Challenges and Opportunities for the Analysis
of Digital News Media Language

Maha El Biadi

maha.elbiadi@usmba.ac.ma

CREDIF Laboratory
Laboratory of Cultures, Représentations, Education, Didactique et Ingénierie de la Formation
Faculty of Letters and Human Sciences Dhar ElMehraz
Sidi Mohamed Ben Abdellah University, Fez, Morocco

Abstract— **The present paper aims to discuss the issue of digital news media analysis and how the use of Information Technology (IT) and Natural Language Processing (NLP) tools can offer a boost to researchers who are particularly interested in examining the linguistic aspect of news media texts. It looks into the reasons why these new methods can assist, and therefore enhance linguistic studies involving minute and detailed analyses of a variety of linguistic features that news media texts contain. The paper starts by presenting the perspective of the linguists, critical discourse analysts to be precise, by looking into the reasons why they consider news media language to be one of the aspects of human communication worthy of being scrutinized, especially in the digital era. The latter is characterized by the production of big amounts of news media content to which people are exposed at a pace never witnessed before. The paper also provides a brief overview of the kind of linguistic tools critical discourse analysts rely on to examine news texts to eventually discuss the possibilities that the new technology can offer, not only to make linguistic studies of the type critical discourse analysts carry out more objective and revealing, but to also process bigger and more representative corpuses of data.**

Keywords— *Digital Media, Critical Discourse analysis, news media language, NLP tools*

I. INTRODUCTION

If you ask anyone who is well acquainted with the pre-digital era, who was born in the 60s and 70s, they would most certainly agree that people's exposure to the news media has exponentially increased, especially in the last two decades. The variety of means through which the news reach people on a day-to-day basis has indeed led to a situation where media consumers are constantly showered with news media content. The use of multi-media devices such as smart phones, PCs and tablets, together with the big increase in the number of news media outlets, especially those that are readily accessible on mobile phones has made the news media omnipresent. The list of the media through which people get the news has indeed grown longer, and has gone beyond the traditional media that pre-existed the internet era, which was mainly limited to TV, radio and newspapers. Social media, news media applications, podcasts, online newspapers, and YouTube channels, compounded with what friends and family share have created an environment where the news media are everywhere and far-reaching. They in consequence reach bigger audiences than ever before.

One of the aspects that scholars interested in the news media examine is the linguistic aspect of news media texts. Any study which does not take on board the meanings conveyed through the linguistic structure is bound to fall short of providing the full picture as to how the news media exerts its powerful influence on news media consumers. The objective of the present paper is therefore to talk about the importance of analyzing the language of the news media, particularly in the digital age. It starts by laying out the perspective of critical discourse analysts and discussing the reasons why they believe news media language is one of the aspects of human communication that should be scrutinized (Fowler, 1991; Fairclough, 1989, 1995; van Dijk 2001).

It then provides a brief overview of the main linguistic features critical discourse analysts look for to examine news texts to get to certain meanings not explicitly expressed. This will eventually pave the way to discussing the possibilities that the new technology can offer, to make linguistic studies of this kind more objective and revealing.

II. NEWS MEDIA IN THE DIGITAL ERA

According to the American Psychological Association, one in ten adults checks the news every hour, 20% of Americans report "constantly" monitoring their social media feeds—which often exposes them to the latest news headlines, whether they like it or not. Even before people were confined to their homes due to the coronavirus pandemic, the average American spent around eleven hours every day looking at screens (Markham, 2020). At the start of the Covid pandemic, The BBC News Channel, for example, reached a total of 11.7m viewers across the   entire week of March the 17th 2020 (the beginning of the covid 19 lockdown) - 70 per cent higher than its average for 2019 (Tobitt 2020). These statistics, which also reflect what was happening in other parts of the world during the first few months of the pandemic show the extent to which the news media is important in people's daily life.

What characterizes our digital age is that individuals no longer have to be in their homes to watch the news bulletin on TV or to buy the newspapers, like it used to be the case in the 70s, 80s or even the 90s to learn about what happens in the world. People nowadays can read, watch or listen to content whenever and wherever they want. Furthermore, a person who possesses a smart device does not have to actively look for the news; most of the time, the news comes to them. There are alerts on mobile phones which continuously notify users whenever news breaks up to tell them about the most recent news. All it takes is an internet connection and a smart phone to keep the flow of the news feed coming in. Consequently, people find themselves soaking in a cocktail of news from the moment they wake up to the time they go to bed, as the majority cannot resist the temptation of taking what is considered to be a primary news-delivery device - their mobile phone - to bed. And it would be no exaggeration to say that it can sometimes be a dangerous cocktail for people's mental health and well-being, especially that the news media that we are exposed to contains for the most part highly negative content. People are generally drawn to negative news. Something referred to as negativity bias by media studies practitioners.

