

Coronalexicon: Meanings and Word-formation Processes of Pandemic-related Lexemes across English Varieties

LEAH GUSTILO

De La Salle University, Manila, Philippines
leah.gustilo@dlsu.edu.ph

CIELO MAY PURA

De La Salle University, Manila, Philippines

THOMAS BIERMEIER

University of Regensburg, Germany

ABSTRACT

The rapidly-spreading infectious disease known as Covid-19 has created a global debacle which triggered the creation of a specialised language to reflect the new situations that have suddenly become part of people's lives. The goal of the present investigation is to describe the linguistic innovations that entered the lexicon of Englishes across the globe. This corpus-based study aimed at describing the meanings and word-formation processes of the trending pandemic-related revitalised and newly-formed compounds and blends in L1 and L2 English varieties. The findings of the current study have clearly displayed that the lasting effects of the pandemic are left indelibly in the lexical innovations introduced in language. Not all pandemic-related words will become permanent in the word stock of any given variety. However, given the long-lasting implications of COVID-19, documenting the nature of language upheaval during the pandemic and its contribution to the vocabulary of first and second language English varieties is of utmost importance.

Keywords: coronalexicon; Covid-19; coronavirus; language creativity; coronaspeak

INTRODUCTION

BACKGROUND OF THE STUDY

A cornucopia of research has documented that language, as a social fact, is not fixed but subject to evolution and change (Gustilo et al., 2019; Liberman, 2020). Language constantly evolves to mirror our daily realities. This dynamic nature of language, which results in neologisms, is triggered by psycholinguistic and sociolinguistic factors (Al-Salman & Haider, 2021). Specifically, in the case of the English language, it is commonly known that English neologisms have been triggered by socio-linguistic factors brought about by new technologies (Crystal, 2004; Gustilo et al., 2020), language contact due to economic and geographical expansions (Kiaer et al., 2021), wars, and other social crises.

Since the beginning of 2020, people around the globe have experienced a kind of war waged by many countries against the rapidly-spreading infectious disease known as Covid-19, which has had an unprecedented impact on the whole world. Covid-19 has affected the use of language to a great extent and created a specialised discourse (Tan et al., 2020). The spread of Covid-19 has not only facilitated the resurgence of existing complex lexemes, but it has clearly produced a wide range of new formations in order to reflect societal changes brought about by the pandemic.

The online world has produced voluminous information, memes, shout-outs, conspiracy theories, and discussions related to Covid-9 (Blommaert, 2020), which reflect people's new experiences and changes that they need to grapple with in dealing with the effects

of the pandemic (Lawson, 2020). In the process, pandemic-related or Covid-19-related communication has opened the floodgates of neologisms into the lexicon of the different varieties of English across the globe. For instance, the pandemic's economic effects produced terms such as *corononomics* and *macroeconomic flu*. Its effects on the medical sector have produced terms such as *flatten the curve*, *PPE*, and *contact tracing*. Dubey et al. (2020) emphasised that apart from its physical and economic burdens, Covid-19 creates immense psychosocial disturbances resulting from fear of infection and fear of losing a loved one, creating words such as *coronaphobia*, *coronapocalypse*, or *coronageddon*.

This specialised language is vehemently called the *language of the pandemic* by the International Journal of Corpus Linguistics, The Telegram, and other online sources. The Oxford English Dictionary (OED) website refers to it as the language of Covid-19. Thorne (2020) termed it *Coronaspeak*. Crystal (2020) termed it *Covocabulary*. Lexicographers, linguists, and even language teachers, saw the need to document the most-lasting effects of the pandemic which are neologisms or lexical innovations that are introduced in language (Al-Salman & Haider, 2021). Kim et al. (2020) issued a call for a cross-lingual analysis of the language of the pandemic, which the present study responded to by analysing the *coronalexicon* of different English varieties across the globe.

Coronalexicon is the term we used to refer to the neologisms that gave rise to the specialised language of Covid19 across different English varieties. Neologisms are a product of language creativity, a property of human language that generates an infinite set of lexical innovations that may be rule or non-rule governed. The OED Learner's dictionary (n.d.) defines neologism as a "new word or expression or a new meaning of a word." Durham (2018, p. 1) refers to it as a "new word or a new way of using a word," which means that they are either new words or existing words that have been used in a new way. Neologisms showcase the language's dynamism and its ability to undergo change (Ahmad, 2000), helping to expand the language's repertoire of words through various word-formation processes.

The main objective of the present study is to describe the nature of global language upheaval during the pandemic as reflected in the lexical innovations relating to Covid-19 and the contribution it brings to the vocabulary of English across the globe. Hence, the foci of investigation revolve around the following research questions:

1. What are the trending revitalised compounds and blends that emerged in the lexicon of different Englishes during the pandemic?
2. What are the newly-constructed compounds and blends that entered the lexicon of different Englishes during the pandemic?
3. What are the meanings associated with these compounds and blends?
4. In which English variety/varieties did these compounds and blends occur or are more frequently used?

REVIEW OF RELATED LITERATURE

Historically, lexical innovations are naturally-occurring linguistic phenomena and, therefore, they are unstoppable. This is because language as a social fact is easily influenced by societal events that exert influence on communities as a whole. Hence, lexical creativity, our ability to create and understand new words, is not uncommon but a prevalent practice across different periods of human history, allowing people to reflect their interactions and real-world experiences through language (Al-Salman & Haider, 2021).

To illustrate, the effects of previous epidemics and pandemics in the history of humankind have expanded the lexicon of a language as new words reflecting the realities of people's situations are added to it. The words *epidemic* and *pandemic* rose to prominence

during the 17th century plagues which hit Europe. *Quarantine* was first used in the 14th century to describe the 40-day period during which ships were isolated before landing during the *Black Death Plague*; the first known use of *self-quarantine* was in 1918 (Meriam-Webster Dictionary, 2021). *Yellow fever* appeared in 1738 (Meriam-Webster Dictionary, 2021) to refer to the virus that travelled from Africa to the Western hemisphere during the slave trade era (Staples & Monath, 2008), which later on brought epidemics in America ("Major American Epidemics of Yellow Fever", n.d.). The first hint of the pandemic of the 21st century, the outbreak of severe acute respiratory syndrome (SARS) in 2003, resulted in the outflowing of often unverified information from the media relating to the crisis. This situation was reflected in the English language when David Rothkopf introduced the term *infodemic* in 2003. We have seen renewed usage for this term during the current pandemic (Oxford English Dictionary, 2020).

