How the Pandemic Fuels Linguistic Change: Lexical Innovations in L1 and L2 English Varieties

Cielo May Pura [a]
cielomay.urbano@gmail.com
De La Salle University,
Manila, Philippines

Leah Gustilo [b]
leah.gustilo@dlsu.edu.ph
De La Salle University,
Manila, Philippines

Thomas Biermeier
thomas.biermeier@sprachlit.uni-regensburg.de
University of Regensburg, Germany

ABSTRACT

Wars and conquests have always opened the floodgates of new words and meanings into the lexicon of the English language. Another kind of war that opens the floodgates for the passage of neologisms into the English language is the war on health during epidemics or pandemics. The present study utilized the News On the Web (NOW) corpus of English-corpora.org to (1) produce a word-list of COVID-19 pandemic language classified as medical, economic, political, and psychosocial lexemes; (2) identify the word-formation processes operating on the COVID-19 related vocabulary, and (3) determine which words are prevalent and unique in L1, L2 Asian, and L2 African varieties of the English language based on their occurrences in the corpus. The study identified 590 pandemic-related words drawn from the News on the Web (NOW) corpus dating from January 2020 to October 2021. The psychosocial category of the pandemic lexicon constitutes the biggest category of words identified from the corpus. The word-formation processes that operated in the production of the pandemic lexemes are compounds, blends, affixation, acronyms, and back-formation. L1 countries have the highest number of pandemic neologisms, prevalent or high-frequent pandemic lexemes, and unique word combinations. People produce neologisms as a coping mechanism to overcome various stressors and reflect their pandemic-related experiences.

Keywords: word formation processes; pandemic language; neologisms; English varieties; lexical creativity

INTRODUCTION

Throughout the history of the English language, wars and conquests have always opened the floodgates of new words and meanings into the lexicon of the English language. To illustrate, Sicard (2015, para. 3) states that during the Civil War in America, *skedaddle* became *skeet* or *scoot*; *lousy*, referring to lice infestations, came to mean *weary*; *jeep* came from the initials *G.P.* inscribed on vehicles utilized during World War II. Ruark (1950, as cited in Sicard, 2015) opined that if there is one thing that can be praised about wars, it is the enhancement of language that it brings. Funk (1978) claimed that approximately 6,000 words are added into the American vocabulary every time America involves in a war. Paul Dickson, a slang expert, was able to produce a book for American war slangs which compiled the vocabulary of war

[a] *Main author*
[b] *Corresponding author*

eISSN: 2550-2131
ISSN: 1675-8021

from the time of the Civil War until the War in Iraq. The wars in Vietnam and Afghanistan introduced into the English language words such as *ground zero, greased,* and *blown away* (Sicard, 2015).

Another kind of war that opens the floodgates for the passage of neologisms into the English language is the war on health during epidemics or pandemics. For instance, the words *epidemic* and *pandemic* came to prominence during the 17th century plagues which hit Europe. Black plague appeared in the English lexicon in the early 17th century because of the black pustules that became visible on the victims' skin. *Spanish flu*, from *Spanish influenza* which was first used in 1890, emerged during the 1918 great epidemic. *Infodemic* (a blend of information and epidemic, which means the proliferation of media information relating to a crisis), was coined during the SARS epidemic in 2003, and it has currently been adapted to refer to the abundance of information on the current COVID-19 health crisis. *Shelter-in-place,* which refers to a military instruction to relocate people in the event of a nuclear attack was coined in 1976, but it is now adapted to refer to an instruction to stay indoors to abate the spread of COVID-19 ("Social change and linguistic change: The Language of Covid-19", n.d.). Indeed, the spread of virus fuels lexical change.

Currently, we are seeing unprecedented lexical creativity in the midst of the unprecedented COVID-19 pandemic. COVID-19 has literally impacted almost every facet of people's lives including their language. Its economic effects are reflected in the lexemes created such as *coronanomics, skeletal workforce, pandemic-buying,* etc. The pandemic's effects on the medical sector have created words that reflect people's war against the virus such as *contact tracing, PPE* (personal protective equipment), *case fatality rate,* and many more. More dramatic than the economic and medical effects of the pandemic are its effects on the psychosocial aspect. Dubey et al. (2020) and Mahendran et al. (2020) have documented high stress levels and their psychosocial implications to people during this pandemic. Hence, it is not surprising that the public's fear and anxiety gave way to the creation of words such as *coronaphobia, coronageddon, pandemic-riddled, pandemic-weary,* etc.

The pandemic has created a specialized discourse, prompting lexicographers and researchers to set their research lenses on the language of the pandemic. They are in wonderment that words such as *COVID-19, coronavirus, and pandemic* gave way to hundreds of newly-formed words whose usage became prevalent across the globe. As the language of the pandemic is new and research about it is only at its inception, it is not difficult to assert the scantiness of literature focusing on this subject and the need to direct our research lenses on the language of the pandemic. The present study utilized the News On the Web (NOW) corpus of English-corpora.org, which is about 12.6 billion at the time of the analysis. The study highlights three essential directions: (1) produce a word-list of COVID-19 pandemic language classified as medical, economic, political, and psychosocial words; (2) identify the word-formation processes operating on the COVID-19 related vocabulary, and (3) determine which words are prevalent and unique in L1 English, L2 Asian, and L2 African varieties of the English language based on their occurrences in the corpus. Undoubtedly, many neologisms may not stay after the pandemic, but given the unprecedented effects of this global crisis, documenting the language upheaval that reflected the coping mechanisms of the people and the contribution of corona lexicon to the vocabulary of different English varieties in the history of language development is extremely necessary.

THEORETICAL AND EMPIRICAL UNDERPINNINGS

Thanks to the property of human language—language creativity; we have the ability to produce and understand new forms of language. Katamba (1993) asserts that language creativity is the capacity of human languages to use finite means to produce infinite words and utterances,

which is manifested in two distinct ways: rule-governed creativity and rule-bending creativity (Katamba, 1993). Lexical creativity gives rise to many neologisms, whether in rule-governed or non-rule-governed ways. Morphological rules are manipulated, resulting in deviant or creative word-forming devices (Jovanović, 2003; Moon, 2009; Rúa, 2010; Vizmuller-Zocco, 1985). Word-formation is a tool for linguistic creativity. Trask (1997, as cited in Ratih & Gusdian, 2018) defines it as forming new words from existing materials; ten Hacken and Thomas (2013) referred to it as producing new words based on some rules; Plag (2003) simply defines it as the creation of new words from other words. Given these definitions, Ratih and Gusdian (2018) concluded that word-formation process involves constructing new words from existing words based on some rules.

The present study underpinned its analysis on the work of Biermeier (2008, 2014) on word-formation to identify how people using different English varieties in different regions formed the *coronalexicon.* In addition, previous findings on word-formation processes also informed our analysis. One of the most recent and relevant studies is the work of Ratih and Gusdian (2018) who used a qualitative research design and utilized the list of new words in English in 2012-2016 from the Oxford English Dictionary online to document the word-formation processes in constructing new words in English. Results of their analysis showed that affixation is the most productive process. Among the double word-formation processes that are productive are blending plus affixation, compounding plus affixation, etymology plus compounding, and clipping plus blending.

Word-formation studies have been undertaken not just to document lexical creativity and language change. They are also used as persuasive information to establish the development of post-colonial Englishes (Dimaculangan & Gustilo, 2017; Gustilo et al., 2019). For instance, Van Rooy and Terblanche (2010) conducted a corpus-linguistic study that aimed to determine the current level of South African English (SAE) in Schneider's (2007) *Dynamic Model of Postcolonial Englishes*. The study focused on complex and morphologically innovative lexemes in a corpus of approximately 703,000 words of a newspaper company. Their findings showed that the acceptability of compounding in SAE indicates that SAE has reached Phase Four, but the derivational process still fails to meet the criteria of acceptability and codification. Also, Dimaculangan and Gustilo (2018) conducted a meta-analysis of the word-formation processes' frameworks used by Filipino speakers of English. Their findings revealed that the Philippine English neologisms were formed through the existing word-formation processes, which further led to creative expansions or modifications of such processes with the deliberate integration of figures of speech like anagram, onomatopoeia, metonymy, oxymoron, and pun. Beirmeier (2017) compared the state of Philippine English lexis and word-formation with other Asian Englishes and British and Canadian L1 English varieties. He claimed that all word-formation categories are both productive and institutionalized in Philippine English as evidenced by a significant number of lexical innovations extracted from GloWbE and ICE. Both studies of Dimaculangan and Gustilo (2018) and Beirmeier (2017) concluded that Philippine English has reached the endonormative stage of development of post-colonial English.

The most comprehensive study that informed the framework of analysis of this present study is the cross-lingual analysis of L1 and L2 varieties of English by Biermeier (2008). Biermeier claimed that compounding is a productive process across Englishes, and compound adjectives are more frequent than compound verbs across all sampled countries except in Kenyan English. He concluded that blending is a modern type of word-formation that can create new words in Englishes, which is particularly preferred in New Zealand, Singapore, and the Philippines. He asserted that conversion is now a firmly established means of word-formation in New Englishes. His findings on affixation revealed that, like conversions, affixes are firmly established in the lexicon of the new varieties. Furthermore, he claimed that some

varieties, which are Great Britain, India, and Singapore, prefer the use of backformation in their spoken components, while others, including the Philippines, East Africa, and New Zealand clearly make use of it in the written components. In addition, clippings, particularly words clipped into -ie/-y, were mainly characteristics of English in New Zealand and have a purpose of making speech lively. Lastly, abbreviations used by writers and speakers of a specific variety strongly depend on their cultural and socio-political contexts. In a nutshell, Biermeier (2008) concluded that New Englishes mainly follow traditional word-formation rules with rare encounters on rule-bending creativity.

