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Bridging technology and creativity: NMT and GenAI in advertising transcreation

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#### Introduction

Technological advances are leading to increasingly "intelligent" Machine Translation (MT) engines. When talking about these advanced engines it is worth mentioning Neural Machine Translation (NMT) and Generative Artificial Intelligence (GenAI), whose rapid increase in effectiveness and accuracy started in the 2010s. Several systems, such as NMT DeepL and GenAI ChatGPT are also free in their standard functions or older versions. Their accessibility has rendered these online translation platforms and chatbots very famous and used worldwide; for instance, ChatGPT reported having about 100 million active users weekly in 20231. The basic functionalities offered for free by various platforms seem to carry out generally good performances without the need for checking the truth of information or paying for advanced functions. The issue connected with machines nowadays is not, therefore, their use, but rather their overuse. In the field of translation, the debate of human translation against machine translation has been frequently discussed in recent years because of the remarkable efficiency of machines in translating texts. For these previously stated reasons, many businesses rely almost exclusively on online translation platforms. According to Tom Winter, a data scientist and computational linguist working at the German national transportation company Deutsche Bahn AG, "Along with data protection and data security, the ability to adapt the engine to DB's corporate language via glossaries is a main advantage of DeepL compared to other machine translation systems"<sup>2</sup>. While analysing all the perks of such MT engines, a doubt comes spontaneously to mind, which is about whether human translators are still useful compared to machines' capacities. Systems such as NMT and GenAI are indeed a great help for translators, but the idea of human translators being fully substituted by machines is unrealistic. In fact, despite the great step forward of translation technology, human translators are still considered essential, "especially in contexts where cultural sensitivity, idiomatic expressions, and deep semantic understanding are crucial"<sup>3</sup>. Fields such as transcreation are the most difficult to approach for machine translation even with a good amount of training data and corpora. Therefore, the main advantages connected to machine translations nowadays are not content-related, but rather ease the translation

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<sup>&</sup>lt;sup>1</sup> Tolzin et al. (2024: 1).

<sup>&</sup>lt;sup>2</sup> DeepL Team (2024).

<sup>&</sup>lt;sup>3</sup> Mirzayev (2024: 31).

process from the point of view of cost-effectiveness and speed. Concerning speed, the use of MT engines to create a first draft of the work to be post-edited by a professional human translator renders the job faster; whereas, from the point of view of costs, this high speed in translating long texts in a matter of seconds is advantageous for businesses, but for now it remains just a partial advantage. Essentially, the content needs to be post-edited by a human translator, a need which can lead to an increase in prices. Such collaboration between machines and human translators is defined by several studies as a "hybrid model". Paradoxically, the hybrid model gives much room to human translators not only as post-editors. Mirzayev (2014: 35) introduces the additional roles of translators as guarantors of culturally adequate content and trainers for the machines through their own data and feedback. Thus, what is certain for now is that to obtain translation outputs as close as possible to perfection, the joint work of both human translators and MT is necessary. Such collaboration can lead to the delivery of cheaper and faster translations with more accurate and nuanced content which only a human reasoning person can obtain. For this reason, language and translation students learn how to deal with these MT engines during their academic path. Being these tools an essential part of translation nowadays, it is necessary for them to learn how to use them to make them become an advantage. In fact, the implementation of the hybrid system must be carried out by professionals. The use of MT engines without the right amount of practice can lead to several mistakes and cause an enormous disadvantage. Furthermore, the increasing sophistication of MT engines causes some errors to be so subtle that they can be barely spotted and corrected. Experience in the field is fundamental to obtaining the advantages listed above by implementing the hybrid system.

Apart from the professional and academic context, it is undeniable that automatic translators and online machine translators are becoming necessary tools for everyone, even for non-professionals. Nowadays it is possible to translate something that we see whenever and wherever we need it simply by taking a picture with our smartphones and uploading it in free applications. If a website is written in a language that is unknown to us, we can translate it with our browser in a matter of a few seconds. This happens in almost every online platform, and it is very common to use it on social media platforms. This performance on such platforms is even more difficult for MT engines because of the so-called UGC (User-Generated Content). This kind of content comprehends captions,

posts, and every sort of content generated and published by users online. The real challenge is that "UGC often has colloquial language, including profanities, spelling errors, emojis, hashtags and abbreviations, and is grammatically ill-formed, which makes it hard for MT, often resulting in incorrect translations"<sup>4</sup>. What is described for UGC is common to more and more translation fields, meaning that this Achilles' heel of MT engines can be found in several contexts. For instance, a poem composed by rhyme schemes and different metaphors; the plot and dialogues contained in a fantasy video game or film; a piece of advertising sponsoring a product; a slogan or the title of a song, a film, a work of art; finally, the already mentioned UGC, for example, the caption of a random social media platform's post. The translation of these elements does not only involve the passage from a source language into a target language by finding static equivalents. In these cases, mere translation techniques are "not enough", and the right approach to be adopted is transcreation. According to Benetello (2018: 42), translation and transcreation should not be regarded as two completely different practices, but "transcreation is the only way to produce copy that can truly resonate with the target audience". Here the author refers to marketing and advertising copies, but this same statement could be applied to any of the previously listed examples of "creative" translation.

At this point, a brief overview of how translation is connected to technology and to creativity was given. Undoubtedly, the words "technology" and "creativity" sound like two completely different concepts, which can barely be connected to each other. In fact, technology is not able to think or act like a human being, or to have a dream or to invent a joke, or a wordplay. For this reason, creativity is recognised as a peculiarity of the human being generally opposed to technology, associated with logic. However, the improvements that briefly describe in the field of NMT and GenAI are leading the engines to be able to translate not only technical texts but also creative texts in which the content, tone, and emotions conveyed are more important than the text itself. Thanks to the field of Natural Language Processing and the implementation of Large Language Models, technology can give us highly human-like responses, as if it had not only the capacity to think like a human being but also to feel emotions. Obviously, the ability of an MT engine

<sup>&</sup>lt;sup>4</sup> Al Sharou & Specia (2022).

of perfectly transcreating a text is not yet achieved, but how far can these technologies go right now? How considerable are their improvements until this point? The aim of this thesis is to give an evaluation of three engines in the context of transcreation through a case study. Before coming to the kernel of this thesis, some basic notions will be explained to ensure a better understanding of the case study itself and its final results.

Chapter 1 is an introduction to MT technologies, starting with a summary of the history of machine translation from its early stages to its most recent developments. In this regard, the different types of MT engines invented in the previous and the current century will be explained. The focus, however, will be reserved for neural networks, NMT and GenAI. The ending paragraphs of this chapter will introduce CAT tools and MT evaluation metrics. The second chapter of this thesis is based on the notions of translation, transcreation, and culture. The first part of the chapter is dedicated to the history of translation, with a particular focus on the historical dualism between word-for-word and sense-to-sense translation; a further focus is dedicated to two important theories that dominated in the fields of translation, linguistics, and communication during the XX century: Jakobson's communication model and language functions, and Nida's equivalence theory. These theories are important before moving to the kernel of the chapter, which is transcreation. The concept of transcreation will be presented in detail, with its definitions, differences with other concepts – such as translation, localisation, and adaptation – and fields of application. For the aim of this thesis, the field that will be deeper analysed is the one of communication, advertising, and marketing. Culture and communication theories will be the conclusive topic of this chapter. After a brief overview of the concept of culture, Hall's and Hofstede's communication models will be explained in all their parameters. These theories are essential when it comes to crosscultural communication, and therefore, they are strictly connected to advertising translation and transcreation.

Finally, the third chapter is completely dedicated to the introduction and development of a case study. This case study is an analysis of the raw outputs of three MT engines: DeepL (NMT), Language Weaver (NMT) and ChatGPT-40 (GenAI). The chapter starts with a presentation of the project and of the three aforementioned MT engines. The following sections deal with fifteen ads translated from English into Italian and German. The ads pertain to fifteen different brands, selected using two different criteria. The first criterion

is the field, since all the chosen ads pertain to the field of advertising in the food industry; the second is the absence of translations in the specific language pairs used for the project. Every ad has its proper section with its own visual, a brief presentation of the ad itself, and the three translations in both language pairs provided by the three MT engines. Every translation is commented using the same metrics. For the purpose of this thesis, the chosen metrics for the outputs' evaluation is MQM (Multidimensional Quality Metrics), which is meant for both human translation outputs and MT outputs. This chapter ends with a general overview of the errors found in the outputs and an analysis of the most frequent error typologies divided by MT engine. The comment and comparison of the three engine's performance will be compiled in the conclusions.

Nowadays technology is improving so rapidly that we never know what is going to happen next, and what capacity will be developed for machines to be every time closer not only to our skills but also to our limitations. Some people even fear that the intelligence of machines will overcome ours one day, causing societal problems such as unemployment. What we must not forget is that these technologies can be important tools and ease our jobs, as in the case of translation and interpreting with the hybrid model. Their developments are meant to help us solve what possibly results in repetitive or complex tasks, allowing us to save time and money. For these reasons, it is important to carry on research and maybe one day will be equally helpful in every translation field.

# Chapter 1: The evolution of Machine Translation, Neural Machine Translation, and Generative Artificial Intelligence

After the brief introduction to this thesis, it is necessary to explain the basis of these cutting-edge technologies which are dominating the translation landscape nowadays. The following sections will be dealing with the history of MT and the various types of MT engines developed in the previous and current centuries. All MT engines are provided with a brief explanation that highlights their differences and their actual improvements. Therefore, following an introduction to the first developed Rule-Based Machine Translation and Statistical Machine Translation, a wider focus is dedicated to neural networks, which is the technology behind Neural Machine Translation and Generative Artificial Intelligence. These two will be analysed in detail because three NMT and GenAI engines will be then tested in Chapter 3. Further topics analysed in this chapter are CAT Tools and MT evaluation methods, which represent very important tools for translators nowadays.

# 1.1. Brief history of Machine Translation, Neural Machine Translation, and Generative Artificial Intelligence

Machine translation was developed in the last century and, therefore, recognised as a recent creation, but the hypothesis for a tool being able to translate from one language into another began much earlier. In fact, it was first mentioned in the XVII century, but there were insufficient means to develop technological tools at the time. At the beginning of the XX century, different demonstrations of MT's ancestors were carried out in Estonia ("typewriter-translator", 1924), France and Russia (1933)<sup>5</sup>. It is believed that the rise of what we refer to as MT began between the 1940s and the 1950s. Hutchins (1997: 195-196) claims that the mathematician and scientist Warren Weaver was the first advancing the proposal of "the application of the computers to the translation of natural languages", further called Machine Translation. This early-stage MT worked with punched cards for automatic translation, a memorised dictionary in the computer containing a limited number of words. While translating, the computer looks up for the translated word in its dictionary and automatically translates the text by substituting the word with the

<sup>&</sup>lt;sup>5</sup> Hutchins (1997: 197).

equivalent in the foreign language. The machine could recognise word-endings, such as inflections, and this was useful to decrease the terms in dictionaries. Research was also carried out in the US at the same time, more precisely in Los Angeles with Harry D. Huskey. In May 1949 he presented his new computer during a demonstration. His new machine was called SWAC (Standards Western Automatic Computer) and was referred to as "electric brain" – the first calculating machine able to translate, according to the New York Times<sup>6</sup>. Different studies were carried out to understand how MT worked; in 1950, in particular, a study carried out in UCLA showed that syntax did not represent a barrier for MT, but this technology was struggling much more with "lexicographic difficulties" instead<sup>7</sup>. After the first MT conference in 1952, Leon Dostert from Georgetown University decided to attempt the first experiment aiming at a practical demonstration of how MT worked, with the help of Paul Garvin from IBM and Peter Sheridan from Georgetown. He thought that it was necessary to test its feasibility to raise some fundings to proceed with the development of this new technology<sup>8</sup>. The demonstration took place in January 1954 at the headquarters of IBM in New York, using a device called IBM Type 701 Electronic Data Processing Machine. The project was carried out in two languages: Russian as source language and English as target language. The ST statements were mainly "about politics, law, mathematics, chemistry, metallurgy, communication and military affairs". It consisted of a sample of 49 Russian sentences translated into English, using a restricted 250-word vocabulary and 6 grammar rules. The demonstration was fruitful because it stimulated the further development of MT also in new countries, such as the USSR, even though the machine was still thought to be slow. Researchers gave the 1954 experiment the name of "toy-system". This kind of system works with only few language resources and limited functionality<sup>10</sup>, with a resulting output translated merely word-to-word. The IBM experiment is believed to be the first example of a new approach, which is rule-based machine translation (RBMT), which will be the main focus in 1.2.1. Although this was a huge finding for the translation industry, technology was not ready for further developments; in fact, machines were slow and so

<sup>&</sup>lt;sup>6</sup> Hill (1949).

<sup>&</sup>lt;sup>7</sup> Hutchins (1997: 217).

<sup>8</sup> Idem (2001: 2).

<sup>&</sup>lt;sup>9</sup> Idem (1997: 239-240).

<sup>&</sup>lt;sup>10</sup> Hahn, Vertan (2003: 69).

was MT, based on large dictionaries and handwritten rules. Translating a text through a machine was unidirectional and required a significant amount of time, and the enthusiasm about this new and cutting-edge technology was not welcomed by everyone. Consequently, in 1966 the ALPAC (Automatic Language Processing Advisory Committee) report was created. The purpose of this committee was to face MT's inadequacies, but it led to a sceptical conclusion that drastically reduced the funding for research in machine translation. In fact, the report revealed the large gap between human translation and machine translation.

"There is no emergency in the field of translation. The problem is not to meet some nonexistent need through nonexistent machine translation. There are, however, several crucial problems of translation. These are quality, speed, and cost". 11

The period is known as the first "AI Winter". RBMT systems were dominant until the 1990s, when computers became faster and the corpus-based approaches to machine translation were developed. Thanks to the advancement of technology, machines could be loaded with a larger number of corpora and still work more efficiently to find a translation proposal in the TL. Essentially, it is possible to distinguish two different approaches for corpus-based MT: statistical machine translation (SMT) and examplebased machine translation (EBMT). SMT uses statistical analysis of bilingual corpora to generate translated versions of the ST. In simple words, the system produces different translation possibilities, and the best hypothesis is chosen by the algorithm basing on the training data<sup>12</sup>. EBMT, instead, bases on bilingual corpora to find examples of the sentence pairs both in the SL and in the TL using a retrieval module; consequently, it generates translations according to the resulting sentences. The first example of statistical translation models was launched by IBM in the late 1980s. In these years, large companies such as Google and Microsoft abandoned the use of RBMT systems in favour of corpusbased approaches – Google had been using SYSTRAN until 2006<sup>13</sup>. This same period is characterised also by the advent of CAT (Computer-Assisted Translation) tools, emerging from the idea that it was not important to create a machine which translates everything on its own, but a machine that helps human translators while translating. Starting from the

<sup>&</sup>lt;sup>11</sup> ALPAC (1966: 16).

<sup>&</sup>lt;sup>12</sup> Wang, Sawyer (2023: 79).

<sup>&</sup>lt;sup>13</sup> Wang et al. (2022: 144).

mid-80s and the 90s, CAT tools such as ALPS (Automated Language Processing Systems) and Trados by MultiTerm (1990) were launched<sup>14</sup>.

During the 2010s the neural machine translation (NMT) method was proposed by Bahdanau<sup>15</sup>. NMT is categorised under corpus-based approaches and uses training corpora without the need for human aid. The success of this technology among the previous ones is the capacity to recognise and avoid lexical ambiguities by analysing the context around the word, phrase or sentence that is being translated. After its launch in 2014, it was adopted in a pair of years by large companies as an online translation system, substituting SMT technologies. Consequently, this is the main approach nowadays adopted for online machine translators and Chatbots. In the same years also Artificial Intelligence (AI) had its potential recognised by engineers, who suddenly started to implement this technology in MT. Generative AI and Large Language Models (LLMs) are technologies that are able to understand natural language inputs and generate natural language outputs. The sub-field of computer science allowing technologies to analyse and use human-like language is called Natural Language Processing (NPL). However, they still present limitations when it comes to text translation, but they are considered good tools for revising and correcting text, so generally speaking in post-editing.

### 1.2. Translation technologies briefly explained

In the previous paragraph, different MT versions are explained to give a general overview. In recent years, more advanced systems were developed and substituted the previously dominant models of RBMT and SMT. It is the case of Neural Machine Translation (NMT) and Generative AI (GenAI), which are now dominating the market in terms of accuracy and speed. These technologies are the results of Deep Learning, which involves systems working with neural networks. Deep Learning is considered a subcategory of Machine Learning, a branch of Artificial Intelligence (AI).

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<sup>&</sup>lt;sup>14</sup> Wang, Sawyer (2023: 73).

<sup>&</sup>lt;sup>15</sup> Ibidem.

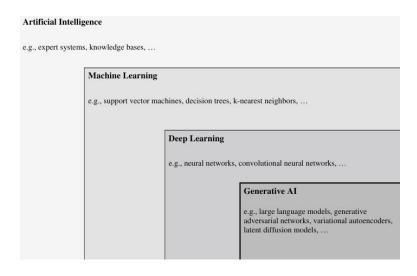


Figure 1: Generative AI and other AI concepts. Bahn, Strobel (2023: 2).

After an overview of RBMT and SMT, and an introduction to neural networks, NMT, and GenAI, the chapter will be focusing on other aspects concerning MT. For instance, the last part of the section will be dealing with CAT tools, which are helpful means for translators, and MT evaluation metrics, which are employed to rate MT systems.

#### 1.2.1. Rule-Based Machine Translation

In the first section, Rule-Based Machine Translation (RBMT) was mentioned as the first type of MT. This system relies on linguistic rules concerning semantics, syntax, and morphology – both in the SL and in the TL. Therefore, the approach requires a wide linguistic knowledge and a lot of effort for researchers, since the rules are written manually. RBMT divides itself into three different branches, as shown in the scheme also known as "Vauquois' triangle".

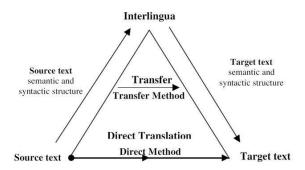


Figure 2: Vauquois' triangle showing the three types of rule-based machine translation. Chemvura (2017: 17).

The first is the direct method, which is the least used because it performs mainly literal translation, relying on morphology without tackling syntactic and semantic ambiguities. Direct approach was adopted for the first MT created at IBM, which has already been explored in 1.1. With the interlingua approach, instead, the SL language is translated into the TL via intermediate language, which consists in an "abstract intermediate representation of the source text out of which the target text is generated" However, the system works properly only within specific domains 17. Finally, the transfer method is still applied to many MT technologies nowadays. The process adopted in the transfer method is divided into three stages – analysis, transfer, and synthesis or generation 18. The analysis stage involves speech tagging as well as morphological, semantic, constituent, and dependency analysis; transfer is the step responsible for the representation through algorithms of both relevant rules and lexical items retrieved from the analysis of the previous step. Generation concludes the process by simply produce and display the target sentence 19.

The most successful example of rule-based machine translation is SYSTRAN, a system launched in 1968. RBMT was largely criticised in the ALPAC report of 1966 for a series of problems mainly regarding quality, speed, and cost (see 1.1.). More specifically, the amount of time and effort required to write all the linguistic rules necessary for the machine to work and the impossibility to insert all the material and knowledge needed were the main disadvantages that lead to the substitution of RBMT with data-driven approaches, in particular with statistical machine translation. Nevertheless, RBMT is still used in few translation systems involving only closely related languages<sup>20</sup>.

#### 1.2.2. Statistical Machine Translation

During the 80s and the 90s, Statistical Machine Translation (SMT) substituted the previous RBMT systems. SMT is classified as a corpus-based approach, since the system relies on large bilingual corpora learnt by the machine during a first training phase. The name of this kind of MT derives from the way it translates a text; in fact, the system

<sup>&</sup>lt;sup>16</sup> Banitz (2020: 56).

<sup>&</sup>lt;sup>17</sup> Idem, p.57.

<sup>&</sup>lt;sup>18</sup> Khenglawt, Laltanpuia (2018: 143).

<sup>&</sup>lt;sup>19</sup> Wang, Sawyer (2023: 78).

<sup>&</sup>lt;sup>20</sup> Kenny (2022: 35).

generates different possible translations of the input text, and then uses the training data as a reference to assign a probability score to each sentence. The sentence obtaining the highest score is then elaborated and proposed as translation in a step called decoding<sup>21</sup>. Therefore, it is a completely different approach to translation compared to the Vauquois' triangle for RBMT shown in the previous section.

SMTs are classified differently according to the translation process. For instance, it is possible to distinguish between word-based SMT, which divides the ST into segments made of words and proceeds to translate every word as a separate entity, and phrase-based SMT (also called PBMT), which is considered the best approach and segments the ST in phrases. Moreover, SMT can be based on two different models: the translation model is bilingual and assigns probabilities to words or phrases translated from the source text to the target text, whereas the language model (also called target-language model<sup>22</sup>) is monolingual and calculates the likelihood of view a word in the target language<sup>23</sup>. All the models are based on *n*-grams. *N*-grams are sequences of items, which could be phonemes, words, phrases, and other discourse parts. Obviously, the *n*-grams analysed specifically in SMT are words and phrases. The first IBM model of SMT which was mentioned in 1.1. was referred to as the "noisy channel model". The model sees errors as noise and tries to avoid them to produce the most correct target as possible by searching for the most probable translation among the sentences in the corpus. In this model, the translation and language model previously explained are combined to find a target sentence which maximises the score. The equation for noisy channels is called Bayes' Theorem. In the example below, "e" refers to the ST and "f" to the TL, while Pr(e) is the language model probability and Pr(f|e) is the translation model probability:

$$\hat{e} = \underset{e}{\operatorname{Argmax}} \operatorname{Pr}(e) \operatorname{Pr}(f|e)$$

Figure 3: Bayes' Theorem for noisy channel model in SMT. (Wang, Sawyer, 2023: 81).

According to Wang and Sawyer (2023: 82), there are "eight modules in a SMT architecture: de-formatter, morphological analyser, part-of-speech tagger, structural

<sup>&</sup>lt;sup>21</sup> Wang, Sawyer (2023: 80).

<sup>&</sup>lt;sup>22</sup> Banitz (2020: 58).

<sup>&</sup>lt;sup>23</sup> Kenny (2022: 37).

transfer, lexical transfer, morphological generator, post-generator, and re-formatter". Concerning the training of these modules, the difference between SMT and NMT, which will be further analysed, is that every module is trained separately, whereas end-to-end training allows NMT to have only one training for the whole system. NMT started substituting SMT systems from 2015, displacing SMT in two years. Although SMT was important for the introduction of machine learning approaches in machine translation, the deficiencies of this system were many and led, as already stated, to the rise of NMT. SMT was trained using corpora containing too short n-grams, leading to phenomena such as word drop and inconsistencies. Moreover, n-grams in the same sentence were translated differently because they were recognised as independent from one another by the system<sup>24</sup>.

#### 1.2.3. Neural networks: brief overview

Neural networks are sets of connected neurons grouped into layers, which resemble the way the human brain works. Since these neurons are made artificially, they can be also referred to as artificial neural networks.

Layers are composed of neurons, or nodes (x), which are the basic units of neural networks. These neurons are responsible for the functioning of the network with their activation. Their activation depends on both the signals received from the neurons they are connected to and the strength of the connections carrying the signals<sup>25</sup>. A neuron's activation generally occurs in two steps. In the first one, a neuron receives the stimuli from the neurons it is connected to. As previously stated, the strength of the connection is a relevant factor. This strength is called weight (w) and it can be positive or negative. Weights take part in the activation of a neuron only if they are positive; if they are negative, instead, they are responsible for the following neuron's inhibition. A stimulus can also be intermediate, meaning that it is neither too positive nor too negative. The following equation is used to calculate the average stimulus that neuron (N) is receiving. It is called "net stimulus", and it consists in the sum of multiplications of every neuron by their own weight.

<sup>24</sup> Idem, p.38.

<sup>&</sup>lt;sup>25</sup> Pérez-Ortiz et al. (2022: 143-144).

$$\mathbf{N} = \mathbf{w}_1 \cdot \mathbf{N}_1 + \mathbf{w}_2 \cdot \mathbf{N}_2 + \dots + \mathbf{w}_n \cdot \mathbf{N}_n$$

The result (N) can assume any value, but activation only occurs when the total of the stimuli is positive. The obtained result is the beginning of the following step, during which the neuron (N) reacts to the stimulus. The reaction is calculated with a function, which can be exemplified as following:

$$\mathbf{N} = \mathbf{F}(\mathbf{x}) = \mathbf{F} (\mathbf{w}_1 \cdot \mathbf{N}_1 + \mathbf{w}_2 \cdot \mathbf{N}_2 + \dots + \mathbf{w}_n \cdot \mathbf{N}_n)$$

There are several ways to schematise the result of the obtained function, which are illustrated below:

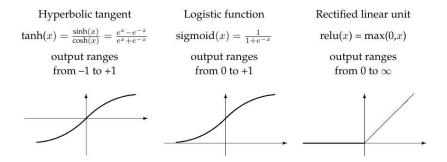


Figure 4: Typical activation functions in neural networks. Koehn (2020: 14).

The most used functions among the three above are the hyperbolic tangent, basing the N's stimulus on a range of values between -1 and +1, and the logistic function, in which the sigmoid N assumes a value in between 0 and +1. Despite of this, the rectified linear unit (ReLU) is believed to be the easiest to calculate<sup>26</sup>. As already mentioned, the result of the equation for stimulus calculation can be positive, negative, or intermediate. The intermediate one is the result triggering the biggest reaction in neurons, whereas highly positive or highly negative results trigger smaller reactions. It is possible to notice this trend also in the diagrams of the hyperbolic tangent and of the sigmoid function above: the line is much more curved when approaching 0 (in the former case) or 0.5 (in the latter case), which are the middle values in between the ranges. This means that a rapid change of values occurs when the reaction is intermediate; when the function assumes non-intermediate values, the line is almost straight. Moreover, the limit values, which are -1

<sup>&</sup>lt;sup>26</sup> Koehn (2020: 14).

and +1 for the hyperbolic tangent and 0 and +1 for the sigmoid function, are never reached<sup>27</sup>.

As previously mentioned, neurons are grouped in layers, so that the output of one layer becomes the input of the one following. The basic layers of a neural networks are the input layer, which receive the external stimuli and make representations of the problem that must be solve; hidden layer(s), which receive the stimuli coming from the input layer, and output layer, which is responsible for the representation of the solution to the initial problem. Hidden layers are named after the fact that it is not possible for us to see the occurring mechanism; in fact, while using for example an online translator, we are able to read only the SL input and its TL output, but we cannot see anything about the translation process. The way information is transmitted from one layer to another is called "step-by-step incremental process". For instance, the higher the number of layers in a neural network, the more precise the output, that is the reason why deep neural networks (i.e., networks containing more than three layers) are considered more advanced and give better results. Deep neural networks will be discussed further in this chapter.

Training is an important step when creating a neural network. Training the system means determining the strength and weight of the connections between neurons in order for the output to be as precise and correct as possible. A training algorithm is a series of step-by-step instructions that control the process to ensure a good translation quality. The process is important because the training data instruct the machine to solve a specific problem. In fact, large corpora are involved in the training process specifically for neural machine translation and generative artificial intelligence, as discussed in the next section. Training a neural network can be a long and difficult process, depending on the amount of training data used.

#### **1.2.4.** Neural Machine Translation (NMT)

Neural machine translation can be defined as an "end-to-end neural network translation model [...] to map the source language into a dense semantic representation, and then

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<sup>&</sup>lt;sup>27</sup> Pérez-Ortiz et al. (2022: 145).

<sup>&</sup>lt;sup>28</sup> Idem, p. 147.

generate the translation by using an attention mechanism<sup>29,30</sup>. As already stated, NMT started to substitute previous MTs during the 2010s, and it is classified as a data-driven approach. Although the training process of NMT is the same as SMT, its success is due to the use of artificial neural networks, which contribute to its speed and quality. Moreover, the learning process is automatic in neural networks, and they do not need human aid, in contrast to SMT and RBMT. Training for NMT involves linguistic data, more specifically large corpora containing sets of SL and their respective TL sentences. At the beginning of the process, random weights are assigned to the neural network, and they are modified to reduce the error function as much as possible. An error function, also called loss function, is the probability of committing errors in the output sentence; the more it decreases, the less mistakes will be made by the network. Learning algorithms involved in the process are responsible for the success of this step, during which the variations are controlled by a progressively decreasing learning rate. The rate controls the overall decrease of the weights and decreases itself accordingly. Training stops as soon as weights are determined<sup>31</sup>. In order to be read by the machines, words are based on representations collocated into space, which are called embeddings. Embeddings are learned by the same algorithms responsible for weights' training. Since embeddings are inserted into a delimited space, they need coordinates to be found by the network. These coordinates are called vectors, a series of numbers associated with embeddings and, consequently, with words. Therefore, when the inputs are received in the input layer of the neural networks, they are read as embeddings of the source sentence. Moreover, the numbers contained in the vector represent the geometric properties of the embedding, which means that every number stores a property of the embedded word, which makes it possible for the system to distinguish them. Concerning polysemy, NMTs are provided with attention mechanisms. These mechanisms are responsible for contextual word embedding and consist in an attention vector created by the system. This vector points the attention to the words in the input sentence which can solve the polysemy problem.

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<sup>&</sup>lt;sup>29</sup> "The decoder pays attention (responds) not only to the last representation built by the encoder [...] but also to the whole sequence of representations built during encoding [...] through an appropriate additional set of neural connections and layers" (Forcada, 2017).

<sup>&</sup>lt;sup>30</sup> Wang et al. (2022: 144).

<sup>&</sup>lt;sup>31</sup> Pérez-Ortiz et al. (2022: 148-149).

Using algorithms for this specific purpose, a new embedding is created by looking at the context.

Specifically for the case of NMT, its neural network is called "Recurrent". In fact, there are different kinds of neural networks; an example is "Convolutional" (CNNs), which are specialised in image recognition, but although they carry out different tasks, the basic structure is always the same. The particular RNN dealing with speech recognition is called LSTM-RNN, which stands for "Long Short-Term Memory" and was conceived to work with longer sentences and produce longer outputs of natural language. Moreover, the latest developed BiLSTM-RNNs are bidirectional and perform backpropagation, meaning that RNNs in NMT go forward and then backward, sending back error information to the previous nodes involved<sup>32</sup>. The model of backpropagation is opposed to the feed-forward model, which propagates information only forward and is the basis of Multi-Layer Perceptrons (MLPs). Concerning the number of layers there are different types of NMT, it is possible to distinguish a Shallow NMT and a Deep NMT. DNMT is a multilayer system exploiting multilayer perceptron, which is the non-linear connection that repeats itself at least three times between the neurons. The different layers of the network are essential to guarantee a more precise output. The difference between deep NMT and shallow NMT is the multiplicity of layers: instead of one to three hidden layer(s), DNMT has at least four hidden ones. Moreover, DNMT uses technologies such as Deep Learning and Artificial Intelligence.

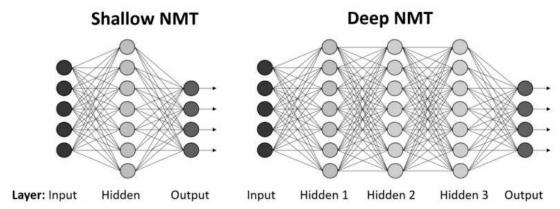


Figure 5: Shallow and Deep MNMT. Retrieved from Omniscien <a href="https://omniscien.com/faq/what-is-neural-machine-translation/">https://omniscien.com/faq/what-is-neural-machine-translation/</a>

<sup>&</sup>lt;sup>32</sup> Kohen (2020: 16).

Concerning translation, "deep learning models can capture the complex relationships between source and target languages, leading to more accurate and fluent translations"<sup>33</sup>. The increasing number of layers, in fact, guarantees a better output, because the process is analysed multiple times before coming to the output. As an example, GPT-3, one of the latest deep NNs developed, has 96 layers with tens of thousands of neurons each, and consequently about 175 million weights<sup>34</sup>.

