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The COVID-19 Crisis and Its Challenges on Social Issues

COVID-19: crisi e sfide nella società

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Get a Jab or Grab a Glass (of Wine)

A Sentiment and Corpus-Assisted Discourse Analysis of Reader Comments on News Story in the *Daily Mail*

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ABSTRACT

The first lockdown had a positive impact on alcohol consumption, with wine becoming the most commonly consumed alcoholic beverage. Although the belief that the immune system and viral resistance are boosted by alcohol was labelled as ‘myth’ by the World Health Organization, a later study gave evidence that red wine drinking provided protection from COVID-19¹. Based on these premises, this paper embraces a multi-disciplinary approach combining sentiment and corpus-assisted discourse analysis to explore news readers’ reactions to the news story as divulged by the *Daily Mail* in a corpus of 454 online comments. Findings indicate that sarcasm and distrust are the most frequent feelings, along with a mainly negative sentiment associated with discourses concerning politics, the effectiveness of various substances in combating the virus and wine-making traditions. Also, insights into the role of readers’ role in affecting editorial policies are drawn.

Keywords: corpus-assisted discourse analysis; COVID-19; reader comments; sentiment analysis; wine.

¹ We are aware that from the medical perspective, this evidence is controversial. See, for instance the papers found at the PubMed repository (for instance Fan *et al.* 2021; Huang *et al.* 2022).

1. INTRODUCTION

Social media has been a major player during the recent pandemic, with people connecting both to spread the information they had and to keep up-to-date. Despite its informative and ‘humane’ potential, however, user-generated content (henceforth UGC) might be the origin of unverified information or any fake news which could rapidly spread worldwide and cause significant damage if not handled properly. At the Munich Security Conference on February 15, 2020, World Health Organization (henceforth WHO) Director-General Tedros Adhanom Ghebreyesus (quoted in Zarocostas 2020, 676) warned the world about a by-product of the epidemic to be fought, namely the infodemic. The term was coined by David Rothkopf in a 2003 Washington Post column where he defined it as “a few facts, mixed with fear, speculation and rumour, amplified and relayed swiftly worldwide by modern information technologies” (Rothkopf 2003, online) emerged in response to minor and major crises like SARS and terrorism. At the beginning of March 2020, WHO Director-General spoke again to warn the world against “not just a public health crisis, [but] a crisis that [would] touch every sector” (quoted in Ducharme 2021, online) and, of course, the wine industry was not exempt from the commercial and social-media related consequences of the pandemic. It might come as no surprise that in many countries restrictions on mobility had a positive impact on alcohol consumption with wine in particular becoming “the most frequently consumed alcoholic beverage” (Dubois *et al.* 2021, 165) of all. Amongst the reasons for the increase in alcohol and specifically wine consumption at times of crisis are: its categorisation as *comfort food* (Cavallo, Sacchi, and Carfora 2020); the generalised panic-buying of food and drink, commonly referred to as a “survivalist response” (Velikova *et al.* 2021, 3); reasons associated with stress: “to distract from problems”, “to help me sleep” and “to relax” (Velikova *et al.* 2021, 12); and the belief that alcohol could prevent COVID-19 infection. This and other news about wine and alcohol in general and its role in contributing to COVID-19 prevention spread widely and caused no little harm. Indeed, an Iranian health ministry spokesman stated that 5,011 people were poisoned with methanol alcohol, of which 90 people suffered eye damage or lost their sight and 728 died between February 20 and April 7, 2020 (Aljazeera 2020). Following the tragedy and other attempts to spread news promoting the idea that alcohol stimulates immunity and resistance to the virus, the WHO went on record to categorically deny it. The International body issued a 6-page

document entitled “Alcohol and COVID-19: What You Need to Know” to address “the misinformation that [was] being spread through social media and other communication channels about alcohol and COVID-19” (World Health Organization 2020, 1). In the document, the statement “alcohol (beer, wine, distilled spirits or herbal alcohol) stimulates immunity and resistance to the virus” was labelled as myth and, in strong opposition to this, the statement “alcohol has a deleterious effect on your immune system and will not stimulate immunity and virus resistance” was labelled as fact (World Health Organization 2020, 2). As COVID-19 cases continued to decline, however, on January 3, 2022 a study by Dai *et al.* (2022) conducted on 473,957 British subjects, 16,559 of whom tested positive for COVID-19 published by *Frontiers in Nutrition*² and entitled “COVID-19 Risk Appears to Vary across Different Alcoholic Beverages” provided evidence that “consumption of red wine above or double above the guidelines played protective effects against the COVID-19” (Dai *et al.* 2022, online). The authors found that “compared with non-drinkers, the COVID-19 risk was 10-17% lower in red wine consumers [and] 7-8% lower in white wine and champagne consumers [while] consumers of beer and cider had 7-28% higher risks of COVID-19”. The story was covered by newspapers all over the world (at least 49, see section 3.1), which spread the news that alcohol could prevent the virus.

Based on these premises, the proposed paper aims at exploring news websites users’ reactions to the abovementioned news story by embracing a multi-disciplinary approach combining sentiment (Kim and Hovy 2004) and corpus-assisted discourse analysis (Partington 2013) in a discourse-historical perspective (Wodak and Meyer 2001). Specifically, a unique dataset of 454 user-generated online comments posted in response to the article titled “Red Wine Wards off Coronavirus... but Beer Does not, According to New Research”, published online on January 23, 2022 by the *Daily Mail*, was scrutinised through automated natural language processing (NLP) tools, namely VADER (Hutto and Gilbert 2014) and #Lancsbox 6.0 (Brezina, Weill-Tessier, and McEnery 2021) for the identification of frequent words and the sentiment score. Subsequently, the analysis delved deeply into the discourses triggered by the news story spreading a scientific article that apparently indicates different results from what declared by WHO official documents in order to learn about the commenters’ underlying drives and further the sentiment analysis from a discursive standpoint. It is believed that by understanding

² Impact Factor: 5.0.

how individuals respond to news is crucial in the development of effective strategies to empower both editors and the public and to make more informed decisions in both the publishing and the reading process.

2. THEORETICAL FRAMEWORK

This section provides an overview of user-generated content (UGC), sentiment analysis and corpus-assisted discourse analysis for the subsequent analysis. The expression UGC is widely used to denote all resources “in the form of text, audio, video, image, or metadata, that are posted by users either intentionally or impulsively on social networking sites” (Kurian 2015, 905) as feedbacks, blog entries, comments etc. This study considers a definite type of UGC that is the online reader comment. Herring (2013, 5) defines the reader comment on news stories as a less prototypical type of convergent media computer-mediated communication “because it involves the convergence of text with text rather than the convergence of text with another mode” and gives rise to polylogues (Marconcchia 2004), dialogues developing on multiple levels in that commenters can engage in conversations with one another other than responding to the text. A comments section to online news is relatively straightforward (Napolitano 2018) and “provides a unique and constructive space for public discourse” (Manosevitch and Walker 2009, 2).