The current pandemic has also opened the floodgates of existing words used in a new way and totally new word-formations. Thorne's (2020) compilation of the language of the pandemic which he termed *coronaspeak* contains glossaries of new words reflecting the current situations caused by the pandemic; it includes nicknames, slang, puns, abbreviations, jargon, demographics, terms for work from home and teleconference, security measures, and inappropriate terms. Some of the interesting words included in his list are blends and compounds such as *covexit* (covid + exit), *corona crunch*, and *viral anxiety*.

The English lexicon has been greatly extended by word-formation processes that operate in lexical innovations. Researchers have used this framework in describing the language of the pandemic. Asif, Zhiyong, Iram, and Nisar (2020) analysed *COVID-19-related* neologisms from articles, books, Oxford Corpus, social media, and five different websites covering Covid-19-related information. They found that the word-formations utilised by the majority of the people on social and mass media and state briefing discussions related to COVID-19 are in the form of compounds, abbreviations, acronyms, and blends. Akut (2020) who used internet articles that listed *COVID-19-related* words identified three word-formation processes: compounding, blending, and affixation. In contrast, more word-formation processes were found by Al-Salman and Haider (2021) who identified compounding, clipping, blending, acronyms and other dual word-formation processes to be operating in the trending neologisms they analysed from a corpus of 208 lexemes from different online sources. They concluded that the emergence of new terms showcases the English language's vitality to extend its vocabulary in relation to the social crisis.

Currently, the only study on the language of the pandemic available on the internet involving large corpora is the OED's description of the most frequent key words related to COVID-19 which are tracked monthly, the preferred word forms in different varieties of English, and the distribution of words across English varieties. Through their monitor corpus involving 10-billion words, the OED was able to track the spikes and surges of the frequencies of medical terms and words reflecting social and economic impacts of COVID-19. *Contact tracer*, *face covering*, and *zoom* are now their new additions. Comparison of word forms revealed that UK preferred Covid-19, while US preferred COVID-19. The OED also documented the distribution of words across different Englishes. To illustrate, the word *frontliner* is used in all varieties, but it is more frequently used in Malaysia and in the Philippines (Oxford English Dictionary, 2020).

In addition, a compendium of recent and proposed studies regarding the language of the pandemic was undertaken by Kim et al. (2020). Their work presented a collection of articles from different scholars worldwide which offered macro and micro linguistic perspectives regarding pandemic-related discourse. They issued a call for a cross-lingual analysis of the language of the pandemic, which the present study responded to by analyzing the pandemic language across English varieties.

THEORETICAL FRAMEWORKS

The present study is anchored on the theoretical underpinnings of language creativity and word formation frameworks that fuel language change and evolution. First, according to Carter (2016, p. 13), language creativity is a prevalent characteristic of human languages. It is also an all-pervasive and exceptional property of all people. This concept of language creativity is mentioned here in order to support the findings of the current study that even L2 speakers of the English language are capable of expanding their English language lexicon since language creativity is an inherent characteristic of all people.

Second, according to Biermeier (2014), language/lexical creativity is aided by word-formation processes that give birth to neologisms in a language. In other words, word-formation process is a vehicle in creating new words from pre-existing materials or other words (Plag, 2003), based on some rules (Hacken & Thomas, 2013). Word-formation processes include compounding, blending, affixation, acronyms/abbreviation, coinages, clippings, backformation, borrowing, and multiple/double processes, and folk etymology (Biermeier, 2014).

Due to space constraints, only the two most frequently occurring word-formation processes we found are presented in this study: compounding and blending. We framed our analysis of compounds and blends using Yule's (2017), Biermeier's (2014), and Al-Salman and Haider's (2021) frameworks. According to Yule (2017, p. 172) compounding is the "joining of two separate words to produce a single form." Biermeier (2014) explains that compounding produces compounds that function as nouns (e.g., *maid-servant*), verbs (to *househunt*), and adjectives (e.g., *teary-eyed*). Compounding is distinguished from blending by its feature which combines words and phrases without clipping or shortening parts of the words. In the present study, all unclipped words that were attached to *COVID-19*, *coronavirus*, *pandemic*, and *corona* to form a single form are considered compounds. Plag (2003, p. 121, as cited in Biermeier, 2008) explains that blending is different from clipping in that the former involves two or more base words while the latter only one. Drawing on Al-Salman and Haider (2021, p. 31), blending is defined in this present study as the word-formation process in which parts of two or more words combine to create a new word. Al-Salman and Haider (2021) identified the word-formation processes of *COVID-19-inspired* neologism, and they listed *coronacoma* and *zoom bombing* as examples for compounds and *quaranteens* and *coronacation* as examples of blends.

METHODOLOGY

RESEARCH DESIGN

To describe the language of the pandemic, we combined quantitative and qualitative approaches in the present study. This combined approach has already been used in previous corpus-based studies (Shin, 2019). The identification of Covid-19 terms in the NOW corpus, defining them according to their linguistic contexts, and classifying them under the compounds or blends category constitute the qualitative part of the study. Raw and normalised frequencies of the lexical items comprise the quantitative analysis.

CORPUS OF THE STUDY

This corpus-based study utilised the News on the Web (NOW) corpus as its dataset—a collection of English web-based news and magazine articles with 13 billion words, which keeps growing with 180-200 million words of data being added each month from 20 countries. For

the present study, we only sampled four countries under each regional variety of English: United States, Great Britain, Canada, and Ireland for L1 Englishes; India, Bangladesh, Pakistan and the Philippines for L2 Asian Englishes; Nigeria, Ghana, Kenya, and Jamaica for L2 African Englishes.

