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LINGUE CULTURE MEDIAZIONI
LANGUAGES CULTURES MEDIATION

10 (2023)
2

The COVID-19 Crisis and Its Challenges on Social Issues

COVID-19: crisi e sfide nella società

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COVID-19 Crisis Management in Newspaper Articles

A Diachronic Analysis

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ABSTRACT

The present study focuses on how the COVID-19 crisis was dealt with and represented in newspaper articles in the period January 2020-February 2022. To this end, a corpus of articles was compiled from the *Times* using Sketch Engine (https://www.sketchengine.eu/), in order to manage and investigate the corpus quantitatively; discourse and genre analyses were applied for the qualitative approach. After providing a definition of the coronavirus timespan and the term *crisis*, the paper explores how the language used changed over successive periods of crisis management and communication (Coombs 2010). It also shows how the unpredictable development of the pandemic had an effect on communication flows, which in turn affected how the crisis unfolded. Different types of information were conveyed through the media that played a crucial role in selecting what to convey (and what not to convey) to the readers and how to represent it. This significantly contributed (and continues to contribute) to the development of the readers' opinions and sentiments, fuelling their worries and feelings of uncertainty, weakness and risk (Denti 2021; Wodak 2021). Future research will focus on metadiscursive features and the changes in rhetorical persuasion (Hyland 2005), and on the politicisation of the crisis (Musolff *et al.* 2022; Thielemann and Weiss 2023).

Keywords: communication phases; COVID-19; crisis management; DA; language development; news discourse; perceptions.

1. INTRODUCTION

COVID-19 is the disease caused by the SARS-CoV-2 coronavirus (WHO, https://www.who.int/). First reported in December 2019 in Wuhan, China, it spread rapidly around the world becoming the most critical global health emergency so far this century. Affecting everybody's lives, it has created tremendous challenges to be faced by people, private and public institutions, and governments at all levels.

Figure 1 shows the development of COVID-19 in the period considered (January 2020 - February 2022). The main waves of COVID-19 infections were driven by the virus variants which partially invalidated the positive outcomes of vaccination programmes, social restrictions, testing and quarantines. The period March-June 2020 marked the first wave, which severely hit almost the entire globe in different moments; the southern hemisphere was affected slightly later. The second wave, in the period July-September 2020, was characterised by increasing death rates and mandatory precautionary measures. The third wave, in the period October 2020 - February 2021, saw the release of the first vaccines. The fourth wave, in the period August-November 2021, was characterised by the Delta variant surge, while the fifth wave, in the period December 2021 - February 2022, by the rise of the Omicron variant. The period after Christmas 2021 also marked the beginning of a slow improvement. Even though people's attitude toward the crisis had been contrasting and varied, the increase in vaccination campaigns, the reduction of death rates and coordinated governmental planning contributed to reducing the sense of danger and uncertainty that characterised the first waves (Dutta 2022; El-Shabasy *et al.* 2022).

The spread of COVID-19 and the ensuing pandemic resulted in extreme challenges to be faced at all levels of our society. Individuals, groups, companies, institutions and governments constantly received and issued different types of information about the growing global crisis. The media at large played a key role in communication: narratives carry the responsibility and the power to determine what information to convey to the readers and how it ought to be represented.

The corpus collected newspaper articles downloaded from the *Times* in the period January 2020 - February 2022. Their quantitative analysis was carried out employing Sketch Engine (https://www.sketchengine. eu/), a software that uses algorithms to process copious texts for the purposes of corpus analysis.

Dec 2019

2020
Dec 2019 | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sept | Oct | Nov | Dec

Mar/Apr 2020
Borders sealed; schools and workplaces closed; events canceled; masking and social distancing started

Dec
First cases of COVID -19 emerge in China

Jan 21
First U.S. case identified, Washington state

Jan 23
Chinese city of Wuhan in lockdown; virus emerges in Europe

Jan 31
World Health Organization declares a global health emergency

Apr 2
1 million cases worldwide

June
Infection rates start to go down but then climb again as states attempt to reopen

July
U.S. breaks its record for daily cases/ deaths

Large-scale testing of vaccines begin

Sept
1 million deaths world-wide

2021
Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec

Dec
U.S. and U.K. approve emergency use of Pfizer vaccine

Virus variants are identified

Jan
Vaccines become available to first responders and individuals 65 and older

2 million deaths worldwide

July
Delta variant found in 65 countries worldwide

Sept
4.5 million deaths worldwide

5.8 billion doses of vaccines given worldwide

370 million vaccines given in the United States

2022
Dec | Jan | Feb | Mar

Oct
700,000 people in U.S. dead from COVID-19, more than caused by 1918 flu pandemic

Nov
The World Health Organization identified omicron as a new variant of concern

Jan
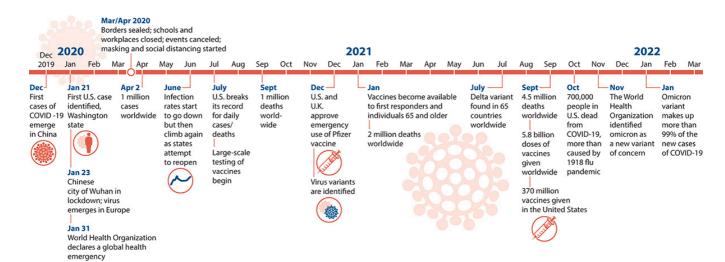Omicron variant makes up more than 99% of the new cases of COVID-19

Figure 1. – COVID-19 timespan.
Source: Macmillan https://covid19.macmillanlearning.com/

The general framework of the diachronic analysis was the three-stage life cycle of a crisis (Fink 1986), mirrored by a 'crisis communication' cycle, divided into a pre-crisis phase, a crisis communication phase, and post-crisis communication (Coombs 2010). Thus, for the aim of this paper, the time span considered was divided into three stages: January-September 2020, October 2020 - February 2021, December 2021 - February 2022.