Over the past few years, UGC has amassed “a large amount of data on individual attitudes, behaviours, and experiences” (Ruelens 2022, 731), and yet “its practical use in addressing relevant research questions and the knowledge of analytical techniques to examine such data among social science researchers remain limited” (Ruelens 2022, 732). One of the possible usages of these data is sentiment analysis where the word sentiment refers to “an explicit or implicit expression in [a] text of the Holder’s positive, negative, or neutral regard toward the Claim about the Topic” (Kim and Hovy 2004, 1; capital letters in the original). Sentiments convey the polarity, which “signifies the orientation of the sentiment expressed in the discourse” (Corbett and Savarimuthu 2022, 5), of the six primary emotions – anger, fear, sadness, joy, love, and surprise. Thus, sentiment analysis – as one of the major approaches of social media analysis (SMA) and web contents mining (WCM) – refers to “the general method to extract subjectivity and polarity from text” (Taboada *et al.* 2011, 268). The sentiment in a text can be rated as negative, neutral

or positive and might be assigned a score determining the degree of negativity or positivity. Balahur *et al.* (2013) provided insights into sentiment classification for news. They pinpointed three different ‘views’ on news articles, namely author, reader, and text, all of which have to be addressed within a study. From a reader’s perspective, sentiment analysis can be defined as the assessment of a ‘target’ based on people’s ‘norm’ that is “their personal understanding and approval of what is ‘good’ and ‘bad’ in a certain situation” (Balahur *et al.* 2013, 2218). From the author’s viewpoint, identifying news bias or perspective should concern discovering how the ways in which a story is framed can express a certain sentiment. From the point of view of the text, at last, the focus is on what is expressly said or explicitly mentioned. In this study, the author’s point of view and the text’s point of view are considered for examining the reader’s point of view in relation to them and the source of the text.

A combination of traditional corpus linguistics techniques – keyword analysis in particular – and discourse analysis is then used. The corpus is studied from a discourse-historical point of view, taking into account the “available knowledge about the historical sources and the background of the social and political fields in which discursive ‘events’ are embedded” (Wodak and Meyer 2001, 65) for the identification of triggered discourse topics. Indeed, KhosraviNik and Sarkoah (2017, 3622) posit that the “identification and classification of specific topics of a discourse are among the first and most important aspects of CDS³”. The analysis allows for an observation of how specific discourse topics in the original article spark fresh discourses or develop already-existing ones. In this respect, Wodak and Meyer’s discussion of the relationships between distinct discourse topics is particularly relevant to this study:

[a] ‘discourse’ about a specific topic can find its starting point within one field of action and proceed through another one. Discourses and discourse topics ‘spread’ to different fields and discourses. They cross between fields, overlap, refer to each other or are in some other way socio-functionally linked with each other. (Wodak and Meyer 2001, 67)

If it comes as no surprise that this is the first study that assesses public attitudes towards wine’s health-related potential in the context of the COVID-19 pandemic, to the best of my knowledge, this is not the first attempt to observe user-generated content as applied to the wine industry towards wine as a product in general⁴.

³ Critical Discourse Studies.

⁴ See: Cuomo *et al.* 2016; Wouters 2016; Cassar, Caruana, and Konietzny 2020.

3. DATA AND METHOD

The aim of this section is to describe the corpus building process and the method of analysis. Since replicability is considered paramount in accurate research, the author is committed to making this study's procedures as transparent and replicable as possible.

3.1. *Corpus building*

In a preliminary phase, the author considered the idea of using more sources for collecting online reader comments. This phase entailed the search of news articles mentioning the study “COVID-19 Risk Appears to Vary across Different Alcoholic Beverages” by Dai *et al.* (2022) in media outlets including an interactive commenting feature with at least 100 comments, via a Google search with the terms ‘covid’ and ‘wine’ covering the time-span January 2022-present. This led to the creation of an initial corpus of 49 articles from worldwide online sources of which, however, only one having more than 100 comments and therefore prompting the author to opt for a single-source study. Specifically, a unique dataset of 454 user-generated online comments posted in response to the article titled “Red Wine Wards off Coronavirus... but Beer Does not, According to New Research”, published online on January 23, 2022 by the *Daily Mail*, met the corpus criteria. The decision to discard other articles hinges upon the fact that UGC is heavily dependent on the content they react to. Although the study they refer to is the same, the way the piece of news is framed affects users’ interpretation and reaction; as Chong and Druckman (2007, 104) claim: “changes in the presentation of an issue or an event produce (sometimes larger) changes of opinion”.

3.2. *Corpus tools*

A relatively large body of research of online UGC has employed manual analysis as a primary method, which somewhat represents a limit to the analysis of larger corpora of comments. In this study, automated natural language processing (NLP) tools were relied on to facilitate the type of analysis the author aimed to perform. Specifically, sentiment, frequency, and keyword analysis were the text mining methods considered; the soft-

were chosen to carry out these tasks were VADER and #Lancsbox 6.0, respectively.

VADER (Valence Aware Dictionary for sEntiment Reasoning) is a lexicon and rule-based sentiment analysis tool which relies on a gold-standard quality lexicon based on trustworthy sentiment word-banks with the addition of “numerous lexical features common to sentiment expression in microblogs, including a full list of Western-style emoticons” (Hutto and Gilbert 2014, 220). The strength of VADER as compared to a typical bag-of-words model⁵ is the incorporation of other features concerning word-order sensitive relationships, namely: punctuation, capitalisation, and degree modifiers as elements affecting the intensity of a text; and the role of the contrastive conjunction ‘but’, a negation in the tri-gram preceding a sentiment-laden lexical feature in flipping the polarity of a text (Hutto and Gilbert 2014, 221). Following the acquisition of valid point estimates of sentiment valence, the analysis of a sample of 400 most positive and most negative tweets from Twitter selected from 10K random tweets makes it “especially attuned to microblog-like contexts [and] performs exceptionally well in the social media domain” (Hutto and Gilbert 2014, 216). Not only does VADER distinguish between negative, neutral, and positive sentiment but also generates a score expressing how negative or positive the sentiment is.

#LancsBox 6.0 is a new generation corpus tool for the processing and analysis of corpus data including 6 modules performing an individual task. The present analysis exploited the Words tool – which generates frequency lists of types, lemmas and POS categories – and the KWIC tool – which produces a list of all instances of a specific term within a corpus and allows for the analysis of concordances.

3.3. *Method*

The approach to examining online readers’ comments is partly based on Ruelens (2022); the procedure, however, is adapted to embrace a discursive perspective. The author reported the results of a survey of 634 online comments to find out about the attitudes towards healthcare services in different countries, the frequency of topics, nationality and

⁵ In a bag-of-words model “a document is represented as a binary or frequency-based feature vector of the tokens it contains, regardless of their position in the text” (Paltoglou and Thelwall 2013, 246).

gender of respondents. The original analytical strategy included the following six steps: extraction; data cleaning; extraction of the names of the countries; determination of gender; word frequency analysis; sentiment analysis. Here, instead, sentiment analysis is preceded by the reading of a 10% sample of the total corpus and the article for qualitative generalisations; frequency analysis is followed by a manual analysis in which the comments by the users are explored qualitatively. The analytical strategy therefore appears as follows:

- Methodological steps (see section 3.4):
 - Extraction (news article and comments).
 - Data cleaning (comments).
- Corpus analytical steps:
 - Sample analysis (news article and comments): this step concerned the reading of the article and a sample of 46 comments (10% of the corpus of comments) selected randomly. A qualitative preliminary analysis at this point was considered paramount for the subsequent quantitative and qualitative analysis. Indeed, in the case at issue, the reading of the article – to be regarded as part of the corpus – helped figure out the main discourses brought up by the writer and reading through a sample of the comments helped pinpoint the further discourses users might bring up in their responses. Also, in the context of a sentiment analysis, the practitioner can get a rough idea of the general sentiment of the responses and put into action methodological adjustments if required.
 - Sentiment analysis (comments): VADER was implemented in Python 3.0 to determine the emotional polarity of individual comments.
 - Frequency and keyword analysis (comments): the corpus was uploaded to #Lancsbox 6.0 and a frequency list was generated thanks to the Words tool. Stopwords⁶ were omitted to decrease the noise of language in the text and have lexical words stand out in the corpus.
 - Discourse analysis (news article and comments).