PROCEDURES

To produce the initial wordlist of pandemic-related neologisms for the present study, first, we listed the trending *COVID-19-inspired* words from electronically published news articles regarding the pandemic. We also included in our list the top 25 Covid-19-related words listed by the Oxford English Dictionary (e.g., self-isolation, hand-washing, social distancing, frontliner, and the like). Then we used the words in the list as our search words in the NOW corpus.

To address our first research question (RQ), we categorised the words in our list as revitalised compounds and blends if their occurrence record existed before January 2020 in the NOW corpus but their usage surged during the pandemic. The search date for revitalised blends was set at 2010 (i.e., date of creation of the NOW corpus) until the date of data analysis. There are only few revitalised blends in the NOW corpus. Comparisons of their frequencies before and after 2020 are indicated in the results.

To answer our second RQ, words are placed under the newly-formed compounds and blends categories if they appeared only beginning 2020 in the NOW corpus. For the newly-formed compounds, only the frequent combinations attached to *COVID-19*, *coronavirus*, *corona*, and *pandemic* are presented in the results. Space constraints did not allow us to present the rest of the 1,239 newly-formed compounds we identified from the NOW corpus. For newly-formed blends, only those with 5 occurrences and most frequent combinations with *COVID-19*, *coronavirus*, *corona*, *pandemic*, and other revitalised words were presented in the results. The search date for the newly-formed words was set at January 1, 2020 until the date of data analysis (October 2021).

The final list of newly-formed compounds and blends were checked whether the combinations are listed in a standard online dictionary (Meriam-Webster's Dictionary). All combinations in our list have no dictionary entries.

After finalizing the word list, the meanings of the trending *COVID-19-related* words were extracted from their linguistic contexts in the corpus. This part of the analysis addresses our third RQ. The Keyword in Context (KWIC) function of the NOW corpus helped in formulating the definitions. The left and right contexts in which these lexemes appeared were analysed. The meanings of the words were constructed by the first author and validated by the second and third authors.

Lastly, the occurrences of words per English variety were analysed to see in which English varieties they occurred or are more widespread. This is to address the fourth RQ. All reported frequencies are raw frequencies except for the normalised frequencies per million words which we used in comparing the revitalised compounds and blends.

RESULTS

Answers to the research questions are discussed simultaneously in the two subsections of Results. The first section discusses Research Questions one, three, and four. The second section discusses Research Questions two, three, and four.

REVITALISED COMPOUNDS AND BLENDS: THEIR MEANINGS AND OCCURRENCES ACROSS ENGLISHES

Tables 1 and 2 present the revitalised compounds and blends, their meanings, and the total raw frequencies of the word in the entire corpus dating back to 2010 until the date of analysis.

The commentary that follows highlights the resurgence of these words during the pandemic in terms of their frequencies per million words, the contexts of the words which reflect the realities surrounding the pandemic, and the identification of English varieties where these words are found or are more widespread.

TABLE 1. Trending Covid-19-inspired revitalised compounds during the pandemic

Word	Frequency	Meaning
coronavirus	2,324,064	a family of deadly viruses that caused the pandemic that resulted in millions of infected individuals and deaths.
self-isolation (noun)	29,148	the act of an individual to separate oneself if he or she has tested positive with COVID-19.
self – isolate (verb)	33,299	
self-quarantine	18,160	This lexeme is synonymous with self-isolate. It refers to restricting oneself from other people due to exposure or possible exposure to the virus.
community transmission	24,367	a situation in which the virus spreads in a community even without human contact.
contact tracing	64,865	The act of tracking down and assessing all recent contacts of a person who tested positive with COVID-19
face mask	46,956	A covering worn to cover almost half of the face to prevent the spread of respiratory droplets.
face shield	5,498	A protective gear made of plastic or see-through materials that prevent or reduce the risk of transmitting respiratory body droplets on the face.
hand washing	11,577	To wash one's hands to remove dirt as a protective measure against the coronavirus.
containment zone	2,644	The area where positive coronavirus cases are being held.
epidemic curve	712	A graph used to describe a specific outbreak by plotting new cases against time intervals.
forehead thermometer	190	An infrared thermometer that uses infrared light to check a person's temperature by pointing it on its forehead.
herd immunity	29,044	A state in which a large part of a community becomes immune to a specific disease, in this case, Covid-19.
immune surveillance	177	The body's immune system and ability to monitor, recognise, and eliminate foreign cells or tissue.
incubation period	5,599	The period covering from the first time the person is exposed to a virus until the appearance of signs and symptoms of the disease.
index patient	382	the first known case of COVID-19 in a specific country.
lockdown	754,792	A government-imposed decision to control movement and activities in a specific city/town to help stop the virus's spread.
frontliner	11,079	
front-liner	1,978	The healthcare and essential persons who help fight the battle against COVID-19.
social distancing	321,127	an act of avoiding social gatherings which involve more than five and more people.
physical distancing	44,859	It refers to maintaining at least a 2-meter distance from people outside the home.
super spreader	6,403	An infected individual who transmits the infection more highly than others or events where there is a higher chance of spreading the infection.
new normal	49,490	emerging practices and situations that became an ordinary protocol.

This corpus-based analysis shows that the above-presented revitalised compounds have high frequency of use during the pandemic compared to their frequencies in the last ten years before the pandemic. All these compounds entered the *coronalexicon* of the 12 sampled English varieties with varying frequencies. Their recorded frequencies for 2020 are much higher compared to 2021 considering that the year is not yet over.