The present paper focuses on two research questions:

- RQ1. How was the COVID-19 crisis depicted in newspaper articles?
- RQ2. How did its representation evolve over time?

After defining what constitutes a crisis and its corresponding communication cycle in section 2, section 3 focuses on the corpus and its prominent features. Then, notable language variations across the periods selected are analysed and discussed, and conclusions are drawn.

2. Defining a crisis

Previous research has indicated that there is no one unanimously acknowledged definition of the term crisis (Coombs 2010, 18). Although it is a widely used term, it is semantically vague and challenging to examine systematically.

According to the *Merriam-Webster.com Dictionary* (https://www.merriam-webster.com/dictionary/crisis), crisis most commonly refers to a challenging or risky situation that requires close attention.

Applied to the context being considered in this study, the most appropriate definition of a crisis might be that of "an unstable or critical time or situation that reaches an acute phase whose outcome will likely be adverse". Given that it is a broad multifaceted term, it is no easy task to define the term *crisis* or choose a suitable synonym. The outbreak of the COVID-19 crisis was an unexpected occurrence characterised by the convergence of multiple events and consequences, requiring immediate actions and measures (Falkheimer and Heide 2010, 514), including restrictions, in the presence of a threat (Raboy and Dagenais 1992, 5), of a sequence of events leading to dramatic changes (Della Sala 2011, 2), of unpredictability and uncertainty. Crises are objective but also subjective, as their meaning changes based on people's individual and collective perceptions, on their cultures, society, time and place, causes, complexity, and impact (De Rycker and Mohd Don 2013).

Material actions and language use, communication and discourse patterns all profoundly influence the handling of crisis avoidance, monitoring, management and resolution (Coombs 2010, 18; De Rycker and Mohd Don 2013, 3). They produce new texts, genres and discourse types, thereby changing existing ones. Crises are recontextualised, built and portrayed, together with the social actors involved; they are "socially shaped […] in organizational political and media discourses, in public and private spaces, in front-stage and back-stage contexts" (De Rycker and Mohd Don 2013, 5, 29). Thus, such a system becomes critical in the construction of readers' opinion and sentiments, as it affects people's concerns, feelings of threat, uncertainty, vulnerability and loss of control (Denti 2021; Wodak 2021).

Several scholars claim that governments must be held responsible for being incapable of preventing such crises by means of suitable measures (Levenson 2020). With new regulations and measures being implemented, which people were required to comply with, they were often legitimised by the need to increase safety (Wodak 2021, 5), even though they were sometimes considered as being in violation of people's rights. These issues will partially emerge from the corpus analysed but need to be further investigated taking into consideration political communication (Musolff *et al.* 2022; Thielemann and Weiss 2023).

Crises follow developmental stages: they erupt, emerge, develop over time and come to an end (Mitroff 1994). These phases will be highlighted in the corpus together with the corresponding steps in communication during the COVID-19 crisis.

2.1. *Crisis management and communication*

As already mentioned, crises are socially and discursively construed, grounded in changing socio-cultural and historical contexts that, according to Hart (2011, 1), are made up of "the set of cognitive representations that discourse participants have of the world".

Social actors build crises through narrative and discourse, through "processes of crisis identification, crisis definition and crisis constitution" (De Rycker and Mohd Don 2013, 11). Thus, crisis communication is critical in managing the crisis itself. This means that, on the one hand, media and politics state (and often overstate) crises, and, on the other hand, people expect guidelines on what to do, plan and say in order to increase safety and "fight the enemy" (Wodak 2021, 2). Spreading infor-

mation and awareness about a crisis such as a pandemic is particularly difficult as health issues involve social, cultural and psychological aspects, including emotions and dreads. Thus, communication is often strategically designed by experts and stakeholders, and public and private objectives and interests may conflict (Conrad and Barker 2010, S67; Garzone 2021, 159-160).

Information is provided through numbers, statistics, rankings and ratios, but also rhetorical strategies aiming to persuade citizens to strictly follow new regulations and restrictive measures implemented by governments to fight the crisis, i.e., the pandemic (Wodak 2021, 8).

The analysis of a crisis management process helps understand crisis communication.

Coombs (2010, 25-46) identifies a three-stage life cycle of a crisis and its corresponding crisis communication cycle. He distinguishes:

- A pre-crisis phase, which entails *signal detection*, *prevention*, and *preparation*: the location, expectation and decrease of crisis risks and threats. In terms of communication, this means collecting information about crisis risks, decision-making on how to manage potential crises, and training people involved in the management process.
- The crisis communication/response phase, which refers to the acknowledgement of the cause and the necessary response. This involves the current situation, the communication during the crisis, and future outcomes, the collection and processing of information for decision making and the design and diffusion of crisis messages. This is the most important communication stage as how and what knowledge is disseminated during the crisis has a significant impact on the consequences of the crisis in terms of reputation.
- The post-crisis phase refers to actions organised in normal conditions. This includes supplying stakeholders with follow-up information, contributing to research, learning from experience. It also entails handling the consequences of the crisis, communicating necessary changes to individuals and providing follow-up crisis messages.