⁶ Stopwords can be defined as common words in a text that do not provide substance to the specific subject of interest. Examples of stopwords are “and”, “is”, “of”, and “the”. The stopwords list considered is freely accessible at: <https://countwordsfree.com/stopwords>.

3.4. *Methodological steps*

In the first step – namely the extraction phase – comments were collected from the newspaper's website and reported in a .txt file. Duplicates were not removed as it was believed this would disregard a potential conscious double-submission of the same comment. The extraction phase led to the creation of the *Wine and the Pandemic User Generated Content 22* (henceforth WPUGC22) corpus of 454 comments totalling 7,721 tokens and 1,845 types 1,776 lemmas and an average length of 17 words per comment.

In the second step, the corpus of comments underwent a pre-processing cleaning that entailed the removal of special symbols (-, ', ', ", and ") and the correction of typos and grammatical errors that could prevent the software from working properly. When posting on the web, people tend to use informal language and do not have to adhere to any formal and content restrictions. This means there are a lot of spelling mistakes, abbreviations, and slang words, as well as errors in syntax. Since NLP tools work best on structured text, the more unstructured text in this medium can make it difficult for them to work with and result in failure. For this reason, removing the *noise* in a text prevents any distortion of reliability of the results.

3.5. *Research ethics*

Online research ethics and consent are still developing, as are the applicable ethical standards. Although commenters did not explicitly accept to participate in this research, comments were obtained from an open access news website where everyone can read them without subscription. It is therefore thought to be acceptable to make use of these data for research without receiving specific approval. At the same time, additional private information like the photo, place of origin, pseudonym, and other identifying information was left out of illustrative examples (Page *et al.* 2022, 75).

4. ANALYSIS

This section presents the results of the corpus analytical steps performed on the article and the comments.

4.1. Sample analysis

Apart from the discourse of COVID-19 – as a sub-discourse of health with the occurrences of ‘covid’, ‘virus’, ‘flu’, and ‘respiratory tract-related infection’ –, the article also falls within the discourse of wine – in particular, red one – and alcoholic beverages in general – ‘beer’ and ‘cider’ –, and slightly touches on chemistry – ‘polyphenol content’ (Fig. 1).

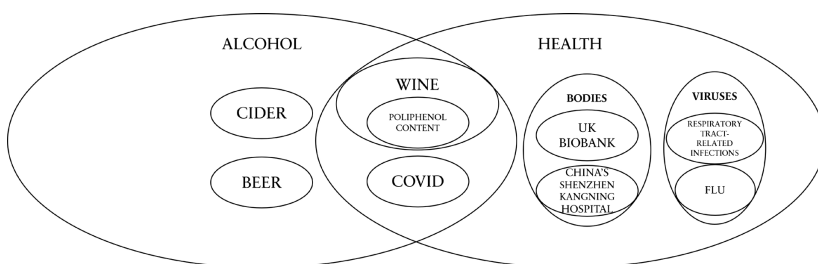


Figure 1. – Discourse topics in the news article.

The sample of comments, then, gave useful clues about the discourses triggered by the article. References to COVID-19 and the wine industry were detected as expected, in addition, some mentions of Boris Johnson and France are spotted. The keywords identified were noted down to form the basis of the subsequent frequency and discourse analysis. More importantly, the reading of the sample warned the author about the presence of sarcasm and irony and urged an impromptu adjustment of the initial analytical strategy with the inclusion of a sarcasm inspection. Alba-Juez and Attardo (2014, 100) give a definition of sarcasm as negative irony “where an apparently positive comment expresses a negative criticism or judgment of a person, a thing or a situation”. This inconsistency between the surface sentiment and the hidden one provides sentiment analysis practitioners with an intricate challenge (Bouazizi and Ohtsuki 2016). For this reason, the analytical strategy was slightly adjusted to suit the new needs. Specifically, the step devoted to the sentiment analysis was widened to include a sarcasm inspection to get finer-grained results regarding the sentiment of the comments.

4.2. Sentiment analysis

Table 1 below reports the number of comments labelled per polarity, their percentage in relation to the total number of comments and their average intensity.

Table 1. – Sentiment analysis.

SEMANTIC ORIENTATION	AVERAGE INTENSITY	AMOUNT	PERCENTAGE
Negative	0.4519	110	24.23%
Neutral	0.0	144	31.72%
Positive	0.4925	200	44.05%

A quick look at the sentiment categorisation and intensity assigned by VADER confirms the presence of a nuanced set of reactions, from mild irony to open humour and bitter sarcasm, especially when politicians are involved. In particular, VADER shows the presence of sarcastic comments ranked as highly positive responses (see Appendix 1 for the top 10 ranked comments) and therefore validates the expectations emerged out of the reading of the sample as to the presence of sarcasm to invalidate the results offered by VADER. At this point, a sarcasm inspection was carried out using the News Headline Dataset (Misra 2019), a large-scale dataset⁷ gathering 11,725 records from *TheOnion*⁸ – an American satirical newspaper organisation – and 14,984 non-sarcastic records from the *HuffPost*⁹ – an American news aggregator – totalling 26,709 records. The dataset was implemented in Kaggle¹⁰ via data scientist Musah Khan’s notebook¹¹ through which the value of 0 is assigned for no sarcasm detected and 1 for sarcasm detected. Sarcasm was found in 55 out of 110 negative comments (50%); 50 out of 144 neutral comments (34.7%); and 104 out of positive 200 comments (52%) which amount to 209 sarcastic comments (46% of the WPUGC22 corpus). Though a well-established and shared definition of sarcasm is not available (Taylor 2017), in the light of previous studies demonstrating that sarcasm is com-

⁷ Available at: <https://github.com/rishabhmisra/Sarcasm-Detection-using-NN>.

⁸ www.theonion.com.

⁹ www.huffingtonpost.com.

¹⁰ A data science community offering tools and resources (<https://www.kaggle.com>).

¹¹ Available at: <https://www.kaggle.com/code/lazer999/sarcasm-detection-nlp-and-tf-for-beginners/comments>.

monly associated with negative sentiment (Kumar and Harish 2018), in case of identification of sarcastic comments, these were assigned a negative sentiment (*Tab. 2*). Since the average negative sentiment exceeds the positive sentiment, the corpus is said to have a *negative polarity*. This disparity in the number of negative comments compared to positive and neutral ones highlights a crystal-clear trend which might impair a constructive online environment that fosters meaningful discussions. It is crucial to understand the underlying reasons behind such a prevalence of negativity, considering the impact it might have on future readers of the same article. Indeed, negative comments can have a significant impact on the overall perception of a particular topic or issue and the presence of several negative comments may negatively influence future readers on the subject and push them to embrace a certain perspective just because it is accepted by the majority.

