that dominate conversations about language. There is a beautiful logic that governs the functioning of language, and it has nothing to do with the usual considerations of good and evil. Furthermore, there is language far beyond the usual positions we hear from academics and traditional institutions. In fact, the most interesting language is to be found far from those spheres. Not everything is lost, apocalyptic positions are becoming a thing of the past, while more scientific and descriptive approaches are taking over the reins of the linguistic guild; however, we still have a lot of work to do.

Those of us who work in linguistics need these new approaches to reach the general public: we need to reclaim the language. In recent years, scientists have done an enormous job to bring science closer to the non-specialist population and we have seen magnificent initiatives to promote scientific dissemination: books, television programs, conferences, blogs, and even monologues. The scientific community has made a great effort and has ensured that the pleasure and curiosity that have led humans to do science do not live locked up in the laboratories and departments of prestigious universities. Those of us who work on issues related to language have, in the scientific community, a magnificent example of what remains to be done.

Taking linguistics to the street is a way of sharing the enjoyment of our discipline. We have to demonstrate that a field that often seems arid and boring is in reality understandable and fascinating for everyone. Linguistics dissemination is also the way to give back what belongs to society. Both because language belongs to the speakers and no one else, and because much of the research in our field is paid with public money; therefore, it must revert positively to the society that, with effort, has made it possible. As language researchers, dissemination is not only a vocation, but it must also be a moral obligation.

With *Anatomía de la lengua*, we want to retrieve Vesalio's spirit to approach language free of prejudices and with a scientific spirit. We also like to think that we are the heirs to a long

tradition of grammarians, lexicographers, linguists, and researchers who have approached language from different perspectives from each other, from the conventional and from prevailing views of the time. As some of those heterodox perspectives have been too often forgotten, we would also like this book to serve as a vindication of their work.

But, above all, what we want is that the reading of this book can be a colorful, enriching, and stimulating experience. In addition, that it gives rise to think, to debate, and to observe the language through different lenses than the ones we are used to. Many of the ideas expressed here are not new, at the end of the book there is a bibliography with academic references for those who want to go to the sources. Further, for those who want to dive further into the field of linguistic popularization, we have also included some readings and links on language that we particularly like and that are aimed for a non-specialist audience. However, many of the other things in the book are the product of our years of work and linguistic reflection, so we would be delighted to hear your impressions and opinions. We are at your disposal at anatomía@molinodeideas.es for anything you want to tell us; we are quite active in the cyberworlds, so it is easy to find us.

Although the book is divided into six conveniently numbered chapters, their reading does not necessarily be sequential. Readers are invited to choose the order that seems most appropriate or according to their interests. The chapters are quite independent, so it is not necessary to read one in order to move on to the next.

Let the dissection begin.

Chapter 1

Glasses to look at the tongue

The observed observer: a linguistic journey through space and time

The fascination for the nature of language is almost as old as language itself. At different times and in different places, language has been observed from very different points of view. If we take a walk-through history, we can see that the angle from which different mentalities have approached the study of language, is impregnated in each period with the spirit of its time. Like so many other things, it seems that when we look at language we inevitably do so through the glasses of our culture.

The day before yesterday

Panini, in addition of being a type of sandwich and the brand of reference for those of us who collected stickers in the 1990s, has the honor to be the author of the first recorded grammar. A work on Sanskrit dated around the fourth century BC. At that time and in India, the study of language was intimately related to religion and the interpretation of religious texts. That link between writing and the sacred almost seems to be a constant that is repeated here and there. Reciting mantras, invoking by means of ritual words, or accessing divine truth through the texts revealed by the corresponding god, are features found in many different beliefs and are not alien to us. According to our countryman, Cicero, the word religion itself derives from the Latin *relegere*, “to read again;” although, perhaps, understanding reading in a slightly broader and more transcendent sense than the literal one.

In India, people were inclined towards the religious approach, in Classical Antiquity, it was disturbing the relation between language and philosophy that troubled the Greco-Roman. They inaugurated the old controversy of whether language is an innate capacity that we bring as a matter of course (nature) or that we learn from our environment (culture). This question has been debated over the centuries and continues to the present day without having certainly clarified whether nature or culture predominates.

With the decline of the Roman Empire in medieval Europe, regional varieties of Latin began to take shape and eventually, by dint of evolution, European languages arose. Nobody likes to burn their idols, so leaving behind a prestige language to proudly embrace the new one, was a delicate transition. After the initial complexes of those who argued that there is no place like home and no language like Latin, some voices began to proudly claim the new vulgar languages. This is the case of the poet Dante Alighieri, at the beginning of the 14th century. With the arrival of the Renaissance, the first grammars of the vulgar languages appeared. In 1492, the same year that Christopher Columbus arrived in America, Antonio de Nebrija published the first grammar of the Spanish language. Coinciding with the expansion of the Catholic Monarchs empire (to the south, against the kings of Granada and what was left of Al Ándalus; to the west, in the incipient American colony), the Spanish language found in that first grammar a descriptive and unifying support. Grammars are not only works for scholars, but also worthy daughters of the political and social times that gave birth to them.

Antonio de Nebrija was not lacking in critics, perhaps the most famous was the humanist Juan de Valdés, who discredited him by arguing that Nebrija had no legitimacy to sign a Castilian grammar for "speaking and writing" like an Andalusian. The unjust stereotype about Andalusian's speech can be found already in the 15th century. In that way, Juan de Valdés, an enthusiast of the speech of Toledo, which he defended as the best Castilian of the kingdom, inaugurated another classic of linguistic disputes as eternal as they are sterile: where Spanish is best spoken.

We found, at the end of the 16th century, one of the most atypical and non-sufficiently vindicated figures in linguistics: Francisco Sánchez de las Brozas, aka the Brocense. A man ahead of his time who proposed a logical and systematic approach to the study of language based on reason, not only to describe the Castilian tongue, but also to get to a general grammar that

enunciate valid rules for all languages. His approach already foreshadowed the vision that the Port-Royal rationalist school in France would soon sustain, and even the scientific and universal vocation that language studies would take on from the 20th century onwards. Despite his visionary clarity, the Brocense was more valued abroad than in Spain, where to make matters worse, he was persecuted by the Inquisition in another shameful case of harassment of the most illustrious minds in our history. The truth is that the Brocense is not well-known outside the language specialist's guild, nor has he received the recognition he deserves.

With the 18th century and the Enlightenment came the founding of the Real Academia Española (Royal Spanish Academy; RAE by its initials in Spanish) and the first academic works. The historical prominence of the first RAE dictionary and those that followed has overshadowed the magnificent production of dictionaries that took place during that era. However, the truth is that there was much lexicographic life beyond the walls of the Academia. The 18th and 19th centuries were full of illustrious grammarians and forgotten lexicographers who had left us wonderful works and movie-like lives. Although, the cultural and political assumptions that permeate these works (necessarily, daughters of their time) are showing their gray hairs, it is difficult not to be caught by the enthusiasm for language, and the thirst for knowledge that they transmit. Manuel de Valbuena is the author of the tremendous *Diccionario universal latino-español*. For his part, Esteban Terreros created the *Diccionario Castellano con las voces de ciencias y artes*, an extensive quadrilingual work in four volumes of scientific and technical vocabulary.

In addition, it is noteworthy to mention Eduardo Benot, a mathematician, grammarian, and progressive politician committed with the protection of minors and education, that signed his complex and genuine *Diccionario de ideas afines*. Roque Barcia had a life worthy of a novel (he was excommunicated no less than sixty times during his life) and published two very interesting

dictionaries: an extensive etymological dictionary and another of synonyms, (frankly original, almost more of an essay than a dictionary) in which he discusses the differences in meaning and use of synonymous words.

One of the most personal and revolutionary dictionaries of the 19th century was Ramón Joaquín Domínguez's *Diccionario nacional* or *gran diccionario clásico de la lengua española*. Its definitions are not written with the impersonality and the apparent objectivity expected of a dictionary, but rather they are purely subjective and openly reveal the author's political sensibilities and personal views. His definition of the word *despotism* is very eloquent: "An anomalous and unjust government system, in which the rulers exercise power without subjection to the laws, or as their whim dictates, disregarding reason, the principles of equity and justice, and the sacred rights of men." This dictionary also expresses a frontal rejection towards RAE, an institution which he despised. The forcefulness with which he qualifies the academic definition of *self-love* is illustrative: "Self-love: the disordered love with which one loves oneself and one's things. (Acad.) What is disordered here is the academic definition, for it cannot be disordered that love which is at the same time a precept of nature and of the law of grace; thou shalt love thy neighbor as yourself. The natural love of ourselves is indispensable even for the preservation of life, that without, it would be indifferent to us. Therefore, we take the liberty of substituting the epithet of natural for that of disordered in the censured definition; although, we accept it as a synonym of selfishness, when self-love degenerates into this base and base sentiment.

Domínguez, who in addition to lexicography was also politically committed, died at the age of thirty-seven when he participated in one of the uprisings of 1848. The lexicographer Manuel Seco describes him as "the lexicographer who died fighting for his own definitions."

However, Felip Monlau is the winner in terms of multifaceted vocations: doctor, journalist, literary critic, professor, lexicographer, and, in addition, author of the first photograph

on record in Spain. A fully-fledged humanist who also contributed to the prolific lexicographic activity of the 19th century in the field of the Spanish language.

Romanticism brought with it the rise of interest in national identities and the cultural roots of the towns. In Europe, mostly in German and England, the first language comparison studies arose. They looked to establish possible parallels and kinship between languages. The observations of Sir William Jones precluded this new linguistic branch. It occurred to Jones, who was an English civil servant stationed in India, to compare the vocabulary and grammar of Latin, Greek, and Sanskrit and, by finding recurring parallels, he concluded that all three languages must have a common ancestor, which he assumed had to be Sanskrit, since it is the oldest from the three of them. It turned out that the conclusion was not entirely accurate; Sanskrit is indeed the oldest, but it would be a distant cousin who lived long ago, not exactly the mother of all languages. Nonetheless, reaching this conclusion led Jones to formulate that, in the same way, Spanish and Italian are sister languages as they have a common ancestor (Latin), it could be the case that geographically and temporally distant languages are branches of the same family.

Once the theory of Sanskrit theory had been rejected as the primordial mother of the entire genealogical tree, a new hypothesis was formulated: there was an undocumented common language even older than Sanskrit from which several languages derived, including Latin, Greek, and Sanskrit, which would explain the similarities between such distant languages. This common ancestor, which related a good part of the languages from India to the Atlantic, was called Proto-Indo-European. Although, some linguistics had already pointed in this direction in the 16th century, Jones' formulation was the one that triggered the comparative fever that spread throughout Europe during the 19th century.

William's ideological engine and of some of the comparativists was, in fact, religious: they assumed that there must have been existed a single ancestral language of divine origin that

humans would have corrupted up to the modern languages. The ideological background of those scholars who sought to discover the primordial divine language is not so far from the motivation that led Panini to write his grammar: 2300 years later, the notion of language as a divine gift corrupted by humans was still present.

Yesterday

In the heat of the comparative linguistics of the nineteenth century, more universalistic approaches to language were proliferated. It was not only sought was not only to describe the grammar of a language, but also to formulate general laws capable of capturing the processes of evolution and kinship between languages. That change in the approach was, among other things, what paved the way for the constitution of linguistics constitution as a discipline that seeks to reflect the functioning of language based on verifiable laws; and that is, as a scientific discipline. The launching of linguistics as a science came in 1916 with the structuralist Ferdinand de Saussure, who exposed, systematized, and clarified some of the methods and questions that had been dissolved for centuries in a skein of imprecise discussions.

In Spain, the linguistics of the 20th century left us a prodigy of lexicography: María Moliner. Her *Diccionario de uso del español* (DUE) remains as an irreplaceable reference, both for Spanish language experts and non-specialist speakers. It is annoying to talk about how magnificent this dictionary is, because by dint of repeating it, the quality of *María Moliner* is almost a commonplace, and it seems we have become impervious to praise. However, Moliner's work is outstanding for several reasons. Moliner created a dictionary that did not fall into the numerous deficiencies of RAE dictionary. Each entry is extremely long-winded in terms of information, not only in terms of the definition of the word (carefully written), but also in terms of synonyms, related words, examples, and even grammatical and spelling notes. The aim of the dictionary was not to be a work of authority, but to capture as much information as possible about

all the words and to record actual use. With today's glasses and in view of the neat and almost hypertextual use of symbols and notations that dot the entries, one gets the feeling that Mrs. Moliner had outgrown the paper.

The theoretical approaches that guided the creation of the work and that provide internal coherence to the dictionary are explained in the very enjoyable prologue of the first edition. Her lexicographical explanations convey the scrupulous rigor and impressive honesty with which Moliner undertook her tremendous dictionary, to which she devoted fifteen years of her life. Unfortunately, neither the prologue nor the original dictionary are accessible. What it is sold today as *Diccionario María Moliner* is an apocryphal and spurious version, a recasting that the publishing house that owns the rights made at the time from the original work, but which never received the author's approval. Only the copies of the first edition of 1966 are authentic, today a rarity to be sought in second-hand bookstores.

María Moliner's *Diccionario de uso del español* is a multidimensional dictionary and a monumental work that we will continue to take our hats off to for many generations to come. The ostracism in which Moliner lived and her marginalization from the academic world are additional reasons to vindicate and celebrate this woman. María Moliner was not the mom who in her spare time wrote a dictionary while mending socks, as it has sometimes been sold to us. Moliner was an intellectual, like the top of a pine tree that the society of her time ignored because she was a woman with republican convictions. Even today, we have not yet rehabilitated this heroine of the language as she deserves; an intellectual survivor of a time that could not have been more hostile to her.

Today

However, if we said that Saussure is the father of linguistics as we know it today, the undisputed champion of the language studies from the 20th century is Noam Chomsky.

Chomsky's theories are based on the idea that language is an innate capacity of human beings (recovering the old Greco-Roman controversy of *nature* versus *culture*), which includes in its potential state the capacity of adapting to all the complexity of grammatical features those human languages have. In plain English, what Chomsky is saying is that we are born with a pluripotential linguistic ability already in our brains and that what we do when we are babies is to acquire (and be careful, because in these matters, *acquiring* is not synonymous with *learning*) our mother tongue. This means that we are able to and specialize the capacity that we bring as standard—and that enables us to acquire any language—towards the particularities of the language in which we are immersed. There is a period in which specialization takes place, which leads from the total potential of the baby who does not yet speak to the competence of the native speaker of a language, and once this period has passed and we have acquired our own language, we can only try to learn other languages; that is, we will never again start from the total potential that we had, but from the limitations that specialization has brought with it.

Perhaps a simplistic example can help us to understand this issue better. Let us assume that we have a puppy dog. At birth, it has the potential ability to develop sense of smell and orientation. While it is a puppy, there is the possibility of training it to become a shepherd dog, a guide dog, a police dog, a rescue dog, or any of the tasks that involve dogs (although, it is a bit unrealistic, let us assume that there are no breeds with more or less disposition for some tasks and that it has the possibilities to opt for any of these ways). That is to say, before training it, all of those ways are possible because the dog has the innate potential to develop them. However, when we train the puppy to become a police dog, it will develop some specific abilities (for example, the sense of smell) that perhaps it would not develop as much if we had trained it to be a shepherd dog. In the same way, a guide dog will develop some capabilities that a police dog will lack. Moreover, it is likely that the initial task for which the puppy is trained will determine how

naturally it can move on to another task as an adult. For example, a certain ability is likely to be common to several dog tasks. It may even be that its training will determine whether it could become absolutely competent at another task, as well as if it had been trained for that task from puppyhood. In a similar way, humans were born with the abstract and general capacity for language, and it is the linguistic environment that surrounds us during our first years of life that specializes that innate capacity towards the particularities of a language (or languages, in the case of bilinguals and others lucky polyglots). Such particularities are what we will be forced to overcome when (with greater or lesser success) we try to learn a new language as adults. Finally, an explanation of why English is so resistant to us.

Chomsky's approach was revolutionary because he proposed a view of the acquisition and language functioning that was very different from what had been advocated until then. Before the development of the Chomskyan theories, the development of human language skills was interpreted as a purely behavioral phenomenon; that is, children acquired their native language through a process of imitation, correction, and gratification, not so different to the way a laboratory rat is trained to perform a certain task. What Chomsky argues is that the language acquisition process cannot be explained by understanding it as purely behavioral training. Linguistic skills involve a degree of sophistication and abstraction that the brain must have them innately. That means that there must be an abstract and universal grammar with which we all humans beings are born, and which enables us to acquire any language. Such universal grammar will specialize towards one language or another according to the language in which we live immersed.

Chomskyan grammatical theory seeks to propose a series of universal abstract rules (expressed by means of a series of rather complex tree formalisms) that would be common to all languages and that would be at the basis of the general linguistic ability with which we are born

and for which we are biologically determined. The search for this universal grammar with which we are all born, and which would underlie all natural human languages, no matter how different they may appear to be from one another, it has been and continues to be one of the great challenges of linguistics and is in line with the proposals outlined by the Brocense in the 16th century.

In all aspects of Chomsky's proposals, the cognitive approach to language is very present (not to say that it is the core of his entire theory). That is, while the structuralists of the early 20th century (Saussure and company) were devoted to the purely formal dissection of phrases and sentences, and while the behaviorists defended language as a purely behavioral behavior, Chomsky introduced the approach about the mental nature of language, according to which a language is not just a set of texts, sentences, and words governed by an unravelable logical structure. His concept also rules out that language is an endearing mechanical behavior, as it is to make a rat to repeat a certain task. On the contrary, language is a cognitive capacity of which language, whether written or spoken, is a manifestation whose structure cannot be separated from the mental process that generates it.

Chomsky's theories have been the focus of all the attention from the end of the 20th century to the present day, either to corroborate and develop his ideas or to refute them. Some of his proposals have been harshly criticized; starting with the fact that we have no evidence to prove that language is indeed innate and that is encoded in human DNA as is having eyes or breathing, and that is precisely one of the starting points of his theories. On the other hand, he has been criticized for being Anglo centrist in his grammatical theory. That is to say, it is fundamentally designed and structured for English and that he assumes (perhaps too lightly) that the same procedures are applicable without further ado, to other languages. We have an exciting road ahead of us to confirm or reject all these theories and to reap new discoveries.

Anatomy of the tongue: head, trunk, and extremities

A seventy-five-year-old man is at home spending the afternoon chatting quietly with his seventeen-year-old granddaughter, who has come to visit the town. To us, it seems that they are just chatting, but the truth is that, under the anodyne appearance of the situation, there is a deep and complex system that allows the two people to be so comfortable talking.

If we were aliens observing the scene, we could describe the exchange between the gentleman and his granddaughter in a physical way: one of the humans emits a chain of sounds through the vibration of an organ housed in the throat (the vocal cords). The sounds come out of his mouth, and they are transmitted through the air in the form of an acoustic wave (like all sounds) until they reach to the other human's ears. Therefore, Corti's organ, which is housed in the skull, converts the acoustic wave into electrical impulses that travel to the brain and are decoded by the corresponding brain area, which is more or less at the level of the nape of the neck. Afterwards, the roles change: the one who was the receiver is now the one who emits the wave and the one who was the transmitter, now is the receiver. Phonetics is the linguistic branch that studies the nature of the acoustic wave emitted and the positions of the various organs involved in the production of the vibration (i.e., how the vocals cords vibrate, where the teeth go, how the tongue is positioned, etc.).

If we listen to what the grandfather and the granddaughter are talking about, we will discover that when the sounds are put together, they have the properties to create messages. In fact, if we change one sound for another, we can significantly alter the message we emit. The phrase, "*Me ha dicho tu madre que te espera en la playa*" (Your mom told me she is waiting for you at the beach) is different from "*Me ha dicho tu madre que te espera en la plaza*" (Your mom told me she is waiting for you at the plaza). The difference between the words, "plaza" (plaza) and "playa" (beach) affects only one sound, but this modification has the property of

altering the message sent. Let us now suppose that the grandfather has difficulty pronouncing the strong letter “r” correctly. It is not that he pronounces another letter, but rather that he emits a strange “r.” Probably, beyond being a peculiarity in his pronunciation, the words will continue to mean the same thing and the message will not be altered (as it happens when a word is changed). This is what phonology is all about: which sounds characterize a language (as opposed to those that are only realizations or ways of pronunciation, without any changes).

When speaking, the message is constituted by words, which in turn can be formed by smaller elements that relate some parts of the sentence to others. Thus, we find words which the ending temporally locates the action in time; for example, the “i” in the verbs as in “*recogí*” (I collected). Words whose ending indicates the number of elements as it occurs in plural nouns; for instance, the “-s” in “*libros*” (books). Words with an antecedent particle that modifies the meaning of the word as in the prefix “*anti-*” in “*antitabaco*” (anti-smoking), and so there are a variety and an extensive etcetera of elements. Morphology deals with how words are formed and how the particles that constitute them are combined.