III. THE IMPACT OF THE NEWS MEDIA ON AUDIENCES

The news media can exert a powerful effect on people who are at the receiving end of the messages conveyed through it. This happens not just by influencing the way people think about a number of issues and events and their perception of the world around them, but also by negatively affecting their mental health and well-being. The negative impact that media coverage can have on people was the main concern of a study carried out by Holman and her colleagues, in Irvine, at the university of California in the US (Holman, Garfin, Cohen Silver, 2014). This group of researchers looked into the effect that news coverage can have on audiences, especially when it comes to news stories about collective traumas. They took the Boston marathon bombing that happened in 2013 and in which Three people were killed and hundreds were injured as a case study. Their investigation was specifically interested in finding out about the impact that the news coverage of the Boston marathon bombing had on individuals, and the psychological distress it triggered in them.

They compared the impact of direct exposure to the traumatic events with indirect media-based community trauma exposure on acute stress responses. They achieved that by studying two groups of people: The first group learned about the Boston marathon bombings only through being repeatedly exposed to media reports about it, while the other had a first-hand experience by actually being present at the scene the day the bombings took place. While it is obvious that the mental health of individuals who witnessed the unfolding events in person suffered, Holman and her colleagues obtained some unexpected findings as far as the two groups are concerned.

The individuals who had seen the explosion in person but who had consumed six or more hours of news coverage had been even more badly affected when compared to the group who had had a first-hand

experience by being at the vicinity when the bombs went off. What this study showed is that exposure to bombing-related media content in the week after the bombings was associated with higher acute stress than direct exposure to the bombings. Results such as these are proof of the extent to which the news media can have a powerful effect on media consumers by affecting their mental health and well-being even more than actually being present at the scene of the traumatic events. They show that news coverage is far more than a benign source of facts. It is then no wonder that the news media receives so much attention on the part of academics working in a variety of fields. The influence it exerts on people attracts a great deal of intellectual scrutiny to try to find out why it is so powerful.

Not only does the news constitute a great portion of what is transmitted through the media, its scope is also so far-reaching the world over, especially in our digital era. And while it is true that the influence of the news media comes from the fact that it is the main source that millions of people rely on to get informed about what is going on in the world, it is not the only reason behind its strong influence.

The power that the news media enjoys also stems from the way audiences perceive them. The big majority of news consumers tend to agree that the news that they read about, watch, or listen to, especially in mainstream media is credible and reliable. For most of them, the news transmits facts and are therefore perceived as being a reflection of what goes on in the world around them. This way of perceiving the news media is bound to make news consumers prone to falling under its powerful spell, by making them take what is being transmitted to them for granted, most of the time without really questioning it.

Another reason behind the big influence that the news media exerts on individuals is the view that news media practitioners themselves have of it and the image they project about it. Professional journalists see the news media, particularly hard news, as containing unbiased, clear and unambiguous facts. This comes from the fact that prior to writing their news reports, they collect the facts and talk about them objectively, and in language which is designed to be clear, unambiguous, and agreeable to news media consumers. There is no doubt that objectivity and impartiality are among the most important news values that professional journalists strive to achieve and do their best to respect. What is certain, however is that a single news story can be told in different ways and from different angles. This, on and of itself, puts the claim that the news is an objective reporting of events and that it is an exact reflection of what goes on in the world under close scrutiny, especially by linguists who use the critical discourse analysis approach (henceforth CDA) to study texts.

IV. CRITICAL DISCOURSE ANALYSIS AND NEWS MEDIA LANGUAGE

CDA has indeed a different view on the matter of news objectivity, especially when it comes to the use of objective, unbiased and impartial language to report news stories in an undistorted manner. For CDA practitioners news is a representation of the world in language. The latter according to them is a very important component that should be looked into and examined mainly because it is a potent means through which news stories are told. Its importance stems from the fact that it is the medium through which all that information is transmitted to big audiences. And because there can be no news media without language, it should therefore not be overlooked or dismissed as being of secondary importance in media studies. According to Norman Fairclough, one of the most prominent CDA, a given text simultaneously fulfills three functions and these go beyond merely providing information of what goes on in the world: news media texts represent the world, set up identities and establish relations.