The structure of NMT presents an encoder-decoder architecture. A(n) RNN is not able to work with words; therefore, linguistic material is transformed into a series of numbers, called vectors, which can be read by the machine. Vectors are not only numbers assigned to the words' form (signifier), but they also contain semantic information (signified)<sup>35</sup>. The process is divided into two modules – the encoder module and the decoder module. It starts with an input, which could be a word, a phrase or a sentence. First, the SL input nodes undergo the sequence-to-vector process and are transformed into a series of numbers, which can be encoded by the first RNN. In this step, the network produces an encoding of each word by looking up among the embeddings it had learned during training. The encodings are then combined until the whole input is represented. The vector is then sent to the second RNN, and this time the numbers are decoded to words to create the TL output (vector-to-sequence). During the decoding process, the decoder "takes some representation of the input con text [...] and the previous hidden state and output word prediction and generates a new hidden decoder state and a new output word prediction"36. In other words, the decoder produces two vectors from the obtained encoding of the source text: one contains the embeddings of both the source and the empty sentence, whereas the other contains the probabilities on all words that could be the first of a sentence. After the assignation of a maximum likelihood to a word among the others, that word becomes the output, and again to vectors are created for the decoder to choose the following words until the whole TL sentence is ready<sup>37</sup>. The NMT system is believed to work better with sentences containing no more than 15-20 words; longer sentences or texts cause more and more major mistakes.

<sup>&</sup>lt;sup>33</sup> Shaik et al. (2023).

<sup>&</sup>lt;sup>34</sup> Pérez-Ortiz et al. (2022: 147).

<sup>&</sup>lt;sup>35</sup> Wang, Sawyer (2023: 61).

<sup>&</sup>lt;sup>36</sup> Koehn (2020: 55).

<sup>&</sup>lt;sup>37</sup> Forcada (2017).

#### 1.2.5. Generative Artificial Intelligence (GenAI)

The name of this technology is highly self-explanatory: the algorithm is able to generate new content, which could be speech, sounds, images, or videos, starting from a written input. As previously stated, GenAI uses Deep Learning technologies and neural networks to predict and generate outputs, exactly like NMT. The advanced branch of Deep Learning to which GenAI specifically pertains is called Deep Generative Model (DGM). The basis of this technology is the implementation of Large Language Models (LLMs), which can be described as "AI systems that are designed to process and analyse vast amounts of natural language data and then use that information to generate responses to user prompts"38. For instance, these models learn huge quantities of online texts to be able to generate new content in a natural language. LLMs learn common patterns in online written content, and from the statistical analysis of these texts they are able, for example, to predict the following words in a sentence. GPT (Generative Pre-trained Transformer) is a type of LLM trained on text data and it is responsible for statistical predictions and creation of written content. GPT is defined a "transformer" model, which can be found in the ChatGPT and its conversational AI<sup>39</sup>. The architecture of GenAI is composed by three main layers: model layer, connection layer, and application layer<sup>40</sup>. The first layer contains pre-trained models; the connection layer, as the name suggests, connects the model layer with the application layer, allowing the model to interact with external data and environment. Finally, application layers are used by users for practical purposes. The application can be end-to-end (using proprietary models), or open, meaning that the models used are public and accessible to all users – such as ChatGPT. The input inserted to obtain an output can be different, from enterprise data to public data. The process of content generation is divided in a series of steps. As soon as the input is inserted, it is broken down into tokens (single grammatical units) so that the GPT can analyse it. After its analysis, words are predicted by GPT using statistical patterns and then filtered to remove any kind of offensive content. The previous process is repeated for the whole input, until the output is ready. Before it appears on the screen, the output is controlled

<sup>&</sup>lt;sup>38</sup> Suruj (2024: 1).

<sup>&</sup>lt;sup>39</sup> Bahn, Strobel (2023: 4).

<sup>&</sup>lt;sup>40</sup> Ivi, p. 5.

and eventually modified by the system, for example by adding words and punctuation to render it closer to the human way of speaking<sup>41</sup>.

Although the system is considered to be very valid and intelligent, users must not forget that GenAI systems cannot understand or think like humans. This constitutes one of their worst flaws, which is opacity. In fact, the machine is not able to explain the mental path that leads to a decision or a solution, and it just directly arrives at the conclusion. Concerning translation, GPTs can process natural languages and carry out translation tasks, but GenAI is considered for now an ally for translators only in the correction and post-editing phases. As already claimed in 1.1., the system still lacks translation because of the way it is pretrained, but it can be useful for readapting or modifying a text. Moreover, researchers state that the machine output could present insufficient quality also due to factors such as language pair used, and not so specific instructions given to the machine<sup>42</sup>.

#### 1.3. CAT tools

CAT (Computer-Assisted or Computer Aided Translation) is software containing tools which help the translator to speed and ease the translation process. Therefore, these tools do not translate autonomously, but they give the possibility, for example, to store translations for future reuse<sup>43</sup>. This is an important notion to remark, since CAT tools are usually referred to as MTs, and vice versa. Nowadays the majority of them are cloud-based, meaning that the contents and the CAT tool itself can be used via browser. There are several typologies of CAT tools (for example, SDL Trados, MemoQ, OmegaT, etc.) and offer different features performing different tasks to ease the translation process. The ones further described are currently the most common.

Translation Memory (TM) is a database allowing the storage of segments, but also full translations. Every segment that is saved by the TM is then stored both in the SL and its TL translation. The sentence pair saved is called Translation Unit (TU). The advantage of saving and storing TUs is that the tool will perform a look-up in the database if in the new translation there is a match, meaning that one or more TU(s) stored are similar or

<sup>&</sup>lt;sup>41</sup> UCL.

<sup>&</sup>lt;sup>42</sup> Farrell (2023: 111-112).

<sup>&</sup>lt;sup>43</sup> Nwanjoku, Zayyanu (2021: 36).

even identical to the segment that is currently being translated. This speeds up the translation process, because the translator does not have to translate the segment from scratch, but simply apply the TU from the previous work or post-editing it. In the former case, the TU is a "100% Match" (i.e. it is identical to the currently translated segment), whereas in the latter it is called a "Fuzzy Match". Other kinds of possible matches when using a TM are, for example, "Context Match" (i.e. a segment in the same translation that recurs many times in the text) and "Fragment Match" (i.e. the system partially translates the segment because only a part of it can be found in the TM).

TermBase (TB) is a database for terminology, which means that it stores words in a certain language and their counterparts in another language. It is useful for specialised terminology and to avoid lexical inconsistencies while translating. The process is exactly like the one previously described for the TM. For instance, the TB performs automatic look-up when the word is recognised and "suggests" it while translating.

Another remarkable tool is Quality Assurance (QA), which is responsible for the revision process of the translation. The strength of using QA is that it performs not only a check of grammar, spelling and punctuation, but also focuses on tags and missing parts of the translation, both in terms of text and layout.

#### 1.4. Evaluation metrics for MT

While translating using MT, it is sometimes easy to spot errors and to make comparisons between the systems to decide which one is better. But as already seen in the previous pages, technologies are developing rapidly, and machines are gradually starting to make less mistakes and the evaluation of a MT system is difficult to perform by simply basing on the output's errors. Therefore, to calculate the TQA (Translation Quality Assessment) of machine translation compared to human translation, evaluation methods are used. There are two possible ways to evaluate a translation: the first is using AEMs (Automatic Evaluation Methods) and the second is to perform human Direct Assessment (DA), which can also be partially automated. Evaluation methods are employed either to improve MT systems' performance (R&D) or to decide among several systems which one is best to use for a specific purpose (buyer). There are many factors affecting TQA, changing according to the stage of MT. In fact, some are relevant in a pre-translation stage (such

as audience, purpose of the text, and general features of text analysis), others in preprocessing stage, or during machine translation, and finally in post-editing<sup>44</sup>. This part of the chapter gives a brief overview of only some of the AEMs in MT quality assessment. All systems have in common a basic requirement, that is the comparison of the output to one or more reference sentence(s). To pursue a clean and precise evaluation, these sentences should not be contained in the training data of that specifical MT engine and should be a high-quality translation, made by a professional to avoid fake results. It is important to remark that there is a difference between all evaluation metrics listed hereunder and revision parameters. The latter, in fact, are used in order to evaluate the mere output quality and not the whole system. Therefore, some parameters which will be shown further, such as Mossop's ones, cannot be included or regarded as MT's evaluation methods.

BLEU (Bilingual Evaluation Understudy) score is an algorithm created in 2002 by IBM and used in the past 15 years to evaluate and classify MT and NMT models. Studies have shown that a big correlation between a proper use of this score and human judgements is present. For the algorithm to work, one or more reference sentence(s) are chosen and put in the system. After the analysis of the MT outputs, the system measures translation quality of the translated sentence(s) by giving a score usually from 0 to 1 – sometimes a range from 1 to 100 is used to simplify understanding. If an output obtains the maximum score, it means that it is identical to the reference sentence, also called "gold standard"; considering the 1-100 range, an output obtaining a score in between 60 and 70 is considered a good translation. Conversely, a score higher than 70 can be considered biassed by the system and, therefore, not reliable. Finally, the system creates a chart and orders the various outputs from the best to the worst result obtained.<sup>45</sup> Despite being one of the most used scores, researchers complain about some biases and claim that there is still room for improvement. In fact, BLEU differs from human judgement because it sticks too much on the reference sentences. The score is higher when the word sequence is the same as in the reference, consequently the system penalises a right translation having different syntactic features. This is the reason why it is highly recommended to employ a corpus of many sentences possibly having a different style and word order.

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<sup>44</sup> Wang, Sawyer (2023: 96-100).

<sup>&</sup>lt;sup>45</sup> Vashee (2019).

Another disadvantage of BLEU score is its focus on segmentation, which could represent an issue for language pairs involving languages, such as Thai or Chinese, having a flexible concept of space between words<sup>46</sup>. BLEU is referred to as an *n*-gram based AEM. In this case, systems refer to words, and so how many *n*-grams (words) in the translated sentence match with the *n*-grams of the reference sentences. Apart from BLEU, another AEM based on *n*-grams is METEOR (Metric for Evaluation of Translation with Explicit ORdering). The effectiveness of this tool is due to the recognition of matches not only between "standard" *n*-grams but also with their surface forms, stemmed forms and meanings<sup>47</sup>. Other examples of AEMs are WER (Word Error Rate) an SER (Sentence Error Rate), the former calculating the percentage of words to change to reach the reference sentence's, the latter basing on the overall syntactic changes<sup>48</sup>.

Among the AEM systems there are some concerning the amount of edits a human translator should perform in order for the output to match the reference sentence(s). In other words, this second type of evaluation metrics concern the so-called PE (Post-Editing) effort. This is the case of TER (Translation Edit Rate), which calculates how many insertions, deletions, and substitutions of single words and shifts of word sequences the output needs to be a copy of the reference sentence(s)<sup>49</sup>. In the case of TER, a lower score indicates a better MT output. An improvement of TER is HTER, which stands for Human-targeted Translation Edit Rate. This system calculates the ratio between the minimum edits a human translation must perform during post-editing and the number of reference's words contained in the pre-edited MT output:

$$HTER = \frac{n.edits}{n.reference\ words}$$

The result is expressed in percentage. HTER uses the same parameters previously described for TER (insertion, deletions, substitutions, and shifts), but the improvement of HTER is that it considers semantic equivalence, beyond fluency and accuracy<sup>50</sup>.

A final AEM which is worth mentioning in this chapter is QE (Quality Estimation). The difference between QE and all the systems listed above is that this technology does not

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<sup>46</sup> Wang, Sawyer (2023: 102).

<sup>&</sup>lt;sup>47</sup> Ibidem.

<sup>&</sup>lt;sup>48</sup> Khenglawt, Laltanpuia (2018: 144).

<sup>&</sup>lt;sup>49</sup> Idem, p. 104.

<sup>&</sup>lt;sup>50</sup> Karpina (2023: 88).

employ reference sentences. QE is mainly used to evaluate MT concerning the time and effort a translator will hypothetically spend in post-editing the MT output. This system is available in public datasets<sup>51</sup>.

This chapter was meant to introduce the basics of machine translation, its tools and its evaluative methods. It was necessary to present technologies briefly before heading to the next chapters and mostly to the case study.

<sup>&</sup>lt;sup>51</sup> Wang, Sawyer (2023: 107).

#### **Chapter 2: When translation turns into transcreation**

Translation is a varied activity, having many shades and involving many different fields. This activity does not only involve the linguistic transfer of words from one language into another. In fact, there are several factors that affect the way a text should be translated: to name just a few of them, the language in which it is written (both source and target), the cultural context, and the text genre. Every field of translation must be approached differently, and also the way different fields influence each other is an important matter of study. Thus, thinking that translating a legal text is not analogous to the process of translating a video game comes naturally; but it would be wrong to state that these two textual genres have nothing in common. For example, metaphors are present in legal documents too – even the word "legal" is a metaphor itself<sup>52</sup>, even though the language in the field of video games is perceived as more prone to the use of metaphors and creative language. The latter genre is strictly connected to the focus of this chapter, which is transcreation. Before heading to transcreation and the strategies applied in this field, it is worth explaining translation basics, from the early stages to the main approaches adopted by translators nowadays. After this wide focus, there will be a brief introduction to cultural studies and communication through Hall's theory and the Hofstede model, which are considered essential dimensions to take into account when communicating crossculturally.

### 2.1. Brief history of translation until the XIX century

Before approaching transcreation, it is necessary to define translation, its history, and its principles. Translation is reported to be a very ancient activity; in fact, the first attested translated text in history was Rosetta's Stone. The stone was engraved in 196 BC and contains translations of the same text in three different languages: Egyptian – using hieroglyphs, ancient Demotic, and Greek. Stepping forward to the 1<sup>st</sup> BC, translating was common under the Romans, in particular for literary texts from ancient Greece, such as Homer. Being translation a consolidated practice already, this era marks the beginning of a dualism in translation, concerning literal – or word-to-word – translation, and sense-to-sense translation, which was denominated by Cicero and Horace "free translation". The

<sup>&</sup>lt;sup>52</sup> Alcaraz, Hughes (2014).

choice of literal or free translation is strictly related to the choice of the (basic) unit of translation: the smaller the chosen unit, the more literal the final translation<sup>53</sup>. According to Ren (2023: 189), "The entire history of Western translation can be said to have developed around literal translation or free translation". In Cicero's "On the definition of Good and Evil", he "emphasized [...] that translation needs to be flexible and cannot be translated word by word"54, especially regarding poems translation from Greek to Latin. Horace, in his "Ars Poetica" (13 BC) was in favour of a re-elaboration of the ST, taking distance from literal translation. Indeed, when thinking about translating poetry, it is not possible to render idioms or metaphors literally from one language into another, but this is something that will be discussed further in this chapter. Although there were many theories about free translation, word-to-word translation was predominant during the Roman Empire's dominion and the medieval ages. Things changed significantly with the translation of the Holy Bible. For instance, literal translation was not sufficient anymore to translate every kind of text, especially when it came to the word of God. One of the most famous translations of the Bible is Luther's translation from Latin into Hochdeutsch - High German. Luther's importance in translation is due to his decision to vulgarize the TT to render it accessible also to lower-class people. This allowed him to give the basis for modern German. Sense-to-sense translation was condemned by the church at the time, considering Bible's free translations, such as Tyndale's work, as paganism.

Ren (*ibidem*.) states that "this phenomenon began to change during the Renaissance period, and it was not until the Enlightenment movement to modern times that people began to translate many literary works, becoming more open-minded, and daring to resist the church". Therefore, the real change happened between Classicism (XVII-XVIII century) and the Romantic period (XIX century), with many theories embracing new ways to translate literary texts. Among the several authors and their different proposals, it is worth citing Dryden for Classicism and Goethe for Romanticism. The former distinguished between metaphrase, paraphrase, and imitation while translating Ovidio's letters from Latin. Metaphrase consists of literal, word-for-word, line-by-line translation; therefore, it can be considered completely source-oriented. Paraphrase aims to render the true sense of the ST with an acceptable TL by offering a paraphrased version of the

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<sup>&</sup>lt;sup>53</sup> Palumbo (2009: 49).

<sup>&</sup>lt;sup>54</sup> Ren (2023: 188).

original, whereas in imitation the translator uses the ST as a pattern but departs from it at will, creating an "adapted" translation. During Classicism, however, the French doctrine imposed the *bienséance*, a way of translating based on the *decorum* of the Latin tradition. For instance, translations must follow decency and, therefore, some scenes considered indecent were censored or rewritten. These translations following the French *bienséance* were referred to as *belles infidèles*, a sexist metaphor recalling unfaithful women and the fact that these translations were unfaithful to their original text. Concerning Goethe, instead, three different "époques" of translation are identified: *prosaisch*, *parodistisch*, *identisch machen*. The three refer, respectively, to "domesticated" translation (for example, the transformation of a poem in prose), "appropriation" of the idea of the original author and sticking to the ST, and a source-oriented translation declared as a "substitute" of the original. The last one was the right one for Goethe because he thought that translations must affirm their nature as substitutes for the original, rather than be better than it.

# 2.2. A focus on the XX-century theories

# 2.2.1. New approaches in Translation Studies

Undoubtedly, the most important centuries for translation theories are from the XX century on. In fact, during the 1950s the first machine translation systems were invented – see 1.1. Moreover, studies have shown that during the decades following the II World War there was a real turn in translation, especially from the cultural point of view. The turn is due to historical changes that affected the post-war scenario such as globalisation, which increased the need for multilingual communication<sup>55</sup>. Towards the end of the XX century, new approaches to translation reoriented Translation Studies, giving a new perspective. It is the case of Descriptive Translation Studies (DTS), which are described as a "descriptive, empirical, interdisciplinary, target-oriented approach to the study of translation"<sup>56</sup>, and whose main theorist is considered to be the Israeli translation scholar Toury. These studies were first mentioned and developed during the 1970s, booming in between the 1980s and the 1990s. Practically, the new approach focuses not only on

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<sup>&</sup>lt;sup>55</sup> Snell-Hornby (2010: 366-367).

<sup>&</sup>lt;sup>56</sup> Assis Rosa (2010: 94).

language and linguistics but also on extralinguistic factors, such as socio-cultural context and the target reader. This becomes possible by redacting a whole description of both source and target text, including information regarding the author(s), the reader(s), and the text itself<sup>57</sup>. These studies were developed also with the advent of gender and post-colonial studies. The other theory advanced in these years was the functionalist approach, which is strictly connected to the name of the German linguist and translator Vermeer. The theory is also called *Skopos* theory (DE *Skopostheorie*), in which the Greek word *skopos* can be translated as "purpose". The theory is based on the perception of translation as an action going towards a specific purpose. According to Vermeer, translation is an offer of information (DE *Informationsangebot*) in the ST which is transferred into a TT using another language<sup>58</sup>. As stated by Snell-Hornby (2010: 367), even if the two approaches were working separately, they came to the same conclusion on the main purpose of translation, regarding in particular "the emphasis on the cultural context of the translation rather than the linguistic items of the source text".

# 2.2.2. Jakobson's translation and communication theory

Among the linguists and translators, the name of the Russian linguist Roman Jakobson is still associated with some of the most important theories and studies of the XX century. In the 50s, he distinguished three kinds of translation: intralingual, interlingual, and intersemiotic translation. The first is also called "rewording", meaning that ST and TT are written in the same language, changing the requirements – such as style, register, etc. – depending on the audience. Interlingual or "translation proper" consists of an ST written in a certain language being translated into another language. Finally, intersemiotic or "transmutation" is the transformation of the linguistic code into another kind of code, for example, films, images, or music, and can be also referred to as the passage from verbal signs to non-verbal signs. Jakobson did not work only on mere translation, but also on communication. An example of communication theory concerns language functions, in other words, the six functions that language can assume. The functions are connected to the six means of effective communication, as illustrated in the following scheme, theorised again by Jakobson.

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<sup>&</sup>lt;sup>57</sup> Idem, p. 96.

<sup>&</sup>lt;sup>58</sup> Palumbo (2009: 107).



Figure 6: communication model and language functions (Jakobson, 1985). Retrieved from Linask (2018: 520).

Starting from the referential or cognitive function, it is used when the speaker simply wants to communicate their ideas and information through a statement. This function is linked to context since it is used to express a statement about a certain topic. The poetic function, instead, is connected to the message and how it is being conveyed, meaning that the function focuses on the use of language in a "poetic" way, with puns, sounds, and many rhetorical figures such as metaphors. As the name confirms, it is mostly found in poems, songs but also slogans and claims. The emotive or expressive function aims at communicating "an impression of an emotion or an attitude of the addresser, whether truthful or not"59, thus connected to the addresser and sometimes referred to as "I function". The opposite of it is the "you function", another name for the conative function. According to Chandler (2007: 184), the scope is to influence the addressee's behaviour with words. For this reason, imperatives and vocatives to address a specific behaviour are frequent in this language function. The last two functions theorised by Jakobson are the phatic and the metalingual functions. The pathic function regards contact, which means this function regulates the beginning, the development, and the ending of a conversation. An example of language collocated under this function is the use of greetings to open the communication channel and establish a social relationship among interlocutors. Finally, the metalingual function focuses on the code; therefore, this function is mainly used to verify if the interlocutor(s) understand one another during the conversation, by asking, for example, if further explanations are needed or stating an opinion. A brief introduction to language functions was necessary to understand what elements in translation and transcreation should be kept or transformed from one language into another. In fact, texts can contain different language functions, and the translator should be aware of this. For example, a technical or scientific text contains mainly referential functions, while in

<sup>59</sup> Linask (2018: 522).

advertising the main functions are poetic – thinking of slogans, and conative, to address the audience to buy a product or sustain a cause $^{60}$ .

The explanation given about Jakobson's language functions theory is necessary to explain transcreation within the field of advertisement and marketing since the former has to be carried out in order to transfer the latter's functions, which are mainly poetic and conative – as previously stated.

# 2.2.3. Equivalence theory

Another translation theory that is very significant in the field of translation is the equivalence theory. Equivalence is defined as the "relationship existing between a translation and the original text" and it can cover different levels in a text: sometimes it regards the whole text, or just a part of it, or even just a few words. The reason why the individuation of different kinds of equivalence is important is connected to the typical dichotomy of translation between word-to-word and sense-to-sense translation, which was discussed in the previous part. Equivalence theory is useful to understand whether to translate a text literally or to concentrate on the meaning, at the expense of rendering the same words of the SL in the TL. Therefore, the choice of using a type of equivalence or another is strictly related to text analysis, in particular to text functions.

Nida is considered one of the most important theorists of equivalence. In his studies about the Bible's translation, Nida makes a distinction between formal equivalence – which he also called formal correspondence – and dynamic equivalence, "both aimed at finding the closest possible equivalents in the TL but differing in their focus of attention" Formal equivalence is the rendering of a text word-for-word. Therefore, from the linguistic point of view, the TT maintains the same syntactic structures and the same words as the ST. Such an output requires the reader(s) to be aware of the linguistic and cultural features of the ST, i.e. the reader(s) should have the ability to read and understand the "foreign" elements kept from the ST into the TT. Moreover, being linguistic and cultural perspectives of the translator absent, and the readers are not influenced by the translator. Dynamic equivalence – also named "pragmatic equivalence" by Koller, instead, allows

<sup>&</sup>lt;sup>60</sup> See Benetello (2018: 29).

<sup>61</sup> Palumbo (2009: 42).

<sup>&</sup>lt;sup>62</sup> Idem, p. 172.

the adaptation of linguistic and cultural elements in the TT. The aim in using dynamic equivalence is to trigger the same effect that the source reader has while reading the ST in the target reader while reading the TT. From the linguistic point of view, a different grammar and syntax could make a text smoother to read for the target audience, and wellknown cultural elements could help the reader(s) of the TT to better understand the text and feel more related to its meaning.

Following Nida's equivalence theory, researchers in the field have theorised more kinds of equivalence, recognising formal and dynamic ones still as the two major types. In 1979, Koller individuated five equivalence frameworks: denotative, connotative, textnormative, pragmatic, and formal equivalence<sup>63</sup>. Pragmatic – or what Nida called dynamic – and formal equivalence were already mentioned in the previous paragraph. Denotative equivalence, also called referential equivalence, considers the same referent in the real world, whereas connotative equivalence aims at triggering the same or similar associations in the minds of natives of the two languages. Finally, text-normative equivalence focuses on a natural rendering of the expressions of the ST in the TT. For this reason, it moves further from literal translation, because a word-for-word rendering would sound unidiomatic, even if the grammar is correct. After Koller, the concept of functional equivalence was proposed by both Newman and Neubert (1994). The idea behind this kind of equivalence is a purposeful translation, which means that not all variables in the source can be relevant in every situation; for instance, it is the job of the translator to determine which of the variables should be given priority to in that specific context, at the expense of what they think are less relevant variables. According to Ren (2023: 190), "Cicero's translation theory also reflects some factors of functional equivalence", making us readers understand the relevance of the target audience and culture in translation ever since the first translation scholars and their first theories.

As explained in these last three sections, the XX and XXI were dominated by a focus on the target audience and culture. Therefore, this introduction including some definitions of translation theories is essential before advancing to the main topic of the chapter, which is transcreation.

<sup>&</sup>lt;sup>63</sup> Pym (2014: 72).

#### 2.3. Towards a definition of transcreation

Etymologically speaking, "the term "transcreation" is the result of the merging together of what Katan calls "translatere" [...] and "transcreare" <sup>64</sup>. In this definition, the Latin terms mean, respectively, perform translation as a linguistic task and rearrange the text from the point of view of its content, focusing also on its target reader and culture. The term was first mentioned by the Indian author and translator Purushottam Lal, who translated Indian classic drama from Sanskrit into English in the 1950s. Furthermore, in his work Great Sanskrit Plays in Modern Translation (1996: 43), he argues that "the thing to do is to attempt to preserve not the Sanskrit language but the Hindu tradition which it enshrines"<sup>65</sup>, summarising the main intention behind transcreation. Also the Brazilian author Haroldo de Campos used the term in 1969 to express a new kind of translation aiming at emphasising creativity in literary translation. This new translation approach "aimed at phonetic, syntactical, and morphological equivalence achieved by appropriating the best contemporary poetry and the existing local tradition"66. It is, in fact, a way of translating by focusing on the message conveyed by the text, rather than the text's linguistics and words. Therefore, the main idea in transcreation is to keep the creativity of the source text in the target text to trigger the same feelings in the readers of both the original text and the target one. This gives the translator a sort of "freedom" and consequently the possibility not to stitch to a mere translation of words, giving importance to the content and the message. If the aim is to be able to maintain the same conative function of the source text, translation becomes not only an interlinguistic process but also a matter of intercultural<sup>67</sup> as well as non-verbal communication. Being transcreation a quite new translation strategy – or at least, recently adopted –, literacy is not abundant, and it can be considered relatively recent. Gaballo (2012: 111) provides a definition aiming at distinguishing it from other kinds of translation.

Transcreation is an intra-/interlingual re-interpretation of the original work suited to the readers/audience of the target language which requires the translator to come up with new conceptual, linguistic and cultural constructs to make up for the lack (or inadequacy) of existing ones. It can be looked at as a strategy to overcome the limits of 'untranslatability'.

<sup>&</sup>lt;sup>64</sup> Carreira (2022: 499).

<sup>&</sup>lt;sup>65</sup> Benetello (2018: 28).

<sup>66</sup> Gaballo (2012: 97).

<sup>&</sup>lt;sup>67</sup> Kuzenko (2017: 40).

More than ten years later, Díaz-Millón and Olvera-Lobo (2023: 347) attempt to find a general definition of transcreation in their study, claiming that

'Transcreation' can be defined as a translation-related activity that combines processes of linguistic translation, cultural adaptation and (re-)creation or creative re-interpretation of certain parts of a text.

Further in the paper, the same authors state that transcreation has gained the status of "added-value translation services" (*ibidem*.) in international standards, such as ISO:17100. This standard issued by the International Organization for Standardization contains dispositions for TSPs (Translation Services Providers) and regulates the way translation processes should be managed by professionals. Another definition of transcreation is given by Torresi (2020: 5) in the context of advertising translation, who defines the process as a "re-building of the entire promotional text so that it sounds and reads both natural and creative in the target language and culture".

In more recent years, the term has earned greater success in different fields, such as in localisation of video games<sup>68</sup>. Video games industry has become particularly popular since the 1970s, thus different translation and localisation strategies have been studied to render them suitable in every language and at the same time maintain the conative function. About transcreation in this field, Magiron and O'Hagan (2006: 20) state that

Game localisers are granted *quasi* absolute freedom to modify, omit, and even add any elements which they deem necessary to bring the game closer to the players and to convey the original feel of gameplay. And, in so doing, the traditional concept of fidelity to the original is discarded. In game localisation, transcreation, rather than just translation, takes place.

At this point, terms such as "translation", "localisation" and "transcreation" cannot be used interchangeably regardless of their real meaning. Another word that is wrongly confused with the previously listed ones is "adaptation"; therefore, before proceeding with further topics, it is worth listing the definitions of these concepts. Starting with translation, this process aims to transfer certain concepts from an SL to a TL and it mainly refers to the written word – in contrast to interpretation, which refers to spoken language. Adaptation, instead, aims to achieve the goals of the original text and the term mainly refers to the field of subtitling and dubbing. However, some refer to transcreation as

<sup>&</sup>lt;sup>68</sup> "Localization (a more specific term, which is mainly used for advertisements, websites and software) [...] need[s] to adjust the promotional text to the target market [...]. This, in turn, might entail transcreation". (Torresi, 2020: 5).

"cultural adaptation" and the two terms are undoubtedly connected to each other; in fact, Newmark (1995: 45) defines it as the freest way of translating. Adaptation brings so many changes on a text that is being translated that "it generally departs from the source text to such an extent that it is no longer recognized as a translated text but has the standing of an original text". Finally, localising means to emphasise the cross-cultural elements of the process, with the aim of preserving the persuasive function of the text. Transcreation is often implemented in localisation (also called L10N), but as already stated they are two different processes. Moreover, the term localisation also involves practices that are not linguistic. To make a further distinction, an example of transcreation is given by Benetello (2018: 37) in the Swiffer's tagline of 1999.

English (source text) Italian (target text)

"When Swiffer's the one, consider it "La polvere non dura, perché Swiffer done" la cattura"

The Italian translation provided above can be literally translated in English as "Dust doesn't linger, because Swiffer catches it." (*ibidem.*). The complete change in the Italian version is due to a major importance given to the text's style rather than its words. The translator focused on keeping a rhyme and creating a slogan without worrying about the use of the same words – except for the name of the product, which should be kept for marketing purposes. Apart from linguistic and stylistic variations, it is possible to notice that there are no culturally significant changes. Regarding localisation, what is needed to be adapted is experience and cultural elements, whereas in translation the focus is the message and the language it is conveyed in. A simple example of localisation is the conversion of measurements from one culture into another:

English (source text) Italian (target text)

I bought 2 pounds of rice. Ho comprato 1 chilo di riso.

Measurements are universally recognised, but different countries and cultures use different systems; for this reason, if we have to translate from English into Italian – as in the example above, EN pounds must be localised into IT *chilo*, in order for the target

<sup>&</sup>lt;sup>69</sup> Díaz-Millón, Olvera-Lobo (2023: 348).

<sup>&</sup>lt;sup>70</sup> Gaballo (2012: 103).

<sup>&</sup>lt;sup>71</sup> Torresi (2020: 5).

audience to better understand the sentence by eliminating foreign elements and transform them into culturally understandable ones. Since culture is strictly related to language, localisation is an important part of translation, but this should be done by experts in the field of communication and copywriters with good language knowledge<sup>72</sup>. Again, Benetello (2018: 29) remarks on the fine line between localisation and transcreation in advertising, stating that "English-speaking clients tend to use the term copywriting to include both origination [...] and transcreation", but this will be analysed further in the present chapter.