After describing the main characteristics of the corpus, the following section will apply the framework introduced to stress how the discourse of crisis communication changed over the time span selected.

3. Analysis

3.1. *Corpus and methodology*

The articles for the corpus were downloaded around the keyword *COVID-19* in the NexisUni database: a total of 20,149 articles from *The Times* (thetimes.co.uk). The choice of *The Times* is linked to some previous studies on COVID-19 and popularisation strategies in *The Times* and in the *Financial Times* (Denti 2020; 2021). For the purposes of this paper, three subcorpora were compiled using Sketch Engine (https://www.sketchengine.eu/):

1. JAN-SEPT20, in the period 20 January - 30 September 2020, characterised by the outbreak of the pandemic and the increase in both death rates and mandatory restrictions;
2. OCT20-FEB21, in the period 1 October 2020 - 28 February 2021, defined by the launch of vaccines;
3. DEC21-FEB22, in the period 1 December 2021 - 28 February 2022, marked by the beginning of some improvements.

All articles have an approximate length of 300-1200 words, totalling 21,122,662 tokens and 17,480,900 words. The key reference corpus is English Web 2021 (enTenTen21), containing 52,268,286,493 tokens, used to identify key items and multiword expressions.

Table 1. – Corpus statistics.

	JAN-SEPT20	OCT20-FEB21	DEC21-FEB22	TOTAL
Tokens	12,178,288	7,051,435	1,892,939	21,122,662
Words	10,300,411	5,569,089	1,611,400	17,480,900
Sentences	444,147	226,778	66,633	737,558
Documents	12,036	6,155	1,958	20,146
# per month	1,337.33 (9)	1,231 (5)	652.66 (3)	1,185 (17)

Table 1 compares the statistical features of the three subcorpora.

The first subcorpus (JAN-SEPT20) covers a period of nine months, with a total of 12,036 articles and an average of 1,337 documents per month.

The second subcorpus (OCT20-FEB21) embraces a shorter period of five months, with a total of 7,051,435 articles and an average of 1,231 documents per month.

The third subcorpus (DEC21-FEB22) is composed of 1,958 articles in total, with an average of 653 documents per month.

A first observation to make is the steady decrease in the number of articles on COVID-19 published from the beginning to the end of the time span considered, from the outbreak of the pandemic to the first consistent signs of recovery. This is in line with the three phases of crisis communication: first, collecting as much information as possible and informing people about all the issues that emerge and how to prevent the spread of the pandemic; second, releasing strategic communication concerning the current situation and the responses, i.e., vaccination; and third, dealing with the consequences of the crisis, communicating necessary changes and providing follow-up information that is the result of what has been studied and learnt.

All articles containing the keyword COVID-19 have been included. This means that they may be specifically on the pandemic, on its origin and spread, on all the consequences and on how governments have been dealing with it, or COVID-19 may be a secondary issue. Initially, the idea was to only collect documents with titles containing keywords strictly related to the pandemic, such as COVID, COVID-19, coronavirus, virus, lockdown, isolation, immunity, pandemic, etc. However, sometimes they were associated mainly with certain geographic areas or topics which did not make the corpus representative. Other times, apparently irrelevant titles hid significant information. Thus, despite the pitfalls of using such a large, and maybe more general, corpus, the final decision was to consider all documents, placing greater emphasis on the development of language over time.

As highlighted in a previous study on intertextuality in COVID-19 crisis management in newspaper articles (Denti 2021), these articles address both expert and non-expert readers, are characterised by the functions of informing, narrating and persuading, typical of news discourse, and by those of informing, evaluating and predicting, typical of financial discourse (Denti and Fodde 2013). Another dominant feature is the presence of networks of genres (Swales 2004), of intertextuality and interdiscursivity (Bhatia 2008; Fairclough 2012; Denti 2021, 250; Garzone 2021), especially the domains of the News, Medicine, Economics and Finance, Politics, and Nature/Science. Metaphors play a significant role in the discourse of COVID-19 (Garzone 2021; Semino 2021), but they have not been analysed in this paper.

Within the three-phase framework, DA and CA (Swales 2004; Bhatia 2008; Fairclough 2012; Wodak 2021), both quantitative and qualitative

analyses were carried out around frequencies, the Wordlist, Concordance and Word Sketch tools of Sketch Engine, and a close reading of the texts, which will be presented in the following section.

3.2. *Data analysis and discussion*

A search for the word *crisis* and its synonyms *juncture*, *exigency*, *emergency*, *contingency*, *pinch*, *strait* (https://www.merriam-webster.com/dictionary/crisis), revealed lower frequencies than one would expect. More frequent synonyms, such as COVID-19, coronavirus, virus, pandemic, will be further analysed below.

