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Morphological Process of COVID-19 Neologisms: A Study of Compounding

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ABSTRACT

This study investigates the compounding process in COVID-19 neologisms. It focuses on words that coexist with words synonymous with the COVID-19 pandemic and the level of public understanding of neologisms that will enter general acceptance through standard English dictionaries. This research is qualitative research. The data comes from Urban Dictionary as a non-standard dictionary involving the community as neologism makers. Data was collected from the first confirmed case of COVID-19 in China on December 8, 2019 to January 31, 2022. Each neologism that resulted from the compounding process with two constituent words was collected to get the most widely used identical word, then compounding by including these words would be analysed to know the results and also the score. We have been found that the lower the score obtained by neologisms with match results, the greater the expectation that neologisms can be accepted by the general public as a global language through standard English dictionaries. Vice versa, the higher the score obtained by neologisms, the smaller the expectations of neologisms can be accepted. However, neologisms with mismatch results are difficult to accept, and even the resulting scores cannot predict anything. Another fact that was found was the error result as a result of the absence of the definition referred to in the standard dictionary. From the overall analysis, nouns are the most used word class.

Keywords: Compounding; COVID-19; Neologism

ABSTRAK

Studi ini menyelidiki proses compounding dalam neologisme COVID-19. Penelitian berfokus pada kata-kata yang hidup berdampingan dengan kata-kata yang identik dengan pandemi COVID-19 dan tingkat pemahaman publik tentang neologisme yang akan masuk penerimaan umum melalui kamus bahasa Inggris standar. Penelitian ini merupakan penelitian kualitatif. Data

berasal dari Urban Dictionary sebagai kamus nonstandar yang melibatkan masyarakat sebagai pembuat neologisme. Pengumpulan data dilakukan sejak kasus pertama COVID-19 terkonfirmasi di China pada tanggal 8 Desember 2019 hingga 31 Januari 2022. Setiap neologisme yang dihasilkan dari proses compounding dengan dua kata penyusun dikumpulkan untuk mendapatkan kata identik yang paling banyak digunakan, kemudian kata-kata ini akan dianalisis untuk mengetahui hasil dan juga skornya. Kami telah menemukan bahwa semakin rendah skor yang diperoleh neologisme dengan hasil yang cocok, maka semakin besar pula harapan neologisme tersebut dapat diterima oleh masyarakat umum sebagai bahasa global melalui kamus bahasa Inggris standar. Begitu pula sebaliknya, semakin tinggi skor yang diperoleh neologisme, semakin kecil harapan neologisme dapat diterima. Namun, neologisme dengan hasil tidak cocok akan sulit diterima, bahkan skor yang dihasilkan tidak dapat memprediksi apa pun. Fakta lain yang ditemukan adalah hasil eror akibat tidak adanya definisi yang diacu dalam kamus standar. Dari analisis secara menyeluruh, kata benda adalah kelas kata yang paling banyak digunakan.

Kata kunci: Compounding; COVID-19; Neologism

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INTRODUCTION

The World Health Organization (WHO) has designated COVID-19 as a global pandemic since March 2020 due to its exponential spread to all countries in the world (Maleki et al., 2020; Amouzouvi et al., 2021; Miao et al., 2022). This issue not only has an impact on human health and socio-economic conditions (Rahmadana & Sagala, 2020; Miranda-Mendizabal et al., 2022) but also has an impact on the emergence of various new languages of human daily life (Asif et al, 2021). The number of cases of infection that is getting higher and wider causes people to indirectly absorb various foreign words or phrases almost every day from various electronic media (Miao & Litvak, 2022). The unavailability of words or phrases that can describe certain things or situations in the pandemic era causes people to find out new words that can represent or describe something to make it easier for people to understand. The goal is that the information conveyed can reach the public clearly and accurately.

New words created in a certain era are called neologisms (Anderson, 2006) as the word formation comes from the Ancient Greek néo-, "new" and lógos, "word, speech". Neologisms are a collection of new words which are in the process of entering the general acceptance process so that these words still sound relatively foreign when heard (Badiu &

Anderson, 2001). Just like the previously available words or phrases, the words that emerged during the COVID-19 pandemic also follow the usual word formation rules. The process of word formation is studied in morphology as stated by McManis et al (1987) that morphology studies how a word is arranged and how the word is put together from smaller parts. In line with McManis, Yule (2020) elaborates by mentioning that there are ten types of word formation when a word is created. They are compounding, blending, clipping, backformation, conversion, coinage, acronyms, derivation, borrowing, and neologisms.