Undoubtedly, the most difficult distinction to make regards translation and transcreation. Although the differences can be easily grasped by reading the previous definitions, some points can still be clarified. Translation follows a series of norms that allow translators to transfer the content appropriately from one language into another and to spot eventual errors during revision. There are several tables and grids listing potential errors, such as Mossop's revision parameters. The grid is divided into five main categories, each of them related to a list of possible errors:

- 1. Transfer: accuracy, completeness (including subcategories addition or omission of elements).
- 2. Content: logic, facts.
- 3. Language: smoothness, tailoring, sub-language, idiom, mechanics.
- 4. Presentation: layout, typography, organization.
- 5. Specification: ClientSpecs, EmployerPol.<sup>73</sup>

It is clear that, when it comes to translating a text, these parameters are quality indicators and, therefore, they must be respected by the translator. In transcreation, instead, breaking the norm is regarded as an added value, and sometimes "what constitutes an error in translation can [...] be a recommended way to proceed in transcreation"<sup>74</sup>. To prove this contrast between translation and transcreation, an example from Benetello (2018: 30-31) of the Audi advertisement is provided below.

<sup>&</sup>lt;sup>72</sup> Idem, p. 8.

<sup>&</sup>lt;sup>73</sup> Mossop (2019: 136-137).

<sup>&</sup>lt;sup>74</sup> Benetello (2018: 30).

German (source text)

Italian (target text)

Audi. Vorsprung der Technik.

Audi. All'avanguardia della tecnica.

Here DE *Vorsprung* indicates a step forward, whereas IT *avanguardia* means being first place or the best in a certain field – in this case, of technology (DE *Technik*, IT *tecnica*). Benetello (p.30) refers to it as a terminological error, and also following Mossop's parameters this change in terminology would refer to language category, sub-language error. But as the author states, this is a field requiring transcreation and not translation, therefore, in order to convey the idea of high technological knowledge resulting in a good product, using the expression IT *all'avanguardia* is the best solution since it is commonly used and sounds very natural.

#### 2.4. Where and when transcreation occurs

In this chapter's introduction, transcreation was presented as a practice occurring in different fields at different levels. This means that some genres need transcreation because of extralinguistic matters and cultural features, whereas others need just translation. Even if, by definition, transcreation mainly involves texts in the field of marketing and communication, it is worth explaining why the method cannot be used in many text types and listing the fields in which it is exploited. Newmark distinguishes eight different methods in a "V"-form scheme and classifies them from the most source-oriented ("SL Emphasis") to the most target-oriented ("TL Emphasis").

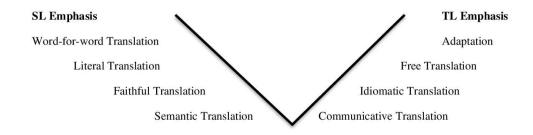


Figure 7: Newmark's V diagram of translation methods (1995: 45).

In order for the explanation to be clear, a comparison between two different text genres will be provided further. If a legal text, such as a Power of Attorney, is taken into account, the translation methods used will be chosen based on the purpose of the text, meaning that the translator must provide all the information given in the ST in the clearest way possible. Moreover, from the point of view of vocabulary, they must keep specialised

terms by using equivalents in the TL. Such texts are a matter of the translation field and must be revised with precise parameters to verify their adequacy, such as Mossop's ones mentioned in the previous section. From this example, it is possible to affirm that whatever text needs to be rendered as literal as possible must be translated, and not "transcreated". This also recalls Jakobson's language function theory. For instance, a legal document does not need to persuade, or influence, or even certify the addressee's understanding of the text; in this case, a Power of Attorney needs to appoint and inform about a specific action or decision, which is the field referential or cognitive function. According to Newmark's diagram, the legal text translation example should be collocated between literal and faithful translation. This does not imply that legal English - or "Legalese" - is completely freed from a sort of "creative" language; in fact, one of the major difficulties for a translator in the legal field is the use of legal metaphors and figurative language, who therefore requires a high fluency in both languages<sup>75</sup>. If an advertising copy for a marketing campaign is taken, instead, a translator must satisfy functions such as conative and poetic, with particular regard to culture. Therefore, this is not only a matter of language, but also of extralinguistic features such as cultural traits and beliefs. In fact, by looking again at the example in 2.3. of Audi's tagline translation, it is possible to deduce that such a change and transcreation would not be possible, for example, in a scientific article, nor in a legal document, because their reliability lays on the vocabulary used which must remain the same for the sake of accuracy and clearness. On the other hand, the example mentioned regards the field of marketing and advertising; therefore, the change is perfectly acceptable to satisfy the language functions involved. Again, in Newmark's diagram, such a translation practice should be collocated in between free translation and adaptation.

Many business areas are mentioned in literacy about the fields where transcreation is performed; certainly, all authors agree that transcreation is necessary when translators deal with persuasive texts, especially in the fields of communication, marketing, and advertising copy. Therefore, some businesses refer to transcreation products as copywriting products, collocating this strategy in between translation and copywriting<sup>76</sup>. According to Díaz-Millón and Olvera-Lobo (2023: 348), transcreation "can be present in

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<sup>&</sup>lt;sup>75</sup> Alcaraz, Hughes (2014).

<sup>&</sup>lt;sup>76</sup> Benetello (2018: 29).

a wide range of fields: literature, marketing, advertising, video-games, websites, information materials, mobile applications, etc.", but some authors argue that video games and websites are mainly localised. Video games, as previously stated, are characterised by higher freedom while translating and the use of techniques that makes this field different from the others concerning translation<sup>77</sup>. Moreover, such a strategy can be present in non-creative fields, for example in healthcare transcreation is used for a matter of transfer of educational health material from one culture and ethnic group into another<sup>78</sup>. Finally, from the comparison of transcreation literature, it is possible to assume that this strategy is required whenever the purpose of the text is to persuade customers pertaining to different cultural spheres.

### 2.5. Cross-cultural translation strategies in marketing and advertising

What emerged from the previous section is that marketing and advertising are the fields that require transcreation the most, being strictly connected to culture. But even when approaching copies pertaining to the same field and sharing the same purpose of selling a product, the attitude towards them should be different depending on their text type. For a better understanding of this concept, a table showing the information-to-persuasion ratio continuum is reported thereafter.

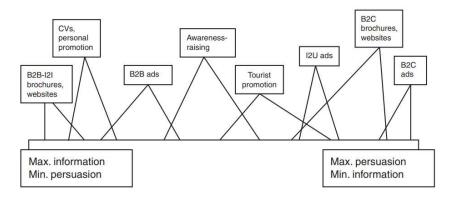


Figure 8: Information to persuasion ratio continuum. Retrieved from Torresi (2020: 27).

For the aim of this thesis, there will be a focus only on B2C (i.e., Business to Consumer) advertising copies; therefore, what is being taken into consideration is a text type whose main objective is to persuade the audience, at times at the expense of information. It is

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<sup>&</sup>lt;sup>77</sup> See Gaballo (2012: 106); Magiron and O'Hagan (2006: 20).

<sup>&</sup>lt;sup>78</sup> Díaz-Millón and Olvera-Lobo (2023: 349).

clear that, however, there are persuasive elements in mainly informative texts and vice versa, but the predominance of one category of elements or the other is clearly visible. This predominance also depends on the countries involved in communication and their respective cultures, but this topic will be discussed in the further section. Therefore, the addressee is also a very important part of the decision-making process for copywriting and transcreation. For instance, in Italy, institutions tend to use an impersonal, noncolloquial style when promoting themselves to their users (in the ratio, I2U), and so do both businesses and institutions with their peers (in the ratio, B2B and I2I) focusing more on giving relevant information rather than persuade their audience, but business changes their approach drastically when it comes to communicating with their consumers to sell them their products. Persuasion can be performed in different ways, but it does not necessarily involve the employment of creative language. In some ads concerning, for example, electrical appliances, the employment of technical vocabulary can be considered a persuasion technique. According to Torresi (2020: 29), the need for a higher concentration of information or persuasion in a text encounters other features which are very relevant to bring a message across cultures effectively, such as the context of distribution, a complete and detailed profile of both source and target, and their relationship. The adjustment of advertisements following these factors is essential to avoid a mediocre, inadequate, or even indecent result. An example of a good crosscultural adaptation is the phonological readaptation for the Italian market of the video games producer Sega.

The word Sega, pronounced as /'sega/ in the rest of the world, in Italian commercials used to be pronounced /'si:ga/ with a heavy American accent. This was done to avoid the obscene associations that go with the written word, which in Italian would be pronounced /'sega/ and allude to male masturbation and to a low-quality product. (Idem., p. 23)

Moreover, a translator can also decide to maintain some national traits from the source culture (i.e., the original culture of the brand) to enhance the quality of the products in other countries. An example could be underlining the Italian characteristics of an Italian brand cross-culturally, such as the pasta brand Barilla. For instance, Barilla launched a campaign in Germany with the motto *Bravo für dich* (2016). Linguistically speaking, the use of an Italian word in the claim of the campaign could be a good strategy to influence the German audience; in fact, being pasta one of the symbol products of Italy, the stress on "Italianness" in advertisement leads the consumer to think that they are buying an

authentic and well-done product. Another example of highlighting national traits to influence the audience is the campaign *Karl the Bosch engineer* made by Bonfire Creative Intelligence for the German company Bosch<sup>79</sup>. In fact, "Germany is stereotypically associated with high technological standards and so German quality assessment bodies are presumed to be particularly severe and reliable"<sup>80</sup>. The creation of a fictional character – a German engineer – which is maintained cross-culturally in Bosch commercials is a good strategy to persuade the English audience by using its German offsprings to enhance the reliability around the product. Linguistically speaking, the fact that the German word *perfekt* is maintained also in the English version is a good strategy and enforces this cross-cultural theory.

Moving forward to B2C advertisement, the rendering of a message from one language into another is not only a matter of translation, but also of copywriting and adaptation. In fact, in the communication world there are also other tools used, such as the brief, a document divided into sections with all the necessary information. A brief is created by the business and then given to the communication agency to give advice and indicate all the contents they expect to see in the final product. The brief lists the characteristics of all elements visible in advertisement for that specific campaign, which are: the title called headline stating the claim or slogan of the campaign, and eventually a sub-headline; visual(s) such as pictures, photos, or illustrations, accompanied by the body copy – a short text whose main function is to complete the visual giving relevant information; other names used for this specific textual part of the ad are "copy" and "textbody"81. Finally, the signature of the business, which is their logo, often accompanied by their payoff. The payoff is different from a claim or a slogan because it is often located with the logo at the end of the printed advertisement. Another element which is recurrent in copies is the socalled "Call to Action" (CTA). As the name already conveys, it is a short sentence which contains an action verb connected to the reason why of a campaign, and it is meant to provoke that same action in the reader. For example, if the ad refers to a product which is being sold, the CTA should persuade the customer to buy that specific product. CTAs are very expressive and persuasive in order to achieve their purpose.

<sup>&</sup>lt;sup>79</sup> Bosch.

<sup>80</sup> Vasta (1999: 297).

<sup>81</sup> Janich (2005: 47).

A translator must consider all these features and re-create the same harmony as in the ST at different levels, for example, by keeping the connection between the visual and the body copy. To make another example on the level of advertisement aesthetic, the way the space is employed is very important, because if a body copy is too long it can cover the visual or change the layout. The concept of adapting the text into a determined space is a leitmotif in many other fields, such as subtitling and dubbing. Concerning the linguistic level, the cross-cultural rendering of a claim or slogan can represent a significant obstacle for a translator to overcome. Transcreation is the most used strategy in these situations because slogans and claims contain mostly puns or rhymes that should be reproduced also in the TT. This practice is defined by Benetello (2018: 36) as "interlinguistic adaptation [...] a hybrid practice that involves both copywriting and translation". In support of this definition, the following example from Haribo slogan is provided (Idem., p.37):

German (ST)	Italian (TT)	English (TT)	
Haribo macht	Haribo è la bontà	Kids and grown-	
Kinder froh und	che si gusta ad ogni	ups love it so, the	
Erwachsene	età.	happy world of	
ebenso.		Haribo.	

Transcreation was necessary to maintain the rhyme. The literal translations provided in English are "Haribo makes children happy and adults too" for German and "Haribo is the delicacy one savours at any age" for Italian (*ibid.*). The main words were translated from German into English (DE *Kinder*, *Erwachsene*, *froh*; EN kids, grown-ups, happy), and the same concept was rendered differently in Italian. For the specific case of the Haribo advertisement, the translator had to consider also the rhythm of the iconic background music. Moreover, this example is useful to underline another essential feature to include in marketing translation: the brand's name must always be present. The strategy of immediately placing the name of the brand adopted in German and Italian has a different output in English, where it is placed at the very end of the slogan but used to make the rhyme. Lastly, the text also had to fit on a certain layout, i.e. only one line.

To conclude, the aim of this section was to underline the difficulties that a translator should overcome when translating, transcreating, adapting, and copywriting in the field of marketing and advertising. The explanation and the examples provided are meant to show the different features affecting cross-cultural translation. The way culture is

perceived and how it is transferred through advertising will be analysed in the following section.

#### 2.6. The cultural factor in transcreation

From what has emerged in the previous paragraphs, transcreation is not only merely a linguistic fact, but it is rather a strategy to transfer advertisement from one language to another from the point of view of culture. Culture can be defined as the "set of values, traditions, beliefs, and attitudes that are shared by the majority of people living in a country or, alternatively, in a local community"82, or in other words "the knowledge, activities and artefacts associated with a given language community"83. Cultural traits inevitably influence language, for example, the way a person talks, or the content exposed in a conversation. From the linguistic perspective, culture influences the vocabulary of its specific community, and the proof is the existence of culture-bound terms<sup>84</sup>. These words are known in the translation field as "realia" and represent a difficulty for a translator. In fact, some realia are well known internationally or even worldwide (such as IT pasta) and therefore they do not need to be changed because they can be understood easily by the target audience. On the other hand, many culture-related words are limited to their community, and very few people know their meaning. An example of unknown realia is the word IT abbiocco, which indicates a condition of sleepiness right after a meal. Fortunately, many strategies were developed to overcome this difficulty, and the translator must choose the most suitable one, depending on whether they want the TT to be more source-oriented (i.e. leave it as it is and if necessary, add a footnote), or targetoriented (i.e. translating the term using the nearest synonym possible or paraphrase it). In transcreation, the aim is to change the advertisement copy to make it accessible among different cultures and perform a sort of re-adaptation. Therefore, it is not only a matter of words and language, but the challenge is to convey the same message to people and communities that perceive reality in different ways. A representative example in advertising was made by Seiko in 2003, in which culture plays a vital role in deciding the most important values for the individual.

<sup>82</sup> Torresi (2020: 34).

<sup>83</sup> Palumbo (2009: 31).

<sup>&</sup>lt;sup>84</sup> Ibidem.

English Italian

It's not your <u>clothes</u>. It's not your <u>Non è la tua auto</u>. Non sono i tuoi <u>sport</u>. It's not your <u>laugh</u>. <u>amici</u>. Non è il tuo <u>lavoro</u>.

It's your watch that says most about È il tuo orologio che dice chi sei who you are. È il tuo orologio che dice chi sei veramente.

In Italian, the three English words clothes, sport, and laugh are not translated, but substituted with *auto*, *amici*, and *lavoro* (EN car, friends, and job), marking that these elements are what makes a person important in that specific culture. For instance, Italy is reported to be more hierarchical than other English-speaking countries, and because of this the job a person does is a priority and determines if a person is successful in life or not. Every culture has different priorities and values; therefore, the mission of copywriters and translators is to spot cultural differences and to recreate a commercial highlighting these values. Thanks to further studies and theories in cross-cultural communication, translators can rely on many theories to solve their translation problems concerning cross-cultural communication, such as Hall's distinction between high-context and low-context cultures, and further paradigms theorised in the Hofstede model.

# 2.6.1. Hall: high-context and low-context cultures

In 1976, Hall developed the paradigm of high-context and low-context cultures. The author's theory is based on the notion of context, and the main idea is that "cultures differ in the way they use context in conveying information through communication". In his theory, Hall states that high-context cultures are the ones that can understand a message even conveyed in little pieces of coded information because their understanding is helped by both the context and the information which are internalised in the person. As a result, these cultures tend to be better at reading between the lines, and understanding non-verbal signs and implicit communication; moreover, they tend to express their feelings more often and value group sense. On the other hand, people being part of a low-context culture need the message to be fully coded, or at least they need more coded information because they cannot perceive the clues given from the context and only use explicit communication. For this reason, these cultural groups favour directness and detailed descriptions, they are less aware of non-verbal signs and struggle with their readability.

<sup>85</sup> Broeder (2021: 14).

Finally, as an umpteenth contrast with high-context cultures, low-context cultural groups prefer to use logic rather than to express feelings. In other words, the major distinction between these two types of cultures is their ability to understand messages that are "hidden" or implicit in the context. Hall classifies cultures from higher to lower contexts as following:

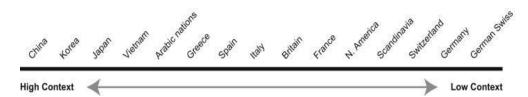


Figure 9: Hall's Country Classification based on High-/Low-Context Culture. Retrieved from Barnum (2021).

Moreover, Broeder (2021: 16) makes a further distinction by denominating the countries in the middle of this classification "middle-context cultures", such as Greece. For this thesis, only a few countries in the list will be taken into account: Italy, Germany, the US, and England. Following Hall's classification, Italian culture is the highest-context (even if following Greece, so it is still a middle-context culture), followed by Britain, North America – therefore, the US – and Germany, which is placed almost at the very end in the overall classification with all the German-speaking countries. From the point of view of communication strategies and translation, this classification means that a translator must render the message more explicit when translating from Italian into English, and much more when translating from both languages into German. This distinction in the field of marketing causes advertising copies to be visibly different in their text and layout. For instance, being high-context cultures more aware of non-verbal signs, ads could contain fewer words and a smaller body copy, but they could present more colours, images, and symbols. An example that best summarises the differences between highcontext and low-context cultures could simply be cups for coffee to-go in different countries. In fact, in low-context countries, it is normal to find sentences written on these cups, such as "Caution! Hot content", whereas in high-context countries cups do not normally carry this kind of instruction.

#### 2.6.2. The Hofstede model

Cultural studies were largely influenced by Hofstede's theories and in particular by his model, developed starting from a database with thousands of questionnaires at IBM in the 1970s. Hofstede (2011: 3) defines culture as "the collective programming of the mind that distinguishes the members of one group or category of people from others" and distinguishes six different cultural dimensions in a study joined with Minkov (2010): power distance, uncertainty avoidance, individualism and collectivism, masculinity and femininity, long and short-term orientation, and indulgence and restraint<sup>86</sup>. The dimensions will not be presented in this precise order.

The first dimension is similar to the previously explained Hall's theory and it is called uncertainty avoidance because it can be defined as the "society's tolerance for ambiguity<sup>87</sup>". A strong uncertainty avoidance condition can reflect in many aspects of everyday life, such as with the presence of more strict and precise laws, more stress and anxiety, and a stronger vision of the authority, which is seen as more competent than the county's citizens. For this very last reason, it is also strictly connected to the power distance dimension, which will be further discussed. Generally speaking, such dimension has a higher presence in "East and Central European countries, in Latin countries, in Japan and German-speaking countries, lower in English speaking, Nordic and Chinese culture countries<sup>88</sup>". The connection with Hall's theory is visible from the classification of Germany, being both low context and strong uncertainty avoidant. When this dimension is represented through pieces of advertising, it is possible to distinguish clearly either weak or strong uncertainty avoidance because the former always presents clear images and references to the topic, with a tagline or body copy avoiding both metaphors and ambiguous language; concerning the latter, the target audience is more likely to understand figurative and creative language, or to the use of less related images and references.

In the Hofstede model, individualism and collectivism are intended as cultural – therefore, societal – phenomena. As the labels already suggest, the people of these cultural groups focus on the individual for the former, or, if anything, the individual's family, and on

<sup>&</sup>lt;sup>86</sup> Hofstede (2011: 8).

<sup>&</sup>lt;sup>87</sup> Idem, p. 10.

<sup>88</sup> Ibidem.

society as a group for the latter, creating a sort of dualism in between, respectively, a "Iconsciousness" and a "we-consciousness". In Hofstede et al. (2010), the Western parts of the world, like the US or Europe are labeled as individualistic – with a stronger individualism in Northern Europe, whereas collectivism is reported to be a characteristic regarding mainly Eastern countries, such as China, and developing countries. Moreover, individualistic cultures are connected to low-context communication, and collectivistic cultures favour high-context communication – see 2.6.1. Collectivistic cultures value group sense in all aspects of their life, most importantly in the decision-making process and in the way they communicate. For instance, collectivistic cultures mainly avoid the use of the first person singular<sup>89</sup>. Such linguistic behaviour leads to certain approaches in the field of advertisement and marketing, in which copywriters and translators adapt to the linguistic habits of the target community. Therefore, individualist cultures will be more prone to be influenced by advertisements linguistically referring to the individual, whereas translators and copywriters producing commercials for collectivistic cultures will make references to group sense and unity. The difficulty in translation when focusing on this specific dualism comes from ads originally written in English, where there is no difference in the singular and plural pronoun "you". For example, when it comes to Italian advertisements, both the singular form tu and the plural form voi can be used<sup>90</sup>, at the discretion of the brand communicators.

Moving forward to the societal characteristics in masculine and feminine cultures, these cultures tend to favour and sympathise with different values. In fact, in masculine cultures, the sympathy for strength, work, and success is more marked than in feminine cultures, in which the gender gap is tendentially reduced. In feminine cultures, the same caring values are shared both by men and women. The same author lists Japan, German-speaking countries, and some Latin countries such as Italy and Mexico as the countries where masculinity is a wider phenomenon. On the other hand, France, Spain, Portugal, Chile, Korea and Thailand are considered to have a lower masculinity, whereas Nordic countries and the Netherlands are believed to be mostly feminine cultures. These perceptions towards what is considered a masculine or a feminine value reflects on advertising as well. Torresi (2020: 114) the masculine-feminine paradigm affects

<sup>&</sup>lt;sup>89</sup> Idem, p.11.

<sup>&</sup>lt;sup>90</sup> Salerno (2014: 66).

particularly I2U communication, since "in feminine societies, institutions are expected to be more caring and closer to citizens as service users". According to Vasta (1999: 289) advertising in English-speaking countries tends to be more feminine-oriented compared to Italy – even if things are changing by the time this paper was written. The author also states that this can be a result of national history; in fact, the UK and the US are reported to have a longer feminist tradition compared to Italy, but still, they are both labeled as masculine cultures.

Hofstede (2011: 13) recognises the presence of taboos in a given cultural community as the main index of being more a masculine or feminine culture. Taboos and stereotypes related to gender are connected to gender roles and, again, to the gender gap. The presence of these taboos in a given community reflects on communication and advertising. This connection has given birth in the past to terrible examples of advertising campaigns, which have resulted in being particularly offensive for many categories, most of the time for women. Sometimes it regards the visual only, but more frequently it concerns also the body copy – or in the case of TV advertising, the voice-over –, making allusions to or even representing clearly the role of the woman as a staying-home mother or sexualising the subject as if women did not have the possibility to be anything else in their life. Moreover, the vast majority of female figures chosen for advertising in general have perfect physical and facial features, and it is not in any case a true representation of women. To give a relatively recent advertising example of what the New York Times has been referring to as "sexist and classist" 91, the brand Peloton published a campaign for its Christmas products in 2019. In the advertisement, the husband gifts the wife with a stationary bike. After a year the woman thanks her husband for the bike because of her bodily improvements while watching a daily video diary she had recorded. The company was accused of depicting a sexist relationship in which the man indirectly forces the woman to improve her appearance for him, as if the women's only objective was to be good-looking for their male partner. According to the NY Times, the company "stood firmly behind the commercial" because the message spread was completely different from its communication objective.

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<sup>&</sup>lt;sup>91</sup> Ortiz (2019).

Power is not only a paradigm related to gender but also in how the country manages its own hierarchical society. This is the case of Hofstede's small or large power distance, "related to the different solutions to the basic problem of human inequality<sup>92</sup>". In other words, this is a parameter used to describe whether what is perceived as an authority is also perceived as more or less distant to subordinates. This refers to all relationships presenting a difference in power, for example, employer and employee, student and teacher, parents and children (the last two recalling the idea of "the elder, the more important"), and so on. Small power distance refers to equal status among people in a country regardless of their societal position, whereas large power distance countries somehow accept inequality conditions. According to Hofstede (2011: 10) power distance features "tend to be higher for East European, Latin, Asian and African countries and lower for Germanic and English-speaking Western countries", including Scandinavian countries. When it comes to advertising, it is very important to bear in mind this cultural phenomenon because such a paradigm in marketing and advertising must be reproduced by advertisers according to the target market. An example of failed ad in this area could be the representation of freedom and rebellion in a country with large power distance, such as China; on the same perspective, the representation of a too unequal hierarchical scheme in small power distance countries could be seen as distorted reality, such as in the US.

Finally, the last two dimensions in Hofstede's model are said to be complementary. These are short-term or long-term orientation, and indulgence or restraint. Short-term orientation and indulgence convey caring more about emotions rather than work and status. The latter behaviour is connected to Asian, Eastern European, and Muslim countries; it is worth noting that there is a medium-term dimension that comprehends the Mediterranean countries<sup>93</sup>.

These cultural dimensions are important to obtain clear communication, cross-culturally speaking. In the field of advertising, not considering such dimensions can possibly lead to communication failure; in fact, as it was possible to see from the examples mentioned in the previous sections, the negative effects caused by ineffective communication can

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<sup>&</sup>lt;sup>92</sup> Hofstede (2011: 8).

<sup>&</sup>lt;sup>93</sup> Idem, p. 16.

render ads insignificant - not communicating at all - or even offensive for the target audience. Therefore, the process of transcreation involves not only linguistic creativity but also particular attention to the cultures involved in the communication process.

# Chapter 3: Case study on advertising transcreation through DeepL, Language Weaver and ChatGPT-40

In the previous chapters, the focus was on the theoretical parts of machine translation, transcreation, and cross-cultural advertising techniques. The very rapid changes and developments in the field of machine translation have undoubtedly led to a wide presence in many spheres of our everyday lives.

In the thesis' introduction, User Generated Content (UGC) was mentioned as an example of an obstacle that MT engines barely overcome, especially when these translation technologies are used by non-professionals. Part of the characteristics of the UGC, however, concern also the category of advertising, including slogans, claims, body copies, and so on. Excluding what is considered profane and grammatically wrong – which is possible but less recurrent - advertising often contains puns, idiomaticities, cultural references, and connections referring to current events, but also hashtags and hyperlinks which are sometimes difficult to recognise for the machine translation engines. Moreover, there are other aspects that machine translation is often unable to catch, for example, the connections with colours and images, and most importantly the history, vision, and mission of a specific brand. The main doubt needing an answer from this study is, therefore, how far can NMT and GenAI go with advertising translation. The following study aims to understand whether these systems can be able to transcreate such text types only in this specific context using specific language pairs and systems. The evaluation is based on their raw outputs. The results will show the type of errors made by the machine translation engines in this particular field divided by engine and language pair.

# 3.1. Case study presentation

The present case study was compiled in August 2024. The first step of the case study was to choose three different systems to be tested in advertising transcreation. I chose two NMTs, which are DeepL and Language Weaver, and ChatGPT-40, the latest version of ChatGPT's Generative AI. My choice was dictated by simple factors: as a student, I use free online translation platforms such as DeepL which is generally considered one of the most efficient online translators. I then selected Language Weaver because of my university's convention with RWS Trados, a software for translators giving access to this NMT, which I considered particularly good. Lastly, ChatGPT is one of the platforms that

is mostly employed by students for research. I wanted to test its newest version, ChatGPT-40mni, to spot differences within the different NMTs chosen and evaluate its developments in creative translations and request fulfilment.

For the current case study, I selected two different language pairs. They both have English (United Kingdom) as the source language, only the target languages differ. The first pair is English (United Kingdom and United States) to standard Italian, and the second pair involves standard German as the target language.

The texts that underwent machine translation pertain to the marketing and advertising field. More specifically, all the ads are classified as B2C, and the products sponsored therein pertain to the branch of the food industry. The reason why the study is based on commercials in the food industry is that this field is one of the most creative and challenging for transcreators, where puns, idioms, cultural references, and emotional language reach their highest point and the preservation of the conative function is crucial; therefore, this could represent even a more challenging task for MT engines. Another criterion I considered for the selection of the ads is the absence of a transcreation of the chosen ads for the language pairs EN>IT and EN>DE. Following these two criteria, I have chosen fifteen different ads from fifteen different food brands. The connection between all these pieces of advertising is their creativity, meaning the employment of rhetorical figures, figurative and emotional language, cultural references, and all the aspects previously cited for advertising. The brands and their respective ads will be presented further. It is important to highlight that some of the ads presented in the studies were neither meant to be international nor to be localised or adapted somehow, but their taglines, body copies, and claims were interesting for this case study anyway and, therefore, they were selected regardless of their national nature. Moreover, it is important to remark that the ones analysed are raw machine translation outputs, i.e. none of the outputs was post-edited. I have voluntarily chosen ads whose texts present different lengths to verify if the different number of words could in any case interfere with the systems' performance. For instance, the longer the text, the more information can be retrieved for the context to be solidly understood; for this reason, a longer text can "help" the MT engine to improve its output.

The first part of this study required all three systems to translate the food ads. Every system required a different insertion of the input. Concerning DeepL, I have used the

online version in my browser, and I have inserted all English STs to translate them first into Italian and then into German. On the other hand, I have used Language Weaver via its integration into the Trados Studio 2022 application on my desktop computer. I have created two different projects, the first with the language pair English (United Kingdom) > Italian (Italy), and the second with the language pair English (United Kingdom) > German (Germany). I had to create a Microsoft Office Word file (docx.) as source file containing all the English STs to insert in the local Trados Studio project. For both projects, I selected Language Weaver NMT as a cloud-based translation resource and once I started the project, the system translated both files in a matter of seconds. Since I just wanted raw results without any further modification, I just finalised and saved the TT files. Finally, ChatGPT-40 required another type of input called prompt, which I will explain in a further section. After translating everything, I gathered all the results and started comparing them.

To evaluate the outputs of the MT systems I have used the Multidimensional Quality Metrics (MQM), which is an analytic method created to evaluate both human and machine translation outputs, including translations generated with Artificial Intelligence. Moreover, "MQM proposes to weigh each error by its severity. It offers three weights: minor [...], major [...] and critical<sup>94</sup>". For the aim of this thesis, the scorecards will not be used to evaluate the outputs, which will be only compared and explained based on error typology. As Mossop's parameter mentioned in chapters 1 and 2, MQM is divided into several categories, each of them containing several other sub-categories. For the aim of the following project, I have decided to use the core version of the evaluation system. The categories are organised as follows:

- · Terminology: inconsistent with terminology resource, inconsistent use of terminology, wrong term.
- · Accuracy: mistranslation, overtranslation, undertranslation, addition, omission, do not translate, untranslated.
- · Linguistic conventions: grammar, punctuation, spelling, unintelligible, character encoding, textual conventions.

<sup>&</sup>lt;sup>94</sup> Park, Padò (2024: 11725).

- · Style: organisation style, third-party style, inconsistent with external reference, language register, awkward style, unidiomatic style, inconsistent style.
- · Locale conventions: number format, currency format, measurement format, time format, date format, address format, telephone format, shortcut key.
- · Audience appropriateness: culture-specific reference, offensive.
- · Design and markup: layout, markup tag, truncation/text expansion, missing text, link/cross-reference.
- · Custom: any other type of error not aforementioned<sup>95</sup>.

Before coming to the case study, I would like to highlight that the aim of this study is the evaluation of raw outputs in this specific and narrow field, and it is neither a judgement on the overall MT engines' performance nor on the systems themselves.