Coronavirus has been around over the years as it is a term for the family of viruses that have led to outbreaks like SARS, MERS, and COVID-19. It has a record of .25 frequency before the pandemic, but it surged to 770.6 in 2020 and 283.7 in 2021 as of analysis date. **Preventing the spread of the coronavirus** has been the underlying reason for the different preventive measures portrayed in the words that come with mobility restrictions such as: *self-isolation/self-isolate*, *self-quarantine*, *social distancing*, *physical distancing*, and *lockdown*. *Lockdown* reached 2.61 frequency of use in 2016, but in 2020 and 2021 it has a record of 223.5 and 122, respectively. The words *social distancing* and *physical distancing* have been extensively used during the pandemic. Before the pandemic, the highest record for *social distancing* was only .02 in 2011-2012; now it has a record of 105.23 in 2020 and 32.29 in 2021. *Physical distancing* occurred only once in 2014-2019, but it appeared 13.84 times in 2020 and 6.08 times in 2021. *Social distancing* is more frequently used in the United States (L1 English), Bangladesh (L2 Asia), and Kenya (L2 Africa), while *physical distancing* in Canada (L1), the Philippines (L2 Asia), and Nigeria (L2 Africa). Similarly, the words *self-isolate* and *self-quarantine* have had very few occurrences before the pandemic, but in 2020 they got 10.15 and 6.43 frequencies and 4.88 and .98 in 2021, respectively. *Self-isolate* is more extensively used in Great Britain (L1), Bangladesh (L2 Asia) and Nigeria, while *self-quarantine* in the United States, the Philippines, and Kenya.

In addition, the use of the following words has become widespread in an effort to **educate the people on how to prevent the spread** of Covid-19. Before the pandemic, *handwashing* has a record of .53. During the pandemic, it has a frequency record of 3.73 in 2020 and 1.29 in 2021. *Face mask* has gone up from .50 to 14.07 in 2020 and 7.14 in 2021, while *face shield* rose to 1.65 and .83 from .08 over the last ten years. Both these words have their highest frequencies in the United States and the Philippines for L1 and L2 Asian Englishes; but for L2 African Englishes, the former is more frequent in Nigeria and the latter in Ghana.

Because of the spread of the virus, **reflecting the fight of governments in detecting and monitoring the virus** like *contact tracing*, *community transmission*, *containment zone*, *forehead thermometer*, and *super spreader* surged in usage. *Contact tracing* rose to 19.8 in 2020 and 9.18 in 2021 from .29 in 2014. It is more common in the United States, Philippines, and Jamaica. *Community transmission* was at 7.66 in 2020 and 3.14 in 2021 from .09 in 2019. It is prevalent in Ireland, Bangladesh, and Nigeria. *Containment zone* was at .88 in 2020 and .25 in 2021 from .02 in 2014. *Forehead thermometer* became widespread resulting in its increase from .01 in 2018 to .05 and .04 in 2020 and 2021, respectively. *Super spreader* has a record of .62 in 2020 and .77 in 2021 from .01 in 2019. It has the highest frequencies in the United States. In the fight against Covid-19, the role of essential and healthcare personnel is very important. This new experience facilitated the resurgence of the word *frontliner/frontliner* whose frequencies surged to 2.48 in 2020 and 3.12 in 2021 from .15 in 2019. Its related form *frontline worker* surged in usage from .23 in 2018 to 4.93 and 6.48 in 2020 and 2021, respectively. The former is used extensively in the Philippines, while the latter is more widespread in all sampled countries especially in India.

In addition, **monitoring the spread of COVID-19 has led to the resurgence of various medical words** that most people only knew during the pandemic. These are *epidemic curve*, *incubation period*, *index patient*, and *immune surveillance*. *Epidemic curve's* frequency record is .02 in 2014 and .23 in 2020 and .08 in 2021. It is mainly used in Canada, Philippines, and Ghana. It is the same with the *incubation period*: from .84 in 2014 to 1.86 in 2020. *Index patient* has a record of .04 before the pandemic and .14 in 2020 and .08 in 2021. *Incubation period* is more widespread in the United States, Bangladesh, and Kenya; while *index patient* in L1 United States and in India and Nigeria for L2 Asia and L2 Africa, respectively. *Immune surveillance* has more frequencies in 2021 than in 2020, which is .03 and

.07, respectively, due to the vaccine's arrival. It is prevalent in the United States, India, and Nigeria.

Finally, the compound, *new normal*, became widespread during the pandemic in all sampled countries especially in the Philippines.

Table 2 presents the revitalised blends, their meanings, and total raw frequencies in the NOW corpus.

TABLE 2. Trending revitalised Covid-19 blends

Word and Frequency	Frequency	Meaning
telemed (telephone + medicine)	111	Communicating with the doctor even without being in the same room with all the available technologies.
infodemic (information + pandemic)	1,432	A state of numerous information and misinformation about the pandemic that leads people to hold wrong beliefs.

This study has listed only two revitalised blends in the NOW corpus: *telemed* and *infodemic*. Due to mobility restrictions the word *telemed* was invented. It refers to managing virtual medical consultations with a frequency record of .83 in 2019, 4.05 in 2020, and 2.48 in 2021. *Infodemic* was coined in 2003, (Merriam-Webster Dictionary, 2021) and its raw frequency of 1,520 or .12 per million words attests to its widespread use during the pandemic. *Infodemic* is widespread in the United States, Philippines, and Bangladesh. *Telemed* is widespread in the United States, India, and Jamaica.

NEWLY-FORMED COMPOUNDS AND BLENDS: THEIR MEANINGS AND OCCURRENCES ACROSS ENGLISHES

Table 3 presents some of the trending compound lexemes that were combined with *coronavirus*, *corona*, *pandemic*, and *COVID-19* together with their meanings and raw frequencies. Space constraints do not allow us to present other rich data from the corpus. To reiterate, the frequencies of these compounds appeared only in 2020. These words do not have entries in Merriam-Webster Dictionary.