The present paper focuses on 'representation' and the way texts represent the world. It discusses the linguistic features that linguists look for, while examining a news media text to see how people, events and happenings are portrayed through their use. What Critical Discourse analysts mean when they state that news media language is a representation of the world is that news language is not a reflection of the world; it is rather represented through it. According to Roger Fowler, another prominent linguist whose work mainly revolved around analyzing news language, news is a social and ideological produce socially constructed and language plays a very important role in it. (Fowler 1991). The content of newspapers is not facts about the world per se, but in a very general sense 'ideas'. He conceives of

the language of the news as being 'a highly constructive mediator' (Ibid) which serves the function of constructing ideas. Because of this, language fulfills a much more potent role which goes beyond just mirroring or reflecting what goes on in the world.

To Fowler, and to the linguists who adopt his approach, language plays a cognitive role by providing an organized mental representation for our experience. It organizes our experience into categories and relationships representing the community's interests and values. What this means is that the news is not just a mirror which provides a value-free and neutral reflection of facts (Fowler 1991). It has a much more powerful role by having the capability of shaping the way people view the world around them. A good analogy that can be drawn to understand the point of view of critical discourse analysts, as far as representation is concerned is by comparing news language to a kind of filter through which events and happenings are represented. News as they appear in different media outlets can be described as filtered reality and not a simple and pure reflection of what is going on in the world. It is, then, the task of CDA to examine news media texts to find out more about 'these filters' through which events and happenings are represented and what their effects are on audiences.

The approach that CDA rely on to study news media texts is the qualitative one. The aim behind it is to isolate and provide a full description of the linguistic forms of interest under scrutiny to eventually get to the implicit meanings that news media texts convey. Their aim is to bring to the fore certain hidden meanings which, for the most part, would go unnoticed for ordinary readers. The aim, therefore, is to get to those concealed meanings and raise people's awareness to the fact that there are always a number of options to choose from, when it comes to talking about news stories. There is a general consensus among CDA practitioners that the linguistic choices that news media professionals make are not value-free and innocent. They are highly motivated (Fowler, 1991; Fairclough, 1989, 1995, 2003; van Dijk, 2001). Choosing a linguistic structure or set of linguistics features rather than others can be ideologically motivated.

To approach a given text, a critical discourse analyst makes use of what they call a linguistic toolkit, which consists of a set of linguistic features that they employ in their media text analyses. Linguists analyze the grammatical structure, by studying what is referred to as the transitivity structure of news media texts; they examine the way the lexis is used in news media texts; They also study message organization by looking into the way topicalization is deployed in a given text. The grammatical structure of news media texts is one of the aspects that get a lot of the attention on the part of CDA as it enables language users to convey certain meanings implicitly. This is mainly because the grammatical or syntactic structure used in a given text is also meaningful; It is not just a structure or skeleton devoid of meaning according to critical discourse analysts.

1- Transitivity structure

To study the grammatical structure of a given text, CDA rely on the transitivity structure. The latter is defined as being the linguistic resource for representing the world through the grammatical structure (Halliday, 2004; Fairclough, 2003; Matthiessen and Halliday, 2014; Thompson, 1996). When discourse analysts study the transitivity structure of texts, they are mainly concerned with actions, relations, participants and circumstances that give content to discourse. The aim is to see how language construes our experience of the world around us, by looking at the way different types of happenings, goings on, are expressed through it. Analyzing transitivity then enables the analyst to specifically find out about who is doing what to whom, when and where.

When it comes to analyzing transitivity, the verb -- what is also called the process -- is of central importance. This is because it is the element through which different types of happenings and goings-on are expressed. Critical Discourse analysts do not conceive of the verb as a purely syntactic sentence element devoid of semantic meaning, in the same way theoretical linguists do. They find the verb categories of Michael Halliday, a systemic functional linguist, useful, as it takes on board the semantic meaning that the verb conveys too. (Halliday, 2004; Matthiessen and Halliday, 2014, Thompson, 1996)

In theoretical linguistics, linguists make the distinction between transitive and intransitive verbs and it is based

on whether the verb takes a direct object or not: Transitive verbs are those verbs which require an object. In a clause such as 'The man bought the book.', the verb 'to buy' which is used in the simple past is a transitive verb because it requires a direct object ('the book'). Intransitive verbs on the other hand are those verbs which do not require an object. In 'Jane arrived.', there is no direct object after the main verb 'arrive' because it is an intransitive verb which does not require an object.