In this study, the researcher will only focus on the formation of compounding because compounding is seen as one of the most common types of word formation (Lehrer, 2003) and the easiest to recognize (Zhao et al., 2021) because it involves two or more root words of common words that have been known previously (McManis et al., 1987; Katamba, 1993; Spencer & Zwicky, 2001; Bormann et al., 2020) so that the resulting meaning looks more real. This is also supported by Newmark's (1988) theory which categorizes neologisms into ten types, they are old words with new senses, new coinages, abbreviations, collocations, eponyms, phrasal words, transferred words, acronyms and pseudo-neologisms. As has been discussed that compounding involves forming words from words that have been previously recognized, so in this case, the compounding process has something to do with one type of neologism, that is old words with new senses. The type of old words with new senses which is juxtaposed with words that are identical to the COVID-19 pandemic will certainly be easier to guess and can indirectly describe situations or things according to the characteristics described by the combination of the two words more accurately. The two or more words referred to hereinafter will be referred to as neologisms.

The COVID-19 era with the emergence of a variety of diverse language creativity can be the basis for the formation of language creativity in the future (Lei et al.,2021), the problem is that neologisms are words that cannot be found in the dictionary (Stenetorp, 2010) so researchers have an important role to provide additional information to society related to linguistic phenomena that occur. The goal is for people living during the COVID-19 pandemic to get accurate information regarding the patterns of words and phrases that appear and so that this research can add new knowledge in the field of linguistics itself, especially the formation of neologisms in the compounding process.

The process of juxtaposing one word with another as compounding until it becomes a neologism attracts researchers to find out what words are often juxtaposed with the word

synonymous with the word of COVID-19 pandemic and how the level of public understanding of the compounding word is created. This study will begin to examine the compounding created as neologisms since the first confirmed case of COVID-19 in China on December 8, 2019 even though WHO declared the status of a global pandemic in March 2020. The comprehensive study was carried out until January 31, 2022.

Research on COVID-19 neologisms has been discussed previously by Lei et al. (2021) who revealed a theory about how new words can be created, this research also investigates how the relationship between neologisms and the events behind the emergence of these neologisms is related. This research method uses categorization, avoidance and synthesis strategies in the creation of neologisms using data from the Baidu Index which developed in China as the country of origin where this research was carried out. A similar study was also carried out by Asif et al. (2021) who analyzed the COVID-19 pandemic in its general linguistic component. The neologism model used is from Krishnamurthy in 2010 and the onomasiological theory from Stekauer (1998). The results of this study reveal various types of neologisms, they are nouns, adjectives, verbs, abbreviations and acronyms related to COVID-19. Then the latest research conducted by Mahdikhani (2022) which analyzed public opinion and emotions regarding the various stages of the pandemic during the COVID-19 pandemic on Twitter. This study contains five content feature sets and extracted them into a machine algorithm so that the results can show predictions that emotional intensity is more popular than tweets containing factual information about COVID-19. This research provides an opportunity for researchers to explore predictions and their relation to neologisms that emerged during the COVID-19 pandemic.

The three studies above are admittedly still analyzing neologisms in general and predictive analysis so that the outputs of the research conducted are very diverse. As far as research on COVID-19, researchers have not found any research that discusses one form of word formation specifically, which is why researchers conducted research so that the output produced was more detailed according to one type, namely compounding.

Research on compounding is also very diverse. Research conducted by Fatiou (2018) analyzed the Greek - English Cypriot bilingual compound verb (BCV). This study reveals the characteristics and roles that each part plays in the construction. The result found that there are four different types of constructions in the data involving English verbs and elements. Another study that also focuses on compounding is the study conducted by

Schmidtke & Kuperman (2019) by taking behavioral and neurophysiological objects from the time course of compound word recognition to reveal the paradox in which temporal activity associated with lexical variables in behavioral studies precedes temporal activity of processing. The results of this study show that data from five naturalistic reading studies in which participants read sentences containing English compound words resulted in survival of eye movement records placing most of the earliest onset of orthographic, morphological, and semantic effects at less than 200 ms. The results obtained also support the theory of complex word recognition which places the initial simultaneous access to form and meaning.