Table 2. – Sentiment and sarcasm analysis.

SEMANTIC ORIENTATION	AVERAGE INTENSITY	AMOUNT	PERCENTAGE
Negative	–	264 (209)	58.15% (46%)
Neutral	–	94	20.70%
Positive	–	96	21.15%

4.3. Frequency and keyword analysis

Frequent words and the keywords identified in the reading of the sample served as an initial guide for finding other related and unrelated expressions that may broaden the search for the discourses developed in the comments. In order to allocate the keywords to a particular discourse topic at this stage, it was necessary to look for both denotative semantic and social-historical links concerning the keywords, which was done by way of the KWIC tool. All the discourse topics that came up in the comments are shown in *Figure 2*.

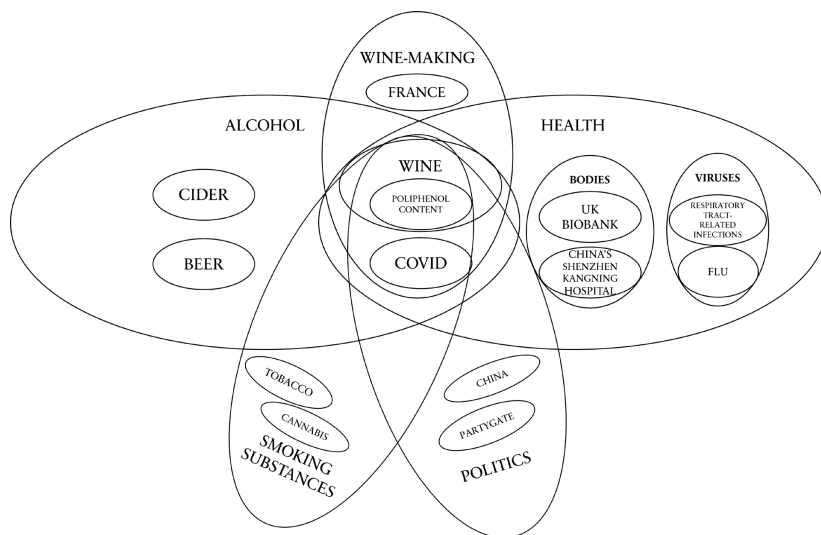


Figure 2. – Discourse topics in the comments.

4.4. Discourse analysis

At this stage, a discursive-historical analysis was carried out through the interpretation of the comments in an effort to comprehend the views and values hidden beneath them.

4.4.1. Wine-making and drinking tradition

One of the discourses emerging out of the comments is one on winemaking as well as the drinking tradition of certain nations (see Appendix 2). Certain users are amazed by the fact that COVID-19 has taken hold even in countries with a strong wine-making and drinking tradition, sometimes in a sarcastic manner. Amongst these countries are France, Italy, Spain, (South) America, and Australia, with France, however, totalling the largest number of occurrences by far. France was the world's second largest producer of wine in 2021 (Statista 2023, online) and ranked first among the top ten countries where alcohol is consumed most frequently (132 days). Also, it occupies the eighth spot in the top ten countries where people are most often drunk measured in days with an average of

17.5 days per year (Winstock *et al.* 2021). Interestingly, despite Italy being the first largest producer of wine worldwide (50.2 million hectolitres compared to 37.6 million hectolitres produced by France) (Statista 2023, online), France is still seen as a wine-drinkers paradise and “the cliché of the French people as a nation of wine connoisseurs remains widespread within France and outside” (Demossier 2010, 4). Comment 1, 3, 5, 7, 8 and 10 make this clear. While some comments look at it from a more general perspective (7 and 10) – e.g., “So, why is it massive in France?” (7) –, in some (1 and 3) – e.g., “[...] I can’t ignore the fact that France has a scary Covid situation and they drink red wine like its water! (1) –, more emphasis is placed on their frequent drinking whereas some others place more emphasis on the commercial and wine-making related dimension (5 and 8) – e.g., “Is all this research carried out by red wine producers in France?” (8). Comment 6 – “Who did the research? Macron?” –, which is clearly sarcastic, refers to French president, Macron, and expands on the previous comments by addressing the political and nationalistic issue more broadly. Comment 4 – “[...] did it come from France because they are selling less wine?” – introduces the topic – or, more precisely, an attitude – of mistrust, which might lead to the development of adversarial and possibly dangerous ideas. Finally, the issue of pesticides in grapes and their residues in wine are brought up in comments 2 and 9 – e.g., “[...] There is no crop more sprayed with insecticides than wine grapes [...]” (9). The study’s findings were not a surprise to either commenter, and they both point to these as the reason why wine is so effective in protecting against the virus. Less frequently mentioned are some well-known wine-making countries (Appendix 3). Some encourage scepticism (15 and 17) – e.g., “According to this article, France, Italy, Spain should be 50% free of Covid due to the amount of wine they drink” (15) – and sarcasm (11 and 16) – e.g., “Great. That nice bottle of Italian red last night I enjoyed was great medicine” (11) – toward the news, but some also demonstrate genuine curiosity and offer proof from personal experience that wine consumption and the virus are related (13 and 14) – e.g., “I am particularly attracted to South Australian Merlot and I have not had Covid!!...” (13). Finally, a reference to beer intake in Northern Italy is made – “[...] the Northern Italians, who tend to drink more beer, have had more Covid cases than further south! [...]” (12) – and two comments (13 and 16) also highlight a more technical aspect of the wine, which is that of grape varieties – e.g., “[...] does it matter which wine region it comes from, or does it have to be an Australian Sheep Dip Sauvignon 2019?” (16).

4.4.2. Politics and commerce

Political discourse topics also emerge; in particular, two are clearly recognisable within the corpus. One concerns China (Appendix 4) and the other the Partygate issue (Appendix 5).

After the contentious and mysterious dynamics that led to the genesis and global propagation of the virus, political and personal positions are taken against China, the nation where the virus originated and the study observing its positive correlation with wine was conducted. Because it is unclear why people should accept a Chinese examination of UK data, allusions to China are used to promote scepticism regarding the report (comment 18, 20, 25, 29) – e.g., “Who would trust anything coming out of China now?” (20). Commenters are attempting to cast doubt on the data because of their elaboration in China, and they are implying that China may have had a role in it or tried to fudge the data related to this issue. Anger towards China also leads to boycott actions extending to other areas besides health – “Boycott anything Chinese. Do not watch the winter games. China must be held accountable” (28). Sarcasm is quite clear in comment 26 – “British figure analysed in China. Go figure!” –, as well as in comment 19 where the news outlet is indirectly blamed for reporting untrustworthy information – “DM (*Daily Mail*) proper accurate stories please....”. References to an alleged business desire to increase Chinese wine production are found in comment 21, 22, 24, and 27 – e.g., “[...] Most probably their wines are not selling fast enough” (22). These may also be classified as being part of the conspiratorial thread, as might be comment 23, which extends the political discourse to the USA by mentioning American virologist Anthony Fauci – “The survey and results are guaranteed by Fauci on behalf of China – allegedly!...”.

