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**Automatic translation of puns from *Le Canard Enchaîné***

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I, MESLET Caroline, confirm that the work presented in this term paper is my own. Where information has been derived from other sources, I confirm that this has been indicated in the term paper.

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## Introduction

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Since its creation, artificial intelligence has frequently been compared to human intelligence or seen as an improvement of the latter. Although AI can perform tasks that are impossible for humans, such as generating a piece of art within a few minutes, it still encounters obstacles. One of these is the notion of creativity. According to the *Oxford English Dictionary*, the verb “to create” is defined as follows: “Of a human agent. To make, form, set up, or bring into existence (something which has not existed before). To produce or do something imaginative or inventive” (‘create’, 2023).

In the field of translation, creativity is an essential skill, along with general knowledge. Thanks to its ever-expanding databank, AI improves its general knowledge. However, no program is yet able to give AI access to creativity.

With the development of automatic translation, also known as machine translation (MT), the idea that MT could challenge the future of translators is common. Yet, this impossibility of using creativity should counterbalance this opinion. An article from the French newspaper *Le Figaro* provides an overview of the use of MT in the field of publishing in France (Cohen, 2024). It appears that an increasing number of publishers are relying on MT, mainly for financial reasons, and ask their usual translators to proofread automatic translations. Yet, there is at least an exception for the translation of novels for which general knowledge and several months of work are needed. In addition, some literary works also require interpretation and creativity.

Creativity can be found in wordplays, which MT is usually unable to translate, as these are based on linguistic features (Leppihalme, 1997, in Giorgadze, 2014, p. 271). In *The Punster’s Amanuensis: The Proper Place of Humans and Machines in the Translation of Wordplay*, the following example of mistranslation is given by Tristan Miller:

*“For example, to native English speakers it is clear that the bank slogan “We feel loanley” contains a play on the words loan and lonely, but MT systems are stymied by the nonce term, leaving it untranslated, or else wrongly assuming it is a misspelling of lonely and losing the double meaning” (Miller, 2019, p. 57).*

Indeed, it appears that for any MT system, or even spellchecking tools, wordplays are detected as typing errors.

However, wordplay can often be used in various forms of writing, including newspapers. For example, a great number of wordplays can be found in the French satirical newspaper *Le Canard enchaîné*. Yet, as there is no existing translation of *Le Canard enchaîné*, its wordplays



are only understandable for a French readership or people who have a good command of this language. Although some articles are sometimes mentioned in foreign newspapers, these are rare instances. For example, in 2017, the Italian newspaper *Liberio* related how *Le Canard enchaîné* revealed many political scandals (Rabany, 2017).

The aim of this paper is thus to find a possibility to achieve translating wordplays with MT. How could MT translate headlines from *Le Canard enchaîné* without missing the meaning of its wordplays? Is there a possibility to help MT?

My corpus consists of a sample of around 100 issues from *Le Canard enchaîné*. Each issue contains several headlines using wordplays. After sending an email to the editorial team of *Le Canard enchaîné*, I received the authorization to use their headlines for this paper. A screenshot of the email is available in the appendix.

Most of the headlines were found on the official website of *Le Canard enchaîné*, from January 2022 to December 2023.

The first part of this paper will deal with Artificial Intelligence (AI), along with recent research in the field of MT and post editing. The specificities of DeepL will also be discussed in this part.

Then, the second part will focus on the presentation of *Le Canard enchaîné*, as well as the different types of wordplays and cultural references it contains.

According to the type of wordplay used, the selected headlines were divided into different categories, the two main categories being idioms and cultural references. Regarding idioms, these examples were classified more precisely, according to four different techniques: phonetic, lexical, morphological techniques, and orthographic and graphic techniques. Each of these techniques cover various literary devices, that will be explained, along with examples from my corpus and the context in which such headlines were written.

As far as cultural references are concerned, a survey was conducted to determine the knowledge of people regarding twenty cultural references which were found in some of the headlines from my corpus. The results will be dealt with in the part about cultural references.

In order to analyze the automatic translation of these headlines, they have all been translated a first time with DeepL at the beginning of this year. Next year, they will be translated a second time, next year, to see if there is any noticeable change.

## Part I. Artificial Intelligence and translation

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Before dealing with machine translation, it is important to define artificial intelligence from which it derives. According to Legg and Hutter in *Collection of Definitions of Intelligence*, the meaning of intelligence can differ from one person to another. Yet, through the different answers obtained in their survey, the authors retained three similar characteristics, leading them to give the following definition: “Intelligence measures an agent’s ability to achieve goals in a wide range of environments” (2007, p. 9).

As far as artificial intelligence is concerned, there is once again a significant range of possible definitions, but the most concrete one is the following, quoted in *Artificial Intelligence and the Future of Defense: Strategic Implications for small- and medium-sized Force Providers*: “AI is defined as non-human intelligence that is measured by its ability to replicate human mental skills, such as pattern recognition, understanding natural language [processing] (NLP), adaptive learning from experience, strategizing, or reasoning about others” (Russel and Norvig, 2009, in De Spiegeleire, Maas and Sweijts, 2017, p. 28).

Artificial intelligence is thus able to compete with human intelligence by mimicking it. This observation echoes the concern voiced by translators, as stated in the introduction, although it also applies more generally to the labor market.

Because of its increasing influence, AI has to be regulated. This led the European Union to propose a special legal framework. The first discussions happened during the European Council on October 1<sup>st</sup>, 2020. In April 2021, the European Commission presented a “Proposal for a regulation laying down harmonised rules on artificial intelligence,” also known as AI Act (Digital, 2023). After six months of negotiations and a three-day debate in December 2023, the law was passed by the European Parliament on March 12<sup>th</sup>, 2024, with 523 votes in favor.

According to the website Reuters, the law still needs to be approved by all European countries this May and is expected to enter into force in 2025. In May 2026, the AI act should be fully effective (Foo Yun Chee, 2024).

Since the first discussions on AI regulation, the AI act has been raising concern among companies developing AI models as they see this new regulation as a limit to innovation. This concern is shared by some European countries, such as France and Germany. On the contrary, the European Parliament rather seeks to preserve rights and liberties. These opposing views are what caused the three-day debate of December 2023 (Davies, 2024).

However, the AI act is also seen as a blueprint in the domain of AI regulation that could be used as a model for future legislation.

The AI act aims to regulate AI models which are considered as a potential threat to the liberties of European citizens. The need for restrictions is thus measured according to the risk. AI models which fall in the unacceptable risk are prohibited, while high-risk AI models are subject to more control and transparency. Finally, the minimal risk category includes most of the AI models integrated into applications. This category does not need specific regulations. However, with the development of generative AI and the problem of disinformation, it could change.

Regarding automatic translation, it appears that the AI Act does not take into account this category. Indeed, as of 2021, there was no mention of MT in the guidelines (Albarino, 2021). This could be explained by the fact that the AI Act focuses mainly on generative AI, which is more likely to spread misinformation or face misappropriation. However, the author also states that “chatbots and products of natural language processing (NLP) are considered lower risk.” In an article from 2023, MT is also considered as belonging to the limited risk category, along with any AI tool interacting with people (‘Nortal’, 2023). The rule applying to lower-risk AI is mainly to “inform users that they are interacting with a machine”, as stated by Albarino (2021).

While AI is in constant expansion of its possible applications in daily life, machine translation is also taking a significant place in the field of translation.

## **I.1. Machine translation**

### **I.1.1. Definition and evolution of MT**

According to the *Oxford English Dictionary*, machine translation refers to “The process of translating by means of a computer” (‘machine translation’, 2023). The idea of using a computer as a translation tool is attributed to Warren Weaver, director of the Natural Sciences Division of the Rockefeller Foundation (Hutchins, 1997, p. 239). After several years, the first demonstration of machine translation happened on 7<sup>th</sup> January 1954.

According to Christopher D. Manning, it is possible to divide the development of NLP into four eras (Manning, 2022, pp. 128-129). The first era runs from 1950 to 1969 and corresponds to the first research carried out by Warren Weaver. At that time, it was thought that machine translation would use the same principles as code-breaking during World War II. In the context of the Cold War, the aim was to be able to translate scientific documents. However, because of a lack of data in the field of linguistics and machine learning, the first automatic translation systems could only work at a word level.

Improvements happened during the second era, from 1970 to 1992. This era saw the demonstration of various systems relying more on linguistic phenomena and machine learning.

Thanks to the emergence of digital content, there was a shift of focus during the third period, from 1993 to 2012. At that time, the aim was rather to develop algorithms capable of achieving language understanding by relying on a source text. The importance of algorithms still exists nowadays in the development of MT systems.

Finally, the period from 2013 onwards corresponds to the development of deep learning which became an important feature for MT systems.

Nowadays, MT services are available in various forms on the internet. The latest innovation in MT is Meta's AI tool which can translate videos into any language (Ma, X. *et al.*, 2023). Despite facing occasional failure, MT has never ceased to improve to provide the most accurate translation possible. Since its creation, the main goal of MT has always been to translate a significant number of documents to help human translators work faster and more efficiently.

However, as stated in the introduction, there is still an area in which MT is unable to surpass human translators: creativity.

## **I.1.2. A growing interest for MT and creativity**

### **I.1.2.1. The Joker Project**

At the same time as MT is being improved, researchers are getting increasingly interested in the topic of creativity in MT. The most recent study focuses on the ability of Python and AI methods to translate puns. In an article published in September 2023 and entitled *Does AI Have a Sense of Humor?* authors Olga Popova and Petra Dadić (2023) present their study on pun translation through three tasks. These tasks are part of the Joker project, a CLEF 2022 workshop. CLEF refers to the *Conference and Labs of the Evaluation Forum* ('*Conference and Labs of the Evaluation Forum*', (no date) which is focused on monolingual and cross-language research, using European languages. In 2022, the Joker project was introduced as a workshop which aims at gathering translators and computer scientists in order to achieve the automatic translation of wordplays using the English-French language pair.

In 2023, the Joker project was modified to also include the English-Spanish language pair, as explained by Popova and Dadić (2023). According to them, the results obtained in 2022 allowed for a modification of the tasks of the Joker project.

The three tasks used for the Clef 2023 Joker project ('*CLEF 2023 Joker Track: Automatic Wordplay analysis*', no date) and which are used by Popova and Dadić (2023) in their article

are the following: pun detection, location, and interpretation, and are performed for the English-French and English-Spanish language pairs.

As mentioned on the Joker project website, pun detection, which is the first task, refers to classifying and explaining each pun. As explained by author Aygyul Epimakhova in an article entitled “Using machine learning to classify and interpret wordplay”, the first task is thus composed of two parts: classification and interpretation (Epimakhova, 2022, p. 1). Although the classification is a success, the interpretation is more challenging, as stated by Popova and Dadić (2023). According to them, the main reason for this difficulty is a “style shift in the translation of puns” (2023, p 5).

Before detailing their method, the authors first explain the difference between pun and wordplay which lies in the fact that wordplay is a generic term, while pun is a subcategory of wordplay.

Regarding the interpretation of wordplays, a distinction has to be made between pun synonyms and target synonyms. The first term refers to a word used instead of another whose sound or spelling is similar, thus changing the meaning of the sentence and producing a humorous effect. Target synonym refers to the focus of the pun.

The authors then provide a summary of previous attempts at pun translation, whether by human translation or MT.

### **I.1.2.2. PunCAT**

One of the previously conducted studies that can be mentioned is the development by Tristan Miller of a computer-assisted pun translation tool named PunCAT. In a chapter dedicated to pun translation and the interaction between translators and MT Miller and Kolb (2022) explore the use of PunCAT to translate puns from English into German.

Through an illustration, the authors show the four parts that compose this tool (2022, p. 70). The pun is first displayed, along with the context in which it appears. Then, there is the dictionary, which is composed of two tabs. The “Source” tab displays the words used in the pun, along with their definition and possible senses. The “Target” tab displays these words in the target language. It has been designed to show the translation for one sense at once. If another sense is selected in the “Source” tab, it will automatically be changed in the “Target” tab where its translation will be generated.

The lexical-semantic network corresponds to a given concept linked to the selected word, along with synonyms. These synonyms can be more general concepts (hypernyms) or more specific concepts (hyponyms).

Finally, the last section contains a list of possible translations for a given word. A difference is made between the target word and the pun word. It also displays phonetic and semantic similarities between both, calculated by the system.

In addition, PunCAT relies on electronic lexical-semantic networks and electronic pronouncing dictionaries. Despite the existence of such sources, the authors note that some queries might not be fulfilled because of information gaps. For the experiment, the authors chose puns where enough information was available to obtain an efficient translation.

During the first session of the experiment, participants translated six puns without using PunCAT. PunCAT was introduced in the second session. Participants were also asked to give their opinions about this experiment.