Seeing the fact that research on the compounding process is still very rare, especially those that bring together the characteristics of neologisms in the compounding word formation process, this research is considered necessary because the compounding process involves many aspects of words and objects which results in productivity in language. The phenomenon of COVID-19 has become a fertile field for the emergence of the seeds of a new language or neologism which in the process will become a reference for the compounding process in the future or will disappear because it is no longer in accordance with a certain era.

METHOD

The data collected are neologisms that developed in society during the COVID-19 pandemic. This data collection uses the indirect non-participant observation method which is carried out by observing the COVID-19 phenomenon directly on the internet. The collected neologisms come from the Urban Dictionary website, which is an online dictionary that contains slang words and phrases that may not be listed in other standard dictionaries. This dictionary is considered very suitable for this study because it involves the neologism that is developing among people.

Urban Dictionary has been around for 22 years, the site has always played an important role in defining political terms, video games, movies, even people's names and many others. Every word in the Urban Dictionary can be made by anyone, descriptions of the words entered are also written according to the wishes of the author freely, so that the resulting words and definitions are often not the actual definitions. This reason also strengthens because Urban Dictionary is a dictionary that accommodates many creative

words from users directly, including neologisms that developed during the COVID-19 pandemic.

The neologism data searched for in the Urban Dictionary is compounding data that involves at least one word that is identical to the COVID-19 pandemic. In this study, one of the most widely used identical words was chosen by users, with the aim that the data analyzed better represent the phenomenon under study. New words or phrases that qualify as COVID-19 pandemic neologisms but do not include an identical constituent word component will be removed and will not be investigated further. The definition of neologism that has been collected and contains inappropriate words or sentences will also be cut in part, but the researcher still shows the conclusions from the intended definition in the reference column.

Furthermore, the selected neologisms will be analyzed using a qualitative descriptive method by including the definition of each neologism from the Urban Dictionary, then analyzing other words that are related to identical words to reveal their compatibility or incompatibility with the standard English dictionary which has been generally accepted.

There are three types of dictionaries that will be used as a measuring tool for each compounding neologism studied. They are the Cambridge Dictionary whose online version has been launched by the University of Cambridge since 1999, the Oxford Dictionary which has features similar to Cambridge's dictionary. The difference is, the Oxford dictionary provides an explanation of the origin of a word. Lastly, The Dictionary by Merriam-Webster is America's most trusted online dictionary which also provides definitions in United Kingdom English.

After the neologisms were collected based on the definitions from the four dictionaries that have been mentioned, the analysis was carried out by comparing each of the definitions in the words associated with the identical word COVID-19 pandemic. Each word will be taken in the order of its definition and marked with a serial number so that it can be seen which word best fits the original meaning. The results of this analysis will show how strongly a neologism can be understood by people from each component of the compounding word. This can also be a strong reason for the acceptance of a COVID-19 neologism into the standard dictionary of English as the language of society in general.

FINDINGS AND DISCUSSION

Researchers have collected data from words that are identical to COVID-19 neologisms. These words are the words most used by the public during the COVID-19 pandemic and are included in the Urban Dictionary. Although the compounding word formation process consists of two or more words, to make the analysis more accurate, the researcher will only choose compounding from the two constituent word components.

Of all the words entered into Urban Dictionary since the first confirmed case of COVID-19, researchers found identical words as shown in table 1.

	First word	Second word	Amount	Total	
1 —		Corona	7	136	
	corona		129	150	
		Covid	10	203	
2 –	covid		193	205	
2 _		isolate(-)	2	9	
3 —	isolate(-)		7	9	
1 —		Lockdown	6	26	
4 —	lockdown		20	20	
5 —		Mask	28	85	
	mask		57	85	
6 —		Pandemic	5	61	
	pandemic	56		01	
7 —		Quarantine	6	72	
	quarantine		66	12	

Table 1. Identical words referring to the COVID-19 pandemic

Table 1 presents the neologism data that has been collected from the Urban Dictionary. The results show that there are seven words that are suspected to be COVID-19 neologisms because these words were entered by many users on the Urban Dictionary during the pandemic.