Halliday's conception of the verb is different from the one of a theoretical linguist in the sense that it is not limited to making this traditional binary distinction between transitive and intransitive verbs. His way of looking at the verb can be said to be more fine-grained as he distinguishes between six categories of verbs or what he calls processes. Each one of these processes is associated with certain kinds of participants. Material processes are verbs of doing/ happening and the participant roles associated with this type of process are the 'doer/ actor' and 'affected/ patient'. Verbal processes are about saying and the participant roles associated with them are 'sayer', 'receiver' and 'verbiage'. Mental processes are verbs of sensing and involve 'senser' and 'phenomenon' as participant roles. Relational processes are verbs of being and the participants involved in them are 'carrier' and 'attribute'. Behavioral processes are about behaving and the participant role associated with it is the 'behaver'. The sixth and last type of verbs is the existential process and it is a verb which conveys the meaning of 'existing'. The participant role associated with this type of process in the 'existent'.

Using Halliday's model to study the transitivity structure of texts enables the analyst to find out about who is doing what to whom by looking at the type of verbs being used in a given text. Choosing a material process for example to represent an action would achieve a different effect compared to using a behavioural process to talk about the same happening for example, and the following sentences will clarify this point some more:

-   He died. (Behavioral process)
-   He killed himself. (Material process)

If we assume that that these two sentences are talking about the same person, they are then construing the same happening in two different ways from the transitivity structure point of view. We have, in other words, two different versions of the same happening. In the first sentence, there is the use of the verb 'to die' which is categorized as a behavioural process in which the volition of the participant (The behaver) is not highlighted. In the second sentence, on the other hand, the participant 'he' is shown as an actor whose material action affects a participant, who happens to be the participant that the subject of the sentence expresses. It contains the process 'to kill' which refers to a deliberate and premeditated action. It talks about an action that 'he' did and which affected the doer of the action himself. These two examples show how different grammatical options can construe the same happening in different ways.

2- Lexicalization

Another analytical concept that CDA makes use of in their analyzes of news media texts and which they find illuminating is what is referred to in CDA as lexicalization.
What linguists are mainly concerned with as far as this linguistic aspect is concerned are the lexical choices that news writers make in their news reports. Studying the options that journalists go for regarding lexicalization can be insightful, as they can reveal a great deal about the way news media texts represent events and people and the ideological standpoint from which they report the news stories.

The following is a concrete example showing the way lexical choices can affect the overall meaning of a given text. It consists of an excerpt published in the New York Times that was widely shared through social media.

The reader who shared the excerpt above and whose identity is unknown, appears to be highly critical of the lexical choices that The New York Times made use of to talk about the events in the Middle East. They for example replaced the word 'evictions' with 'forced 'expulsions'. Saying 'Isreali Palestinian conflict' equally lacks accuracy according to them and using 'Palestinian struggle' would be a more accurate alternative. 'Evict six Arab families' does not accurately describe the situation; saying 'ethnically cleanse Palestinians' would serve the purpose in a better way. 'The contested neighbourhood' is another expression that got the attention of the critical reader. To them, it would be fairer towards Palestinians to use the lexical item 'home'. Lastly, using the expression 'the Israeli efforts to remove Palestinians' greatly underplays what Israelis do in the region and should be replaced by 'The Israeli crime to remove Palestinians'. The aim of this reader is obviously to bring to people's attention the fact that there are other lexical options, and others alternatives to represent events.

There are nuances in meaning as far as lexical items are concerned and these generally come as a result of the fact that the lexical or vocabulary items that are at the disposal of language users do not have a denotative meaning only; they also have certain connotative meanings associated with them. A given lexical item, in other words, can have a set of synonyms with the same denotative meaning, but each one of these synonyms has its own connotative meanings that is associated with it. Certain lexical items are highly loaded, while other are less so or are considered neutral.

The fact that there is a range of lexical choices at the disposal of language users highlights the importance of examining the way lexicalization is deployed in news media texts. Language, according to CDA, serves this function of organizing the world into sets of categories of people and phenomena such as 'women', 'men', 'natives', immigrants…etc. This categorization, which is mainly achieved through vocabulary, can be powerful and is not without consequences, especially when used in the news media. According to Roger Fowler (1991), categorization can play a cognitive role by providing an organized mental representation for our experience.