The most relevant studies that inform the present study on the word-formation processes of the pandemic language are the works of Al-Salman and Haider (2021) and Al-Azzawi and Haleem (2021). Al-Salman and Haider (2021) described the trending neologisms and word-formation processes in English since the outbreak of COVID-19. Results of their corpus analysis revealed the various forms of word-formation that are operating in the COVID-19 vocabulary. It includes blending, clipping, acronyms, and compounding. Furthermore, they distinguished between single-word and dual-word formation processes proving that the English language is creative and vital in responding to the emerging crises. Al-Azzawi and Haleem (2021) corroborate these findings in their analysis of various tweets and hashtags related to the pandemic. The proliferation of COVID-19 neologisms uses techniques such as borrowing, word formation or lexical deviation, and word play. Their findings support Halliday and Matthiessen's (2013) theory that language operates differently in various social situations, and it is bound to vary to suit the purpose of the users or particular social situations. The uses of neologisms on the COVID-19 lexicon reveal the contexts surrounding the innovation of these words. These two recent studies have been very helpful in confirming the present analysis.

COVID-19 pandemic has been wreaking havoc on all aspects of the world, not only in the health aspect but also in economic, psychosocial, and political terms. This is why the present study aims at reflecting through language the effects of the pandemic by categorizing the pandemic lexemes into medical, psychosocial, economic, and political terms. These categories were inspired by the study of Dubey et al. (2020), who claimed that the effects of the pandemic cover economic/financial, medical, and psychosocial aspects. In addition, we drew on Asif et al. (2020), who categorized the pandemic language into medical terms *(*e.g. *symptomatic, asymptomatic, incubation period)* and terms popularized by state briefings (e.g. *social distancing and flattening the curve)*.

METHODOLOGY

RESEARCH DESIGN

We employed a combination of qualitative and quantitative approaches in examining the language of the pandemic. The use of both methods has been reported in studies comparing corpora (e.g. Lu & Deng, 2019; Shin, 2019). The qualitative approach of the study involved the classification of words into medical, economic, psychosocial, and political terms and word-formation processes based on Biermeier's (2008, 2014) framework. The quantitative dimension of the paper made use of frequency counts and percentages. The extent of use of pandemic-related words across the regional varieties of English was analyzed through frequency counts. The researchers set the search date starting January 1, 2020 up to October 15, 2021 with an option to show 1,000 hits.

eISSN: 2550-2131
ISSN: 1675-8021

CORPUS

We collected data from the News on the Web (NOW) corpus created by Mark Davies, a collection of web-based newspapers and magazines in 20 different English-speaking countries from 2010 to the present. Every day, 6-10 million words are being added to this monitor corpus or 200-220 million words of data each month (from about 300,000-400,000 new articles). It contains about 12.6 billion words at the time of the analysis. It gives the frequency of words and phrases by the week and indicates when a particular topic was discussed the most since 2010.

For the current study, we sampled from the datasets of Great Britain, United States, Ireland, and Canada for L1 Englishes; Bangladesh, India, Philippines, and Pakistan for L2 Asian Englishes; and Kenya, Jamaica, Nigeria, and Ghana for L2 African Englishes.

DATE COLLECTION PROCEDURES

In identifying the words related to the COVID-19 pandemic, we first collected high-frequency and popular words regarding the pandemic listed on the online Oxford English Dictionary website, pandemic glossary articles from the internet, and those published at dictionary.com. The 65 initial wordlist (e.*g., self isolation, social distancing, quarantine, lockdown, corona, coronavirus, pandemic, corona-free*, etc.) served as the search words for the identification of pandemic lexemes in the NOW corpus. To access the NOW corpus, we first logged in englishcorpora.org and clicked the NOW corpus which brought us to its main interface. It has the List option that displays the searched words with their corresponding frequencies. Its Chart option shows the total frequency of each word per country and year, which is very helpful in comparing the frequencies of the sampled countries. Its KWIC (Keyword in Context) display enabled us to see the patterns of contexts in which a searched word occurs by sorting the words to the left and to the right. Having a registered account in the englishcorpora.org allowed us to search 200 words per day.

To answer the first research question, we analyzed the meaning of each term as used and reflected in the corpus, considering the left and right context of the searched word. The Keyword in Context function (KWIC) of the corpus shows how the words are used in a sentence and, therefore, helped us draw each word's meaning. The meanings of some of these words were checked in the wordlist of the pandemic language published by Oxford English Dictionary and other wordlists available on the internet. Next, the words were classified into medical, psychosocial, economic, and political terms. Because of space constraints, we reported here only the results for words with 5 frequencies and above in the corpus, which totaled 590 words.

To establish guidelines in determining the classification of the pandemic lexemes, we set parameters describing the scope of the category (See Appendix A and Appendix B). Appendix A shows the parameters in classifying the pandemic words into medical, economic, psychosocial, and political terms. Each COVID-19-related lexeme was further categorized into different word-formation processes following Biermeier's (2008) framework for word-formation processes to answer the second research question. We also set coding parameters to help classify the lexical items into different word-formation processes (Appendix B).

To answer the third research question, we relied on the occurrence data of each word in the NOW corpus. Each country has varying sizes of sub-corpora. For comparability, we reported the normalized frequency. Each figure in a specific variety was projected to a corpus size of precisely one million words (per mil). NOW corpus shows both the actual number of occurrences for each word and per million words, i.e., frequency per one million words.

eISSN: 2550-2131
ISSN: 1675-8021

RESULTS AND DISCUSSION

PANDEMIC LEXEMES CATEGORIZED AS MEDICAL, ECONOMIC, PSYCHOSOCIAL, AND POLITICAL TERMS

This corpus-based study has identified 590 pandemic-related words drawn from the News on the Web (NOW) corpus. Table 1 shows the frequencies and percentages of the categories of pandemic-related lexemes in relation to the total number of pandemic words (with 5 or more frequencies) identified in the NOW Corpus.

TABLE 1. Categories of pandemic-related lexemes

Categories of pandemic-related lexemes	Frequency	Percentage (%)
Psychosocial	253	43
Medical	174	30
Economic	137	23
Political	26	4

As can be seen in Table 1, the pandemic-psychosocial-related lexemes (e.g. *covidiot, covidient, covidivorce)* with 253 words or 43% of the overall wordlist superseded the three other categories. This result is surprising since the pandemic is a health crisis. It only strengthens the claim of Dubey et al. (2020) that COVID-19 creates immense psychosocial disturbances such as living with uncertainties, anxieties, and mental health problems resulting in fear of infection and fear of losing a loved one. These scenarios must have led to an extended list of psychosocial terms in the pandemic language.

Nevertheless, as the pandemic is initially a war fought by medical practitioners, medical terms have been used frequently during the outbreak of COVID-19. They have been used widely at press conferences of different medical fields globally. The extensive list of medical terms placed second in the wordlist. There are 174 medical/health-related terms *(e.g. herd immunity, coronavirus-free, PPE, face mask)*, or 30% of the pandemic words extracted from the corpus. In addition, this health crisis has led to a severe economic crisis, giving birth to the lexical innovation of 137 economic-related pandemic terms (e.g. *coronapocalypse, coronanomics* or 23% of the overall wordlist. Baldwin and di Mauro (2020) asserted that the COVID-19 pandemic is more severe economically than medically, which holds true as the neologisms in the economic category of the present study proliferate. Moreover, to implement management crisis campaigns, the pandemic-era has also given birth to political terms. This study listed a total of 26 politically-related words or 4% of the total pandemic words identified in the corpus. It includes terms that are more inclined to protocols imposed by governing authorities (e.g. *lockdowns, movement control, enhanced community quarantine or ECQ).*

WORD-FORMATION PROCESSES IN PANDEMIC LEXEMES

The word-formation processes that operated in the production of the pandemic lexemes are compounds, blends, affixation, acronyms, and back-formation. Not all word-formations in the framework of Biermeier (2008, 2014) and in other word-formation frameworks such as the one evolved by Dimaculangan and Gustlilo (2018) have corpus evidence in the pandemic wordlist. Table 2 shows the frequencies and percentages of the word-formation processes that reflected the lexical creativity of the different English users in producing their pandemic lexicon.

eISSN: 2550-2131
ISSN: 1675-8021

TABLE 2. Frequencies and percentages of the number of lexemes in each word-formation process

Category	No. of Lexemes	Percentage (%)
Compounds	511	87
Blends	38	6
Affixation	29	5
Acronyms	11	2
Back-formation	1	0
Total	590	

Of the 590 pandemic lexemes extracted from the NOW corpus, 511 are compounds, which is 87% of the total pandemic lexemes. This finding corroborates the findings of Biermeier (2008, 2014) that compounding is the most frequently used word-formation process in his datasets. The present study also reveals that the most frequently used sub-type of compounds is compound adjectives, followed by endocentric compounds. Most of the compounds are formed by attaching various headwords to *coronavirus, corona, pandemic,* and *COVID-19* to describe many things and experiences brought about by the pandemic. Blending is the second most frequent word-formation process with 38 words or 6% of the pandemic vocabulary. Affixation has 29 words, at 5% of the total words with prefixes *a~, anti~, non~, inter~, intra~, pre~, post~, con~, mid~,* and *near~* and suffixes *~ic, ~al, ~ly,* and *~wise.* Acronym has 11 words or 2% of the pandemic wordlist and one word under back-formation category.