In another part, the authors deal with the participants' interactions with PunCAT and their impact on the translation process. Although the results do not show whether using PunCAT influences the time spent on translating puns, it might be different once participants are well enough accustomed to this tool.

Contrary to Miller and Kolb (2022), Popova and Dadić (2023) only focus on the ability of MT to translate puns. Since the language pairs used in these studies are different, results are accordingly different: if there is no post-editing for MT output, pun translation will remain a challenging task for MT, as observed by Popova and Dadić (2023).

Contrary to the tools used by Popova and Dadić (2023) in their study, it appears that PunCAT is significantly more effective for pun translation since it provides a great range of possibilities, although it depends on the working style of each translator. In addition, there is no proof regarding whether PunCAT has a significant impact on the time spent translating puns.

Yet, in both cases, the output still needs to be assessed by a human translator. This task is commonly referred to as post-edition or post-editing (PE). According to the website RWS, "PE differs considerably from classic translation. It is actually a special form of review" (Beßler, 2021).

## **I.2. The place of human translators in the MT process**

### **I.2.1. Post-editing**

In the case of MT, PE can be referred to as machine translation post-editing (MTPE), as used by Celia Rico Pérez (2024) in an article about MTPE guidelines, entitled "*Re-thinking Machine Translation Post-Editing Guidelines.*"

In this article, the author takes as a starting point the fact that guidelines for MTPE are essential to conciliate expectations and quality.

#### **I.2.1.1. Post-editing guidelines**

According to Celia Rico Pérez, the first guidelines were defined in 2003 by Jeff Allen (Allen, 2003, *in* Rico Pérez, 2024, p. 28). These guidelines divided post-editing into two categories: light post-editing and full post-editing. While light post-editing is characterized by minimal intervention, full post-editing aims at a quality close to human translators.

However, it is hard to make a difference between these two approaches, especially when used in MTPE projects, where the main challenge is to decide whether a change has to be made or not when post-editing MT output.

Rico Pérez (2024) also points out that these guidelines were established when the human-machine relation was different, because of the wish to aim at Fully Automatic High Quality Machine Translation (FAHQMT). According to this view, human translators were only part of the "undesirable final step in MT development", which is MTPE, as quoted by the author (Vieira 2019, p. 319, *in* Rico Pérez, 2024, p. 27).

However, a shift happened with the development of neural machine translation (NMT), enabling a different approach to MTPE, which is based on giving wider access to MT. Instead of being seen as a replacement for professional translators, MT can now be used by anyone.

Since MTPE is changing, new guidelines need to be defined. That is the aim of Celia Rico Pérez's 2024 article.

To begin with, several aspects need to be taken into account, as stated by the author: "type of MT engine, description of source text, client's expectations, volume of documentation to be processed, turnaround time, errors to be corrected, document life expectancy, and use of the final text" (Allen, 2003; Guerberof-Arenas, 2013; O'Brien, 2011a, *in* Rico Pérez, 2024, p. 28), as quoted by the author.

### **I.2.1.2. Post-editing and client's expectations**

Depending on the client's expectations, three modes of post-editing are possible: rapid, partial, or full post-editing. Correction strategies will differ according to the mode used.

The role of client's expectations has been noted by Rudy Loock (2019). Indeed, in an article entitled "*La plus-value de la biotraduction face à la machine*," the author points out that since machines are unable to consider some requests made by clients, like text format, register, the use of anglicisms or not, and so on, translators are thus here to answer the client's needs.

Regarding MTPE, Celia Rico Pérez (2024) also mentions tension factors, which are mostly linked to a high demand for productivity. In this regard, MT is considered essential for business strategy, while human translators remain in the background, with the task of post-editing.

As far as translators are concerned, they either accept or reject MTPE, which they consider either as only revising or on the contrary, another form of translation. As a result, tensions arise from the fact few instructions are given to translators, mainly because clients are not able to set a margin of error.

Error acceptability is another debate since it depends on the MT output and purpose of the translated text.

### **I.2.1.3. Post-editing and translator's expectations**

Celia Rico Pérez (2024) then defines the translator's expectations towards MTPE guidelines, which have not been sufficiently taken into account by previous studies, according to the author.

Mentioning Guerberof-Arenas' study about the opinion of translators on MTPE guidelines, she states that these guidelines need to be improved to achieve better job satisfaction.

The nature of MTPE also has to be taken into account, as the boundary between MT and translation memories (TM) output is often difficult to perceive.

### **I.2.1.4. Post-editing and quality**

Quality is another important factor in MTPE, as much as defining NMT errors. Although NMT seems to be more effective than statistical machine translation (SMT), there are still improvements that can be made. Moreover, what makes NMT errors difficult to identify is the fact that this system is more fluent, as shown by the author through the mention of some studies. In this regard, edits are often irrelevant, as they do not affect the quality of MT.



The last part of the article focuses on the composition of the MTPE ecosystem. The metaphor of ecosystem is used to describe the translation process. The MTPE ecosystem is thus composed of situated information, a text to post-edit, and instruction for the MTPE process. according to the author, taking these elements into account when creating guidelines will favor a better understanding of the MTPE process.

Situated information refers to the context in which MTPE guidelines are defined.

As far as the text is concerned, there are some aspects that the translator needs to know, including its domain, or its purpose.

Finally, MTPE instructions should rely on general instructions and language-specific instructions.

But despite this specific framework designed to ensure the efficiency of PE, this task is far from being accepted by professional translators. Indeed, since PE is not considered as translation, it is often seen as less gratifying, compared to translation. In her article entitled "*Technologies et bien-être des traducteurs*," Sara Salmi (2022) states that MT even disadvantages translators, mainly because it is considered quicker and cheaper by companies that are thus only asking professional translators to proofread MT output. Moreover, post-editing is often badly paid, leading to a complete disregard felt by professional translators.

In this regard, the status of human translators in post-edition needs to be redefined. Indeed, if considering the research conducted by Popova and Dadić (2023), post-editing is not mentioned, which raises the problem of the place of human translators in the MT process.

### **1.2.2. Pre-edition**

One interesting approach to better include human translators in the MT process is the idea of pre-edition, instead of post-edition. This idea is developed in an article entitled "*Reassessing the proper place of man and machine in translation a pre-translation scenario*" (Ive, Max, and Yvon, 2018). The article focuses on the possibility of using pre-edition, instead of post-edition when dealing with machine translation (MT). In this way, the order in human-machine interaction is reversed.

The goal of pre-edition is mainly to anticipate errors or difficulties that can be met by MT. To do so, a human translator will analyze the text to find any potential difficulties and look for additional references to help the machine understand the text better. Resources such as parallel corpora can be used for this part. According to the authors, this part is similar to the process done by any human translator before translating a text.

Then, the machine will receive translation produced by the human translator, before processing to the automatic translation.

Because errors or difficulties are anticipated, this method focuses more on quality than quantity, with up to 20% of the total improvement in translation quality, as stated by the authors (Ive, Max, and Yvon, 2018, p. 305).

However, the efficiency of pre-edition can vary, as difficulty levels are different from one text to another, but also according to the language pair involved.

With the rise of MT, two issues need to be addressed. On one hand, professional translators need to accept its impact on the labor market. On the other hand, a better framework needs to be designed regarding the tasks attributed to post-editors so that it does not appear as a proofreading task, but closer to the work of a professional translator who uses MT to achieve better efficiency, as well as improving the machine for future translations. In this regard, human translators and MT could work together on the same level.

### **I.3. DeepL: pros and cons**

As stated in the introduction, the goal of this paper is to study the capacity of MT in the translation of wordplays, especially those from *Le Canard enchaîné*. To do so, DeepL will be used. Available online since August 2017, this automatic translation browser was created by Jaroslaw Kutylowski, founder of DeepL SE, a German company based in Cologne ('DeepL', no date). It provides translation in any language of the European Union, except Irish, Maltese, and Croatian. In addition, DeepL can also translate from Arabic, Indonesian, Norwegian, Turkish, Japanese, Chinese, and Russian. A difference is also made between British and American English, as well as between Portuguese and Brazilian Portuguese.

#### **I.3.1. Errors**

DeepL is not infallible and sometimes makes errors. Despite these errors, DeepL is still widely used for automatic translation, especially among students. In "*La traduction automatique en 2021. Qui, quoi et comment ? Une enquête sociolinguistique*," Gilles Cloiseau (2022) conducted a survey in which participants are students. The goal of this article is to analyze how students use MT, depending on their studies. Thanks to a form, the author was able to obtain diverse answers regarding the use of MT, as well as ask students about their opinions on a particular translation made with DeepL.

Although it depends on the type of studies of the participants, it still appears that students are more likely to use automatic translation when needing to translate. However, results also showed that students who tried to translate by themselves before looking at the automatic translation were less satisfied with DeepL's translation. On the other hand, students who looked at the automatic translation before trying to come up with their own translation were more likely to be influenced by DeepL's suggestions.

In "*Traduction automatique et biotraduction : le mariage forcé*" (Breyel-Steiner and Grass, 2021) Christine Breyel-Steiner and Thierry Grass state that professional translators react differently to automatic translation, especially when processed by DeepL. Indeed, some think that the rise of MT will be the doom of translators, while others consider that it will never be better than translators. And finally, some think that MT needs to be included in the work done by translators.

However, as stated in the introduction, it appears that DeepL also has specific errors that are different compared to the ones that can be found in other MT browsers. One of these errors appears through inconsistencies when submitting the same passage in two different years. This phenomenon has been observed by Bruno Poncharal (2021) in his article entitled "*La TA à l'épreuve du texte littéraire : d'une (im)possible restitution de l'expérience de lecture ?*" Using DeepL to translate passages from English novels, the author explains how DeepL has difficulties in choosing verb tenses, for example.

Another possible error I noticed is a difference in results when typing a sentence or just copy-pasting it. For example, I asked for the translation of the following headline from *Le Canard enchaîné*: "Laïcité, j'efface ton nom..." (2020s)

After typing it on DeepL, the following suggestions were obtained:

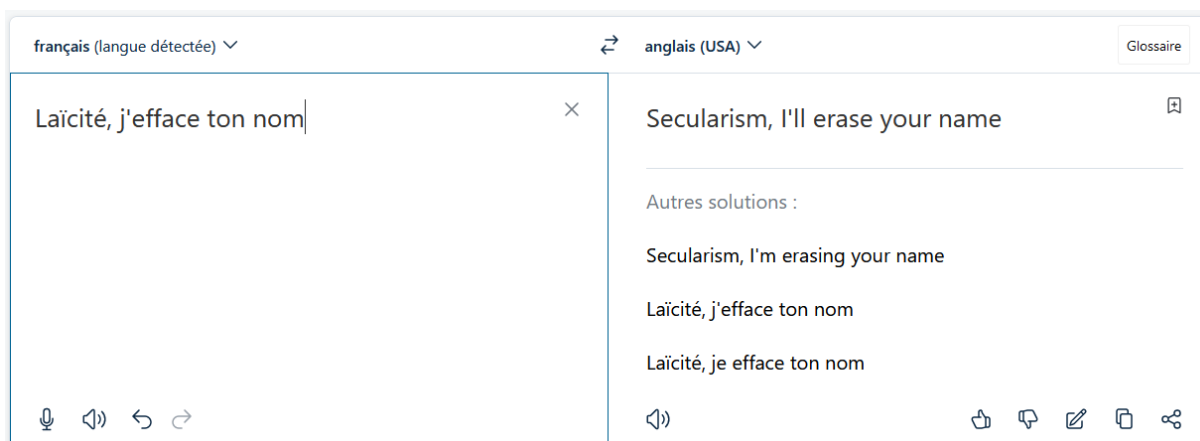


Figure 1 Translation suggestions for "Laïcité, j'efface ton nom..." (typed version).

Screenshot from DeepL

Two of the suggestions are not even translations. “je efface” is not even grammatically correct. Regarding the other two suggestions, DeepL seems to have difficulties in choosing between verb tenses, similar to the observation made by Poncharal (2021). In our example, the suggestions given by DeepL include both present continuous (“I’m erasing”) and future simple (“I’ll erase”) to translate the present tense of the source text.