TABLE 3. Newly-formed COVID-19-inspired Compounds

Word	Frequency	Meaning
coronavirus-related	22,029	These compounds pertain to all issues, effects, and concerns caused by the COVID-19 virus.
COVID-19-related	13,300	
pandemic-related	12,917	
corona-related	241	
	48,487	
pandemic-induced	5,635	A condition or situation that occurred due to the pandemic/coronavirus.
coronavirus-induced	4,048	
COVID-19-induced	1,495	
corona-induced	102	
	11,280	
coronavirus-hit	1,796	Someone or something that experienced the effects of the coronavirus/pandemic and underwent changes.
pandemic-hit	1,589	
COVID-19-hit	165	
corona-hit	71	
	3,621	
pandemic-driven	1,977	Someone or something that is being operated or controlled by the situations relating to the pandemic/coronavirus.
coronavirus-driven	795	
COVID-19-driven	231	
corona-driven	4	
	3,007	

pandemic-era	2,534	The period during which COVID-19 has severely affected almost all countries and individuals.
coronavirus-era	297	
COVID-19-era	127	
corona-era	23	
	2,981	
pandemic-shortened	1,839	An event that has been reduced or lessened because of COVID-19.
coronavirus-shortened	350	
COVID-19-shortened	78	
corona-shortened	1	
	2,268	
COVID-19-positive	1,285	A person who is presently inflicted with COVID-19.
coronavirus-positive	677	
corona-positive	89	
	2,051	
coronavirus-free	782	A person, situation, or a condition that is free from the threats of COVID-19.
COVID-19-free	429	
corona-free	203	
pandemic-free	140	
	1,554	
coronavirus-led	680	A situation or condition that happens because of COVID-19.
pandemic-led	510	
COVID-19-led	136	
corona-led	11	
	1,337	
coronavirus-affected	546	A situation, condition, or person that is afflicted by COVID-19 virus and its effects.
pandemic-affected	397	
COVID-19-affected	274	
corona-affected	71	
	1,288	
coronavirus-stricken	645	A person or condition that has been infected or affected with COVID-19.
pandemic-stricken	560	
COVID-19-stricken	60	
corona-stricken	13	
	1,278	
coronavirus-infected	843	The meaning of these compounds is similar to coronavirus-hit or coronavirus-stricken, but the linguistic contexts of those compounds in the corpus are used with humans; these words describe a person who became sick because of coronavirus.
COVID-19-infected	291	
corona-infected	109	
pandemic-infected	4	
	1,247	
pandemic-delayed	804	An event or a situation that happened late or postponed because of COVID-19.
coronavirus-delayed	291	
COVID-19-delayed	23	
corona-delayed	1	
	1,119	
coronavirus-linked	744	Situations or things that pertain to or are related to COVID-19.
COVID-19-linked	171	
pandemic-linked	132	
corona-linked	2	
	1,049	
pandemic-fueled	685	A condition or situation that was realised because of COVID-19.
coronavirus-fueled	253	
COVID-19-fueled	40	
corona-fueled	5	
	983	
coronavirus-enforced	649	An action being implemented or an event happening because of coronavirus. This word is more of a compulsory enactment.
pandemic-enforced	199	
COVID-19-enforced	110	
corona-enforced	16	
	974	
COVID-19-like	447	An illness that has the same symptoms with coronavirus; For pandemic-like, it refers to situations or characteristics that are similar to the effects and characteristics of pandemic.
coronavirus-like	407	
pandemic-like	64	
corona-like	35	
	953	
pandemic-inspired	380	Actions, ideas, or things, that happen because of the influence of COVID-19.
coronavirus-inspired	317	
COVID-19-inspired	86	

corona-inspired	14	
	79	
pandemic-ravaged	376	Something (e.g. economy) that has been severely affected because of COVID-19.
coronavirus-ravaged	303	
COVID-19-ravaged	55	
corona-ravaged	5	
	739	
coronacrisis	469	A challenging situation brought about by COVID-19 that affected the economy and other societal conditions.
coronavirus-crisis	15	
pandemic-crisis	9	
COVID-19-crisis	7	
TOTAL	500	

Most of the compound combinations we identified are compound adjectives. The most extensively used compound adjectives are *coronavirus-related*, *COVID-19-related*, *pandemic-related*, and *corona-related* with a total of 48,487 raw frequencies. *Coronavirus-related* has the highest frequencies in the sampled Englishes worldwide, especially in the United States. Drawing on the linguistic context of their meanings, the headword *-related* was used to describe **how people have associated the pandemic effects to almost all aspects of life**. The headwords *-linked* and *-like* also indicate how the pandemic created different life concerns. *Coronavirus-related* expenses, *pandemic-linked* deaths, and *COVID-19-like* symptoms are a few of their examples. Among the compound adjectives formed from the headwords *-linked*, *coronavirus-linked* is more frequent; it is extensively used in Great Britain, Bangladesh, and Kenya. Among the compound adjectives formed from the headwords *-like*, *COVID-19-like* is more frequent, and it is primarily used in Bangladesh.

It goes without saying that the headwords *-positive* and *-infected* are attached to *covid words*. These *words* are frequently shown in adjectival phrases such as *COVID-19-positive individuals* and *coronavirus-infected children*. These pandemic lexemes have been used worldwide, but *COVID-19-positive* has the highest occurrences, especially in the United States and in the Philippines.

The compounds with headwords *-induced*, *-led*, and *-inspired* portray the **political and social effects** caused by COVID-19, such as in the phrases *coronavirus-induced recession*, *pandemic-led lockdowns*, and *coronavirus-inspired comedy special*. *Pandemic-induced* is the most extensively used especially in the United States, India, and Bangladesh; *coronavirus-led* is most frequently used in India; and *pandemic-inspired* is most frequently used in the United States. **The economic effects of COVID-19** on the world left traces in the lexicon of the people with the formation of lexemes bound to the headwords *-hit*, *affected*, *-stricken*, and *-ravaged*. Thus, adjectival phrases such as *coronavirus-hit* businesses, *coronavirus-affected* companies, *coronavirus-stricken* economy, *pandemic-hit* year, and *pandemic-ravaged* world entered the lexicon of the sampled English varieties. Indeed, the pandemic has had significant economic threats that economists created the word *macroeconomic flu* (Baldwin & di Mauro, 2020). Language speakers worldwide have coined different terms to describe how the pandemic has battered the world's economy, confirming the claim of Baldwin and di Mauro (2020) that COVID-19 is more serious economically than medically. On the other hand, the pandemic has inspired creative ways to earn as reflected in the linguistic context of *pandemic-fueled sales boom*. Among these compound lexemes with *-hit*, *-affected*, *-stricken*, and *-ravaged* headwords, the most extensively used in all sampled Englishes is *coronavirus-hit* with the highest frequency in India. *Coronavirus-affected* is more frequently used in L2 Asia: Bangladesh and India. *Coronavirus-stricken* is more common in L2 Asia, Philippines and Bangladesh, and L1 United States. Lastly, *pandemic-ravaged* and *pandemic-fueled* are more common in the United States.