Table 2. – *"Crisis" frequency.*

Item	Frequency / Relative Frequency per 1 m. tokens					
	JAN-SEPT20		OCT20-FEB21		DEC21-FEB22	
crisis	8,193	672.75	2,069	293.41	412	217.65
juncture	24	1.97	8	1.13	5	2.64
exigency	5	0.41	1	0.14	1	0.52
emergency	3,115	255.78	1,076	152.59	294	155.31
contingency	186	15.27	95	13.47	25	13.20
pinch	82	6.73	24	3.40	8	4.23
strait	39	3.20	17	2.41	3	1.58
TOTAL	11,644		3,290		748	

Table 2 shows their occurrences in absolute and relative terms per 1 million words. *Crisis* comes in 172nd position, with 8,193 occurrences in the first period, 391st with 2,069 occurrences in the second period, and 527th with 412 occurrences in the third one. Its synonyms are less frequent, especially *exigency*, *pinch* and *strait*, whose values, singularly considered, are meaningless. However, considering *crisis* together with its synonyms, the totals disclose more significant positions: between 12th and 13th in the first period, 25th and 26th in the second, 306th and 307th in the third. These numbers also unveil an expected fall in references to the concept of a crisis, as the pandemic is being managed and things are changing for the better. Common collocations with *crisis* were identified through Word Sketch (*Table 3*) and the three periods were compared. The reference marker was the typicality score, used to denote the collocation strength: the higher, the stronger. Lower scores meant the words in the collocation often combine with other words.

Table 3. – "Crisis" collocation.

Collocate	Score	Collocate	Score	Collocate	Score
		Modifiers of *crisis*			
corpus: covid_19_ jan_sept20	57,3	corpus: oct_2020_ febr_2021	64,2	corpus: covid_19_ dec21_feb22	74,5
financial	11,3	financial	10,77	financial	10,58
coronavirus	11,05	economic	10,11	staffing	10,2
Covid-19	10,98	Covid-19	9,98	cost-of-living	9,67
global	9,54	coronavirus	9,71	Covid-19	9,55
current	9,24	global	9,19	global	9,07
health	9,23	Covid	9,03	health	8,73
economic	9,04	health	8,84	supply	8,46
Covid	8,97	existential	8,16	scheduling	8,3
present	8,43	credit	8,07	chain	8,27
existential	8,19	obesity	7,92	opioid	8,27
public	7,96	current	7,89	Covid	8,26
national	7,87	present	7,86	migration	8,25
unprecedented	7,77	banking	7,76	mental	7,92
obesity	7,65	bad	7,68	present	7,89
virus	7,63	national	7,67	pandemic	7,81
bad	7,59	winter	7,58	Suez	7,72
banking	7,44	housing	7,43	impending	7,7
housing	7,34	historic	7,43	economic	7,67
previous	7,23	Covid19	7,34	list	7,67
immediate	7,01	immediate	7,31	workforce	7,61

Looking at the first 20 modifiers of *crisis*, *Table 3* shows how *financial* has the strongest score in all the three periods, because the pandemic has been compared to the 2008 financial crisis in that it has induced another global financial crisis. As for the following modifiers, the first two periods have similar modifiers but with different rankings. While in the first the focus is on the *present* and *unprecedented* situation involving the world (*global*), *health*, *economy* and the lives of people (*existential*), in the second the public's concern about the economic situation grew, including anxiety for the *credit*, the *banking* and the *housing* systems. *Obesity* was an important comorbidity factor in contracting COVID. *Unprecedented* has been partially replaced by *historic*, which represents

the acknowledgment of the pandemic, of its causes, consequences and response. *Winter crisis* refers to the possibility of a new spread due to the cold weather. The third period shows some different collocations. After *financial*, *staffing* has the highest score, and *workforce*, further down, is semantically related to this. In fact, the coronavirus caused a crisis in terms of personnel getting sick, personnel being fired or suspended for not getting vaccinated and people losing their jobs, which, in turn, created deficiencies in the NHS:

> (1) Suspected heart attack and stroke victims are being told to get a lift to hospital rather than wait for ambulances as the Covid staffing crisis threatens to cripple response times. (thetimes.co.uk January 4, 2022)

Supply and (supply) *chain* are linked to the lessening of restrictions and the slow restart of business activities, while *scheduling* is linked to sports seasons and the difficulties in planning new sports calendars.

Moreover, as the effects of the crisis combined, they led to the increase in *opioid* consumption:

> (2) The opioid crisis has been exacerbated by the Covid-19 pandemic. Experts have blamed the toll on financial, social and mental health factors, with the ensuing repercussions on housing and employment. (thetimes.co.uk December 6, 2021)

The *mental* (health) crisis is another consequence of the pandemic, requiring actions on the part of counsellors, teachers and parents.

The adjective *bad* began to appear in the first period, increases in the second and almost disappears in the third. Mainly used in the form of its superlative *worst*, e.g., *the worst crisis*, *the worst humanitarian crisis*, *the worst peacetime crisis*. Its use accompanied the development of the pandemic and the communication strategies adopted: its detection, spread and follow-up phases.

As for the other collocations, in the period January-September 2020, *crisis* premodifies nouns such as *management*, *hit*, *mode*, *end* and *response*, describing how governments are tackling the crisis since it first hit, both at local and global level. And one question is often repeated: given the crisis mode, is it working and when will the crisis end?

> (3) Coronavirus lockdown: is it working and when will the crisis end? Scientists are tackling the next big question: how to ease restrictions without triggering a new wave of infections. (thetimes.co.uk March 29, 2020)

The most frequent verb collocations represent the idea of *facing* (*tackle*, *handle*, *address*, *navigate*) a *looming* and *exacerbating* crisis, of *managing*

it and of *overcoming* (*solve, weather withstand*) it and its ensuing crises. Most verbs using *crisis* as the subject are semantically related to a strong impact on everyone and everything: *hit, begin, cause, affect, expose, force, lead*.