All the identified pandemic lexemes were defined based on their linguistic contexts in the corpus. Due to space constraints, we present here only a few examples of the words under the compounds category in Tables 3-6. The complete wordlist can be found in Appendix C. Table 3 presents examples of compound medical lexemes from our dataset.

TABLE 3. Examples of compound medical lexemes

Lexeme	Meaning	Example and Source in NOW
incubation period (noun)	The period when a person is exposed to a virus and its inception stage of infection. For COVID-19, this is between 2-14 days, on average.	While the full incubation period for the virus is 14 days, the average period for symptoms to show was "around five or six days." Source: MSN US (21-03-11)
coronavirus-positive/ corona-positive (adjective)	A person who is presently inflicted with COVID-19.	The coronavirus-positive player has entered self-quarantine and that players, coaches and staff who were in close contact with him were tested.... Source: SF Chronicle US (20-10-03)
coronavirus-like/ pandemic-like (adjective)	An illness that has similar characteristics with or symptoms of coronavirus.	According to IDPH, 4,742 residents are currently in hospitals due to coronavirus-like illnesses. Source: NBC Chicago US (20-11-11)
community transmission (noun)	A situation in which the virus spreads in a community even without human contact.	Perth's cases of community transmission last week were the first in Western Australian in more than a year. Source: ABC News US (21-04-26)

immune surveillance (noun)	This compound is formed by combining the adjective immune and the noun surveillance. Since immune is described as having resistance to a particular virus or infection as a human body develops antibodies and surveillance is an act of monitoring, the combined word refers to the body's immune system and ability to monitor and eliminate foreign cells which might be dangerous such as COVID-19.	Further, this type of testing could be particularly important for the immune surveillance of health care workers, first responders, government workers, and others whose infection risks could be heightened by working with COVID-19 infected individuals. Source: TMCnet US (20-06-16)
herd immunity (noun)	The term refers to a state in which a large part of a community becomes immune to a specific disease, in this case, COVID-19, because there are only a few high-risk people (i.e., elderlies, babies, and persons with medical issues). It can happen when a group of people has been exposed to the virus, and it develops resistance naturally or upon a vaccine's availability.	They instead favor achieving herd immunity by inoculating a significant percentage of the population.... Source: MSN US (20-09-02)

Bauer (1983) states that compounding is the most frequent category of word-formation by far. His statement is validated in this present study as even among COVID-19 lexemes, compounds have the most number of words. The reason for this is that many terms representing the varied experience of the people during the pandemic have been attached with the words *corona*, *coronavirus*, *pandemic*, and *COVID-19*. These lexemes are mostly compound adjectives, in which the headword (e.g., free, safe, positive, and negative) is derived from either a verb by affixation, an adjective, or a verbal, and the non-head words (e.g., *corona, coronavirus, pandemic,* and *COVID-19*) which complement or describe the headword. Most pandemic compound lexemes are formed through this process. Examples are *coronavirus-infected, pandemic-prevention, corona-affected, and COVID-19-fighting.* Table 4 presents the examples of lexemes categorized under compound economic.

TABLE 4. Examples of compound economic lexemes

Lexemes	Meaning	Examples and Source in NOW
coronavirus-mitigation (adjective)	Preventive measures that reduce the seriousness and severity of COVID-19.	The church wants to hold in-person worship services, fully subject to social distancing and other coronavirus-mitigation steps.
coronavirus-relief/ pandemic-relief/ COVID-19-relief (adjective)	Something that serves as an aid to someone who suffered immensely because of COVID-19.	Meanwhile, in the middle of the madness, progress on a flip-flop: After halting talks about a coronavirus-relief package earlier this week, they're back on. Source: iPolitics CA (20-10-09)
coronaviruscrisis/ coronavirus-crisis/ coronacrisis/ corona-crisis/ pandemic-crisis/ COVID-19-crisis (noun)	A challenging situation brought about by COVID-19, usually about financial or economic struggle.	The coronacrisis has cost Russian companies RUB3.8 trillion ($47bn) in lost profits this year as of August.... Source: Intellinews IE (20-11-02)
coronabonds/ corona-bonds (noun)	An idea from European countries, which means issuing collective	

	debts to combat the economic crisis brought by the pandemic.	...the eurozone needed to issue coronabonds to raise crisis-response funds. Source: Spectator GB (20-06-04)
coronavirus-stricken/ corona-stricken/ pandemic-stricken/ COVID-19-stricken (adjective)	A person or a condition that has been infected or affected with COVID-19.	Beyond the coronavirus-stricken economy, Biden was likely to face questions at the town hall about whether his Justice Department would pursue criminal charges against Trump... Source: New York Daily News US (21-02-16)
coronavirus-spurred/ pandemic-spurred/ COVID-19-spurred (adjective)	Something that happened fast or are rising abruptly.	Example: Coronavirus-spurred budget issues aren't unique to Nevada or the United States. Source: Review Journal US (20-09-10)

The analysis of compound economic terms has revealed that *crisis* is the most productive headword of all the compounds used here. It only proves how people correlate the pandemic to a major world crisis. It is also interesting to know that the headwords attached four times in all pandemic words are *hit, stricken, ravaged, struck, caused, based,* and *led.* The first three words pertain to catastrophes that indicate that COVID-19 has a profound macroeconomic impact that devastated the world economy. The pandemic has had significant economic threats that even G7 countries have suffered, experiencing what economists termed as *macroeconomic flu.* Language speakers worldwide have formed different terms to describe how the pandemic has ravaged, infested, and battered the economy. This only proves that the COVID-19 pandemic is more serious economically than medically (Baldwin & di Mauro (2020). The previously stated compound economic words were used in the adjectival phrases like *coronavirus-hit businesses, corona-hit companies, and pandemic-hit year*. Interestingly, *coronavirus-hit* has its highest occurrences in 2020, which is also the same with *corona-hit* and *COVID-19-hit,* but it significantly decreases in the year 2021, whereas the compound economic term *pandemic-hit* has gone up even more in the year 2021. This implies that the word *pandemic* has been recognized and ingrained in the minds of the language speakers up to now, which is also related to how the speakers use the derived word *pre-pandemic* and *post-pandemic*. It is also worth mentioning that the word *pandemic-hit* is more extensively used in L2 Asian countries like the Philippines and Bangladesh.

Compound psychosocial terms in the language of the pandemic are also formed. The words classified under this category pertain to psychological and social behaviors displayed during the pandemic, categories of people who have functions during the pandemic, actions to make people connected amidst the pandemic, or words describing the *pandemic times*. It also includes activities related to or affects social gatherings. Further, this sub-category includes words related to how the pandemic has greatly affected people's lives in many ways, not just in the physical aspect. Among these words are compound terms (see Table 5).

TABLE 5. Examples of compound psychosocial lexemes

Lexeme	Meaning	Examples and Source in NOW Corpus
Coronavirus-linked/ pandemic-linked/ COVID-19-linked (adjective)	Compounds that are related to COVID-19.	Coronavirus-linked travel restrictions and higher tuition costs in the U.S. are just two factors keeping students away. Source: LinkedIn (20-11-08)
coronavirus-plagued/ pandemic-plagued/ COVID-19-plagued (adjective)	The period that describes the aggression and intensity of COVID-19.	Variety spoke with the executive about Netflix's enviable position in a pandemic-plagued movie landscape. Source: Variety US (21-01-12)
coronavirus-weary/ pandemic-weary COVID-19-weary (adjective)	People who are undergoing exhaustion or tiredness due to COVID-19 and its effects on all aspects of this world.	A flood of worries went through his pandemic-weary mind, the biggest of which was the catwalk he noticed. Source: MSN AU (21-04-27)
coronavirus-ridden/ pandemic-ridden/ COVID-19-ridden (adjective)	Compounds that describe the unpleasant and horror times, experiences, events, things, etc. during COVID-19.	Remember those horror stories of coronavirus-ridden cruise ships floating around at sea...? Source: New York Times US (20-10-04)
physical distancing (noun)	This word has a more literal meaning than the previous one. It refers to maintaining at least a 2-meter distance from people outside the home, which triggered the suspension of social gatherings and regulation of physical meetings.	People were forced onto the streets when emergency drop-in shelters limited their space to ensure physical distancing. Source: Timescolonist CA (20-09-02)
social distancing (noun)	While this word is interchangeable with physical distancing, social *distancing* has a connotative meaning that refers to avoiding social gatherings which involve more than five and more people.	Minnesota officials have mandated mask wearing at indoor public places, social distancing of at least six feet... Source: Twincities US (20-09-02)
coronavirus-friendly/ corona-friendly/ pandemic-friendly/ COVID-19-friendly (adjective)	Compounds referring to anything that is adapted to the pandemic or anything that aids people from getting infected by COVID-19.	Before Thanksgiving, the CDC released coronavirus-friendly shopping guidelines, suggesting people shop online during Black Friday.... Source: USA Today US (20-12-23)

Of all the categories of compounds, compound psychosocial terms show the highest number in the wordlist. This finding is mainly because COVID-19 has created immense psychological and social disturbances such as living with anxieties and mental health problems resulting in fear of infection and losing a loved one (Dubey et al., 2020). Many relationships and social gatherings have been affected, which were manifested in the most frequently used compound psychosocial terms: *social distancing* and *physical distancing*. Both words have soared high in their occurrences on the corpus in 2020 but have noticeably gone down in 2021. However, their occurrences on the corpus in 2021 are still notable, with the former ranging from 105.50 per MIL to 37.77 and the latter from 13.88 to 7.21 per MIL. Between the two,

social distancing is the most preferred term across all sampled countries, but the latter has significantly high occurrences in Canada, the Philippines, and New Zealand.