# 3.2. Translation systems' overview

# 3.2.1. DeepL

DeepL Translator is an AI-powered machine translator provided by the German company DeepL (GmbH) founded in 2017. It is well known for offering free multilingual translation and writing services. DeepL stands for "Deep Learning", which is the learning algorithm of the machine translation engine. In simple words, such a learning process is continuous and performed automatically by the engine itself, learning and training from both the inputs and the outputs – see Chapter 1. This technology is typical of Neural Machine Translation systems, also adopted by DeepL. Standard DeepL Translator is free, whereas its Pro version is used by many businesses worldwide, such as Fujitsu<sup>96</sup>. According to DeepL's website, statistics claim that linguistic experts prefer the latest DeepL's model to Google Translate, ChatGPT-4, and Microsoft translation services, adding that the need for post-editing is much lower for DeepL than for other companies, which is convenient from the point of view of efficiency and productivity<sup>97</sup>. Finally, according to Intento Enterprise MT Hub, which helps companies worldwide find the best translation solutions.

<sup>95</sup> The MQM Council (2024).

<sup>&</sup>lt;sup>96</sup> DeepL Team (2024).

<sup>&</sup>lt;sup>97</sup> DeepL Team (2024).

DeepL MT has gained recognition as one of the leading machine translation solutions in the industry, serving individuals and businesses alike in overcoming language barriers and facilitating effective communication across global contexts. Ranked best in 126 out of 198 pair/domain combinations. Domain Leader in Legal. Language Leader in 13 pairs. (2023: 78)

Although the legal field is DeepL's piece de resistance according to Intento, this translation platform is generally regarded as one of the best ones, with a better performance with the language pair German <> English<sup>98</sup>. However, as for other machine translation engines nowadays, its main defeats can be reconnected to the ones described in Chapter 1's introduction. The full understanding of context, of idioms, and of extralinguistic items – such as cultural references – is still one of the biggest challenges for these systems. According to Di Nunzio et al. (2021: 152), who studied the performance of DeepL in the medical field, the system seems to produce lexical errors and to carry out a better performance in popular science rather than in medical texts, which logically contain more domain-specific lexicon rather than popular science texts. Other errors that are frequent for DeepL regard syntax, inflection, and prepositions<sup>99</sup>.

## 3.2.2. Language Weaver

Language Weaver is a machine translation engine provided by the RWS group. RWS was founded in 1958, and, among the totality of its clients, it counts "90 of the globe's top 100 brands, the top 10 pharmaceutical companies, and approximately half of the top 20 patent filers worldwide<sup>100</sup>". One of the largest groups working with RWS' Language Weaver is, for example, the Coca-Cola Europacific Partners (CCEP). The very first version of Language Weaver "originated as a spin-out company from the University of Southern California in 2002"<sup>101</sup>.

It is possible to access Language Weaver NMT as a cloud-based resource through the Trados Studio desktop application for local and cloud-based projects or also use it through a browser. Such software and its application are not free, but some universities have started partnerships with RWS to obtain free access for their students, including the University of Padua. Users can have access to thousands of language combinations, and

<sup>&</sup>lt;sup>98</sup> See Intento (2023: 25): "English-German pair in the Financial and IT domains is DeepL. Its score for the Financial domain is higher".

<sup>99</sup> See Di Nunzio et al. (2021) and Varela Salinas et al. (2023).

<sup>&</sup>lt;sup>100</sup> RWS Group.

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<sup>&</sup>lt;sup>101</sup> RWS Group (2024).

it is possible to make use of adaptive language pairs and dictionaries to ensure a better output by injecting in the engine more sector-based vocabulary in the form of TMs and TBs. By translating with the system through Trados Studio, it is possible to translate files directly, which means that the translator just focuses on the written text and as soon as the translation is over the system generates a target file maintaining the same layout and file type of the original.

For the current project, I have used Language Weaver NMT with the previously stated language pairs. This MT engine was inserted in the Trados Studio desktop application by installing its plugin in the RWS app store. The Trados version used to compile the case study is Trados Studio 2022 SR2 – 17.2.11.19134. It is worth mentioning that the following translation outputs are raw and not post-edited, and they were obtained by simply using the body copies, taglines, and claims as input.

In contrast to the other systems used for the project, Language Weaver undergoes no tailored training; therefore, the system does not seem to perform better in specific fields rather than others and its outputs need frequent post-editing regardless of the topic of the translation.

#### 3.2.3. ChatGPT-4 omni

GPT-4 omni – or simply 40 – is the latest version of the AI-powered chatbot ChatGPT provided by the American AI research organisation OpenAI, released in May 2024. This version comes with two available variants, which are 40mni and 40mni mini, with the former being slightly more advanced than the latter, which is recommended for easier tasks. According to the chatbot website, "GPT-40, OpenAI's newest flagship model, is stronger and faster than GPT-4 in quantitative questions (maths and physics), creative writing, and many other challenging tasks<sup>102</sup>". In addition to this impressive multimodality, another relevant improvement of this GenAI is the general capacity concerning other languages besides English, meaning that the chatbot now has a better response in terms of time and accuracy to non-English inputs. Alternatively, another older version can be used for free. Many important businesses already use ChatGPT worldwide, such as the pharmaceutical company Moderna<sup>103</sup>. As for DeepL, Intento tested the

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<sup>&</sup>lt;sup>102</sup> OpenAI (2024).

<sup>103</sup> Idem.

previous versions: GPT-3, ChatGPT, and GPT-4. Although it is not the same version and steps forward were made through the advent of ChatGPT-4o,

"OpenAI has demonstrated impressive capabilities in natural language understanding and generation. [...] ChatGPT ranked best in 61 out of 198 pair/domain combinations. Domain Leader in Entertainment. GPT-4 ranked best in 75 out of 198 pair/domain combinations". (Intento, 2023: 76).

From Intento's comment placing ChatGPT in the first place for the domain "Entertainment", I assumed that this particular GenAI could produce interesting results and outputs for the present case study. In fact, even if the field covered in the case study is not exactly the same as the one mentioned by Intento, the text function – mainly conative – and the creativity expressed through language – use of puns, metaphors, and so on – are elements present in both genres and which should be maintained cross-linguistically. The fact that this approach to translation can be fulfilled by ChatGPT in the field of Entertainment led me to suppose that the same machine translation engine could produce successful outputs also in the food advertising field, which is again the one chosen for this case study.

The application – both 40 and 40 mini – is currently free within a limited number of inputs, after which it requires a paid subscription or a wait of hours before restarting using the chatbot. Its costless nature makes it easily accessible to students, who use it for research purposes. Although it is a very sophisticated system trained on a large amount of training data, it still fails at times, mostly when it comes to translation. In fact, sometimes the system provides information that is out of context due to the poorness or the imprecision in the inserted prompt. In order to obtain a precise output without the risk of failing many attempts, a good prompt should be created. In the field of GenAI, a prompt is a "textual input provided by users to guide the model's output. [...] Prompts generally consist of instructions, questions, input data, and examples <sup>104</sup>". In recent years, prompt engineering was developed to produce complete prompts and, subsequently, to obtain the desired output from the system. In the field of GenAI for textual outputs, the user creating the prompt should be aware of LLMs' limitations, such as its probabilistic nature, the domain specificity of the input and the MT engine's probabilistic nature<sup>105</sup>. To achieve the desired result with an only prompt as input, I have personally elaborated the following

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<sup>&</sup>lt;sup>104</sup> Amatriain (2024: 1).

<sup>&</sup>lt;sup>105</sup> Idem, p.3-4.

generic prompt. The words in brackets were substituted with the right information that, in my opinion, was needed to give a richer and more accurate context to the chatbot:

Please transcreate the following [text] into (ITALIAN/GERMAN). Such advertisement was published by (BRAND) in (MONTH, YEAR) for their (PRODUCT/CAMPAIGN/EVENT). The target market of the transcreated text is (ITALY/GERMANY AND GERMAN-SPEAKING COUNTRIES). The original target market was (COUNTRY OF ORIGINAL TARGET MARKET). The visual of the campaign is (BRIEF DESCRIPTION OF THE VISUAL). The length of the transcreated text should be similar to the original one to fit in the copy.

[body of text]

The following is a practical example of the prompt used as input for ChatGPT-40 to obtain as output a transcreation into Italian for "Heinz ketchup" US ad (2023):

Please transcreate the following [text] into Italian. This advertisement was published by "Heinz" in 2023 for their ketchup. The target market of the transcreated text is Italy. The original target market was the US. The visual of the campaign is a red and white labyrinth with a horizontal bottle pouring some ketchup, which looks very thick. The length of the transcreated text should be similar to the original one to fit in the copy.

[So thick you'll get lost in it. Our extra thick ketchup results in an extra slow pour.]

The prompt used was always the same, besides a pair of ads which required an even more specific prompt, but these will be presented further in the case study. All the transcreations provided in the next section are the result of a single prompt. When using ChatGPT for this kind of task, it produces an output containing not only the requested transcreation, but also its comment of the output itself. For instance, the machine translation engine lists to the user the reasons why it produced that specific textual output; therefore, it is interesting to report GPT's "decisions" and to determine whether it was coherent or not, or how far its performance is from the human's reasoning. For example, the following comment was given by ChatGPT-40 concerning the transcreation output obtained from the insertion of the abovementioned prompt: "This translation captures the essence of the original message, maintaining the play on the thickness of the ketchup and its slow pour, while resonating with Italian language and culture. The length is also similar to fit the original design". The addition of such comments written in a human-like style renders the output even more realistic.

# 3.3. Advertising translation into Italian and German

In this section, all advertising texts will be presented singularly. The visual is placed right under every new paragraph; I have decided to include it because it is one of the most important parts of a campaign, it attracts the audience, and it is strictly related and coherent to the textual part of an ad. Right under the presentation of the visual, besides some background information contained in its caption, every MT output will be commented on with their errors and a final comparison among the systems used. For every ad, two different tables have been redacted, the first with the translations with English as ST and Italian as TT, while the second presents English as ST and German as TT. The errors in the outputs are in bold. The statistics and data general comments will be shown in the following section.

#### 3.3.1. Heinz

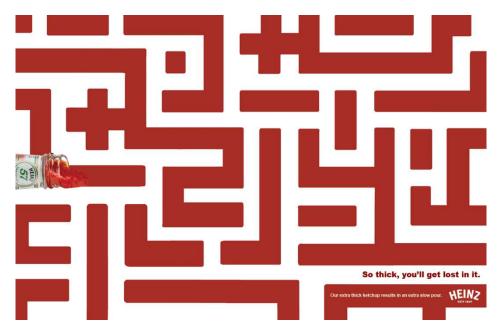


Figure 10: Heinz ad in the USA, August 2024. Retrieved from https://www.adsoftheworld.com/campaigns/so-thick-you-ll-get-lost-in-it [visited 27.08.2024, 11:10].

This ad was recently published by Heinz to promote its signature ketchup, whose most remarkable feature is its thickness. This characteristic is the central focus of this ad; therefore, it is important to keep this item and the reference to the fact of getting lost in its thickness, to maintain the connection between the text and the visual – a labyrinth.

Original (EN)	DeepL (IT)	Language Weaver	ChatGPT-4o (IT)
		(IT)	
So thick you'll get	Così denso che vi ci	Così grossa che ti	Così denso che ti ci
lost in it.	perderete dentro.	perderai.	perderai.
Our extra thick	Il nostro ketchup	Il nostro ketchup	Il nostro ketchup
ketchup results in	extra denso <b>si</b>	extra <b>spesso</b>	extra denso, per
an extra slow pour.	traduce in un	comporta un	una colata extra
_	versamento extra	versamento molto	lenta.
	lento.	lento.	

*Table 1: MT outputs for the language pair English > Italian. Brand: Heinz.* 

DeepL and Language Weaver (from now on LW) presented some mistakes from the linguistic point of view. Starting with DeepL's output, verbal expressions such as *si* traduce in ("translates into") and versamento ("spill") can be classified under the style category of MQM, more specifically language register. This classification is due to the fact that the content is understandable, but it is written in a too-formal register. The

stronger difference between DeepL's and LW's performances is that DeepL seems to "understand" the context more than Language Weaver did. The general inconsistencies contained in LW's output led to a very poor result. *Grossa* (translatable as "fat") and *spesso* (translatable as "thick" but not suitable to this context) can be categorised as inconsistent use of terminology since they should have been translated with the same word, but they result in two different adjectives. Moreover, they are also wrong terms. Concerning *grossa*, the translation is wrong also from the point of view of linguistic conventions, more specifically grammar, because in Italian *ketchup* is a masculine noun; therefore, the adjective cannot be declined with feminine flexion, as in the case of *grossa*. LW also committed an error in the translation of "extra" with *molto*, which should be maintained as "extra" for a matter of parallelism and coherence; thus, this represents an inconsistent use of terminology. Finally, as in DeepL, LW made two errors in the translation of the verb "results". For instance, the verb *comportare* and the noun *versamento* in Italian are used in texts having a high degree of technicality and, therefore, are not suitable to the context.

On the other hand, ChatGPT has performed a good translation. What could be considered as an omission (the verb "results" in the ST is omitted) is an added value, because it contributes to keeping the same length as the original, and it renders the whole output smoother and quicker.

Original (EN)	DeepL (DE)	Language Weaver	ChatGPT-4o (DE)
		(DE)	
So thick you'll get	So dickflüssig, dass	So dick, dass du	So dickflüssig, dass
lost in it.	<b>Sie</b> sich darin	dich darin <b>verirren</b>	du dich darin
Our extra thick	verlieren werden.	wirst.	verlierst.
ketchup results in	Unser extra	Unser extra dickes	Unser extra dickes
an extra slow pour.	dickflüssiger	Ketchup <b>führt zu</b>	Ketchup sorgt für
_	Ketchup <b>lässt sich</b>	einem <b>besonders</b>	ein extra langsames
	besonders langsam	langsamen Gießen.	Gießen.
	ausgießen.	_	-

*Table 2: MT outputs for the language pair English > German. Brand: Heinz.* 

The translation in German with DeepL presents a language register error because it refers to the audience with the courtesy form *Sie*. The rest of the errors are common to both DeepL and LW. In the first part of the text, the choice of the verb tense is an error concerning style. The MTs have correctly translated the English future tense with a German future tense, which is correct from the point of view of grammar, but it leads to

a longer output, which is something that should be avoided in the advertising field to better fit in the copy as the source. ChatGPT opted for a present tense, which nowadays is also more common than future tenses in German<sup>106</sup>. From the point of view of language, the choice of both lexical verbs – *verlieren* and *verirren* – is correct; therefore, this is an error that can be categorised as unidiomaticity. Another mistake that is common in both MTs' outputs is the adverb *besonders*, which should have been left as "extra" for a matter of consistency and parallelism – as in Italian. Regarding DeepL, the error also concerns the use of the verb tense. For instance, *lässt sich* [...] *ausgießen* means literally "lets itself be poured out". Such translation leads to both a longer and less smooth output. To avoid both these unnecessary additions, the sentence could be simplified to *fließt extra langsam*. LW's verb choice is also not suitable to this context, being the verb *zu etwas führen* too formal and markable as a language register error. As for the Italian outputs, ChatGPT was the best at translating the given text. Again, the verb was transcreated into *für etwas sorgen*, but its meaning is too formal for the context. According to MQM, it represents a language register error.

I have found this solution good from the point of view of the respect of the length and I prefer it compared to the literal translation of the verb performed by LW, which is anyways acceptable.

<sup>&</sup>lt;sup>106</sup> Di Meola, Puato (2019: 95-106).

## 3.3.2. Oreo



Figure 11: Oreo ad in the USA, December 2023. Retrieved from https://www.adsoftheworld.com/campaigns/ho-ho-byoo [visited 27.08.2024, 11:20].

The advertising company decided to put a Christmas card written by a child as visual. To give a more childish effect, various mistakes are present in the text. Therefore, when transcreating such an ad, it is important to maintain the childish tone and use of language. Other difficulties present in the ad are the slang word "cuz" for "because" and the alliteration in the tagline (own-know), which should be somehow maintained also in the TT.

Original (EN)	DeepL (IT)	Language Weaver (IT)	ChatGPT-4o (IT)
Dear Santa, I ate the	Caro Babbo	Caro Babbo	Caro Babbo
cookies while i was	Natale, ho	Natale, ho	Natale, ho
waiting for you can	mangiato i biscotti	mangiato i biscotti	mangiato i biscotti
have the milk. I	mentre aspettavo	mentre stavo	mentre ti aspettavo,
hope I am still on	che tu prendessi il	aspettando che tu	ma puoi prendere il
your good list.	<b>latte</b> . Spero di	possa avere il latte.	latte. Spero di
Bring your Own	essere ancora sulla	Spero di essere	essere ancora nella

cuz	you	never	tua lista dei buoni.	ancora sulla <b>vostra</b>	lista dei buoni.
know.			Porta <b>il tuo</b> perché	buona lista.	Portati i tuoi, non si
			non si sa mai.	Portate i vostri cuz	sa mai.
				che non si sa mai.	

Table 3: MT outputs for the language pair English > Italian. Brand: Oreo.

As previously stated, some grammar mistakes in the ST are made on purpose to convey the idea of a child writing a letter. These errors, however, were not translated as childish mistakes, but as real errors which negatively affect the comprehension of the text. From the point of view of the purpose of the text, the output containing errors could be a good solution as it reflects the choices made for the ST. The idea of writing like little children who frequently make mistakes can be maintained, but the problem concerning these outputs is that they convey a different meaning compared to the meaning of the ST. For this reason, the following mistranslations are accuracy errors, since they regard the category of accuracy. While DeepL did not understand the message but succeeded in giving a smooth output - resulting in a mistranslation, LW's translation is both mistranslated as it uses a language register with gerund and complex verb tenses which are not typical of a child. From the point of view of respecting the idea of a child writing a letter containing mistakes, the purpose was respected more by LW than by DeepL, but LW's output is anyways unacceptable because of its unchildish formality. Moreover, LW also failed in the way it addresses the character of Santa, i.e. the use of the second person plural instead of singular, as it did also for "Heinz". This error concerns again the category of language register, but it is also an inconsistent style, because in the first part of the text Santa was addressed to as second person singular. LW performs also an unidiomatic use of language since buona lista is a literal translation of "good list", but it is not the Italian equivalent of Santa's "good list", which is lista dei buoni.

The last part of the text is a separate tagline containing an alliteration. The transcreation of this part resulted to be poor from both DeepL and LW. DeepL declined the article *il* and the personal pronoun *tuo* (your) as singular, but since it should refer to biscuits it represents a grammar error. Concerning LW, the translation of "you" of the second person plural in the declination of the verb *portate* and in the personal pronoun *vostri* represents an error concerning the language register, but the worst error is that the word "cuz" was maintained as the object of the sentence, representing an untranslated element. ChatGPT-40 again gave the best transcreation output. Regarding the potential omission of the

connector "cuz" in the claim, which is present in DeepL as *perché* and in LW as *che*, it has to be considered acceptable because its omission helps the claim to be faster compared to the original, and it represents neither a severe omission nor an obstacle to comprehension.

Original (EN)	DeepL (DE)	Language Weaver	ChatGPT-4o (DE)
		(DE)	
Dear Santa, I ate the	Lieber	Lieber	Lieber
cookies while i was	Weihnachtsmann,	Weihnachtsmann,	Weihnachtsmann,
waiting for you can	ich habe die Kekse	ich habe die Kekse	ich habe die Kekse
have the milk. I	gegessen, während	gegessen, während	gegessen, während
hope I am still on	ich <b>darauf gewartet</b>	ich <b>darauf wartete</b> ,	ich auf dich
your good list.	habe, dass du die	dass du die Milch	gewartet habe, aber
Bring your Own	Milch bekommst.	<b>haben kannst.</b> Ich	du kannst die Milch
cuz you never	Ich hoffe, ich stehe	hoffe, ich stehe	haben. Ich hoffe,
know.	noch auf deiner	immer noch auf	ich stehe noch auf
	guten Liste.	Ihrer guten Liste.	deiner guten Liste.
	Bring dein eigenes	Bringen Sie Ihren	Bring lieber eigene
	mit, denn man weiß	eigenen <b>CUZ</b> mit,	mit, man weiß ja
	ja nie.	den Sie nie kennen.	nie.

Table 4: MT outputs for the language pair English > German. Brand: Oreo.

The resulting transcreations in German present almost the same errors as the Italian both for DeepL and LW. The mistranslation of the first part resulted also in the German versions, and again DeepL resulted in only a mistranslation, whereas LW translation presents more mistakes, which can be classified once again as both a mistranslation and a language register error. The personal pronoun used concerning Santa is still wrong in this context, not only because *Ihrer* is the personal adjective for the courtesy form (a child would never write in this way to such character), but also because of the previous employment of the second person singular in the same text.

The two transcreations of the claim show the same errors of the Italian versions: DeepL translated "your own" with *dein eigenes* and represents a grammar error since it should have been a plural pronoun; LW treated again the word "cuz" as the object of the sentence and, judging from the choice of writing it in capital letters, it even treated the word as if it was an acronym. The language register error made by LW in Italian is still present in the German transcreation, but with a different way to address the audience. LW for German uses, in fact, the courtesy form *Sie*. Finally, a different mistake of the MT is the use of the relative pronoun *den* instead of the connector *denn*. For instance, the translation

of the resulting sentence is "that you never know" instead of "because you never know". This represents a spelling and a grammar error. ChatGPT made no errors, and in contrast to the Italian output, the personal pronoun is present in the sentence *auf deiner Liste* ("on your list").

Generally speaking, for both language pairs, ChatGPT-40 offered two good transcreations of the final tagline of the ad. The alliteration was maintained in both language pairs, creating a tagline which has its own rhythm, and it is suitable in the advertising context.

## 3.3.3. Burger King

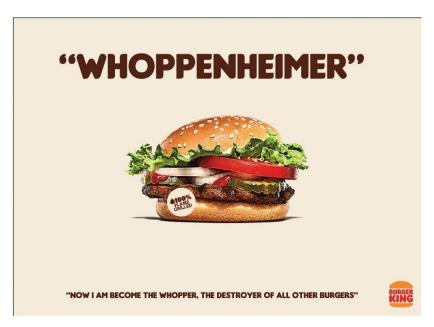


Figure 12: Burger King's ad published in Australia, the UK and India, July 2023. Retrieved from: https://www.adsoftheworld.com/campaigns/whoppenheimer [visited 27.08.2024, 11:25].

The brand Burger King published the present ad to promote their new burger, the "Whopper". The main reason why I decided to transcreate this ad is the reference to the film "Oppenheimer". The ad was published on the same day the film was released in cinemas. Therefore, I wanted to see if this reference could be transferred by the chosen MTs.

Original (EN)	DeepL (IT)	Language Weaver	ChatGPT-4o (IT)
		(IT)	
"Whoppenheimer"	"Whoppenheimer"	"Whoppenheimer"	"Whoppenheimer"
"Now I am become	"Ora sono	"Ora sono	"Ora sono
the whopper, the	diventato il	diventato il	diventato il
destroyer of all	Whopper, il	whopper, il	Whopper, il
other burgers"	distruttore di tutti	distruttore di tutti	distruttore di tutti
	gli altri	gli altri	gli altri burger."
	hamburger."	hamburger"	

Table 5: MT outputs for the language pair English > Italian. Brand: Burger King.

Generally speaking, in this ad the machine translation systems' outputs reported less errors. Only errors concerning grammar and punctuation are present in all the outputs. For instance, DeepL and ChatGPT made the same mistakes: the first one is the addition of a full stop at the end of the text. LW, instead, did not capitalise the name of the burger, which should have been written as "Whopper" as in the other outputs. Even if in the ST

the name is not capitalised, the word "whopper" has its own meaning in English – something that is really big – whereas in Italian it has no sense besides being the name of the burger. Therefore, it should be treated as a proper name and capitalised. Moreover, even if "whopper" is treated as a proper name, Italian ads use the article in front of it, and for this reason, it should not be marked as an error<sup>107</sup>. Finally, the use of burger or hamburger in the transcreations is interchangeable in Italian<sup>108</sup>, the use of one term or the other does not imply the use of a wrong term.

Original (EN)	DeepL (DE)	Language Weaver	ChatGPT-4o (DE)
		(DE)	
"Whoppenheimer"	"Whoppenheimer"	"Whoppenheimer"	"Whoppenheimer"
"Now I am become	"Jetzt bin ich der	"Jetzt bin ich der	"Jetzt bin ich der
the whopper, the	Whopper, der	<b>Knacker</b> , der	Whopper, der
destroyer of all	Zerstörer aller	Zerstörer aller	Zerstörer aller
other burgers"	anderen Burger"	anderen Burger."	anderen Burger."

*Table 6: MT outputs for the language pair English > German. Brand: Burger King.* 

For the language pair English>German, the punctuation error represented by the full stop at the end of the text is reported in LW and ChatGPT's outputs. The only error present in this output is LW's translation of the name of the burger "Whopper" into *Knacker*. If translating the word "whopper" from English, the common result in both Italian<sup>109</sup> and German<sup>110</sup> is either a term indicating someone or something which has a very big dimension, or a term indicating fake news. In German, instead, *Knacker* can indicate either an old or strange person in a pejorative or colloquial way or, in a culturally related field, a precise sort of wurst<sup>111</sup>. Being the word "whopper" an item that should not have been translated, it represents an accuracy error. As for the Italian outputs, the article in front of the proper name *Whopper* in the German output should be maintained as it is commonly found like this in websites and ads<sup>112</sup>.

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<sup>&</sup>lt;sup>107</sup> Burger King Restaurants Italia S.p.A. (2024).

<sup>&</sup>lt;sup>108</sup> Di Carlo (2018: 97).

<sup>&</sup>lt;sup>109</sup> Cambridge dictionary: https://dictionary.cambridge.org/dictionary/english/whopper.

<sup>&</sup>lt;sup>110</sup> Pons: <u>https://it.pons.com/traduzione-2/inglese-tedesco/whopper.</u>

<sup>&</sup>lt;sup>111</sup> Pons: <a href="https://it.pons.com/traduzione-2/tedesco-inglese/Knacker">https://it.pons.com/traduzione-2/tedesco-inglese/Knacker</a>.

<sup>&</sup>lt;sup>112</sup> Burger King Company LLC (2024).

## 3.3.4. Hummus Republic



Figure 13: Hummus Republic's ad published in the US, March 2023. Retrieved from: https://www.adsoftheworld.com/campaigns/fresh-habits [visited 27.08.2024, 11.50].

This ad is part of a format, meaning that there is a fil rouge connecting all the ads of the campaign (in this case, the tagline "Fresh habits"), which however have different visuals, with different characters. In this format, there are many characters besides the picky eater, such as the "Plant-based", the "Fast-foodie" and the "Gym-junkie". Translating such names could be a challenge, as well as maintaining a quick-to-read text.

Original (EN)	DeepL (IT)	Language Weaver	ChatGPT-4o (IT)
		(IT)	
Fresh habits for the	Abitudini fresche	Nuove abitudini per	Abitudini fresche
picky eater	per i <b>mangiatori</b>	i <b>mangiatori più</b>	per i palati esigenti
	schizzinosi	esigenti	
	Abitudini fresche		
	per i <b>mangioni</b>		
	schizzinosi		
	Abitudini fresche		
	per i <b>mangiatori</b>		
	difficili		

Table 7: MT outputs for the language pair English > Italian. Brand: Hummus Republic.

For this particular input, DeepL produced three different outputs. As it is possible to notice from the bold characters, none of the options given by this MT engine is suitable to the context. In fact, DeepL chose words that could be quite offensive. The term "picky eater" does not imply a so negative connotation as some Italian terms, such as *schizzinoso* ("picky"), difficile ("difficult"), and mangione ("big" or "good eater"), do, and which could result offensive. In such context, even if schizzinoso is the direct translation such words are not suitable to the purpose of reaching the conative function, and they could even trigger the opposite reaction to the one desired. These errors concern the category of terminology (wrong term), but also of audience appropriateness because they could be quite offensive. DeepL also proposed mangiatori as a direct translation of "eaters", but it is again a wrong term because the world is in the wrong context. In the field of marketing and advertising words used in a metaphoric or in a more "poetic" way is preferred. Concerning this, ChatGPT's output palati esigenti (literally "demanding palates") is more playful and does not imply a negative collocation, nor is too formal for this context. This same sub-language error is present in LW's output too. The last remarkable error in LW's output is the completeness error concerning più ("more") because this is an addition compared to the ST.

Finally, I wanted to signal that there is a very important difference between the ST and all the outputs. The "picky eater", which is singular, was translated with plural substantives in Italian. I did not mark this as an error because I do not consider it wrong to approach a more collectivistic view when transcreating from the US language and culture (the target market of the ST) to the Italian one. Culturally speaking, I think a good linguistic strategy for an Italian audience could be using the plural form to categorise the "picky eater" not as a single character, but as a group of people behaving the same way. In fact, based on Hofstede's theory of individualistic and collectivistic countries – see 2.6.2. – the US is a more individualistic country than Italy and, in general, European countries – even if all these countries have a higher individualism compared to the rest of the world<sup>113</sup>.

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<sup>&</sup>lt;sup>113</sup> Clearly Cultural.

Original (EN)	DeepL (DE)	Language Weaver	ChatGPT-4o (DE)
		(DE)	
Fresh habits for the	Frische	Frische	Frische
picky eater	Gewohnheiten für	Gewohnheiten für	Gewohnheiten für
	den wählerischen	den wählerischen	wählerische Esser
	Esser.	Esser	
	Frische		
	Gewohnheiten für		
	wählerische Esser		
	Neue		
	Gewohnheiten für		
	wählerische Esser		

Table 8: MT outputs for the language pair English > German. Brand: Hummus Republic.

"Picky eater" is translated as *wählerischer Esser*, sometimes in its singular form (DeepL, LW), sometimes in its plural form (DeepL, ChatGPT). If it was necessary to choose one between the two options, the plural form should be used because Germany is less individualistic than both the US and Italy following the cultural principle of collectivism. Its employment could represent a good strategy also from the linguistic point of view in order to make it faster and smoother. Despite all outputs being acceptable, the word *Esser* could be substituted by other substantives which could give a different shade to the text. For example, based on the EN>IT output created by ChatGPT-4o, a good alternative to the *Esser* could be *Gaumen*, which is the direct translation of EN "palate" and IT *palato*. Nevertheless, both *wählerischen Esser* and *picky eater* seem to be popular collocations in German corpora<sup>114</sup>.

<sup>&</sup>lt;sup>114</sup> Retrieved from the corpus "German Web 2020 (deTenTen20)" in Sketch Engine.

## 3.3.5. Barilla



Figure 14: Barilla's "Passtaword" campaign, first published in Italy in May 2023. Retrieved from: https://www.adsoftheworld.com/campaigns/passtaword [visited 27.08.2024, 11.55].

As for the previous brand, this campaign is also a format. The common feature is the purpose of raising awareness on the occasion of World Pasta Day, whereas the changing features on the format are the pasta type and sauce, as well as the "passtaword" on the top of the visual.

Original (EN)	DeepL (IT)	Language Weaver	ChatGPT-4o (IT)
		(IT)	
SpaghettiN.5allaca	SpaghettiN.5allaca	SpaghettiN.5allaca	SpaghettiN.5allaca
rbonara	rbonara	rbonara	rbonara può
can help you	può aiutarvi a	può <b>aiutarvi</b> a	aiutarti a prevenire
prevent identity	prevenire il furto	prevenire il furto <b>di</b>	il furto d'identità.
theft.	d'identità.	identità.	Trasforma il tuo
Turn your favourite	Trasformate il	Trasforma il tuo	piatto di pasta
pasta dish into a	vostro piatto di	piatto di pasta	preferito in una
safe password.	pasta preferito in	preferito in una	password sicura.
	una password	password sicura.	
	sicura.		

*Table 9: MT outputs for the language pair English > Italian. Brand: Barilla.* 

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LW's output presents an error concerning inconsistent style because the Italian translation of "you" is the second person plural *voi* instead of the singular *tu*. In fact, while DeepL is coherent in the way it refers to the audience throughout the whole text, LW switches the person in the second part of the text. Moreover, in the phrase *furto di identità* there is a grammar error concerning the fact that *di* is not apocopated, whereas in DeepL and ChatGPT the version *furto d'identità* is smoother to read and it is also more common than leaving the whole preposition.