When doing a copy and paste of the same sentence, the results are slightly different as it can be seen with the following suggestions:

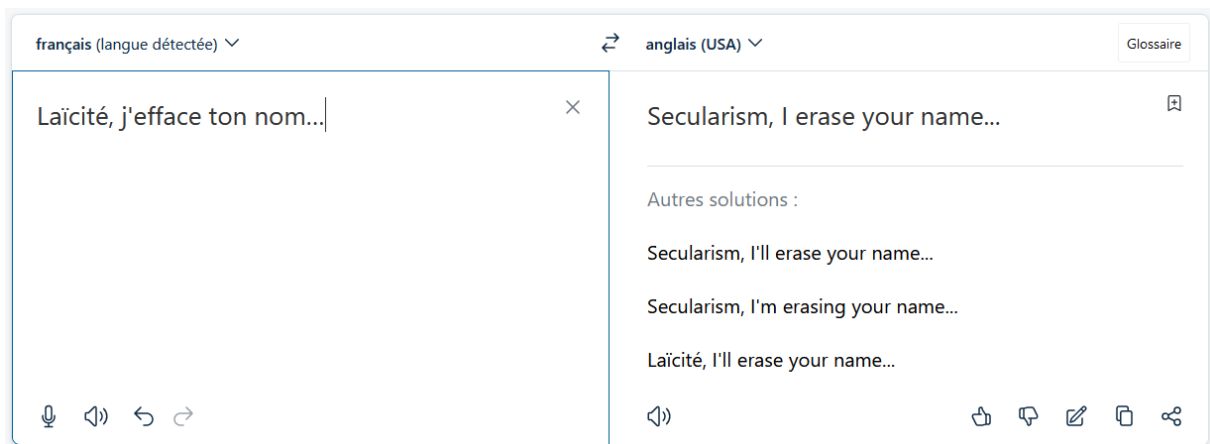


Figure 2 Translation suggestions for "Laïcité, j'efface ton nom..." (copy and paste version).  
Screenshot from DeepL.

Compared to the previous example, the possible translations remain, and another one has been added (“Secularism, I erase your name...”) All suggestions are possible translations, except for the last one where the French word “laïcité” remains untranslated, probably because of the capital L. DeepL thus considered it as a proper noun and did not translate it.

Although it works differently compared to other MT browsers, especially since it relies on a parallel corpus on its own, it seems that DeepL still presents difficulties in achieving satisfying translations.

### I.3.2. Multiple suggestions

Unlike other automatic translation browsers, DeepL can provide several possibilities of results for a given translation which allows its user to modify the output of a given translation. It also gives the possibility to modify each word of the translation to replace them with synonyms. Finally, DeepL is also linked to the parallel corpus Linguee (Linguee, no date) which it uses as a database composed of texts provided in any language of the EU, except Irish and Croatian.

In addition, it is also possible to look for examples from English to Japanese, Chinese, and Russian, and vice versa.

According to the article from *Le Figaro*, some publishers chose DeepL to translate novels for which little to no interpretation or creativity is needed (Cohen, 2024). This thus statement shows that DeepL is also used by professionals.

On March 9<sup>th</sup>, 2016, the following headline was published: "*Hollande : Moi aussi, je serai bientôt à la rue !*" (2016e) When trying to translate this headline with DeepL, I obtained the following result:



Figure 3 Translation suggestions for "Moi aussi, je serai bientôt à la rue !" Screenshot from DeepL.

In this example, there is a wordplay with the expression "*être à la rue*" (to be homeless) as it is misinterpreted as meaning "*être dans la rue*" (to demonstrate in the streets).

As it can be seen in this screenshot, the headline was translated as meaning "to be homeless". Since post-edition was required to include the other meaning more explicitly, I used a feature allowing me to change each word of the obtained translation.

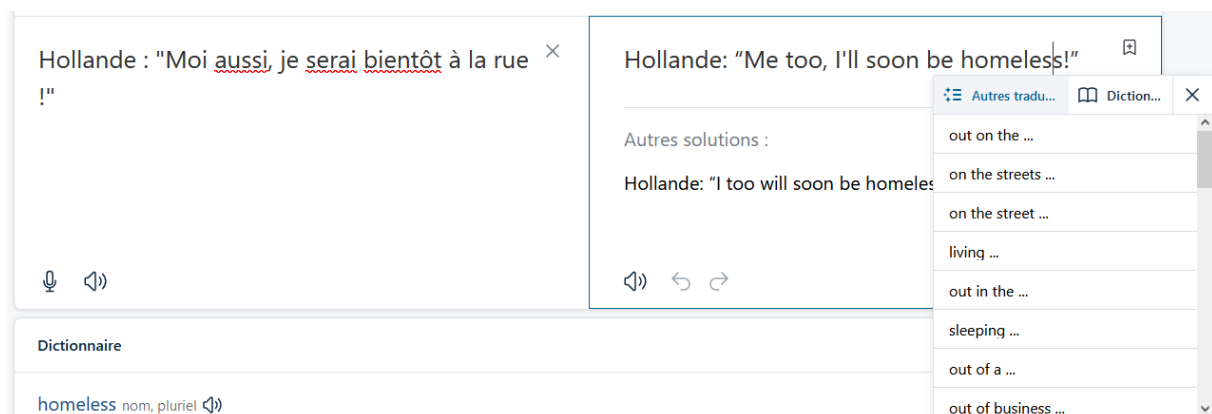


Figure 4 Other translation possibilities for "homeless". Screenshot from DeepL.

As it can be seen in this screenshot, the drop-down menu allows users to substitute a word with another suggestion given by DeepL. In the case of the noun “homeless,” it can be replaced by the expression “on the streets,” which is closer to the French expression than “homeless” is.

If we consider a pre-edition scenario, as suggested by Ive, Max, and Yvon (2018), the following modification can be made on the original headline:



Figure 5 Pre-edition scenario for "Moi aussi, je serai bientôt à la rue !" Screenshot from DeepL.

Thanks to the substitution of the coordinating conjunction *à* by the coordinating conjunction *dans*, which is more idiomatic in this case, the translation proposed by DeepL is “on the streets,” similar to the suggestion mentioned previously with the drop-down menu.

This translation seems to be closer to the real meaning of the headline. In fact, although it might still be interpreted as meaning “to be homeless”, the fact that “streets” are mentioned without any precise context might lead the reader to expect a different, yet implicit meaning.

These examples of pre-edition and post-edition with DeepL thus show that these scenarios are partially efficient. However, one may wonder if these observations apply to every example of my corpus since there are different types of wordplays, as it will be detailed in the next part.

## Part II. *Le Canard enchaîné* and its wordplays

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### I.4. *Le Canard enchaîné*: a satirical newspaper founded on wordplays

The French satirical newspaper *Le Canard enchaîné* was created in September 1915 by Maurice Maréchal, with the help of a cartoonist, Henri-Paul Gassier (Cariguel, 2017, p. 187).

In the context of the First World War, many satirical newspapers already existed, as stated in a blog by Laurent Arzel on Gallica. However, Maurice Maréchal, being himself a writer for one of them, appeared to have contradictory views with the founder of the weekly *La Guerre Sociale*. This opposition thus led him to create his own newspaper according to his ideas.

According to Arzel (no date), the name of *Le Canard enchaîné* is a reference to the French slang *canard* which stands either for a newspaper, a rumor spread by newspapers, or a piece of paper about miscellaneous news and which is often decorated with woodcuts. (Definitions for *canard*, according to the *Larousse dictionary*, no date)

When he first introduced his newspaper, Grassier played on words and stated: “*Enfin, Le Canard enchaîné prendra la liberté grande de n’insérer, après minutieuse vérification, que de nouvelles rigoureusement inexactes*” (Finally, after a meticulous verification, *Le Canard enchaîné* will take the great liberty of only including absolutely false information)

This statement is said to point out the link between French newspapers and propaganda during wars.

As far as the adjective *enchaîné* (chained) is concerned, Azrel (no date) believes that it is a reference to another newspaper, *L’Homme libre* (The free man) that faced censorship and was thus renamed *L’Homme enchaîné* (The chained man).



Figure 6 Advert for *Le Canard enchaîné*. Source: Le blog Gallica

On September 10<sup>th</sup>, 1915, this advertisement for *Le Canard enchaîné* was published in another newspaper, *L'Humanité*. Under the drawing of a chained duck, the following sentence can be read: “*Je suis enchaîné, c'est vrai ! Mais je n'ai aucun fil à la patte.*”

This sentence is a play on words with the noun *patte*. Indeed, although it appears in the expression “*avoir un fil à la patte*,” the noun *patte* can also be considered on its own, meaning “leg”. It is thus a direct reference to the duck which appears in every issue of *Le Canard enchaîné*. This reference also creates a wordplay based on the difference between proper and figurative sense.

Moreover, the French expression “*avoir un fil à la patte*” means “to be tied down”, or “to be constantly watched”, which expresses the will of the journalists and cartoonists from *Le Canard enchaîné* to use the freedom of speech, instead of having limits imposed on them.

Nowadays, *Le Canard enchaîné* is still in favor of the freedom of speech, as it can be seen on the home page of its website.



## “ LA LIBERTÉ DE LA PRESSE NE S’USE QUE QUAND ON NE S’EN SERT PAS ”

Bienvenue au « Canard enchaîné » et merci de vous abonner au seul journal qui a une chaîne au cou, certes, mais n’a pas de fil à la patte. « Le Canard », comme vous le savez, est un phénomène unique dans la presse écrite française et même mondiale, car il est totalement indépendant.

Indépendant de la publicité et, donc, à l’abri des pressions qui vont avec. Il tire ses ressources – depuis 1915 – du produit exclusif de ses ventes et de la fidélité de ses lecteurs.

Indépendant également de la finance. Il n’appartient pas à un quelconque caïd du CAC40 mais il est l’entière propriété de ses salariés. Une singularité qui lui a d’ailleurs permis de résister à toutes les entreprises de rachat ou de déstabilisation.

Cette indépendance financière se double d’une indépendance politique. « *Le Canard n’est ni de gauche, ni de droite, il est d’opposition* », résumait un de ses anciens directeurs, qui le décrivait aussi comme un journal irrévèrent, d’humeur et de bonne humeur.

Si « *le Volatile* », comme l’avait jadis baptisé de Gaulle, penche quand même à gauche, il n’est inféodé à personne, à aucun parti politique ou syndicat, à aucune chapelle. Il est donc libre de toutes entraves. De là vient sa force pour tenter de vous informer au plus près et de vous distraire au mieux.

Bonne lecture.

Figure 7 Home page for lecanardenchaîné.fr

As it can be seen, there is once again a mention of the fact that, although *Le Canard enchaîné* might be chained, it is not tied up (“*seul journal qui a une chaîne au cou, certes, mais n’a pas de fil à la patte*”). On top of that, a slogan has been added: “*La liberté de la presse ne s’use que quand on ne s’en sert pas*” (Freedom of the press only wears out when it is not used).

Regarding this slogan, it can be seen that there is a play of words. Indeed, the French verb *user* has two possible meanings: “to wear out” or “to use”. It is thus possible to interpret the slogan in two different ways.

### 1.5. The various types of wordplays in *Le Canard enchaîné*

As a satirical newspaper published every Wednesday, *Le Canard enchaîné* deals with daily news while using a humoristic tone. This humor appears through the use of wordplays, as explained in Popineau’s article on the translation of wordplays and spoonerism in *Le Canard enchaîné*, as well as in *Private Eye* (Popineau, 2015). In her article, the author describes various types of wordplays that produce humor.

Through the many examples given by the author, it thus appears that there are several literary devices which can produce humor. Before looking at the different types of wordplays in detail, the examples of the corpus were divided into two broader categories: idioms and cultural references.

The first broad category which has been identified involves idioms. According to the *Oxford English Dictionary*, an idiom is “a form of expression, grammatical construction, phrase, etc.,

used in a distinctive way in a particular language, dialect, or language variety; spec. a group of words established by usage as having a meaning not deducible from the meanings of the individual words” (‘idiom’, 2023).

Regarding my corpus, it appears that some examples rely on wordplay involving famous French sayings or expressions.

### **I.5.1. Idioms**

As far as idioms are concerned, they were classified into different subcategories, according to the type of modification they underwent. These modifications will be detailed in the next part.

In a chapter from “*Crossing Languages to play with words*,” and entitled “*Varieties of wordplay*,” Verena Thaler also proposes a classification for the most frequent types of wordplays, composed of four main categories: phonetic techniques, lexical techniques, morphological techniques, and orthographic and graphic techniques (Thaler, 2016).

Using Winter-Froemel’s (2016) and Thaler’s (2016) classifications, the different types of wordplay found in my corpus will be explained.

#### **I.5.1.1. Phonetic techniques**

The first category in Thaler’s classification relies on phonetic techniques (Thaler, 2016, p. 52), which can in turn be divided into several categories: play on homophones, play on similarity of pronunciation, play on permutation of sounds, play on rhythm and rhyme, and play on alliteration and assonance.