Similarly, compound psychosocial terms are mostly compound adjectives in which various words are attached to the corona-pandemic-COVID-19 lexemes: *coronavirus~*, *corona~*, *pandemic~*, and *COVID-19~*. Some headwords attached to all these four words are: *~themed*, *~enforced*, *~specific*, *~shaped*, *~era*, *~friendly*, *~style*, *~generated*. Interestingly, these headwords denoted a meaning that showed how COVID-19 and its preventive measures have molded and affected social gatherings and relationships. Examples of these words are *coronavirus-enforced shutdown*, *coronavirus-themed emails*, *pandemic-specific programs*, and *COVID-19-friendly events*.

Lastly, compound political terms in the language of the pandemic were also formed. They refer to the government and required ruling authorities and governmental concerns amidst the pandemic. Among the words we extracted from our dataset are presented in Table 6.

TABLE 6. Examples of political compound lexemes

Lexemes	Meaning	Examples and Source in NOW Corpus
coronavirus-task-force (adjective)	A particular organization that performs COVID-19 operations (prevention, regulation, etc.)	Trump's appearance was billed as his return to heading coronavirus-task-force briefings; Source: New Yorker US (20-08-12)
lockdown (noun)	A government-imposed decision to control movement and activities in a specific city/town where people are prohibited from going outside their homes and doing outdoor activities to help stop the virus's spread.	A lockdown put in place on January 15, shutting non-essential services and schools,... Source: CMS IE (21-02-24)
pandemic-voting (adjective)	Anything related to elections during COVID-19.	Our journey through America's varying levels of pandemic-voting preparedness continues this week.... Source: Talking Points Memo US (20-09-04)
travel bubble/s (noun)	Refers to "travel bridges" or "corridors" which allow travelers to move freely in a different country with fewer quarantine protocols.	Mahuta's comments Thursday came after she met with her Australian counterpart Marise Payne at the first high-level summit since the two countries opened a quarantine-free travel bubble this week. Source: SF Gate US (21-04-22)
coronavirus-enforced/ corona-enforced/ pandemic-enforced/ COVID-19-enforced (adjective)	A certain condition being implemented or happening forcefully (not relentlessly) because of coronavirus. This word is more of a compulsory enactment.	The offer comes at a time when the government is injecting stimulus ... as the economy reopens from coronavirus-enforced lockdowns. Source: Reuters US (21-01-18)

coronavirus-lockdown/ corona-lockdown/ coronalockdown/ pandemic-lockdown (adjective)	These compounds refer to confinements due to COVID-19	Example: Juventus has reportedly been in deep trouble ever since the coronavirus-lockdown was imposed. Source: IB Times GB (20-11-11)

The wordlist is shorter in this category, but the words listed have notable occurrences in the corpus. Because the pandemic is a worldwide crisis, governments across the globe have implemented protocols to help prevent the spread of the disease. As such, governments use pandemic-related lexemes to disseminate important information in managing the crisis. This assumption is related to Henrich and Holmes's (2011) claim that countries are creating pandemic preparedness plans to prepare for pandemics, including crisis communication strategies to identify what information people want to receive and how they want to receive it. This notion resulted in the formation of pandemic-related neologisms being used and popularized by the ruling authorities, such as *lockdown* and *coronavirus-task-force*.

The overall frequencies of the pandemic-related lexemes grouped under L1 Englishes, L2 Asian Englishes, and L2 African Englishes showed that L1 English varieties display the highest overall frequencies on the pandemic lexicon with an average frequency of 5.31 per million words. L2 Asian and L2 African Englishes are also capable of innovating new words with the average frequency of 4.33 and 3.81 per million words, respectively, representing their experiences related to the pandemic. This finding confirms Biermeier's (2008) findings in his cross-Englishes analysis of ICE corpus that L2 varieties of English are as capable of forming new words as the L1 Englishes.

PREVALENT AND UNIQUE WORDS IN L1 AND L2 ENGLISH VARIETIES

Out of 590 pandemic lexemes, 401 are found prevalent in L1 English countries, 110 in L2 Asia, and 34 in L2 Africa. These lexemes occurred also in other varieties, but they are more prevalent in the varieties in which they are grouped under. Are there words that are prevalent in all sampled regional varieties? Affirmatively, there are 45 pandemic lexemes with high frequencies which appeared in all sampled countries. They are presented in Table 7.

TABLE 7. High frequency pandemic lexemes which appeared in all sampled Englishes

coronaviruses	COVID-19-related
self-quarantine	corona-related
community transmission	lockdown
contact tracing	travel-bubble/s
face mask	telemed
epidemic curve	telemedicine
coronavirus-infected	asymptomatic
coronavirus-free	symptomatic
COVID-19-positive	anti-pandemic
COVID-19-care	anti-COVID-19
COVID-19-recovered	post-corona
COVID-19-confirmed	post-pandemic
new normal	post-COVID-19

coronavirus-induced	pre-corona
COVID-19-induced	pre-pandemic
coronavirus-hit	pre-COVID-19
coronavirus-stricken	COVID-19
pandemic-stricken	PPE
social distancing	SARS-CoV-2
physical distancing	WFH
coronavirus-linked	WAH
coronavirus-affected	WFA
coronavirus-themed	

High-frequency words imply that the words are institutionalized in those Englishes with the potential to stay in their lexicon as frequencies are one of the essential criteria for a word to be added to any of the well-known dictionaries (Merriam-Webster, n.d.; Wild, 2020). These results highlight the general claim that the different regional varieties of English have produced highly intelligible words, which is indicative of the users' capability to extend their everyday collective lexicon as a language response mechanism on various stressors.

While there are words that are prevalent in all varieties, there are also lexemes that occurred only in L1 English, L2 Asian, or L2 African Englishes as of the date of analysis.

L1 Englishes, still, are the most creative in forming new words. Out of 590 pandemic lexemes, 176 words occur only in L1 Englishes, 17 in L2 Asian, and two words in L2 African. These findings prove Biermeier's (2008) claim that Englishes enlarge their lexicon using standard or existing word-formation processes. English language speakers in L2 also showed creativity in forming news words based on established word-formation processes, as seen in the number of unique neologisms in L2 Asia English variety. The present findings corroborate Dimaculangan and Gustilo's (2018) findings in their analyses of Philippine English word-formations, in which they claim that Philippine English items were formed through existing word-formation processes.

Table 8 shows the 176 words that occurred only in L1 English counties.

TABLE 8. Pandemic lexemes that occurred only in L1 English varieties

coronavirus-safe	corona-crash	coronavirus-motivated
corona-safe	coronavirus-decimated	coronavirus-stimulus
coronavirus-tested	pandemic-created	coronavirus-sized
COVID-19-test	COVID-19-created	coronavirus-restricted
COVID-19-tested	pandemic-wounded	coronavirus-compromised
pandemic-associated	pandemic-scale	corona-generated
pandemic-aid	pandemic-rattled	COVID-19-generated
CoronaCheck	pandemic-provoked	coronavirus-sensitive
coronavirus-borne	pandemic-hobbled	pandemic-limited
coronavirus-killing	pandemic-recession	pandemic-stressed
COVID-19-killing	pandemic-powered	pandemic-defying
pandemic-safety	pandemic-oriented	pandemic-constrained
COVID-19-control	pandemic-depressed	pandemic-rejigged
CoronaCare	pandemic-wrecked	pandemic-produced

coronavirus-recovery
pandemic-recovery
coronavirus-flu
pandemic-flu
coronavirus-exposed
coronavirus-neutralizing
COVID-19-type
pandemic-spreading
coronavirus-infested
COVID-19-infested
coronavirus-exposure
coronavirus-treatment
coronavirus-filled
pandemic-filled
coronavirus-laced
coronavirus-quarantined
CoronaSurveys
coronavirus-protection
pandemic-ending
pandemic-low
pandemic-battling
pandemic-busting
pandemic-gripped
coronavirus-sniffing
Coronapod
COVID-19-vulnerable
coronaviruscrisis
coronavirus-crisis
COVID-19-relief
COVID-19-fueled
coronavirus-focused
pandemic-based
pandemic-spurred
coronavirus-crippled
pandemic-wracked
coronacoaster
coronavirus-blighted
coronavirus-throttled
pandemic-weakened
coronavirus-shutdown
coronavirus-shuttered
coronavirus-damaged
pandemic-damaged