Original (EN)	DeepL (DE)	Language Weaver	ChatGPT-4o (DE)
		(DE)	
SpaghettiN.5allaca	SpaghettiN.5allaca	SpaghettiN.5allaca	SpaghettiNr.5allaca
rbonara	rbonara	rbonara	rbonara kann dir
can help you	kann <b>Ihnen</b> helfen,	Kann Ihnen helfen,	helfen,
prevent identity	Identitätsdiebstahl	Identitätsdiebstahl	Identitätsdiebstahl
theft.	zu verhindern.	zu verhindern.	zu verhindern. Mach
Turn your	Verwandeln Sie	Verwandeln Sie	dein
favourite pasta	Ihr	Ihre Lieblings-	Lieblingspastageric
dish into a safe	Lieblingsnudelgeri	Pasta in ein	ht zu einem sicheren
password.	cht in ein sicheres	sicheres Passwort.	Passwort.
	Passwort.		

*Table 10: MT outputs for the language pair English > German. Brand: Barilla.* 

In this language pair, instead, language register errors are present both in DeepL and in LW's German output. The distance to the audience here is even bigger because the "you" is translated with the courtesy form. For this language pair LW did not create an output with inconsistent style, compared to the Italian translation of the same ad. Moreover, LW did not "understand" that the "Passtaword" was the subject of the sentence and capitalised the verb (grammar). This error may be due to the fact that translations in Trados are divided into segments, which are translated separately.

Although all German outputs are overall acceptable, the choice to remain loyal to the ST's terminology results in a more complicated structure. In fact, the verb *helfen* employed in all translations implies a following secondary clause, which is a more complicated structure and therefore it is not perfectly suitable to the advertising context. The solution is avoiding the use of the verb *helfen*, which would also render the text quicker to read and smoother. An example could be *SpaghettiN.5allacarbonara sichert deine Identität* ("This password protects your identity") or simply *SpaghettiN.5allacarbonara kann* 

*Identitätsdiebstahl verhindern*. Another term I would personally avoid is DeepL's *Lieblingsnudelgericht*. As already stated in 2.5., keeping elements that strongly remind the audience of a specific culture is a good strategy to remark on the authenticity of that specific product. For this reason, changing "pasta" into *Nudel* creates a different effect and distances the ad from the aforementioned "Italianness" which Barilla always stresses.

## 3.3.6. Kellogg's

# Comes with both Pros



Figure 15: Kellogg's ad published in the US, the UK and India in February 2023. Retrieved from: https://www.adsoftheworld.com/campaigns/pros-and [visited 27.08.2024, 11:57].

This very short text contains a difficult pun, even if the direct translations of "pros and cons" are not that far from English (IT *pro e contro* or *vantaggi e svantaggi*, and DE *pro und kontra* or *Vorteile und Nachteile*). However, transcreation is not just making something sound good or a rhyme; therefore, the translation of this ad should go beyond its literal translation.

Original (EN)	DeepL (IT)	Language Weaver	ChatGPT-4o
		(IT)	
Comes with both	Viene fornito sia	Viene fornito sia	Un mix di Pro e
Pros and Corns	con Pro che con	con Pro che Corns	Cornflakes!
	Corns		
	Viene fornito con		
	Pro and Corns		

Table 11: MT outputs for the language pair English > Italian. Brand: Kellogg's.

One of the errors recurring both in DeepL and LW is the use of a passive form. The employment of passive in this field is an error both because of the length and because of the slightly different meaning conveyed by such verb form, leading to an accuracy error. However, the form *viene fornito* is not only an error concerning the chosen passive but also from the lexical point of view. The Italian verb *fornire* means "supply, provide, procure", in its informal form the verb "get" can be used. For this reason, this represents a language register error from both points of view. Moreover, this time focusing on

DeepL's second output, the MT engine left the term "and" untranslated. From the point of view of transcreating the content, ChatGPT-40 gave once again the best output. The most interesting thing DeepL did is the omission of the verb – which also in this case cannot be referred to as an error – and the use of the collocation *un mix di* ("a mix of"), which is very popular and informal, and for these reasons suitable to the context of advertising.

ChatGPT's solution is more engaging, in particular for the choice of punctuation; however, I would have changed the pun even more to adapt it to an Italian audience. This change is due to the fact that the word "cons" only needs the addition of a letter to become "corns", whereas the Italian word *contro* needs much more changes which are not clear. Therefore, I would render this change more obvious, for example with something like *con pro e contrornflakes*.

Original (EN)	DeepL (DE)	Language Weaver	ChatGPT-4o (DE)
		(DE)	
Comes with both	Kommt sowohl mit	Mit Pro und Corns	Mit allen Vor- und
Pros and Corns	Pros als auch mit		Cornflakes!
	Corns		
	Kommt sowohl mit		
	Pros als auch		
	Corns		

Table 12: MT outputs for the language pair English > German. Brand: Kellogg's.

DeepL's output results in a longer sentence compared to the ST, but it cannot be regarded as an error because the outputs are both acceptable and there is enough room for a longer sentence, as it is visible from the wide white background in the image. In contrast, LW's version is too short and not captivating at all. The omission of the verb in this transcreation is not an error, but its absence should be somehow enriched with something else, as ChatGPT did.

Regarding transcreation itself, ChatGPT-40 has performed a more creative output, especially concerning the addition of the exclamation mark, but maybe the pun remains too literal in relation to the ST. The mixture of the collocations *pro und kontra* and *Vorund Nachteile* is still not that obvious to the audience. I would have played more with words, for example, *mit allen Pro und Kornflakes!* to recall the same initial letter of *kontra*, or as I did in Italian *Pro und Kontrarnflakes*.

## 3.3.7. Misfits Market



Figure 16: Misfits Market campaign, published in the US in May 2022. Retrieved from: https://www.adsoftheworld.com/campaigns/more-than-meets-the-eye [visited 27.08.2024, 12.00].

Misfit Market operates in the US only. This ad is again part of a campaign called "More than meets the eye" and it is composed of different ads united by a format, but this time the body copy remains every time the same, while the fruit in the visual and the central tagline change. The tagline, structured as if the fruit was talking to someone, gives the idea of the object of the visual being a real person. This ad was chosen to propose to the MTs longer and less playful copies and to see if this causes them to understand the context more.

Original (EN)	DeepL (IT)	Language Weaver	ChatGPT-4o (IT)
		(IT)	
Don't like the way I	Non ti piace il mio	Non ti piace il mio	Non ti piace come
look? Bite me.	aspetto? Mordimi.	aspetto? Mordimi.	sembro?
Beneath their ugly	Sotto il loro brutto	Al di sotto del loro	Assaggiami. Sotto il
appearance, our	aspetto, i nostri	aspetto brutto, i	loro aspetto
misfits are always	disadattati sono	nostri	imperfetto, i nostri
fresh and full of	sempre freschi e	disadattamenti	" <b>misfits</b> " sono
organic GMO-free	pieni di delizie	sono sempre freschi	sempre freschi e
deliciousness. So	biologiche senza	e pieni di	ricchi di bontà
even though they	OGM. Quindi,	prelibatezze	biologica <b>e</b> senza
might not look	anche se non	organiche senza	OGM. Quindi,
picture-perfect, they	sembrano perfetti,	OGM. Quindi,	anche se non sono

always taste just as	hanno sempre un	anche se	perfetti
good.	sapore altrettanto	potrebbero non	esteticamente, il
https://www.misfits	buono.	<b>sembrare</b> perfetti,	sapore è sempre
market.com/	https://www.misfits	hanno sempre un	ottimo.
	market.com/	sapore altrettanto	https://www.misfits
		buono.	market.com/
		https://www.misfits	
		market.com/	

*Table 13: MT outputs for the language pair English > Italian. Brand: Misfits Market.* 

DeepL's translation of "misfits" with disadattati is not suitable to the context and I marked it as an error because of the employment of a wrong term. Personally, I would call them by another name without translating literally from the ST, which causes a change of meaning in the TT. A good solution could be the employment of an Italian pun, which is brutti ma buoni (lit. "bad looking but good"). The same error can be found in LW's output, but this time disadattamenti is a substantive referring to situations that bring to awkwardness and strangeness; therefore, this represents also a mistranslation. Another error that is common to both MTs regards the sentence "full of organic GMO-free deliciousness". Both outputs result in unidiomatic expressions and transfer errors. In fact, the MTs translated "deliciousness" as delizie and prelibatezze, which are plural substantives indicating something that is delicious, but not the fact of being delicious as in the ST – which can be rendered in Italian with ChatGPT's proposal bontà. Therefore, both errors are again mistranslation errors and present unidiomatic style. In this same part of the body copy ChatGPT made an addition error by adding a coordinate conjunction more in e senza OGM, affecting also the readability of such text. Another error made by the same system is the use of "misfits" also in Italian. Although it is written in between commas, the brand is not known outside the United States, and for this reason, it could be difficult for an Italian audience to understand such a word. This represents an undertranslation and an error concerning culture-specific references.

Finally, the last part of the body copy was translated differently by DeepL and ChatGPT, but both versions are acceptable. On the other hand, LW opted again for a literal translation of "they might not look picture-perfect". The verb tense adopted by DeepL and ChatGPT is the simple present, whereas LW used a conditional form as in the ST. The present tense could be considered more suitable for two reasons: the first is the length, which increases when using a conditional form; the second reason is the objectivity of the

misfit fruits not being good-looking, which is a statement and a matter of fact and does not require a hypothetical verb tense. For this reason, this is an error concerning grammar. For the tagline of the ad, I prefer the literal translation of DeepL and LW rather than ChatGPT's transcreation, especially for the output of the word "bite". In my opinion, this word was chosen instead of others – such as "try", "taste", etc. – for some reasons that should be kept also in other languages. Therefore, I prefer *mordimi* ("bite me") instead of *assaggiami* ("taste me"). Also the use of the word *aspetto* ("appearance") for the purpose of the ad is more suitable and recalls that before judging something, we should take into account all of its shades and characteristics, besides creating a personification of the fruit in the visual. I had the impression that ChatGPT tried to use more neutral words and to render the text less offensive towards the product, by for example translating "ugly" with *imperfetto* ("imperfect") instead of *brutto* (lit. "ugly"). From my point of view, this strategy is good in order not to underestimate the product, but at the same time, this was not the case in which such an approach was necessary since such words were used to highlight the idea of looking beyond appearance.

Original (EN)	DeepL (DE)	Language Weaver (DE)	ChatGPT-4o (DE)
Don't like the way I look? Bite me. Beneath their ugly appearance, our misfits are always fresh and full of organic GMO-free deliciousness. So even though they might not look picture-perfect, they always taste just as good.  https://www.misfitsmarket.com/	wie ich aussehe?	Beiß mich. Neben ihrem hässlichen Aussehen sind	wie ich aussehe? Probier mal. Hinter ihrem unperfekten Aussehen stecken unsere "Misfits" voller Frische und biologischer, GVO- freier Köstlichkeit. Auch wenn sie optisch nicht perfekt sind, schmecken sie

*Table 14: MT outputs for the language pair English > German. Brand: Misfits Market.* 

The first thing which is very interesting to notice is the changes in the translation approach according to the different language pairs. For example, while for the language pair EN-IT the word "organic" was translated as biologico by DeepL and as organico by LW, here the translation outputs are organisch for DeepL and biologisch for LW. The second interesting thing is that LW understood the ST in the tagline in Italian, but here it made an accuracy error which I classified as mistranslation. In fact, the question is not towards the audience but towards the speaker (the strawberry in the visual) itself, which does not make sense. This same first part sounds unidiomatic in all outputs; despite its grammatical correctness, the syntactic structure involving the V1 (verb-initial) word order in questions does not pertain to the spoken language nowadays. To render it more idiomatic, a solution could be avoiding the V1 structure and saying Dir gefällt nicht, wie ich aussehe? or Du magst mein Aussehen nicht?, as if it was an affirmative sentence. Focusing on DeepL, the MT engine translated "bite me" as leck mich (lit. "lick me") in the tagline, which is a mistranslation because pragmatically it is not an action that would be performed with a strawberry. Moreover, this expression is a double entendre meaning a vulgarity. For this reason, it is sometimes employed in German ads; for instance, the company ChupaChups played with this expression in its past ads<sup>115</sup>. The direct translation of such an expression is "fuck you" or "lick my ass", which is inappropriate in this ad. Therefore, this represents an error concerning audience appropriateness because it results in a too-offensive expression.

As translations of "appearance" there were two different outputs: *Aussehen*, which was proposed by two engines, and  $\ddot{A}u\beta eren$ , which is only present in DeepL's output. Both of them can be considered acceptable. On the other hand, the employment of the word *Aussehen* as in LW and ChatGPT creates a connection with the tagline and maintains the wordplay of the personification of the fruit. Moving forward to an error common to both DeepL and LW, the word *Köstlichkeiten* is plural and as for the Italian outputs *delizie* and *prelibatezze*. This word does not truly reflect the concept in the ST, since its direct translation is "being full of delicacies" instead of "being delicious"; therefore, these represent both mistranslations and errors concerning unidiomatic style. Another error common to both DeepL and LW is the use of *Außenseiter*, the translation of "misfits",

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<sup>&</sup>lt;sup>115</sup> Retrieved from Slogans.de.

which can be classified as a wrong term. Furthermore, DeepL omitted the word *immer* ("always") in contrast to the other outputs. This omission is relevant because the word "always" contributes to highlighting even more the good quality of the products in terms of taste in contrast to their appearance. The last error is a wrong term proposed by LW, which translated "beneath" as *neben* ("close to", "besides"). This error slightly changes the meaning of the sentence, because it loses the idea of the fruit's perfection under their peel, which is an integral part of the wordplay in the body copy.

Finally, ChatGPT-40 performed a sort of neutralisation of the terms also for the language pair English>German. The system had the same approach it has for the Italian translation: "bite me" was translated into *probier mal* ("try"), and "ugly" became *unperfekt* ("imperfect"). Moreover, the same error of undertranslation and culture-specific reference is present also here because the engine did not translate the word "misfit". As I previously stated for the Italian output, a good solution could be finding a pun in German to substitute the English term.

## 3.3.8. KFC

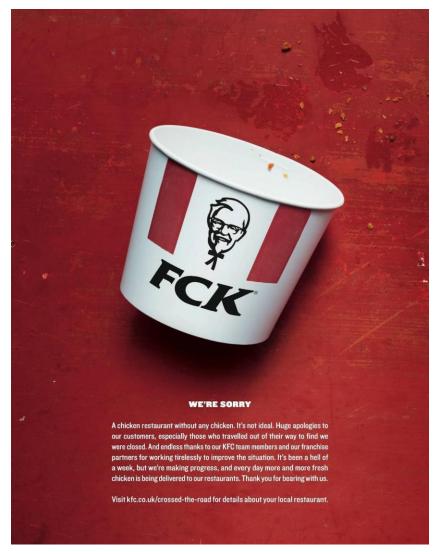


Figure 17: KFC's ad in the UK to apologise for the depletion of chicken in their stores, February 2018. Retrieved from: https://www.adsoftheworld.com/campaigns/fck [visited 27.08.2024, 12:05].

As written in the caption above, the present ad was created to apologise for the depletion of chicken in some stores in the UK; therefore, it was not meant to be internationally adapted or localised. I chose it for the same reason as the previous ad, which is a longer and less playful text. However, it still can be challenging for the MT engines because of the "FCK" pun which hides a swear word. Furthermore, the friendly and colloquial tone to be maintained throughout the whole text could represent another obstacle for the chosen engines.

Original (EN)	DeepL (IT)	Language Weaver	ChatGPT-4o (IT)
FOL	ECK	(IT)	TOV OI
FCK	FCK	FCK	FCK CI
WE'RE SORRY.	CI SCUSIAMO.	CI DISPIACE.	DISPIACE. Un
A chicken	Un ristorante di	Un ristorante di	ristorante di pollo
restaurant without	pollo senza pollo.	pollo senza pollo.	senza pollo. Non è
any chicken. It's	Non è l'ideale. Ci	Non è ideale. Ci	l'ideale. Le nostre
not ideal. Huge	scusiamo con i	scusiamo con i	più sincere scuse ai
apologies to our	nostri clienti, in	nostri clienti,	clienti, soprattutto
customers,	particolare con	specialmente con	a quelli che hanno
especially those	quelli che hanno	quelli che <b>hanno</b>	fatto tanta strada
who travelled out of	fatto un viaggio	fatto di tutto per	per poi trovarci
their way to find we	fuori porta per	scoprire che	chiusi. Un grazie
were closed. And	scoprire che	eravamo chiusi. E	infinito ai membri
endless thanks to	eravamo chiusi. E	<b>senza fine grazie</b> ai	del nostro team
our KFC team	grazie infinite ai	membri del team	KFC e ai nostri
members and our	membri del team	KFC e ai nostri	partner in
franchise partners	KFC e ai nostri	partner <b>di</b>	franchising per
for working	partner in	franchising per	aver lavorato
tirelessly to	franchising che	aver lavorato	instancabilmente
improve the	hanno lavorato	instancabilmente	per migliorare la
situation. It's been a	instancabilmente	per migliorare la	situazione. È stata
hell of a week, but	per migliorare la	situazione. È stata	una settimana
we're making	situazione. È stata	una settimana	infernale, ma
progress, and every	una settimana	infernale, ma	stiamo facendo
day more and more	infernale, ma	stiamo facendo	progressi, e ogni
fresh chicken is	stiamo facendo	progressi, e ogni	giorno sempre più
being delivered to	progressi e ogni	giorno sempre più	pollo fresco viene
our restaurants.	1 0	pollo fresco viene	
	· ·	1	consegnato nei nostri ristoranti.
Thank you for	consegnato sempre	consegnato ai	
bearing with us.	più pollo fresco ai	nostri ristoranti.	Grazie per la vostra
Visit	nostri ristoranti.	Grazie per aver	pazienza. Visita
kfc.co.uk/crossed-	Grazie per averci	accettato di	kfc.it/crossed-the-
the-road for details	sopportato.	collaborare con	road per i dettagli
about your local	Visitate	noi.	sui ristoranti più
restaurants.	kfc.co.uk/crossed-	Visita il sito	vicini.
	the-road per	kfc.co.uk/crossed-	
	conoscere i dettagli	the-road per	
	sui vostri ristoranti	ulteriori	
	locali.	informazioni sui	
	 AT outputs for the language	ristoranti locali.	1 WEG

Table 15: MT outputs for the language pair English > Italian. Brand: KFC.

As stated in the introduction, the ST's apologetic tone and less playful language render the text clear and without hidden meanings. Maybe for this reason the NMT systems did not have particular difficulties in carrying out an overall good result. DeepL made some errors in the output towards the very end of the text: the first is the translation of "bearing

with us" with *averci sopportato*. This is a wrong term because the Italian verb *sopportare* means to tolerate somebody or something besides their bad behaviour, and this verb is too strong for this specific context.

Moving on to LW output, there are a pair more errors compared to DeepL. LW's mistaken translation of "bearing with" resulted in the output aver accettato di collaborare con noi ("accepting to collaborate with us"), which represents a mistranslation. Further errors are collocated towards the beginning and the middle part of the text. The first is an accuracy error in the translation of the sentence "who travelled out of their way to find we were closed". The Italian output by LW is hanno fatto di tutto per scoprire che eravamo chiusi ("they did everything they could to find out we were closed"). This represents another mistranslation because the meaning of the Italian translation is that customers did their best intending to find out the restaurant was closed, instead of indicating that despite their effort to reach the restaurant, it was closed. The expression "endless thanks" was translated with senza fine grazie, which is unidiomatic in Italian and whose direct equivalent is grazie infinite – unidiomatic style. Finally, LW made a grammar error by using the preposition di in partner di franchising (it should be in). Concerning ChatGPT-40, the only error committed by the MT engine is the change of the website's link. In fact, instead of the link "kfc.co.uk/crossed-the-road" given in the source, the machine changed the domain to "kfc.it/crossed-the-road", which does not exist online. This error concerns link/cross-reference in the design and markup category. Since I requested ChatGPT to transcreate with Italy as a target market 116 I am aware of the fact that the domain was changed because of the prompt, but this decision made by the machine translation engine is inconsistent compared to the previous ad of "Misfits Market", in which ChatGPT left the domain .uk in every output, although the prompt is always the same. On the other hand, DeepL and LW did not change anything in the hyperlink, which remains the same as the one in the English ST. Therefore, the errors concerning these latter two engines are both link/cross reference errors and untranslated elements. They should be distinguished

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<sup>&</sup>lt;sup>116</sup> Prompt: Please transcreate the following [text] into Italian. This advertisement was published by "KFC" in February 2018 because of an unlucky episode concerning the depletion of chicken in the stores. The target market of the transcreated text is Italy. The original target market was the UK. The visual of the campaign is an empty chicken bucket with the brand's logo on a red background. The first word of the [text] is written in the visual and it is a pun with the brand's name resulting in a swear word, the rest of the [text] is its body-copy. The length of the transcreated text should be similar to the original one to fit in the copy.

from ChatGPT's error, because it correctly attempts to localise the website by changing its domain extension, even if the resulting output contains a wrong hyperlink which cannot be found online.

Original (EN)	DeepL (DE)	Language Weaver	ChatGPT-4o (DE)
FOL	ECK	(DE)	ECK WID
FCK	FCK	FCK	FCK WIR
WE'RE SORRY.	WE'RE SORRY.	ES TUT UNS	ENTSCHULDIGEN
A chicken	Ein	LEID.	UNS. Ein
restaurant without	Hähnchenrestaurant		Hähnchen-
any chicken. It's	ohne Hähnchen.	Hühnerrestaurant	Restaurant ohne
not ideal. Huge	Das ist nicht ideal.	ohne Hühnchen. Es	Hähnchen. Nicht
apologies to our	Wir möchten uns bei	ist nicht ideal. Wir	ideal. Unseren
customers,	unseren Kunden	entschuldigen uns	aufrichtigen
especially those	O .	sehr bei unseren	<b>Applaus</b> an unsere
who travelled out	besonders bei	Kunden, vor allem	Kunden, vor allem
of their way to find	denen, die einen	bei denen, die sich	an jene, die weite
we were closed.	weiten Weg auf sich	auf den Weg	Wege auf sich
And endless thanks	genommen haben,	machten, um	genommen haben,
to our KFC team	um festzustellen,	festzustellen, dass	nur um
members and our	dass wir	wir geschlossen	festzustellen, dass
franchise partners	geschlossen sind.	waren. Und	wir geschlossen
for working	Und ein unendliches	endloser Dank an	hatten. Ein riesiges
tirelessly to	Dankeschön an	unsere KFC-	Dankeschön an
improve the	unsere KFC	Teammitglieder	unser KFC-Team
situation. It's been	Teammitglieder und	und unsere	und unsere
a hell of a week,	unsere	Franchise-	Franchise-Partner,
but we're making	Franchisepartner,	Partner, die	die unermüdlich
progress, and every	die unermüdlich	unermüdlich daran	daran gearbeitet
day more and more	daran arbeiten, die	gearbeitet haben,	haben, die Situation
fresh chicken is	Situation zu	die Situation zu	zu verbessern. Es
being delivered to	verbessern. Es war	verbessern. Es war	war eine höllische
our restaurants.	eine verdammt harte	eine verdammt	Woche, aber wir
Thank you for	Woche, aber wir	gute Woche, aber	•
bearing with us.	machen Fortschritte	wir machen	Fortschritte, und
Visit	und jeden Tag wird		jeden Tag wird
kfc.co.uk/crossed-	mehr und mehr	jeden Tag wird	mehr frisches
the-road for details	frisches	immer mehr	Hähnchen in unsere
about your local	Hähnchenfleisch an	frisches Huhn in	Restaurants
•	unsere Restaurants	*	
restaurants.		unsere Restaurants	geliefert. Danke, dass <b>Sie</b> Geduld mit
	geliefert. Vielen	geliefert. Vielen	
	Dank, dass <b>Sie</b> so	Dank, dass Sie mit uns einverstanden	uns haben. Besuchen Sie
	viel Geduld mit uns haben.	sind.	
			kfc.de/crossed-the-
		Weitere	road für
	kfc.co.uk/crossed-	Informationen zu	Informationen zu

the-road	für	Ihren	lokalen	Ihrem	lokalen
Information	ien über	Restaura	nts <b>finden</b>	Restaurant.	
Ihre	örtlichen	Sie	unter		
Restaurants	5.	kfc.co.uk	k/crossed-		
		the-road.	•		

Table 16: MT outputs for the language pair English > German. Brand: KFC.

The major error affecting these outputs is language register. In fact, towards the end of all three outputs, the audience is addressed by using the courtesy form Sie. It is interesting to note that also ChatGPT committed this error, which was maybe caused by the context of apologies. This could have led the MT engine to associate such context with a wider distance between the brand and its audience, and a more respectful tone. ChatGPT made more errors in the translation of this particular ad compared to all the other ads translated in this case study. Towards the beginning of the ad, the machine translation engine made a huge mistranslation by translating "apologies" with Applaus ("applause", "handclaps"). This is a very serious mistake because the output's meaning is the opposite of the ST's meaning: dedicating a round of applause to customers who did something for nothing is almost ridiculing someone instead of apologising to them. That reconnects to the idea of MTs creating offensive or even dangerous situations by translating something wrong 117, as already claimed in the introduction of this chapter; therefore, it could result offensive and represent an error under the category of audience appropriateness. The following error concerns the sub-category of link/cross-reference. The engine changed the KFC hyperlink's domain extension from ".uk" to ".de", as it did in the Italian output. Even if the localisation attempt was a right "decision" adopted by ChatGPT, the resulting hyperlink cannot be found online; for this reason, it represents an error.

As I previously stated for the translations, the longer length and less playful language may have contributed to the overall good output of DeepL and LW. A longer text gives a wider, more precise context, and consequently leads to a higher probability for the engine to successfully understand the text and produce a more accurate output. Besides the already discussed language register errors, DeepL translated "we were closed" by mistakenly switching from the past to the present form (*wir sind geschlossen*) and causing a mistranslation because it gives different information compared to what is written in the ST. LW's errors concern the same field. The machine translation engine translated "a hell

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<sup>&</sup>lt;sup>117</sup> Al Sharou, Specia (2022).

of a week" with eine verdammt gute Woche (a hell in a positive sense), which is the opposite of what the brand is communicating. Another difficulty presented by LW is the sentence "Thank you for bearing with us", translated as Vielen Dank, dass Sie mit uns einverstanden sind. In German, mit jemandem einverstanden sein means to agree with somebody, which is not the meaning of the sentence in the ST. Apart from the language register error because of the employment of the courtesy form, it represents another mistranslation error. To conclude, no attempt was made by these two MT engines to localise the hyperlink at the end of the ad. As for the language pair English>Italian, the unmodified hyperlink represents both a link/cross reference error and an untranslated element in the TT.

Concerning the pun in the ad's visual, I have tried to add it in the ST to examine if the systems could find a solution to transcreate it somehow. In the specific case of ChatGPT, I had first written a prompt without specifying the nature of the pun; I then wrote a second prompt to see whether something could change in the transcreation 118. What changed from the first to the second output is that the pun "FCK" was not isolated in the first line - as if it was an acronym - but rather written as a unique sentence, resulting in FCK CI DISPIACE in Italian and FCK WIR ENTSCHULDIGEN UNS in German. Undoubtedly this was difficult to transcreate or change, also because this ad was meant to be published in the UK only. The change made by ChatGPT signifies that the system understood the instructions added in the prompt and tried to make the pun understandable also for a foreign audience. "FCK" can be maintained in the Italian and German outputs and cannot be considered an error because it is normal in some types of advertising, especially in the food industry, to maintain English words<sup>119</sup> – in this case, a one-word pun in English. Moreover, the employment of this pun in particular is a good way to recall the brand's name, which would be otherwise lost if adapted into another language. It can be also easily understood cross-linguistically because of the following sentence "We are sorry", which explains its use in the ad.

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<sup>&</sup>lt;sup>118</sup> Prompt for both IT and DE: The visual of the campaign is an empty chicken bucket with the brand's logo on a red background. The first word of the [text] is written in the visual and it is a pun with the brand's name resulting in a swear word, the rest of the [text] is its body-copy.

<sup>119</sup> Janich (2005: 115).

## **3.3.9. Doritos**

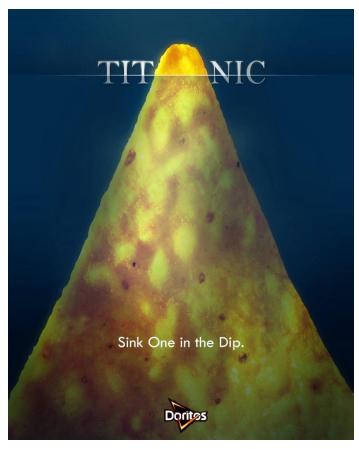


Figure 18: one of the formats of the Dorito campaign in the US, April 2018. Retrieved from: https://www.adsoftheworld.com/campaigns/movie-doritos-superman [visited 21.08.2024, 12.10].

This ad is part of a campaign called "Movie Dorito", whose leitmotif is the reference to films. Besides the present ad referring to "Titanic", other visuals of "Superman" and "Jaws" were created for the campaign. I chose this particular ad for the reference to the film and its playful pun, as I did for "Whoppenheimer" – see 3.3.3.

Original (EN)	DeepL (IT)	Language Weaver	ChatGPT-4o (IT)
		(IT)	
TITANIC	TITANICO	TITANIC	TITANIC
Sink One in the	<b>Affondare</b> uno	<b>Affondarne</b> uno nel	Affondane uno
Dip.	nell' <b>acqua</b> .	bagno.	nella salsa.

Table 17: MT outputs for the language pair English > Italian. Brand: Doritos.

This very short text led to several problems in the machine translation engines' outputs. From the visual, it is clear that the reference to the film "Titanic" should be left unvaried. LW and ChatGPT-40 succeeded in this task, whereas DeepL translated it with the Italian adjective *titanico*, which is the direct translation of the English adjective "titanic". This

is an accuracy error under the MQM sub-category "do not translate", because of the absence of correspondence between ST and TT. Concerning the rest of the text, only ChatGPT succeeded in keeping the joke cross-linguistically. The first noticeable error is common to both DeepL and LW, and it is related to the employed verb tense. The translation should have been an imperative form, whereas DeepL and LW proposed affondare, which is the infinitive form. These errors do not concern the category of grammar, but stylistically speaking, such a verb tense is not a preferential choice in advertising. For instance, the most used are imperative – as ChatGPT-40 did – and present form 120. Another word in the ST causing both systems to fail is "dip", which was translated by DeepL and LW respectively as acqua ("water") and bagno ("bathroom"). On one hand, the output of DeepL might be caused by the interference of a more possible collocation learnt by the machine translation engine and the tendency of these engines to "correct" the ST by providing a different translation in the TT. On the other hand, LW's translation is completely nonsense. Both errors are categorised as mistranslations.

Original (EN)	DeepL (DE)	Language Weaver	ChatGPT-4o (DE)
		(DE)	
TITANIC	TITANIC	TITANIC	TITANIC
Sink One in the	Eins im	Sink einen ins <b>Bad</b> .	Tauch einen ins
Dip.	Tauchbecken		Dip.
	versenken.		

Table 18: MT outputs for the language pair English > German. Brand: Doritos.

For the German versions, the film's name was correctly kept untranslated in all three outputs.

DeepL repeated the same errors which are also present in its Italian output. The use of the infinitive *versenken* ("to sink something") is again a language register error because an infinitive verb was used instead of an imperative, whereas the translation of "dip" with *Tauchbecken* ("small pool") is a mistranslation. This latter error concerning meaning transfer is also present in LW's output. In this second case, "dip" was translated as *Bad* ("to take a bath") by LW, which is also the choice of the same system for the Italian output.

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<sup>&</sup>lt;sup>120</sup> Salerno (2014: 65).

In both language pairs, ChatGPT-40 provided two interesting – and I would personally say correct – transcreations. One thing worth noticing is that the machine translation engine chose two different verbs for "sink". For instance, the Italian verb *affondare* means literally "to sink", but German *tauchen* is the equivalent of the English verb "to dive". Even if ChatGPT-40 has chosen two different verbs, they can be considered two alternatives and, therefore, both acceptable.