People's actions in coping with the various effects of the pandemic are also inscribed in the phrases *pandemic-driven* digital transformation and *coronavirus-enforced* break.

Pandemic-driven is extensively used in the United States, while *coronavirus-enforced* in Ghana. Other **effects on the social activities of the people** resulted in the creation of compounds bound to headwords *delayed* and *shortened* such as in *coronavirus-shortened 60-game campaigns* and *coronavirus-delayed season*. These two compounds are more extensively used in the United States.

The **overall impact of the pandemic** is reflected in the compounds *coronacrisis*, *coronavirus-crisis*, *pandemic-crisis*, and *COVID-19-crisis*, in which *coronacrisis* is the most commonly used, particularly in Great Britain. The whole period in which the pandemic crisis is experienced manifests in the words *pandemic-era*, *coronavirus-era*, *COVID-19-era*, and *corona-era*, with *pandemic-era* as the most frequently used in the United States.

Lastly, since the pandemic has created a massive world crisis that has been unprecedented in generations, people wished for a *COVID-19-free* country resulting in various lexemes from the headword *free*, which are used worldwide. However, *coronavirus-free* has the most number of occurrences, particularly in Bangladesh.

Table 4 presents some of the newly-formed blends in the NOW corpus, their meanings, and total raw frequencies.

TABLE 4. Newly-formed COVID-19-inspired blends in the NOW corpus

Word	Frequency	Meaning
coronanomics (coronavirus + economics)	55	A country's financial situation due to the fluctuations caused by the outbreak of COVID-19.
coronapocalypse (coronavirus + apocalypse)	21	End of the world brought about by pandemic, which will result in social or economic collapse.
coronageddon (Coronavirus + armageddon)	9	It has the same meaning as coronapocalypse, only that its frequencies are found merely in sampled L1 countries.
coronacation (coronavirus+vacation)	12	Home vacation during the pandemic.
covideo (covid + video)	30	The use of videos in communicating during the COVID-19 pandemic.
covidivorce (covid + divorce)	7	Divorce filed during COVID-19 pandemic.
quarantini (quarantine + martini)	221	A concoction of a martini-like cocktail with a mixture of Vitamin C which people drink at home while under quarantine.
coronarita (coronavirus +margarita)	8	Just like quarantini, it refers to a cocktail drink.
quaranteens (quarantine +teenagers)	29	Babies born during the pandemic who will grow up to become teenagers. This word also refers to teenagers who are not allowed to go outside and must stay home.
zumping (zoom + dumping)	10	A way to break up with someone through video conferences like Zoom.
quarantime (quarantine + time)	41	The period during the COVID-19 pandemic and countries across the world imposed nationwide lockdowns.
moronavirus (moron + coronavirus)	20	A quarantine shaming for someone who does not follow health and safety guidelines.
Covidiot (covid + idiot)	271	A person who does not follow health protocols.
coronathon (coronavirus + marathon)	7	A digital technology hackathon where people can present innovative ideas to deal with the coronavirus crisis.
twindemic (twin + pandemic)	286	Twin pandemics of flu and COVID-19 at the same time.
coronasomnia (coronavirus + insomnia)	57	A medical condition in which people struggle to sleep because of the threats of COVID-19.
maskne (mask + acne)	707	The growth of acne in the face as a result of frequently wearing face masks.
coronavarsity (corona +anniversary)	18	Commemoration of the beginning of COVID-19 outbreak. It also refers to special occasions that happened during the pandemic.

CoronApp (coronavirus + application)	30	An application that provides information on the latest news and updates about COVID-19.
Coronanxiety (coronavirus + anxiety)	6	A feeling of worry and nervousness due to the effects of Covid-19.

The blends category is the second most-frequent word-formation process used in forming *coronalexicon*. We presented only 20 of these blends that we have identified in the lexicon of the sampled Englishes in the NOW corpus (See Table 4).

The pandemic has caused devastating economic disruption in people's lives as reflected by the blends *coronanomics*, *coronapocalypse*, and *coronageddon* which were formed to describe **the economic implications** (*coronanomics*) **and gravity of the outbreak** (*coronapocalypse* and *coronageddon*). The linguistic contexts of *coronanomics* in the corpus denote a meaning that is used to describe the economy of countries facing economic depression, while *coronapocalypse* and *coronageddon* describe the world coming to an end because of the devastating effects of the pandemic. They are more frequently used in the United States (L1).

Lockdown and quarantine restrictions led to the creation of blends that **depict people's activities at home and its negative effects to their relationships**. *Quaranteens* refers to teenagers who have been directed to stay at home during lockdowns, and it is used in the United States, Great Britain, and Philippines. *Quarantini* and *coronarita* depict people's leisure activities at home as stress relievers. *Quarantini* is most common in the United States, India, and Jamaica; *coronarita* has occurred in the United States and Philippines. The online communication at home has resulted in the formation of *covideo*, which is immensely used in Ireland, Bangladesh, and Philippines. *Coronathon* refers to a digital event where people can engage in presenting their innovative ideas in order to combat COVID-19. These stay-at-home experiences altogether sum up the word *coronacation*, which has more occurrences in the United States and India. Quarantine restrictions have affected relationships as revealed by two blends, *covidivorce* and *zumping*. The linguistic context of *covidivorce* in the corpus points to marriages that are wearing away due to the pressures of self-isolation that led to divorces. *Covidivorce* occurred in the United States and in Nigeria. *Zumping*, which has occurrences in Great Britain and in India, refers to a respectful way of dumping someone via Zoom.