The Partygate scandal in the UK involved parties and gatherings of government officials during the COVID-19 pandemic of 2020 and 2021, when public health restrictions meant that most gatherings were prohibited. While restrictive measures of varying degrees to help slow the spread of the virus were in effect, dozens of gathering took place at 10, Downing Street – the official residence of the Prime Minister of the UK – and other government buildings and came under investigation by the Metropolitan Police. Of these, at least three of them were attended by the then-prime minister Boris Johnson. After the news was disclosed by the *Mirror*¹², 126 fixed penalty notices were issued by the police to 83

¹² See: Crerar 2021.

people attending the parties for breaking COVID-19 regulations, including Johnson and his wife. The discourse emerges through references to ‘mp’, ‘Downing Street (party)’ (5 occurrences), ‘Boris’ (5 occurrences) but also to ‘Keir Starmer’¹³ (2 occurrences) Leader of the Opposition and the Labour Party since April 4, 2020, and one of Boris Johnson’s fiercest opponents. In the comments, the subject is always brought up to create a sarcastic effect (Appendix 5 – comments from 30 to 38) – e.g., “So those at Downing Street were trying to protect themselves from Covid, so can work more for the country” (36). The idea that government authorities were aware of the benefits of wine in preventing the virus and that the meetings were conceived of as preventative measures rather than as chances to meet social needs is the foundation of sarcasm.

4.4.3. Other curative substances

References to other substances that are typically associated with a potential risk for health and for which there are studies supporting their efficacies in tackling COVID-19 are also spotted (Appendix 6). It is the case, for instance, for cannabis (van Breemen *et al.* 2022) and tobacco (Paleiron *et al.* 2021) in the face of WHO’s statement claiming that “smokers are more likely to suffer more severe outcomes of COVID-19, such as admission into intensive care units and death, than never smokers” (World Health Organization 2022, online). Paying particular attention to the specific cases of tobacco, there is also an official document on the former that argues: “[t]obacco users have a higher risk of being infected with the virus through the mouth while smoking cigarettes or using other tobacco products. If smokers contract the COVID-19 virus, they face a greater risk of getting a severe infection as their lung health is already compromised” (World Health Organization n.d., online). Sometimes seriously (comments 39, 41, and 42) and sometimes sarcastically (comments 40 and 43), people bring up the fact that wine has been added to the list of alternative curative substances – e.g., “Apparently so does cannabis” (39) and “So, there you have it, drinking wine and smoking weed protects you from the virus. You don’t have to tell me twice” (40). It is worth noting that comments 42 and 43 introduce more substances,

¹³ The actual words used in the comments are “Starma” and “Kier” but based on the context it is safe to assume that these are typos.

including crack, and purport personal testimony on the effectiveness of smoking and alcohol (whiskey) in preventing the virus.

4.4.4. Trust in the newspaper

The state of uncertainty is apparent in some comments where the newspaper is accused of offering contrasting views on the same topic (Appendix 7). The newspaper's editorial board is attacked for its inability to express a clear stance on whether wine is harmful or beneficial – e.g., “Next week it will be the opposite!” (46). This confusion aroused by newspapers might ultimately lead to an increased distrust towards official sources. This is because, in the long run, as ordinary people look for answers to their questions in official sources and get nothing but a series of conflicting information, they might eventually grow sceptical towards that source and equate it to unofficial sources. Indeed, it seems that after the accusations of publishing inconsistent information, they have not published an article in favour of wine since then. Although we cannot be sure whether this is a consequence of user feedback, there is still a likelihood that the news outlet operated accordingly.

5. FINAL REMARKS, LIMITATIONS AND AVENUES FOR FUTURE STUDIES

The study focused on comments to a news item popularising the contents of a scientific article. The analysis of sentiment revealed that scepticism and sarcasm are dominant, and that sentiment is basically negative. Readers appear to chuckle at the news or to be sceptical of the official facts being more inclined to question the accuracy of information presented to them. It also highlights the potential influence of social media platforms in shaping public opinion, as sarcastic and sceptical comments seem to be prevalent in online discussions surrounding news items to counteract the share and spread of unverified or misleading content. In general, this instance of scepticism and distrust in the news story might contribute to building a fractured and polarised society. The discourses produced by the news are primarily political, commercial, and medical discourses; other illicit medications are mentioned, as are national business interests and recent political events, particularly those that were recent and local. While a minority of readers take its content seriously,

accusing the newspaper of disseminating conflicting news, they concurrently endorse conspiracy theories related to political and economic issues. Overall, the study can benefit news outlets in choosing their topics, as well as their editorial policies, and avoiding inconsistencies and bias.

From a methodological point of view, *para-replicability* (Partington 2009, 293-394) – denoting the process of extending and building on someone’s research by covering wider and different aspects on the same line as the previous work – was considered paramount; for this reason the method was developed out of an existing one and with a special thought to future studies that might refer back to it with the utmost clarity and reliability.

The trustworthiness of the corpus tools utilised in this study is mostly responsible for its shortcomings. VADER is capable of assessing a text’s sentiment, but in some instances, like the one observed for the present study, a text’s concealed meanings may deceive the software and make a study less reliable. When sarcasm was detected by another tool, countermeasures were immediately adopted. However, if on the one hand this helped make the results more accurate, the very definition of sarcasm makes the issue more complex. In a study of the differences between sarcasm and irony in Italian and English, Taylor (2017, 21) found that “there is a greater perception of face-attack in the behaviours described as sarcastic or SARCASTICO” (emphasis in the original) and that these are more commonly employed “to indicate behaviours with a target” (Taylor 2017, 33); despite this, sarcasm and irony are widely used as near-synonyms and are not easy to define.

Considering that the main goal of news outlets is to inform their readers to some degree, analysing readers’ reactions to news stories can help news outlets adjust their editorial policy and to decision-making processes in creating more engaging, attractive content or present it in more innovative ways. Future studies might observe how the emergence of discourse subjects develop in comments to the same article over a stretch time or how a direct comment on an article might subsequently inspire and develop a different discourse topic by another user.

APPENDICES

Appendix 1. – Top 10-ranked comments per sentiment compound.

#	COMMENT ¹⁴	SENTIMENT COMPOUND	SARCASM DETECTION
1.	Great. That nice bottle of Italian red last night I enjoyed was great medicine.	0.936	Yes
2.	Best drink both to be on the safe side, then. Don't forget the pre drink of gin or whiskey to double down on your safety!	0.897	Yes
3.	Wow. Just wow. Research grant ad nauseum.	0.8779	Yes
4.	Actually, it's sunshine, fresh air, blueberries and exercise that will boost your immune system. This article is complete fantasy!	0.8655	No
5.	Brexit is wonderful, dreams can come true	0.8481	No
6.	I didn't believe that article, but this one is obviously true. Cheers!	0.8459	Yes
7.	Funny how no one is speaking much about the best way to stop Covid which is to have a healthy immune system! Stop drinking alcohol, eat a species specific and species appropriate diet, get plenty of sunlight and make sure you move around a bit (don't do lots of strenuous exercise). People in the Western world are generally unhealthy, you only need to have a quick look around to see that. How can we expect our immune system to function well when most of us have some kind of metabolic disorder? Even the ones who are super fit are at risk as the contestant stress their bodies are under does nothing to help the immune system.	0.8241	Yes
8.	Ha ha ha ha what a load of rubbish.	0.8225	No
9.	Blueberries are nice. I'd eat those all day long. Good food, good health.	0.8225	No
10.	I only smell the delicious fragrance when you take the top off a good pinot noir.	0.8126	Yes

¹⁴ Comments are reported according to sentiment score.