## **3.3.10. Pink Lady**

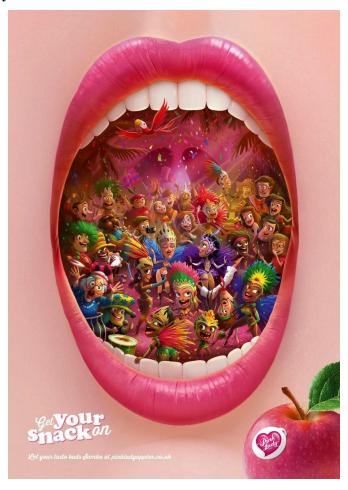


Figure 19: Pink Lady ad published in the UK, February 2017. Retrieved from: https://www.adsoftheworld.com/campaigns/get-your-snack-on [visited 27.08.2024, 12.13].

The present ad is part of a campaign called "Get your snack on", whose core element is the presence of different types of dances in the visual. Therefore, keeping the word "samba" in the text is essential to maintain the connection with the rest of the ad. I chose this ad for the playful language in the tagline, which can be challenging for MT systems.

Original (EN)	DeepL (IT)	Language Weaver	ChatGPT-4o
		(IT)	(IT)
Get your snack on.	Fate uno spuntino.	<b>Preparatevi</b> uno	Fai uno
Let your taste buds	Lasciate che le	spuntino.	spuntino.
Samba at	vostre papille	Lascia che le tue	Fai <b>ballare</b> le tue
pinkladyapples.co.uk	gustative <b>sballino</b> su	papille gustative	papille su
	pinkladyapples.co.u	siano a	pinkladyapples.i
	k	pinkladyapples.co.u	t
		k	

Table 19: MT outputs for the language pair English > Italian. Brand: Pink Lady.

In its translation, LW is inconsistent throughout the whole text. It is possible to note that the pronoun used in the first part of the ad is the second person plural voi, whereas in the second part the engine switches to the second person singular tu; this error is classifiable as inconsistent style. Furthermore, all systems failed in keeping the reference to the word "samba" in the TT, resulting in omissions. DeepL's proposal is *sballare*, which represents a mistranslation because of its meaning. In Italian, this verb is the equivalent of "being high" in English, used especially for drug consumption. ChatGPT kept the idea of dancing with ballare ("to dance"), but it resulted in an accuracy error because of the omission of "samba". The worst output is LW's translation; for instance, the machine translation engine suggested the sentence [lascia che le tue papille gustative] siano a (literally "let your taste buds be at"), which does not make sense. Therefore, their categorisation concerns multiple types of errors, including mistranslation and omission. The last error concerns the hyperlink at the very end of the ad. In ChatGPT's output, the website was localised and resulted in *pinkladyapples.it*, which, however, does not exist. This leads to a link/cross-reference error. DeepL and LW, instead, did not attempt to localise the hyperlink, which remains the same as in the ST. For this reason, this represents both a link/cross reference error and an untranslated element.

Original (EN)	DeepL (DE)	Language Weaver	ChatGPT-4o (DE)
		(DE)	
Get your snack on.	Holen Sie sich	Holen Sie sich	Mach dir einen
Let your taste buds	Ihren Snack.	Ihren Snack.	Snack.
Samba at	Lassen Sie Ihre	Lass deine	Lass deine
pinkladyapples.co.u	Geschmacksknospe	Geschmacksnerve	Geschmacksknosp
k	n Samba tanzen auf	<b>n</b> Samba <b>bei</b>	en Samba tanzen
	pinkladyapples.co.	pinkladyapples.co.	auf
	uk	uk	pinkladyapples.de

*Table 20: MT outputs for the language pair English > German. Brand: Pink Lady.* 

The errors in this section are similar to the ones found in the Italian outputs. The way DeepL and LW address the audience is an error concerning language register, which remains consistent throughout the whole text in the case of DeepL and not in the case of LW, the latter switching to the use of the second person singular in the second half of the text. LW's output presents the wrong term *Geschmacksnerven*. In fact, the equivalent of "taste buds" is *Geschmacksknospen*, used by both DeepL and ChatGPT. The same MT engine made a grammar error towards the end of the output by using the preposition *bei* 

instead of *auf*. Again, the link/cross-reference error in the hyperlink is repeated in German. ChatGPT localised the website wrongly by changing its domain extension and generating a non-existing hyperlink, whereas DeepL and LW copied the hyperlink contained in the English ST in the TT without changing its domain extension. Therefore, these two latter engines provoked an accuracy error in their outputs, more specifically the outputs contain untranslated elements.

Compared to the Italian translation, the most positive result in German is the presence of the word "samba", which was one of the keywords of the ad. Although LW correctly kept the word, the translation remains too literal, as if the machine translation engine did not "understand" the context. However, in my opinion, the outputs in terms of transcreation are very poor in both languages. For instance, the expression "Get your snack on" is much stronger and more playful than simply saying *farsi/prepararsi uno spuntino* ("to make/prepare yourself a snack"). The same happens in German because verbs such as *sich holen* and *machen* are normally used and they are not as catchy for an ad as the English version.

## 3.3.11. Tabasco



Figure 20: last visual ad of the campaign promoting Tabasco's "Scorpion Challenge", published in the US in November 2023. Retrieved from: https://www.adsoftheworld.com/campaigns/feel-the-heat-aee511d8-2388-424b-9407-f64c2ec58bdf [visited 27.08.2024, 12.15].

The purpose behind Tabasco's campaign renders this ad different from the previously seen ones. To promote the new product called "Scorpion Sauce", Tabasco launched this challenge in 2023 for their customers. The challenge consists in preparing cocktails' recipes given by the brand, which become spicier because of the increasing quantity of the sauce required by the recipe. This whole challenge is well-represented by the visual. Therefore, the elements to be kept in the text when translating are the original name of the sauce of the challenge, and the reference to spiciness.

Original (EN)	DeepL (IT)	Language Weaver	ChatGPT-4o (IT)
		(IT)	
How far can you	Fino a che punto	Fino a che punto <b>si</b>	Fin dove riesci ad
go?	potete spingervi?	può andare?	arrivare?
Enter the Scorpion	Partecipate alla	Partecipa alla <b>sfida</b>	Accetta la Scorpion
Challenge at	Scorpion Challenge	Scorpione a	Challenge su
tabasco/scorpion.c	su	tabasco/scorpion.c	tabasco/scorpion.c
om (if you can	tabasco/scornion c	om (se riesci a	om (se riesci a
handle the heat).	om (se riuscite a	gestire il <b>caldo</b> ).	sopportare il
			piccante).

sopportare	il	
calore).		

*Table 21: MT outputs for the language pair English > Italian. Brand: Tabasco.* 

For the first line of the output, LW used the impersonal form si può andare? ("is it possible to go?"). This error is a mistranslation, because the transferred meaning does not coincide with the ST meaning. An error that is common to both systems is the translation of "heat" with calore and caldo. From the point of view of literal translation, these could be two possible solutions in Italian, but in the context of hot sauces and spiciness, the right equivalent is piccante as in ChatGPT's output. These are the wrong terms. Another accuracy error in LW's output is the fact that "Scorpion Challenge" was translated into sfida Scorpione. The MT engine did not maintain the English name as if it was a proper name and therefore should have been left untranslated. Moreover, just after the wrongly translated "Scorpion Challenge" a grammar error is present – the system used the wrong preposition a instead of su to introduce the website's link. The best output is once again the one proposed by ChatGPT-4o, except for an error concerning the translation choice of the verb "enter". It is the case of the verb accettare ("to accept", "to approve"), which refers to the challenge. In fact, the idea conveyed in the ad is to actively take part in the challenge (partecipare as in DeepL and LW) and not just passively accept it. The style of the text is, therefore, unidiomatic.

Original (EN)	DeepL (DE)	0 0	ChatGPT-4o (DE)
		(DE)	
How far can you	Wie weit <b>können</b>	Wie weit kannst du	Wie weit kannst du
go?	Sie gehen?	gehen?	gehen?
Enter the Scorpion	Nehmen Sie an der	Nehmen Sie an der	Mach mit bei der
Challenge at	Scorpion Challenge	Skorpion	Scorpion Challenge
tabasco/scorpion.c	unter	Challenge auf	auf
om (if you can	tabasco/scorpion.c	tabasco/scorpion.c	tabasco/scorpion.c
handle the heat).	om teil (wenn <b>Sie</b>	om <b>T</b> eil (wenn <b>Sie</b>	om (wenn du die
	die <b>Hitze</b> ertragen	die <b>Hitze</b>	Schärfe verträgst).
	können).	bewältigen	
		können).	

Table 22: MT outputs for the language pair English > German. Brand: Tabasco.

The most recurrent error in these translations is language register. In fact, the machine translation engines translate the pronoun "you" with the German courtesy form *Sie*. While DeepL consistently makes this mistake from the beginning to the end of the text, LW

translates "you" as the second person singular du in the first line of the text, and then switches to the courtesy form. By doing so, the output also results in inconsistent style. If compared with the Italian outputs, the same wrong terms were employed both by DeepL and LW to translate the word "heat"; in fact, the word Hitze has the same meaning as Italian calore and caldo. These terms represent "heat" in the sense of "the quality of being hot"121, but as the effect of eating something spicy; therefore, the Italian and German words are not the right equivalents in this case. Another error present in both the Italian and the German translation proposal by LW is the transfer of the "Scorpion Challenge" into German Skorpion, which should have been left untranslated. Lastly, a pair of grammar errors are present in both outputs. Concerning DeepL, the wrong preposition unter was used to introduce the website's link; LW, instead, inserted the capital letter on *Teil*, which is part of the German separable verb *teilnehmen* ("to take part"). The only error common to all three systems is the choice of leaving the hyperlink untranslated. The best output was created by ChatGPT. There are no relevant mistakes according to MQM's parameters; an interesting choice in its output of moving from the literal translation and using the verb *vertragen* in its simple present form without the need for the modal verb können ("can"). This is a smart choice because it renders the text faster and shorter.

<sup>&</sup>lt;sup>121</sup> Retrieved from Cambridge Dictionary: <a href="https://dictionary.cambridge.org/dictionary/english/heat">https://dictionary.cambridge.org/dictionary/english/heat</a>.

## 3.3.12. Haribo



Figure 21: Gold Bears ad for Haribo's campaign "Bear over Beer", published in the UK in 2014. Retrieved from: https://www.behance.net/gallery/15680683/Haribo-Gold-Bears-Bear-over-Beer [visited 27.08.2024, 12.20].

This ad is part of a campaign whose central wordplay involves the words "beers" and "bears". For instance, all the campaign's visuals are constituted by the classical German beer glass filled with darker bears on the bottom – in this case, golden – and white bears on the top to simulate the beer and its foam. Therefore, it is important to transcreate the playful elements in the text recalling the word of beer (such as "freshly brewed" and "on tap"), and in particular the wordplay "a bear belly is better than a beer belly", which is easier to keep in German because of the same assonance between *Bier* and *Bär*, but it is more challenging with the Italian *birra* and *orso*.

Original (EN)	DeepL (IT)	Language Weaver	ChatGPT-4o (IT)
		(IT)	
A bear belly is	Una pancia da orso	Una pancia <b>di</b> orso	Meglio una pancia
better than a beer	è meglio di una	è meglio di una	di orsetti che una
belly.	pancia da birra.	pancia di birra.	pancia di birra.
Since 1920, we've	Dal 1920 abbiamo	Dal 1920, abbiamo	Dal 1920, abbiamo
created five freshly	creato cinque gusti	creato cinque gusti	creato cinque gusti
brewed flavors that	di birra fresca,	<b>appena estratti</b> che	freschi, sempre
are always	sempre disponibili	sono sempre	pronti <b>a</b> spillare.
available on tap.	alla spina.	disponibili alla	Goditi questi orsetti
Enjoy these award	Godetevi questi <b>orsi</b>	spina. Goditi questi	pluripremiati,
winning bears that	pluripremiati,	<b>orsi</b> pluripremiati	perfetti per ogni

are suitable for	adatti a ogni	adatti a ogni	occasione.
every occasion.	occasione.	occasione.	Fai un sorso su
Take a sip at	Sorseggiate un	Sorseggia a	www.haribo.com
www.haribo.com	sorso su	www.haribo.com	
	www.haribo.com		

*Table 23: MT outputs for the language pair English > Italian. Brand: Haribo.* 

DeepL presents an important mistranslation error. In fact, while in the English ST words of the field of beer are used to describe gummy bears, DeepL directly mentions beer even if the ad is about candies and "freshly brewed flavours" was translated erroneously as gusti di birra fresca. The same phrase was rendered as gusti appena estratti by LW, which is just a literal translation and does not sound idiomatic in Italian. Moreover, the word appena ("just") to translate "freshly" constitutes a non-sense addition, because the sentence begins with "since 1920"; therefore, the fact that the flavours were "just" created is an impossible temporal sequence. LW is also responsible for grammar errors connected to prepositions, such as pancia di orso and the a introducing the hyperlink at the end of the text. Concerning this last error, I would also highlight it as unidiomatic style, and in the same last line also DeepL made the same mistake because of a too-literal translation of the ST.

ChatGPT-4o's output is overall good, besides a grammar error concerning the use of the preposition *a* instead of *da*. ChatGPT could better catch the general context and the metaphors of the ST without giving the impression that the brand is selling beer. In addition, the transcreation of "bears" with *orsetti* is suitable for an Italian Haribo ad, because in Italy the product is called *orsetti gommosi*; the use of *orsi* in the other outputs towards the end of the text lacks on connection with the product – wrong terms.

Original (EN)	DeepL (DE)	Language Weaver	ChatGPT-4o (DE)
		(DE)	
A bear belly is	Ein Bärenbauch ist	Ein Bärenbauch ist	Ein <b>e</b> Bärchenbauch
better than a beer	besser als ein	besser als ein	ist besser als ein
belly.	Bierbauch.	Bierbauch.	Bierbauch.
Since 1920, we've	Seit 1920 haben wir	Seit 1920 haben wir	Seit 1920 haben wir
created five freshly	fünf frisch gebraute	fünf frisch gebrühte	fünf frisch gebraute
brewed flavors that	Geschmacksrichtun	Geschmacksrichtun	Geschmacksrichtun
are always	gen entwickelt, die	gen kreiert, die	gen kreiert, die
available on tap.	immer vom Fass	immer vom Fass	immer zapfbereit
Enjoy these award	erhältlich sind.	erhältlich sind.	sind. Genieße diese
winning bears that	Genießen Sie diese	Genießen Sie diese	preisgekrönten
	preisgekrönten	preisgekrönten	Bärchen, passend

are suitable for	<b>Biere</b> , die für jede	Bären, die für jeden	zu jedem Anlass.
every occasion.	Gelegenheit	Anlass geeignet	Nimm einen
Take a sip at	geeignet sind.	sind.	Schluck auf
www.haribo.com	Nehmen Sie einen	Nehmen Sie einen	www.haribo.com
	Schluck <b>unter</b>	Schluck <b>um</b>	
	www.haribo.com	www.haribo.com	
		<u>Uhr</u>	

*Table 24: MT outputs for the language pair English > German. Brand: Haribo.* 

In these outputs there are recurrent errors in both DeepL and LW: the use of the courtesy form to address the audience (language register) and grammar errors concerning the wrong use of prepositions to introduce the hyperlink. In DeepL's output, "award winning bears" is translated with *preisgekrönten Biere*, causing a mistranslation. This error could be also caused both by the probabilistic nature of the MT engine and by the lexical elements of the text which refer to beer and caused a misunderstanding. Moving on to LW, it interpreted the hyperlink as it was the time, using the German expression *um x Uhr*. This error leads to an addition of an item that is absent in the ST, apart from the link/cross-reference error because *Uhr* was included in the link. ChatGPT also made a grammar error concerning the declination of the article *eine* connected to the word *Bärchenbauch*, because the word is masculine, but the article in the output is feminine, and therefore it should have been *ein*.

The first line of the ad should be revised because, even if the nominal compounds *Bärenbauch* and *Bärchenbauch* are grammatically correct, they do not maintain the assonance between the words *Bär* and *Bier*. As I stated in the introduction of this section, the wordplay with the words bear-beer is a very important item to be transcreated. As I foresaw, the wordplay is better rendered in German than in Italian. Nevertheless, ChatGPT-40 succeeded in giving a good output for both language pairs because of its creativity. The Italian output focuses more on the belly (*pancia*) rather than the words *beer* and *bear* (*orso* e *birra*), but the wordplay still works and creates a funny tagline for this ad.

#### 3.3.13. Domino's Pizza



Figure 22: Domino's Pizza ad for the promotion of their late-night delivery service in Israel, December 2017. Retrieved from: https://www.adsoftheworld.com/campaigns/midnight-crisis [visited 27.08.2024, 12.25].

As stated in the caption of the picture, this ad was meant to promote Domino's late-night delivery service. Even if it is very short, it is almost completely based on a pun for midlife crisis – associated with the frequent need of people going through this phase to buy a motorbike – and midnight crisis, connected to a late-night craving for pizza and therefore connected to a scooter used by riders for delivery service. I chose this ad to see if the MT system can maintain a wordplay cross-linguistically, using words with similar phonetic characteristics. From this point of view, this ad is similar to the previous one by Haribo.

Original (EN)	DeepL (IT)	Language Weaver	ChatGPT-4o (IT)
		(IT)	
MIDLIFE CRISIS	CRISI DI	CRISI DI MEZZA	CRISI DI MEZZA
MIDNIGHT	MEZZANOTTE	ETÀ	ETÀ
CRISIS	CRISI DI	CRISI DI	CRISI DI
DELIVERY	MEZZANOTTE	MEZZANOTTE	MEZZANOTTE
UNTIL 4AM	CONSEGNA FINO	CONSEGNA FINO	CONSEGNE FINO
	ALLE 4 DEL	ALLE 4:00	ALLE 4 DEL
	MATTINO		MATTINO

Table 25: MT outputs for the language pair English > Italian. Brand: Domino's Pizza.

In Italian, the equivalents for "midlife crisis" and "midnight crisis" are, respectively, *crisi di mezza età* and *crisi di mezzanotte*. Since the words are phonetically similar and the

phrase maintains the parallelism through their structure, the pun is easily keepable also in Italian. LW and ChatGPT succeeded in maintaining the wordplay, but DeepL did not translate at all the word "midlife", resulting twice in *crisi di mezzanotte*. This error should be signalled as an untranslated element. The error may be due to the propensity of the MT engines to "correct" the ST by providing a different translation in the TT, as already mentioned for the Doritos ad – see 3.3.9.

Original (EN)	DeepL (DE)	Language Weaver	ChatGPT-4o (DE)
		(DE)	
MIDLIFE CRISIS	MIDLIFE-KRISE	MIDLIFE	MITTELLEBENSK
MIDNIGHT	<i>MITTERNACHTSK</i>	CRISIS	RISE
CRISIS	RISE	<i>MITTERNACHTSK</i>	<i>MITTERNACHTSK</i>
DELIVERY	LIEFERUNG BIS 4	RISE	RISE
UNTIL 4AM	UHR MORGENS	LIEFERUNG BIS	LIEFERUNG BIS 4
		4:00 UHR	UHR MORGENS

Table 26: MT outputs for the language pair English > German. Brand: Domino's Pizza.

The difficulty for MT systems for this language pair is the absence of a real equivalent for "midlife crisis". This problem can be easily solved thanks to the German language's high productivity concerning compound words. The word *Mittellebenskrise* already exists online but cannot be found in dictionaries. Therefore, the solution to maintain the same structure of *Mitternachtskrise* ("midnight crisis") is to use the compound *Mittellebenskrise* as ChatGPT did. Alternatively, DeepL's solution of building a compound word and keeping half of the word in English is acceptable, but the untranslated output from LW must be classified as an untranslated element under the accuracy category. Moreover, this also represents an error from the point of view of inconsistent style, because the copy is left half in English and half in German.

Overall, the output quality is good in both language pairs, maybe because the pun can be cross-linguistically maintained even with a literal translation. For instance, the pun contains neither metaphors nor extralinguistic references, representing MT engines' biggest challenges. Concerning the second part of the text, I find all outputs suitable to the context in both language pairs. Time is expressed in the outputs in different ways, but they are all acceptable. The most correct solution for the context might be Language Weaver's because it is the most synthetic, but also DeepL and ChatGPT's outputs could be considered good choices from the point of view of precision and misunderstanding avoidance.

# 3.3.14. McDonald's

#NationalChocolateChipDay

# Chip in some smiles today.





Order now

Figure 23: McDonald's ad for National Chocolate Chip Day published in the UK, May 2023. Retrieved from: https://www.adsoftheworld.com/campaigns/choc-chip-cookie-day [visited 27.08.2024, 12.25].

This particular ad is meant for its original market only, since Chocolate Chip Day is a national day – as the hashtag says. Even if the ad was not meant to be international, I wanted to see how MT systems handle hashtag transcreation. Another important feature is the wordplay "chocolate chip" - "chip in", a colloquial way to say "give", or "offer".

Original (EN)	DeepL (IT)	Language Weaver	ChatGPT-4o (IT)
		(IT)	
#NationalChocolat	#Giornata	#NationalChocolat	#GiornataNazional
eChipDay	Nazionale del	eChipDay	eDelChocolateChip
Chip in some	Cioccolato	<b>Fai</b> un sorriso oggi.	Regala un sorriso
smiles today.	Regalate un po' di	Ordina ora.	con ogni biscotto.
Order now.	sorrisi oggi.		Ordina ora.
	Ordinate ora.		

*Table 27: MT outputs for the language pair English > Italian. Brand: McDonald's.* 

Starting from the hashtag, the only system that has translated it maintaining the hashtag's features correctly is ChatGPT-4o. DeepL also translated it but committed two errors: the first one is the space between the words, whereas a hashtag requires all its words to be united (spelling error); the second error is the omission of the word "chip" in the hashtag, which results in the TT as "National Chocolate Day" only. LW, instead, left the hashtag untranslated, causing an accuracy error. Moreover, the translation of the verb "chip in" with the expression *fai un sorriso* ("make a smile") represents a mistranslation, because such a verb does not convey the same idea of "gifting smiles".

Concerning the wordplay, DeepL and LW translated the ST in a literal way. The outputs convey the same idea, but they are less playful and original compared to ChatGPT's output. In this latter case, even if the connection between the word "chip" in the hashtag and the verb "chip" was not maintained, I think the addition of the word *con ogni biscotto* ("with every chip") is a good choice in terms of establishing a connection within the hashtag and the rest of the text, even if the words are not similar as in English. This could be a good choice also because the name of the food was left in English in the hashtag; therefore, the insertion of the Italian word for "chip" thereunder is explanatory for the Italian audience.

Original (EN)	DeepL (DE)	Language Weaver	ChatGPT-4o (DE)
		(DE)	
#NationalChocolat	#NationalChocolat	#NationalChocolat	#Tag <b>DerChocolate</b>
eChipDay	eChipDay	eChipDay	Chips
Chip in some	Verschenken Sie	<b>Gib</b> heute ein	Schenk heute ein
smiles today.	heute ein Lächeln.	Lächeln <b>ein</b> .	Lächeln mit jedem
Order now.	Jetzt bestellen.	Jetzt bestellen.	Keks.
			Jetzt bestellen.

*Table 28: MT outputs for the language pair English > German. Brand: McDonald's.* 

In contrast to the language pair English>Italian, this time both DeepL and LW left the hashtag untranslated. Again, ChatGPT is the only system that translated the hashtag, and it followed the same path it did with Italian, which is translating only half of it. However, I classified the plural "chips" at the end of the hashtag as an error. The plural of "chocolate chip" should be "chocolate chip cookies", for this reason, this represents a grammar error. At the same time, also the article *der* represents a grammar error. Finally, the word "chocolate" in the same hashtag could have been translated with the German *Schoko* for a better understanding – undertranslation. Such a change would be a good choice also

from the point of view of layout because it would not lengthen the hashtag; conversely, translating it into Italian could lead to a much longer hashtag, which is not practical.

In DeepL's output, a language register error is also present because of the use of the courtesy form, and also LW's output contains a language register error. Compared to verbs such as *verschenken* or *schenken* ("to gift"), the verb *eingeben* is very formal and it is mostly used in the field of IT and medicine. Therefore, it should be marked as a language register error. To conclude, ChatPT-40 again produced the best output compared to the other engines. Moreover, the German output created by ChatGPT is the exact translation of its Italian version.

There is a relevant difficulty in translating and keeping the wordplay with the verb "chip in" in the ST, but the text could be rendered more playful anyway using other rhetorical means, such as a rhyme or a different wordplay. For instance, for the language pair English>Italian a good solution could be making a rhyme using the infinitive form of the verbs *condividere* ("to share") and *sorridere* ("to smile"), two words keeping the main idea behind the ST. Another word that is important to keep in the transcreated text is "chocolate chip"; therefore, a starting point could be *un chocolate chip da condividere*, *un buon motivo per sorridere* ("a chocolate chip to share, a good reason to smile").

nutella

# new tell uh nuh tell ah nou tella neu tella nut tella

It spreads the same,



no matter how you pronounce it.

Arrey Vickey

Figure 24: Nutella ad published in India, September 2022. Retrieved from: https://www.adsoftheworld.com/campaigns/new-nuh-nou [visited 27.08.2024, 12.30].

This playful ad focuses on the different ways the word "Nutella" is pronounced by English speakers. I chose this ad because I wanted to test the MT systems and see if they could understand this reference to pronunciations. This translation can be particularly challenging for the language pair English>Italian, being "Nutella" a sort of Italian word (EN "nut" and Latin suffix "ella") and, therefore, being pronounced by the Italian audience in only one possible way.

Original (EN)	DeepL (IT)	Language Weaver	ChatGPT-4o (IT)
		(IT)	
New tell uh	Nuovo racconto uh	Nuovo messaggio	Nu tell a
Nuh tell ah	Nuh tell ah	uh	Noo tel la
Nou tella	Nou tella	No, dillo	Noot ella
Neu tella	Neu tella	Nou tella	Nuh tella
Nut tella	Noce tella	Tè NEU	Nut tella
		Dado tella	Si spalma allo

It	spreads	the	Si	diffonde	allo	Si	diffonde	allo	stesso modo,
sam	ie,		stes	sso modo,		stes	so modo,		qualunque sia la
no 1	matter how	you	indipendentemente		non importa come		come	pronuncia.	
proi	nounce it.		dal	*		lo p	ronunci.		

*Table 29: MT outputs for the language pair English > Italian. Brand: Nutella.* 

As I foresaw in the introduction, it is particularly challenging to find an equivalent to this tagline in Italian. For instance, DeepL and LW completely failed to find equivalents according to the text's purpose. The two MT engines interpreted some of the pieces of pronunciation as lexical words, translating them into Italian words and, therefore, causing many mistranslations.

In the second part of the text, which contains a normal sentence, a wrong term was employed; this is the case of the verb *diffondere* ("to spread"). *Diffondere* can be one of the translations for this verb, but it does not represent the word's equivalent in this context. It can be a translation of "to spread", but the verbs' meaning is "to propagate" or "to broadcast". On the other hand, ChatGPT-4o's version is perfectly acceptable, because the verb *spalmare* is the right equivalent in this context. This verb is commonly used with spreads and saucy food. Moreover, ChatGPT was the only engine performing a transcreation; further considerations and proposals will be presented at the end of this section.

Original (EN)	DeepL (DE)	Language Weaver	ChatGPT-4o (DE)
		(DE)	
New tell uh	Neu erzählen uh	Neu Tell uh	Nu tell ah
Nuh tell ah	Nuh tell ah	Nein, sag Aha	Nuh tella
Nou tella	Nou tella	Nou tella	Neu tella
Neu tella	Neu tella	Neu tella	Noot ella
Nut tella	Nuss tella	Mutter tella	Nut tella
It spreads the	Es verbreitet sich	Es verteilt sich auf	Es lässt sich gleich
same,	gleich,	dieselbe Weise,	gut streichen,
no matter how you	egal, wie man es	Egal, wie Sie es	egal, wie du es
pronounce it.	ausspricht.	aussprechen.	aussprichst.

Table 30: MT outputs for the language pair English > German. Brand: Nutella.

Again, the majority of mistranslations is due to the fact that DeepL and LW translated tokens that were meant to be "written forms of pronunciations" into real words. Another error that repeats also in this language pair is the wrong terms concerning the translation of the verb "to spread". In DeepL's output, the verb *sich verbreitet* has the same problem of IT *diffondere*, which is "to propagate" or "to broadcast". Also, the verb *sich verteilen* 

in LW's output is not suitable to the context, because it is closer to the meaning of "to distribute". Moreover, LW addressed the audience with the courtesy form *Sie* at the end of the ad, creating a language register error. Its further error is connected to the expression *auf dieselbe Weise* used to translate "the same" in the ST. Linguistically speaking, it is a correct translation, but from the point of view of the context and of the length required, it is not a suitable translation compared to ChatGPT and DeepL's alternative *gleich*. Finally, right after the previous error, the capitalisation of the word *egal* ("no matter" or "anyways") represents a spelling error. In fact, in German, only proper names and substantives are capitalised, whereas *egal* here is used as an adverb.

Generally speaking, this Nutella ad was one of the most challenging for these MT engines among all of the chosen ads. Besides these difficulties, ChatGPT-40 gave a good starting point for transcreation, changing the pronunciations of the word "Nutella" both in Italian and German. However, such an ad could be considered publishable neither in Italy nor in German-speaking countries. Concerning the language pair English>German, this idea of mispronouncing the word "Nutella" is not common to German speakers. The difficulty of associating the right article with the word "Nutella" for Germans<sup>122</sup> could be used to recreate the same effect the ST produces in an English-speaking audience.

In the case of the language pair English>Italian, such an ad should be modified or rethought because the word "Nutella" in Italian has only one pronunciation and it is almost impossible for an Italian speaker to mispronounce it. Maybe the pronunciations written in the transcreated ad could represent the different dialects of Italy because phonetically speaking the pronunciation of determined sounds changes depending on the geographical area a person lives in. For instance, in the region of Tuscany, the phonetic phenomenon of Tuscan *gorgia* leads to a different pronunciation of the three specific consonants compared to their pronunciation in standard Italian. The Tuscan dialect is well known for this phenomenon called spirantisation, by which the unvoiced plosive phonemes /t/, /p/, and /k/ are pronounced in their fricative counterparts when they are found between two vowels<sup>123</sup>. Again, a common phonetic trait of speakers coming from Northern Italy is a less marked pronunciation of doubled consonants in words<sup>124</sup>. These

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<sup>&</sup>lt;sup>122</sup> Hennig et al. (2021).

<sup>&</sup>lt;sup>123</sup> Maturi (2014: 109).

<sup>&</sup>lt;sup>124</sup> Idem, p.115.

two examples of regional variants could be useful to represent how "Nutella" is pronounced in different parts of Italy. Another solution could be keeping the pronunciations in the ST and translating only the second part in Italian to represent how the product is pronounced outside Italy, highlighting its worldwide fame. However, this could be difficult to understand for people who do not know any other language besides Italian; moreover, for this same reason, it should also be represented in the visual for the audience to understand that the written pronunciations recall other languages, maybe with some foreign flags as visual elements. This last transcreation idea is why the untranslated and unvaried pronunciations in the TT were not marked as errors. For instance, it is not an error to maintain the advertising idea of the ST, but in this case, the translation should have been consistent.

This stress on internationality was already present in an advertising campaign created by Nutella at the end of the XX century for the Italian market. In fact, between the 1970s and 1980s Nutella launched a campaign picturing children from different parts of the world as visuals and a sentence in their mother tongue as part of the body copy, generally saying "Nutella is good". The campaign aimed to stress Nutella's popularity worldwide and the importance of cultural integration, as for the ad chosen for this case study.