##### **I.5.1.1.1. Homophony**

The first subcategory of phonetic techniques is homophones. In *Puns, Ironies (Plural), and Other Type-4 Patterns*, American linguist Louis G. Heller makes the following statement about the use of homophony to produce puns:

*“Some puns [...] work equally well whether written or spoken. Some must be delivered in one medium and definitely not in the other. One could have an orthographic pun on bow, which would be spelled alike whether the meaning signified “a weapon used with arrows” (phonological /bəʊ/) or “a bending from the waist employed as a social amenity” (phonological /baʊ/). If one spoke the line containing the word, one would be constrained*

to choose between the two articulations, and the audience would not recognize the other possibility” (Heller, 1983, pp. 439-440).

In *Varieties of Wordplay*, Thaler (2016) quotes Long and Graesser to give the following example of homophones: “When you step on a grape it gives a little whine.” (Long and Graesser, 1988, p. 44, in Thaler, 2016, p. 53) In this example, the homophony appears between two nouns, “whine” and “wine,” thus creating two different meanings.

In my corpus, an example of homophones can be found in the headline from September 11<sup>th</sup>, 2013. In 2013, François Hollande was the French president, and he was given the following line: “*J’aimerais bien qu’on me porte ONU!*” (2013a)

There is a play on words involving the acronym ONU (*Organisation des Nations Unies*, French acronym for UN) and the French idiom “*porter aux nues*,” as both have the same pronunciation (phonological /ɔny/). In French, *porter aux nues* means to overestimate or praise someone excessively. Since the headline refers to the UN Security Council about Syria (Security committee, 2013), it could suggest that Hollande wants to be praised for his decisions. However, if someone read aloud this headline, the wordplay would be lost because of the similarity of sounds between “ONU” and “*aux nues*”.

#### **I.5.1.1.2. Similar pronunciation**

The second subcategory of phonetic techniques is the play on similarity of pronunciation. Plays on similarity of pronunciation rely on phonetic similarities between two groups of words. Quoting a French advertisement for cigarette paper, Thaler gives the following: “Dreh bien !” (Forgács and Göndöcs, 1997, p. 63, in Thaler, 2016, p. 53) In this example, there is a similarity in pronunciation between the adverb *très* in French and the verb *dreh* in German. It thus creates a play of words by including the verb *dreh* (twist) in the expression “*très bien*” (very good).

In my corpus, the following example of a play on the similarity of pronunciation can be found: “*Avec le Grec on s’en Zorba !*” (2015a) In this example, *sort pas* (no way out) and the name “Zorba” have the same pronunciation, thus creating a humorous pronunciation of the French expression “*on ne s’en sort pas*” (there is no way out).

Interestingly, this wordplay also seems to replicate the accent of a German person speaking French, since this quote is given to former German Chancellor Angela Merkel.

This headline was published on July 8<sup>th</sup>, 2015, when Greece refused help from the European Union, regarding their financial crisis (Traynor *et al.*, 2015)

Moreover, “Zorba” is also a reference to the film *Zorba the Greek*, also known as *Zorba le Grec*, in French. Released in 1964, this film is an adaptation of Níkos Kazantzákis’ novel, *Alexis Zorba*, written in 1946.

Since *Zorba the Greek* was included in the survey about cultural references, the results regarding this film will now be discussed.

To begin with, *Zorba the Greek* is among the least familiar cultural references, with an overall total of 11 positive answers. Regarding each age category, this film is especially familiar to respondents aged between 56 and 68 years old, where 66.67% of the respondents answered positively.

On the contrary, the lowest score for *Zorba the Greek* was obtained among respondents aged between 16 and 19 years old, with 0% of positive answers.

#### **I.5.1.1.3. Permutation of sounds**

The third subcategory of phonetic techniques is the play on permutation of sounds. This type of wordplay is also referred to as spoonerism or *contrepètrerie*, in French, as mentioned in Popineau’s article.

In *Varieties of Wordplay*, Thaler gives the following example of spoonerism: “*Du bist/Buddhist*” (Thaler, 2016, p. 54) In this example, the letters “b” and “d” have been permuted to create a wordplay.

In my corpus, the closest example of spoonerism that can be found is the following: “*Nouveau nom and faux nez*” (New name and false nose) (2017e). In this example from May, 24<sup>th</sup>, 2017, the correct sentence might be “*Nouveau nez and faux nom*” (New nose and false name). In this case, the sounds /ne/ (as in *nez*) and /nõ/ (as in *nom*) have been permuted. Moreover, it should be noted that another wordplay is included through the similarity of sound between “*nez*” and “*né*”. The correct sentence would thus be “*Nouveau né and faux nom*” (Newborn and false name).

#### **I.5.1.1.4. Rhythm and rhyme**

The fourth subcategory of phonetic techniques is a play on rhythm and rhyme. Quoting an advertising slogan for the food delivery service Lieferando in 2015, Thaler gives the following example in German: “*Uschi das ist Sushi*” (Thaler, 2016, p. 54)

In my corpus, the following example of rhyme can be found: “*Sus à Pégasus !*” (Down with Pegasus!) (2021h) In this example, the French interjection *sus* rhymes with “Pégasus”.

This headline was published on July 21<sup>st</sup>, 2021. In this example, Pégasus refers to the Pegasus project developed by NSO, an Israeli spyware firm. On July 20<sup>th</sup>, the Guardian revealed that President Macron’s phone number appeared on a list of leaked data from the Pegasus project (Chrisafis *et al.*, 2021)

#### **I.5.1.1.5. Alliteration and assonance**

The fifth subcategory of phonetic techniques is a play on alliteration and assonance. Quoting an English tongue twister, Thaler gives the following example: “Betty Botter bought some butter.” (Thaler, 2016, p. 54)

In my corpus, the following example of alliteration and assonance can be found: “Attention en tension” (Attention under tension) (2021a). In this example, the “t” and “s” sounds are repeated twice to produce an alliteration, while the repetition of the sounds /ã/ (as in *en*) and /õ/ (as in *nom*) produces an assonance.

This headline from was published on August 4<sup>th</sup>, 2021, along with the following headline: “Combien d’antivax opposés au test anti-génie ?” (How many vaccine skeptics are opposed to the anti-genius test?) (2021b) Since this main headline refers to antigen tests and people opposed to vaccination (Willsher, 2021), “attention en tension” could also refer to this context.

#### **I.5.1.2. Lexical techniques**

The second category in Thaler’s classification relies on lexical techniques. Several categories have been identified: homonymy, polysemy, paronymy, play on phraseological elements, and play on lexical sets.

##### **I.5.1.2.1. Homonymy**

The first subcategory of lexical techniques is homonymy. Quoting Blake, Thaler gives the following example of homonymy: “The first thing that strikes you in Rome is traffic.” (Blake, 2007, p. 76, *in* Thaler, 2016, p. 54) In this example, two different meanings of the verb “to strike” are used to create a wordplay. It can also be said that this example falls into the category of homographs. According to the Merriam Webster Dictionary, homonymy is divided into two categories: homophones and homographs. “*Homophones* are words that sound the same but

are different”, while *homographs* “are words that are spelled the same but are different.” (Homophones, homographs, and homonyms, no date)

### I.5.1.2.2. Polysemy

The second subcategory of lexical techniques is polysemy (Thaler, 2016, p. 54). Polysemy refers to a single word with several different meanings. Contrary to homographs, polysemy only appears once in a sentence. Quoting Esme Winter-Froemel, Thaler gives the following example of polysemy in German: “*Zwei Jäger treffen sich*” (Winter-Froemel, 2019, p. 1429, in Thaler, 2016, p. 55) In this example, there is a wordplay on the two possible meanings of the verb *treffen sich*, which are either “come together” or “hit each other”, as explained by Winter-Froemel (2019).

In my corpus, the following example of polysemy can be found: “*Cette fois, ça dépasse la Borne !*” (This time, Borne is overwhelmed) (2023z). The polysemy appears through the use of two different expressions with the verb *dépasser*: “*être dépassé*” (being overwhelmed) and “*dépasser les bornes*” (step over the line). However, in our example, “*les bornes*” is replaced by “*la Borne*” to create a play with the name of the French Prime Minister Elisabeth Borne and the word *borne* (boundary marker) which are homographs, that is to say, words sharing the same orthograph. Moreover, the use of the definite article *la* indicates a pejorative connotation in the way the Prime Minister is referred to (Noms propres, no date).

This headline was published on February 8<sup>th</sup>, 2023, after the French Parliament debate about the pension reform. During this time, Elisabeth Borne was Prime Minister and used Article 49.3 from the French constitution to impose the reform. However, it led to tensions among deputies, as well as the use of no-confidence motions from the opposition. (*Le Monde*, 2023)

### I.5.1.2.3. Paronymy

The third subcategory of lexical techniques is paronymy. Paronyms are words that are similar in orthograph and/or pronunciation and can be confused. Quoting Alexander, Thaler gives the following example:

“Maggie goes to the doctor’s and says: I’ve forgotten to take my contradictive pills.

Doctor: You’re ignorant.

Maggie: That’s right. Three months” (Alexander, 1997, p. 64, in Thaler, 2016, p. 56).

As explained by Thaler (2016), in this example, the adjective “contradictive” is used as a paronym of the adjective “contraceptive,” while the adjective “ignorant” is a paronym of the adjective “pregnant”.

In my corpus, the following example of paronyms can be found: “*Plutôt qu'à la canicule abonnez-vous au « Cagnard Enchaîné » !*” (Instead of the heatwave, subscribe to the “*Cagnard Enchaîné*”!) (2022ap)

In this headline, which was published on August 3<sup>rd</sup>, 2022, “*Cagnard*” (informal word for “blazing sun”) is the paronym of the noun *canard* (duck). In the context of the heat wave (*canicule*, in French) in the summer of 2022 (Roucaute, 2022), the name of the satirical newspaper was changed to include the noun *cagnard*.

#### I.5.1.2.4. Phraseological elements

The fourth subcategory of lexical techniques is a play on phraseological elements. A play on phraseological elements involves idioms and sayings. Quoting an advertisement, Thaler gives the following example in German: “*Renovierungspflicht? Wenn der Vermieter bei blauen Wänden rot sieht*” (Janich 2013, p. 181, in Thaler, 2016, p. 57) In this example, there is a play of words between the adjective for the color blue (*blau*), the adjective for the color red (*rot*) and the expression *rot sehen*, which means “to see red, to lose one’s head,” as explained by the author.

In my corpus, the following example of a play on phraseological elements can be found: “*Macron enchaîne les sommets mais ne grimpe pas dans les sondages*” (Macron does a series of summits but does not climb polls) (2022ad)

In this example, published on June 29<sup>th</sup>, 2022, there is first a play with the polysemy of the noun *sommet*, as it can either mean “mountaintop” or “meeting”. The humorous effect of the polysemy is reinforced by a second play, this time with the polysemy of the verb *grimper*. Indeed, in the context of polls, “*grimper dans les sondages*” means “to climb in the polls”. However, in the context of mountain climbing, *grimper* also means “to climb”.

By using the lexical field of mountain climbing, this headline might thus suggest that Macron’s popularity is decreasing, on the one hand, and on the other hand, he takes part in several summits. Indeed, on the 24<sup>th</sup>, Macron took part in Brussels’ Euro Summit (Euro Summit, 24 June 2022, 2022). Then, from the 25<sup>th</sup> to the 28<sup>th</sup>, the G7 was held at Schloss Elmau, Germany (G7 summit, Schloss Elmau, 26-28 June 2022, 2022). Finally, President Macron also attended the NATO summit in Madrid, Spain, from the 28<sup>th</sup> to the 29<sup>th</sup> of June (2022 NATO Summit, 2022).

Moreover, it should be noted that a great number of the examples composing my corpus are based on a play on phraseological elements. Indeed, as mentioned at the beginning of this part, these examples were classified as part of a category involving famous French idioms.

#### **I.5.1.2.5. Lexical sets**

The fifth subcategory of lexical techniques is play on lexical sets. Quoting Lecolle, Thaler gives the following example: “Le court end it long” (Lecolle, 2015, p. 238, in Thaler, 2016, p. 57) As explained by Thaler, this example “opposes *court* (‘short’) and *long* (‘long’), involving the idiom *en dire long* (‘to speak volumes’).” Since an idiom is also involved, this example also falls into the category of plays on phraseological elements.

In my corpus, the following example of a play on lexical sets can be found: “*Moi chancelière, toi chancelant !*” (I am the chancellor, you are shaky!) (2013c).

In this example, the similarity of spelling and pronunciation between the noun *chancelière* and the adjective *chancelant* produces a wordplay.

This headline was published on September 25<sup>th</sup>, 2013, after Angela Merkel was elected for a third time as German chancellor (Petrikowski, 2005). Meanwhile, Hollande’s popularity was at the lowest, according to polls (Les Echos, 2013).