The period October 2020 – February 2021 experienced two coronavirus waves and the general awareness of living through the worst pandemic since the 1918-20 Spanish flu took hold. People feel tired (*crisis exhaustion*) and having reached a *crisis point*, a *response* needs to be decided on.

	Details	Left context	KWIC	Right context
1	doc#0	iment policies in the face of an impending cost-of-living	**crisis**	**are** tax rises - national insurance and freezing the high
2	doc#0	meaningful discussions.</s><s>"A full on cost-of-living	**crisis**	**is** coming down the tracks and nothing that I've seen n
3	doc#1	sfer window while City will hope the worst of their injury	**crisis**	**is** behind them.</s><s>Euros on the horizon Brighton a
4	doc#2	spending on clothes may suggest that the cost of living	**crisis**	**is** already prompting households to cut back on spendi
5	doc#2	ban losses from the pandemic.</s><s>The hit from the	**crisis**	**has not been** as bad as feared, however, allowing Nat\
6	doc#4	intecare as a concern.</s><s>"The growing waiting list	**crisis**	**is** a symptom of overcrowding," a spokeswoman said.
7	doc#5	and has raised investor hopes that an end to the health	**crisis**	**is** in sight.</s><s>It marks the best annual performan
8	doc#12	nfection numbers.</s><s>He warned us that the Covid	**crisis**	**was** likely to go on well beyond March 29.</s><s>"It c
9	doc#12	doses during the 12 months to April.</s><s>The opioid	**crisis**	**has been** exacerbated by the Covid-19 pandemic Page
10	doc#15	idy Europe's biggest travel group claimed the Covid-19	**crisis**	**was** behind it as summer bookings surpassed prepand
11	doc#15	n " a short-term dampener Page 2 of 2 Pandemic travel	**crisis**	**is** behind us, says Tui ", but he said bookings were pic
12	doc#16	d the rest of the world can finally declare that the Covid	**crisis**	**is** behind us."</s><s>It also warned about the damage
13	doc#17	</s><s>On the plus side, the worst of the supply chain	**crisis**	**is** abating.</s><s>The Baltic Exchange Dry Index, the
14	doc#18	in which the government gives the impression that the	**crisis**	**is** over when in actual fact there is huge disruption con
15	doc#18	nemoir of 30 years on the road, told The Times that the	**crisis**	**was** solely down to the pay and conditions many trucke
16	doc#19	able clubs to postpone games in the midst of the Covid	**crisis**	**are** no longer fit for purpose.</s><s>"They were well-in
17	doc#20	orded in April 2020.</s><s>After almost two years, the	**crisis**	**is** not yet over.</s><s>Load-Date: January 15, 2022 E
18	doc#21	tified as the most imminent threats, while looming debt	**crises**	**are** expected to pose more of a risk to stability in the m

Figure 2. – "Crisis" concordance in the third period (Sketch Engine).

Verb collocations are similar to the previous period, with predicate verbs identifying change and verbs introducing causal argumentation. Causal relations are an attempt to understand why and how all the phenomena that evolved around the COVID-19 breakout occur.

The period December 2021 - February 2022 was when the results of the last two years of *crisis mode* emerged, i.e. when discussion began

about what had been done and what should have been done to *tackle*, *resolve*, *survive*, *address*, *face* the crisis, and what needed to be done to mitigate the growing *cost of living crisis* and *manage* the multiple crises that were brought about by the pandemic.

Figure 2 shows some of the *crisis* concordances in this interval. The cost of living, waiting lists, health, travel and supply chain are the main concerns but there are some positive signals of recovery and of the pandemic being "behind us".

The following sections will investigate in more depth precisely how communication and language changed over the time span taken into consideration. Given the unexpected, fast and cyclic development of the pandemic, the three phases sometimes overlap, especially the first two, because governments had to quickly face the spread of the coronavirus and of its pervasive effects.

3.2.1. The pre-crisis/beginning of the crisis phase

As already mentioned, January-September 2020 marked the pre-crisis/beginning of the crisis phase, meaning the appearance of the coronavirus in specific geographical areas, the difficulties in predicting its possible spread and the identification of actions and measures to prevent it, in order to reduce its risks and threats. For governments worldwide this entailed urgently trying to understand what was happening and how to fight it as rapidly as possible, even introducing extraordinary and harsh measures such as lockdowns. As regards communication, this meant gathering information about the risks of the pandemic, decision-making on how to manage potential resulting emergencies, training people involved in the management process, and to persuade people to abide by the new rules. Governments' reputations were also at stake. This period partially overlapped with the second one in terms of identifiable communication phases. Events moved quickly, including two waves of contagion and two lockdowns, and how and what knowledge was disseminated had a significant impact on the consequences of the crisis and the respective reputation of government authorities.

The first communicative choice had to do with the specific language used to identify the virus. Considering the first 50 keywords, *coronavirus* was the term with the highest 'keyness' score (106.4). Keyness refers to how the word is considered key in its context. *Covid-19* was quite far down (43.37), followed by *virus* (23.5).

Among the 50 most recurrent words of this period's Wordlist, *Covid-19* is slightly more frequent than *coronavirus* with a relative frequency per million tokens of 1,802.8 compared to 1,737.7 for the latter, followed further down by *virus* (1,014.7), *pandemic* (800.9) and *crisis* (672.7).