# 3.4. Case study: errors' overview

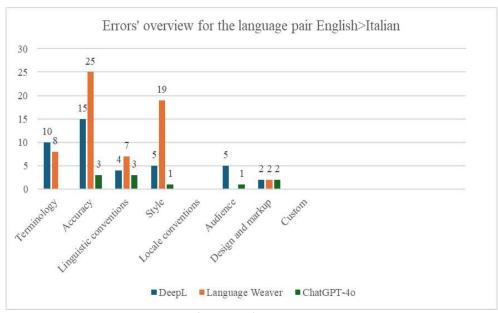


Figure 25: Errors' overview EN>IT.

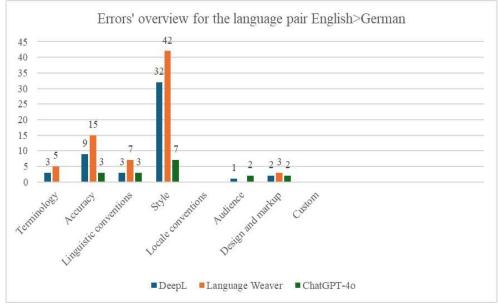


Figure 26: Errors' overview EN>DE.

Following the error count, it is possible to see that ChatGPT-4o (27) performed the best translations and transcreations among the chosen MT engines, followed by DeepL (91) and Language Weaver (133). The gap between ChatGPT-4o and DeepL is much more significant compared to the one between DeepL and Language Weaver, which is anyways remarkable. All MT engines have in common the fact that no error in their outputs pertains to the categories of locale conventions and custom errors, but there are many differences in their translations which will be hereafter analysed.

# 3.4.1. Errors in DeepL

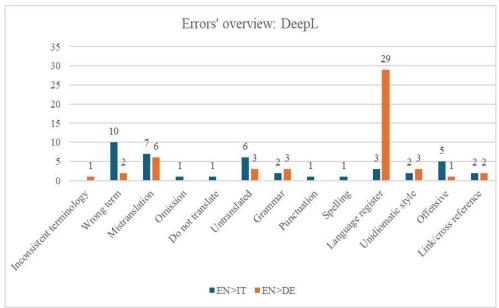


Figure 27: Errors' overview in DeepL.

DeepL committed a total of 91 errors, 41 for the language pair English>Italian and 50 for the language pair English>German. Generally speaking, most errors pertain to the categories of terminology (wrong term), accuracy (mistranslation and untranslated), and style (language register). As previously mentioned, there were no errors in the locale conventions category and custom category.

Concerning the language pair EN>IT the majority of errors is connected to the sub-category of wrong term, followed by untranslated. A remarkable error for this specific language pair is offensive language under the category of audience appropriateness, in which DeepL scored five errors for Italian.

The most frequent error for the language pair EN>DE is language register, followed by grammar, unidiomatic style, and mistranslation. In most cases, the errors concerning the sub-category of language register concern the way the machine translation engine refers to the audience. The most frequently used person and pronoun is Sie, the German courtesy form. Even if its use was always grammatically correct, the courtesy form is not a preferential choice in advertising and marketing campaigns  $^{125}$ .

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<sup>&</sup>lt;sup>125</sup> Salerno (2014: 66).

# 3.4.2. Errors in Language Weaver

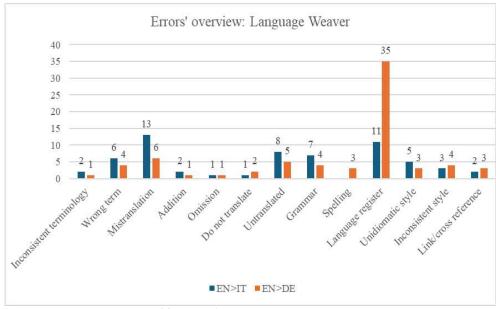


Figure 28: Errors' overview in Language Weaver.

Language Weaver committed a total of 133 errors, 61 for the language pair English>Italian and 72 for the language pair English>German. The majority of errors are attributable to the sub-categories of language register, mistranslation, wrong term, untranslated, and grammar; in contrast to the general overview given for DeepL, another sub-category to which part of the errors pertain is unidiomatic style, under the category of style. Moreover, this is the only MT engine that has committed errors in the sub-category inconsistent style, again under the category of style. The reason for these errors is the segmentation applied by Language Weaver on the ST. When translating with this NMT engine through SDL Trados Studio, the software divides the text into segments. Most of the time, segments are separated by punctuation marks<sup>126</sup>, and segmentation rules can be manually changed by Trados users. Segmentation causes the software to translate segments separately from one another; therefore, this results in inconsistent style. In these few cases, the MT engine addressed the audience using different pronouns in the same output. However, Language Weaver did not commit any error in the category of audience appropriateness.

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<sup>&</sup>lt;sup>126</sup> European Parliament (2019).

Starting from the language pair EN>IT, major errors are present in the sub-categories of language register, mistranslation, untranslated, grammar, and wrong term. The sub-category of language register, however, contains many errors for the language pair EN>DE. In fact, as for DeepL, all personal pronouns, verbs, and possessive adjectives referring to the courtesy form *Sie* were marked as errors. In German grammar, the subject must be expressed, whereas in Italian the subject can be omitted, and this is what happens the vast majority of the time – unless the pronoun is necessary for any kind of specification. This is the reason why language register errors happen to be much more frequent in the German outputs rather than in the Italian ones; nevertheless, the German courtesy form is an error, whereas the Italian *voi* ("you" in its second person plural meaning) cannot be considered an error, because it is common in Italian ads to address people this way in advertising <sup>127</sup>. Finally, the sub-categories mistranslation and untranslated also present slightly more errors compared to other categories, which seem to have more or less the same number of errors.

#### 3.4.3. Errors in ChatGPT-40

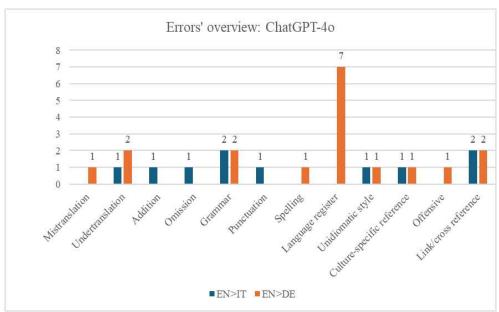


Figure 29: Errors' overview in ChatGPT-40.

ChatGPT-40 committed a total of 27 errors, 10 for the language pair English>Italian and 17 for the language pair English>German. Clearly, these GenAI engine's outputs contain

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<sup>&</sup>lt;sup>127</sup> Salerno (2014: 66).

fewer errors compared to DeepL and Language Weaver. No error was made in the category of terminology. An error common to both language pairs is classified under the category of design and markup, more specifically the sub-category of link/crossed references. This happened because in some of the outputs containing a hyperlink, ChatGPT tried to localise the website by changing the domain extension from .uk to .it or .de. The main issue with changing this part of the hyperlink is that the localised ones do not exist.

For the outputs of the language pair EN>IT, the most frequent errors were grammar and, as previously stated, link/cross-reference. For the language pair EN>DE, instead, ChatGPT performed the highest number of errors in the sub-category language register by committing the same mistake as both DeepL and Language Weaver because of the employment of the courtesy form. These errors are majorly contained in the KFC output – see 3.3.8. – which was the longer one. ChatGPT-4o did not maintain the colloquiality of the ad and the same output contains also a link/cross reference error, a mistranslation, and an error concerning the audience appropriateness category.

Apart from a few errors in its outputs, it is worth saying that ChatGPT-40 performed a real transcreation in some ads, for example, part of Oreo's ad – see 3.3.2. –, Kellogg's one – see 3.3.6. –, and the last one by Nutella – see 3.3.15.

#### **Conclusions**

Nowadays it is easy to have access to different online MT engines and to obtain an overall positive translation output, even with free tools. This success is due to the powerful technology behind the MT engines which allow an increasingly fast and accurate result. Because of their dramatic improvement, they are being employed in many businesses as part of hybrid solutions with human translators. This means that translators work jointly with machines, which create an initial draft to be analysed and corrected by a human posteditor and linguistic expert<sup>128</sup>. Neural Machine Translation and Generative Artificial Intelligence engines have been considered the most popular and efficient systems for a decade now. In Chapter 1, MT engines were analysed in detail. These engines are powered by neural network technology, which recalls the human brain's structure and is made of neurons connected into layers. Every engine has an initial layer that receives the input to be translated, the input layer, and an output layer which allows the final representation of the output. The layers in between are called "hidden", and they are responsible for input understanding and output generation. The higher the number of hidden layers, the more accurate the final output. The majority of MT engines now have more than three hidden layers, and they are known as "deep" neural networks.

The above-mentioned models are currently dominating the market because of their increasingly good performances. Despite their success in many fields, one of the biggest challenges for these engines is creative language, i.e. texts involving metaphors, rhetoric figures, idioms, puns, and cultural items. When such elements become central and need to be maintained cross-linguistically, the text undergoes transcreation. Transcreation is a branch of translation in which the content of the text becomes the focus, rather than the text itself. It can be regarded as the less literal translation type; in the historical dualism between word-to-word and sense-to-sense translation, transcreation is connected to the latter approach. In fact, the most important part of a text to be transcreated is not the words themselves, but what the words trigger in the reader or the audience, and how the message is being conveyed linguistically speaking. Therefore, transcreation is an activity involving texts that are meant to persuade their addressees rather than to inform them, also by using language poetically and creatively. In text analysis, these functions are called,

<sup>&</sup>lt;sup>128</sup> Mirzayev (2014: 35).

respectively, conative and poetic<sup>129</sup>. The conative and poetic functions are the core elements of texts pertaining to fields such as entertainment, video games, advertising, and marketing. For the aim of this thesis, its exclusive focus is translation in the field of marketing and advertising, exploring also cultural theories, whose understanding is crucial in order to correctly transfer a text from one culture into another. For this reason, the cultural theories developed by Hall and Hofstede were further explained and analysed in context.

All previously explained notions could be found in the case study, which concerns food advertising transcreation with NMT and GenAI engines. Its main aim is the evaluation of the outputs of three different machine translation engines – DeepL, Language Weaver, and ChatGPT-4o – conducted with the parameters offered by Multidimensional Quality Metrics (MQM). What emerged from the case study is that ChatGPT-4o performed the best outputs in terms of transcreation and it is the engine whose outputs contain fewer errors. As already stated, transcreation is not only about translating from one language into another but also about transforming and rearranging the content of a text to adapt it to a target audience and culture. Therefore, in contrast to some translation fields which mainly require loyalty to the ST and literal translation – such as legal or technical translation – the employment of creativity and the focus on the content rather than the text itself are the basis for a good transcreated output.

By looking at the results and the statistics shown at the end of the previous chapter, it is clear that the best transcreations were performed by ChatGPT-4o. In this regard, there are some examples of "transcreation effort" concerning some ads worth citing. Even if the following transcreations could not be publishable in a real-life situation, the outputs created by this GenAI engine represent a significant step forward because of its considerable employment of creativity. In 3.3.2., Oreo's ad was transcreated first for the language pair English>Italian and, subsequently, for the language pair English>German.

Source text (EN)	ChatGPT-4o (EN>IT)	ChatGPT-4o (EN>DE)
Bring your Own cuz you	Portati i tuoi, non si sa mai.	Bring lieber eigene mit,
never know.		man weiß ja nie.

Table 31: ChatGPT's outputs for Oreo's tagline. EN> IT, DE.

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<sup>&</sup>lt;sup>129</sup> Benetello (2018: 29).

From the point of view of language, it is possible to notice that the tagline in the English ST contains an alliteration concerning the words "own" and "know". ChatGPT-40 succeeded in recreating the same rhetoric figure using words alliterating with each other, both in Italian and in German translations. In the case of Italian, the whole tagline is an alliteration, because the repetition concerns many letters. By dividing the tagline into two sentences separated by a comma, the first part consists of the repetition of the letters /t/ and /i/, whereas in the second sentence, the alliteration concerns the nasal phonemes (/m/ and /n/) and the letter /s/. For German, instead, the rhetoric figure is closer to assonance with the words *mit* and *nie*. The rhythm given to the tagline with this rhetoric figure renders it even more memorable and, therefore, it is suitable to the text's purpose.

Another example that represents a good transcreation concerns the outputs of the Kellogg's ad.

Source text (EN)	ChatGPT-4o (EN>IT)		Chat	GPT-40	(EN>DI	Ξ)			
Comes with both Pros and Corns		mix nflakes		Pro	e		allen flakes!	Vor-	und

Table 32: ChatGPT's outputs for Kellogg's ad. EN> IT, DE.

The pun in the English ST which consists in the substitution of "Pros and Cons" with "Pros and Corns" was visibly maintained in both language pairs' outputs. Since this was a result carried out by all MT engines, the transcreation effort in the specific case of ChatGPT-40 is the change of the words in the ad to render it even more playful. There are many differences between the source and the two target translations. Starting from the verb, which in both translations was omitted. As explained in 3.3.6., this cannot be considered an omission according to MQM because the absence of the verb does not cause an obstacle to comprehension, nor negatively affects the text. Moreover, as specified in Chapter 2, texts such as advertising copies contain changes that could be translation errors, but not in transcreation ones<sup>130</sup>. Moving on to the rest of the translation, "with both" is transcreated into Italian as *un mix di* ("a mix of") and into German as *mit allen* ("with all"). The Italian output results in a more creative translation than the German, but both are suitable. The most creative part in both TTs is the transcreation of "Pros and Corns". As previously stated, the pun was maintained, and "Corns" was

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<sup>130</sup> Ibidem.

changed into *Cornflakes*. Moreover, "Pros" is translated with *Vor*- in the German output, which is the abbreviation for the word *Vorteile*. Apart from being a good solution to maintain a similar length, this is also very idiomatic from the linguistic point of view, because it is common in German to omit the second part of a word in a two-compound sequence if the second part of the compound word is the same in both words. For instance, the normal translation of "Pros and Cons" would be *Vor- und Nachteile*. Finally, the exclamation mark used in the TTs is very engaging compared to the ST, which lacks punctuation. The ellipsis present in the Italian TT makes the text even more engaging for the audience. It is worth reaffirming that these outputs might not be publishable; in fact, other solutions were given in the previous chapter. What is considerable is the effort of ChatGPT-40 to rearrange the text creatively and engagingly, which is anyway positive.

The last example worth mentioning is the Nutella ad, which was one of the most difficult to translate for the MT engines.

Source text (EN)	ChatGPT-4o (EN>IT)	ChatGPT-4o (EN>DE)
New tell uh	Nu tell a	Nu tell ah
Nuh tell ah	Noo tel la	Nuh tella
Nou tella	Noot ella	Neu tella
Neu tella	Nuh tella	Noot ella
Nut tella	Nut tella	Nut tella

Table 33: ChatGPT's outputs for Nutella's tagline. EN> IT, DE.

This part of the Nutella ad was very challenging. The ST reproduces a series of ways English speakers pronounce the word "Nutella". The attempt of ChatGPT-40 to re-create different pronunciations is very creative. In fact, even if the engine copied some from the ST and did not change them radically in Italian and German, they could be suitable for a transcreated ad. Undoubtedly, the most challenging language, as explained in 3.3.15., is Italian. It is almost impossible for an Italian speaker to mispronounce this word because it was created from the merge of EN "nut" and the Latin suffix *-ella*; therefore, as stated in the previous chapter, other strategies should be found. From the point of view of German, instead, the ad could play on the difficulties in choosing the right article attributable to the word "Nutella". As explained in 3.3.15., such copy does not render the same effect cross-linguistically, and for this reason, the ad should be rethought completely when it comes to other languages and audiences. Despite the partial unsuitability of the

present transcreations in a real-life context, the effort to understand and re-create a copy similar to the original made by ChatGPT-40 is significant.

The good performance of this GenAI engine is due to prompting. As explained in the case study's introduction, a prompt is formed by all clear and necessary information in order for the engine to fully "understand" our request and elaborate an output that should fulfil as much as possible what we asked in that prompt. The transcreated outputs created by ChatGPT, as explained further, were obtained using the same prompt for every ad. The prompt remained unvaried in its structure and in the types of information given; the peculiarities of every ad were the only things that were obviously changed. These peculiarities were source and target language, source and target market, year and place of publication, the typology of the product that was being sponsored, and relevant details concerning the visual. Moreover, the prompt ordered to transcreate the source and not to translate it, which is a very important instruction to give in order to avoid literal translations and to ensure a readaptation of the text, when necessary. All these pieces of information can be regarded as context, and this was the reason why ChatGPT-4o gave more successful outputs compared to DeepL and Language Weaver. These two latter engines were not provided with the necessary information about the ads and, therefore, they could not contextualise the ad. Their resulting outputs' quality depended also on their training in general, and if the training was tailored or not. As explained in 3.2.1. and 3.2.2., respectively, DeepL is prone to give its best performance when the ST pertains to the legal field, whereas for the language pair English>German, its best results concern the fields of finance and IT<sup>131</sup>; Language Weaver, instead, is a non-tailored MT engine that can be trained by users with CAT Tools, such as Translation Memories or dictionaries. Moreover, another characteristic of Language Weaver in Trados is segmentation, which can represent an obstacle to consistency in the TT. These premises are visible in their outputs, for example in the way the audience is addressed in the majority of DeepL and Language Weaver's outputs for the language pair English>German. The recurrence of the courtesy form Sie in almost all outputs and the use of a formal register also from the lexical point of view for both language pairs are due both to the MT engines' background, their training, and the absence of context.

<sup>&</sup>lt;sup>131</sup> Intento (2023).

Another interesting fact concerning ChatGPT-4o's output is the human-like comments they were delivered with. For instance, every GenAI output consisted of two parts: the transcreated text, and a comment created by the engine stating the reasons why the output presented determined characteristics, and which parameters listed in the input were respected. For example, one of the most important requests in the prompt was the respect of the ST's length also in the TT. This request is very important because most translated advertising has to fit in the same copy as the original and, therefore, the length of the translated text should be almost the same as the original text. Having specified this requirement to ChatGPT-40, the machine tried to stick to the original length for every translation and then specified the "effort" in the comment. Furthermore, these comments contained some interesting details which go beyond the instructions given in the prompt. This happened with two ads in particular: Burger King – see 3.3.3. – and Doritos – see 3.3.9. The common feature between these two ads is the reference to two very famous films: "Oppenheimer" and "Titanic". In these two particular cases, these cinematic references could represent a further obstacle, because this piece of information was voluntarily omitted in the prompt to test the engine's capacity to recognise such extralinguistic references. Apart from giving an overall good and acceptable output, ChatGPT-40 in its comment mentioned the films to justify its choices concerning its transcreation.

GPT's comment for Burger King (EN>IT)	GPT's comment for Doritos (EN>IT)
This version maintains the playful	This version preserves the playful
reference to "Oppenheimer" while	reference to the Titanic while making it
ensuring the text resonates with an Italian	catchy and engaging for an Italian
audience, retaining the original impact and	audience, with a similar length to fit the
length.	original copy.

Table 34: GPT's comments on Burger King and Doritos outputs. Language pair EN>IT.

Therefore, the engine recognised and mentioned the references without having been told about them. All outputs' comments are published in the Appendix.

The last thing worth mentioning in ChatGPT's performance is its localisation attempts concerning hyperlinks in part of the ads. As already stated at the end of Chapter 3, ChatGPT-40 was the only engine that attempted to localise some hyperlinks to the original brand's website. However, its localisation was not successfully carried out because of the absence of those websites online; in other words, ChatGPT just changed

the domain extension ".uk" in the hyperlink into ".it" or ".de" depending on the target language and market requested in the prompt. This change was performed only in the cases of KFC and Pink Lady's ads – see 3.3.8. and 3.3.10. –, for both language pairs. Even though its localisation attempt led to some errors, this is a practice that must be performed by translators when facing ads or any kind of text containing a hyperlink. This is why the attempt can be regarded as a step ahead of ChatGPT compared to DeepL and Language Weaver, whose translations of KFC and Pink Lady's ads do not present any localisation effort.

On the other hand, ChatGPT-4o showed some uncertainty in one case only from the point of context understanding and the employment of the right tone of voice. The longest ad analysed was KFC one – see 3.3.8. – which was also the one presenting a less creative language. Surprisingly, errors occurred only in the output for the language pair English>German, in which the most frequent error was language register. In fact, the engine addressed the audience using the courtesy form, an error that was very frequent in DeepL and Language Weaver's outputs throughout the whole case study. It might be possible that the engine misunderstood the context and the tone of voice of the ST since the entire ad was an apology of the brand to its customers. For instance, the apologetic tone and the less playful language could have led the system to be more formal towards the audience, regardless of the text genre and the informal way of addressing customers despite the situation. Moreover, it was unexpected to note in ChatGPT's output also a mistranslation, which was the only one performed by the engine in all its outputs. In the future, it could be interesting to analyse whether length could be another possible factor influencing the success of MT outputs in ChatGPT.

Conversely, not all transcreations performed by DeepL and Language Weaver were insufficient and wrong. For example, in Burger King's ad – see 3.3.3. – the outputs were overall good for the language pair English>Italian; in fact, DeepL and Language Weaver present only minor mistakes in their raw outputs, but the transcreation is carried out positively. The same thing could be said for the transcreations of Hummus Republic's ad – see 3.3.4. – and Kellogg's ad – see 3.3.6. – concerning the language pair English>German. These two NMT engines perform better when the pun in the ad is very literal and, therefore, also its translation can be performed in a word-for-word approach. In this case study, there was only a small number of ads that could be translated this way,

whereas the vast majority of them required re-adaptation and major changes to the ST. In this regard, Benetello (2018: 42) states that "Although there are cases where a faithful rendition can be effective [...], the copy must often be re-created". With the previously mentioned prompts, instead, ChatGPT received enough information to determine whether the TT should have been more or less loyal to the word and structure of the ST. In this regard, some short ads contained some puns that could be transferred literally from one language into another. Apart from the aforementioned ones, Doritos' ad – see 3.3.9. – and Barilla's ad – see 3.3.5. – can be easily translated into other languages without changing the content or adapting it to the target culture.

This analysis of raw outputs led to the conclusion that ChatGPT-40 performed better than DeepL and Language Weaver in this case study. However, the amount of analysed data is not sufficient to give an overall opinion on which engine is better at machine translating in general. Therefore, I genuinely hope this thesis will be used as a starting point to continue research on the topic of MT and transcreation. First, it could be interesting to compare and contrast outputs obtained from the employment of more than two language pairs. Being language strictly connected to the concept of culture, it could be interesting to analyse if NMT and GenAI engines are aware of culturally significant differences between distant cultures, and how this awareness is reflected in the language used and the translated outputs. Furthermore, the narrowness of the chosen field gives less room for further considerations. In fact, this case study only investigates the field of the food industry, but the marketing and advertising fields cover a wide range of products, and each product should be communicated in its precise way. I am sure that further developments and improvements will lead to more sophisticated NMT and GenAI engines in the future. Finally, in terms of hybrid solutions in transcreation, an interesting consideration could be made on the post-editing effort of human translations on transcreated MT raw outputs.

This thesis shows that MT and GenAI engines in transcreation could represent a significant advantage in this field. In particular, GenAI's capacities of analysing, generating, and adapting the content allow human translators to focus more on the more challenging aspects for the engines, such as puns, emotions, and the rendering of specific cultural elements. In a world where everything goes fast and immediate response is

needed, the joint work of human beings' creativity and MT engines' technology is the key to a successful outcome and an effective transcreation strategy.

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#### Riassunto

La traduzione automatica (en. *Machine Translation*, abbr. MT) è uno strumento utilizzato in numerosi ambiti della vita quotidiana. In particolare, nelle aziende si tende ad utilizzare la traduzione automatica e i relativi sistemi di traduzione assistita (en. *Computer-Assisted* o *Aided Translation tools*, abbr. *CAT tools*) come supporto al traduttore. Questo sistema è chiamato "modello ibrido" ed è efficace per quanto riguarda il risparmio a livello di costi e di tempistiche di finalizzazione delle traduzioni. In questo caso, il traduttore assume un ruolo più simile a quello di post-editor e revisore di una bozza di traduzione redatta dalla macchina. È però risaputo che la traduzione automatica può presentare problemi per quanto riguarda l'ambito della transcreazione, ovvero di quella branca della traduzione che si occupa di testi contenenti creatività, uso di linguaggio figurato e persuasione. La transcreazione, quindi, riguarda la traduzione in ambito di marketing e pubblicità, sottotitolaggio, videogiochi, letteratura e comunicazione in generale. Questa tesi si propone di indagare ed analizzare l'utilizzo della traduzione automatica nella transcreazione attraverso un case study nell'ambito specifico della comunicazione nella *food industry*.

Nel Capitolo 1 vengono investigati la storia e il funzionamento della traduzione automatica, incluse le varie tipologie di MT sviluppate nel corso del secolo precedente e di quello corrente. La traduzione automatica è nata tra gli anni '40 e '50 del XX secolo, ma prima di giungere alla traduzione automatica come la conosciamo oggi sono stati sviluppati vari modelli. Il primo era la traduzione automatica basata su regole (en. Rule-Based Machine Translation, abbr. RBMT), che, come dice il nome, si basava su regole morfo-sintattiche e dizionari, sia per quanto riguarda la lingua di partenza che per quella di arrivo. Il sistema era però lento e le traduzioni ottenute erano poche rispetto al costo e alla manodopera necessaria a stilare le regole su cui la macchina doveva basarsi. Inoltre, la tecnologia dell'epoca non era in grado di sostenere delle operazioni così complesse. L'approccio successivo, invece, ha dominato il panorama della traduzione fino all'inizio del secolo corrente. La traduzione automatica statistica (en. Statistical Machine Translation, abbr. SMT) si basava su dati statistici ottenuti in seguito all'analisi di enormi corpus multilingue. Dall'avvento della traduzione automatica statistica, l'accessibilità e gratuità delle piattaforme di traduzione automatica online hanno reso questa tipologia di traduzione tra le più veloci e convenienti in ogni ambito della vita quotidiana.

Attualmente, i modelli più moderni di traduzione automatica sono la traduzione automatica neurale (en. Neural Machine Translation, abbr. NMT) e l'intelligenza artificiale o IA generativa (en. Generative Artificial Intelligence, o GenAI). Sono delle tecnologie in continua evoluzione presenti sul mercato dal 2015, quando i modelli di SMT sono stati rimpiazzati quasi completamente dai primi modelli di NMT. Questi sistemi appartengono alla macrocategoria dei modelli linguistici di grandi dimensioni (en. Large Language Models, abbr. LLMs), il funzionamento dei quali si basa sull'apprendimento del linguaggio naturale attraverso una grande quantità di input testuali per permettere la generazione di output testuali, sempre in linguaggio naturale. La tecnologia che ne consente il funzionamento è quella delle reti neurali, anche dette reti neurali artificiali. Il nome di questo modello computazionale deriva dalla somiglianza tra queste reti di neuroni o nodi artificiali e la struttura del cervello umano. I nodi sono raggruppati in unità di elaborazione, ovvero degli strati di neuroni collegati tra loro a formare una rete di scambio di informazioni. In questi modelli è sempre presente una prima unità di input, in cui il messaggio viene per la prima volta ricevuto e appreso dal sistema, e uno strato di output, in cui i neuroni hanno il compito di elaborare l'output finale e fornire la risoluzione del problema iniziale. Tra i nodi degli strati di input e output ci sono degli strati *hidden*, chiamati così perché nascosti, e quindi non visibili all'occhio umano quando utilizza un qualsiasi LLM. Quando questi strati hidden sono presenti in una quantità superiore a tre, la rete neurale viene definita profonda. Più profonda è una rete neurale, più l'output sarà preciso, in quanto sarà stato analizzato da più nodi e quindi più attentamente. Un altro fattore da cui dipende il buon funzionamento della rete neurale è l'addestramento di quest'ultima, basato su algoritmi di addestramento che iniettano una serie di istruzioni che devono venire apprese dalla rete. Solitamente l'addestramento introduce nel sistema una grande quantità di dati, e perciò può risultare un processo piuttosto lungo. Le reti neurali possono essere utilizzate sia per la creazione di contenuti audiovisivi che per la produzione di output in un linguaggio naturale, come nel caso di NMT e IA generativa. Ci sono varie differenze tra questi due sistemi; la traduzione automatica neurale è infatti destinata unicamente all'attività di traduzione, mentre l'intelligenza artificiale generativa alla creazione di output testuali generici. Un'altra differenza è la tipologia di input inserita nella rete. Per la NMT è il mero testo da tradurre, mentre per l'IA generativa è richiesta la creazione di un prompt. Un prompt è un vero e

proprio testo in cui viene richiesto all'IA di compiere un'attività specifica. La precisione e la quantità di dettagli presenti in questa richiesta garantiranno la precisione e la correttezza dell'output. Oltre alle tecnologie che governano l'attuale mondo della traduzione, il capitolo prosegue col presentare degli strumenti utili al traduttore durante l'intero processo di trasferimento del messaggio da una lingua all'altra. Questi sono gli strumenti di traduzione assistita menzionati in precedenza e le loro funzionalità principali, tra le quali la memoria di traduzione ed il database terminologico, seguiti dalle metriche di valutazione delle performance di traduzione automatica.

Successivamente, il Capitolo 2 si occupa della traduzione e della transcreazione, delle loro differenze e delle difficoltà nella resa di elementi persuasivi, emozionali e culturali da una lingua all'altra. Dal punto di vista storico, infatti, la traduzione è sempre stata vista come una tecnica attuabile in due modalità, una più letterale e l'altra ad sensum, cioè dando priorità al messaggio a discapito del testo. Mentre nel corso dei secoli si credeva che canonicamente solo uno dei due metodi potesse essere quello giusto, oggigiorno nel mondo della traduzione esistono diversi approcci che vanno adottati o scartati a seconda della tipologia di testo che deve essere tradotto. Nel corso del XX secolo sono state sviluppate varie teorie della traduzione, tra le più importanti le funzioni del linguaggio di Jakobson e la teoria dell'equivalenza di Nida. Queste teorie sono rilevanti per quanto riguarda la transcreazione, un ambito della traduzione che riguarda testi che soddisfano funzione conativa e poetica. Il termine transcreazione è accreditato ai traduttori e scrittori Purushottam Lal e Haroldo de Campos, che hanno citato questa tecnica nelle loro opere tra gli anni '50 e '70 del secolo scorso. Attualmente, la transcreazione è un ambito della traduzione che affianca il copywriting multilingue e che viene spesso confuso con la localizzazione e l'adattamento, pratiche tipiche adottate negli stessi ambiti peculiari della transcreazione. Come già detto in precedenza, la transcreazione riguarda principalmente l'ambito pubblicitario e del marketing, in quanto le pubblicità sono atte a persuadere il proprio pubblico e a suscitare determinate emozioni. Oltre alla loro funzione, il linguaggio pubblicitario è spesso molto abbellito da metafore, idiomatismi, culturemi, figure retoriche di varia natura, riferimenti extralinguistici e giochi di parole. Altri elementi di cui bisogna tenere conto nella transcreazione pubblicitaria sono i componenti di una pubblicità, come il visual, il body copy, i colori utilizzati, l'appartenenza ad un format o ad una campagna specifica, e così via. Nel momento in cui una pubblicità viene

transcreata, l'abilità del traduttore deve essere quella di mantenere questo miscuglio di creatività, emozione e memorabilità che è il fulcro del funzionamento della stessa; senza questi elementi, la pubblicità non sarebbe in grado di portare a termine il suo scopo. Questo è il caso della pubblicità B2C, ovvero quella creata dall'azienda per il consumatore diretto, che sia comunicazione promozionale o sociale. Infatti, gli avvisi pubblicitari possono avere lo scopo di persuadere o di informare, o entrambe le cose. Solitamente persuasione ed informazione sono due elementi inversamente proporzionali tra loro: ad esempio, all'interno di un curriculum vitae ci sono molte informazioni e la persuasione è al minimo. Nell'avviso promozionale di un prodotto, come una bevanda o un giocattolo, le informazioni vere e proprie sul prodotto sono poche, mentre gli elementi di persuasione sono molti. Tra i prodotti per cui viene adottato un più alto tasso di persuasione è possibile trovare i prodotti alimentari e il cibo in generale, che è stato per questo motivo scelto come ambito per il case study. Prima di passare al nucleo di questa tesi, l'ultima tematica affrontata nel Capitolo 2 è come la cultura influenzi la comunicazione pubblicitaria. Il fattore culturale è da tenere in considerazione soprattutto tra culture molto distanti fra loro. Essendo le lingue strettamente legate anche alla cultura dei loro parlanti, la transcreazione richiede un'attenzione particolare quando la comunicazione, sia verbale che non verbale, diventa interculturale. Alla luce di ciò, nel capitolo vengono presentati dei famosi modelli culturali studiati nell'ambito pubblicitario. Il primo è il modello che contrappone le culture definite high context e quelle definite low context. Queste ultime sono caratterizzate da una necessità di codifica totalmente esplicita del messaggio, al contrario delle culture high context in grado di comprendere una tipologia di comunicazione più implicita. Il secondo modello è quello delle dimensioni culturali proposto da Hofstede: culture maschili e femminili, individualismo e collettivismo, orientamento a lungo e a breve termine, indulgenza e controllo, avversione all'incertezza e distanza dal potere. Tutte le dimensioni proposte da Hall e da Hofstede sono necessarie al fine non solo di garantire una comunicazione funzionante, ma anche di veicolare un messaggio in modo che non risulti offensivo o imbarazzante per la cultura di arrivo.