Coronalexicon reflects the **attitudes of people regarding health and government protocols**. Citizens are ridiculed as *covidiot* when they do not follow instructions. *Covidiot* is used worldwide especially in the United States and Great Britain for L1 English, India for L2 Asia, and Kenya for L2 Africa. Also, *moronavirus*, is used to mock leaders and politicians who have shown wrong decisions while controlling the outbreak of the disease. It occurred in the United States and the Philippines.

Newly-formed blends that are **health-related** are *maskne*, *coronasomnia*, and *coronanxiety*. *Maskne* is more prevalent in the United States and the Philippines. *Coronanxiety*, fear of losing a loved one or being infected with the disease may lead to *coronasomnia*, a word for sleep deprivation due to anxiety, is immensely used in the United States.

CoronApp is a web application that monitors updates associated with *coronavirus*. Its occurrences are mostly found in the United States.

Lastly, all these various experiences are referred to as events and actions happening during *quarantime/s* primarily by Americans and Filipinos (Philippines). *Quantimes* have been around for more than a year since the world was ravaged by COVID-19. The Americans call it *coronaversionary*.

DISCUSSION

Our analysis of the revitalised and newly-formed lexemes reflects the rate at which Englishes across the globe have assimilated lexical innovations into their vocabulary. Many of the identified lexemes of *coronalexicon* are revitalised compounds and blends which are "old words in new light" (Ro, 2020). NOW corpus evidence shows that prior to the pandemic, the usage of these words is not significantly noticeable compared to their increased usage during the pandemic. To illustrate, coronavirus compound lexeme has a recorded frequency of .05 per million words (or 105 raw frequency) in 2019 in the NOW corpus, but as of December 2020, it has a recorded raw frequency of 1,994,401 or 764.77 per million words, making it a ubiquitous word in all sampled English varieties. The Oxford English Dictionary's (OED) data confirm our analysis. Fiona McPherson, the OED's senior editor, reports that coronavirus has a recorded frequency of .03 times per million words, but in April 2020, its recorded frequency, together with the newly-coined term Covid-19, had increased to 1,750 per million words, suggesting that both the revitalised term and the newly coined term are now used at almost the same frequency (Ro, 2020). According to Al-Salman and Haider (2021, p. 33), the reintroduction of these words "shows that not only does social change bring about new words and terms, but it also reintroduces some pre-existing words that have gained new resonance in the time of major crises, as in the *COVID-19* case."

The newly formed compounds and blends presented in this study are results of combining and blending words to *COVID-19*, *coronavirus*, *corona*, *pandemic*, and some revitalised compounds. The volume of lexical innovations under the compounding category confirms Bauer and Laurie's (1983) claim that compounding is the most frequent word-forming process by far and Al-Salman and Haider's data (2021) that compounding is the most frequently-used process in lexical innovations that extend the lexicon of languages during the pandemic.

This *pandemic-induced* linguistic change happens as fast as the spread of *coronavirus* because language users are fast enough to create words that reflect societal changes induced by the virus. Indeed, the meanings of the words extracted from the linguistic context in which they appear, reflect the following realities: 1) efforts made by healthcare professionals in detecting and monitoring the spread of the virus and infected individuals, (2) efforts made by governments to prevent the spread of the virus, (3) economic disruption caused by the virus (4) people's actions in coping with the various effects, (4) people's attitudes regarding health and government protocols and policies, and (5) health-related protocols and issues caused by the pandemic. The *coronalexicon* created by ordinary people are new words for new habits they learned (Hollet, 2020) and their way of making sense of their new experiences.

Findings regarding the distribution of revitalised and newly-formed words indicate that *COVID-19* has 'infected' (Ro, 2020) the English language worldwide as all sampled Englishes show evidence of *COVID-19-induced* language change in their vocabulary. L1 Englishes took the lead in using the pandemic lexemes, but L2 Asian and L2 African Englishes also show linguistic creativity. Our efforts to locate where these pandemic lexemes occurred or are more frequently used are not without value. They can help bridge effective intercultural communication as they give hints as to which terms or forms are used in public communication in different Englishes.

CONCLUSION

The main objective of this study is to describe the global language upheaval which was fueled by the pandemic. The present study aimed at identifying the trending revitalised compounds and blends (RQ 1) and newly-formed compounds and blends (RQ 2) in the NOW corpus, their meanings which reflect people's experiences during the pandemic (RQ 3), and their frequencies reflecting which English variety is most creative in producing neologisms (RQ 4).

The current study has clearly displayed that the lasting effects of the pandemic are left indelibly in the lexical innovations introduced in language. The pandemic has opened the floodgates of English vocabulary to new terms and new meanings of old terms which composed the specialised *coronalexicon* and demonstrated the creativity of the English language in responding to societal changes. This *coronalexicon* reflects the political, medical, economic, and psychosocial realities of the war against the coronavirus. People created this specialised discourse as a coping strategy to communicate effectively during these trying times.

Space constraints limited this current study in presenting the full wordlist of both revitalised and newly-formed *COVID-19-related* terms we extracted in the NOW corpus. Future investigations will prove beneficial if they could provide a more complete wordlist, including words formed through other word-formation processes, "a unified terminology" (Al-Salman & Haider, 2021), that can be used in effective crisis and multicultural communication.

Crystal (2020) opines that lexicographers cannot predict if *COVID-19* neologisms would eventually become part of the language or disappear as soon as the pandemic has ended. However, we agree with Ro (2020) that words with 'lasting behavioral changes such as zoombombing' will have greater chances of staying forever. Not all Covid-19-related words will become permanent in the word stock of any given variety. However, given the long-lasting implications of *COVID-19*, documenting the nature of language upheaval during the pandemic and its contribution to the vocabulary of first and second language English varieties is of utmost importance.