#### **I.5.1.3. Morphological techniques**

The third category in Thaler’s classification relies on morphological techniques (Thaler, 2016, p. 57). Several categories have been identified: play on morphemes, compounding as play, portmanteau words, derivation as play, play on acronyms, and play on comparative forms.

##### **I.5.1.3.1. Morphemes and compounding**

The first two subcategories of morphological techniques are play on morphemes and compounding as play. Given that no example for these two techniques was found among the headlines from *Le Canard enchaîné*, they will not be illustrated with examples from my corpus.

##### **I.5.1.3.2. Portmanteau words**

The third subcategory of morphological techniques is portmanteau words. According to the *Online Etymology Dictionary*, this term was coined by Lewis Carroll in 1882 and is borrowed



from Middle French *portemanteau* (coat rack). Portmanteau words are a combination of two words to form a new one.

Quoting Hausmann, Thaler gives the following example in French: “*provocasseurs*”. This portmanteau word is composed of the noun *provocateurs* (“agitators/troublemakers”) and the noun *casseurs* (“rowdies”), as mentioned by the author (Hausmann, 1974, p. 64, in Thaler, 2016, p. 58).

In my corpus, the following example of portmanteau can be found: “Hollande, un Président Charismatique !” (Hollande, a Charismatic president!) (2015c) In this example, the name of another French satirical newspaper, *Charlie Hebdo*, is combined with the adjective *charismatique* (charismatic).

This headline was published on January 21<sup>st</sup>, 2015. As mentioned in the previous part about cultural references, *Charlie Hebdo*’s office was targeted by the terrorist attacks of 2015, when François Hollande was President (Harding, 2015).

#### **I.5.1.3.3. Derivation**

The fourth subcategory of morphological techniques is derivation as play.

In my corpus, the following example of derivation as play can be found: “Ouvrir les vaccinodromes, fermer les déconnodromes !” (Open vaccination centers, close fool-around-centers!) (2021f).

This headline was published on March 24<sup>th</sup>, 2021, when vaccination centers were created to increase mass vaccination, although people were still sceptic about it (Willsher, 2021).

In this example, the French verb *déconner* (slang for “to fool around”) is used to form a neologism, similar to the neologism *vaccinodromes* which refers to vaccination centers.

#### **I.5.1.3.4. Acronyms**

The fifth subcategory of morphological techniques is play on acronyms. Using personal data, Thaler (2016, p. 58) gives an example in German with the acronym “MG” which is given several possible meanings: “*Mönchengladbach* [name of a German city] [...] *Maschinengewehr*... [Machine gun] [...] *MichelanGelo*.” In this example, all the nouns mentioned begin with the letter “m” and also contain the letter “g”, as if they stood for the acronym “MG”. However, when looking at the *PONS* dictionary, it appears that only *Maschinengewehr* (“machine gun”) stands for the acronym “MG” (‘MG’, *Pons*, no date)

In my corpus, the following example of play on acronyms can be found: “*LREM devient "La République en masques" !*” (LREM becomes “The Republic with masks) (2020a). The acronym LREM stands for “*La République En Marche*” (The Republic Going Forward), also known as En Marche ! (Forward!), which is the name of a French political party (Ray, 2017). But in the case of this headline, this acronym becomes “*La République en masques.*” This headline, which was published on February 26<sup>th</sup>, 2020, refers to the period of the coronavirus pandemic when masks were used to prevent the spreading of the coronavirus (BBC News, 2020).

#### **I.5.1.3.5. Comparative forms**

The sixth subcategory of morphological techniques is a play on comparative forms. Given that no example of a play on comparative forms was found among the headlines, this type of wordplay will not be illustrated with an example from my corpus.

#### **I.5.1.4. Orthographic and graphic techniques**

The fourth category in Thaler’s classification relies on orthographic and graphic techniques (Thaler, 2016, p. 59). Several categories have been identified: play on orthographic variations, shifting of word boundaries, palindromes, and play on typographic elements.

##### **I.5.1.4.1. Orthographic variation**

The first subcategory of orthographic and graphic techniques is the play on orthographic variation. A play on orthographic variation is a modification of the spelling, without changing or altering the meaning.

Using personal data, Thaler gives the following example:

“<BLUEGUY> mais au fait moi je suis pas correcteur [But in fact, I’m no proofreader]

<BLUEGUY> j’ai juste été traumatisé à coup de dictées [I’ve just been traumatized by dictations]

<luke> trop matisé donc :)” (2016, p. 59)

In this example, the first syllable of the past participle *traumatisé* (traumatized) has been modified with the adverb *trop* (too), as shown by the author.

In my corpus, the following example of a play on orthographic variation can be found: “*L’Europe va devoir mettre les mains dans la Grèce*” (Europe will have to get its hands dirty) (2015e). In

this example published on January 7<sup>th</sup>, 2015, *Grèce (Greece)* is an orthographic variation of the noun *graisse* (grease) which is derived from the French expression “mettre les mains dans le cambouis,” (literally “to put one’s hands into grease”, meaning “to get one’s hands dirty.”) There is thus a play with the similarity of pronunciation between *Grèce* and *graisse*. Moreover, *graisse* is a synonym for *cambouis*.

Similarly to the headline “*Avec le Grec, on s’en Zorba !*” (2015a), the context for this headline is the Greek financial crisis. It thus means that the European Union will have to intervene in order to solve the crisis.

#### **I.5.1.4.2. Shifting of word boundaries**

The second subcategory of orthographic and graphic techniques is shifting of word boundaries. As explained by Thaler (2016), shifting of word boundaries is similar to homophones, but goes beyond phonetic similarity.

Quoting an advertising slogan for West Ice cigarettes from 2005, Thaler gives the following example: “Have an Ice Day” (2016, p. 59). In this example, the slogan can be read as “Have a nice day”. This is made possible by a modification of the position of spaces between the indefinite article “an” and the noun “ice”.

In my corpus, the following example can be found: “*le ciel, le soleil et l’amer*” (2015d). This wordplay is a reference to François Deguelt’s song “*Le ciel, le soleil et la mer*” (The sky, the sun, and the sea).

In this headline, which was published on August 12<sup>th</sup>, 2015, the phonetic similarity lies between *la mer* (the sea) and *l’amer* (the bitter). The shift of boundaries can be observed as the definite article “*la*” becomes the definite article “*l’*” and the noun *mer* becomes the noun *amer*. Although an apostrophe has been added between the definite determiner and the noun, the letters are exactly the same as in the original title of the song.

Since François Deguelt’s song was included in the survey about cultural references, the results regarding this song will now be discussed.

To begin with, *Le ciel, le soleil et la mer* is the fifth most familiar cultural reference, with an overall total of 20 positive answers. Regarding each age category, Deguelt’s song is especially familiar to respondents aged between 34 and 44 years old, where 75% of the respondents answered positively. Along with Les Musclés’s song *La fête au village*, the TV series *Drôles de dames*, and François-René de Châteaubriand’s novel *Mémoires d’outre-tombe*, it is also the cultural reference which obtained the highest percentage of positive answers for the 34-44 age category.

On the contrary, the lowest score for *Le ciel, le soleil et la mer* was obtained among respondents aged between 16 and 19 years old, with only 11.11% of positive answers.

#### **I.5.1.4.3. Palindrome**

The third subcategory of orthographic and graphic techniques is palindrome. According to the *Oxford English Dictionary*, a palindrome is “A word or a sequence of words that reads, letter for letter, the same backwards as forwards.” (‘palindrom’, 2023)

Given that no example of palindrome was found among the headlines from *Le Canard enchaîné*, this type of wordplay will not be illustrated with an example from my corpus.

#### **I.5.1.4.4. Typographic variation**

The fourth subcategory of orthographic and graphic techniques is a play on typographic elements. Quoting an advertising slogan for an IBM typewriter, Thaler gives the following example: “*SchreibMaschine*” (Forgács and Göndöcs, 1997, p. 64, in Thaler, 2016, p. 60). In this example, the German word for “typewriter” is written in a typographic way that makes the name of the brand, IBM, obvious to the reader.

In my corpus, the closest example of a play with typographic elements is the following: “*cette fois, ça dépasse la Borne*” (This time, Borne is overwhelmed) (2023z). In this example, the typographic variation appears in the similarity of the noun *borne* (boundary marker) and the proper noun Borne. However, the first letter of the noun *borne* has been capitalized.

As mentioned previously, this headline was published on February 8<sup>th</sup>, 2023, when there were tensions at the Parliament because of the pension reform.

#### **I.5.1.5. Other literary techniques**

In addition to the different types of wordplay given by Thaler (2016), it appears that other literary techniques are used in some examples of my corpus.

##### **I.5.1.5.1. Zeugma**

The first literary technique observed is zeugma. Zeugma is a type of wordplay using polysemy. In this type of wordplay, two different meanings of one verb are used for two different segments

in the same sentence. Since it involves polysemy, zeugma could be classified into the second category mentioned by Thaler, that is to say, the category of lexical techniques

In my corpus, the following example of zeugma can be found: “*Toi bomber le torse, moi bomber Alep !*” (Stick out your chest, while I bomb Alep!) (2016f) In this example, the French verb *bomber* has two different meanings: to strut or to bomb.

This headline was published on October 12<sup>th</sup>, 2016, when, Russia and France had conflicting views regarding the situation in Syria. On October 10<sup>th</sup>, 2016, as stated by the website *France 24*, “Russia blocked a draft French UN Security Council resolution calling for an end to the barrage of air strikes,” when Aleppo was held by rebels. Being Syria’s ally, Russia thus vetoed France’s resolution (France 24, 2016).

In the case of the headline from *Le Canard enchaîné*, the situation is summarized as follows: Putin is going to continue bombing Aleppo, while Hollande must accept this decision.

#### **I.5.1.5.2. Innuendo**

Another literary technique that is used to produce wordplay is the innuendo. According to the *Oxford English Dictionary*, an innuendo is “an oblique hint, indirect suggestion; an allusive remark concerning a person or thing, esp. one of a depreciatory kind.” (‘innuendo’, 2023)

In my corpus, the following example of innuendo can be found: “*Mais puisque je vous dis que Pénélope n’a rien fait !*” (I’m telling you Pénélope did nothing wrong!) (2017d).

This headline was published on February 1<sup>st</sup>, 2017, after *Le Canard enchaîné* itself revealed that François Fillon’s wife, Penelope was paid for a fictitious job as parliamentarian assistant (Chrisafis, 2017).

Given the context, the headline can be interpreted in two different ways. Indeed, the first meaning of “*Pénélope n’a rien fait*” is that Mrs. Fillon did nothing wrong. But it could also mean that she did nothing at all because she had no actual job. There is thus an implicit meaning hidden in this headline. Moreover, François Fillon is implicitly mocked by *Le Canard enchaîné*.

#### **I.5.1.5.3. Allusion**

The next literary technique is allusion. According to the *Oxford English Dictionary*, allusion is an implied, indirect, or passing reference to a person or thing; (in later use more widely) any reference to someone or something.” (‘allusion’, 2023). Another sense also includes “A play on words, a pun; (also) the action of punning.” But according to the OED, this sense is now

rare. It should also be noted that an allusion is not deprecatory, contrary to an innuendo for which it is the case.

In my corpus, the following example of allusion can be found: “*Si tu ne viens pas à Lagardère...*” (If you don’t come to Lagardère...) (2023at).

This headline, published on June 14<sup>th</sup>, 2023, refers to the acquisition of media group Lagardère by Vincent Bolloré, CEO of Vivendi group. Indeed, on June 9<sup>th</sup>, 2023, Vincent Bolloré finally obtained from the European Commission the right to buy Lagardère group (Joux, 2023).

This example is also a reference to a quote from the film *Le Bossu*. *Le Bossu* is an adventure film adapted from a novel written in 1857 by Paul Féval. It tells the story of Henri de Lagardère, who takes the oath of avenging Duke Philippe de Nevers who was killed by his cousin, the Prince of Gonzagues. Having left a scar on the hand of the prince with a stroke from his sword, Lagardère says his famous quote to him: “*Si tu ne viens pas à Lagardère, Lagardère ira à toi*” (If you don’t come to Lagardère, Lagardère will come to you).

The headline thus refers to the media group and the famous quote from the film *Le Bossu*.

#### **I.5.1.5.4. Metaphor**

The last literary technique to be found in my corpus is metaphor. According to the *Oxford English Dictionary*, a metaphor refers to “a figure of speech in which a name or descriptive word or phrase is transferred to an object or action different from, but analogous to, that to which it is literally applicable; an instance of this, a metaphorical expression” (‘metaphor’, 2024).

In my corpus, the following example of metaphor can be found: “*Le chef de l'Etat plonge, le Premier ministre rame*” (The president dives, the Prime Minister paddles) (2017a).