Words are not isolated, but are grouped together to mean things, and the relationship between them determines the meaning of the message. It is not the same for me to eat a trout as for a trout to eat me. We can even have the same set of words and build with them structures with a very different meaning, depending on how we relate the elements. For instance, “*el plato del día*” (meal of the day) is not the same as “*el día del plato*” (day of the meal). When the verb “*hervir*” (boil) is intransitive, that is, when it does not have a direct complement, the subject is the liquid that boils: “*El agua hierve a cien grados centígrados*” (The water boils at 100 degrees centigrade). However, when we use the same verb in a transitive construction, as in “*Mi padre hierve agua*” (My father boils water), the subject of the sentence is the person who causes the

action of the liquid to boil. Syntax is the branch that studies the different ways in which the words are organized and grouped in a sentence.

Once we have the structure of the elements that make up the sentences of the conversation, we will need to know how the meanings and the nuances they bring to the message conveyed, are related. Let us suppose that the grandfather is telling fight stories of his youth: if he tells his granddaughter how he ran in front of the “*grises*” (gray) during Franco's regime, “*grises*” (gray) is a way of naming an element (in this case, the police) through the color of the uniform. If the grandfather says, “*estoy oyendo a tu hermano mugir por el pasillo*” (I hear your brother mooing down the hall), there is a subliminal and malicious implication that the grandfather is somehow attributing the characteristics of the cow to his grandson. The literal meaning of a sentence does not always expresses what the speaker has in mind. Semantics analyzes the creation of meanings and looks for relationships between them, as well as the connotations expressed by the speakers.

Morphology, syntax, and semantics deal with very different issues, but when studying the structure of words and sentences, it is easy to end up mixing them up to justify a certain analysis. It is necessary to separate them and keep in mind that morphology deals with the rules for constructing words, the syntax of the rules to construct sentences, and the semantics of the rules for assigning meaning. Although these three processes are closely related, it is necessary to distinguish the words or sentences that are morphologically or syntactically poorly formed from the ones that are well-formed, but do not exist or have no meaning in a language. When we speak here of well and poorly formed structures, we do not mean that they are correct or incorrect in normative or academic terms, but that they are formed according to the internal logic of the language. We will come back to this later.

A word can be morphologically well-formed but have no associated meaning and thus will not be used, but it is still well constructed; nor is there anything to prevent it from being assigned a meaning at any time and becoming just another word. The criteria by which some words are assigned a meaning and others are not, it is difficult to establish. Indeed, words can lose meaning over the years. For instance, the hypothetical word, “*imbello*” (not pretty) (as an antonym of the word “*bello*” (pretty) does not exist, perhaps because we already have the word “*feo*” (*ugly*). However, the existence of the word “*barbilampiño*” (*beardless*) does not prevent the existence of “*imberbe*.. In any case, despite not having an associate meaning, “*imbello*” is a word morphologically so well-formed as the word “*imberbe*.” It is another matter if we assign a meaning to this well-formed word and start using it. It is the morphological rules and not the semantic ones that make the word well-constructed.

Similarly, to say that “*desdormir*” (unsleeping) is ungrammatical because the act of undoing sleep is meaningless, would be like saying that the sentence “*Los seres humanos ponen huevos*” (Human beings lay eggs) is ungrammatical. One thing is the way phrases and sentences are constructed, and other very different thing is what the words and sentences mean, and whether what is expressed by the words has correspondence in the real world. From a semantic point of view, in our world, it does not make any sense a verb to undo the act of sleeping because sleeping is an irreversible action, and neither does it make sense for humans to lay eggs because that is not the way they reproduce. But what grammar is concerned with is making the rules for constructing correct words and sentences from the language system’s point of view, not the one from the world system. In our world, it makes no sense that humans lay eggs, but we all understand that the strangeness produced by the sentence is not due to linguistic reasons but to its incongruity with the reality we know. In fact, we could imagine contexts in which this phrase would make sense: a science fiction novel or a Monty Python movie, among others. Therefore,

we should not forget that both morphology and syntax are disciplines that study the internal logic of language.

In a sense, the facets of the linguistic message production that we have just learn (phonetics, phonology, morphology, syntax, and semantics) range from the generation of the sound wave to the creation of meaning. These areas constitute the core of linguistics, the hard and fast theory aspects, but there is life beyond theory. Let us return to the seemingly unremarkable communicative situation of the grandfather and his granddaughter. The situation lends itself to being photographed from various angles that concern other knowledge areas. We could analyze the discourse of each of the interlocutors on the hunt for juicy features to study. The grandfather is quite a joker and tends to verbalize the opposite of what he means. His granddaughter knows that she has to know him to understand him. The correct interpretation of the message by putting the meaning in a situational context is the study field of pragmatics. Pragmatics is what allows us to correctly interpret the meaning of a sign that reads “*Niños gratis*” (free children) in the window of a travel agency: it is not that they are giving away children in that agency, but that there are family trips’ offers and other vacation packages in which young children under a certain age do not pay.

For instance, we can also analyze why the grandfather is a bit disconcerted when his granddaughter says that this film is making him a fool. The grandfather is not quite sure what *petar* is, but he suspects that it must not be very different from the *dabuten* of his children to which he had to get used to in the eighties. Similarly, the granddaughter finds endearing the expressions she only hears his grandfather say. Specific expressions to a social group or an area are dealt with by sociolinguistics and dialectology, respectively. If the grandfather had some form of dementia or age-related cognitive impairment, it would be interesting for the diagnosis to observe whether there is any alteration, both in pronunciation or writing and in the content of the

message delivered. Neurolinguistics is concerned with such matters, and if the youngest grandchild of the family tribe were to wander around the house, the infantile babbling that announces that the baby is beginning to speak would delight any psycholinguist.

The tongue is a complex creature that resists being divided into the traditional triad of head, trunk, and extremities, and the tentacles we have seen are only a few of the many it has. It is excessively simplistic to reduce this highly variable, rich, and hypnotically complex human capacity into watertight compartments. There are so many variables involved in linguistic communication and so many disciplines that come across language in their research that necessarily the only possible perspective for a reliable portray of this beautiful creature is to assume that there is no single perspective.

Norm or description? From the broom to the microscope

If we hear someone say that “*En la cola del pan había un señor detrás mío* (*When I was in line to buy bread, there was a man behind of me*),” it is possible that more than one of us will not have time to point out that the expression “*detrás mío*” (behind of me) is incorrect because it has to be “*detrás de mí*” (behind me). We have well-internalized the notion that there are some correct ways of expressing ourselves, as opposed to other malignant ones that damage our language and that must be removed without a second thought. There is no reason to wonder, after all, that there are good and bad usages is what we were taught in language class with spelling and grammar rules with the insistence of the Malay drop. And is not it so? Is not there something harmful and perverse in “*detrás mío*” (behind of me)? Is it not abominable to hear “*tú contestastes que no*” (you answered no)? Do not your eyes bleed when you read “*habíamos tres*” (*there was three of us*)? Actually, there is nothing intrinsically wrong with saying “*detrás mío*” or “*contestaste*.” We simply have a more or less shared norm that dictates that we are going to say “*detrás de mí*” and “*contestaste*,” but it could well have been the case that we speakers had

agreed to opt for forms that today are considered incorrect and that those were now the valid ones.

Chapter V

Data Analysis

Now that the documents “*Language and Learning in the Digital Age*” were translated from English into Spanish and “*Anatomía de la lengua*” from Spanish into English, this chapter will analyze the texts and show the results collected. According to Madhu (n.d), "Data analysis is the process of ordering, categorizing, manipulating, and summarizing data to obtain answers to research questions." (p.2). This chapter is important because it will help break down the complex material by arranging them into simpler data for straightforward analysis and interpretation. The answers obtained will clarify the research question, which evaluates the use of translation procedures and methods in the documents mentioned. Chapter three will apply three instruments to obtain the data: the text analysis chart, the color-coding, and the glossary. Each of them fulfills the objective of either helping to collect data or interpreting the data collected from the beginning to the end of the process.

5.1 Analysis and interpretation of the results

As well as the data analysis, the interpretation of the results is also meaningful for the project. As mentioned by Ashirwadam (n.d), "Another significant part of the research is the interpretation of the data, which is taken from the analysis of the data and makes inferences and draws conclusions." (p.1). Moreover, Madhu (n.d) mentioned that qualitative and quantitative are the two methods in which analysts can interpret data. As mentioned in the research approach, the data used in this research is qualitative; therefore, the qualitative method will be selected to interpret the results. Due to this, the process is longer than the quantitative method since it requires time to select the adequate paragraphs of the translated texts. It also demands time to rigorously apply the instruments to them.

As explained earlier, the process consists of using three instruments. The first one is the text analysis chart that will ease the translation process by sorting the texts into different factors such as the text style, the function, the scale of formality and difficulty, and lastly, the scale of emotional tone the translation method selected. The second instrument is a color code that will place each translation procedure with a unique color set by the translator. This analysis will help to identify which were the procedures that have been applied. Lastly, after all the texts have been color-coded, the researcher will use a glossary to register all the difficult terminologies for the translator or future readers. An index will show the terms with their definitions, grammar categories, and language equivalences.

5.1.1 Text Analysis

This chart helps the translator classify the texts into different factors before translating. By sorting the texts into these factors, the process will be easier since the translation method, style, function, formality scale, generality and difficulty, and emotional tone are already defined. So, the translator does not have to take extra time to study which text function may be more suitable. Also, sometimes, in the middle of the translation, the translator realized that the text style selected was not appropriate for the text. Therefore, translators must analyze the texts first to avoid these mistakes that will delay the delivery of an accurate, faithful, and natural work. Also, translators must deliver a well-translated text since it is being translated into another language, which means that the target audience will rely on it, considering that it is well-translated. The chart below shows the analysis of both texts.

Table 5

Text Analysis	Language and Learning in the Digital Age	Anatomía de la lengua, historias, curiosidades y porqués del idioma
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Text Style	Discussion	Discussion
Text Function	Informative	Informative
Scale of Formality	Neutral	Official
Scale of Generality or Difficulty	Simple	Educated
Scale of Emotional Tone	Factual	Factual
Translation Method	Semantic translation	Semantic translation

Table 5 shows the researcher's instrument to analyze the texts under study—source: Researcher's creation

5.1.2 Color Coding

This instrument aims to show the readers which translation procedures have been applied to translate the texts and for the translators to evaluate the correct use of each procedure. Once the text analysis chart is filled, and the texts are translated, 15 paragraphs of around 100-150 words from each text will be chosen to conduct this instrument. Then, the translator will use a chart that shows six different translation procedures on the left side: transposition, modulation, omission, amplification, explicitation, and literal translation. The right side will show the unique colors that match every translation procedure. To better comprehend the equivalence between the texts, the original paragraphs will be placed before the color-coded text. If one word has two translation procedures, the translator will use symbols or characters such as parenthesis, brackets, slashes, bars, or underlying to differentiate the multiple procedures employed.

The chart below shows the translation procedures with their corresponding colors.

Table 6

Translation Procedure	Color Assigned
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Transposition	Yellow
Modulation	Brown
Omission	Orange
Amplification	Green
Explicitation	Purple
Literal translation	Pink

Table 6 shows each technique with corresponding colors in the color-coding systematic procedure—source: Researcher's creation.

5.1.2.1 Color coding of “Language and Learning in the Digital Age”

Paragraph 1

When digital media carry language, language can be interactive, for example in a chat room, via text messaging, or on a Twitter feed, but also permanent. It can travel far and wide, but can be changed even more rapidly and thoroughly than a rumor as each user has a chance to modify it, for example, in wikis. We will argue that digital media “power up” or enhance the powers of language, oral and written, just as written language “powered up” or enhanced the powers of oral language.

Cuando los medios digitales son portadores del lenguaje, este puede ser interactivo, por ejemplo, en una sala de conversación, a través de mensajes de texto o en un [tablero de publicaciones de la red social Twitter], pero también de manera permanente. Este puede viajar a lo largo y a lo ancho, pero puede modificarse incluso mucho más rápido y a fondo que un rumor, ya que cada usuario tiene la oportunidad de modificarlo y un ejemplo es wikis. Argumentaremos que los medios digitales “potencian” o mejoran los poderes del lenguaje, así como el lenguaje escrito lo hizo con el lenguaje oral.

Paragraph 2

Digital media are a delivery system for language (and other things), just like a car is a delivery system for humans. Written language was an earlier delivery system for language. We can hardly understand a delivery system if we do not understand what it carries and why. While we may seem to trivialize digital media and written language by calling them delivery systems, in reality we do no such thing. Cars, trucks, planes, and tanks are delivery systems for humans, but they have transformed the world and human beings for both good and bad.

Los medios digitales son un sistema de comunicación para el lenguaje (y otras cosas), al igual que un carro es un sistema de entrega para los humanos. El lenguaje escrito fue un sistema de comunicación temprana para el lenguaje. Difícilmente podemos entender un sistema de comunicación si no entendemos qué porta y por qué. Si bien puede parecer que trivializamos los medios digitales y el lenguaje escrito al llamarlos sistemas de comunicación, en realidad, no hacemos tal cosa. Los carros, camiones, aviones y tanques son sistemas de entrega para los humanos, pero ellos han transformado el mundo y a los seres humanos tanto para bien como para mal.

Paragraph 3

By the Middle Ages in the West, society was thoroughly organized into a “great chain of being” (Lovejoy 1933) with kings and bishops at the top, knights and lords below them, followed by land owners and tradespeople, and, at the bottom, the majority of the population, peasants. This was a chain as much about who had the authority to speak and to speak the truth and who did not, than it was of internal worth. It was about who should listen to whom. Peasants, at the bottom, listened to everyone else and spoke authoritatively to none.

En occidente, en la Edad Media la sociedad estaba completamente organizada en una “gran cadena del ser” (Lovejoy, 1933) con reyes y obispos en la cima, caballeros y señores por debajo de ellos, seguidos por los propietarios de tierras y comerciantes y, en la base, estaba la

mayoría de la población y campesinos. Esta era una cadena tanto sobre quién tenía la autoridad para hablar y decir la verdad y quién no, como de valor interno. Se trataba de quién debía escuchar a quién. En la base, los campesinos escuchaban a todos los demás y no hablaban con autoridad a nadie.

Paragraph 4

It is true, though, that thanks to how big the potential audience is these days (namely everyone with a computational device, mobile or not, and a connection to the Internet), even small causes, crackpots, and people with rare skills and insights can find a significant audience, though not a mass one. Everyone who loves making doll heads out of avocado pits can find each other around the world and group together as “people like us” or “people with a shared passion” (that others do not understand). Before they felt alone among those who thought they were odd, special, or marginal.

Sin embargo, es cierto que gracias a lo grande que es el público potencial en estos días (a saber, todos con un dispositivo informático, móvil o no y una conexión a internet), incluso las pequeñas causas, los chiflados y las personas con habilidades y conocimientos poco comunes pueden encontrar una audiencia significativa, aunque no masiva. Todos los que aman hacer cabezas de muñecas con huesos de aguacate, pueden encontrarse el uno al otro en todo el mundo y agruparse como "personas como nosotros" o "personas con una pasión compartida" (que otros no entienden). Antes se sentían solos entre los que pensaban que eran raros, especiales o marginales.

Paragraph 5

There is one crucial point we want to make before readers begin this book in earnest. It is popular today for people to write books to say that some aspect of digital media (social media, the Internet, video games, and so forth) is bad or ruining our culture or endangering our

civilization (e.g. among many others, Bauerline 2008 or Carr 2010). There are others who think that digital media are a panacea; for example, they think that just by giving poor children computers and the Internet we could close the gap in school performance between the rich and the poor (but see Stross 2010).

Existe un punto crucial que queremos señalar antes de que los lectores comiencen este libro en serio. En la actualidad es popular que las personas escriban libros para decir que algún aspecto de los medios digitales (las redes sociales, el internet, los videojuegos, etc.) es malo o está arruinando nuestra cultura o poniendo en peligro nuestra civilización (por ejemplo, entre muchos otros, Bauerline, 2008 o Carr, 2010). Y otros piensan que los medios digitales son una panacea, por ejemplo creen que con solo dar a los niños pobres computadoras e internet, podríamos cerrar la brecha en el rendimiento escolar entre los ricos y los pobres (pero véase Stross, 2010).

Paragraph 6

No technology—books, television, computers, video games, or the Internet— by itself makes people good or bad, smart or stupid. Such technologies have effects only in terms of how, when, where, and why they are put to use. They have different effects in different contexts of use. They can be forces for good or ill. A computer connected to the Internet in the hands of a child with good mentoring is often a force for learning. It may not be in other circumstances. The real issue, then, is social, that is, who has and who does not have mentoring, not technology alone. The same is true of books and of language, as we will see.

Ninguna tecnología (libros, televisión, computadoras, videojuegos o internet) hace por sí misma a las personas buenas o malas, inteligentes o tontos. Estas tecnologías tienen efectos solo en términos de cómo, cuándo, dónde y por qué se utilizan. Además, tienen efectos diferentes en diferentes contextos de uso. Pueden ser fuerzas para el bien o para el mal. Una computadora

conectada a internet en manos de un niño con buena asesoría es a menudo una fuerza para el aprendizaje, aunque puede que no lo sea en otras circunstancias. Por tanto, la verdadera cuestión es social, es decir, quién tiene y quién no tiene asesoría, no la tecnología por sí sola. Lo mismo ocurre con los libros y el lenguaje, como veremos.

Paragraph 7

Language can be viewed as cognitive, material, or social; it is, of course, all of these at one and the same time. Language is also something that is both individual and social. Language seems to belong to us as individuals—to be something we can use in distinctive ways—and yet seems also to be shaped by social conventions beyond our individual control. As an individual, I can say what no one else has ever said before. My language, my way of communicating, seems to be my own. I can say, for instance: “Blue cows decry metaphysics on Tuesdays” and probably this has never been said (or written) before by anyone else.

El lenguaje se puede considerar como algo cognitivo, material o social, pero es por supuesto, todos estos al mismo tiempo. Además, es tanto individual como social. Parece que el lenguaje nos pertenece como individuos (algo que podemos utilizar de distintas maneras) y, sin embargo, también parece estar moldeado por convenciones sociales que están más allá de nuestro control individual. Como individuo, puedo decir lo que nadie ha dicho antes: mi lenguaje, mi manera de comunicarme, parece ser mío. Por ejemplo, puedo decir: “Las vacas azules condenan la metafísica los martes” y probablemente, esto no lo haya dicho (ni escrito) nunca nadie antes.

Paragraph 8

Oral language arose a long time ago, long enough for evolution to transform it. Writing did not. Writing is a relatively recent invention (Goody 1986, 1988). It has not been around long enough to be a product of evolution. It was purely a cultural invention (as is the language of mathematics or of Yu-Gi-Oh!). It was an invention of only very few cultures and then spread to

others. All cultures initially and most cultures historically were “oral cultures” in the sense that they had no writing. There are still some oral cultures today.

El lenguaje oral surgió hace mucho tiempo, lo suficiente para que la evolución lo transformara. Sin embargo, a diferencia del lenguaje oral, la escritura no fue así. La escritura es una invención relativamente reciente (Goody, 1986, 1988). Por consiguiente, no ha existido el tiempo suficiente para ser un producto de la evolución. Fue una invención puramente cultural (¡como lo es el lenguaje de las matemáticas o el de Yu-Gi-Oh!). Fue una invención de muy pocas culturas que luego se extendió a otras. Inicialmente, todas las culturas y la mayoría de las culturas históricamente eran "culturas orales" en el sentido de que no tenían escritura. De hecho, todavía existen algunas culturas orales en la actualidad.

Paragraph 9

Phones, too, allowed people to talk and respond at a distance (though not if they were dead). Today, voice chat through computers (in a game like World of WarCraft or in something like Skype) allows people to talk to others across the globe in real time in small or large groups without being physically co-present. If we add video to voice chat, we get a new form of co-presence at a distance. It's all oral language, but greatly enhanced and empowered in comparison to “face-to-face co-present- in-local-space-and-time communication.”

Los teléfonos celulares también permitieron a las personas hablar y responder a distancia (aunque no si estaban muertos). En la actualidad, el chat de voz a través de computadoras (en un juego como World of WarCraft o en algo como Skype) permite a las personas hablar con otras [de todo]el mundo en tiempo real en grupos pequeños o grandes sin estar físicamente copresentes. Si le añadimos video al chat de voz, obtenemos una nueva forma de copresencia a distancia. Es todo lenguaje oral, pero muy mejorado y potenciado en comparación de “comunicación copresencial cara a cara en el espacio local y en el tiempo”.