The categories that are used in the news media can lead to representing the individuals as types. These would have some implications for people who are being represented through them, as they have the potential of conjuring up certain qualities and attributes that are generally associated with them. That means that whenever a category is referred to through a label or lexical items it would make the reader think of the individuals or groups of people that they represent in terms of some general qualities that we generally associate with these categories. When the lexical item 'teenager' is mentioned for example, it would generally evoke meanings such as lack of maturity, abundance of energy, unnecessary risk-taking and stubbornness. These categories which tend to exist in our minds as a kind of ready-made bundles of attributes, may harden into simplified mental images or what are referred to as stereotypes, with all the implications that these can have for individuals or groups of people within society. These simplified mental images can potentially lead to discrimination which can be one of the most dangerous outcomes of categorization.

3- Topicalization

Topicalization is another important linguistic feature, which CDA are interested in studying. It relates to the way sentence elements are ordered and the way the message is organized in it. A sentence constituent is topicalized when it takes the initial position in the sentence. Placing an element at the beginning of the sentence can be meaningful according to CDA; it can achieve the effect of highlighting a sentence element for certain ideological reasons. (Thompson 1996) This is why linguists believe that this aspect is also worth investigating as it enables the analysts to bring to the surface certain implicit meanings not explicitly expressed.

The following two examples show how the use of topicalization can lead to conveying meanings in a tacit manner:

- The wall collapsed.
- The demolition experts removed the wall.

The two sentences above can be said to convey the same propositional content when seen in the same context of

use. Both of them talk about a wall which is no longer in existence due to its removal by human agents: 'the demolition experts. The two sentences are however different, mainly due to the two different ways of organizing the sentence components in each one of them, which have resulted in a change in meaning to a certain degree. In the first sentence, 'the wall' is topicalized because it occurs initially in the sentence. It is by this given more prominence, whereas in the second sentence, 'the wall' has receded to the final position of the message by being placed in the final position of the sentence.

Passive and Active syntactic constructions/ Active construction can also serve the purpose of 'topicalizing' or 'de-topicaling' a sentence component. These constructions can also be used to change the order of elements in a sentence as the following two examples show:

- The little boy hugged the dog.
- The dog was hugged by the little boy.

In the first sentence 'the little boy' is topicalized because it is the subject of an active construction. It occurs initially in the sentence, whereas 'the dog' is placed finally in the sentence because it is the direct object in an active construction. When the same sentence is turned into the passive voice, 'the dog' which is the direct object in the active construction becomes topicalized by being placed initially in the sentence. It is therefore given more prominence in the second sentence than in the first sentence.

V. CRITICISM AGAINST CDA

CDA mainly use the qualitative approach to analyze texts. They provide a description and interpretation of the linguistic features used in texts to get to the meanings that these encode. And due to their overreliance on the qualitative approach, critical discourse analysts are confronted with questions relating to issues such as the extent to which these are generalizable. This is in fact one of the areas that CDA is highly criticized for: overly relying on isolated linguistic features to get to the implicit meanings that the text encodes. They are accused of lacking objectivity in their analyses of news media texts and of being subjective in

their interpretation of certain linguistic features (Haig, 2004; Widdowson, 1995). These criticisms laid against the way CDA approaches media texts are valid since a single linguistic structure can sometimes be open to a variety of interpretations and explanations. What a researcher engaging in qualitative analyses of this kind mainly does is argue his/her case to try to convince the reader that this is the meaning those linguistic features are conveying and try to link those to the overall context of the news media text.

One way to overcome what is seen as a weakness and to enhance the results of linguistic analyses of this kind is by carrying out a quantitative study of news media texts. This will enable the researcher to see if there are clear and discernible statistical patterns which point to certain ideological meanings. Rather than having to see the significance of a set of isolated linguistic features in a given text linguists can combine their qualitative analysis with quantitative results. This would make them engage with the interpretation of the uncovered statistical patterns that the quantitative analysis reveals, making their findings not only clearer but also more objective and robust. This will, therefore make it possible for researchers to say with a greater degree of confidence that the linguistic features in question point to certain social or ideological meaning.

VI. THE USE OF THE NEWS TECHNOLOGY IN TEXTUAL ANALYSIS

A manual analysis of news media texts can be very effective in doing quantitative studies of this kind but it has its own limitations: it is time consuming and laborious, something which calls for more efficient methods that would enable the researcher to reach good generalizations.
The first solution that springs to mind when it comes to quantitatively analyzing a big corpus of news media texts is the use of Information technology as it offers the possibility of treating a bigger corpus of news media texts that would enable the researcher to draw some good generalizations.
The questions that arise however relate to the way linguistic analyses of this kind be computerized and automated. How effective are computer algorithms in detecting the linguistic features of interest to CDA? It is possible that there are certain features that would lend

themselves to being computerized more than others and would therefore be more easily quantified, mainly due to their nature.