In this example published on July 5<sup>th</sup>, 2017, there is a wordplay based on the lexical field of water that appears through the French verb *ramer* (literally “to paddle”, meaning “to struggle”). Moreover, this headline is preceded by the following explanation: “Macron joue les sous-marinières pendant que le Premier Ministre planche à l’Assemblée” (Macron is playing submariners, while the Prime Minister is working hard at the assembly).

It should be noted that in this sentence, the lexical field of water is extended by the noun *sous-marinières* and the verb *planche*. However, in this context, the verb *plancher* means “to struggle”. Thanks to the polysemy of the verb *plancher*, another layer of the wordplay is thus added.

As far as the lexical field of water is concerned, it refers to the fact that President Macron went to Île Longue, in Brest harbor, Brittany, on the 4<sup>th</sup> of July (BBC News, 2017). Several nuclear submarines are stored in this secret military base. During his visit, President Macron went on board one of them, Le Terrible. On the same day, Prime Minister Edouard Philippe had his first speech at the Assemblée Nationale (Herrerros, 2017).

This headline from *Le Canard enchaîné* underlines in a playful tone the difference in activities between President Macron who seems to have a good time in the submarine, and Prime Minister Philippe who is working hard on his speech.

### **I.5.2. Cultural references**

The second broad category of wordplays which can be observed in my corpus of examples is about cultural references.

Cultural references require significant knowledge of the culture in both the source language and the target language. However, it appears that some cultural references are less obvious than others. In the case of our study with the headlines from *Le Canard enchaîné*, some wordplays involve cultural references. Most of them are films or books, mainly from the 20<sup>th</sup> century.

Moreover, it can be said that these wordplays about cultural references also fall into the category of allusions, which will be dealt with in detail in the next part.

In order to determine the popularity of the cultural references found in the headlines of this newspaper, a survey was conducted through a Google Form. A total of 65 respondents completed the form.

In order to study the results according to the age of the respondents, they were divided into several categories, ranging from 16 to 68 years old. The average age is 29 years old.

The age categories are the following: from 16 to 19 years old (18 respondents), from 20 to 23 years old (20 respondents), from 24 to 30 years old (8 respondents), from 34 to 44 years old (4 respondents), from 45 to 48 years old (5 respondents), 50 to 54 years old (7 respondents), and from 56 to 68 years old (3 respondents). Each category is composed of four different ages, except for the last category where there are only three different ages. The disparity between categories can be explained by the two following diagrams (Figure 8 and Figure 9).

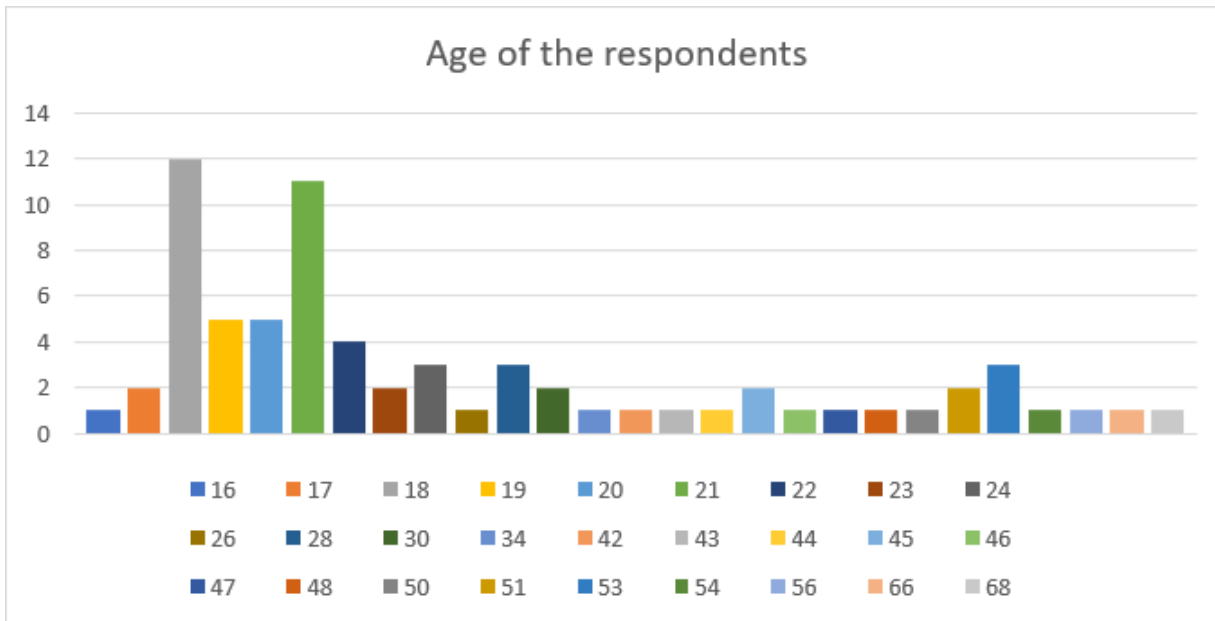


Figure 8 Age repartition of the 65 respondents.

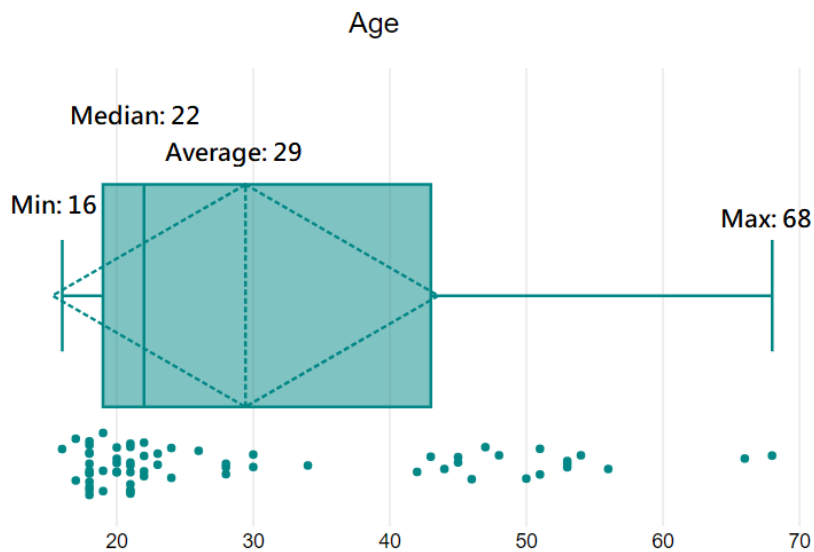


Figure 9 Box plot diagram showing the minimum, median, average, and maximum age.

As shown in this diagram (Figure 9), it appears that the average age of the respondents is 29 years old. Moreover, a significant number of respondents are 18 or 21 years old. It can be explained by the fact that the survey was mostly shared among students.

When looking at the results obtained in each age category for the different cultural references, this age disparity will need to be taken into account.



Regarding the content of the form, a total of twenty cultural references were selected from the corpus used in this thesis paper. To make it easier for respondents to recognize them, each cultural reference was written in its original form. Indeed, as mentioned previously, all the cultural references have been modified to produce a wordplay, similar to idioms.

Among the twenty, there are eight films: *Le port de l'angoisse* (1944), *Le crime était presque parfait* (1954), *Zorba the Greek* (1964, also known as *Zorba le Grec*, in French), *La mélodie du bonheur* (1965), *La nuit des morts-vivants* (1968), *Les violons du bal* (1974), *Le roi des cons* (1981), *En quête de sens* (2015).

Seven of the cultural references are songs: *Nuits de Chine* by Louis Lynel, *Le ciel, le soleil et la mer* by François Deguelt, *La marche nuptiale* by Georges Brassens, *La fête au village* by les Musclés, *Sévère mais juste* by Raymond Devos, *Le temps qui passe* by Alain Barrière, and *Sois belle et tais-toi* by Serge Gainsbourg.

Among the other genres appearing in the headlines of *Le Canard enchaîné*, there is also the TV series *Drôles de dames*, Wagner's opera *Twilight of the Gods* (1876; also known as *Le crépuscule des dieux*, in French.)

There are also three novels: *L'écume des jours* (1947, Boris Vian), *Mémoires d'outre-tombe* (1849-1850, François-René de Chateaubriand), and *For whom the bell toll?* (1940, Ernest Hemingway).

The twenty cultural references appear in the following table:

Movies	A	Le port de l'angoisse (1944)	B	Le crime était presque parfait (1954)	C	Zorba le Grec (1964)	D	La mélodie du bonheur (1965)		
	E	La nuit des morts-vivants (1968)	F	Les violons du bal (1974)	G	Le roi des cons (1981)	H	En quête de sens (2015)		
Songs	I	Nuits de Chine (Louis Lynel)	J	Le ciel, le soleil et la mer (François Deguelt)	K	La marche nuptiale (Georges Brassens)	L	La fête au village (les Musclés)		
	M	Sévère mais juste (Raymond Devos)	N	Le temps qui passe (Alain Barrière)	O	Sois belle et tais-toi (Serge Gainsbourg)				
Other	P	Drôles de dames (TV series, 1976)	Q	Le crépuscule des dieux (Wagner, opera)	R	L'écume des jours (Boris Vian, novel)	S	Mémoires d'outre-tombe (François René de Chateaubriand, novel)	T	Pour qui sonne le glas ? (Ernest Hemingway, novel)

Figure 10 The twenty cultural references. Table made with Excel.

As can be seen in this table, a letter has been attributed to each of the cultural references. The corresponding letters will be used when discussing the results.

When completing the form, respondents were asked to state whether the selected cultural references were familiar to them or not.

Respondents were asked their age, then they had to indicate which cultural references were familiar to them. In addition, an optional question was added to know if the respondents were familiar with *Le Canard enchaîné* and if they had already read it. This optional question thus

provided additional information about the popularity of *Le Canard enchaîné* which is also a cultural reference itself.

The results will now be discussed thanks to the following diagrams (Figure 11):

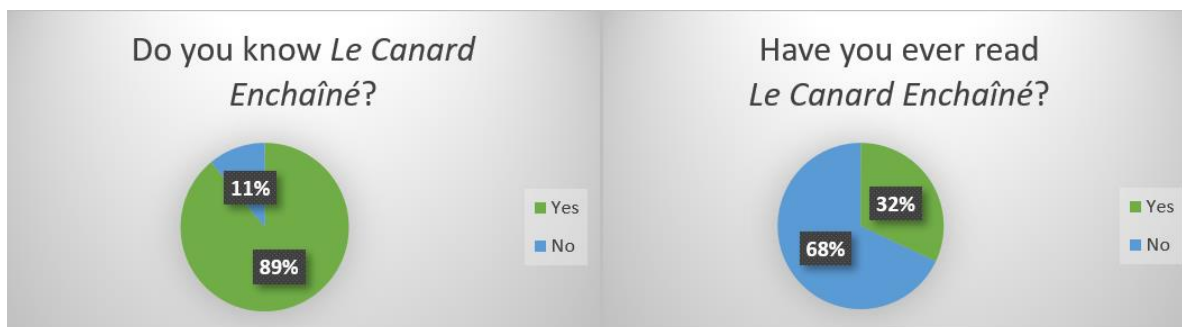


Figure 11 The popularity of *Le Canard enchaîné*. Diagrams made with Excel.

As a result, it appears that 89% of the respondents know this newspaper. Yet only 32% of those respondents have already read *Le Canard enchaîné*.

Among the respondents who have already read it, it appears that two respondents studied extracts from *Le Canard enchaîné* in class, while a person from the 66-70 category reads it every week.

It also seems that *Le Canard enchaîné* and French satirical newspapers in general are also more or less linked to the terrorist attacks of 2015 (Harding, 2015). Indeed, since another satirical newspaper, *Charlie Hebdo*, was one of the targets of this attack, it might have shed light on this type of newspaper, as illustrated by the answer given by a respondent from the 24-30 years old category: "Une seule fois après les attentats" (Once, after the terrorist attacks).

Regarding the popularity of the selected cultural references, it can also be noted that among the answers collected through the Google form, some were left empty by respondents as no cultural reference was familiar to them. Although this instance represents only 8 cases out of the 65 answers, it is still worth noting that 5 out of the 8 empty forms are from respondents belonging to the 16-20 category. Moreover, it strengthens the idea that the younger the respondents are, the fewer cultural references they know.

Surprisingly, although stating that they know *Le Canard enchaîné* and have already read it, a respondent from the 46-50 category was not familiar with any of the selected cultural references.

Regarding the rest of the respondents who filled out the form, at least one cultural reference is familiar to each respondent. As far as the selected cultural references are concerned, all of them are familiar to at least one respondent.