REFERENCES

- Ahmad, K. (2000, August). Neologisms, nonces and word formation. In *Proceedings of the Ninth Euralex International Congress*
- Akut, K. (2020). Morphological analysis of the Neologisms during the COVID-19 pandemic. *International Journal of English Language Studies*, 1-7.
- Al-Salman, S., & Haider, A. S. (2021). COVID-19 trending neologisms and word formation processes in English. *Russian Journal of Linguistics*, 25(1), 24-42.
- Asif, M., Zhiyong, D., Iram, A., & Nisar, M. (2020). Linguistic analysis of Neologism related to Coronavirus (COVID-19). https://www.researchgate.net/publication/342233593_Linguistic_Analysis_of_Neologism_Related_to_Coronavirus_COVID-19
- Baldwin, R., & di Mauro, B. W. (2020). *Economics in the time of COVID19*. CEPR Press.
- Bauer, L., & Laurie, B. (1983). *English word-formation*. Cambridge University Press.
- Blommaert, J. (2020). COVID19 and Globalization. https://www.researchgate.net/publication/339788830_COVID19_and_Globalization
- Biermeier, T. (2008). *Word-formation in New Englishes—A Corpus-based Analysis*. LIT.
- Biermeier, T. (2014). Compounding and Suffixation in World Englishes. In S. Buschfeld, T. Hoffmann, M. Huber & A. Kautzsch (Eds.), *The Evolution of Englishes: The Dynamic Model and beyond* (pp. 312-330). John Benjamins.
- Carter, R. (2016). *Language and Creativity: The art of common talk*. Routledge.
- Crystal, D. (2004). *Language and the internet*. Cambridge University Press.
- Crystal, D. (2020). *Cambridge reflections-COVID-19: Vocabulary*. Cambridgeblog. <http://www.cambridgeblog.org/2020/05/covocabulary/>

- Dubey, S., Biswas, P., Ghosh, R., Chatterjee, S., Jana, M., Chatterjee, S., Lavie, C. J. (2020). Diabetes & metabolic syndrome: Clinical research & reviews psychosocial impact of COVID-19. *Diabetes & Metabolic Syndrome: Clinical Research & Reviews*, 14(5), 779–788.
- Durham, G.C. (2018, September 3). *Back Formations and Neologisms*. 3 Quarks Daily. <https://www.3quarksdaily.com/3quarksdaily/2018/09/back-formations-and-neologisms.html>
- Gustilo, L., Vergel, M.I., & Valle, I. (2020). Digital writing and english teachers' attitudes towards its non-standard conventions. *Asian EFL Journal*, 24(4), 101-129.
- Gustilo, L., Tocalo, A.W., & Calingasan, K.A. (2019). The intelligibility and acceptability of internet Philippine English (IPE): Their implications to English language teaching in New English varieties. *The Asian EFL Journal*, 21(2.5), 83-104.
- Hacken, P., & Thomas, C. (2013). *The semantics of word formation and lexicalization*. Edinburgh University Press.
- Hollett, V. (2020). *New English words and language change with COVID-19*. Simple English Videos. <https://www.simpleenglishvideos.com/new-english-words-and-language-change-with-covid-19/>
- Kiaer, J., Calway, N., & Ahn, H. (2021). Chinese, Japanese and Korean-inspired culinary words in the English Language. *3L: Southeast Asian Journal of English Language Studies*, 27(3), 1-21.
- Kim, T., Woods, P., Azman, H., Abdullah, I., Hashim, R., Rahim, H., Idrus, M., Said, N., Lew, R., & Kosem I. (2020). COVID-19 insights and linguistic methods. *3L: The Southeast Asian Journal of English Language Studies*, 26 (2), 1–23.
- Lawson, R. (2020, April 28). Coronavirus has led to an explosion of new words and phrases – and that helps us cope. <https://theconversation.com/coronavirus-has-led-to-an-explosion-of-new-words-and-phrases-and-that-helps-us-cope-136909>
- Liberman, M. (2020). Types of language change. https://www.ling.upenn.edu/courses/Fall_2003/ling001/language_change.html
- Neologism. (n.d.). In *Oxford Learner's Dictionary*. <https://www.oxfordlearnersdictionaries.com/us/definition/english/neologism?q=neologism>
- Oxford English Dictionary. (2020, July 15). *Using corpora to track the language of Covid-19: update 2*. <https://public.oed.com/blog/using-corpora-to-track-the-language-of-covid-19-update-2/>
- Oxford English Dictionary. (2020, April 9). *Social change and linguistic change: The Language of Covid-19*. <https://public.oed.com/blog/the-language-of-covid-19/>
- Major American Epidemics of Yellow Fever (1793-1905). (n.d.). <https://www.pbs.org/wgbh/americanexperience/features/fever-major-american-epidemics-of-yellow-fever/>
- Plag, I. (2003). *Word-Formation in English*. Cambridge University Press.
- Ro, C. (2020, May 25). *From 'coviidiots' to 'quarantine and chill', the pandemic has led to many terms that help people laugh and commiserate*. BBC. <https://www.bbc.com/worklife/article/20200522-why-weve-created-new-language-for-coronavirus>
- Self-Quarantine. (n.d.) In *Merriam-Webster Dictionary*. Retrieved July 30, 2021 from <https://www.merriam-webster.com/dictionary/self-quarantine>
- Shin, Y. K. (2019). Do native writers always have a head start over nonnative writers? The use of lexical bundles in college students' essays. *Journal of English for Academic Purposes*, 40, 1–14.
- Staples, J. & Monath, T. (2008). Yellow fever: 100 years of discovery. *JAMA Network* 300(8), 960-962.
- Tan, K. H., Woods, P., Azman, H., Abdullah, I. H., Hashim, R. S., Rahim, H. A., & Kosem, I. (2020). Covid-19 insights and linguistic methods. *3L: Language, Linguistics, Literature®*, 26(2).
- Thorne, T. (2020, April 15). *#CORONASPEAK – the language of Covid-19 goes viral–2*. *Language and Innovation*. <https://language-and-innovation.com/2020/04/15/coronaspeak-part-2-the-language-of-covid-19-goes-viral/>
- Yellow Fever. (n.d.) In *Merriam-Webster Dictionary*. <https://www.merriam-webster.com/dictionary/yellow%20fever>
- Yule, G. 2017. *The study of language* (6th ed.). Cambridge University Press.