In a pilot study carried out by a group of researchers at Sidi Mohamed Ben Abdellah University, we aimed at looking into this possibility of using IT in textual analyzes of this kind. We started by testing out two computer programs designed to analyze linguistic data LancsBox and AntConc to find out about their effectiveness and accuracy in detecting two linguistic features, which are passivisation and nominalization, in a small corpus of news reports and to see which one of the two programs is more efficient, and also to compare the results that we obtained through their use to the results of a manual analysis of news media texts (Zih, El Biadi, Chatri, 2020). The results of the study show that the two programs can identify roughly all the passive constructions and nominals they were instructed to detect. The two programs could not however isolate the clauses that directly refer to the perpetuator that the news texts talk about. Computer programs of this kind are indeed very effective in assisting linguists in their textual analyses. And even if the computer program cannot sometimes detect all the linguistic features it is instructed to find, it can at least reduce the amount of work the linguist has to do to analyze a given text, which is in and of itself a big achievement.

This kind of corpus linguistics software used to process linguistic data is key in overcoming the problem of subjectivity that CDA is criticized for. Through its use, the researcher cannot only obtain some quantitative results that can lay bare certain meaningful patterns, helping him/her, thus, reach a certain degree of objectivity in their analyses of discourse, it also enables him/ her to save time and effort in their endeavor to study large amounts of data. It will, by this, help them to overcome the reluctance that they generally feel towards engaging in this type of quantitative studies.

VII.   CONCLUSION

One of the main characteristics of the digital age we live in today is the exponential increase in people's exposure to news media texts, especially when compared to the pre-internet era. This state of affairs does not only highlight the importance of studying news media texts to see the kind of effect that their language can have on news media consumers, it also warrants rethinking the methods used to scrutinize to efficiently get to the meanings that news media texts convey oftentimes in an implicit manner. This means that the tools that linguists interested in news media language rely on have to be in keeping with the new speedy pace with which news media texts reach people all over the world. This can be achieved by bringing on board the new information technology and the tools it offers to study large corpuses of data. This surely has the potential of enhancing texts analyses of the type critical discourse analysts carry out, by enabling them to draw good and reliable generalizations.

REFERENCES

[1] Fairclough, N. (1989). *Language and Power*, London/New York: Longman.

[2] Fairclough, N. (1995). *Critical Discourse Analysis: The Critical Study of Language,* Longman: New York.

[3] Fairclough, N. (2003). *Analysing Discourse*: *Textual analysis for social research*. Routledge: UK.

[4] Fowler, R. (1991). Language in the News: Discourse and Ideology in the Press, Routledge: London.

[5] Haig, E. (2004). Some Observations on the Critique of Critical Discourse Analysis. Studies in Language and Culture, 25, 129-149.

[6] Halliday, M.A.K. (2004). *An Introduction to Functional Grammar*. Arnold Publishers: London.

[7] Holman, E.A., Garfin D.R. and Cohen Silver, R (2014). Media's role in broadcasting acute stress following the Boston Marathon bombings. Proceedings of the National Academy of Sciences of the United States of America 111(1): 93–98.

[8] Markham, R (2020, May 19). You Asked: Is It Bad for You to Read the News Constantly? Time. https://time.com/5125894/is-reading-news-bad-for-you/

[9] Matthiessen, C. and Halliday, M.A.K (2014). *Halliday's Introduction to Functional Grammar* 4th ed. Routledge.

[10] Tobitt, C (2020, March 17). Coronavirus leads to 'staggering demand' for trusted TV news. PressGazette.

https://pressgazette.co.uk/coronavirus-leads-to-staggering-demand-for-trusted-tv-news/

[11] Thompson, G. (1996). *Introducing functional grammar*. London: Arnold Publishers.

[12] Van Dijk, T. A. (2001). "Critical Discourse Analysis", in *The Handbook of Discourse Analysis*, D. Schiffrin, D. Tannen, & H. E. Hamilton, eds. Malden, MA: Blackwell, pp 352–371.

[13] Widdowson, H.G. (1995). "Discourse analysis: a critical view." Language and Literature 4 (3): 157-172.

[14] H. Zih, M. El Biadi and Z. Chatri, "Evaluating the effectiveness of corpus linguistic software in analyzing the grammatical structure: LancsBox and AntConc as case studies," 2020 6th IEEE Congress on Information Science and Technology (CiSt), 2020, pp. 515-519, doi: 10.1109/CiSt49399.2021.9357285.