Paragraph 10

Such technological changes in oral language, while **they** are enhancements and empowerments in some senses, **do** involve losses. **We will** see that all technological changes involve both gains and losses. A person can speak on a tape, but **we** cannot speak to that person. **They** cannot be challenged, and **they** cannot **talk back**. A dialogic property of face-to-face communication has been lost. Phones lose visual cues and even video-enhanced voice chat loses some of the timing and close embodiment that is important to face-to-face communication.

Aunque son mejoras y potenciadores en algunos sentidos, estos cambios tecnológicos en el lenguaje oral implican pérdidas. Veremos que todos los cambios tecnológicos implican tanto ganancias como pérdidas. Una persona puede hablar en una cinta, pero precisamente no podemos hablar con esa persona. No se les pueden desafiar y no pueden responder. Por estas razones, se ha perdido una propiedad dialógica de la comunicación cara a cara. Los teléfonos celulares pierden las señales visuales e incluso el chat de voz con video mejorado pierde parte de la sincronización y la personificación cercana que es importante para la comunicación cara a cara.

Paragraph 11

Over time, the Spatial Property (the ability to talk about concrete things in the here and now) was also the basis for talking about mental and abstract things via metaphors. Once humans **hit on** this metaphorical trick of talking about mental and abstract things as if **they** were things in space and time, **they** were on the path to **being** able to talk about metaphysics, minds, and the emotional nuances (or lack thereof) of males' brains. The move from talk about concrete things in the here and to talk about mental and abstract things was a major step in the development of the human mind, **human** culture, and **human** language.

Con el tiempo, el Spatial Property (la capacidad de hablar de cosas concretas en el aquí y ahora) fue también la base para hablar de cosas mentales y abstractas a través de metáforas. Una

vez que los humanos dieron con este truco metafórico de hablar de cosas mentales y abstractas como si fueran cosas en el espacio y el tiempo, estaban en el camino de poder hablar de metafísica, de mentes y de los matices emocionales (o la falta de ellos) del cerebro de los hombres. El paso de hablar de cosas concretas en el aquí y el ahora a hablar de cosas mentales y abstractas fue un paso importante en el desarrollo de la mente, la cultura y el lenguaje humano.

Paragraph 12

In this book we will discuss many other important changes in language. We will watch language become more powerful, just as it did when spatial metaphors were used to talk about abstract and mental things. We will see that digital media are causing important changes in language. But the most powerful enhancement of language in human history was literacy—written language. Literacy is a technology, just like digital media. So far, its effects dwarf those of digital media; one of the keyways digital media have and will transform language is by transforming or replacing literacy in various spheres and practices. We will turn to literacy in the next chapter.

En este libro hablaremos de muchos otros cambios importantes en el lenguaje. Veremos cómo el lenguaje se vuelve más poderoso, igual que cuando se utilizaban metáforas espaciales para hablar de cosas abstractas y mentales. Veremos que los medios digitales están provocando importantes cambios en el lenguaje; pero la mejora más poderosa del lenguaje en la historia de la humanidad fue la alfabetización: el lenguaje escrito. Al igual que los medios digitales, la alfabetización es una tecnología y, hasta ahora, sus efectos empujan los de los medios digitales; una de las claves que los medios digitales han transformado y transformarán el lenguaje es la transformación o sustitución de la alfabetización en diversos ámbitos y prácticas. En el próximo capítulo hablaremos de la alfabetización.

Paragraph 13

Understanding in thought and language is, for us humans, first and foremost embodied and situated. We see and understand things through the perspective of our bodies (embodied) and in terms of specific contexts and variations across contexts (situated). For humans, understanding very small things (like atoms) and very big ones (like galaxies) is hard since they are beyond our ordinary means of perception. Understanding things that are more accessible to our senses is much easier for us. We have had to invent quite special tools to understand the very small and the very large.

Para los seres humanos, la comprensión en el pensamiento y el lenguaje es, ante todo, personificada y situada. Vemos y entendemos las cosas a través de la perspectiva de nuestros cuerpos (encarnados) y en términos de contextos específicos y variaciones entre contextos (situados). Para los seres humanos, comprender cosas muy pequeñas (como los átomos) y muy grandes (como las galaxias) es difícil, ya que están más allá de nuestros medios ordinarios de percepción. Nos resulta mucho más fácil entender cosas que están más accesibles a nuestros sentidos. En cambio, para entender lo muy pequeño y lo muy grande, hemos tenido que inventar herramientas muy especiales.

Paragraph 14

Writing is a secondary delivery system, delivering language that can be spoken, thought, or signed. For the rest of this book, we will use the term “oral language” to mean language that is delivered by speech, thinking, or signing, and the term “written language” to be language that is delivered by writing. To say writing is secondary does not mean literacy is not important, but it does mean that oral language is more foundational for literacy and literacy learning than many people realize (Gee 2004; Hart & Risely 1995; Heath 1983; Scollon & Scollon 1981).

La escritura es un sistema de comunicación secundaria, lenguaje que se puede pensar, expresar en forma oral, o por medio de señas. Para el resto de este libro, utilizaremos el término

“lenguaje oral” para referirnos al lenguaje que se transmite mediante el habla, el pensamiento o por medio de las señas, y el término “lenguaje escrito” para referirnos al lenguaje que se transmite por la escritura. Decir que la escritura es secundaria no quiere decir que la alfabetización no sea importante, sino que el lenguaje oral es más fundamental para la alfabetización y su aprendizaje, más de lo que muchas personas creen (Gee, 2004; Hart & Risely, 1995; Heath, 1983; Scollon & Scollon, 1981).

Paragraph 15

Stating that literacy is a delivery system for oral language, and a secondary one at that, may seem to downplay its significance. But, in reality, it does not. Consider automobiles, which are a “delivery system” for human beings. Cars are not themselves human beings, but they have radically changed how humans act, interact, think, plan, and value. The impact they have had on our cities and on the world economically, culturally, and environmentally is massive. Far from being trivial, since they are “only” a delivery system, automobiles are transformative. Literacy, too, has been transformative of both language and human beings.

Al afirmar que la alfabetización es un sistema de comunicación del lenguaje oral, y además secundario, puede parecer que se le resta importancia, pero, en realidad, no es así. Considere los automóviles que son un "sistema de entrega" para los seres humanos. En sí, los automóviles no son seres humanos, pero han cambiado radicalmente la forma en que los humanos actúan, interactúan, piensan, planifican y valoran. El impacto económico, cultural y medioambiental que han tenido en nuestras ciudades y en el mundo, es enorme. Lejos de ser triviales, ya que son "solo" un sistema de entrega, los automóviles son transformadores. Por eso, la alfabetización también ha transformado tanto el lenguaje como los seres humanos.

5.1.2.2 Color coding of “Anatomía de la lengua”

Paragraph 1

Galeno fue un médico griego que vivió en el siglo ii d.C. Investigador incansable, contribuyó al conocimiento científico de la época con innumerables descubrimientos anatómicos y fisiológicos sobre el cuerpo humano. Su trabajo fue portentoso y sus descripciones se convirtieron en obras de referencia para la medicina medieval en Europa. No obstante, algunas de sus descripciones no eran exactas y contenían errores. Esos fallos eran más que comprensibles: durante la época romana la disección de cadáveres humanos estaba terminantemente prohibida, por lo que Galeno y los anatomistas de aquel entonces tenían que conformarse con diseccionar cerdos y otros animales, y extrapolar la disposición anatómica que encontraban a la anatomía humana.

Galen was a Greek physician who lived in the 2nd century AD. He was a tireless researcher who contributed to the scientific knowledge of that time with countless anatomical and physiological discoveries about human body. His work was outstanding, so his descriptions became reference works for medieval medicine in Europe. However, some of his descriptions were not accurate and contained errors, but they were more than understandable because during Roman times the dissection of human cadavers was strictly forbidden. Due to this, Galen and the anatomists of that time had to settle with dissecting pigs and other animals, and by extrapolate-the anatomical arrangement they found to the human anatomy.

Paragraph 2

Esta anécdota de la historia de la medicina resume bastante bien las dificultades que tenemos los humanos para cuestionar nuestras creencias y nuestra fe en las fuentes de autoridad, incluso cuando la realidad nos lleva claramente la contraria. Antes de la llegada de Vesalio, la anatomía consistía en estudiar y corroborar unos textos que, inevitablemente, eran defectuosos e

incompletos. En la Edad Media el único objetivo de realizar disecciones humanas era confirmar lo que un señor había dicho 1000 años antes y, si la realidad no lo corroboraba, se desacreditaba la realidad antes que la fuente. La revolución de Vesalio consistió en cuestionar esa aproximación, que defendía que estudiar una disciplina consistía en venerar un texto en vez de observar la realidad.

This anecdote from the medicine's history sums up quite well the difficulties we humans have in questioning our beliefs and our faith in authority's sources, even when reality clearly leads us to the contrary. Before the arrival of Vesalius, anatomy consisted of studying and corroborating texts that were inevitably flawed and incomplete. In the Middle Ages, the only purpose of performing human dissections was to confirm what a man had said 1000 years before and, if the reality did not corroborate it, it was discredited before the source. Vesalius' revolution consisted in questioning that approach, which defended that studying a discipline consisted in venerating a text, instead of observing the reality.

Paragraph 3

Quienes nos dedicamos a la lingüística necesitamos que estos nuevos planteamientos lleguen al público general: tenemos que recuperar la lengua. En los últimos años, los científicos han hecho un enorme trabajo para acercar la ciencia a la población no especialista y hemos visto magnificas iniciativas para fomentar la divulgación científica: libros, programas de televisión, conferencias, blogs y hasta monólogos. La comunidad científica ha hecho un gran esfuerzo y ha logrado que el placer y la curiosidad que han llevado a los humanos a hacer ciencia no vivan encerrados en los laboratorios y departamentos de prestigiosas universidades. Los que trabajamos en asuntos relacionados con la lengua tenemos en la comunidad científica un magnífico ejemplo de lo que nos queda por hacer.

Those of us who work in linguistics need these new approaches to reach the general public: we need to reclaim the language. In recent years, scientists have done an enormous job to bring science closer to the non-specialist population and we have seen magnificent initiatives to promote scientific dissemination: books, television programs, conferences, blogs, and even monologues. The scientific community has made a great effort and has ensured that the pleasure and curiosity that have led humans to do science do not live locked up in the laboratories and departments of prestigious universities. Those of us who work on issues related to language have, in the scientific community, a magnificent example of what remains to be done.

Paragraph 4

Llevar la lingüística a la calle es una forma de compartir el disfrute de nuestra disciplina; además tenemos que demostrar que un campo que muchas veces resulta árido y aburrido es, en realidad, comprensible y fascinante para todos. La divulgación lingüística es también la manera de devolverle a la sociedad lo que es suyo, lo que le pertenece, tanto porque la lengua es propiedad de los hablantes, y de nadie más, como porque muchas de las investigaciones en nuestro campo se pagan con dinero público y, por lo tanto, deben revertir positivamente en la sociedad que, con esfuerzo, las ha hecho posibles. Como investigadores de la lengua, la divulgación no es solo una vocación; debe ser también una obligación moral.

Taking linguistics to the street is a way of sharing the enjoyment of our discipline. We have to demonstrate that a field that often seems arid and boring is in reality understandable and fascinating for everyone. Linguistics dissemination is also the way to give back what belongs to society. Both because language belongs to the speakers and no one else, and because much of the research in our field is paid with public money; therefore, it must revert positively to the society that, with effort, has made it possible. As language researchers, dissemination is not only a vocation, but it must also be a moral obligation.

Paragraph 5

Panini, además de un tipo de bocadillo y la marca de referencia de los que coleccionábamos cromos en los años noventa, tiene el honor de ser el autor de la primera gramática de la que se tiene constancia, una obra sobre el sánscrito fechada en torno al siglo iv a.C. En aquella época y en la India, el estudio de la lengua estaba íntimamente relacionado con la religión y la interpretación de los textos religiosos. Ese vínculo entre la escritura y lo sagrado casi parece una constante que se repite aquí y allá. Recitar mantras, invocar mediante palabras rituales o acceder a la verdad divina a través de los textos revelados por el dios correspondiente son rasgos que encontramos en muy distintas creencias y que no nos es ajena. La propia palabra *religión* deriva del latín *relegere*, según nuestro paisano Cicerón, ‘volver a leer’, aunque, quizá, entendiendo leer en un sentido un poco más amplio y trascendente que el literal.

Panini, in addition of being a type of sandwich and the brand of reference for those of us who collected stickers in the 1990s, has the honor to be the author of the first recorded grammar. A work on Sanskrit dated around the fourth century BC. At that time and in India, the study of language was intimately related to religion and the interpretation of religious texts. That link between writing and the sacred almost seems to be a constant that is repeated here and there. Reciting mantras, invoking by means of ritual words, or accessing divine truth through the texts revealed by the corresponding god, are features found in many different beliefs and are not alien to us. According to our countryman, Cicero, the word religion itself derives from the Latin *relegere*, “to read again;” although, perhaps, understanding reading in a slightly broader and more transcendent sense than the literal one.

Paragraph 6

Una vez rechazada la teoría del sánscrito como madre primigenia de todo el árbol genealógico, se formuló una nueva hipótesis: que existía una lengua común no documentada más

antigua aún que el sánscrito de la que derivaban diversas lenguas, entre ellas el latín, el griego y el sánscrito, que explicaría las semejanzas entre idiomas tan alejados. A ese antecesor común que emparentaba buena parte de las lenguas que van desde la India hasta el Atlántico se lo llamó protoindoeuropeo. Si bien algunos lingüistas habían apuntado en esta dirección ya en el siglo xvi, la formulación de Jones fue lo que dio el disparo de salida a la fiebre comparativa que se extendió por Europa durante el siglo xix.

Once the theory of Sanskrit theory had been rejected as the primordial mother of the entire genealogical tree, a new hypothesis was formulated: there was an undocumented common language even older than Sanskrit from which several languages derived, including Latin, Greek, and Sanskrit, which would explain the similarities between such distant languages. This common ancestor, which related a good part of the languages from India to the Atlantic, was called Proto-Indo-European. Although, some linguistics had already pointed in this direction in the 16th century, Jones' formulation was the one that triggered the comparative fever that spread throughout Europe during the 19th century.

Paragraph 7

Al calor de la lingüística comparativa del siglo xix fueron proliferando las aproximaciones más universalistas al lenguaje: lo que se buscaba ya no era solo describir la gramática de una lengua, sino formular leyes generales capaces de recoger los procesos de evolución y parentesco entre lenguas. Ese cambio en la aproximación fue, entre otras cosas, lo que abonó el terreno para la constitución de la lingüística como disciplina que ansía reflejar el funcionamiento de la lengua a partir de unas leyes comprobables, es decir, como disciplina científica. La puesta de largo de la lingüística como ciencia llegó en 1916 con el estructuralista Ferdinand de Saussure, que expuso, sistematizó y acotó algunos de los métodos y cuestiones que llevaban siglos disueltos en una madeja de discusiones imprecisas.

In the heat of the comparative linguistics of the nineteenth century, more universalistic approaches to language were proliferated. It was not only sought to describe the grammar of a language, but also to formulate general laws capable of capturing the processes of evolution and kinship between languages. That change in the approach was, among other things, what paved the way for the constitution of linguistics as a discipline that seeks to reflect the functioning of language based on verifiable laws; and that is, as a scientific discipline. The launching of linguistics as a science came in 1916 with the structuralist Ferdinand de Saussure, who exposed, systematized, and clarified some of the methods and questions that had been dissolved for centuries in a skein of imprecise discussions.

Paragraph 8

Los planteamientos teóricos que guiaron la confección de la obra y que dotan de coherencia interna al diccionario están explicados en el muy disfrutable prólogo de la primera edición. Sus explicaciones lexicográficas transmiten el escrupuloso rigor y la impresionante honradez con que Moliner acometió su tremendo diccionario, al que dedicó quince años de su vida. Lamentablemente, ni el prólogo ni el diccionario original son accesibles: lo que hoy se vende como *Diccionario María Moliner* es una versión apócrifa y espuria, una refundición que la editorial propietaria de los derechos hizo en su momento a partir de la obra original, pero que nunca llegó a contar con el visto bueno de la autora. Solo son auténticos los ejemplares de la primera edición del año 1966, hoy una rareza que hay que buscar en librerías de segunda mano.

The theoretical approaches that guided the creation of the work and that provide internal coherence to the dictionary are explained in the very enjoyable prologue of the first edition. Her lexicographical explanations convey the scrupulous rigor and impressive honesty with which Moliner undertook her tremendous dictionary, to which she devoted fifteen years of her life. Unfortunately, neither the prologue nor the original dictionary, are accessible. What it is sold

today as *Diccionario María Moliner* is an apocryphal and spurious version, a recasting that the publishing house that owns the rights made at the time from the original work, but which never received the author's approval. Only the copies of the first edition of 1966 are authentic, today a rarity to be sought in second-hand bookstores.

Paragraph 9

El *Diccionario de uso del español* de María Moliner es un diccionario multidimensional y una monumental obra ante el que seguiremos quitándonos el sombrero durante muchas generaciones. El ostracismo en el que vivió Moliner y su marginación del mundo académico son motivos añadidos para reivindicar y celebrar a esta mujer. María Moliner no era la mamá que en su tiempo libre redactaba un diccionario mientras remendaba calcetines, como a veces se nos ha vendido. Moliner era una intelectual como la copa de un pino que la sociedad de su época ignoró porque era mujer y de convicciones republicanas. Todavía hoy no hemos rehabilitado como se merece a esta heroína de la lengua, superviviente intelectual de un tiempo que no pudo serle más hostil.

María Moliner's *Diccionario de uso del español* is a multidimensional dictionary and a monumental work that we will continue to take our hats off to for many generations to come. The ostracism in which Moliner lived and her marginalization from the academic world are additional reasons to vindicate and celebrate this woman. María Moliner was not the mom who in her spare time wrote a dictionary while mending socks, as it has sometimes been sold to us. Moliner was an intellectual, like the top of a pine tree that the society of her time ignored because she was a woman with republican convictions. Even today, we have not yet rehabilitated this heroine of the language as she deserves; an intellectual survivor of a time that could not have been more hostile to her.

Paragraph 10

La aproximación de Chomsky resultó revolucionaria porque proponía una visión de la adquisición y el funcionamiento del lenguaje muy diferente a lo que hasta entonces se había defendido. Antes del desarrollo de las teorías chomskyanas, el desarrollo de las habilidades lingüísticas humanas se interpretaba como un fenómeno puramente conductista; es decir, los niños adquirirían su lengua materna a través de un proceso de imitación, corrección y gratificación no muy distinto a como se entrena una rata de laboratorio para que lleve a cabo una determinada tarea. Lo que Chomsky defiende es que el proceso de adquisición de la lengua no puede explicarse entendiéndolo como un entrenamiento puramente conductual: las habilidades lingüísticas conllevan un grado de sofisticación y abstracción tal que el cerebro debe tenerlas de manera innata. Eso significa que debe existir una gramática abstracta y universal con la que nacemos todos los seres humanos y que nos capacita para adquirir cualquier idioma. Tal gramática universal se especializará hacia una u otra lengua según en qué lengua vivamos inmersos.

Chomsky's approach was revolutionary because he proposed a view of the acquisition and language functioning that was very different from what had been advocated until then. Before the development of the Chomskyan theories, the development of human language skills was interpreted as a purely behavioral phenomenon; that is, children acquired their native language through a process of imitation, correction, and gratification, not so different to [the way] a laboratory rat is trained to perform a certain task. What Chomsky argues is that the language acquisition process cannot be explained by understanding it as purely behavioral training. Linguistic skills involve a degree of sophistication and abstraction that the brain must have them innately. That means that there must be an abstract and universal grammar with which we all humans beings are born, and which enables us to acquire any language. Such universal grammar

will specialize towards one language or another according to the language in which we live immersed.

Paragraph 11

La teoría gramatical chomskiana busca proponer una serie de reglas abstractas universales (expresadas mediante una serie de formalismos arbóreos bastante complejos) que serían comunes a todas las lenguas y que estarían en la base de la habilidad lingüística general con la que nacemos y para la que estamos determinados biológicamente. La búsqueda de esa gramática universal con la que todas las personas nacemos y que subyacería a todas las lenguas humanas naturales, por muy diferentes que aparenten ser unas de otras, ha sido y sigue siendo uno de los grandes retos de la lingüística y entronca con las propuestas que en el siglo xvi esbozaba el Brocense.