The keyness of the word *coronavirus* is reflected in the titles of the articles of this period, being the most frequent one in a total of 3,328 instances, 2,044 of which are in thematic position, to highlight the relevance of the word and of the topic, and to be catchy and memorable. Most are followed by (in+) the geographical place or nationality, a proper name or a linked topic:

(4) Coronavirus_Trump adviser Anthony Fauci calls for handshake ban. (thetimes.co.uk April 9, 2020)

(5) Coronavirus in Ireland_Lockdown restrictions 'like Nazi Germany', O'Doherty tells court. (thetimes.co.uk May 5, 2020)

(6) Coronavirus_Wuhan's schools reopen as lockdown eases further. (thetimes.co.uk May 5, 2020)

(7) Coronavirus in Scotland_Union demands screens to protect teachers in class. (thetimes.co.uk June 24, 2020)

These titles occur in 28 percent of the total documents, and thus play a significant role in terms of the spread of the topic, of the stance towards it, and of the political issues conveyed. References to politics increasingly appear throughout the documents. There are continuous references to the different UK governments and countries, distinguishing between Britain, Scotland, and Ireland, their political systems or ministers, their different situations and approaches, and all the political issues and tensions that arose. The names of the Prime Ministers, their offices, building names and addresses, of Parliament headquarters and national symbols are broadly used to create lexical cohesion and to politically divide (Denti 2021, 254). Ireland and Scotland are directly addressed in the title about 4 times more frequently than Britain and England. This is only partially explained by the fact that it is a British newspaper. It also has a political importance. Wales is barely present.

The words *Covid* or *Covid-19* appear in 835 titles (7 percent only), 82 times in thematic position. Indeed, *coronavirus* is more used at the beginning of the pandemic, as the contrasting data in the following periods will show.

The other most important keywords detected are *lockdown* (82.3), often postmodified by *restriction* or *measure*, *furlough* (52.232), *self-isolat** (71.3), *distancing* (37.4), often accompanied by *social*, *facemask*

(35.4), *quarantine* (25.6), *two-meter* (25.4), *sanitiser* (24.9), which have to do with the first measures applied by most governments to fight COVID-19. While most of them were applied to prevent people from suffering health issues, *furlough* refers to the measures adopted to avoid job losses. The term furlough was adopted to refer to employees being suspended due to a company's economic condition or lack of work; their salaries were temporarily paid for by the government.

Another keyword, specifically present in the first months of the pandemic, is *outbreak*, with the emotional connotation of a sudden burst, astonishment and fear caused by the virus, often enhanced by the premodifiers *coronavirus*, *Covid-19*, *virus*, *Sars*, *local*, *serious*, *future* and *worst*. It also collocates with action verbs such as *contain*, *localise*, *control*, *tackle*, *prevent*, *fight*, all aiming at stopping and managing it.

Among the first 50 keywords, *NHS* (National Health Service), *PPE* (Personal Protective Equipment), *ventilator*, *HSE* (Health Safety Executive), *NPHET* (National Public Health Emergency Team for COVID-19), all relate to health issues, policies and procedures to help patients both inside and outside hospitals, as well as medical staff, teachers and all people working with the public.

The highest score in this multi-word keyness list is for *care home* (76.3), as these bodies suffered from proportionately higher contagion rates and had to accommodate and take care of all the patients released from overcrowded hospitals. To the same semantic field belong expressions such as *second wave*, *intensive care*, *coronavirus death*, *infection rate*, *confirmed case*, *coronavirus case*, *death toll*, *spread of the virus*, *case of the virus*, *coronavirus test* that describe the focus and the negative sentiments in the news throughout this period: the outbreak of the pandemic, the spread of the contagion, the need for intensive care, the high rate of deaths ultimately caused by the virus.

The people involved in decision-making form another group of key single words and multi-word expressions: *Boris Johnson* and *Mr Johnson*, *Matt Hancock* or the *Health Secretary*, the *Scottish government*, *Nicola Sturgeon* or the *First Minister*, *NHS staff*, *Holohan* (Ireland) and *Whitty* (England) or the *Chief Medical Officer*, *Health Minister*, *World Health Organisation*, *Public Health England*, *Health Minister*, *scientific adviser*. Authorities and institutions, doctors and experts, are regularly quoted and referred to in the articles. This helps confer authoritativeness to the information reported, build trust in the reader (Wilson 2003).

The identification of the people involved in the crisis at all levels is one of the main foci of all articles of all three subcorpora. In fact, *people* is the

word with the highest frequency in the first period, and the second one in the other two, after *year*. Time and people are the most important issues in crisis management: to act fast and learn from the past in order to better forecast what to expect next. It was paramount to help people, to train people and persuade them to follow the rules, even when they seemed to limit or deprive people of individual rights. Thus, in addition to the political system and the health system, *people* collocates with *young*, *old* and *elderly*, *vulnerable* and *infected*, *disabled*, *normal*, *healthy*; with *schools* and *universities*, *businesses* and the *market*; *children*, *workers*, *experts*, the *country*, the *family* and the *community*. The pandemic affects everybody's lives, both in the private and in the public spheres, as an individual, as a local or an international community. People needed to be *helped*, *encouraged*, *advised*, *protected*, but also *stopped* from engaging in dangerous behaviours and instead *forced* to follow the rules (Denti 2021, 252-253).