I primi due capitoli rappresentano una necessaria introduzione al fine di comprendere appieno lo scopo e il contenuto dell'ultimo capitolo. Nel Capitolo 3 viene presentato e successivamente svolto un case study sulla transcreazione mediante l'utilizzo di sistemi

di NMT e di IA generativa. Nel case study vengono inseriti come input quindici differenti pubblicità appartenenti al mondo della food industry di quindici marchi differenti. Le pubblicità scelte sono molto diverse tra loro sia dal punto linguistico che creativo. Inoltre, sono volutamente di lunghezze differenti per verificare se anche la lunghezza fosse un fattore di influenza nella traduzione attuata dai sistemi scelti. Il primo sistema utilizzato nella transcreazione delle pubblicità è DeepL nella sua versione gratuita online come NMT; anche il secondo è una NMT ed è Language Weaver, inserito come plug-in nel CAT tool SDL Trados. Il terzo sistema è un'intelligenza artificiale generativa, ovvero ChatGPT nella sua più recente versione 40mni. Gli input inseriti sono tutti in lingua inglese, ma il case study riguarda due coppie linguistiche: la prima è inglese>italiano, mentre la seconda è inglese>tedesco. Come già esplicato in precedenza, l'inserimento degli input per la traduzione automatica è differente nei vari sistemi: in DeepL è stato inserito un semplice input testuale; per Language Weaver, essendo utilizzato da SDL Trados, è stato creato un progetto locale contenente un file docx. da tradurre con tutti i testi al suo interno; per l'IA generativa, infine, è stato inserito un prompt. Il prompt di base creato per il case study è lo stesso per tutti gli input, ciò che è stato cambiato sono le informazioni più specifiche di ogni pubblicità, ovvero nome del brand e della campagna, data di pubblicazione, mercato di partenza e di arrivo, lingua di partenza e di arrivo, e una breve descrizione del visual che accompagna il testo. Ogni pubblicità è presentata in una propria sezione comprendente anche il suo visual e alcune informazioni di base sulla campagna di cui fa parte. Segue a queste informazioni la traduzione dei tre sistemi in italiano con commento e, all'interno della stessa sezione, i tre output in tedesco con commento. Il commento contiene una valutazione degli errori seguendo i parametri offerti da Multidimensional Quality Metrics (MQM) nella sua versione core, avente un numero inferiore di parametri rispetto a quella completa. MQM è un sistema di valutazione studiato per output prodotti sia da traduttori che da sistemi di traduzione automatica o intelligenza artificiale generativa. A tal proposito, è giusto ribadire che lo scopo del case study è quello di valutare gli output e analizzare la presenza o l'assenza di uno "sforzo" di transcreazione, e non quello di ottenere delle pubblicità pubblicabili senza alcun postediting o revisione.

Ciò che si può evincere dal case study del Capitolo 3 è che, in questo caso specifico, la tecnologia di IA generativa si presta alla transcreazione più dei sistemi di traduzione

automatica neurale scelti. A livello di dati concreti, DeepL e Language Weaver hanno raggiunto, rispettivamente, le soglie dei 91 e 133 errori, al contrario di ChatGPT-40 i cui output ne riportano 27 per entrambe le coppie linguistiche. Uno dei motivi di successo dell'IA generativa comparato ai sistemi di NMT è sicuramente l'attività di prompting necessaria all'inserimento dell'input. Infatti, la funzione del prompt testuale è quello di dare delle informazioni di contesto e dettagli all'IA generativa in modo da ottenere un output più preciso e corretto possibile. È quindi il contesto a fare la differenza, il che è proprio ciò che manca ai sistemi di NMT che devono tradurre delle frasi singole senza alcuna informazione sulla loro funzione, la loro provenienza e il loro brand. Grazie ai dettagli presenti nel *prompt* l'IA generativa, alcuni risultati di ChatGPT-40 rappresentano delle vere e proprie transcreazioni, riproponendo figure retoriche e giochi di parole, o addirittura cambiando il testo per adattarlo ad un pubblico di nazionalità differente. Ma talvolta il sistema di IA generativa è andato oltre il prompt, scovando all'interno delle pubblicità dei dettagli che non erano presenti tra quelli inseriti come input. Nel caso di due pubblicità che fanno riferimento a due film, ChatGPT-40 ha riportato queste informazioni nell'output nonostante i riferimenti non fossero stati esplicitamente inseriti nell'input. Questo accorgimento è visibile nei commenti con cui ChatGPT-40 accompagna ogni traduzione richiesta. Nei commenti solitamente il sistema "giustifica" le sue azioni in relazione a ciò che viene richiesto nel prompt. Un'altra attività che ha distinto nel case study l'IA generativa dai sistemi di NMT è stata il tentativo di localizzazione di alcuni siti web presenti in alcuni input. ChatGPT-40 ha difatti cambiato l'estensione di dominio in .it e .de negli hyperlink che nel testo di partenza presentavano l'estensione .uk. Questa prestazione è in precedenza denominata "tentativo" perché gli hyperlink risultanti da questo cambio non esistono online, generando quindi un errore dal punto di vista della classificazione di MQM. D'altro canto, il fatto che l'IA generativa abbia tentato un'attività tipica nel mondo della traduzione e transcreazione pubblicitaria è un buon punto di partenza per degli sviluppi futuri. Sorprendentemente, ChatGPT-40 ha commesso il maggior numero di errori in una stessa pubblicità per quanto riguarda la coppia linguistica inglese>tedesco. L'errore commesso più di frequente è stato di registro linguistico sotto la macrocategoria di stile del testo, un errore ripetuto più volte anche da DeepL e Language Weaver; infatti, nella traduzione è stata utilizzata la forma di cortesia per rivolgersi all'audience della pubblicità, il che va evitato nei messaggi promozionali.

Nonostante il contesto riassunto del *prompt* e la lunghezza del testo, che trasmetteva ulteriori informazioni sul contesto di pubblicazione della pubblicità in esame, l'IA generativa ha utilizzato la forma sbagliata per rivolgersi al cliente ipotetico. Probabilmente la scelta è stata sviata dal tono meno giocoso e più apologetico della pubblicità, in quanto doveva essere un modo da parte dell'azienda per scusarsi riguardo ad un accaduto passato. Nonostante la parziale formalità, la pubblicità aveva comunque la funzione di divertire ed un linguaggio che rispecchiava questo intento.

Per quanto riguarda le prestazioni di DeepL e Language Weaver, la quasi totale assenza di contesto e l'addestramento dei due sistemi hanno portato a degli output qualitativamente inferiori a quelli del sistema di IA generativa scelto. L'esempio più lampante è quello di DeepL, un sistema addestrato e performante soprattutto in campo giuridico, le cui traduzioni sono molto formali e il registro linguistico è generalmente più alto rispetto a quello pubblicitario. Tutto ciò spiega le tipologie di errori più frequenti dei due sistemi NMT, generalmente concernenti le macrocategorie di stile nell'ambito del registro linguistico, di terminologia per quanto riguarda l'utilizzo di termini sbagliati in un dato contesto, e l'accuratezza dell'output per quanto riguarda delle traduzioni errate dettate dall'incomprensione del contesto e la mancanza di informazioni. L'errore più ricorrente nella coppia linguistica inglese>tedesco riguarda il registro linguistico, in quanto spesso le macchine hanno tradotto i testi utilizzando la forma di cortesia per rivolgersi alla clientela. Questo errore dettato dalla troppa formalità rispecchia pienamente l'addestramento di DeepL, come menzionato in precedenza. In ogni caso, non tutte le traduzioni operate da questi sistemi sono fallimentari. DeepL e Language Weaver hanno avuto dei buoni risultati nei casi in cui l'input conteneva giochi di parole o figure retoriche molto letterali, per le quali non fosse necessario lo sconvolgimento del testo e si potesse tradurre rimanendo piuttosto fedeli al testo di partenza.

Spesso si sente dire che la tecnologia rappresenta una minaccia nei confronti di persone in determinate posizioni lavorative, in quanto verranno sostituite da macchine sempre più intelligenti. Ciò che è importante ribadire è che il miglioramento continuo della tecnologia non è atto alla sostituzione, ma all'aiuto. In un mondo in cui tutto va sempre più veloce e l'attesa è stata sostituita dall'immediato, la tecnologia può rappresentare il nostro più grande alleato. L'obiettivo della tesi è quello di valutare la performance di DeepL, Language Weaver e ChatGPT-40 in questo specifico campo della pubblicità e del

marketing. Dal case study è possibile evincere che nel campo della transcreazione l'utilizzo dell'intelligenza artificiale generativa può essere un aiuto per il traduttore al fine di ottimizzare il modello ibrido e di conciliare tecnologia e creatività.

## **Appendix**

# Original copies (language: English)

So thick you'll get lost in it. Our extra thick ketchup results in an extra slow pour.

Dear Santa, I ate the cookies while i was waiting for you can have the milk. I hope I am still on your good list. Bring your Own cuz you never know

"Whoppenheimer" "Now I am become the whopper, the destroyer of all other burgers"

Fresh habits for the picky eater

SpaghettiN.5allacarbonara can help you prevent identity theft. Turn your favourite pasta dish into a safe password.

Comes with both Pros and Corns

Don't like the way I look? Bite me. Beneath their ugly appearance, our misfits are always fresh and full of organic GMO-free deliciousness. So even though they might not look picture-perfect, they always taste just as good. https://www.misfitsmarket.com/

FCK WE'RE SORRY. A chicken restaurant without any chicken. It's not ideal. Huge apologies to our customers, especially those who travelled out of their way to find we were closed. And endless thanks to out KFC team members and our franchise partners for working tirelessly to improve the situation. It's been a hell of a week, but we're making progress, and every day more and more fresh chicken is being delivered to our restaurants. Thank you for bearing with us. Visit kfc.co.uk/crossed-the-road for details about your local restaurants.

TITANIC Sink One in the Dip.

Get your snack on. Let your taste buds Samba at pinkladyapples.co.uk

How far can you go? Enter the Scorpion Challenge at tabasco/scorpion.com (if you can handle the heat).

A bear belly is better than a beer belly. Since 1920, we've created five freshly brewed flavors that are always available on tap. Enjoy these award winning bears that are suitable for every occasion. Take a sip at www.haribo.com

#### MIDLIFE CRISIS MIDNIGHT CRISIS DELIVERY UNTIL 4AM

#NationalChocolateChipDay Chip in some smiles today. Order now.

New tell uh Nuh tell ah Nou tella Neu tella Nut tella It spreads the same, no matter how you pronounce it.

## Raw DeepL (language: Italian)

Così denso che vi ci perderete dentro. Il nostro ketchup extra denso si traduce in un versamento extra lento.

Caro Babbo Natale, ho mangiato i biscotti mentre aspettavo che tu prendessi il latte. Spero di essere ancora sulla tua lista dei buoni. Porta il tuo perché non si sa mai.

"Whoppenheimer" "Ora sono diventato il Whopper, il distruttore di tutti gli altri hamburger."

Abitudini fresche per i mangiatori schizzinosi // Abitudini fresche per i mangioni schizzinosi // Abitudini fresche per i mangiatori difficili

SpaghettiN.5allacarbonara può aiutarvi a prevenire il furto d'identità. Trasformate il vostro piatto di pasta preferito in una password sicura.

Viene fornito sia con Pro che con Corns // Viene fornito con Pro and Corns

Non ti piace il mio aspetto? Mordimi. Sotto il loro brutto aspetto, i nostri disadattati sono sempre freschi e pieni di delizie biologiche senza OGM. Quindi, anche se non sembrano perfetti, hanno sempre un sapore altrettanto buono. <a href="https://www.misfitsmarket.com/">https://www.misfitsmarket.com/</a>

FCK CI SCUSIAMO. Un ristorante di pollo senza pollo. Non è l'ideale. Ci scusiamo con i nostri clienti, in particolare con quelli che hanno fatto un viaggio fuori porta per scoprire che eravamo chiusi. E grazie infinite ai membri del team KFC e ai nostri partner in franchising che hanno lavorato instancabilmente per migliorare la situazione. È stata una settimana infernale, ma stiamo facendo progressi e ogni giorno viene consegnato sempre più pollo fresco ai nostri ristoranti. Grazie per averci sopportato. Visitate kfc.co.uk/crossed-the-road per conoscere i dettagli sui vostri ristoranti locali.

#### TITANICO Affondare uno nell'acqua.

Fate uno spuntino. Lasciate che le vostre papille gustative sballino su pinkladyapples.co.uk

Fino a che punto potete spingervi? Partecipate alla Scorpion Challenge su tabasco/scorpion.com (se riuscite a sopportare il calore).

Una pancia da orso è meglio di una pancia da birra. Dal 1920 abbiamo creato cinque gusti di birra fresca, sempre disponibili alla spina. Godetevi questi orsi pluripremiati, adatti a ogni occasione. Sorseggiate un sorso su <a href="https://www.haribo.com">www.haribo.com</a>

# CRISI DI MEZZANOTTE CRISI DI MEZZANOTTE CONSEGNA FINO ALLE 4 DEL MATTINO

#Giornata Nazionale del Cioccolato Regalate un po' di sorrisi oggi. Ordinate ora.

Nuovo racconto uh Nuh tell ah Nou tella Neu tella Noce tella Si diffonde allo stesso modo, indipendentemente dalla pronuncia.

# Raw Language Weaver (language: Italian)

Così grossa che ti perderai. Il nostro ketchup extra spesso comporta un versamento molto lento.

Caro Babbo Natale, ho mangiato i biscotti mentre stavo aspettando che tu possa avere il latte. Spero di essere ancora sulla vostra buona lista. Portate i vostri cuz che non si sa mai.

"Whoppenheimer" "Ora sono diventato il whopper, il distruttore di tutti gli altri hamburger"

Nuove abitudini per i mangiatori più esigenti

SpaghettiN.5allacarbonara può aiutarvi a prevenire il furto di identità. Trasforma il tuo piatto di pasta preferito in una password sicura.

Viene fornito sia con Pro che Corns

Non ti piace il mio aspetto? Mordimi. Al di sotto del loro aspetto brutto, i nostri disadattamenti sono sempre freschi e pieni di prelibatezze organiche senza OGM. Quindi, anche se potrebbero non sembrare perfetti, hanno sempre un sapore altrettanto buono. https://www.misfitsmarket.com/

FCK CI DISPIACE. Un ristorante di pollo senza pollo. Non è ideale. Ci scusiamo con i nostri clienti, specialmente con quelli che hanno fatto di tutto per scoprire che eravamo chiusi. E senza fine grazie ai membri del team KFC e ai nostri partner di franchising per aver lavorato instancabilmente per migliorare la situazione. È stata una settimana infernale, ma stiamo facendo progressi, e ogni giorno sempre più pollo fresco viene consegnato ai nostri ristoranti. Grazie per aver accettato di collaborare con noi. Visita il sito kfc.co.uk/crossed-the-road per ulteriori informazioni sui ristoranti locali.

TITANIC Affondarne uno nel bagno.

Preparatevi uno spuntino. Lascia che le tue papille gustative siano a pinkladyapples.co.uk

Fino a che punto si può andare? Partecipa alla sfida Scorpione a tabasco/scorpion.com (se riesci a gestire il caldo).

Una pancia di orso è meglio di una pancia di birra. Dal 1920, abbiamo creato cinque gusti appena estratti che sono sempre disponibili alla spina. Goditi questi orsi pluripremiati adatti a ogni occasione. Sorseggia a <a href="https://www.haribo.com">www.haribo.com</a>

#### CRISI DI MEZZA ETÀ CRISI DI MEZZANOTTE CONSEGNA FINO ALLE 4:00

#NationalChocolateChipDay Fai un sorriso oggi. Ordina ora.

Nuovo messaggio uh No, dillo Nou tella Tè NEU Dado tella Si diffonde allo stesso modo, non importa come lo pronunci.

## **Raw ChatGPT-40 + AI comment (language: Italian)**

"Così denso che ti ci perderai. Il nostro ketchup extra denso, per una colata extra lenta." This translation captures the essence of the original message, maintaining the play on the thickness of the ketchup and its slow pour, while resonating with Italian language and culture. The length is also similar to fit the original design.

"Caro Babbo Natale, ho mangiato i biscotti mentre ti aspettavo, ma puoi prendere il latte. Spero di essere ancora nella lista dei buoni. Portati i tuoi, non si sa mai." This version preserves the playful and apologetic tone of the original, while fitting naturally into the Italian language and maintaining the length needed for the copy.

"Whoppenheimer" "Ora sono diventato il Whopper, il distruttore di tutti gli altri burger." This version maintains the playful reference to "Oppenheimer" while ensuring the text resonates with an Italian audience, retaining the original impact and length.

"Abitudini fresche per i palati esigenti" This version captures the essence of the original message, appealing to a discerning audience in Italy, while maintaining the required length and tone.

"SpaghettiN.5allacarbonara può aiutarti a prevenire il furto d'identità. Trasforma il tuo piatto di pasta preferito in una password sicura." This version keeps the playful connection between a beloved pasta dish and digital security, while fitting naturally into Italian and maintaining the original length.

"Un mix di Pro e... Cornflakes!" This version keeps the wordplay and humor while making it feel natural and engaging for an Italian audience, maintaining a similar length to fit the original copy.

"Non ti piace come sembro? Assaggiami. Sotto il loro aspetto imperfetto, i nostri "misfits" sono sempre freschi e ricchi di bontà biologica e senza OGM. Quindi, anche se non sono perfetti esteticamente, il sapore è sempre ottimo. <a href="https://www.misfitsmarket.com/">https://www.misfitsmarket.com/</a>" This version captures the playful tone and the key message, making it engaging for an Italian audience while maintaining the length and structure to fit the original copy.

"FCK CI DISPIACE. Un ristorante di pollo senza pollo. Non è l'ideale. Le nostre più sincere scuse ai clienti, soprattutto a quelli che hanno fatto tanta strada per poi trovarci chiusi. Un grazie infinito ai membri del nostro team KFC e ai nostri partner in franchising per aver lavorato instancabilmente per migliorare la situazione. È stata una settimana infernale, ma stiamo facendo progressi, e ogni giorno sempre più pollo fresco viene consegnato nei nostri ristoranti. Grazie per la vostra pazienza. Visita kfc.it/crossed-the-road per i dettagli sui ristoranti più vicini." This version maintains the tone, message, and wordplay while making it feel natural and effective for an Italian audience, with a similar length to fit the original copy.

"TITANIC Affondane uno nella salsa." This version preserves the playful reference to the Titanic while making it catchy and engaging for an Italian audience, with a similar length to fit the original copy.

"Fai uno spuntino. Fai ballare le tue papille su pinkladyapples.it" This version maintains the playful and energetic tone of the original, making it engaging for an Italian audience while ensuring the length fits the original copy.

"Fin dove riesci ad arrivare? Accetta la Scorpion Challenge su tabasco/scorpion.com (se riesci a sopportare il piccante)." This version maintains the challenge and intensity of the original, making it engaging for an Italian audience while fitting the required length.

"Meglio una pancia di orsetti che una pancia di birra. Dal 1920, abbiamo creato cinque gusti freschi, sempre pronti a spillare. Goditi questi orsetti pluripremiati, perfetti per ogni occasione. Fai un sorso su www.haribo.com" This version keeps the playful tone and message, making it engaging for an Italian audience while maintaining a similar length to fit the original copy.

"CRISI DI MEZZA ETÀ CRISI DI MEZZANOTTE CONSEGNE FINO ALLE 4 DEL MATTINO" This version maintains the play on words and the overall tone while making it suitable for an Italian audience, with a similar length to fit the original copy.

"#GiornataNazionaleDelChocolateChip Regala un sorriso con ogni biscotto. Ordina ora." This version keeps the cheerful tone and message while making it suitable and catchy for an Italian audience, with a similar length to fit the original copy.

"Nu tell a Noo tel la Noot ella Nuh tella Nut tella Si spalma allo stesso modo, qualunque sia la pronuncia." This version captures the playful nature of the original pun while making it suitable for an Italian audience, with a similar length to fit the original copy.

# Raw DeepL (language: German)

So dickflüssig, dass Sie sich darin verlieren werden. Unser extra dickflüssiger Ketchup lässt sich besonders langsam ausgießen.

Lieber Weihnachtsmann, ich habe die Kekse gegessen, während ich darauf gewartet habe, dass du die Milch bekommst. Ich hoffe, ich stehe noch auf deiner guten Liste. Bring dein eigenes mit, denn man weiß ja nie.

"Whoppenheimer" "Jetzt bin ich der Whopper, der Zerstörer aller anderen Burger"

Frische Gewohnheiten für den wählerischen Esser // Frische Gewohnheiten für wählerische Esser // Neue Gewohnheiten für wählerische Esser

SpaghettiN.5allacarbonara kann Ihnen helfen, Identitätsdiebstahl zu verhindern. Verwandeln Sie Ihr Lieblingsnudelgericht in ein sicheres Passwort.

Kommt sowohl mit Pros als auch mit Corns // Kommt sowohl mit Pros als auch Corns

Gefällt dir nicht, wie ich aussehe? Leck mich. Unter ihrem hässlichen Äußeren sind unsere Außenseiter immer frisch und voller organischer, GVO-freier Köstlichkeiten. Auch wenn sie vielleicht nicht perfekt aussehen, schmecken sie genauso gut. <a href="https://www.misfitsmarket.com/">https://www.misfitsmarket.com/</a>

FCK WE'RE SORRY. Ein Hähnchenrestaurant ohne Hähnchen. Das ist nicht ideal. Wir möchten uns bei unseren Kunden entschuldigen, besonders bei denen, die einen weiten Weg auf sich genommen haben, um festzustellen, dass wir geschlossen sind. Und ein unendliches Dankeschön an unsere KFC Teammitglieder und unsere Franchisepartner, die unermüdlich daran arbeiten, die Situation zu verbessern. Es war eine verdammt harte Woche, aber wir machen Fortschritte und jeden Tag wird mehr und mehr frisches Hähnchenfleisch an unsere Restaurants geliefert. Vielen Dank, dass Sie so viel Geduld mit uns haben.

TITANIC Eins im Tauchbecken versenken.

Holen Sie sich Ihren Snack. Lassen Sie Ihre Geschmacksknospen Samba tanzen auf pinkladyapples.co.uk

Wie weit können Sie gehen? Nehmen Sie an der Scorpion Challenge unter tabasco/scorpion.com teil (wenn Sie die Hitze ertragen können).

Ein Bärenbauch ist besser als ein Bierbauch. Seit 1920 haben wir fünf frisch gebraute Geschmacksrichtungen entwickelt, die immer vom Fass erhältlich sind. Genießen Sie diese preisgekrönten Biere, die für jede Gelegenheit geeignet sind. Nehmen Sie einen Schluck unter www.haribo.com

MIDLIFE-KRISE MITTERNACHTSKRISE LIEFERUNG BIS 4 UHR MORGENS

#NationalChocolateChipDay Verschenken Sie heute ein Lächeln. Jetzt bestellen.

Neu erzählen uh Nuh tell ah Nou tella Neu tella Nuss tella Es verbreitet sich gleich, egal, wie man es ausspricht.

# Raw Language Weaver (language: German)

So dick, dass du dich darin verirren wirst. Unser extra dickes Ketchup führt zu einem besonders langsamen Gießen.

Lieber Weihnachtsmann, ich habe die Kekse gegessen, während ich darauf wartete, dass du die Milch haben kannst. Ich hoffe, ich stehe immer noch auf Ihrer guten Liste. Bringen Sie Ihren eigenen CUZ mit, den Sie nie kennen.

"Whoppenheimer" "Jetzt bin ich der Knacker, der Zerstörer aller anderen Burger."

Frische Gewohnheiten für den wählerischen Esser

SpaghettiN.5allacarbonara Kann Ihnen helfen, Identitätsdiebstahl zu verhindern. Verwandeln Sie Ihre Lieblings-Pasta in ein sicheres Passwort.

## Mit Pro und Corns

Gefällt mir nicht, wie ich aussehe? Beiß mich. Neben ihrem hässlichen Aussehen sind unsere Außenseiter immer frisch und voller biologischer GVO-freier Köstlichkeiten. Auch wenn sie vielleicht nicht perfekt aussehen, schmecken sie immer genauso gut. <a href="https://www.misfitsmarket.com/">https://www.misfitsmarket.com/</a>

FCK ES TUT UNS LEID. Ein Hühnerrestaurant ohne Hühnchen. Es ist nicht ideal. Wir entschuldigen uns sehr bei unseren Kunden, vor allem bei denen, die sich auf den Weg machten, um festzustellen, dass wir geschlossen waren. Und endloser Dank an unsere KFC-Teammitglieder und unsere Franchise-Partner, die unermüdlich daran gearbeitet haben, die Situation zu verbessern. Es war eine verdammt gute Woche, aber wir machen Fortschritte, und jeden Tag wird immer mehr frisches Huhn in unsere Restaurants geliefert. Vielen Dank, dass Sie mit uns einverstanden sind. Weitere Informationen zu Ihren lokalen Restaurants finden Sie unter kfc.co.uk/crossed-the-road.

#### TITANIC Sink einen ins Bad.

Holen Sie sich Ihren Snack. Lass deine Geschmacksnerven Samba bei pinkladyapples.co.uk

Wie weit kannst du gehen? Nehmen Sie an der Skorpion Challenge auf tabasco/scorpion.com Teil (wenn Sie die Hitze bewältigen können).

Ein Bärenbauch ist besser als ein Bierbauch. Seit 1920 haben wir fünf frisch gebrühte Geschmacksrichtungen kreiert, die immer vom Fass erhältlich sind. Genießen Sie diese preisgekrönten Bären, die für jeden Anlass geeignet sind. Nehmen Sie einen Schluck um <a href="https://www.haribo.com.uhr">www.haribo.com.uhr</a>

## MIDLIFE CRISIS MITTERNACHTSKRISE LIEFERUNG BIS 4:00 UHR

#NationalChocolateChipDay Gib heute ein Lächeln ein. Jetzt bestellen.

Neu Tell uh Nein, sag Aha Nou tella Neu tella Mutter tella Es verteilt sich auf dieselbe Weise, Egal, wie Sie es aussprechen.

# **Raw ChatGPT-40 + AI comment (language: German)**

"So dickflüssig, dass du dich darin verlierst. Unser extra dickes Ketchup sorgt für ein extra langsames Gießen." This version captures the essence of the original, emphasizing the thickness and slow pour of the ketchup, while fitting naturally into the German language and maintaining the required length.

"Lieber Weihnachtsmann, ich habe die Kekse gegessen, während ich auf dich gewartet habe, aber du kannst die Milch haben. Ich hoffe, ich stehe noch auf deiner guten Liste. Bring lieber eigene mit, man weiß ja nie." This version keeps the playful and apologetic tone while making the message feel natural and engaging for a German-speaking audience. The length is also consistent with the original to fit the copy.

"Whoppenheimer" "Jetzt bin ich der Whopper, der Zerstörer aller anderen Burger." This version maintains the clever reference to "Oppenheimer" and keeps the impactful tone intact while fitting naturally into the German language and preserving the original length.

"Frische Gewohnheiten für wählerische Esser" This version captures the essence of the original message, appealing to selective eaters in German-speaking countries, while maintaining the length and tone required for the copy.

"SpaghettiNr.5allacarbonara kann dir helfen, Identitätsdiebstahl zu verhindern. Mach dein Lieblingspastagericht zu einem sicheren Passwort." This version retains the original playfulness while making the text feel natural and effective for German-speaking audiences, with a similar length to fit the copy.

"Mit allen Vor- und Cornflakes!" This version preserves the playful wordplay while making it feel natural and catchy for a German-speaking audience, with a similar length to fit the original copy.

"Gefällt dir nicht, wie ich aussehe? Probier mal. Hinter ihrem unperfekten Aussehen stecken unsere "Misfits" voller Frische und biologischer, GVO-freier Köstlichkeit. Auch wenn sie optisch nicht perfekt sind, schmecken sie immer genauso gut. <a href="https://www.misfitsmarket.com/">https://www.misfitsmarket.com/</a>" This version keeps the playful tone while making the message clear and appealing for a German-speaking audience, with a similar length to fit the original copy.

"FCK WIR ENTSCHULDIGEN UNS. Ein Hähnchen-Restaurant ohne Hähnchen. Nicht ideal. Unseren aufrichtigen Applaus an unsere Kunden, vor allem an jene, die weite Wege auf sich genommen haben, nur um festzustellen, dass wir geschlossen hatten. Ein riesiges Dankeschön an unser KFC-Team und unsere Franchise-Partner, die unermüdlich daran gearbeitet haben, die Situation zu verbessern. Es war eine höllische Woche, aber wir machen Fortschritte, und jeden Tag wird mehr frisches Hähnchen in unsere Restaurants geliefert. Danke, dass Sie Geduld mit uns haben. Besuchen Sie kfc.de/crossed-the-road für Informationen zu Ihrem lokalen Restaurant." This version captures the original tone and message, making it relatable and engaging for a German-speaking audience while maintaining the length and structure of the original copy.

"TITANIC Tauch einen ins Dip." This version captures the playful spirit of the original while making it catchy and relatable for a German-speaking audience, with a similar length to fit the original copy.

"Mach dir einen Snack. Lass deine Geschmacksknospen Samba tanzen auf pinkladyapples.de" This version retains the playful tone while making it feel natural and engaging for a German-speaking audience, with a similar length to fit the original copy.

"Wie weit kannst du gehen? Mach mit bei der Scorpion Challenge auf tabasco/scorpion.com (wenn du die Schärfe verträgst)." This version retains the intensity and challenge of the original, making it suitable and engaging for a German-speaking audience, with a similar length to fit the copy.

"Eine Bärchenbauch ist besser als ein Bierbauch. Seit 1920 haben wir fünf frisch gebraute Geschmacksrichtungen kreiert, die immer zapfbereit sind. Genieße diese preisgekrönten Bärchen, passend zu jedem Anlass. Nimm einen Schluck auf www.haribo.com" This version maintains the playful tone and fits naturally in German, with a similar length to the original to ensure it fits the copy.

"MITTELLEBENSKRISE MITTERNACHTSKRISE LIEFERUNG BIS 4 UHR MORGENS" This version keeps the wordplay intact and adapts it to German, ensuring it's relatable and concise while fitting the original copy's length.

"#TagDerChocolateChips Schenk heute ein Lächeln mit jedem Keks. Jetzt bestellen." This version maintains the playful tone and fits naturally in German, with a similar length to ensure it fits the original copy.

"Nu tell ah Nuh tella Neu tella Noot ella Nut tella Es lässt sich gleich gut streichen, egal, wie du es aussprichst." This version keeps the playful tone and adapts the pun for a German-speaking audience, with a similar length to fit the original copy.