Chomskyan grammatical theory seeks to propose a series of universal abstract rules (expressed by means of a series of rather complex tree formalisms) that would be common to all languages and that would be at the basis of the general linguistic ability with which we are born and for which we are biologically determined. The search for this universal grammar with which we are all born, and which would underlie all natural human languages, no matter how different they may appear to be from one another, it has been and continues to be one of the great challenges of linguistics and is in line with the proposals outlined by the Brocense in the 16th century.

Paragraph 12

En todos los aspectos de las propuestas de Chomsky está muy presente —por no decir que es el meollo de toda su teoría— la aproximación cognitiva al lenguaje. Es decir, mientras que los estructuralistas de comienzos del siglo xx (Saussure y compañía) se dedicaban a la disección puramente formal de frases y oraciones, y mientras los conductistas defendían el lenguaje como

un comportamiento puramente conductual, Chomsky introdujo la aproximación sobre la naturaleza mental del lenguaje, según la cual una lengua no es solo un conjunto de textos, oraciones y palabras regidos por una estructura lógica desentrañable; su concepto también descarta que la lengua sea un comportamiento mecánico entrañable, como lo es hacer que una rata repita cierta tarea. Por el contrario, el lenguaje es una capacidad cognitiva de la que la lengua, ya sea escrita o hablada, es una manifestación cuya estructura no puede separarse del proceso mental que la genera.

In all aspects of Chomsky's proposals, the cognitive approach to language is very present (not to say that it is the core of his entire theory). That is, while the structuralists of the early 20th century (Saussure and company) were devoted to the purely formal dissection of phrases and sentences, and while the behaviorists defended language as a purely behavioral behavior, Chomsky introduced the approach about the mental nature of language, according to which a language is not just a set of texts, sentences, and words governed by an unravelable logical structure. His concept also rules out that language is an endearing mechanical behavior, as it is to make a rat to repeat a certain task. On the contrary, language is a cognitive capacity of which language, whether written or spoken, is a manifestation whose structure cannot be separated from the mental process that generates it.

Paragraph 13

Las teorías de Chomsky han centrado toda la atención del gremio desde finales del siglo xx hasta hoy, ya sea para corroborar y desarrollar sus ideas, ya sea para rebatirlas. Algunas de sus propuestas han sido duramente criticadas, empezando por el hecho de que no tenemos ninguna prueba que demuestre que el lenguaje es, efectivamente, innato y que está codificado en el ADN humano como lo está tener ojos o respirar; y justo ese es uno de los puntos de partida de sus teorías. Por otro lado, se le ha afeado que toda su teoría gramatical peque de anglo centrista, es

decir, **que** está pensada y estructurada fundamentalmente para el inglés, y que asuma (quizá **con** demasiada ligereza) que los mismos procedimientos son aplicables, sin más, a otros idiomas. Nos queda **por delante** un emocionante camino para confirmar o rechazar todas estas teorías y para cosechar nuevos descubrimientos.

Chomsky's theories have been the focus of all the attention from the end of the 20th century to the present day, either to corroborate and develop his ideas or to refute them. Some of his proposals have been harshly criticized; starting with the fact that we have no evidence to prove that language is indeed innate and that is encoded in human DNA as is having eyes or breathing, and that is precisely one of the starting points of his theories. On the other hand, he has been criticized for being Anglo centrist in his grammatical theory. That is to say, it is fundamentally designed and structured for English and that he assumes (perhaps too lightly) that the same procedures are applicable without further ado, to other languages. We have an exciting road ahead of us to confirm or reject all these theories and to reap new discoveries.

Paragraph 14

Al hablar, el mensaje está constituido por palabras, que a su vez pueden estar formadas por elementos **más pequeños** que relacionan unas partes de la oración con otras; así, encontramos palabras cuya terminación sitúa temporalmente la acción, por ejemplo, la **–í** en los verbos, como en *recogí*; palabras cuya terminación indica cantidad de elementos, como ocurre en **los** sustantivos **en** plural, por ejemplo la **–s** de *libros*); palabras con una partícula antepuesta que modifica el significado de la palabra, como hace el prefijo *anti–* en *antitabaco*; y así hay un variopinto y extenso etcétera de elementos. De cómo se forman **las** palabras y cómo se combinan las partículas que las constituyen trata **la** morfología.

When speaking, the message is constituted by words, which in turn can be formed by smaller elements that relate some parts of the sentence to others. Thus, we find words which the

ending temporally locates the action in time; for example, the “*t*” in the verbs as in “*recogí*” (I collected). Words whose ending indicates the number of elements as it occurs in plural nouns; for instance, the “-s” in “*libros*” (books). Words with an antecedent particle that modifies the meaning of the word as in the prefix “*anti-*” in “*antitabaco*” (anti-smoking), and so there are a variety and an extensive etcetera of elements. Morphology deals with how words are formed and how the particles that constitute them are combined.

Paragraph 15

La morfología, la sintaxis y la semántica se ocupan de asuntos muy distintos, pero al estudiar la estructura de las palabras y las oraciones es fácil acabar mezclándolas para justificar un determinado análisis. Es necesario separarlas y tener en cuenta que la morfología se encarga de las normas para construir palabras, la sintaxis de las reglas para construir oraciones y la semántica de las reglas de asignación de significados. Si bien estos tres procesos están íntimamente relacionados, es necesario distinguir las palabras u oraciones que están morfológica o sintácticamente mal formadas de las que están bien formadas, pero no existen o no tienen sentido en una lengua. Cuando aquí hablamos de estructuras bien y mal formadas no nos referimos a que sean correctas o incorrectas en términos normativos o académicos, sino a que están formadas de acuerdo a la lógica interna de la lengua; volveremos sobre ello más adelante.

Morphology, syntax, and semantics deal with very different issues, but when studying the structure of words and sentences, it is easy to end up mixing them up to justify a certain analysis. It is necessary to separate them and keep in mind that morphology deals with the rules for constructing words, the syntax of the rules to construct sentences, and the semantics of the rules for assigning meaning. Although these three processes are closely related, it is necessary to distinguish the words or sentences that are morphologically or syntactically poorly formed from the ones that are well-formed, but do not exist or have no meaning in a language. When we speak

here of well and poorly formed structures, we do not mean that they are correct or incorrect in normative or academic terms, but that they are formed according to the internal logic of the language. We will come back to this later.

5.1.3 Glossary

The last instrument used is a glossary to register complex terminologies from each text. The translator will select terminologies that readers may find difficult when reading or terms that the translator considers to be necessary storage for future translations. Doing this will make it easier for the translator to find the equivalence of certain terminologies that are complex to transfer. It will compose one glossary for each text with the aid of a chart that shows the equivalence of the term in the target language as well as the grammatical category and the definition. The final product will be an index with all the terms ready to be used as a reference. The charts below show glossaries in Spanish and English with their factors.

5.1.3.1 Glossary from English into Spanish

Table 7

Lenguaje y aprendizaje en la era digital			
Término en el idioma de partida	Término en el idioma de llegada	Categoría gramatical	Definición
Advent	Advenimiento	Sustantivo	Llegada de alguien o algo
Bypass	Evitar	Verbo	Apartar algún daño, peligro o molestia, impidiendo que suceda

Conventions	Convenciones	Sustantivo	Reunión general de un partido político o de una agrupación de otro carácter, para fijar programas, elegir candidatos o resolver otros asuntos.
Crackpot	Chiflado / Descabellado	Sustantivo	Dicho de una persona: Que tiene algo perturbada la razón
Cues	Señales	Sustantivo	Distintivo, marca
Curtailed	Restringido	Verbo	Ceñir, circunscribir, reducir a menores límites
Dwarf	Empequeñecer algo / eclipsar	Verbo	Minorar algo, hacerlo más pequeño, o amenguar su importancia o estimación
Ephemeral	Efímero / Temporal	Sustantivo	Pasajero, de corta duración
Hallmarks	Características	Sustantivo	Dicho de una cualidad: Que da carácter o sirve para distinguir a alguien o algo de sus semejantes
Impinging	Afectar	Verbo	Menoscabar, perjudicar, influir desfavorablemente

Jeopardized	Amenazado	Adjetivo	Dar a entender con actos o palabras que se quiere hacer mal a alguien
Myriad	Infinidad	Sustantivo	Gran número y muchedumbre de cosas o personas
Nuances	Matices	Sustantivo	Rasgo poco perceptible que da a algo un carácter determinado
Panacea	Panacea / Cura milagrosa	Sustantivo	Remedio o solución general para cualquier mal
Paramount	Fundamental / Primordial	Adjetivo	Que sirve de fundamento o es lo principal en algo
Pervasive	Dominante	Adjetivo	Que sobresale, prevalece o es superior entre otras cosas de su orden y clase
Proliferating	Proliferante	Adjetivo	Que se produce o multiplica en formas similares
Reasserted	Restablecer	Verbo	Volver a establecer algo o ponerlo en el estado que antes tenía
Splinter	Separarse	Verbo	Establecer distancia, o aumentarla, entre algo o alguien y una persona,

			animal, lugar o cosa que se toman como punto de referencia
Surrogate	Sustituto	Sustantivo	Persona que hace las veces de otra
Trivialize	Trivializar	Verbo	Quitar importancia, o no dársela, a una cosa o aun asunto
Unleashed	Desencadenado	Verbo	Originar, provocar o dar salida a movimientos del ánimo, hechos o series de hechos
Utterance	Enunciado	Sustantivo	Secuencia con valor comunicativo, sentido completo y entonación propia
Vernacular	Vernácula	Adjetivo	Dicho especialmente del idioma o lengua: Domestico, nativo, de la casa o país propio
Well-off	Acomodo (a)	Adjetivo	Rico, abundante de medios o de que tiene los suficientes

Table 7 shows the chart with the factors used to categorize and classify the terms to create the Spanish glossary—source: Researcher's creation.

5.1.3.2 Glossary from Spanish into English

Table 8

Anatomy of the Language			
Term in Source Language	Term in Target Language	Grammatical Category	Definition
Anodina	Anodyne	Adjective	Not likely to offend or arouse tensions
Canónicos	Canonical	Adjective	Of, relating to, or forming a canon
Carraspeó	Hawk	Verb	To raise by trying to clear the throat
Contundencia	Forcefulness	Noun	Possessing or filled with force
Chascarrillos	Funny story / joke	Noun	Something said or done to cause laughter
Cogote	Nape	Noun	The back of the neck
Detractores	Critics	Noun	One given to harsh or captious judgement
Elocuente	Eloquent	Adjective	Having or showing the ability to use language clearly and effectively
Epíteto	Epithet	Noun	A disparaging or abusive word or phrase

Espuria	Spurious	Adjective	Of falsified or erroneously attributed origin
Estancos	Watertight	Adjective	Leaving no possibility of misconstruction or evasion
Extrapolar	Extrapolate	Verb	To infer from values within an already observed interval
Fidedigna	Reliable	Adjective	Able to be believed: likely to be true or correct
Galopante	Rampant	Adjective	Marked by a menacing wildness, extravagance, or absence of restraint
Ilustres	Illustrious	Adjective	Notably or brilliantly outstanding because of dignity or achievements or actions
Imperantes	Prevailing	Noun	To be usual, common, or popular
Innata	Inherent	Adjective	Belonging to the basic nature of someone or something
Lucidez	Clarity	Noun	The quality or state of being clear
Meollo	Core	Noun	The essential meaning
Ostracismo	Ostracism	Noun	Exclusion by general consent from common privileges or social acceptance

Paladín	Champion	Noun	One who shows marked superiority
Portentoso	Outstanding	Adjective	Marked by eminence and distinction
Preludiaron	Preluded	Verb	To serve as a prelude to
Proliferando	Proliferate	Verb	To increase in number or amount quickly
Prolijo	Neat	Adjective	Marked by skill or ingenuity

Table 8 shows the chart with the factors used to categorize and classify the terms to create the English glossary—source: Researcher's creation.

Chapter VI

Conclusions and Recommendations

This last chapter of the research is important because of the conclusions and recommendations for forthcoming studies and research. It will start by bringing back the research objectives and evaluating their achievements. It will list all the objectives proposed in chapter I and show if they were accomplished in an intended way or unexpected results were found instead. Also, it will discuss the significant outcomes found during the translation process and the process of data analysis and interpretation. This refers to applying the different data collection instruments to the translated texts. Lastly, by the end of the chapter, it will present some recommendations, and directions for future students enrolled in similar research of evaluating the effects of translation procedures.

6.1. Purpose of the Conclusion

As mentioned before, this conclusion aims to show the audience if the objectives proposed for this investigation had success in being achieved. Further, if those objectives were truly accomplished, it will prove to the audience by showing how they were achieved. In other words, this chapter is essential for it narrows down the key points and outcomes of the project. The conclusions of this research are based on the translation process and the application of the instruments to two texts. One was translated from English into Spanish, and the other was from Spanish into English. It attempts to show the readers how to achieve an accurate, faithful, and natural translation product.

6.2. Conclusions

6.2.1. To translate the documents “Anatomía de la lengua” from Spanish into English and “Language and learning in the digital age” from English into Spanish for a public university’s library.

Due to the global pandemic, the desire to provide digital texts for a public university's library was born. The library chosen was the Joaquín García Monge from Universidad Nacional. Specifically, the texts belong to the language field. The researcher decided to translate one text from Spanish into English and one text from English into Spanish. The translated texts will be accessed digitally in the library platform by students, professors, and even outsiders interested in the topic. This will facilitate the job for those who live far from the institution or prevent physical exposure, so they do not have to risk their health safety.

Before engaging in the translation of both texts, the translator analyzed them by applying the general and close reading proposed by Newmark. General reading helps to grasp what the text is about, and if the subject of the text is not clear, it is the job of the translator to research to understand the topic and the message of the text. Once the translator identifies these elements by applying the general reading, specific details must also be found. By conducting the close reading, the translator examined the texts in detail and analyzed deeply which styles of function, formality, generality or difficulty, emotional tone, and what translation method or procedure is more suitable for the translation process. Also, close reading helped find possible barriers such as jargon, slang, and metaphors that must be studied first, avoiding future concerns during the process. When applying the general reading for both texts, the translator realized they were informative. The subject of both texts is language. The message that the English text wants to convey is about how language and learning behave in a digital age. On the other hand, the

Spanish text is about the anatomy of the language, addressing its questions, history, and curiosities. Then, by conducting the close reading, it was achieved to determine the factors of the text analysis.

The translator considered both texts to have a discussion style since, in both texts, ideas, viewpoints, and arguments were presented. Then, as mentioned before, the texts are informative; therefore, the informative function was chosen because both texts intend to inform the audience about linguistics. Regarding the scale of formality, the neutral scale was selected for the English text, while the official scale was chosen for the Spanish text. For the scale of generality or difficulty, the neutral scale was selected for the English text because the vocabulary used in the text is understandable and educated. In contrast, the official scale was chosen for the Spanish text since the text addresses the audience with a more formal language. There is a scale of emotional tone, and the factual scale was chosen for both texts since they address facts information, and it does not use either intensifiers or gentle tones. Lastly, the method selected for both texts is semantic due to the present vocabulary related to linguistics, so the translator must transfer them accurately. With the rigorous application of both readings, the translation process was easier since all the possible difficulties were pointed out, and the factors of the text analysis were already defined.

6.2.2. To apply various translation techniques to the documents to achieve natural, cohesive, and accurate texts.

After determining the elements for the translation process, such as the different scales and the translation method, translation techniques must be selected to convey the units of the content accurately. As Newmark (1988) discussed, the translation procedures or techniques work on smaller units of the texts rather than on the entire text as the translation methods. However,

although they work on smaller units, it does not mean that they are being analyzed separately. As mentioned in chapter four, Vinay and Darbelnet (1958) said it must convey ideas and feelings, not only words. In a translation process, it can apply up to eight translation techniques; notwithstanding, for both texts, the translator only used six procedures. They were transposition, modulation, omission, amplification, explicitation, and literal translation.

Transposition is used to work at the grammatical level, and it is used to show the grammatical differences between English and Spanish. Then, modulation works on the content of the texts, and it is aided when some ideas make sense in both languages in the SL. However, when transferring the meaning to the TL, it had to use its equivalence in the TL, and by doing that, some categories of thoughts were changed from the SL. The next procedure is omission, and it was employed because when constructing ideas in Spanish, they are usually longer than when producing ideas in English. Hence, when translating Spanish into English, it was used to show the elements that were not required in English.

On the other hand, in terms of amplification, it was used to show the extra elements that when translating English into Spanish was required to convey the message to be understandable in Spanish. Then, explicitation was applied to show the different ideas that the translator added. Sometimes, the audience can comprehend the content even better with a little more explanation on the same idea. Lastly, literal translation was the procedure that helped to display when the SL grammatical construction found its nearest equivalence in the TL. Overall, with only these techniques, the translator achieved to complete the translation process of both texts and make the best effort in producing natural, cohesive, and accurate translations for future readers.

6.2.3. To evaluate the effect of the translation techniques applied on the documents.

After translating the texts, the data collection instrument, the color-coding systematic procedure was applied. With this instrument, the translator managed to analyze the usage frequency of the techniques and evaluate the correct translation and if the procedures used were appropriate. By applying the colors to the first text, "Language and Learning in the Digital Age," which was translated from English into Spanish, the translator realized that the most frequent translation procedures used were literal translation, transposition, and modulation. The literal translation was the most used because nearly all the grammatical structures of the English text have their correspondences when translating into Spanish. With this, the translator achieved one of the objectives of semantic translation: to translate as close as possible to the original text and still it is natural and acceptable to the audience.

The second most used technique was transposition. It was extremely helpful because one of the notable grammatical differences between English and Spanish is that English tends to place the adjective first and then the noun. However, in Spanish, it is the opposite. Throughout the text, the translator noticed that this word order was very prevailing in addition to the changes of grammatical categories such as verb into a noun. However, another grammatical change that the researcher found was that many sentences were inverted in English: the predicate first and then the subject.

In contrast, when translating it into Spanish, the subject comes first and then the predicate. The translator investigated and learned that sentence inversion and compensation are the two corresponding translation techniques, but they were not included since they belong to the licenciante degree. Lastly, the modulation was also frequent in terms of content changes. There were categories of thoughts that in English convey the message. However, when translating it into Spanish, it did not do the job, so the translator used different vocabulary to convey the unity

of the message. May the perspective's point of view be different, but it does deliver the same intention of the text.

For the second text, "Anatomía de la lengua," translated from Spanish into English, some of the most frequent techniques employed were literal translation, transposition, and modulation. Like the English text, the literal translation was predominant since most Spanish structures encounter their near-equivalent when translating them into English. As well as for transposition and modulation, word ordering and changes of grammatical categories were the most encountered. In contrast, for modulation, the translator found that some of the sentences used passive voice with the pronoun "se" in Spanish and turned into a normal passive voice in English. In reality, two other commonly used techniques were omission and amplification. As discussed earlier, translating the English text into Spanish tends to be longer in the Spanish version. The translator perceived that the article was the common amplification used when translating into Spanish in these texts.

Furthermore, it was also omission because sometimes, the noun and the pronoun can be omitted in Spanish, and the sentence is still understandable. At the same time, in English, these two elements are essential. When translating into English, it was the opposite, some of the articles were omitted while verb to be, pronouns, and nouns were added. To sum up, all the six translation techniques were significant during the process, and the translator identified all of them throughout the texts. Indeed, there are many more translation techniques that a text can be benefited from. They are 13 translation techniques in total, and for these texts, only six were employed. Specifically, these are the techniques used to obtain a bachelor degree. The seven remaining procedures are used to obtain the licentiate degree.

6.2.4 To create a glossary with the most relevant terminology found in both texts.

When engaging during the translation process, finding unknown vocabulary or complex terminologies is common. Indeed, these words must be identified when performing the general and close reading in the text analysis step. Nonetheless, a word can usually have a different definition under a different context or due to the cultural varieties between the two languages. Hence, it is the translator's job to establish the accurate term and stick with it to produce consistency throughout the translation. The translator stores all the terminologies along the journey, which eases the future translation processes. It also allows the audience to enjoy the reading truly with consistency. Further, when they find difficult words such as specific jargon because they do not belong to the field of that content, they can consult it in the glossary available within the material.

In this project, the translator composed two indexes of terminologies for both English and Spanish text. Each of the glossaries has 25 terminologies and three columns. They include the word in the source language and the target language, the grammatical category, and, lastly, the definition of the term. The translator included these factors because it will be helpful in future translations where the two languages are also English and Spanish. Thus, the term is already translated into the target language, and depending on the context, the grammatical category will help fit the target structure. Furthermore, since they are semantic translations, the translator focused on the equivalence of the specific technical words rightly. Accordingly, if readers find those technical words difficult, these fields of the columns will help the readership understand the complex terms accurately and effectively.