pandemic-shattered
pandemic-slowed
pandemic-stunted
pandemic-alert
pandemic-emptied
pandemic-racked
pandemic-pummeled
pandemic-economy
pandemic-buying
pandemic-roiled
pandemic-winning
coronavirus-closed
COVID-19-delayed
COVID-19-plagued
COVID-19-mandated
pandemic-sparked
COVID-19-sparked
COVID-19-shaped
coronavirus-altered
COVID-19-altered
coronacoaster
coronavirus-halted
COVID-19-nfluenced
COVID-19-weary
coronavirus-resistant
corona-era
pandemic-riddled
coronavirus-spawned
CoronaCorps
coronavirus-style
corona-style
pandemic-style
pandemic-dominated
coronaviurs-denying
pandemic-denying
COVID-19-denying
pandemic-tinged
coronavirus-adjusted
pandemic-adjusted
corona-shock
coronacrisis-inspired
pandemic-truncated
coronaburger

pandemic-born
pandemic-year
pandemic-required
COVID-19-required
COVID-19-relevant
pandemic-permitting
pandemic-management
pandemic-inflected
pandemic-upended
pandemic-cramped
pandemic-modified
pandemic-age
pandemic-depleted
pandemic-perfect
pandemic-informed
pandemic-minded
pandemic-panicked
pandemic-planning
pandemic-edition
pandemic-electronic
pandemic-aware
pandemic-assistance
pandemic-riven
pandemic-stained
coronavirus-deniers
corona-shaming
coronavirus-task-force
pandemic-election
pandemic-voting
corona-politics
CoronApp
CoronaCide
coronalert
coronageddon
coronacession
coronalization
cornteen
coronasaurus
coronamona
coronalogues
coronanxiety
pandumbic
pandemic-wise

coronavirus-impaired	corona-break	midpandemic
coronavirus-invoked	coronaprocedure	

Table 9 shows the words that occurred only in the lexicon of L2 Asia and L2 African countries as of the date of analysis.

TABLE 9. Pandemic lexemes that occurred only in L2 Asian and African Englishes

L2 Asian Englishes	**L2 African Englishes**
Corona-Support	coronamania
coronafly	concorona
corona-scan	
coronaoven	
corona-phobia	
corona-panic	
pandemic-fight	
coronaracism	
corona-lockdown	
pandemiconomic	
locktail	
covidient	
MGCQ	
ECQ	
MECQ	
APOR	

As mentioned earlier, the listed words in Tables 7-9 are the ones that are prevalent and unique in the different regional varieties of English. This analysis clearly shows which words have been widely used in particular regional varieties and which ones are unique in the lexicon of the sampled varieties based on corpus evidence. The contribution of this analysis is that it can bridge wider intercultural understanding of the pandemic language in the different parts of the world. Knowing the vocabulary used to communicate regarding pandemic-related issues by different regional varieties of English in different regions can strengthen societies' capacities for intercultural understanding. For example, *frontliner* is used by all English varieties in the monitor corpus of the Oxford English Dictionary; but it is noticeably more frequent in Malaysia and the Philippines, while in other varieties, *frontline worker* is the more preferred word.

The findings of the present study corroborate previous theoretical explanations on the factors of language change. Nordquist (2020) described language change as a phenomenon in which permanent modification in the features and use of a language happens over time. He claimed that language changes, evolves, and adapts according to the speakers' needs. The extended list of the pandemic lexicon in this study is a substantial proof that language change happens because of the following factors. First, people form words to describe their new and varied experiences in the difficult situations imposed upon by the COVID-19 virus crisis in our society. Words such as *coronacation,* which implies people's stay-at-home experiences due to community lockdowns for an extended period, and *coronapocalypse* or *coronageddon*, which resonates the people's anxiety and fear about the world coming to an end, are just some of the hundreds of words that mirror the new experiences encountered by the people which triggered

them to create such words. Second, people form words as a 'language response mechanism' against various stressors brought about by the pandemic crisis. It is an internal motivation to cope with the gravity of lifestyle changes and adjustments. The pandemic has impacted not just the physical well-being of individuals but also their mental health resulting in an inner motivation to cope with these chaotic conditions by using words, which created crisis communication response. This assumption corroborates Ruark's (1950, as cited in Sicard, 2015) statement that one of the nicer things about wars is the enrichment of language that it brings. In the present context, the war pertains to the war against COVID-19 (Imani, 2021). War words are created as a response to situations that are scary, frustrating, but occasionally also humorous. For example, words such as *coronavirus-weakened, pandemic-weakened, pandemic-shuttered, pandemic-hammered, pandemic-damaged, coronavirus-damaged, corona-ravaged, coronavirus-battered, pandemic-struck, pandemic-inflicted, corona-devastated,* and *COVID-19-battered* speak of the 'war-like' metaphoric sense of these words. On the other hand, words such as *coronascan, coronatracker, pandemic-containment, coronawarriors, coronavirus-fighting, pandemicontrol*, and the like are expressions of the people's efforts to fight the war against COVID-19. Indeed, social crises manifest lexical innovation (Lawson, 2020). Language thrives during turbulent times.

CONCLUSION

The present study was inspired by the events revolving around the major health crisis known as the COVID-19 pandemic. It drastically changed and affected all aspects of life, including language, which triggered the present study to document the resulting pandemic language. It utilized the NOW corpus to investigate the pandemic lexemes produced in the sampled English language varieties. The comprehensive study identified 590 pandemic words drawn from the News on the Web (NOW) corpus dating from January 2020 to October 2021. We only reported here the lexemes with five occurrences in our datasets. The terms on the psychosocial category of the pandemic lexicon constitute 43% of the overall wordlist. The second most extended list is the one on medical terms, constituting almost one third of the total pandemic lexicon identified from the corpus. Terms in the economic category constitute 23% of the *coronalexicon.* Lastly, political terms representing governments' war with COVID-19 constitute 4% of the total words. Our findings exemplify the more underlying severe effects of the pandemic as reflected in the long list of compound medical and economic words. The pandemic itself is a war within the medical field, and this war victimized people whose social activities and financial lives have significantly changed. The long list of economic terms, especially those related to economic recession, exemplifies the economic downturn of the biggest health crisis ever seen in generations. Moreover, political issues and public shaming of politicians during the pandemic are reflected in words like *'pandumbic* and *moronavirus.'* Lastly, the extended list of the pandemic psychosocial terms proves that the pandemic is also a time of social crises. People form words as a coping mechanism to articulate their new experiences and responses to the unprecedented events brought about by the pandemic. The various pandemic words which are categorized under the medical, economic, psychosocial, and political lexemes reflect the *coronalexicon* used by the people in communicating medical and health-related information, effects of the pandemic in the economy, social behaviors, activities, and government-issued protocols as a result of the war against the virus.

The word-formation processes that operated in the production of the pandemic lexemes are compounds, blends, affixation, acronyms, and back-formation. Of the 590 pandemic lexemes listed, almost 90 percent of them are compounds. The most frequent type based on our data is the compound adjectives, followed by endocentric compounds. Blends and affixation constitute only 6% and 5%, respectively. Prefixes used are *a~, anti~, non~, inter~, intra~, pre~,*

post~, con~, mid~, and *near~* and suffixes used are *~ic, ~al, ~ly,* and *~wise.* This present study claims that among the word formation processes, like most studies have concluded, compounding is the most frequently used word-formation process in creating new words in the language of the pandemic. The long list of compounds formed by attaching the pandemic lexemes *coronavirus, corona, pandemic,* and *COVID-19* to a vast number of words in which the pandemic words act as modifiers that give attributes to various headwords substantiate this claim.

Moreover, our findings revealed that L1 countries have the highest frequency of use on the pandemic lexemes, highest number of prevalent or high-frequent pandemic lexemes, and highest number of unique word combinations. These results are expected as English is the mother tongue of L1 speakers. L2 Asian Englishes, on the one hand, closely followed L1 countries when it comes to frequency of use. L2 African Englishes have also shown evidence of lexical creativity on pandemic lexemes. These findings imply that L2 language speakers have a high potential to embiggen their own lexicon and utilize the English language in describing their varied pandemic experiences. This present study is supported by theoretical and empirical underpinnings that explain why language evolves. It promotes the notion that turbulent times (e.g. wars, pandemics) or social crises usher in lexical innovation. The pandemic intensifies people's language coping mechanism from the pandemic's various stressors. The present study proves that the varied experiences of the people, the need to address them, and people's language coping mechanism paved the way to expand the vocabulary of different English varieties (Gustilo et al., 2021).

The present study can be a great contribution to the body of information that strengthens and supports intercultural communication. Exchange of vital information during critical times is necessary. Knowing the pandemic lexicon of each variety plays a significant role in establishing multicultural interaction and creating effective worldwide responses to the overall pandemic information. Further, understanding intercultural dialogue when cross-cultural cooperation is most needed strengthens intercultural relations to overcome this unprecedented context.

The present findings also play a significant contribution to the advancement of the field of applied linguistics/language teaching. Lexical creativity manifested in different ways to form new words has been an effective focus of investigation that can shed light on the enlargement of the lexicon of English varieties and provide a framework for learning.