The position of identical words is always more of a first word than a second word when collaborating to become a compounding word, so that neologisms produced during the COVID-19 pandemic often use identical words as their neologism identities.

From the data shown in table 1, it is also concluded that the most common identical word used by Urban Dictionary users as compounding is the word COVID with the highest acquisition of 10 data in the second word position, and 193 data in the first word position.

The final total of this word acquisition is 203 data. These 203 data are then entered in table 2 to find out the comparison of their definitions in four different types of dictionaries.

Neo logisms	Urban Dictionary	Refers to	Merriam- Webster Dictionary	Cambridge Dictionary	Oxford Dictionary	Result	Score
covid beard	An unkept, greasy set of facial hair brought on by isolation during the self quarantine pha se of the COVID- 19 pandemic.	facial hair	(1)the hair that grows on a man's face often excluding the mustache	(1)the hair that some men allow to grow on the lower part of their face	(1)hair that grows on the chin and sides of somebody's face	match	3
covid compan ion	The person you have chosen to self-isolate with during the Covid- 19 Pandemic.	someo ne who accom panies others	(1)one that accompanies another	(1)a person you spend a lot of time with often because you are friends or because you are travelling together	(1)a person or an animal that travels with you or spends a lot of time with you	match	3
covid cookies	1.The phlegm you cough up while sick with Covid- 19. 2.chunks of lungs that are scraped out of your lungs when you have COVID-19.	hard cough with phleg m	(1)a small flat or slightly raised cake	(1)a small, flat, sweet food made from flour and sugar	(1)a small flat sweet cake for one person, usually baked until hard and dry	mismat ch	3
covid nigger	Something where you just make it up, and use it to influence those around you for the sole purposes of befuddlement, and perplexin IRL Schizo Posting. Huzzah.	someo ne who lies	(1)offensive, see usage paragraph below —used as an insulting and contemptuous term for a Black person	(1)an extremely offensive word for a black person	(1)a very offensive word for a black person	mismat ch	3

Table 2. Neologisms and their comparison of definitions from four different dictionaries

In the table above, there are four neologisms and their definitions, each taken from four different types of dictionaries. The neologism *covid beard* is a combination of the first word *covid* as an identical word for the COVID-19 pandemic and the second word *beard* as a word whose meaning is analyzed according to three standard English dictionaries. The second word is a word that is further analyzed to find out if it matches the definition written

by Urban Dictionary users. The results shown by the three dictionaries are match which means that the word *beard* as a word that existed before the COVID-19 pandemic has a meaning that matches what was written by the neologism maker. The word *beard* in Urban Dictionary refers to facial hair, and this definition is also supported by three general English dictionaries at once by showing the score (1) in each dictionary. This score indicates that the definition that refers to facial hair shows the first position when the word *beard* is searched in the three dictionaries. This is also a strong reason that the word *covid beard* has great expectations of being accepted into the standard English dictionary because the definition shown is very clear and easily understood by the public. A similar example of *covid beard* is *covid companion*. These two neologisms have an equal and strongest score.

Different from the two neologisms that have been discussed, the opposite is true for the neologisms of *covid cookies* and *covid nigger*. These two neologisms do have the same score as the two previous neologisms, but the results show that the definition of the second word of this neologism is the opposite of what the neologism maker meant. This can be proven by the definition in the Urban Dictionary which reveals that the neologism of the word *cookies* in the neologism of *covid cookies* refers to hard cough with phlegm, and the word *nigger* in the neologism of *covid nigger* refers to someone who lies. Meanwhile, when the words *cookies* and *nigger* are searched in the Merriam-Webster Dictionary, Cambridge Dictionary and Oxford Dictionary, these three dictionaries show different definitions and agree that the word *cookies* has a definition as a small cake and the word *nigger* has a definition that refers to a black person. Score (3) with mismatch results being the worst result so this word has the least expectation of being accepted into standard English.