6.3. Restatement of the Research Question

What is the effect of procedures and methods used to translate the documents *Anatomía de la Lengua* from Spanish into English and *Language and to learn in the digital age* from English into Spanish for a public university's library during the 1st quarter of 2022?

Depending on the type of text and audience, the translator must use adequate translation methods and procedures. With this, translators achieve the objective of translation, which is to serve as a bridge between languages so people can have new knowledge and communication between different cultures. As stated earlier, semantic was the method selected for the two translations, and six translation procedures were applied to the texts to achieve accurate, faithful, and natural translations. All definitions of the translation methods and procedures were developed in-depth in the theoretical framework. To conclude, the researcher has had contact with those definitions during several courses and has also been in translation practices.

Notwithstanding, not until engaging in this project that she comprehends the weight and effect of applying translation methods and techniques. Without the help of these procedures, the texts would have been translated vaguely, without direction. Instead, the translator studied the different methods and procedures and analyzed the texts rigorously by applying the correct translation steps to select the best methods and techniques for each text. Furthermore, only then, with the professional guidance of the tutor and the correction of a philologist, the translator accomplished compose two accurate, faithful, and natural translations for the future readership.

6.4. Recommendations

When doing a graduation investigation, people can feel overwhelmed by the amount of work and feel lost at the beginning of the stage. Consequently, it can influence the final product. The work may be unsound, and even the delivery span can be affected. However, researchers can

assist each other. As a result, while conducting this research, the investigator encountered several situations and collected various recommendations that can be useful for future students enrolled in a similar investigation and even for outsiders. These suggestions include features based on the events experienced from the beginning to the end of the research.

First, researchers must know which period to enroll in and take the graduation workshop and seminar. After filling out the course forms, investigators must choose the texts that will be translated for the research. This takes time because they are one text in English and the other in Spanish, and they must contain 20 pages each. Sometimes, the institutions' inquiries will take their time to respond or deliver the texts. Also, after the texts are selected, the tutor and the director of the career must inspect and approve them. Personally, the investigator realized a week earlier, before the last quarter of the career, that it was time to take the graduation workshop. In other words, the researcher only had one week to contact a tutor and one week to search for the texts. Hence, as a recommendation, ask for the information beforehand and search for the texts, so later it will be even easier when constructing the objectives for the investigation.

Second, some recommendations for the graduation workshop are that it is better to search in advance the sources that will be used to support the ideas when taking the graduation workshop. Researchers will not have to stop in the middle of the writing process with the sources in hand. Also, chapter two requires more than ten reliable sources, so it is ideal to do it beforehand. Further, if the investigator has available time apart from the daily duties, it is recommended to start translating the texts and the workshop. Certainly, they are required until the next quarter for the graduation seminar; however, sometimes, unforeseen events can happen. Also, the translations must be delivered in the first instance of the seminar. The tutor can examine them approve them so that the translator can send the Spanish translation to the philologist. Thus, when the work is in progress, it will be more straightforward and lighten the seminar's task.

Third, based on the experience, the researcher wants to give some suggestions for the process of translation. As mentioned before, start to translate as soon as possible, and for a more organized management, investigators can try to set a delivery date. The researcher herself set a goal of finishing the two translations in one month. Nonetheless, although they must be completed in the fastest way, it cannot neglect the principle of delivering accurate translations. So, it needs time to review the texts to ensure their quality. Then, in terms of the application of translation methods and procedures, translators must take the time to study them in-depth and stick with the translation steps. As discussed earlier, they must analyze the text to determine the type of audience, the type of text, and its barriers. Only then can they select the best translation methods and procedures. In addition, follow the principles of those prominent authors such as Peter Newmark and Eugene Nida because, as mentioned before, they are experts in the field.

Fourth, when it comes to using data collection instruments such as color-coding, the investigator has some recommendations. When engaging in color-coding, students can apply the same technique of the translation process. The translator herself set the goal of delivering the color-coding of both texts in three to four days. This technique helps to develop more discipline since the person sets an objective and must commit it. Then, in terms of applying the colors to the words, sometimes, students will opt for working with one procedure at a time by searching for that technique in all the paragraphs. Nonetheless, this can be overwhelming because some words can be analyzed out of context by looking for that specific procedure. Thus, the translator suggests analyzing each utterance and applying the color simultaneously.

Time management, organization, and discipline are the keys to completing this project. In the end, apart from all these recommendations, students are not alone. They have tutors and many professionals who can inquire when having difficulties during the process. Also, the researcher presented all these recommendations based on her experience, but everyone works at a different

pace and will be surrounded by different circumstances. Notwithstanding, the investigator hopes these suggestions can help future university colleagues to accomplish their graduation journey.

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Annexes

“Language and learning in the digital age”



LANGUAGE AND LEARNING IN THE DIGITAL AGE

In *Language and Learning in the Digital Age*, linguist James Paul Gee and educator Elisabeth Hayes deal with the forces unleashed by today's digital media, forces that are transforming language and learning for good and ill.

They argue that the role of oral language is almost always entirely misunderstood in debates about digital media. Like the earlier inventions of writing and print, digital media actually “power up” or enhance the powers of oral language.

Gee and Hayes deal, as well, with current digital transformations of language and literacy in the context of a growing crisis in traditional schooling in developed countries. With the advent of new forms of digital media, children are increasingly drawn towards video games, social media, and alternative ways of learning. Gee and Hayes explore the way in which these alternative methods of learning can be a force for a paradigm change in schooling.

This is an engaging, accessible read both for undergraduate and graduate students and for scholars in language, linguistics, education, media and communication studies.

James Paul Gee is the Mary Lou Fulton Presidential Professor of Literacy Studies at Arizona State University, USA. He is a member of the National Academy of Education, and author of numerous books, including the bestselling *An Introduction to Discourse Analysis* (Routledge, 3rd edn, 2011) and companion title *How to do Discourse Analysis* (Routledge, 2011).

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Gee, James Paul, and Elisabeth R. Hayes. Language and Learning in the Digital Age. Taylor & Francis Group, 2011. ProQuest Ebook Central. <http://ebookcentral.proquest.com/lib/ualr/ebooks/detail.action?docID=801078>. Created from sdunalr-bro-ebooks on 2021-09-01 20:01:47.

“Language and Learning in the Digital Age” is both grounded and wise. Gee and Hayes’ perspective is one that looks back as much as it looks forward and it has a place on everyone’s bookshelf or digital reader, so that we can take stock in how far we have come (and how far we have to go).”

Jennifer Rowsell, *Canada Research Chair in Multiliteracies, Brock University, Canada*

“Both a stimulating and highly readable account of how new media are changing the way we communicate and learn and an antidote to the various moral panics surrounding computers, the Internet and youth culture. This book should be required reading for anyone working in education today.”

Rodney Jones, *City University of Hong Kong*

LANGUAGE AND LEARNING IN THE DIGITAL AGE

James Paul Gee and Elisabeth R. Hayes

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Routledge
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LONDON AND NEW YORK

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1

INTRODUCTION

In a title like *Language and Learning in the Digital Age*, the word “language” seems less trendy than the word “digital.” We are rightly impressed by our new digital tools. Their perils and possibilities are new. In comparison, language seems so old and mundane, its perils and possibilities long forgotten. However, we will argue that the perils and possibilities of digital media are, in fact, species of the same perils and possibilities we find in the history of oral language and written language.

Digital media are an interesting hybrid of the properties of oral language and of written language. Oral language is interactive but ephemeral (sound passes away quickly). It does not travel accurately because each person in a chain of communication can easily change it. Literacy is less interactive but permanent. It travels far and wide and it is harder to change as pieces of paper or books are passed down through a chain of people.

When digital media carry language, language can be interactive, for example in a chat room, via text messaging, or on a Twitter feed, but also permanent. It can travel far and wide, but can be changed even more rapidly and thoroughly than a rumor as each user has a chance to modify it, for example, in wikis. We will argue that digital media “power up” or enhance the powers of language, oral and written, just as written language “powered up” or enhanced the powers of oral language.

Readers may say that digital media carry so much more than language. But language itself is and has always been a mixture of sound, words, images created in the mind, and gestures used in contexts full of objects, sounds, actions, and interactions. Language has always been “multimodal” (combining words, images, and sounds) as are many messages conveyed via digital media and, indeed, many other media today.

Nevertheless, multimodality is more pervasive, diverse, and important today than ever before. A comparison between a textbook or a newspaper from the 1950s and today will show that today’s textbooks and newspapers have many more images in

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2 Introduction

them (Lemke 1998). Both textbooks and newspapers are often available today on the Internet where they are accompanied by yet more images and videos.

Multitasking is another pervasive and important phenomenon today. Multitasking by the so-called “digital generation” is much discussed. However, oral language has always demanded multitasking. In speaking we have to pay attention, as we will see, to a myriad of things. The same is true of early hunting and gathering by our ancestors. The last humans who could not multitask died out long ago, for good Darwinian reasons. Nonetheless, today multitasking is required more than ever and the ability to know how, when, and where to multitask is becoming paramount.

Digital media are a delivery system for language (and other things), just like a car is a delivery system for humans. Written language was an earlier delivery system for language. We can hardly understand a delivery system if we do not understand what it carries and why. While we may seem to trivialize digital media and written language by calling them delivery systems, in reality we do no such thing. Cars, trucks, planes, and tanks are delivery systems for humans, but they have transformed the world and human beings for both good and bad.

This book is about language in the digital age. So let’s talk about language. Oral language was a gift to humans from evolution, culture, or God (depending on your point of view). It was a gift of true equality. Everyone, barring very severe disorders or terrible social circumstances, acquires a native language (Chomsky 1986; Pinker 1994). Furthermore, every human is both a producer (a talker) and a consumer (a listener) when it comes to oral language (or sign language, for that matter).

Cultures, in all likelihood not long after they first arose, had a problem with this equality. In many cultures, it came to pass that the powerful restricted other people’s rights to speak. The powerful set themselves up as the official spokespersons for the culture. Kings, elders, and shamans came to produce the official and powerful speech in cultures. Everyday people became, when speech was truly consequential, consumers (listeners) and not producers (speakers). They were, in matters of consequence, often silenced.

By the Middle Ages in the West, society was thoroughly organized into a “great chain of being” (Lovejoy 1933) with kings and bishops at the top, knights and lords below them, followed by land owners and tradespeople, and, at the bottom, the majority of the population, peasants. This was a chain as much about who had the authority to speak and to speak the truth and who did not, than it was of internal worth. It was about who should listen to whom. Peasants, at the bottom, listened to everyone else and spoke authoritatively to none.

Writing created a new challenge to authority and struck a new blow for equality. When someone speaks out, authority can easily identify and reach that person to enforce power. But when someone writes on a wall, a building, or a piece of paper, they can be anonymous and they can be miles away by the time the authorities read what they wrote.

Writing once again offered the possibility that all could be both producers (writers) and consumers (readers). It offered people the capacity to confront authority from anonymity and from afar. When print came along, the possibilities

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just became infinitely larger, since now books could be more easily produced, made more cheaply, and distributed to many more people. But literacy was fated never really to work this way, save for in special circumstances.

In the case of both handwritten manuscripts and printed books, reading was, until modern times, restricted to the well-off, the educated, and the powerful in most countries (Graff 1979, 1987). When countries like Sweden achieved nearly universal reading (in the sixteenth century), reading was encouraged so that all could read the Bible and ministers visited homes to ensure that everyone was reading “correctly” (Johansson 1977). In modern societies, even when reading became nearly universal, writing spread much more slowly and never became universal. Many people today cannot write nearly as well as they can read. Printing houses and publishers, almost from the beginning of print, controlled what could be officially published (often along with state authorities). Once again, everyday people were meant to consume (read) and not produce (write, and certainly not publish).

Digital media again offer us an opportunity for equality, for letting everyone be producers as well as consumers. With digital media people can often bypass official institutions and oversight to produce their own media, knowledge, products, services, and texts. They can easily distribute their productions worldwide. They can make ads, movies, and video games to compete with the “professionals” or to critique “mainstream” sources. Through the Internet, even people once considered “marginal” or not “mainstream” can find many others like themselves across the globe and group together. People without official credentials can debate those who do have them and compete with them to produce knowledge and ideas.

Since we know that, with both oral language and literacy the ability of the powerless to produce and not just consume was curtailed, restricted, and policed, though never with total success, we can suspect that forces will arise to stem the tide of everyday production and participation that digital media have unleashed. Digital media are still new enough that the shape these controls will take is not fully clear, even to the powerful, nor can we be sure that this time equality will not win out.

Equality is a big problem for all of us, not just those who want to hold power over others. If everyone has a point of view and the ability to voice (or write) it, in a big enough group, there is not time or attention enough for everyone to be heard. Not everyone can get a significant audience and those who do will gain more status and power. So far, quality and truth have certainly not determined by themselves who gets a big audience, status, or power.

The same problem arises in an even more dramatic form with digital media, since today audiences can be global. In an age where everyone can produce and appeal to the whole world for an audience, some people gain a big audience and some do not, since none of us can pay attention to even a small fraction of the production, information, and communication circulating today in our global, interconnected media.

It is true, though, that thanks to how big the potential audience is these days (namely everyone with a computational device, mobile or not, and a connection to the Internet), even small causes, crackpots, and people with rare skills and insights

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only in terms of how, when, where, and why they are put to use. They have different effects in different contexts of use. They can be forces for good or ill. A computer connected to the Internet in the hands of a child with good mentoring is often a force for learning. It may not be in other circumstances. The real issue, then, is social, that is, who has and who does not have mentoring, not technology alone. The same is true of books and of language, as we will see.

The New Testament (John 1:1) says: “In the beginning was the Word, and the Word was with God, and the Word was God.” For humans, that first word was spoken. Oral language is our original gift. Written language came along much later. Digital media later still. For centuries people identified the breath with which we speak with the spirit or the soul and the language they spoke with their unique humanity. Written language froze that breath, allowing it to travel far and wide, allowing the growth of cities, empires, and institutions. Digital media have unfrozen it again, creating a voice that can travel far and rapidly among “everyday people” and, for good and ill, challenge the power of experts, empires, and institutions. What will happen? Only the future will tell.

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can find a significant audience, though not a mass one. Everyone who loves making doll heads out of avocado pits can find each other around the world and group together as “people like us” or “people with a shared passion” (that others do not understand). Before they felt alone among those who thought they were odd, special, or marginal.

This ability to gain an audience at all, even if not a mass one, is in many respects good and to be encouraged and applauded. Today, people with rare diseases or formerly lost causes can find and get support from others. Young people can gain readers for their fan fiction from across the world. Their readership won’t compare with popular published authors, but they often don’t care, since they are writing for the love of it and adore having readers at all.

But there is a potential downside as well. As the ability for people to find others with the same interests or passions increases, so do the number of groups. People can splinter and even polarize around their favored passions, values, and even political views, communicating only with others who share their passions, values, and views. The irony becomes that in a world where everyone can produce and find an audience, “everyone” becomes not a true public or civil space, but a bunch of groups “doing their own thing.” Equality is further jeopardized in this world when some people have better access than others to the groups whose interests or passions lead to more status and success in society.

Today, despite the proliferating groups on the Internet and the heavily polarized politics in the United States and some other countries (caused in part by the growth in media and group sites that allow everyone to customize what they hear only to what they already believe), there are many instances where people from different groups have used the Internet and social media to engage in large-scale public causes, whether fighting dictators or aiding people in disasters. It remains to be seen how the tension will play out between the trend to split into many different, valued-laden groups and the opportunity for people to organize for large causes more spontaneously than ever before.

We have hope and fear. Hope that diversity and commonality, as well as production and consumption, can finally find a happy marriage. Fear that control over everyday producers will be re-asserted, groups will splinter and polarize, and common cause and a public sphere (both nationally and globally) will erode or become dominated only by the technologically elite.

There is one crucial point we want to make before readers begin this book in earnest. It is popular today for people to write books to say that some aspect of digital media (social media, the Internet, video games, and so forth) is bad or ruining our culture or endangering our civilization (e.g. among many others, Bauerline 2008 or Carr 2010). There are others who think that digital media are a panacea; for example, they think that just by giving poor children computers and the Internet we could close the gap in school performance between the rich and the poor (but see Stros 2010).

No technology—books, television, computers, video games, or the Internet—by itself makes people good or bad, smart or stupid. Such technologies have effects

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2 LANGUAGE

What is language?

The word “language” can mean different things. One way we can think about language is as something in our heads. We can think of it as a set of “rules” in our minds or brains that tells us how to speak “grammatically.” In this sense, language is a cognitive phenomenon (Clark 1996).

We can also view language as something physically present in the world. It is present in the form of speech, audio recordings, and writings. In this sense, language is a material object.

Alternatively, we can view language as a set of social conventions, shared by a group of people, about how to communicate (Duranti 1997). This is rather like baseball: baseball is based on a set of rules and, while these rules are in people’s heads and in rule books, what is most important about them is that they are followed by people when they play the game.

Of course, the conventions for spoken language are not really in a rule book of any kind. Some books about grammar tell us how their authors think people should (but don’t always) talk, while other books seek to describe how people actually do talk. Children don’t read books of either sort to learn how to talk.

The conventions that children learn to follow in speaking are social (Halliday & Hasan 1989). They are social in the sense that we catch on to them, in large part, by imitating other people (though with some variation).

Language can be viewed as cognitive, material, or social; it is, of course, all of these at one and the same time. Language is also something that is both individual and social. Language seems to belong to us as individuals—to be something we can use in distinctive ways—and yet seems also to be shaped by social conventions beyond our individual control. As an individual, I can say what no one else has ever said before. My language, my way of communicating, seems to be my own. I can

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say, for instance: "Blue cows decry metaphysics on Tuesdays" and probably this has never been said (or written) before by anyone else.

At the same time my language (English) was here long before I arrived on the scene. Many others have used it before me, and I follow much the same conventions others have followed. I use many words and phrases that I have heard or read before. Thus, when I said "Blue cows decry metaphysics on Tuesdays" I followed a grammatical pattern that other English speakers have long followed (Subject Verb Object). Furthermore, I was influenced by a sentence the linguist Noam Chomsky (1957: 15) once wrote (making much the same point I was trying to make with my "novel" sentence: people can say totally novel things): "Green ideas sleep furiously." When I wrote the sentence, I thought "decry metaphysics" was pretty novel, but I later found that the phrase has 151 hits on Google.

Other people's language is inside my head whether I know it or not. Looked at this way, language is a communal resource from which we all beg, borrow, and steal. People talk like others and still each of us has our own unique style (Bakhtin 1981, 1986).

Oral and written language

We often distinguish among "oral language," "written language," and "language" (as a term that includes both oral and written language). We can even use the term language for "languages" that are not human, as in "the language of the bees" or, if human, languages that are not "natural," as in "the language of mathematics."

For humans, language was oral long before it was written. Oral language has existed since the dawn of humanity. Written language was invented much more recently; estimates range from 3000 to 8000 years ago (Sampson 1990), and it was invented only by a few different cultures (Goody 1986, 1988).

All human groups have oral language. Not all cultures have had or even today have written language. Oral language was language's first and primary form. Distinguishing between oral and written language, and thinking about oral language as in some sense primary, is necessary to identify the distinctive features of each.

Who or what made language?

We know that people invented the conventions of baseball consciously (which is why we call them "rules"). They also agree to change them consciously and after overt discussion. Given these rules, some people are good at baseball and some are not.

Language is not like baseball in either of these respects. No group of humans got together and consciously decided what the conventions (or rules) of language would be. Furthermore, all humans are good at learning their first language and can learn any language in the world equally easily as their first language (Chomsky 1986; Pinker 1994).

All human languages share basic design properties (Chomsky 1957, 1986; Comrie 1981; Greenberg 1978). They all have vowels and consonants and syllables.

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new varieties of language for special purposes. Children acquire a vernacular variety of their first language as part of the process of being socialized into their families and communities. They are equally good at this, since the process is partly controlled by their biological capacity for acquiring language, a capacity special to humans. All children later have to learn specialized varieties of language, like the language of physics or of carpenters, more overtly and with more variation among learners.

Oral language

In this book we will eventually argue that digital media are a powerful force, not to lessen the importance of language, but to "level up," or enhance, language. Digital media "power up" (improve and expand) abilities language already has and they give language new abilities, or new powers. In that way, they are doing to language what human cultures have always done since they inherited language.

But it is important now to stop and talk, again, about what we mean by "language." Language arose first as speech (oral language). Oral language is language's original and primary form. It is oral language that evolved in the human species.