Appendix 2. – Wine-making and drinking tradition (France).

#	COMMENT	SENTIMENT COMPOUND	SARCASM DETECTION
1.	I really like the sound of what is suggested and will happily try it but I can't ignore the fact that France has a scary Covid situation and they drink red wine like its water!	0.6253	No
2.	I didn't know this, but I am not surprised. Wine is at the top when it comes to content of pesticides and it's not unreasonable that pesticides in your bloodstream could well help against viruses. There is no crop more sprayed with pesticides, particularly neurocidal INSECTICIDES. than wine grapes. In France, workers in vineyards who contract Parkinson's disease are compensated by the French government because it has statistically been found that insecticides are MORE than likely to be the cause of it.	0.5575	No
3.	According to this article, France, Italy, Spain should be 50% free of Covid due to the amount of wine they drink.	0.5106	No
4.	Funny that my Lady drinks wine and caught Covid, I drink beer and have never caught Covid, so that debunks that theory, did it come from France because they are selling less wine?	0.4404	Yes
5.	Sounds like something France or any other wineries would say just to sell more wine.	0.3612	Yes
6.	Who did the research? Macron?	0.0	Yes
7.	So, why is it massive in France?	0.0	No
8.	Is all this research carried out by red wine producers in France?	0	No
9.	It might just be true. There is no crop more sprayed with insecticides than wine grapes. Wine grapes have a couple of insects that can completely wipe out a vineyard's vines. Wine has the highest content of pesticides in it. The French government compensates vineyard workers who get Parkinson's. Perhaps it's the pesticides in the bloodstream of wine drinkers that fights off the covid virus. I'm just playfully offering up a dubious POSSIBLE. Keep on drinking it.	-0.25	No
10.	So, how many died in France with Covid?	-0.5574	No

Appendix 3. – Wine-making and drinking tradition (other countries).

#	COMMENT	SENTIMENT COMPOUND	SARCASM DETECTION
11.	Great. That nice bottle of Italian red last night I enjoyed was great medicine.	0.936	Yes
12.	Well, the Europeans tend to have longer average lives than the Brits, so maybe there's something in it. In general, not too sure about Covid, but on reflection, the Northern Italians, who tend to drink more beer, have had more Covid cases than further south! There's also been quite a number of 100yr old people in Italy, for instance, that have survived Covid, even if they caught it, so just maybe!	0.7888	No
13.	I am particularly attracted to South Australian Merlot and I have not had Covid!!	0.5686	No
14.	I'll stick to New World reds which are far superior to OLD French vinegar.	0.5423	Yes
15.	According to this article, France, Italy, Spain should be 50% free of Covid due to the amount of wine they drink.	0.5106	No
16.	So, I'll keep on drinking my bottle or two of the red vino collapso, does it matter which wine region it comes from, or does it have to be an Australian Sheep Dip Sauvignon 2019?	0.0258	Yes
17.	Red wine grown in many of the world's regions. You can purchase reds like you can water in many of the world's regions. still the Covid cases in the same regions is high. For example, Italy, Spain, South America, Australia. This is rubbish. I don't trust the science behind this study.	-0.0521	Yes

Appendix 4. – Politics and trade (China).

#	COMMENT	SENTIMENT COMPOUND	SARCASM DETECTION
18.	Well at long last we have some good news from China, that's if you're daft enough to believe anything from them.	0.6124	Yes
19.	Yeah really.....report from.... China.....says it allDM proper accurate stories please....	0.5423	Yes
20.	Who would trust anything coming out of China now?	0.5106	No
21.	When do we expect the first batch of China's very own red wine to grace the drinks section?	0.4215	No

22.	A statement from China I wouldn't believe. Most probably their wines are not selling fast enough.	0	No
23.	The survey and results are guaranteed by Fauci on behalf of China – allegedly!!	0	No
24.	Did not know China produced wine so obviously a sales pitch.	0	Yes
25.	Figures analysed in China. I'll keep an open mind.	0	Yes
26.	British figure analysed in China. Go figure!	0	Yes
27.	What the article should also point out is that in the last 5-10 years, many of the vineyards in the Bordeaux region of France have been bought out by... Chinese billionaires. Mmmmn, think there's a connection?	0	Yes
28.	Boycott anything Chinese. Do not watch the winter games. China must be held accountable.	-0.3182	No
29.	The trouble with this story is they were all drinking some cheap Chinese red plonk. And Covid being a Chinese invention I'm reluctant to believe any of it!	-0.6114	Yes

Appendix 5. – Politics (Partygate).

#	COMMENT	SENTIMENT COMPOUND	SARCASM DETECTION
30.	So, there we have the truth, Boris and his Conservative friend must have known this back in May 2020 Party on Wayne.	0.802	Yes
31.	Great, is this is why Downing Street had the drinks party?!	0.7959	Yes
32.	Great, no vaccines for me I've just ordered 30 crates of red wine, let's party the Boris way.	0.7088	Yes
33.	Haha that is what Boris and his party cronies knew all along.	0.6908	Yes
34.	Which mp with shares in red wine wants a boost this month?	0.5994	Yes
35.	Did the study gather facts from Boris's party or Keir's?	0.4019	Yes
36.	So those at Downing Street were trying to protect themselves from Covid, so can work more for the country.	0.3818	Yes
37.	So that's why there were so many parties in downing street. They were a prophylactic means to avoid catching the virus. How long before boris uses this as a excuse?	0.2682	Yes

38.	We're them drinking red wine at the Downing Street party. Starmer made an error again with the beer choice.	0.0	No
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Appendix 6. – Other curative substances.

#	COMMENT	SENTIMENT COMPOUND	SARCASM DETECTION
39.	Apparently so does cannabis.	0.6542	No
40.	So, there you have it, drinking wine and smoking weed protects you from the virus. You don't have to tell me twice.	0.5745	Yes
41.	At the start of the pandemic, Chinese scientists had observed that smokers were less prone to catching Covid!	0.4365	No
42.	Try Whisky. It kills everything else. So why wouldn't it kill that too. I'm not vaxxed and never had Covid. Every day I'm in my local bar, surrounded by other heavy drinkers and smokers. You would think a high-risk group and high-risk environment. Not one of them has ever had Covid.	0.0	No
43.	What's next? Smoking crack kills the virus dead in its tracks.	-0.8316	Yes

Appendix 7. – Trust in the newspaper.