Neo logisms	Urban Dictionary	Refers to	Merriam- Webster Dictionary	Cambridge Dictionary	Oxford Dictionary	Result	Score
butt covid	Despite all the scary lung symptoms associated with COVID-19, some people mainly experience gastrointestinal symptoms, resulting	related to buttocks and diarrhea	(1)buttocks: often used as a euphemism for ass in idiomatic expressions	(2)slang for bottom	(4)the part of the body that you sit on	match	7

 Table 3. Neologisms and their comparison of definitions from four different dictionaries (varied scores)

	in severe diarrhea, vomiting, and general nausea. Thus, butt COVID.						
covid crazy	An individual who obsesses about Covid-19 and all the accompanying CDC precautions.	an obsessio n, different from the others	(5)being out of the ordinary : UNUSUAL	(4)a person who is crazy	(3)very enthusi astic or excited about someth ing	match	12
covid test	A modern spin on a much loved classic.	sexual intercour se	(2)a procedure, reaction, or reagent used to identify or characterize a substance or constituent	(2)a medical examination of part of your body in order to find out how healthy it is or what is happening with it	(2)a medica l examin ation to discov er what is wrong with you or to check the conditi on of your health	mismat ch	6
covid cooch	Female genitalia	genitals	(1)a dance performed by women that was once common in carnivals and fairs and marked by a sinuous and often suggestive twisting and shaking of the torso and limbs	-	-	mismat ch	error
covid munging	This is a variant of munging in which the corpse to be munged is a victim of the coronavirus, who is acquired via a local nursing home.	munging	-	(1)the process of changing data into another format (= arrangement) so that it can be used or processed	-	mismat ch	error

Table 3 has the same content as table 2, the difference is that table 3 represents a more varied score depending on the previous analysis process.

The word butt in the neologism *covid butt* has match results from four dictionaries with a score of (7). This score is the result of calculating the position of the equivalent definition of three standard English dictionaries. In Merriam-Webster, for example, the word *butt* with a meaning that refers to the definition made in the Urban Dictionary occupies position (1), but in the Cambridge Dictionary and Oxford Dictionary, this definition occupies positions (2) and (4) so that this neologism has a smaller expectation than neologism which has a total score of (3) in table 2.

The same case is also seen in the neologism *covid crazy* which even has a score of (12), which is higher than the neologism *butt covid*, it can be concluded that the match results with a higher score can make this neologism increasingly difficult to accept in general through English dictionaries commonly used by the public.

Different scores can also occur in cases of neologisms that get mismatched results, however, as discussed in table 2, cases such as the neologism *covid test* will be difficult to accept by the general public because the definition is very different from what is known so far.

Furthermore, the neologisms of *covid cooch* and *covid munging* became the rarest cases among all the neologisms examined. The second word for each of these neologisms is not defined in the two standard English dictionaries, so no conclusions can be drawn. The neologisms of *covid cooch* and *covid munging* may get mismatch results because there is no match and error scores because they cannot be calculated.

The most conclusion that can be drawn from tables 2 and 3 is that neologisms that have higher scores will be difficult to accept by the public because these neologisms are difficult to understand, but it is possible that neologisms can be accepted by some people who like to use one particular dictionary if the word analyzed occupies a lower position.