Oral language arose a long time ago, long enough for evolution to transform it. Writing did not. Writing is a relatively recent invention (Goody 1986, 1988). It has not been around long enough to be a product of evolution. It was purely a cultural invention (as is the language of mathematics or of *Yu-Gi-Oh!*). It was an invention of only very few cultures and then spread to others. All cultures initially and most cultures historically were "oral cultures" in the sense that they had no writing. There are still some oral cultures today.

For most of human history, oral language was used for face-to-face communication where people were co-present with each other in space and time. But think about what happened when humans invented the technology of audio recording. Now the oral word could be used for communication across time and space when people were not face-to-face or co-present. They could even listen to the recorded voice of a dead person.

Phones, too, allowed people to talk and respond at a distance (though not if they were dead). Today, voice chat through computers (in a game like *World of Warcraft* or in something like Skype) allows people to talk to others across the globe in real time in small or large groups without being physically co-present. If we add video to voice chat, we get a new form of co-presence at a distance. It's all oral language, but greatly enhanced and empowered in comparison to "face-to-face co-present-in-local-space-and-time communication."

Such technological changes in oral language, while they are enhancements and empowerments in some senses, do involve losses. We will see that all technological changes involve both gains and losses. A person can speak on a tape, but we cannot speak to that person. They cannot be challenged and they cannot talk back. A dialogic property of face-to-face communication has been lost. Phones lose visual cues and even video-enhanced voice chat loses some of the timing and close embodiment that is important to face-to-face communication.

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They all have nouns, verbs, sentences, and clauses grammatically they all have "recursion" (the potential to make longer and longer sentences by embedding one phrase or clause in another, as in: "John thinks that Mary believes that Sue claimed that Bob warned Jane not to believe that things are our ancestors"—obviously this could go on forever). Languages can all form questions, make statements, and give orders, and the ways they do these things are similar in some respects. There are yet deeper language universals that are beyond our scope here.

It is highly likely that all human languages developed from one original language. Over a long period of time, as different human groups spread across the world and communicated only with each other, this original language changed in different ways in different places. This gave rise to the great diversity in human languages that we see today and that was once even richer (before so many languages died out).

Language evolved as a capacity in human beings along with the growth of human cultures. We do not know what early stages of human language were like, since there are no early or "primitive" languages left. All human languages are complex and the languages spoken by cultures with no literacy are not less complex syntactically than those spoken by cultures with literacy (Gee 2004; Pinker 1994).

Barring severe disabilities or social problems, all humans acquire language as a core or basic property of their humanity. The form of language they acquire we can call their "vernacular" (Gee 2004). A vernacular variety of language is the form of language people use in their "everyday" lives when they are not speaking as specialists or experts of any sort. Even experts speak a vernacular variety of their language when they are not speaking or acting as experts.

People's vernacular style of language varies by dialect (so the vernacular form of English is different in different parts of the country or among different social groups). However, everyone's vernacular variety is equally complex and equally English (or whatever other language they have acquired).

In the course of history, people have invented new styles of speaking or writing for specific special purposes. They had a specific job to do and designed changes to the language to get it done. These varieties of a language use the grammatical resources of vernacular varieties, but are specialist varieties that not everyone learns or knows (while everyone has a vernacular variety).

So, for example, imagine a culture wants to engage in religious rituals of some sort. They have (culturally) designed certain ceremonies, environments, and artifacts for their rituals. They may also design changes to their language so they can use that language for their rituals, just as they use their ceremonies, environments, and artifacts. They create a "religious language" or a "ritual language," ways of using language for ritual or religious purposes.

Later in history, people (as groups, cultures, societies, institutions, and even clubs) have created a massive number of varieties of language. They have changed their basic language to engage in language varieties for mathematics, science, law, medicine, engineering, game design, anime fandom, and many other things.

To sum up: language developed as a capacity in humans (and not other animals) in the course of human evolution and then it was transformed by cultures as they invented

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Of course, we have not given up face-to-face co-present local communication and we still reap its benefits. Nonetheless, new forms of technologically enhanced communication do change the "ecology" of such face-to-face co-present local communication. For example, many people spend more time talking to people from across the world via voice chat, Skype, and chat rooms than they do talking to their neighbors in face-to-face co-present local communication.

In the next chapter we will discuss the nature of oral language in more depth. There we will argue that "oral" is not really an appropriate word here. There are also human languages (which bear all the hallmarks of language's original design properties) that are signed, not spoken. We can all think with language in our minds and not say it (though thinking language is somewhat like mentally saying it or signing it to oneself).

The spatial basis of meaning in language and thinking

As language evolved in human beings, what were its core or essential properties? The origins of language are so long in the past that we know next to nothing about them. Early humans were hunters and gatherers. Surely, when language first arose, humans used it for face-to-face communication and to talk about the here and now and things physically present around them ("Look, antelope, over there" accompanied by a gesture). This here-and-now aspect of language is, and always has been, at the very foundation of human language.

Early humans surely did not sit around the fire talking about metaphysics or the emotional nuances (or lack thereof) of the male brain. Life in those early days, to adopt a well-known phrase from Thomas Hobbes, was "nasty, brutish, and short." Our ancestors were focused on survival. Early language almost certainly was used only to communicate about concrete matters in the here and now, not abstract matters.

Thus, an initial function of language was to allow human beings to talk about concrete things in the here and now while being face-to-face with others. Gesture was probably an important accompaniment of language at this point (as it still is today). Let's call this the Spatial Property of Language. A core property of language is its use for face-to-face communication about concrete things in the here and now.

As language evolved further and eventually was transformed by human culture, this original Spatial Property became more powerful in an interesting way. Humans learned to talk about abstract and mental things and they did so by talking about them as if they were things in space and time. People, through language, began to treat things which are not actually concrete and in the here and now as if they were, through metaphor (Anderson 1971; Lakoff 1987; Lakoff & Johnson 1980; Lyons 1977). People also think about abstract things as if they were concrete, since people often use language to think (Lakoff 1987). People, in talk and thought, move from the concrete to the abstract.

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For example, when I say, "I lost my keys," I am talking about a physical thing in space. When I say, "I lost my mind," "I lost my integrity," "I lost my train of thought," or "I lost the election," I am talking about things that are more abstract than my keys and not physical (or at least a simple physical thing) like my keys. These are all metaphors. We treat minds, integrity, thought, and elections as if they are things I can misplace in space (Lakoff 1987, Lakoff & Johnson 1980). There are many examples of such spatial metaphors:

PHYSICAL

I dropped my keys.
Drop that gun!
I went away from home.
I came back home.
I explored the park.
I moved the book.
I found a dollar bill.
I slipped on the ice.
John grew six inches.
I gained in stature (height).
The cab drove me home.
Nothing is in the box.
I pushed the cart.
Birds fly.

ABSTRACT OR MENTAL

The idea just dropped out of my head.
Drop that topic!
I went insane.
I came back to my senses.
I explored algebra.
The speech moved me emotionally.
I found the truth.
The idea slipped my mind.
John grew as a statesman.
I gained in stature (reputation).
He drives me crazy.
Nothing is in his head.
I pushed the idea.
That proposal is not going to fly.

Over time, the Spatial Property (the ability to talk about concrete things in the here and now) was also the basis for talking about mental and abstract things via metaphors. Once humans hit on this metaphorical trick of talking about mental and abstract things as if they were things in space and time, they were on the path to being able to talk about metaphysics, minds, and the emotional nuances (or lack thereof) of males' brains. The move from talk about concrete things in the here and now to talk about mental and abstract things was a major step in the development of the human mind, human culture, and human language.

In this book we will discuss many other important changes in language. We will watch language become more powerful, just as it did when spatial metaphors were used to talk about abstract and mental things. We will see that digital media are causing important changes in language. But the most powerful enhancement of language in human history was literacy—written language. Literacy is a technology, just like digital media. So far, its effects dwarf those of digital media; one of the key ways digital media have and will transform language is by transforming or replacing literacy in various spheres and practices. We will turn to literacy in the next chapter.

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12 Language

Being embodied and situated

Though a popular belief was that humans think through abstractions and generalities, in reality, humans think through images and experiences (Clark 1989; Gee 2004). Consider the difference between "The coffee spilled, go get a mop" and "The coffee spilled, go get a broom" (Clark 1989). You readily recall a world of experience, not just definitions of words, to understand these sentences.

When we need to understand abstractions, or things that are too small, too large, or too complex for us to perceive or understand easily, we often call on the power of metaphors to describe them. We see, for example, a biological cell as a little room full of little machines making things. We picture the inside of an atom as if it were composed of little planets orbiting around a central body (the nucleus). We imagine DNA as if it was a blueprint for a house. Our metaphors can get us into trouble, but they are, nonetheless, often essential for human understanding. Scientists' models are often like metaphors: for example, the wire frame model of the double helix of DNA, a model plane in a wind tunnel, a diagram of the forces impinging on a moving object, the picture of a branching tree to represent evolution.

Understanding in thought and language is, for us humans, first and foremost embodied and situated. We see and understand things through the perspective of our bodies (embodied) and in terms of specific contexts and variations across contexts (situated). For humans, understanding very small things (like atoms) and very big ones (like galaxies) is hard since they are beyond our ordinary means of perception. Understanding things that are more accessible to our senses is much easier for us. We have had to invent quite special tools to understand the very small and the very large.

We have, though only in a sense and with real limitations, freed ourselves from our bodies, from concreteness, and from the here and now. We have tools to deal with abstraction that are no longer tied to metaphor (e.g. various branches of mathematics). The technology that freed us the most from the here and now was literacy. Literacy allowed language to be uncoupled from conversation among humans in specific contexts of use. It allowed for the invention of specialized languages to deal with abstract and complex things.

Digital media (like text messaging, Twitter, and other social media) are, in a sense, bringing language back to its conversational, interactive, here-and-now foundations. They are also bringing back concrete images and experiences, as well as metaphors, for understanding the abstract and the complex through, for example, simulations and video games. But they are doing this in quite different ways than did oral language.

People with today's social media and virtual worlds can "chat" (in writing or in voice chat) with people across the world. Such interactions are embodied, situated, and "face-to-face" in a new way.

Digital media also create new ways to use models and metaphors for understanding. They allow us, in a simulation or a game, to become an electron and move through an electromagnetic field, to be a virus entering a body, the leader of a wolf

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pack, or a firefly signaling to a mate. The scale of our human bodies is no longer the limitation it once was. We can use simulations and games as models or metaphors for understanding (Gee 2007b; 2007c).

With literacy, language is separated from bodies. With digital media the body often returns, but in displaced and virtual ways. We understand an electromagnetic field through a concrete embodied experience, but our (surrogate) "body" is an electron. We understand modern warfare on the field of battle, but the field is virtual and the body is an avatar we control through virtual space and time.

Language returns to a landscape of voice, the here and now, to concrete embodied understandings, to images and metaphors, and to "face-to-face" individualized interactions. But this is a landscape unlike what has come before.

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3 LITERACY

What is language? What is literacy?

The word "literacy" is used in many different ways. We will use it in a narrow and traditional sense. By "literacy" we will mean reading and writing human language.

More extended uses of the term (e.g. "computer literacy," "emotional literacy," "science literacy") are fine for other purposes. However, in this book, we keep the notion of literacy narrow and traditional so that we can first understand the role of literacy and then the role of digital media in changing language. Understanding how literacy as a technology has influenced language is important for understanding later how digital media as technologies influence language.

Before we can discuss literacy coherently, we need (perhaps surprisingly) to be clear about what we mean by "oral language." Ironically, oral language isn't always oral (audible, spoken). As we mentioned in the previous chapter, we can talk to ourselves silently and we often use language to think (which may itself be a form of silent speaking).

American Sign Language (ASL) is signed, not spoken, but it is a real language just like English or Spanish (Gee & Goodhart 1988; Grosjean & Lane 1980). By the way, we are not talking about "Signed English," but about ASL acquired as a native language by deaf children.

Whether language is spoken to others out loud or silently to oneself, it is inherently interactive or dialogic. If I say or think to myself, "Is there really any reason for me to have shown up today?," the very form of my silent utterance is a question that invites a response, namely an answer to the question—which, of course, I might or might not actually give to myself. If I say or think to myself, "That guy really is a fool," my silent utterance is a claim that invites a response to questions like "How do you know that?" "Are you being too hard on him?" and so forth. Again, I

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may skip the response or engage in an internal dialogue, but language is built to be interactive and to invite certain sorts of responses or dialogue.

Speaking is just one way to express language. Thinking is another way and signing is yet another way. Speech, thinking, and signing are different *delivery systems* for language. They are not themselves language. Literacy is yet another delivery system for language. It, too, is not itself language. So what is "language," this thing that can be delivered orally, through thinking, by signing, or in writing?

Language is a set of social conventions about how to combine words, phrases, clauses, and sentences to communicate meanings. These grammatical combinations of words ("grammatical sentences") are delivered or expressed via speech, thought, signing, or writing. Language is a "system" of conventions about how to make meanings that can be expressed or delivered in different ways.

For human beings, the original and primary form of language is language spoken (or signed) to others (Gee 2004, 2008a; Pinker 1994). Writing is a latecomer on the scene and exists to deliver language that is or can be oral, thought, or signed (Botha & Knight 2009; Gee 2004; Goody 1986, 1988; Olson 1996; Snow 1991).

Not all spoken language can be expressed through writing systems. For example, the rise and fall in the pitch of the voice that characterize intonation contours in English have no systematic symbols in the English writing system. Nor do the changes in stress that distinguish a word like "record" (I kept a record of our conversation) and "recond" (I will not record our conversation). No writing system can capture all of the features of speech (or thought or signing) that are relevant to communication and meaning.

Writing is a secondary delivery system, delivering language that can be spoken, thought, or signed. For the rest of this book, we will use the term "oral language" to mean language that is delivered by speech, thinking, or signing, and the term "written language" to be language that is delivered by writing. To say writing is secondary does not mean literacy is not important, but it does mean that oral language is more foundational for literacy and literacy learning than many people realize (Gee 2004; Hart & Risley 1995; Heath 1983; Scollon & Scollon 1981).

Stating that literacy is a delivery system for oral language, and a secondary one at that, may seem to downplay its significance. But, in reality, it does not. Consider automobiles, which are a "delivery system" for human beings. Cars are not themselves human beings, but they have radically changed how humans act, interact, think, plan, and value. The impact they have had on our cities and on the world economically, culturally, and environmentally is massive. Far from being trivial, since they are "only" a delivery system, automobiles are transformative. Literacy, too, has been transformative of both language and human beings.

There is yet another way to view the impact of literacy as a delivery system for language. When humans have a tool, like a gun, a pole vault pole in pole vaulting, or a forklift in an industrial plant, the human being is capable of doing more with the tool than without it (Wertsch 1998). Human ability is so enhanced with tools that we can see the "person-with-tool" as an integrated entity; that is, we can see the actor in pole vaulting as "human-with-pole" (pole-vaulter), the actor using a

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“Anatomía de la lengua”

ANATOMÍA DE LA LENGUA

*Historias, curiosidades
y porqués
del idioma*

Un proyecto de

 **molino
de ideas**

VOX

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Nil Vendrell (págs. 55, 74, 82, 121, 125,
149, 151, 153, 185, 197 y 213)

Diseño de cubierta, maquetación y preimpresión
Victor Gomollón

Primera edición: 2016
© Langmenow, S. L.
© L'AROUSSE EDITORIAL, S. L.
Mallorca, 45, 2.ª planta
08020 Barcelona
Tel.: 93 241 35 05
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ISBN: 978-84-9974-213-7
DL: B-8923-2016
E11

Del sol y del lenguaje

Una vez me preguntaron por qué me dedico a dirigir programas de divulgación científica. Respondí de una manera ciertamente poco educada pero, a cambio, muy efectiva: con otra pregunta.

—«¿Por qué brilla el sol?»

Mi interlocutor, un hombre leído y orgulloso de sus lecturas, sonrió, carraspeó incómodo, se recolocó innecesariamente las gafas de montura al aire y me respondió que el sol es una estrella, que duda cabe, y que las estrellas son... en fin... brillantes.

—«Sí —dije yo—, que las estrellas son brillantes está bastante claro, pero, ¿por qué?»

No tuvo más remedio que rendirse. Le expliqué entonces que el brillo del sol se debe a las fusiones nucleares que tienen lugar en su interior, y que el hecho de que algo así no sea vox populi, ni siquiera entre gente más o menos culta, justifica sobradamente todos los esfuerzos por popularizar la ciencia.

Si nos preocupa el desconocimiento general que rodea al saber científico, no debería preocuparnos menos el que existe en torno al lenguaje. Veamos. ¿Por qué llamamos *sol* al sol, y no *mesa* o *coche* o *paraguas*? ¿De dónde salen esas y las demás palabras? ¿Por qué *diantres* *diantres* está aceptada por la Real Academia Española y *pifostio* no? ¿Estoy escribiendo mal si escribo *pifostio*? ¿Y qué *diantres* es un *pifostio*?

A todas esas preguntas y a muchísimas otras da respuesta *Anatomía de la lengua*, y lo hace de manera original y divertida. Durante su lectura y después de ella se sorprenderá usted contando a sus amigos anécdotas y chascarrillos sobre el lenguaje. Y, cuando

lo haga, estará aportando su granito de arena a la divulgación de la lingüística.

Dicen los autores de *Anatomía de la lengua* que el lenguaje es un ente vivo y que, por tanto, no debe ser recluido entre los muros del academicismo. Que no existe un «hablar mal», sino tan solo un «hablar distinto». Porque el lenguaje, como el sol, es propiedad de todos. Y, como ocurre con el sol, sin él, ni usted ni yo estaríamos aquí.

Jose A. Pérez Ledo
Columnista, novelista
y divulgador científico

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*En recuerdo de Daniel Cabrera Espinar,
con inmenso cariño y agradecimiento*

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había llegado a la medicina. Vesalio es el humanista que introdujo la aproximación científica al estudio del cuerpo humano y hoy se lo considera uno de los padres de la anatomía moderna.

Esta anécdota de la historia de la medicina resume bastante bien las dificultades que tenemos los humanos para cuestionar nuestras creencias y nuestra fe en las fuentes de autoridad, incluso cuando la realidad nos lleva claramente la contraria. Antes de la llegada de Vesalio, la anatomía consistía en estudiar y corroborar unos textos que, inevitablemente, eran defectuosos e incompletos. En la Edad Media el único objetivo de realizar disecciones humanas era confirmar lo que un señor había dicho 1000 años antes y, si la realidad no lo corroboraba, se desacreditaba la realidad antes que la fuente. La revolución de Vesalio consistió en cuestionar esa aproximación, que defendía que estudiar una disciplina consistía en venerar un texto en vez de observar la realidad.

Aunque en un campo bien distinto, las personas que formamos Molino de Ideas compartimos la visión vesaliana del mundo. En el ámbito de la lengua abundan todavía las posiciones que defienden una aproximación basada en la autoridad y la tradición. Lo preocupante es, además, que esa manera de entender la lengua es la que muchas veces hemos mamado en el colegio y también es la aproximación mayoritaria en la sociedad. Cuando aparecen noticias sobre lengua en los medios de comunicación suele ser para alertar del mal uso que hacemos del idioma, del empobrecimiento galopante del castellano y de lo descuidados que somos como hablantes. Bajo esa noción (que las instituciones que se dedican a la lengua suelen transmitir y que los medios se apresuran a amplificar) subyace la idea de que la lengua es un bien inmutable creado por la divinidad y que los humanos nos hemos encargado de corromper. En su versión laica, en lugar de ser un regalo divino que hemos roto, a quienes hemos traicionado los hablantes de hoy en día es a nuestros gloriosos antepasados, que sí se expresaban con verdadera corrección y decoro.

La lengua es mucho más que corrección y escobazos en la cabeza. La lengua no es un don divino que hemos pervertido con nuestro uso. La lengua nos pertenece, es nuestra, no nos la ha prestado nadie. La lengua es una creación colectiva que hacemos todos los hablantes, posiblemente una de las obras más democráticas y fascinantes

Lengua, cadáveres y clases de anatomía

Galeno fue un médico griego que vivió en el siglo II d.C. Investigador incansable, contribuyó al conocimiento científico de la época con innumerables descubrimientos anatómicos y fisiológicos sobre el cuerpo humano. Su trabajo fue portentoso y sus descripciones se convirtieron en obras de referencia para la medicina medieval en Europa. No obstante, algunas de sus descripciones no eran exactas y contenían errores. Esos fallos eran más que comprensibles: durante la época romana la disección de cadáveres humanos estaba terminantemente prohibida, por lo que Galeno y los anatomistas de aquel entonces tenían que conformarse con diseccionar cerdos y otros animales, y extrapolar la disposición anatómica que encontraban a la anatomía humana.