REFERENCES

Al-Azzawi, Q.O., & Haleem, H.A. (2021). "Do you speak Corona?": Hashtags and neologisms since the COVID-19 pandemic outbreak. *International Journal of Linguistics, Literature and Translation, 4*(4), 113-122. doi:10.32996/ijllt.2021.4.4.12

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. doi.org/10.22363/2687-0088-2021-25-1-24-42

Asif, M., Zhiyong, D., Iram, A., & Nisar, M. (2020). Linguistic analysis of neologism related to Coronavirus (COVID-19). *SSRN Electronic Journal*. doi:10.2139/ssrn.3608585

Baldwin, R., & di Mauro, B. W. (2020). *Economics in the Time of COVID-19*. London: CEPR Press. Retrieved June 9, 2020 from https://voxeu.org/system/files/epublication/COVID-19.pdf.

Bauer, L. (1983). *English Word-formation*. Cambridge, England: Cambridge University Press.

Biermeier, T. (2008). Word-formation in New Englishes. *World Englishes – Problems, Properties and Prospects Varieties of English around the World*. 331-350. doi:10.1075/veaw.g40.20bie

Biermeier, T. (2014). Compounding and suffixation in world Englishes. *Varieties of English around the World the Evolution of Englishes,* 312-330. doi:10.1075/veaw.g49.18bie

Beirmeier. T. (2017). Lexical trends in Philippine English revisited. *Philippine ESL Journal*, *19*, 25-44.

Funk, W. (1978). *Word Origins and Their Romantic Stories*. Gravesend, England: Bell Publishing LTD.

Dimaculangan, N., & Gustilo, L.E. (2017), Lexical patterns in the early 21st century Philippine English writing. *Advanced Science Letters, 23(2),* 1094-1098.

Dimaculangan, N.G., & Gustilo, L.E. (2018). A closer look at Philippine English word-formation frameworks. *Advanced Science Letters, 24*(11), 8384-8388. doi:10.1166/asl.2018.12569

Dubey, S., Biswas, P., Ghosh, R., Chatterjee, S., Dubey, M. J., Chatterjee, S., Lahiri, D., & Lavie, C.J. (2020). Psychosocial impact of COVID-19. *Diabetes & Metabolic Syndrome*, *14*(5), 779–788. doi.org/10.1016/j.dsx.2020.05.035

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 the new English varieties. *Asian EFL Journal*, *21*(2), 83-104.

Gustilo, L., Pura, C.M., & Biermeier, T. (2021). Coronalexicon: Meanings and word-formation processes of pandemic-related lexemes across English varieties. *3L: Language, Linguistics, Literature®: The Southeast Asian Journal of English Language Studies, 27*(4), 1-15.

Halliday, M.A.K., & Matthiessen, C.M.I.M. (2013). *Halliday's Introduction to Functional Grammar* (4th ed.). Routledge. doi.org/10.4324/9780203431269

Henrich, N., & Holmes, B. (2011). Communicating during a pandemic: information the public wants about the disease and new vaccines and drugs. *Health Promotion Practice*, *12*(4), 610-619.

Imani, A. (2021). What 'Corona War Metaphor Means in Iranian Political Discourse. *GEMA Online Journal of Language Studies, 21*(4), 329-341.

Jovanović, V.Ž. (2003). On productivity, creativity and restrictions on word conversion in English. *Facta Universitiatis-Linguistics and Literature*, *2*(10), 425-436.

Katamba, F. (1993). Introducing lexical morphology. In *Morphology. Modern Linguistics Series.* (pp. 89-110). London, England: Palgrave McMillan. https://doi.org/10.1007/978-1-349-22851-5_5

Lawson, R. (2020, April 28). *Coronavirus has led to an explosion of new words and phrases – and that helps us cope.* Retrieved November 06, 2020 from https://theconversation.com/coronavirus-has-led-to-an-explosion-of-new-words-andphrases-and-that-helps-us-cope-136909

Lu, X., & Deng, J. (2019). With the rapid development: A contrastive analysis of lexical bundles in dissertation abstracts by Chinese and L1 English doctoral students. *Journal of English for Academic Purposes*, 39, 21-36. https://doi.org/10.1016/j.jeap.2019.03.008

Mahendran, K., Patel, S., & Sproat, C. (2020). Psychosocial effects of the COVID-19 pandemic on staff in a dental teaching hospital. *British Dental Journal*, *229*(2), 127-132.

Merriam-Webster. (n.d.). *How Does a Word Get Into the Dictionary?* Retrieved August 20, 2020, from https://www.merriam-webster.com/words-at-play/how-does-a-word-get-into-the-dictionary.

Moon, R. (2009). Lexicography and linguistic creativity. *Lexikos, 18*(1). doi:10.4314/lex.v18i1.47249

Nordquist, R. (2019, July 03). *What Is Corpus Linguistics?* Retrieved August 31, 2020 from https://www.thoughtco.com/what-is-corpus-linguistics-1689936

Nordquist, R. (2020, February 11). *Language Change.* Retrieved July 10, 2020 from

https://www.thoughtco.com/what-is-a-language-change-1691096

Plag, I. (2003). *Word-Formation in English*. Cambridge: Cambridge University Press.

Ratih, E., & Gusdian, R.I. (2018). Word formation processes in English new words of Oxford English Dictionary (OED) Online. *A Journal of Culture English Language Teaching Literature & Linguistics, 5*(2), 24-35. doi:10.22219/celticumm.vol5.no2.24-35

Rúa, P.L. (2010). Making and breaking the rules: Lexical creativity in the alternative music scene. *Language Awareness*, *19*(1), 51-67.

Schneider, E.W. (2007). *Postcolonial English: Varieties around the world*. Cambridge: Cambridge University Press.

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. doi.org/10.1016/j.jeap.2019.04.004

Sicard, S. (2015, October 15). *How America's Wars Have Changed The English Language.* Retrieved August 25, 2020 from https://taskandpurpose.com/community/how-americas-wars-have-changed-the-english-language

Social change and linguistic change: The language of Covid-19 (2020). Retrieved July 10, 2020 from: https://public.oed.com/blog/the-language-of-covid-19/

ten Hacken, P., & Thomas, C. (Eds.). (2013). *The Semantics of Word Formation and Lexicalization*. Edinburgh, Scotland: Edinburgh University Press.

Van Rooy, B., & Terblanche, L. (2010). Complexity in word-formation processes in new varieties of South African English. *Southern African Linguistics and Applied Language Studies*, *28*(4), 357-374.

Vizmuller-Zocco, J. (1985). Linguistic creativity and word Formation. *Italica, 62*(4), 305-310. doi:10.2307/479110

Wild, K. (2020, July 15). *Using corpora to track the language of Covid-19*. Oxford English Dictionary. Retrieved June 9, 2020 from https://public.oed.com/blog/using-corpora-to-track-the-language-of-covid-19-update-2/

eISSN: 2550-2131
ISSN: 1675-8021

APPENDIX A

PARAMETERS IN CODING THE TERMS

Classification	Parameters
Medical	• Words related to the COVID-19 virus, descriptions of symptoms and diseases, an indication of virus contraction, medical procedures, or reports of the outbreak Example: *coronavirus* • Words that pertain to stopping transmission, reducing contact rate, shorten the duration of infection Examples: *hand washing, immunity surveillance* • Words that refer to enhancing quality, consistency, and affordability of care provision Examples: *pandemic-aid* • Words related to recovery and treatment of the disease Examples: *coronavirus-free, coronavirus-recovered* • Words that indicate safety from coronavirus Examples: *coronavirus-proof, coronavirus-safe* • Words related to people who are committed to stopping transmission and knowledgeable to facilitate medical procedures toward the infected individuals (medical practitioners) Examples: *corona-warriors, coronavirologists* • Words related to or describe facilities or areas dedicated to coronavirus patients Examples: *coronavirus-designated, pandemic-filled* • Words related to COVID-19 vaccine Examples: *anti-COVID-19-, CoronaVac* • Words related to something that serves as a platform on COVID-19 information and medical news Examples: *CoronaSurveys, Coronapod*
Economic	• Words that describe the economic impact of the pandemic Examples: *pandemic-hit, coronavirus-stricken* • Words that pertain to the economic situations or activity as a result of the pandemic Examples: *new normal, pandemic-recession* • Words related to enormous economic and financial implications Examples: *coronavirus-driven, pandemic-led* • Words related to or describe measures regarding post-pandemic economic management Examples: *pandemic-mitigation, coronavirus-triggered* • Words related to any forms of help, relief, or economic activity, to help the progression of the economy Examples: *pandemic-relief, coronavirus-response* • Refers to economic activities, issues, or concerns Examples: *coronavirus-based (unemployment), coronavirus-spurred (budget), pandemic-created (poverty)* • Words that include financial and business-related terms Examples: *coronacoin, corona-bond*
Social	• Words related to names of groups of people formed during the pandemic Examples: *frontliners, quaranteams* • Words that pertain, describe, or inhibit social gatherings, events, or activities Examples: *super-spreader, social distancing* • Words related to online platform activities, issues, or situations Examples: *zoom-bombing, coronavision*