3.2.2. The second period

October 2020 - February 2021 was characterised by the crisis communication/response phase, i.e., the recognition and acknowledgement of the pandemic and of its causes, and how to react. This involved identifying the current situation and future outcomes, then subsequently collecting and processing information to start vaccination campaigns, planning and spreading the right messages. At this point, communication still had a crucial role, especially in persuading people to get vaccinated.

The second subcorpus has several features in common with the first, but also new ones. The word *coronavirus/es* has an even higher keyness score of 233 against 75 for *Covid* and *Covid-19*. The word *coronavirus* appears in 758 titles, 524 of which in thematic position. They represent just above 12 percent of 6,155, the total number of documents in this period, while 1,082 have *Covid* or *Covid-19* (18 percent of the total), of which 230 are in thematic position. Some of them overlap, as both expressions are present. In comparison with the previous period, notwithstanding the significant functions of *coronavirus* in crisis communication, the expressions *Covid* and *Covid-19* were starting to replace it, opting for the virus's official name.

Some new entries are represented by the new names of politicians and, more importantly, by the vocabulary and names of vaccines: *AZN*, *Astrazeneca*, *vaccine*, *jab*, *immunization*, *pharmaceuticals*, *vaccination*, *Pfizer-Biontech* and some of the codes of the pharmaceutical industry.

The focus had undeniably changed, but the uncertainty concerning the efficacy of vaccinations was still very strong:

> (8) The Covid-19 vaccination plans will cost UK taxpayers at least £11.7 billion, the public spending watchdog says. [...] Each vaccine contract includes some indemnity protection for the makers in case of legal action arising from adverse effects caused by the jabs. (thetimes.co.uk December 16, 2020)

The first 50 multi-word expressions of this period are very similar to those of the January-September 2020 subcorpus, but with lower keyness scores. *Pharmaceutical preparation* has the highest score of 131.21, after *covid-19 coronavirus* and *covid coronavirus*, followed by *covid-19 coronavirus vaccine*, *sector performance*, *covid-19 coronavirus regulation*, *pharmaceuticals industry*, *naics32541 pharmaceutical preparation manufacturing*, *naics325412 pharmaceutical preparation*, and *pharmaceutical preparation manufacturing* further down. Certain new keywords refer to *sector performance*, *wholesale trade*, *recreation event* and *stock index*, looking at how the economy is doing and trying to pull through. These data show a step forward both in terms of crisis management and communication function. International actors such as Mr. Biden and the European Union are also present in this list, as there is a broader outlook at the crisis by more closely considering what the other countries are doing and experiencing, especially the EU and the USA.

The most frequent lexical verbs are mainly reporting verbs (*say*, *tell*, *report*), typical of news discourse, action verbs (*do*, *make*, *go*, *take*, *get*, *give*, *lead*, *leave*), verbs of opinion (*think*, *know*, *find*, *feel*, *ask*, *believe*), trend verbs (*remain*, *fall*, *continue*, *rise*, *return*, *increase*), the verbs *mean* and *lead* which are very important in newspapers' popularisation strategies to explain difficult concepts. The use of verbs does not vary much in the three subcorpora, due to their function in this genre.

The same trend is identified in the use of adjectives and adverbs. They can be classified into evaluative, both positive and negative (e.g., *more*, *good*, *positive*, *bad*, *low*), even though the former are more recurrent and *bad* is frequently used in its superlative *worst*; identifying an upward or a downward trend, an improving or a worsening situation; temporal (e.g., *now*, *always*, *then*, *again*, *recent*); adversative (e.g., *but*, *however*), intensifiers (e.g., *further*, *significant**, *much*, *far*), and modals (e.g., *probably*, *possibl**, *perhaps*). Sometimes they are slightly vague (e.g., *high*, *large*, *big*, *small*) (Denti 2021). What changes across time is their frequency but there is little change in their position in the list. Therefore, their value

and function remain. Again, one explanation may be the cyclic trend of the pandemic and of the virus's variants.

3.2.3. The third period

December 2021 – February 2022 was characterised by the post-crisis phase, i.e., planning and implementing actions and measures in normal conditions, and the beginning of more concrete evidence of recovery, despite the many issues that were still to be solved. It included providing people with follow-up information, contributing to research, learning from experience, but also coping with the consequences of the pandemic, communicating necessary changes to individuals and the communities and providing follow-up messages (Coombs 2010):

> (9) Covid restrictions are ending, so what's the new etiquette? (thetimes. co.uk February 17, 2022)

In this period, *coronavirus* appears in only 25 titles (14 times in thematic position), just above 1 percent of the total 1,958 documents, while *Covid* or *Covid-19* 527 times, i.e., 27 percent, 172 times in thematic position. This means that *Covid* and *Covid-19* have replaced *coronavirus*. This change in language use is probably due to the coinage of COVID-19 by the World Health Organisation to specifically indicate this new coronavirus and was employed by the medical community. However, it took a little longer before it was disseminated and popularised in everyday language.

The keyword *outbreak* changes collocates, especially as object of verbs. The outbreak is not something to be fought and controlled, but something to look back at and from which people have learnt.

Mental, *economic* and *workforce* are also referred to in a different way: they reflect a change in focus, more about the wider consequences of the pandemic and its implications for society, rather than the immediate public health threat.