In general, the most familiar cultural reference is the TV series *Drôles de dames*, especially for the 45-48-year-old category where 100% of the respondents answered positively. On the contrary, the least known cultural reference is the song *Sévère mais juste*. For this cultural reference, 5.56% of the respondents aged between 16 and 19 years old answered positively. The rest of the respondents are not familiar with this song.

Regarding the global results, which are summarized in the following table (Figure 12), it appears that they are rather consistent. However, when comparing the category of respondents aged between 16 and 19 years old with the category of respondents aged between 34 and 44 years old, it appears that they represent the two extremes. Indeed, for the 16-19 category, four of the twenty cultural references are totally unknown (0%). On the contrary, this percentage is the highest in the 34-44 category, with eight cultural references that are totally unknown.

Regarding cultural references with which respondents are totally familiar, it appears that respondents aged between 45 and 48 years old and respondents aged between 56 and 68 years old are the only two age categories with the highest percentage of positive answers (100%). Indeed, in the 45-48 category, one cultural reference is totally familiar to them, while this number is of two cultural references for the 56-68 category.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
16-19	5,56	11,11	0	16,67	33,33	5,56	5,56	5,56	0	11,11	16,67	0	5,56	16,67	11,11	27,78	5,56	16,67	22,22	0
20-23	0	25	10	60	30	0	5	15	0	20	40	25	0	20	50	70	5	55	30	20
24-30	12,5	0	12,5	37,5	37,5	12,5	25	25	0	50	25	37,5	0	25	12,5	25	0	62,5	62,5	37,5
34-44	0	50	50	50	25	0	0	0	0	75	25	75	0	0	0	75	25	50	75	50
45-48	0	40	40	40	40	0	0	0	20	40	40	80	0	0	20	100	40	60	60	60
50-54	0	42,86	28,57	42,86	14,29	0	42,86	0	28,57	57,14	28,57	85,71	0	14,29	28,57	57,14	0	42,86	42,86	57,14
56-68	0	66,67	66,67	66,67	0	0	0	0	33,33	33,33	33,33	33,33	0	33,33	33,33	33,33	66,67	100	100	66,67

Percentage of positive answers



0% 100%

Figure 12 Percentage of positive answers for the survey. Table made with Excel.

As mentioned previously, each letter corresponds to one of the twenty cultural references. Negative answers appear in red, while positive answers are in green. The age category is mentioned for each line.

Moreover, it appears that the respondent who is familiar with the most cultural references belongs to the category of respondents aged between 24 and 30 years old. Out of the twenty selected cultural references, this respondent is familiar with fourteen of them.

On the contrary, eight respondents are only familiar with one cultural reference. Five out of these eight respondents belong to the 16-20 category. In addition, as mentioned previously, the eight instances of empty forms are also from respondents from the 16-20 category.

These differences thus strengthen the idea that general knowledge can vary within the same age category.

Although the results of this survey show a great disparity between generations regarding their knowledge of cultural references, one must bear in mind that general knowledge is unique to every individual and can vary between people, even among individuals of the same age.

The release date of each of these cultural references also needs to be taken into consideration.

Despite these different factors which can influence results if it were to be done with different respondents, this statistical study is still useful for this thesis paper. Indeed, in order for the wordplay to be understood, the cultural references first need to be known to the reader. In the case of translation, a mistranslation might lead to the loss of the reference. It is thus important to know the popularity of cultural references.

Thanks to this survey, it appears that many of the cultural references found in the headlines of *Le Canard enchaîné* are not well-known. *Le Canard enchaîné* itself is not well-known among every age category.

To illustrate the fact that most of the cultural references used in *Le Canard enchaîné* are not always well-known, the following example (Figure 13) can be studied. On March 1<sup>st</sup>, 2017, one of the headlines was “*Les violents du bal*” (2017c).



Figure 13: *Le Canard enchaîné* on March 1st, 2017.

It is a reference to the film “*Les violons du bal*”. *Les violons du bal* was released in 1974. This biopic is about the childhood of filmmaker Michel Drach during the Occupation.

In order to create a wordplay, the French noun *violons* (violins) was replaced by the noun *violents* (violent people). However, as this film remains unknown to many today, it is harder to get the meaning of the wordplay.

As stated previously, general knowledge is specific to each individual. A person might know of a certain piece of media, while another person from the same age might not know about it.

It also depends on the popularity of the media. As for the example of *Les violons du bal*, it can be said that this film is not famous enough to be remembered in the years to come.

Since this example was included in the aforementioned survey on cultural references, the answers of the respondents will now be discussed.

In the survey, the cultural reference *Les violons du bal* is familiar to only 3.08% of the 65 respondents. Most of the positive answers for this cultural reference can be found in the 24-30 category, with a percentage of 12.50%.

In light of the results obtained through the survey, it thus seems that understanding wordplays from *Le Canard enchaîné* requires a substantial amount of general knowledge, as its cultural references can be identified as belonging to different generations.

It is also important to mention that *Le Canard enchaîné* is a cultural reference of its own since it only exists in France and relies on wordplays that are only understandable by its French readership, given they have sufficient general knowledge, as mentioned before.

Headlines from *Le Canard enchaîné* thus involve a significant diversity of literary techniques to produce wordplays. However, as stated by Thaler (2016), “It seems difficult to propose such a classification for wordplay in the broadest sense (2.3) since there is a nearly unlimited range of possibilities to modify linguistic material in a creative and playful way” (2016, p. 52).

## Conclusion

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This paper thus showed the challenges faced by MT when translating wordplays. As creativity is needed and requires imagination, which MT lacks, only human translators can achieve pun translation, as seen in the example given in the introduction (Miller, 2019, p. 57).

However, recent research allowed the creation of systems or protocols designed for pun translation, as is the case with PunCat (Miller and Kolb, 2022) and the CLEF 2023 Joker project (Popova and Dadić, 2023). Thanks to this research, the field of pun translation with MT could be improved.

Since MT is often seen as a threat to the labor market, researchers have also tried to establish rules to favor better cooperation between the machine and human translators (Rico Pérez, 2024), in an attempt to position both at the same level (Ive, Max, and Yvon, 2018). In this regard, post-editors would no longer be seen as proofreaders but consider themselves as translators specialized in the field of MT with which they cooperate. As far as pre-edition is concerned, this scenario could prevent potential errors from MT before the translation process. Moreover, in the case of pun translation, pre-edition also allows human translators to provide additional information or context to improve efficiency and accuracy.

Regarding the headlines from *Le Canard enchaîné*, it appears that they contain a significant range of wordplays thanks to the use of various literary techniques. As observed by Popineau (2015), these literary techniques used to create humor already represent a challenge for human translators, as they require creativity. As seen in the part about the different types of wordplays, some examples of headlines even include more than one layer of wordplay by combining several literary techniques, thus increasing the difficulty of reproducing a wordplay from one language to another.

Headlines from *Le Canard enchaîné* also rely on cultural references and allusions to various events or personalities. Significant general knowledge is thus needed, in order to understand and translate wordplays from *Le Canard enchaîné*.

As far as DeepL is concerned, it appears that its output still needs to be post-edited. In the case of a pre-edition scenario, DeepL appears to achieve a better translation. However, since these two scenarios were tried for one example only, results could be different for other types of wordplays, since they rely on different literary techniques.

Given that MT already needs the help of human translators for simpler translations, pun translation also represents a difficulty and cannot be achieved without human help.

Finally, pre-edition and post-editing scenarios will be considered in future research regarding the translation of wordplays from *Le Canard enchaîné* with DeepL. As mentioned previously, results might differ between the various types of wordplays that have been detailed in this paper. Some changes might also appear between the translation done this year and the second translation that will be done next year.



## Bibliography

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### Corpus

*Le Canard enchaîné* (2013a) “J’aimerais bien qu’on me porte ONU!”, 11 September.

*Le Canard enchaîné* (2013b) ‘La marge nuptiale’, 24 April.

*Le Canard enchaîné* (2013c) ‘Moi chancelière, toi chancelant!’, 25 September.

*Le Canard enchaîné* (2015a) “Avec le Grec, on s’en Zorba!”, 8 July.

*Le Canard enchaîné* (2015b) ‘C’est le porc de l’angoisse!’, 28 October.

*Le Canard enchaîné* (2015c) ‘Hollande, un Président Charismatique!’, 21 January.

*Le Canard enchaîné* (2015d) ‘Le ciel, le soleil et l’amer’, 12 August.

*Le Canard enchaîné* (2015e) ‘L’Europe va devoir mettre les mains dans la Grèce’, 7 January.

*Le Canard enchaîné* (2016a) ‘C’est vert, mais juste’, 11 May.

*Le Canard enchaîné* (2016b) ‘Drame de drôles’, 23 November.

*Le Canard enchaîné* (2016c) ‘Le pénitent qui passe’, 27 January.

*Le Canard enchaîné* (2016d) ‘L’ennui du mort-vivant’, 2 November.

*Le Canard enchaîné* (2016e) ‘Moi aussi, je serai bientôt à la rue!’, 9 March.

*Le Canard enchaîné* (2016f) “Toi bomber le torse, moi bomber Alep!”, 12 October.

*Le Canard enchaîné* (2017a) ‘Le chef de l’Etat plonge, le Premier ministre rame’, 5 July.

*Le Canard enchaîné* (2017b) ‘L’écume des tours’, 26 April.

*Le Canard enchaîné* (2017c) ‘Les violents du bal’, 1 March.

*Le Canard enchaîné* (2017d) “Mais puisque je vous dis que Pénélope n’a rien fait!”, 1 February.

*Le Canard enchaîné* (2017e) ‘Nouveau nom et faux nez’, 24 May.

*Le Canard enchaîné* (2020a) ‘LREM devient “La République en masques”!’, 26 February.

*Le Canard enchaîné* (2020b) ‘Pour qui sonne le gla-gla?’, 29 July.

*Le Canard enchaîné* (2021a) ‘Attention en tension’, 4 August.

*Le Canard enchaîné* (2021b) ‘Combien d’antivax opposés au test anti-génie?’, 4 August.

*Le Canard enchaîné* (2021c) ‘Gravissime, Macron déclare l’état de siège!’, 29 December.

*Le Canard enchaîné* (2021d) 'Je ne verrai plus, hélas, les fidèles se masser devant moi!', 15 December.

*Le Canard enchaîné* (2021e) 'Le gouvernement ne peut plus se permettre le moindre faux passe!', 22 December.

*Le Canard enchaîné* (2021f) 'Ouvrir les vaccinodromes, fermer les déconnodromes!', 24 March.

*Le Canard enchaîné* (2021g) 'Pécresse n'est pas Ciotti de l'auberge!', 8 December.

*Le Canard enchaîné* (2021h) 'Sus à Pégasus!', 21 July.

*Le Canard enchaîné* (2021i) 'Zemmour, candidat de l'extrême doigt', 1 December.

*Le Canard enchaîné* (2022a) '19 degrés ? On va se cailler les amish!', 7 September.

*Le Canard enchaîné* (2022b) 'Alerte, la ration est en danger!', 31 August.

*Le Canard enchaîné* (2022c) 'Attention à la dernière ligne droite, et même extrême droite!', 6 April.

*Le Canard enchaîné* (2022d) 'Avec moi, l'école a retrouvé sa vocation : transmettre!', 12 January.

*Le Canard enchaîné* (2022e) 'Avec Poutine, je me suis planté à l'Oural!', 23 February.

*Le Canard enchaîné* (2022f) 'Blanquer nage à Ibiza et rame à Paris!', 19 January.

*Le Canard enchaîné* (2022g) 'Ca, une campagne ? Plutôt Borne plaine!', 8 June.

*Le Canard enchaîné* (2022h) 'Ce quinquennat démarre avec un léger handicap!', 25 May.

*Le Canard enchaîné* (2022i) 'Darmanin élu Ballot d'or 2022!', 1 June.

*Le Canard enchaîné* (2022j) 'Dupon-Moretti en plein numéro de Sceaux périlleux', 5 October.

*Le Canard enchaîné* (2022k) 'E. Borne : Je reste à Matignon et Macron à l'Enlisé!', 22 June.

*Le Canard enchaîné* (2022l) 'En quête d'essence', 12 October.

*Le Canard enchaîné* (2022m) 'Ennuis de Chine', 30 November.

*Le Canard enchaîné* (2022n) 'Et surtout la santé, pour bosser jusqu'à 65 ans!', 28 December.

*Le Canard enchaîné* (2022o) 'Il y a encore du flottement à la tête de l'Etat!', 10 August.

*Le Canard enchaîné* (2022p) 'La Fifa multiplie fautes et coups pas francs', 23 November.

*Le Canard enchaîné* (2022q) 'La présidence de l'Europe, c'est bien peu de Scholz!', 26 January.