	• Words that include general terms which are used chiefly on social contexts, activities Examples: *coronavirus-linked (travel restrictions), pandemic-themed (Halloween)* • Words that describe the severity of the pandemic effect to physical, economic, psychological, and all aspects of life Examples: *coronavirus-affected, coronavirus-impacted* • Words that describe delayed or shortened, or otherwise initiated activities, events, programs, or game seasons Examples: *pandemic-delayed*, *coronavirus-prompted* • Words that refer back or describe the overall pandemic times, including all experiences in every aspect of human lives Examples: *pandemic-era, quarantimes* • Words that refer to appliances used during quarantine period Examples: *coronaoven, pandemic-electronic* • Words that describe the extreme fear or anxiety, or mixed emotions of the people brought about by the pandemic Examples: *coronaphobia, coronanxiety* • Words related to or describe preparations of activities as a form of bounce back after *COVID-19-hit* *Examples: pandemic-preparedness, pandemic-required* • Words related to human relationships and human gatherings Examples: covidivorce, CoronaChristmas • Words that reflect a culture in a specific country Examples: *quarantini, coronarita*
Political	• Words related to government-implemented programs/activities concerning pandemic situations Examples: *lockdown, GCQ* • Words related to government-mandated processes and politics Examples: *pandemic-voting, pandemic-election* • Words concerning any form of agreement and political concerns between administration Examples: *corona-politics, travel bubble* • Words that describe government-mandated programs due to COVID-19 Examples: *pandemic-enforced, coronavirus-imposed*

eISSN: 2550-2131
ISSN: 1675-8021

APPENDIX B

PARAMETERS ON WORD-FORMATION PROCESSES

Word - Formation	Parameters
1. Compounding	• combination of two to three words • act as a single, hyphenated, or two words • words combined can either be two nouns, two adjectives, an adjective and a noun, adjective and gerund or participle nouns, and verb preposition Example: *new normal* • includes an exocentric compound in which the words are not grammatically or semantically equivalent to either of its parts in contrast to an endocentric compound that fulfills the same linguistic function as one of its parts (Nordquist, 2020) • includes compound adjectives which are combinations of compounding and verbals (Nordquist, 2019) Example: *pandemic-inspired* • words formed by combining the acronym COVID-19 to various headwords Example: *COVID-19-recovered* • words formed by double compounding Example: *coronacrisis-inspired*
2. Blending	• blending parts of two words, either its beginning, middle, or end part of the word • includes words that are created from clipped forms of both words • includes partial blending in which a part of the word combined with a whole word, whether the whole word is at the beginning or end of the newly formed word Example: *covidiot* • includes a blend of a pun and a word Example: *cornteen* in which *corn* is a pun of *'quaran* from *quarantine'*
3. Affixation	• an existing word is added with either a prefix, affix, or suffix • the prefixes, affixes, and suffixes exist in L1 Englishes • includes words that undergo a semantic shift in the formation of the new word Example: *non-pandemic*
4. Abbreviations and Acronyms	• the lexeme is part of the original alphabet; the initials were given new meanings, but the people has a shared understanding of it, Example: *PPE for Personal Protective Equipment* • it is a combination of Uppercase and Lowercase Letters, hyphenated or not Example: *SARS-CoV-2*
5. Clipping	• a long word that is reduced into a shorter one by using just a part of the word: initial, middle, or end part Example: *influenza* becomes *flu* • the reduced form of the word retains the original meaning of the longer one
6. Conversion	• the grammatical function of the word changes without any morphological change • the semantic meaning of the word may be changed or retained

eISSN: 2550-2131
ISSN: 1675-8021

7. Backformation	• by removing actual or supposed affixes, the word class of the lexeme changes • a compound noun that undergoes affix deletion is also an example of backformation Example: *self-isolation* is used in a sentence as *self-isolate*

eISSN: 2550-2131
ISSN: 1675-8021

APPENDIX C

WORDLIST OF PANDEMIC LEXEMES IDENTIFIED FROM THE CORPUS (WITH 5 AND ABOVE FREQUENCIES)

No.	Compound - Medical Pandemic Words		
1	coronavirus	coronavirus-aid	coronavirus-spreading
2	coronaviruses	pandemic-aid	pandemic-spreading
3	self-isolation	coronavirus-afflicted	coronavirus-scarred
4	self-quarantine	pandemic-afflicted	pandemic-scarred
5	shelter in place	COVID-19-afflicted	coronavirus-compliant
6	shelter in place	coronavirus-vaccine	pandemic-compliant
7	community transmission	coronavirus-tracking	COVID-19-compliant
8	contact tracing	COVID-19-traking	corona-case
9	face mask	coronaCheck	coronacase
10	face shield	coronavirus-proof	coronavirus-infested
11	hand washing	corona-proof	corona-infested
12	containment zone	pandemic-proof	pandemic-infested
13	epidemic curve	COVID-19-proof	COVID-19-infested
14	forehead thermometer	coronavirus-laden	coronavirus-exposure
15	herd immunity	pandemic-laden	coronavirus-treatment
16	immune surveillance	coronavirus-borne	coronavirus-designated
17	incubation period	pandemic-borne	COVID-19-designated
18	index patient	coronavirus-killing	coronavirus-filled
19	coronavirus infected	COVID-19-killing	pandemic-filled
20	corona-infected	coronavirusoutbreak	CoronaWatch
21	COVID-19-infected	coronavirus-outbreak	coronavirus-dedicated
22	coronavirus free	coronavirus-tracing	COVID-19-dedicated
23	coronafree	corona-negative	coronavirus-laced
24	corona-free	coronavirus-negative	coronavirus-quarantined
25	pandemic-free	COVID-19-negative	Corona-Support
26	COVID-19-free	corona-warriors	CoronaSurveys
27	coronavirus positive	coronawarriors	coronafly
28	COVID-19-positive	coronavirus-carrying	coronavirus-ready
29	corona-positive	coronavirus-contaminated	pandemic-ready
30	coronavirus like	coronavirus-safety	COVID-19-ready
31	pandemic-like	pandemic-safety	coronavirus-protection
32	coronavirus fighting	coronavirologists	pandemic-high
33	pandemic-fighting	coronavirus-secure	pandemic-appropriate
34	COVID-19-fighting	COVID-19-secure	COVID-19-appropriate
35	coronavirus safe	coronavirus-containment	pandemic-causing
36	corona-safe	pandemic-containment	COVID-19-causing
37	pandemic-safe	coronavirus-control	pandemic-ending

38	COVID-19-safe	pandemic-control	pandemic-low
39	coronavirus test	COVID-19-control	pandemic-battling
40	coronavirus-testing	CoronaCare	pandemic-busting
41	coronavirus-tested	coronavirus-recovery	pandemic-gripped
42	COVID-19-test	pandemic-recovery	Corona-warn-app
43	COVID-19-testing	coronavirus-flu	corona-like
44	COVID-`19-tested	pandemic-flu	coronavirus-sniffing
45	coronaviral	coronavirus-exposed	corona-scan
46	coronavirus-prevention	COVID-19-exposed	CoronaTracker
47	pandemic-prevention	coronavirus-neutralizing	Coronapod
48	COVID-19-prevention	COVID-19-neutralising	COVID-19-care
49	coronavirus-associated	coronavirus-type	COVID-19-recovered
50	pandemic-associated	pandemic-type	COVID-19-confirmed
51	COVID-19-associated	COVID-19-type	COVID-19-vulnerable

No.	**Compound - Economic Pandemic Words**		
1	new normal	coronavirus-ravaged	coronavirus-impaired
2	coronavirus-induced	corona-ravaged	coronavirus-hammered
3	corona-induced	pandemic-ravaged	pandemic-hammered
4	COVID-19-induced	COVID-19-ravaged	coronavirus-slammed
5	coronavirus-mitigation	coronavirus-battered	coronavirus-addled
6	coronavirus-hit	pandemic-battered	pandemic-addled
7	corona-hit	COVID-19-battered	corona-crash
8	pandemic-hit	coronavirus-response	coronavirus-decimated
9	COVID-19-hit	pandemic-response	pandemic-created
10	coronavirus-driven	COVID-19-response	COVID-19-created
11	COVID-19-driven	coronavirus-focused	pandemic-infused
12	coronavirus-led	pandemic-focused	pandemic-wounded
13	corona-led	COVID-19-focused	pandemic-scale
14	pandemic-led	coronavirus-based	pandemic-rattled
15	COVID-19-led	corona-based	pandemic-provoked
16	coronavirus-stricken	pandemic-based	pandemic-hobbled
17	corona-stricken	COVID-19-based	pandemic-devastated
18	pandemic-stricken	coronavirus-struck	pandemic-recession
19	COVID-19-stricken	corona-struck	pandemic-powered
20	coronaviruscrisis	pandemic-struck	pandemic-oriented
21	coronavirus-crisis	COVID-19-struck	pandemic-depressed
22	coronacrisis	coronavirus-spurred	pandemic-wrecked
23	corona-crisis	pandemic-spurred	pandemic-shattered
24	pandemic-crisis	COVID-19-spurred	pandemic-slowed
25	COVID-19-crisis	Coronacoin	pandemic-stunted
26	coronavirus-triggered	coronavirus-crippled	pandemic-derived