Some nouns acquire relevance, such as *end*, referring to the end of restrictions, of mask use, etc., *Omicron*, the new variant, *test*, with an increase in the use of testing in all fields as everything reopened and restarted, from sports to businesses and recreational activities.

The third subcorpus shows a higher frequency of adjectives identifying an apparently new positive perspective towards the future: *positive* does not appear in the first 50 positions of the previous subcorpora, *great*, *low*, representing good results in terms of falling death rates.
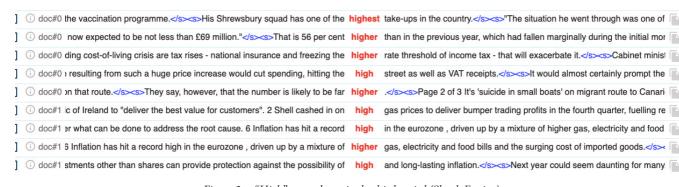
]	ⓘ doc#0 the vaccination programme.</s><s>His Shrewsbury squad has one of the	**highest**	take-ups in the country.</s><s>"The situation he went through was one of
]	ⓘ doc#0 now expected to be not less than £69 million."</s><s>That is 56 per cent	**higher**	than in the previous year, which had fallen marginally during the initial mor
]	ⓘ doc#0 ding cost-of-living crisis are tax rises - national insurance and freezing the	**higher**	rate threshold of income tax - that will exacerbate it.</s><s>Cabinet minist
]	ⓘ doc#0 e resulting from such a huge price increase would cut spending, hitting the	**high**	street as well as VAT receipts.</s><s>It would almost certainly prompt the
]	ⓘ doc#0 on that route.</s><s>They say, however, that the number is likely to be far	**higher**	.</s><s>Page 2 of 3 It's 'suicide in small boats' on migrant route to Canari
]	ⓘ doc#1 ic of Ireland to "deliver the best value for customers". 2 Shell cashed in on	**high**	gas prices to deliver bumper trading profits in the fourth quarter, fuelling re
]	ⓘ doc#1 er what can be done to address the root cause. 6 Inflation has hit a record	**high**	in the eurozone , driven up by a mixture of higher gas, electricity and food
]	ⓘ doc#1 6 Inflation has hit a record high in the eurozone , driven up by a mixture of	**higher**	gas, electricity and food bills and the surging cost of imported goods.</s<
]	ⓘ doc#1 stments other than shares can provide protection against the possibility of	**high**	and long-lasting inflation.</s><s>Next year could seem daunting for many

Figure 3. – "High" concordance in the third period (Sketch Engine).

However, *positive* sometimes has an optimistic, though cautious connotation; other times it is associated with *test/testing/tested*:

(10) How should people behave next week? "With cautious optimism," Jones says. Things look positive for now. (thetimes.co.uk February 17, 2022)

(11) Upon their return to the UK, several players tested positive, causing their match against West Ham to be postponed before Christmas. (thetimes.co.uk January 8, 2022)

The same thing occurs with *low*, which is also employed to indicate the negative aspect of poorer self-esteem in people, especially teenagers. Thus, adjectives do also still report negative trends. *High*, mostly used in its comparative or superlative form, with reference to the previous years or months, functions both as an intensifier and as a booster (*Fig. 3*).

In conclusion, the language of the third subcorpus shows the comeback of sports seasons and tournaments, as well as high street shopping, cinema, and recreational activities. Thus, some important upward trends are present. However, people and governments still need to be cautious.

4. CONCLUSIONS

The COVID-19 crisis became global not only in terms of boundaries but also because of its global media visibility. The media played a decisive role in the communication flows about COVID-19 to both expert and non-expert readers. The present paper has tried to highlight the three stages of this crisis management and its communication flows were observed in the corpus analysed, endeavouring to emphasise each period's features.

The first period is characterised by the unknown to be coped with and the coming fight against the enemy (Denti 2021; Wodak 2021), by narratives that affected people's emotions and behaviour, that informed and disinformed the public, spawning conflicts and ambiguities that led to the absence of the univocal, clear and shared stances needed to encourage constructive behaviour to overcome the pandemic. As is well known, a consistent number of people around the world reached the point of denying the existence of the disease itself.

The second period emphasises a more informed management of the crisis, the need to face the effects of the pandemic especially from a health, safety and economic point of view, and the beginning of vaccination campaigns.

By the third period the readers' opinion and sentiment, the social implications of the pandemic i.e., concern, feelings of threat, uncertainty,

vulnerability, and loss of control, that permeate the corpus, had improved. Vaccination, the availability of funds, and the establishment of actions and measures by the governments contributed to gaining people's consensus and faith in their politicians, although the need for safety and security still remains. While many consequences need to be solved and cautiousness is required, the future is seen as more *foreseeable, bright, post-pandemic* and *long-term.* However, every crisis is unique and the boundaries between the stages are not always clear cut.

Crisis models are like stage models of conflict (Folger *et al.* 2009, 74-79), and crises are made up of segments with predictable actions and behaviours, a sort of a crisis script, suggesting management and resolution strategies. However, the outbreak and surge of the pandemic was extremely fast and pervasive and positive and negative trends of the disease alternated back and forth over time. This led to an unpredictable development that had an effect on communication flows, which in turn affected how the crisis unfolded.

Future research will have to take into consideration not only the politicisation of the crisis but also newspapers' political affiliation.

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