#	COMMENT	SENTIMENT COMPOUND	SARCASM DETECTION
44.	There is a new story every week regarding wine etc and whether it is good or bad. This is probably more a coincidence than reality.	-0.2543	No
45.	We were being warned about the dangers of red wine the other day. Pick the expert that suits you best!	-0.2587	No
46.	Next week it will be the opposite!	-0.2589	No
47.	Last week red wine was good for your heart yesterday it wasn't but today it's good for Covid sufferers.	-0.5689	No
48.	Until Monday, Wednesday and Friday when the opposite studies are revealed.	-0.6643	No

REFERENCES

- Alba-Juez, Laura, and Salvatore Attardo. 2014. "The Evaluative Palette of Verbal Irony". *Pragmatics & Beyond New Series*, edited by Geoff Thompson and Laura Alba-Juez, 242: 93-116. Amsterdam: John Benjamins Publishing Company. doi: <https://doi.org/10.1075/pbns.242.05alb>.
- Aljazeera. 2020. *Iran: Over 700 Dead after Drinking Alcohol to Cure Coronavirus*. Last modified April 27. [25/05/2023]. <https://www.aljazeera.com/news/2020/4/27/iran-over-700-dead-after-drinking-alcohol-to-cure-coronavirus>
- Balahur, Alexandra, Ralf Steinberger, Mijail Kabadjov, Vanni Zavarella, Erik van der Goot, Matina Halkia, Bruno Pouliquen, and Jenya Belyaeva. 2013. "Sentiment Analysis in the News". *ArXiv* 1309.6202. doi: <https://doi.org/10.48550/ARXIV.1309.6202>.
- Bouazizi, Mondher, and Tomoaki Ohtsuki. 2016. "Sentiment Analysis in Twitter: From Classification to Quantification of Sentiments within Tweets". In *2016 IEEE Global Communications Conference (GLOBECOM)*. Washington (DC): IEEE. doi: <https://doi.org/10.1109/GLOCOM.2016.7842262>.
- Brezina, Vaclav, Pierre Weill-Tessier, and Anthony McEnergy. 2021. #LancsBox (Version 6.0) [Software Package].
- Cassar, Mario L., Albert Caruana, and Jirka Konietzny. 2020. "Wine and Satisfaction with Fine Dining Restaurants: An Analysis of Tourist Experiences from User Generated Content on *TripAdvisor*". *Journal of Wine Research* 31 (2): 85-100. doi: <https://doi.org/10.1080/09571264.2020.1764919>.
- Cavallo, Carla, Giovanna Sacchi, and Valentina Carfora. 2020. "Resilience Effects in Food Consumption Behaviour at the Time of Covid-19: Perspectives from Italy". *Heliyon* 6 (12): e05676. doi: <https://doi.org/10.1016/j.heliyon.2020.e05676>.
- Chong, Dennis, and James N. Druckman. 2007. "Framing Theory". *Annual Review of Political Science* 10 (1): 103-126. doi: [10.1146/annurev.polisci.10.072805.103054](https://doi.org/10.1146/annurev.polisci.10.072805.103054).
- Corbett, Jacqueline, and Bastin Tony Roy Savarimuthu. 2022. "From Tweets to Insights: A Social Media Analysis of the Emotion Discourse of Sustainable Energy in the United States". *Energy Research & Social Science* 89 (July): 102515. doi: <https://doi.org/10.1016/j.erss.2022.102515>.
- Crerar, Pippa. 2021. "EXCLUSIVE: Boris Johnson 'broke Covid lockdown rules' with Downing Street Parties at Xmas". *Mirror*. Last modified December 1. [27/09/2023]. <https://www.mirror.co.uk/news/politics/boris-johnson-broke-covidlockdown-%2025585238>
- Cuomo, Maria Teresa, Debora Tortora, Giuseppe Festa, Alex Giordano, and Gerardino Metallo. 2016. "Exploring Consumer Insights in Wine Marketing: An

- Ethnographic Research on #Winelovers". *Psychology & Marketing* 33 (12): 1082-90. doi: <https://doi.org/10.1002/mar.20942>.
- Dai, Xi-jian, Liang Tan, Lina Ren, Yuan Shao, Weiqun Tao, and Yongjun Wang. 2022. "COVID-19 Risk Appears to Vary across Different Alcoholic Beverages". *Frontiers in Nutrition* 8 (January): 772700. doi: <https://doi.org/10.3389/fnut.2021.772700>.
- Demossier, Marion. 2010. "Consuming Wine in France the 'Wandering' Drinker and the 'Vin-anomie'". Dans *Dictionnaire d'Histoire Culturelle de la France Contemporaine*, édité par Christian Delporte, Jean Yves Mollier, et Jean Francois Sirinelli. Paris: Presses Universitaires de France, 842-844. [24/05/2023]. https://purehost.bath.ac.uk/ws/portalfiles/portal/9434644/revisedarticle3_1.pdf.
- Dubois, Magalie, Lara Agnoli, Jean-Marie Cardebat, Raúl Compés, Benoit Faye, Bernd Frick, Davide Gaeta, Eric Giraud-Héraud, Eric Le Fur, Florine Livat, Giulio Malorgio, Philippe Masset, Giulia Meloni, Vicente Pinilla, João Rebelo, Luca Rossetto, Günter Schamel, and Katrin Simon-Elorz. 2021. "Did Wine Consumption Change during the COVID-19 Lockdown in France, Italy, Spain, and Portugal?". *Journal of Wine Economics* 16 (2): 131-168. doi: <https://doi.org/10.1017/jwe.2021.19>.
- Ducharme, Jamie. 2020. "World Health Organization Declares COVID-19 a 'Pandemic'. Here's What That Means". *Time Magazine*. Last modified March 11. [03/05/2023]. <https://time.com/5791661/who-coronavirus-pandemic-declaration>
- Fan, Xiude, Zhengwen Liu, Kyle L. Poulsen, Xiaoqin Wu, Tatsunori Miyata, Srinivasan Dasarathy, Daniel M. Rotroff, and Laura E. Nagy. 2021. "Alcohol Consumption is Associated with Poor Prognosis in Obese Patients with COVID-19: A Mendelian Randomization Study using UK Biobank". *Nutrients* 13: 1592. doi: <https://doi.org/10.3390/nu13051592>.
- Herring, Susan C. 2013. "Discourse in Web 2.0: Familiar, Reconfigured, and Emergent". *Discourse 2.0: Language and New Media*, edited by Deborah Tannen and Anna Marie Trester, 1-25. Washington (DC): Georgetown University Press.
- Huang, Bo-Huei, Elif Inan-Eroglu, Ramon Z. Shaban, Mark Hamer, Annie Britton, and Emmanuel Stamatakisa. 2022. "Alcohol Intake and Mortality Risk of COVID-19, Pneumonia, and Other Infectious Diseases: An Analysis of 437191 UK Biobank Participants". *Preventive Medicine Reports* 26 (2022): 101751. doi: 10.1016/j.pmedr.2022.101751.
- Hutto, J. Clayton, and Eric Gilbert. 2014. "VADER: A Parsimonious Rule-Based Model for Sentiment Analysis of Social Media Text". *Proceedings of the International AAAI Conference on Web and Social Media* 8 (1): 216-225. doi: <https://doi.org/10.1609/icwsm.v8i1.14550>.
- Khosravini, Majid, and Nadia Sarkhoh. 2017. "Arabism and Anti-Persian Sentiments on Participatory Web Platforms: A Social Media Critical Discourse Study". *International Journal of Communication* 11: 3614-3633.