27	pandemic-triggered	pandemic-crippled	pandemic-alert
28	COVID-19-triggered	coronavirus-wracked	pandemic-emptied
29	coronabonds	pandemic-wracked	pandemic-racked
30	corona-bonds	corona-coaster	pandemic-pummeled
31	coronavirus-caused	coronavirus-blighted	pandemic-economy
32	corona-caused	pandemic-blighted	pandemic-buying
33	pandemic-caused	coronavirus-throttled	pandemic-roiled
34	COVID-19-caused	coronavirus-weakened	pandemic-winning
35	coronavirus-relief	pandemic-weakened	coronavirus-closed
36	pandemic-relief	coronavirus-shutdown	coronavirus-inflicted
37	COVID-19-relief	coronavirus-shuttered	pandemic-inflicted
38	coronavirus-fueled	pandemic-shuttered	COVID-19-inflicted
39	pandemic-fueled	coronavirus-damaged	coronavoucher
40	COVID-19-fueled	pandemic-damaged	

No.	**Compound - Psychosocial Pandemic Words**		
1	frontliner	COVID-19-era	coronavirus-sensitive
2	front-liner	coronavirus-ridden	pandemic-sensitive
3	super spreader	pandemic-ridden	COVID-19-sensitive
4	super-spreader	COVID-19-ridden	pandemic-level/s
5	social distancing	coronavirus-friendly	pandemic-resilient
6	physical distancing	corona-friendly	pandemic-limited
7	zoom bombing	pandemic-friendly	COVID-19-limited
8	Zoom bomber/s	COVID-19-friendly	pandemic-preparedness
9	coronavirus-linked	coronavirus-riddled	pandemic-challenged
10	pandemic-linked	pandemic-riddled	pandemic-reduced
11	COVID-19-linked	COVID-19-riddled	pandemic-abbreviated
12	coronavirus-affected	coronavirus-spawned	pandemic-accelerated
13	coronavirus-themed	coronavirus-conscious	pandemic-stressed
14	corona-themed	pandemic-conscious	pandemic-pushed
15	pandemic-themed	COVID-19-cosncious	pandemic-defying
16	COVID-19-themed	coronavirus-postponed	pandemic-set
17	coronavirus-inspired	pandemic-postponed	pandemic-constrained
18	corona-inspired	Coronavirusfacts	pandemic-boosted
19	pandemic-inspired	coronatime	pandemic-rejigged
20	COVID-19-inspired	corona-time	pandemic-produced
21	coronavirus-delayed	pandemic-time	pandemic-born
22	pandemic-delayed	coronavirus-only	pandemic-year
23	COVID-19-delayed	pandemic-only	pandemic-times
24	coronavirus-shortened	COVID-19-only	pandemic-required
25	COVID-19-shortened	coronavirus-marred	COVID-19-required
26	coronavirus-era	pandemic-marred	pandemic-tailored

27	pandemic-era	coronavirus-wary	pandemic-relevant
28	coronavirus-related	pandemic-wary	COVID-19-relevant
29	COVID-19-related	CoronaCorps	pandemic-permitting
30	corona-related	coronavirus-style	pandemic-management
31	coronavirus-impacted	corona-style	pandemic-inflected
32	pandemic-impacted	pandemic-style	pandemic-season
33	COVID-19-impacted	COVID-19-style	pandemic-torn
34	coronavirus-prompted	coronababy	pandemic-upended
35	pandemic-prompted	coronavirus-dominated	pandemic-cramped
36	COVID-19-prompted	pandemic-dominated	pandemic-fight
37	coronaoven	coronavirus-denying	pandemic-modified
38	coronavirus-plagued	pandemic-denying	pandemic-paused
39	pandemic-plagued	COVID-19-denying	pandemic-age
40	COVID-19-plagued	coronavirus-necessitated	pandemic-depleted
41	coronaphobia	pandemic-necessitated	pandemic-perfect
42	corona-phobia	COVID-19-necessitated	pandemic-informed
43	coronavirus-mandated	coronavirus-tinged	pandemic-minded
44	pandemic-mandated	pandemic-tinged	pandemic-panicked
45	COVID-19-mandated	CoronaPass	pandemic-planning
46	coronavirus-disrupted	coronavirus-adjusted	pandemic-edition
47	pandemic-disrupted	pandemic-adjusted	pandemic-electronic
48	COVID-19-disrupted	COVID-19-adjusted	pandemic-aware
49	coronavirus-sparked	corona-panic	pandemic-assistance
50	pandemic-sparked	coronashock	pandemic-riven
51	COVID-19-sparked	corona-shock	pandemic-stained
52	coronavirus-shaped	coronacrisis-inspired	coronavirus-deniers
53	corona-shaped	coronavirus-truncated	corona-shaming
54	pandemic-shaped	pandemic-truncated	coronaracism
55	COVID-19-shaped	coronavirus-tainted	social bubbke
56	coronavirus-altered	coronaburger	blursday
57	pandemic-altered	corona-divorce	doomscroll
58	COVID-19-altered	coronaprocedure	zoom fatigue
59	coronacoaster	coronavision	coronavirus-interrupted
60	coronavirus-halted	coronavirus-motivated	pandemic-interrupted
61	pandemic-halted	coronavirus-stimulus	COVID-19-interrupted
62	coronavirus-influenced	coronavirus-sized	coronavirus-stalled
63	pandemic-influenced	pandemic-sized	pandemic-stalled
64	COVID-19-influenced	coronavirus-restricted	pandemic-dictated
65	coronavirus-weary	pandemic-restricted	corona-affected
66	pandemic-weary	coronavirus-centered	pandemic-affected
67	COVID-19-weary	coronavirus-compromised	COVID-19-affected
68	coronavirus-resistant	Corona-Christmas	coronavirus-specific
69	pandemic-resistant	corona-generated	corona-specific

eISSN: 2550-2131
ISSN: 1675-8021

70	corona-era	coronavirus-generated	pandemic-specific
71	coronavirus-era	pandemic-generated	COVID-19-specific
72	pandemic-era	COVID-19-generated	

No.	Compound - Political Pandemic Words		
1	coronavirus-task-force	pandemic-voting	coronavirus-forced
2	lockdown	corona-politics	pandemic-forced
3	coronavirus-lockdown	travel bubble	COVID-19-forced
4	corona-lockdown	coronavirus-enforced	coronavirus-imposed
5	coronalockdown	corona-enforced	pandemic-imposed
6	pandemic-lockdown	pandemic-enforced	COVID-19-imposed
7	pandemic-election	COVID-19-enforced	

No.	Blend - Medical Pandemic Words
1	telemed
2	CoronApp
3	CoronaCide
4	CoronAlert
5	twindemic
6	CoronaVac

No.	Blend - Economic Pandemic Words
1	coronanomics
2	infodemic
3	coronapocalypse
4	coronageddon

No.	Blend - Psychosocial Pandemic Words		
1	coronacation	zumping	coronathon
2	covideo	moronavirus	Coronalogues
3	covidivorce	covidiot	Coronanxiety
4	quarantini	Coronasur	maskne
5	coronarita	Coronasaurus	quarantime
6	quaranteen	Coronasomnia	coronials
7	quaranteam	Coronamona	

eISSN: 2550-2131
ISSN: 1675-8021

No.	Affixation - Medical Pandemic Words
1	non-corona
2	non-pandemic
3	nonpandemic
4	non-COVID-19
5	near-pandemic
6	asymptomatic
7	symptomatic
8	anti corona
9	anti pandemic
10	anti-COVID-19

No.	Affixation - Economic Pandemic Words
1	post-corona
2	post-pandemic
3	postpandemic
4	post-COVID-19
5	pre-corona
6	pre-pandemic
7	prepandemic
8	pre-COVID-19
9	inter-pandemic
10	intra-pandemic

No.	Affixation - Psychosocial Pandemic Words
1	coronally
2	pandemically
3	pandemic-wise
4	pandemical
5	mid-pandemic
6	midpandemic
7	mid-COVID-19

No.	Acronyms - Medical Pandemic Words
1	COVID-19
2	PPE
3	SARS-CoV-2

No.	Acronyms - PsychoSocial Pandemic Word
1	WFH

No.	Acronyms - Political Pandemic Words
1	GCQ
2	APOR

No.	Back-formation - Medical Pandemic Word
1	self-isolate

ABOUT THE AUTHORS

Cielo May Pura is an English language teacher at Potrero National High School Senior High School Department, where she has been teaching for five years. Aside from that, she is the current SHS Research Coordinator of the same school and the School-Based Management Coordinator. She received her Baccalaureate degree at the University of the East - Caloocan, where she took up a Bachelor of Arts major in Communication Arts and graduated cum laude. She is currently taking graduate studies at De La Salle University-Manila under the Master of Arts in English Language Education specializing in Second Language Education. Her research interests are corpus linguistics, discourse analysis, Computer-Mediated Communication, word-formation processes, to name a few.

Leah E. Gustilo is Full Professor in the Department of English Applied Linguistics, De La Salle University, Manila, Philippines, where she teaches English Communication and other courses in the undergraduate and graduate programs. She has published articles on contrastive rhetoric, computer-mediated discourse analysis, Philippine English, and ESL writing and assessment in reputable journals.

Thomas Biermeier is a lecturer at the University of Regensburg, Germany. His research interests centre on word-formation and lexicology, morphology, varieties of English and corpus linguistics. His dissertation on "Word-formation in New Englishes" was published in 2008. He has given talks in Europe, Asia and Australia, and published articles such as Word-formation in New Englishes – Properties and trends (2009), Lexical trends in Asian Englishes (2010), Lexical Trends in Philippine English (2011), Compounding and suffixation in World Englishes (2014) and Philippine English lexicon (forthcoming).

eISSN: 2550-2131
ISSN: 1675-8021