	Adjective	Noun	Verb
Adjective	-	boneless covid, chronic covid, long covid, covert covid	-
Noun	covid casual, covid closed, covid conscious, covid crafty, covid crazy, covid crazy, covid fat, covid fat, covid feral, covid flexible, covid free, covid good, covid hot, covid pretty, covid retired, covid retired, covid sexual, covid snug, covid worthy.	butt covid, camp covid, covid arm, covid ass, covid babies, covid baddie, covid balls, covid barbie, covid baron, covid beard, covid belly, covid bitch, covid booger, covid boy, covid bush, covid butt, covid café, covid cane, covid card, covid catfish, covid cavities, covid chips, covid circle, covid cloud, covid cluster, covid cock, covid cocon, covid code, covid companion, covid condom, covid consequences, covid cooch, covid cookies, covid couple, covid coupon, covid couture, covid coven, covid cowboy, covid eraze, covid crisis, covid crutch, covid crush, covid cunt, covid cutie, covid czar, covid daddy, covid denier, covid dick, covid dissonance, covid divot, covid dreams, covid driver, covid ear, covid earring, covid education, covid enthusiast, covid farm, covid fate, covid face, covid faggot, covid farm, covid fate, covid face, covid forest, covid guilt, covid gut, covid hag, covid hair, covid hipster, covid idiot, covid minute, covid misinformation, covid moment, covid monkey, covid nullet, covid muncher, covid musicians, covid nazi, covid orgy, covid mask, covid party, covid police, covid rapper, covid queen, covid geason, covid seas, covid shame, covid shits, covid season, covid sex, covid slut, covid soldier, covid season, covid sex, covid slut, covid soldier, covid season, covid sex, covid slut, covid soldier, covid soup, covid spelunker, covid slut, covid soldier, covid season, covid sex, covid slut, covid soldier, covid soup, covid spelunker, covid slut, covid soldier, covid soup, covid spelunker, covid spreader, covid stripper, covid style, covid theatre, covid thrst, covid throat, covid time, covid theatre, covid thrst, covid throat, covid time, covid theatre, covid thrst, covid throat, covid time, covid toes, covid vaccine, covi warrior, covid year, thanks covid.	covid boom, covid check, covid chow, covid clean, covid convoy, covid cuck, covid cuffed, covid cut, covid date, covid dump, covid fag, covid finger, covid flow, covid freak covid jab, covid kiss, covid mosh, covid munging, covid poisoning, covid rebound, covid scare, covid shuffle, covid slap, covid snapped, covid squeeze, covid stutter, covid tan, covid taste, covid tinkle.
	_	crying covid, fuck covid,	_
Verb		,,,,,	

Table 4. Neologisms and their word classes

From the analysis process that has been carried out in tables 2 and 3, the word class for each neologism is obtained which is shown in table 4.

This result is also obtained from matching definitions from three dictionaries. Researchers always look for definitions for each word that is side by side with identical words by equating references from different dictionaries. For example, if a word like *covid barbie* is searched, the researcher will refer to the noun because the three dictionaries show the noun to reference the definition discussed first.

Without needing to count again, table 4 clearly shows that the most widely used word class for the creation of neologisms in the COVID-19 pandemic era is the noun + noun word class.

CONCLUSION

The current study investigates the compounding process in COVID-19 neologisms since the first case of COVID-19 was confirmed in China on December 8, 2019 to January 31, 2022. Researchers used compounding neologisms data collected from the online site Urban Dictionary as a non-standard dictionary to see how creatively words synonymous with pandemic could produce compounding by juxtaposing other previously known words. The conclusion that can be drawn from the results of this study is that the smaller the score obtained by neologisms with match results, the neologisms have the greatest chance of entering general acceptance in global society through standard dictionaries. On the other hand, the higher the score, the smaller the chance of receiving it.

The results studied do not always match because the definitions made in the Urban Dictionary only involve individuals, not general agreement. Several results that indicate a mismatch are also analyzed, the conclusion obtained is that when the results show a mismatch, then any score obtained has no effect. Neologisms will be difficult to accept in general acceptance because their definitions are not found in standard dictionaries.

The final conclusion obtained from the results of the data analysis is the disclosure of the word class that is used as a companion word for identical words. The word class in question is a noun. So that the identical word which is a noun becomes noun + noun.

From the various conclusions obtained, this study provides recommendations for further research to find out the process of forming words other than compounding to reveal other facts behind the process of forming neologisms in certain eras. This research can also serve as the basis for and input to standard dictionaries to obtain another measure of selecting a particular neologism for inclusion as a widely accepted reference language.

Finally, the expected impact of all this is the dissemination of useful information that can be easily captured by the public.