En la Europa medieval, la disección de cadáveres humanos sí estaba permitida y formaba parte de la educación de los médicos de las incipientes universidades. El catedrático iba leyendo en voz alta los textos clásicos de Galeno a la vez que se diseccionaba el cuerpo en cuestión. Cuando había un desacuerdo entre la anatomía del cadáver y el texto de Galeno, el catedrático proclamaba con solemnidad: «Se equivoca el cadáver, que no Galeno». Hubo que esperar al siglo XVI para que un joven estudiante, Vesalio, cuestionase el método de estudio de la anatomía humana vigente en aquel momento. Vesalio empezó a diseccionar cadáveres humanos sin tener en cuenta los textos canónicos y elaboró nuevas descripciones basadas exclusivamente en su experiencia. Su tratado de anatomía *De humani corporis fabrica* revolucionó el estudio de la anatomía porque en él anteponía la observación a la veneración por las fuentes clásicas. El Renacimiento

LENGUA, CADÁVERES Y CLASES DE ANATOMÍA / 13

que hayamos construido los humanos jamás. Y nos la estamos perdiendo. Mientras nos dedicamos a discutir sobre si la palabra *empoderar* es válida o no y a rasgarnos las vestiduras por los anglicismos que entran en la lengua cada día, nos estamos privando del inmenso placer de observar verdaderamente cómo hablamos y de entender por qué hablamos como hablamos. Hay tanta lengua por descubrir y tan disfrutable que no se entiende que la corrección y las posiciones agoreras sean las únicas que copan las conversaciones sobre lengua. Existe una hermosísima lógica que rige el funcionamiento de la lengua y nada tiene que ver con las consideraciones habituales en torno al bien y al mal. Hay lengua mucho más allá de las posiciones habituales que oímos en boca de académicos e instituciones tradicionales. Es más, la lengua más interesante la encontramos lejos de esos ámbitos. No está todo perdido. Las posiciones apocalípticas van siendo propias del pasado, mientras que las aproximaciones más científicas y descriptivas van haciéndose con las riendas del gremio lingüístico; pero aún tenemos mucho trabajo pendiente.

Quienes nos dedicamos a la lingüística necesitamos que estos nuevos planteamientos lleguen al público general: tenemos que recuperar la lengua. En los últimos años, los científicos han hecho un enorme trabajo para acercar la ciencia a la población no especialista y hemos visto magníficas iniciativas para fomentar la divulgación científica: libros, programas de televisión, conferencias, blogs y hasta monólogos. La comunidad científica ha hecho un gran esfuerzo y ha logrado que el placer y la curiosidad que han llevado a los humanos a hacer ciencia no vivan encerrados en los laboratorios y departamentos de prestigiosas universidades. Los que trabajamos en asuntos relacionados con la lengua tenemos en la comunidad científica un magnífico ejemplo de lo que nos queda por hacer.

Llevar la lingüística a la calle es una forma de compartir el disfrute de nuestra disciplina; además tenemos que demostrar que un campo que muchas veces resulta árido y aburrido es, en realidad, comprensible y fascinante para todos. La divulgación lingüística es también la manera de devolverle a la sociedad lo que es suyo, lo que le pertenece, tanto porque la lengua es propiedad de los hablantes, y de nadie más, como porque muchas de las investigaciones en nuestro campo se pagan con dinero público y, por lo tanto, deben

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revertir positivamente en la sociedad que, con esfuerzo, las ha hecho posibles. Como investigadores de la lengua, la divulgación no es solo una vocación; debe ser también una obligación moral.

Con *Anatomía de la lengua* queremos recuperar el espíritu de Vesalio para acercarnos a la lengua libres de prejuicios y con espíritu científico. También nos gusta pensar que somos herederos de una larga tradición de gramáticos, lexicógrafos, lingüistas e investigadores que se han aproximado a la lengua con perspectivas distintas entre ellas y también diferentes de las convencionales y de las visiones imperantes de la época. Como algunas de esas perspectivas heterodoxas se han olvidado demasiadas veces, también nos gustaría que este libro sirviera para reivindicar su trabajo.

Pero, por encima de todo, lo que queremos es que la lectura de este libro sea una experiencia colorida, enriquecedora y estimulante, y que dé pie a pensar, a debatir y a observar la lengua a través de cristales distintos a los que estamos acostumbrados. Muchas de las ideas que aquí se expresan no son nuevas: al final del libro hay una bibliografía con las referencias académicas para quien quiera acudir a las fuentes. Para quien quiera seguir buceando en el campo de la divulgación lingüística, también hemos incluido algunas lecturas y enlaces sobre lengua que nos gustan particularmente y que están dirigidos a un público no especialista. Otras muchas cosas que se cuentan en el libro, en cambio, sí son producto de nuestros años de trabajo y reflexión lingüística; estaremos encantados de escuchar vuestras impresiones y opiniones. Nos tenéis a vuestra disposición en anatomia@molinodeideas.es para todo lo que queráis contarnos; somos bastante activos en los cibermundos así que es fácil dar con nosotros.

A pesar de que el libro se divide en seis capítulos convenientemente numerados, su lectura no tiene necesariamente que ser secuencial. Invitamos a los lectores a que opten por el orden que les parezca más apropiado o acorde a sus intereses. Los capítulos son bastante independientes y no es necesario haber leído uno para poder pasar al siguiente.

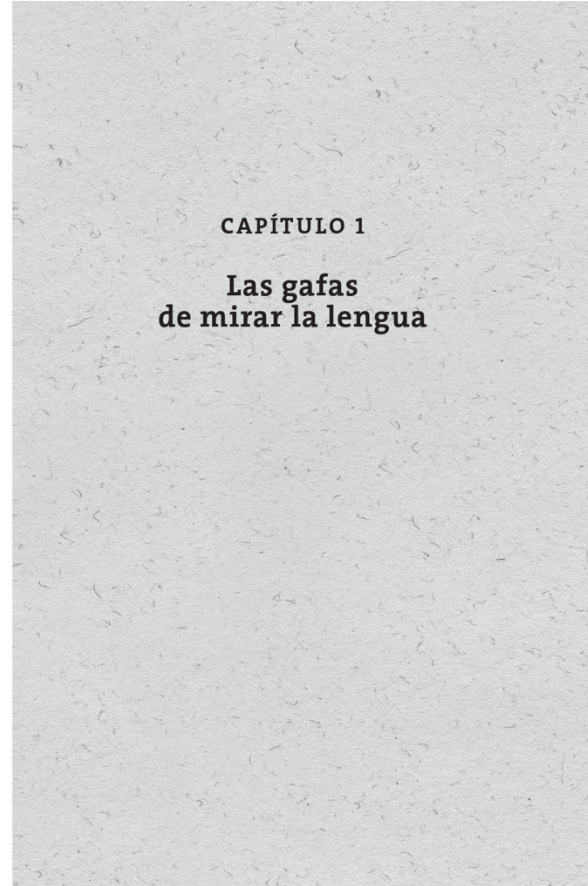
Que comience la disección.

El observador observado: un recorrido lingüístico por el espacio y el tiempo

La fascinación por la naturaleza del lenguaje es casi tan antigua como el lenguaje mismo. En distintas épocas y lugares se ha observado la lengua con puntos de vista muy diversos; si nos damos un paseo por la historia vemos que el ángulo desde el que distintas mentalidades se han aproximado al estudio de la lengua está impregnado en cada época del espíritu de su tiempo. Como tantas otras cosas, parece que cuando observamos la lengua inevitablemente lo hacemos a través de las gafas de nuestra cultura.

Anteayer

Panini, además de un tipo de bocadillo y la marca de referencia de los que coleccionábamos cromos en los años noventa, tiene el honor de ser el autor de la primera gramática de la que se tiene constancia, una obra sobre el sánscrito fechada en torno al siglo IV a. C. En aquella época y en la India, el estudio de la lengua estaba íntimamente relacionado con la religión y la interpretación de los textos religiosos. Ese vínculo entre la escritura y lo sagrado casi parece una constante que se repite aquí y allá. Recitar mantras, invocar mediante palabras rituales o acceder a la verdad divina a través de los textos revelados por el dios correspondiente son rasgos que encontramos en muy distintas creencias y que no nos es ajena. La propia



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palabra *religión* deriva del latín *relegere*, según nuestro paisano Cicerón, 'volver a leer', aunque, quizá, entendiendo leer en un sentido un poco más amplio y trascendente que el literal.

Mientras que en la India se inclinaban por la aproximación religiosa, en la Antigüedad clásica era la relación entre lengua y filosofía la que más inquietaba a los pensadores grecorromanos, que inauguran la vieja polémica sobre si la lengua es una capacidad innata que traemos de serie (*natura*) o si es una habilidad que aprendemos del entorno (*cultura*). Esa cuestión se ha discutido a lo largo de los siglos y llega hasta nuestros días sin que hayamos dilucidado con certeza si predomina la naturaleza o la cultura.

Con la decadencia del Imperio romano, empezaron a perfilarse las variedades regionales del latín en la Europa medieval y, a fuerza de evolucionar, acabaron dando lugar a las lenguas europeas. A nadie le gusta quemar a sus ídolos, así que dejar atrás una lengua de prestigio para abrazar con orgullo la nueva fue una transición delicada. Tras los complejos iniciales de quienes defendían que como en casa en ningún sitio y como el latín ninguna lengua, algunas voces se lanzaron a reivindicar con orgullo las nuevas lenguas vulgares; es el caso del poeta Dante Alighieri, a comienzos del siglo XIV. Con la llegada del Renacimiento, surgieron las primeras gramáticas de las lenguas vulgares; así, en 1492, el mismo año que Cristóbal Colón llega a América, Antonio de Nebrija publicó la primera gramática de la lengua española.

Coincidiendo con la expansión del imperio de los Reyes Católicos (hacia el sur, contra los reyes de Granada y lo que quedaba de Al-Ándalus; hacia el oeste, en la incipiente colonia americana), la lengua española encontró en aquella primera gramática un sustento descriptivo y unificador. Las gramáticas no solo son obras para eruditos, sino también dignas hijas de los tiempos políticos y sociales que las alumbran.



Primera gramática del español escrita por Antonio de Nebrija (publicada en 1492) [Biblioteca Gonzalo de Berceo]

A Antonio de Nebrija no le faltaron detractores: quizá el más sonado fue el humanista Juan de Valdés, que lo desacreditaba arguyendo que Nebrija no tenía legitimidad para firmar una gramática del castellano por «hablar y escribir» como un andaluz. El injusto estereotipo sobre el habla de los andaluces lo encontramos ya en el siglo xv. De ese modo Juan de Valdés, entusiasta del habla de Toledo, que defendía como el mejor castellano del reino, inauguró otro clásico de las disputas lingüísticas tan eternas como estériles: dónde se habla mejor español.

A finales del siglo xvi nos encontramos con una de las figuras más atípicas y no suficientemente reivindicadas de la lingüística: Francisco Sánchez de las Brozas, alias el Brocense, un adelantado a su tiempo que propuso una aproximación lógica y sistemática al estudio de la lengua basada en la razón; no solo para describir la lengua castellana, sino para llegar a una gramática general que enunciara reglas válidas para todas las lenguas. Su aproximación ya presagiaba el enfoque que poco después sostendrá la escuela racionalista de Port-Royal en Francia, e incluso la vocación científica y universal que tomarán los estudios de lengua a partir del siglo xx. A pesar de su lucidez visionaria, el Brocense fue más valorado fuera de casa que en España, donde, para más inri, fue perseguido por la Inquisición en otro bochornoso caso de acoso a las mentes más preclaras de nuestra historia. Lo cierto es que el Brocense no es excesivamente conocido fuera del gremio de especialistas de lengua ni ha recibido el reconocimiento que merece.

Con el siglo xviii y la Ilustración llegó la fundación de la Real Academia Española (RAE) y las primeras obras académicas. El protagonismo histórico del primer diccionario de la RAE y los que lo siguieron ha eclipsado la magnífica producción de diccionarios que tuvo lugar durante aquella época, pero lo cierto es que hubo mucha vida lexicográfica más allá de los muros de la Academia. Los siglos xviii y xix están repletos de ilustres gramáticos y lexicógrafos olvidados que nos han dejado obras maravillosas y vidas de película. Aunque se les notan las canas a las suposiciones culturales y políticas que impregnan dichas obras (necesariamente, hijas de su tiempo), es difícil no contagiarse del entusiasmo por la lengua y la sed de conocimiento que transmiten. Manuel de Valbuena es el autor

Domínguez, que además de con la lexicografía también estaba muy comprometido en lo político, murió a los treinta y siete años al participar en uno de los alzamientos de 1848. El lexicógrafo Manuel Seco lo describe como «el lexicógrafo que murió luchando por sus propias definiciones».

Pero la palma en lo que a vocaciones polifacéticas se refiere se la lleva Felip Monlau: médico, periodista, crítico literario, profesor, lexicógrafo y, además, autor de la primera fotografía de la que se tiene constancia en España. Un humanista en toda regla que también contribuyó a la prolífica actividad lexicográfica del siglo xix en el ámbito de la lengua española.

El Romanticismo trajo consigo el auge del interés por las identidades nacionales y las raíces culturales de los pueblos. En Europa, sobre todo en Alemania e Inglaterra, surgieron los primeros trabajos de comparación de lenguas, que buscaban establecer posibles paralelismos y parentescos entre ellas. Las observaciones de sir William Jones preludivieron esa nueva rama de la lingüística. A Jones, que era un funcionario inglés destinado en la India, se le ocurrió comparar el vocabulario y la gramática del latín, el griego y el sánscrito, y, al encontrar ciertos paralelismos que se repetían, concluyó que las tres lenguas debían tener un antecedente común, que asumió que tenía que ser el sánscrito por ser el más antiguo de las tres. La conclusión resultó no ser del todo exacta; el sánscrito es, en efecto, la más antigua, pero vendría a ser una prima lejana que vivió hace mucho, no exactamente la madre de todas las lenguas. No obstante, llegar a dicha conclusión llevó a Jones a formular que, de la misma manera que el español y el italiano son lenguas hermanas por tener un antecedente común —el latín—, podía ocurrir que lenguas geográficas y temporalmente alejadas fueran ramas de una misma familia.

Una vez rechazada la teoría del sánscrito como madre primigenia de todo el árbol genealógico, se formuló una nueva hipótesis: que existía una lengua común no documentada más antigua aún que el sánscrito de la que derivaban diversas lenguas, entre ellas el latín, el griego y el sánscrito, que explicaría las semejanzas entre idiomas tan alejados. A ese antecesor común que emparentaba buena parte de las lenguas que van desde la India hasta el Atlántico se lo llamó

del tremendo *Diccionario universal latino-español*. Por su parte, Esteban Terreros confeccionó el *Diccionario Castellano con las voces de ciencias y artes*, una extensa obra cuatrilingüe en cuatro tomos de vocabulario científico y técnico.

También destaca Eduardo Benot, matemático, gramático y político progresista comprometido con la protección de los menores y la educación, que firmó su complejo y genuino *Diccionario de ideas afines*. Roque Barcia tuvo una vida digna de novela (lo excomulgaron nada menos que sesenta veces a lo largo de su vida) y además publicó dos interesantísimos diccionarios: un extenso diccionario etimológico y otro de sinónimos, francamente original, casi más un ensayo que un diccionario, en el que glosa las diferencias de significado y uso de palabras sinónimas.

Uno de los diccionarios más personales y revolucionarios del siglo xix fue el *Diccionario nacional o gran diccionario clásico de la lengua española*, de Ramón Joaquín Domínguez. Sus definiciones no están redactadas con la impersonalidad y la aparente objetividad que se espera de un diccionario, sino que son pura subjetividad y dejan ver abiertamente la sensibilidad política y visiones personales del autor. Su definición de la palabra *despotismo* resulta muy elocuente: «Anómalo e injusto sistema de gobierno, en que los gobernantes ejercen el poder sin sujeción a las leyes, o según les dicta su capricho, desentendiéndose de la razón, de los principios de equidad y justicia y de los sagrados derechos del hombre». Ese diccionario también expresa un rechazo frontal hacia la RAE, una institución a la que despreciaba. La contundencia con la que matiza la definición académica de *amor propio* es ilustrativa: «Amor propio: el amor desordenado con que uno se ama a sí mismo y a sus cosas. (Acad.) Lo que hay aquí de desordenado es la definición académica; porque no puede ser desordenado ese amor que es al mismo tiempo un precepto de la naturaleza y de la ley de gracia; amarás al prójimo como a tí mismo. El amor natural de nosotros mismos es indispensable hasta para la conservación de la vida que sin él nos sería indiferente. Así, pues, nos tomamos la libertad de sustituir el epíteto de natural al de desordenado en la censurada definición, si bien le aceptamos como sinónimo de egoísmo, cuando el amor propio degenera en ese ruin y bajo sentimiento».

1	español	siete
2	inglés	seven
3	lituano	septyni
4	armenio	levtn
5	latín	septem
6	griego clásico	hepta
7	persa	haft
8	sánscrito	sapta
9	hitita	sipta

Denominación del número siete en diferentes lenguas



protoindoeuropeo. Si bien algunos lingüistas habían apuntado en esta dirección ya en el siglo xvi, la formulación de Jones fue lo que dio el disparo de salida a la fiebre comparativa que se extendió por Europa durante el siglo xix.

El motor ideológico de William Jones y de algunos de los comparativistas era, en realidad, religioso: suponían que debía de haber existido una única lengua ancestral de origen divino que los humanos habrían corrompido hasta llegar a los idiomas modernos. El fondo ideológico de aquellos eruditos que buscaban descubrir la lengua divina primigenia no está tan lejos de la motivación que llevó a Panini a escribir su gramática: 2300 años después, la noción del lenguaje como un don divino corrompido por los humanos seguía presente.

Ayer

Al calor de la lingüística comparativa del siglo xix fueron proliferando las aproximaciones más universalistas al lenguaje: lo que se buscaba ya no era solo describir la gramática de una lengua, sino formular leyes generales capaces de recoger los procesos de evolución y parentesco entre lenguas. Ese cambio en la aproximación fue,

entre otras cosas, lo que abonó el terreno para la constitución de la lingüística como disciplina que ansía reflejar el funcionamiento de la lengua a partir de unas leyes comprobables, es decir, como disciplina científica. La puesta de largo de la lingüística como ciencia llegó en 1916 con el estructuralista Ferdinand de Saussure, que expuso, sistematizó y acotó algunos de los métodos y cuestiones que llevaban siglos disueltos en una madeja de discusiones imprecisas.

En España, la lingüística del siglo xx nos dejó un prodigio de la lexicografía: María Moliner. Su *Diccionario de uso del español* (DUE) sigue siendo una referencia irremplazable, tanto para expertos en lengua española como para hablantes no especialistas. Da rabia hablar de lo magnífico que es el DUE, porque a fuerza de repetirlo, la calidad del *María Moliner* es casi un lugar común y parece que nos hayamos vuelto impermeables a las alabanzas. Pero es que el trabajo de Moliner es portentoso por diversos motivos; Moliner confeccionó un diccionario que no caía en las numerosas deficiencias de las que pecaba el diccionario de la RAE. Cada entrada es extremadamente prolija en información, no ya solo en relación con la definición de la palabra (cuidadosamente redactada), sino también en cuanto a sinónimos, palabras relacionadas, ejemplos e, incluso, notas gramaticales y ortográficas. El objetivo del diccionario no era hacer una obra de autoridad, sino plasmar toda la información posible de todas las palabras y recoger el uso real. Con nuestras gafas del hoy y ante el uso prolijo y casi hipertextual de símbolos y notaciones que salpican las entradas, da la sensación de que a doña María se le quedaba pequeño el papel.

Los planteamientos teóricos que guiaron la confección de la obra y que dotan de coherencia interna al diccionario están explicados en el muy disfrutable prólogo de la primera edición. Sus explicaciones lexicográficas transmiten el escrupuloso rigor y la impresionante honradez con que Moliner acometió su tremendo diccionario, al que dedicó quince años de su vida. Lamentablemente, ni el prólogo ni el diccionario originales son accesibles: lo que hoy se vende como *Diccionario María Moliner* es una versión apócrifa y espuria, una refundición que la editorial propietaria de los derechos hizo en su momento a partir de la obra original, pero que nunca llegó a contar con el visto bueno de la autora. Solo son auténticos los ejemplares

es decir, ya no partiremos nunca de la potencialidad total que tuvimos, sino de las limitaciones que la especialización ha acarreado.