*Le Canard enchaîné* (2022r) 'La situation reste quand même un peu Ukraignos!', 16 February.

*Le Canard enchaîné* (2022s) 'Laïcité, j'efface ton nom...', 14 December.

*Le Canard enchaîné* (2022t) 'Le joyeux projet de Macron : Travailler plus pour mourir mieux!', 14 September.

*Le Canard enchaîné* (2022u) 'L'Eglise de France en pleine débandade!', 9 November.

*Le Canard enchaîné* (2022v) 'Les députés ne tiennent pas en passe!', 5 January.

*Le Canard enchaîné* (2022w) 'Les Iraniennes ne rêvent que de coupures de Coran', 7 December.

*Le Canard enchaîné* (2022x) 'Les usagers attendent encore le miracle de la multiplication des pleins', 19 October.

*Le Canard enchaîné* (2022y) 'Les victimes réclament une allocation de rentrée solaire!', 24 August.

*Le Canard enchaîné* (2022z) 'L'Europe lâche beaucoup de l'Est!', 9 March.

*Le Canard enchaîné* (2022aa) 'L'obscurantisme ne doit en aucun cas être une fatwalité!', 17 August.

*Le Canard enchaîné* (2022ab) 'Macron doit se préparer à une sacrée coagitation!', 15 June.

*Le Canard enchaîné* (2022ac) 'Macron élu meilleur récupérateur!', 21 December.

*Le Canard enchaîné* (2022ad) 'Macron enchaîne les sommets mais ne grimpe pas dans les sondages', 29 June.

*Le Canard enchaîné* (2022ae) 'Macron entame un régime sans Sahel!', 27 July.

*Le Canard enchaîné* (2022af) 'Macron : Je ne veux voir dépasser qu'une seule tête, la mienne!', 11 May.

*Le Canard enchaîné* (2022ag) 'Macron : Je propose à Marine le Pen la retraite à 53 ans', 27 April.

*Le Canard enchaîné* (2022ah) 'Macron : Nous allons consulter un bureau d'étuves!', 20 July.

*Le Canard enchaîné* (2022ai) 'Macron se défend : Oh, c'était juste pour mettre un peu d'Uber dans les épinards des Américains!', 13 July.

*Le Canard enchaîné* (2022aj) 'Marine Le Pen invente la motion de sangsue!', 26 October.

*Le Canard enchaîné* (2022ak) 'Mélenchon maître du Je!', 4 May.

*Le Canard enchaîné* (2022al) 'Ni le Pen, ni Marine', 20 April.

*Le Canard enchaîné* (2022am) 'Nous sommes sur une bonne dynamite de groupe', 13 April.

*Le Canard enchaîné* (2022an) 'On ne change pas une équipe qui stagne!', 6 July.

*Le Canard enchaîné* (2022ao) 'Pas la Meloni du bonheur!', 28 September.

*Le Canard enchaîné* (2022ap) 'Plutôt qu'à la canicule, abonnez-vous au Cagnard enchaîné!', 3 August.

*Le Canard enchaîné* (2022aq) 'Pour l'opposition, Borne coche toutes les cases!', 18 May.

*Le Canard enchaîné* (2022ar) 'Pourtant, Poutine reste très glaçant!', 2 March.

*Le Canard enchaîné* (2022as) 'Pourvu que les chefs d'état ne signent pas un Charm el-Cheikh en bois!', 2 November.

*Le Canard enchaîné* (2022at) 'Poutinage artistique et Zelenski acrobatique!', 9 February.

*Le Canard enchaîné* (2022au) 'Poutine redoute une victoire à la pire russe', 16 March.

*Le Canard enchaîné* (2022av) 'Rase Poutine!', 23 March.

*Le Canard enchaîné* (2022aw) 'Un cessez-le-feu durable, on n'y croit guerre...', 30 March.

*Le Canard enchaîné* (2022ax) 'Un choix qui phryge le ridicule!', 16 November.

*Le Canard enchaîné* (2022ay) 'Une giffle qui frappe aussi les esprits!', 21 September.

*Le Canard enchaîné* (2022az) 'Vous voyez qu'on est capables de changer les gens!', 2 February.

*Le Canard enchaîné* (2023a) 'A Marseilles, les trafiquants font des heures stups', 5 April.

*Le Canard enchaîné* (2023b) 'Appelez-moi Manu militari', 29 March.

*Le Canard enchaîné* (2023c) 'Après les fichés S, les fichés SS', 29 November.

*Le Canard enchaîné* (2023d) 'Au cas où, je garde ma Borne d'incendie', 12 July.

*Le Canard enchaîné* (2023e) 'Avant le 31, Macron a déjà un bon coup dans le nez!', 27 December.

*Le Canard enchaîné* (2023f) 'Avec Macron, rien n'est moins sourd!', 19 April.

*Le Canard enchaîné* (2023g) 'B. Arnault: Mais dans quel monde Vuitton?', 6 September.

*Le Canard enchaîné* (2023h) 'C'est pas bientôt fini, cet hémicirque?', 15 February.

*Le Canard enchaîné* (2023i) 'Cette année, Noël risque de tomber en janvier!', 11 January.

*Le Canard enchaîné* (2023j) 'Darmanin : il nous manquait plus qu'un dealer d'opium du peuple !', 20 September.

*Le Canard enchaîné* (2023k) 'Darmanin se console : j'ai été reconduit, mais pas à la frontière', 13 December.

*Le Canard enchaîné* (2023l) 'Encore un coup que la France Niger mal', 2 August.

*Le Canard enchaîné* (2023m) 'Enfin une mesure qui ne sera pas impôt-pulaire !', 10 May.

*Le Canard enchaîné* (2023n) 'Je ne suis pas méprisant, c'est une méprise !', 17 May.

*Le Canard enchaîné* (2023o) 'Je voulais dire que c'est une réforme très gauche', 8 March.

*Le Canard enchaîné* (2023p) 'La France mal partie pour les épreuves de notation !', 3 May.

*Le Canard enchaîné* (2023q) 'L'Argentine veut encore la Coupe d'immonde', 22 November.

*Le Canard enchaîné* (2023r) 'Le Maire, nouveau chantre du "quoi qu'il en coupe"', 21 June.

*Le Canard enchaîné* (2023s) 'Le président français se Taipei notre tête !', 12 April.

*Le Canard enchaîné* (2023t) 'Le processus de paix au point morts', 11 October.

*Le Canard enchaîné* (2023u) 'Le retour des allahakbarbares', 18 October.

*Le Canard enchaîné* (2023v) 'Le tour de magie d'Attal : Abayacadabra', 30 August.

*Le Canard enchaîné* (2023w) 'Les plans du gouvernement sont plutôt flouze', 31 May.

*Le Canard enchaîné* (2023x) 'Les punaises de lit vont-elles provoquer une crise au sommier de l'état ?', 4 October.

*Le Canard enchaîné* (2023y) 'Macron à coté de ses pompes à chaleur', 27 September.

*Le Canard enchaîné* (2023z) 'Macron : Cette fois, ça dépasse la Borne !', 8 February.

*Le Canard enchaîné* (2023aa) 'Macron cherche à tourner la plage !', 7 June.

*Le Canard enchaîné* (2023ab) 'Macron furibard : Mes vacances gâchées par des fils de putsch', 9 August.

*Le Canard enchaîné* (2023ac) 'Macron n'a pas fini de patauger', 15 November.

*Le Canard enchaîné* (2023ad) 'Macron n'est pas prêt de trouver de l'argent frais', 19 July.

*Le Canard enchaîné* (2023ae) 'Macron refuse d'enterrer l'âge de guerre !', 25 January.

*Le Canard enchaîné* (2023af) 'Macron remet le pays en état de marche !', 18 January.

*Le Canard enchaîné* (2023ag) 'Macron se décerne la médaille d'ordre', 26 July.

*Le Canard enchaîné* (2023ah) 'Macron sonné par une commotion de censure', 22 March.

*Le Canard enchaîné* (2023ai) 'Macron : voilà pourquoi les français ne peuvent plus me calculer', 6 December.

*Le Canard enchaîné* (2023aj) 'Mais, à l'horizon, toujours pas d'anti-fadas', 1 November.

*Le Canard enchaîné* (2023ak) 'Martinez : On va donner d'autres coups de manif dans la réforme !', 1 February.

*Le Canard enchaîné* (2023al) 'Mohammed VI : Je rase les murs', 13 September.

*Le Canard enchaîné* (2023am) 'Mon plan banlieue, on n'y a vu que du feu', 5 July.

*Le Canard enchaîné* (2023an) 'Non, rien de rien, non, je ne retraite rien', 22 February.

*Le Canard enchaîné* (2023ao) 'On ignorait que c'était aussi un dé-rappeur', 23 August.

*Le Canard enchaîné* (2023ap) 'Pour une fois qu'elle a une idée de génisse !', 24 May.

*Le Canard enchaîné* (2023aq) 'Poutine a les mercenaires à vif', 28 June.

*Le Canard enchaîné* (2023ar) 'Restez droits dans vos votes !', 15 March.

*Le Canard enchaîné* (2023as) 'Retraites : le sujet déchaîne toujours les pensions !', 4 January.

*Le Canard enchaîné* (2023at) 'Si tu ne viens pas à Lagardère...', 14 June.

*Le Canard enchaîné* (2023au) 'Sur les retraites, je m'y suis pris comme un manche !', 26 April.

*Le Canard enchaîné* (2023av) 'Ton ministre, tu l'aimes ou tu l'acquitte', 8 November.

*Le Canard enchaîné* (2023aw) 'Trump va-t-il finir à l'ombre ?', 16 August.

*Le Canard enchaîné* (2023ax) 'Un épisode complètement Bardellique', 20 December.

*Le Canard enchaîné* (2023ay) 'Une solution à deux Etats, mais sans l'Etat-nyahou', 25 October.

*Le Canard enchaîné* (2023az) 'Wagner : le crépuscule des odieux ?', 1 March.

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## List of Abbreviations

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<b>Abbreviation</b>	<b>Meaning</b>
AI	Artificial intelligence
AT	Automatic translation
CAT	Computer-assisted tools
CSI	Culture-specific item
MT	Machine translation
MTPE	Machine Translation Post-Editing
NLP	Natural Language Processing
NMT	Neural machine translation
PE	Post-Editing/Post-Edition
SMT	Statistical Machine Translation

## Appendix

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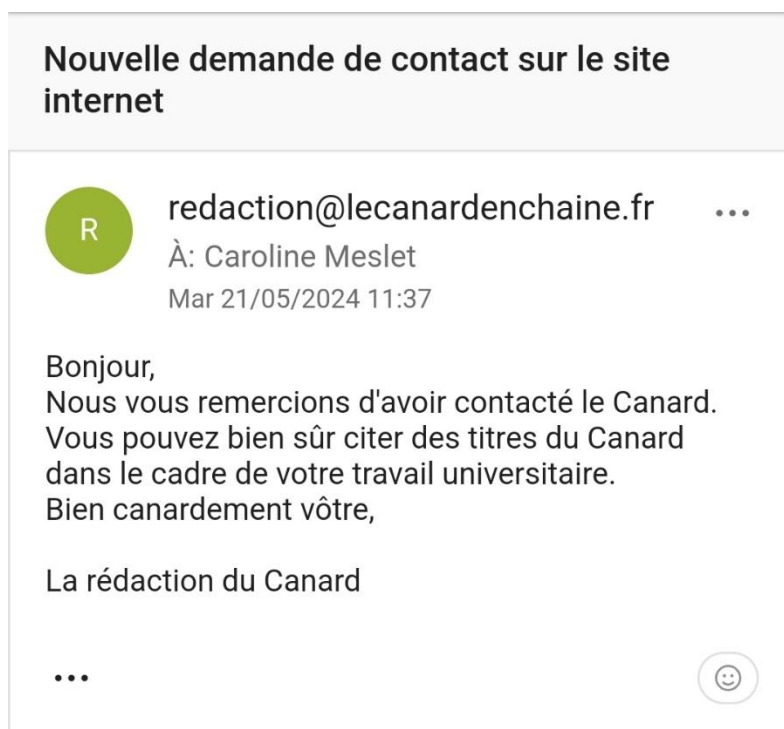


Figure 14 Email from the editorial team of *Le Canard enchaîné*

## *Automatic translation of puns from Le Canard enchaîné*

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As it is constantly improved, automatic translation is challenging professional translators. Yet, some tasks, like pun translation, remains difficult for machines. The aim of this paper is thus to look at recent research in machine translation and pun translation, as well as study the case of DeepL. Finally, different types of wordplays will also be explained, with examples from the satirical French newspaper Le Canard Enchaîné.

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**Key words:** automatic translation, pun translation, wordplay, DeepL, Le Canard Enchaîné