REFERENCES

- Amouzouvi, K., Assamagan, K. A., Azote, S., Connell, S. H., Fankam, J. B. F., Fanomezana, F., ... & Zimba, G. (2021). A model of COVID-19 pandemic evolution in African countries. Scientific African, 14, e00987. https://doi.org/10.1016/j.sciaf.2021.e00987
- Anderson, J. M. (2006). Malmkjær, Kirsten, ed. The Linguistics encyclopedia (Ebook ed.). London.
- Asif, M., Zhiyong, D., Iram, A., & Nisar, M. (2021). Linguistic analysis of neologism related to coronavirus (COVID-19). Social Sciences & Humanities Open, 4(1), 100201. https://doi.org/10.1016/j.ssaho.2021.100201
- Bormann, T., Seyboth, M., Machleb, F., & Weiller, C. (2020). Learning of novel compound nouns–A variant of lexical learning that requires intact verbal short-term memory. Cortex, 124, 23-32. https://doi.org/10.1016/j.cortex.2019.08.024
- Budiu, R., & Anderson, J. R. (2001). Word learning in context: Metaphors and neologisms. School of Computer Science, Carnegie Mellon University.
- Fotiou, C. (2018). A linguistic analysis of Cypriot Greek-English compound verbs. Lingua, 215, 1-26. https://doi.org/10.1016/j.lingua.2018.09.001
- Katamba, Francis. 1993. Morphology. New York: St. Martin's Press.
- Lehrer, A. (2003). Understanding trendy neologisms. Italian Journal of Linguistics, 15, 369-382. https://doi.org/10.1016/B0-08-044854-2/04318-2
- Lei, S., Yang, R., & Huang, C. R. (2021). Emergent neologism: A study of an emerging meaning with competing forms based on the first six months of COVID-19. Lingua, 258, 103095. https://doi.org/10.1016/j.lingua.2021.103095
- Mahdikhani, M. (2022). Predicting the popularity of tweets by analyzing public opinion and emotions in different stages of Covid-19 pandemic. International Journal of Information Management Data Insights, 2(1), 100053. https://doi.org/10.1016/j.jjimei.2021.100053
- Maleki, M., Mahmoudi, M. R., Heydari, M. H., & Pho, K. H. (2020). Modeling and forecasting the spread and death rate of coronavirus (COVID-19) in the world using time series models. Chaos, Solitons & Fractals, 140, 110151. https://doi.org/10.1016/j.chaos.2020.110151
- McManis, C, Stollenwerk, D., & Zheng-Sheng, Z. (1987). Language files: Materials for an introduction to language. Reynoldsburg: Advocate Publishing Group.
- Miao, L., Last, M., & Litvak, M. (2022). Tracking social media during the COVID-19 pandemic: The case study of lockdown in New York State. Expert Systems with Applications, 187, 115797. https://doi.org/10.1016/j.eswa.2021.115797

- Miao, L., So, K. K. F., Im, J., & Jiang, T. (2022). The pandemic's effects on customer-tocustomer engagement in hospitality consumption: A multi-country investigation. International Journal of Hospitality Management, 102, 103158. https://doi.org/10.1016/j.ijhm.2022.103158
- Miranda-Mendizabal, A., Recoder, S., Sebastian, E. C., Closas, M. C., Ureña, D. L., Manolov, R., ... & Castellví, P. (2022). Socio-economic and psychological impact of COVID-19 pandemic in a Spanish cohort BIOVAL-D-COVID-19 study protocol. Gaceta Sanitaria, 36(1), 70-73. https://doi.org/10.1016/j.gaceta.2021.10.003
- Newmark, P. (1988). A textbook of translation (Vol. 66). New York: Prentice hall.
- Rahmadana, M. F., & Sagala, G. H. (2020). Economic resilience dataset in facing physical distancing during COVID-19 global pandemic. Data in brief, 32, 106069. https://doi.org/10.1016/j.dib.2020.106069
- Schmidtke, D., & Kuperman, V. (2019). A paradox of apparent brainless behavior: The time-course of compound word recognition. Cortex, 116, 250-267. https://doi.org/10.1016/j.cortex.2018.07.003
- Spencer, A., & Zwicky, A. M. (2001). The handbook of morphology. UK: Blackwell.
- Stenetorp, P. (2010). Automated extraction of swedish neologisms using a temporally annotated corpus. Skolan för datavetenskap och kommunikation, Kungliga Tekniska högskolan.
- Yule, G. (2020). The study of language. Cambridge university press.
- Zhao, S., Wu, Y., Tsang, Y. K., Sui, X., & Zhu, Z. (2021). Morpho-semantic analysis of ambiguous morphemes in Chinese compound word recognition: An fMRI study. Neuropsychologia,157,107862. https://doi.org/10.1016/j.neuropsychologia.2021.107862