- Kim, Soo-Min, and Eduard Hovy. 2004. "Determining the Sentiment of Opinions". In *Proceedings of the 20th International Conference on Computational Linguistics – COLING '04*, 1367-es. Genève: Association for Computational Linguistics. doi: <https://doi.org/10.3115/1220355.1220555>.
- Kumar, H.M. Keerthi, and B.S. Harish. 2018. "Sarcasm Classification: A Novel Approach by Using Content Based Feature Selection Method". *Procedia Computer Science* 143: 378-386. doi: <https://doi.org/10.1016/j.procs.2018.10.409>.
- Kurian, Jayan Chirayath. 2015. "Facebook Use by the Open Access Repository Users". *Online Information Review* 39 (7): 903-922. doi: <https://doi.org/10.1108/OIR-02-2015-0055>.
- Manosevitch, Edith, and Dana Walker. 2009. "Reader Comments to Online Opinion Journalism: A Space of Public Deliberation". In *10th International Symposium on Online Journalism*, Austin (TX), April 17-18, 2009.
- Marcoccia, Michel. 2004. "On-Line Polylogues: Conversation Structure and Participation Framework in Internet Newsgroups". *Journal of Pragmatics* 36 (1): 115-45. doi: [https://doi.org/10.1016/S0378-2166\(03\)00038-9](https://doi.org/10.1016/S0378-2166(03)00038-9).
- Misra, Rishabh, and Prahal Arora. 2019. "Sarcasm Detection Using Hybrid Neural Network". *ArXiv* abs/1908.07414. doi: 10.48550/arXiv.1908.07414.
- Napolitano, Antonella. 2018. "Image Repair or Self-Destruction? A Genre and Corpus-Assisted Discourse Analysis of Restaurants' Responses to Online Complaints". *Critical Approaches to Discourse Analysis across Disciplines* (Special Issue) 10 (1): 135-153.
- Page, Ruth, David Barton, Carmen Lee, Johann Wolfgang Unger, and Michele Zappavigna. 2022. *Researching Language and Social Media: A Student Guide*. 2nd ed. London: Routledge.
- Paleiron, Nicolas, Aurélie Mayet, Vanessa Marbac, Anne Perisse, Hélène Barazzutti, François-Xavier Brocq, Frédéric Janvier, Bertrand Dautzenberg, and Olivier Bylicki. 2021. "Impact of Tobacco Smoking on the Risk of COVID-19: A Large Scale Retrospective Cohort Study". *Nicotine & Tobacco Research* 23 (8): 1398-1404. doi: <https://doi.org/10.1093/ntr/ntab004>.
- Paltoglou, Georgios, and Mike Thelwall. 2013. "More Than Bag-of-Words: Sentence-based Document Representation for Sentiment Analysis". In *Proceedings of Recent Advances in Natural Language Processing*, Hissar (Bulgaria), September 7-13, 2013, 546-552. [24/05/2023]. <https://aclanthology.org/R13-1072.pdf>
- Partington, Alan. 2009. "Evaluating Evaluation and Some Concluding Reflections on CADS". In *Corpus Assisted Discourse Studies on the Iraq Conflict: Wordings the War*, edited by John Morley and Pauk Bayley, 261-303. London: Routledge.
- Partington, Alan, ed. 2013. *Patterns and Meanings in Discourse: Theory and Practice in Corpus-Assisted Discourse Studies (CADS)*. Amsterdam: John Benjamins Publishing Company (Studies in Corpus Linguistics, 55).

- Rothkopf, David J. 2003. "When the Buzz Bites Back". *The Washington Post*. Last modified May 11. [21/05/2023].
<https://www.washingtonpost.com/archive/opinions/2003/05/11/when-the-buzz-bites-back/bc8cd84f-cab6-4648-bf58-0277261af6cd/>
- Ruelens, Anna. 2022. "Analyzing User-Generated Content Using Natural Language Processing: A Case Study of Public Satisfaction with Healthcare Systems". *Journal of Computational Social Science* 5 (1): 731-749. doi: <https://doi.org/10.1007/s42001-021-00148-2>.
- Statista. 2023. "Wine Production in Selected Countries and Regions". *Statista*. Last modified April. [08/06/2023].
<https://www.statista.com/statistics/240638/wine-production-in-selectedcountries-and-regions/>
- Taboada, Maite, Julian Brooke, Milan Tofiloski, Kimberly Voll, and Manfred Stede. 2011. "Lexicon-Based Methods for Sentiment Analysis". *Computational Linguistics* 37 (2): 267-307. doi: https://doi.org/10.1162/COLI_a_00049.
- Taylor, Charlotte. 2017. "The Relationship between Irony and Sarcasm: Insights from a First-Order Metalanguage Investigation". *Journal of Politeness Research* 13 (2): 209-241. doi: <https://doi.org/10.1515/pr-2015-0037>.
- van Breemen, Richard B., Ruth N. Muchiri, Timothy A. Bates, Jules B. Weinstein, Hans C. Leier, Scotland Farley, and Fikadu G. Tafesse. 2022. "Cannabinoids Block Cellular Entry of SARS-CoV-2 and the Emerging Variants". *Journal of Natural Products* 85 (1): 176-84. doi: <https://doi.org/10.1021/acs.jnatprod.1c00946>.
- Velikova, Natalia, Oleksandra Hanchukova, and Bogdan Olevskiy. 2021. *The Effect of Covid-19 on U.S. Wine Consumption: Six Months after the Original Lockdown*. Texas Wine Marketing Research Institute. Research Report, May 14, 2021. [07/07/2023].
<https://www.depts.ttu.edu/hs/texaswine/docs/COVID-19-Wine-Report.pdf>.
- Winstock, Adam R., Larissa J. Maier, Carmen Villa-Llera, Ahnjili Zhuparris, Emma Davis, Rachel Sutherland, Kim Kuypers, Cristopher Timmerman, Jason A. Ferris, and Monica J. Barratt. 2021. *Global Drug Survey (Gds) 2021 Key Findings Report*. [23/05/2023].
https://www.globaldrugsurvey.com/wp-content/uploads/2021/12/Report2021_global.pdf
- World Health Organization. 2020. "Alcohol and COVID-19: What You Need to Know", 1-6. [03/06/2023].
https://www.euro.who.int/__data/assets/pdf_file/0010/437608/Alcoholand-COVID-19-what-you-need-to-know.pdf
- World Health Organization. 2022. "Coronavirus Disease (COVID-19): Tobacco". Last modified May 25. [27/09/2023].
<https://www.who.int/emergencies/diseases/novel-coronavirus-2019/question-and-answers-hub/q-a-detail/coronavirus-disease-covid-19-tobacco>

- World Health Organization. n.d. “Tobacco and COVID-19”. [27/09/2023].
<https://www.who.int/europe/emergencies/situations/covid-19/tobacco-andcovid-19>
- Wodak, Ruth, and Michael Meyer. 2001. *Methods of Critical Discourse Analysis*. London: Sage. doi: <https://doi.org/10.4135/9780857028020>.
- Wouters, Claire. 2016. *The Effect of Negative User-Generated Content on Consumer-Based Brand Equity: Comparing Brand Loyal versus Non-Loyal Customers in the Luxury Wine Market*. University of Cape Town, Faculty of Commerce, School of Management Studies. [03/06/2023].
<http://hdl.handle.net/11427/20999>
- Zarocostas, John. 2020. “How to Fight an Infodemic”. *The Lancet* 395 (10225): 676. doi: [https://doi.org/10.1016/S0140-6736\(20\)30461-X](https://doi.org/10.1016/S0140-6736(20)30461-X).

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