Quizá un ejemplo simplón pueda ayudarnos a entender mejor este asunto. Vamos a suponer que tenemos un cachorro de perro. Al nacer tiene la habilidad potencial de desarrollar el olfato y la orientación. Mientras es un cachorro, existe la posibilidad de entrenarlo para que se convierta en un perro pastor, un perro guía, un perro policía, un perro de rescate o cualquiera de las labores en las que intervienen perros (aunque sea un poco irreal, vamos a suponer que no existen razas con mayor o menor disposición para algunas tareas y que tiene las posibilidades de optar por cualquiera de estas vías). Es decir, antes de entrenarlo, todas esas vías son posibles porque el perro tiene innata la capacidad potencial de desarrollarlas. Sin embargo, en el momento en el que entrenamos al animal para que sea perro policía, desarrollará unas capacidades concretas (por ejemplo, el olfato) que quizá no desarrollaría tanto si lo hubiéramos entrenado para ser pastor. De igual manera, un perro guía desarrollará unas capacidades de las que carecerá el policía. Es más, probablemente la labor de partida para la que se entrene al cachorro determine la naturalidad con la que pueda pasar a desempeñar otra labor siendo ya adulto; por ejemplo, es probable que una cierta capacidad sea común a diversas tareas perrunas; incluso puede que su entrenamiento determine si podría llegar a ser absolutamente competente en otra labor, tanto como si hubiera sido entrenado para esta desde cachorro. De una manera parecida, los humanos nacemos con la capacidad abstracta y general para el lenguaje, y es el entorno lingüístico que nos rodea durante nuestros primeros años de vida lo que especializa esa capacidad innata hacia las particularidades de un idioma (o idiomas, en el caso de los bilingües y otros suertudos políglotas). Dichas particularidades son las que nos veremos obligados a superar cuando, con mayor o menor éxito, ya de mayores intentemos aprender un



de la primera edición del año 1966, hoy una rareza que hay que buscar en librerías de segunda mano.

El *Diccionario de uso del español* de María Moliner es un diccionario multidimensional y una monumental obra ante el que seguiremos quitándonos el sombrero durante muchas generaciones. El ostracismo en el que vivió Moliner y su marginación del mundo académico son motivos añadidos para reivindicar y celebrar a esta mujer. María Moliner no era la mamá que en su tiempo libre redactaba un diccionario mientras remendaba calcetines, como a veces se nos ha vendido. Moliner era una intelectual como la copa de un pino que la sociedad de su época ignoró porque era mujer y de convicciones republicanas. Todavía hoy no hemos rehabilitado como se merece a esta heroína de la lengua, superviviente intelectual de un tiempo que no pudo serle más hostil.

Hoy

Pero si decíamos que Saussure es el padre de la lingüística tal y como hoy la conocemos, el paladín indiscutible de los estudios de lengua del siglo xx es Noam Chomsky. Las teorías de Chomsky se sustentan sobre la idea de que el lenguaje es una capacidad innata del ser humano (recuperando la vieja polémica grecorromana de *natura* versus *cultura*) que incluye en su estado potencial la capacidad de amoldarse a toda la complejidad de rasgos gramaticales que tienen las lenguas humanas. Dicho en cristiano, lo que Chomsky viene a decir es que nacemos con una habilidad lingüística pluripotencial ya en el cerebro y que lo que hacemos cuando somos bebés es adquirir (y ¡ojo!, porque en estos menesteres *adquirir* no es sinónimo de *aprender*) nuestra lengua materna: eso quiere decir que podemos y especializamos la capacidad que traemos de serie —y que nos capacita para adquirir cualquier lengua— hacia las particularidades que tiene el idioma en el que estemos inmersos. Hay un periodo en el que se lleva a cabo la especialización que lleva de la potencialidad total del bebé que aún no habla a la competencia del hablante nativo de una lengua, y una vez pasado ese periodo y adquirida la que será lengua propia, solo podemos intentar aprender otras lenguas;

idioma nuevo. Al fin una explicación de por qué se nos resiste tanto el inglés.

La aproximación de Chomsky resultó revolucionaria porque proponía una visión de la adquisición y el funcionamiento del lenguaje muy diferente a lo que hasta entonces se había defendido. Antes del desarrollo de las teorías chomskianas, el desarrollo de las habilidades lingüísticas humanas se interpretaba como un fenómeno puramente conductista; es decir, los niños adquirirían su lengua materna a través de un proceso de imitación, corrección y gratificación no muy distinto a como se entrena una rata de laboratorio para que lleve a cabo una determinada tarea. Lo que Chomsky defiende es que el proceso de adquisición de la lengua no puede explicarse entendiéndolo como un entrenamiento puramente conductual: las habilidades lingüísticas conllevan un grado de sofisticación y abstracción tal que el cerebro debe tenerlas de manera innata. Eso significa que debe existir una gramática abstracta y universal con la que nacemos todos los seres humanos y que nos capacita para adquirir cualquier idioma. Tal gramática universal se especializará hacia una u otra lengua según en qué lengua vivamos inmersos.

La teoría gramatical chomskiana busca proponer una serie de reglas abstractas universales (expresadas mediante una serie de formalismos arbóreos bastante complejos) que serían comunes a todas las lenguas y que estarían en la base de la habilidad lingüística general con la que nacemos y para la que estamos determinados biológicamente. La búsqueda de esa gramática universal con la que todas las personas nacemos y que subyacería a todas las lenguas humanas naturales, por muy diferentes que aparenten ser unas de otras, ha sido y sigue siendo uno de los grandes retos de la lingüística y entronca con las propuestas que en el siglo xvi esbozaba el Brocense.

En todos los aspectos de las propuestas de Chomsky está muy presente —por no decir que es el meollo de toda su teoría— la aproximación cognitiva al lenguaje. Es decir, mientras que los estructuralistas de comienzos del siglo xx (Saussure y compañía) se dedicaban a la disección puramente formal de frases y oraciones, y mientras los conductistas defendían el lenguaje como un comportamiento puramente conductual, Chomsky introdujo la aproximación sobre

la naturaleza mental del lenguaje, según la cual una lengua no es solo un conjunto de textos, oraciones y palabras regidos por una estructura lógica desentrañable; su concepto también descarta que la lengua sea un comportamiento mecánico entrenable, como lo es hacer que una rata repita cierta tarea. Por el contrario, el lenguaje es una capacidad cognitiva de la que la lengua, ya sea escrita o hablada, es una manifestación cuya estructura no puede separarse del proceso mental que la genera.

Las teorías de Chomsky han centrado toda la atención del gremio desde finales del siglo xx hasta hoy, ya sea para corroborar y desarrollar sus ideas, ya sea para rebatirlas. Algunas de sus propuestas han sido duramente criticadas, empezando por el hecho de que no tenemos ninguna prueba que demuestre que el lenguaje es, efectivamente, innato y que está codificado en el ADN humano como lo está tener ojos o respirar; y justo ese es uno de los puntos de partida de sus teorías. Por otro lado, se le ha afeado que toda su teoría gramatical peca de anglocentrista, es decir, que está pensada y estructurada fundamentalmente para el inglés, y que asuma (quizá con demasiada ligereza) que los mismos procedimientos son aplicables, sin más, a otros idiomas. Nos queda por delante un emocionante camino para confirmar o rechazar todas estas teorías y para cosechar nuevos descubrimientos.

Anatomía de la lengua: cabeza, tronco y extremidades

Un señor de setenta y cinco años está en casa con su nieta de diecisiete, que ha venido de visita al pueblo, y están pasando la tarde de chachara tranquila. A nosotros nos parece que solo están charlando, pero lo cierto es que bajo la apariencia anodina de esa situación, se esconde un profundo y complejo sistema que permite que las dos personas estén tan a gusto hablando.

Si fuéramos extraterrestres que observan la escena, podríamos describir el intercambio entre el señor y su nieta de una manera física: uno de los humanos emite una cadena de sonidos mediante la

antitabaco; y así hay un variopinto y extenso etcétera de elementos. De cómo se forman las palabras y cómo se combinan las partículas que las constituyen trata la morfología.

Las palabras no están aisladas, sino que se agrupan para significar cosas y la relación entre ellas determina el significado del mensaje: no es lo mismo que yo me coma una trucha que que una trucha me coma a mí. Podemos incluso tener un mismo conjunto de palabras y construir con ellas estructuras con un significado muy distinto, según cómo relacionemos los elementos: *el plato del día* no es lo mismo que *el día del plato*. Cuando el verbo *hervir* es intransitivo, es decir, cuando no lleva complemento directo, el sujeto es el líquido que hierve: *El agua hierve a cien grados centígrados*; sin embargo, cuando usamos el mismo verbo en una construcción transitiva, como en *Mi padre hierve agua*, el sujeto de la oración es la persona que causa la acción de que el líquido hierva. La sintaxis es la rama que estudia las distintas modalidades en las que se organizan y agrupan las palabras de una oración.

Una vez que tengamos la estructura de los elementos que constituyen las frases de la conversación, necesitaremos saber cómo se relacionan los significados y los matices que aportan al mensaje emitido. Supongamos que el abuelo está contando batallitas de juventud: si le cuenta a su nieta cómo corría delante de los grises durante el franquismo, ese los *grises* es una manera de denominar a un elemento (en este caso, la *policía*) a través del color de su uniforme. O si el abuelo dice *estoy oyendo a tu hermano mugir por el pasillo*, hay una implicación subliminal y maliciosa que implica que el abuelo le atribuye, de alguna manera, las características de la vaca a su nieta. El significado literal de una frase no siempre expresa lo que el hablante tiene en mente. La semántica analiza la creación de significados y busca las relaciones entre ellos, así como las connotaciones expresadas por los hablantes.

La morfología, la sintaxis y la semántica se ocupan de asuntos muy distintos, pero al estudiar la estructura de las palabras y las oraciones es fácil acabar mezclándolas para justificar un determinado análisis. Es necesario separarlas y tener en cuenta que la morfología se encarga de las normas para construir palabras, la sintaxis de las reglas para construir oraciones y la semántica de las reglas

vibración de un órgano que tiene alojado en la garganta (las cuerdas vocales); los sonidos salen por su boca, se transmiten por el aire en forma de onda acústica (como todos los sonidos) hasta llegar a las orejas del otro humano; entonces el órgano de Corti, alojado en el cráneo, convierte la onda acústica en impulsos eléctricos, que viajan hasta el cerebro y son descodificadas por el área cerebral correspondiente, que está más o menos a la altura del cogote. Después, cambian los papeles: el que era el receptor es quien ahora emite la onda y el antes emisor es quien la recibe. La rama de la lingüística que estudia la naturaleza de la onda acústica emitida y las posiciones de los distintos órganos involucrados en la producción de la vibración (esto es, cómo vibran las cuerdas vocales, dónde van los dientes, cómo se coloca la lengua, etc.) es la fonética.

Si nos ponemos a escuchar de qué están hablando el abuelo y la nieta, descubriremos que los sonidos al juntarse tienen la propiedad de crear mensajes; de hecho, si cambiamos un sonido por otro, podemos alterar notablemente el mensaje que emitimos. La frase *Me ha dicho tu madre que te espera en la playa* es diferente de *Me ha dicho tu madre que te espera en la plaza*. La diferencia entre las palabras *plaza* y *playa* afecta tan solo a un sonido, pero esa modificación tiene la propiedad de alterar el mensaje emitido. Supongamos ahora que el abuelo tiene dificultades para pronunciar el sonido fuerte de la letra *r* correctamente. No es que pronuncie otra letra, sino que emite una *r* rara. Probablemente, más allá de ser una particularidad en su pronunciación, las palabras seguirán significando lo mismo y no se alterará el mensaje (como si ocurre cuando se cambia una palabra). De esto es de lo que trata la fonología: de qué sonidos caracterizan una lengua (frente a los que solo son realizaciones o maneras de pronunciar, sin que conlleven cambios).

Al hablar, el mensaje está constituido por palabras, que a su vez pueden estar formadas por elementos más pequeños que relacionan unas partes de la oración con otras; así, encontramos palabras cuya terminación sitúa temporalmente la acción, por ejemplo, la *-i* en los verbos, como en *recogí*; palabras cuya terminación indica cantidad de elementos, como ocurre en los sustantivos en plural, por ejemplo la *-s* de *libros*; palabras con una partícula antepuesta que modifica el significado de la palabra, como hace el prefijo *anti-* en

de asignación de significados. Si bien estos tres procesos están íntimamente relacionados, es necesario distinguir las palabras u oraciones que están morfológica o sintácticamente mal formadas de las que están bien formadas pero no existen o no tienen sentido en una lengua. Cuando aquí hablamos de estructuras bien y mal formadas no nos referimos a que sean correctas o incorrectas en términos normativos o académicos, sino a que están formadas de acuerdo a la lógica interna de la lengua; volveremos sobre ello más adelante.

Una palabra puede estar bien formada morfológicamente pero no tener un significado asociado y, por lo tanto, no se utilizará, pero no por ello deja de estar bien construida; tampoco hay nada que impida que en cualquier momento se le asigne un significado y pase a ser una palabra más. Los criterios por los que a unas palabras se les asigna un significado y a otras no son difíciles de establecer. De hecho, las palabras pueden perder el significado a lo largo de los años. Por ejemplo, la hipotética palabra *imbello* (como antónimo de la palabra *bello*) no existe, quizá porque ya tenemos la palabra *feo*; sin embargo, la existencia de la palabra *barbilampiño* no impide que también exista *imberbe*. En cualquier caso, a pesar de no tener un significado asociado, *imbello* es una palabra morfológicamente tan bien formada como lo es la palabra *imberbe*. Otro asunto es que a esa bien formada palabra le asignemos un significado y empecemos a usarla. Son las reglas morfológicas y no las semánticas las que hacen que la palabra esté bien construida.

De igual modo, decir que *desdormir* es agramatical porque el acto de deshacer el sueño no tiene sentido sería como decir que la oración *Los seres humanos ponen huevos* es agramatical. Una cosa es la manera en que las frases y oraciones están construidas, otra muy distinta es lo que las palabras y las oraciones significan, y si lo expresado por las palabras tiene correspondencia en el mundo real. Desde el punto de vista semántico, en nuestro mundo no tiene sentido un verbo para deshacer el acto de dormir, porque dormir es una acción irreversible, y tampoco tiene sentido que los humanos pongan huevos porque no es así como se reproducen, pero de lo que se ocupa la gramática es de marcar las reglas para construir palabras y frases correctas desde el punto de vista del sistema de la lengua, no del sistema del mundo. En nuestro sistema del mundo no tiene sentido

que los humanos pongan huevos, pero todos entendemos que la extrañeza que produce esa frase no se debe a motivos lingüísticos sino a su incongruencia respecto a la realidad que conocemos. De hecho, podríamos imaginar contextos en los que esa frase tuviera sentido: una novela de ciencia-ficción o una película de los Monty Python, entre otras. Por lo tanto, no debemos olvidar que tanto la morfología como la sintaxis son disciplinas que estudian la lógica interna de la lengua.

En cierto modo, las facetas de producción del mensaje lingüístico que acabamos de ver —fonética, fonología, morfología, sintaxis y semántica— abarcan desde la generación de la onda sonora hasta la creación de significado. Estas áreas constituyen el meollo fundamental de la lingüística, los aspectos de teoría pura y dura. Pero hay vida más allá de la teoría. Volvamos a la aparentemente anodina situación comunicativa del abuelo y la nieta. La situación se presta a ser fotografiada desde varios ángulos que atañen a otras áreas de conocimiento. Podríamos analizar el discurso de cada uno de los interlocutores a la caza y captura de rasgos jugosos para estudiar. El abuelo es bastante guasón y tiende a verbalizar lo contrario de lo que quiere decir; su nieta sabe que hay que conocerlo para entenderlo. La correcta interpretación del mensaje poniendo el significado en contexto situacional es el campo de estudio de la pragmática. La pragmática es la que nos permite interpretar correctamente el significado de un cartel que reze *Niños gratis* en el escaparate de una agencia de viajes: no es que regalen niños en esa oficina, sino que hay ofertas de viajes familiares y otros paquetes vacacionales en los que los niños menores de cierta edad no pagan.

También podemos analizar, por ejemplo, por qué al abuelo lo desconcierta un poco que su nieta diga que *Esa película lo está petando*. El abuelo no tiene muy claro que es eso de *petar*, pero sospecha que no debe ser muy diferente del *dabuten* de sus hijos al que ya tuvo que acostumbrarse en los años ochenta. De igual manera, a la nieta le resultan entrañables las expresiones que solo oye decir a su abuelo; de las expresiones propias de un grupo social o de una zona se ocupan la sociolingüística y la dialectología, respectivamente. Si el abuelo tuviera alguna forma de demencia o deterioro cognitivo propio de la edad, sería interesante para el diagnóstico observar si

existe alguna alteración, tanto en la pronunciación o en la escritura como en el contenido del mensaje emitido; a esos asuntos se dedica la neurolingüística. Y si por la casa anduviera zascandileando el nieta pequeño de la tribu familiar, los balbuceos infantiles que anuncian que el bebé está empezando a hablar harían las delicias de cualquier psicolingüista.

La lengua es una criatura compleja que se resiste a ser dividida en la triada tradicional de cabeza, tronco y extremidades, y eso que los tentáculos que hemos visto son solo algunos de los muchos que tiene. Resulta excesivamente simplista reducir esta capacidad humana tan variable, tan rica y tan hipnóticamente compleja en compartimentos estancos. Son tantas las variables que intervienen en la comunicación lingüística y tantas las disciplinas que se topan con el lenguaje en sus investigaciones que necesariamente la única perspectiva posible para retratar de manera fidedigna a esta hermosa criatura es asumir que no existe una perspectiva única.

¿Norma o descripción? Del escobazo al microscopio

Si oímos a alguien decir que *En la cola del pan había un señor detrás mio*, es posible que a más de uno le falte tiempo para precisar que la expresión *detrás mio* es incorrecta porque tiene que ser *detrás de mí*. Tenemos bien interiorizada la noción de que hay algunas maneras correctas de expresarse, frente a otras malignas que dañan nuestra lengua y que deben ser extirpadas sin miramientos. No hay de qué extrañarse: a fin de cuentas, que hay usos buenos y malos fue lo que nos enseñaron en clase de lengua a golpe de reglas de ortografía y gramática con la insistencia de la gota malaya. ¿Y acaso no es así? ¿Acaso no hay algo nocivo y perverso en *detrás mio*? ¿No resulta abominable oír *tú contestastes que no*? ¿No os sangran los ojos al leer *habíamos tres*? En realidad, no hay nada intrínsecamente malo en decir *detrás mio* o *contestastes*. Simplemente, tenemos una norma más o menos compartida que dicta que vamos a decir *detrás de mí* y *contestaste*. Pero bien podría haberse dado el caso de que los

hablantes hubiéramos acordado optar por formas que hoy se consideran incorrectas y que esas fueran ahora las válidas.

A raíz de esas dos posibles posturas (la que distingue entre bien y mal, y la que considera que hay varios usos, unos con prestigio social y otros sin él pero todos válidos), se distinguen dos aproximaciones a la lengua. Por un lado, están quienes defienden que existen unas maneras de expresarse correctas, que son aquellas que siguen las normas recogidas en las obras consideradas canónicas para estos menesteres (en el caso del español, serían las gramáticas y los diccionarios de la RAE, por ejemplo). Esa aproximación es la normativista o prescriptivista, porque entiende que existe un uso bueno de la lengua que consiste en respetar aquellas normas impuestas por cierta élite académica que se considera la autoridad lingüística. Las personas normativistas son aquellas a quienes les sangran los ojos ante un *detrás mio*. Para los normativistas, la lengua es algo que se construye de arriba hacia abajo: unas élites, unas instituciones o unas personas tienen el poder de dictaminar cómo se ha de hablar o cuáles son los cánones que hay que seguir (alta literatura, y otros textos formales y respetables); y los diccionarios y gramáticas bajan esas reglas al común de los mortales cual Moisés bajando con las Tablas de la Ley. Para los normativistas, quienes incumplen la norma académica están en pecado mortal porque «eso no se dice así y está mal». Esta aproximación es la que hemos mamado desde el colegio y, por lo general, la hemos asumido sin más cuestionamientos. Sin embargo, cabe preguntarse quién dictamina esas normas y con qué criterio. A fin de cuentas, ¿las estructuras que encontramos recogidas en la norma no fueron *outsiders* alguna vez antes de entrar? ¿La gramática que hoy consideramos válida que es si no los usos *punkys* de ayer? En último término, ¿no es el castellano un latín mal hablando y degenerado?

Existe otra aproximación que entiende que la lengua se construye desde abajo hacia arriba; es decir, son los hablantes quienes crean la lengua (generando palabras y estructuras gramaticales) y el estudio simplemente debe describir cómo se expresan los hablantes, todos ellos: el premio Nobel de literatura y el señor que apenas sabe escribir; luego tendrá que caracterizar los usos que observa por regiones, rangos de edad, estrato sociocultural, etc. En esta aproximación,