Seven Types of Meaning and Seven Attributes: A Study of Chinese Anti-Pandemic Neologisms Under the Dual Perspective of Lexical Semantics and Lexical Pragmatics

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ABSTRACT

From 2019 to 2023, a large number of neologisms related to the COVID-19 pandemic appeared in Chinese society, which has become a major linguistic phenomenon. Studying these neologisms can help to create new neologisms and use them more scientifically and rationally in times of major emergencies, avoid ambiguity and increase social influence and recognition. The authors identified 316 neologisms from the content published on Chinese government websites and media and networks that were collected as the research texts. First, we clarify the ways that neologisms are created and the neologism types from the perspective of lexicology. Leech's Seven Types of Meaning was used to analyse the basic composition of these neologisms. Combining this with the lexical pragmatics theory of the seven attributes of Lexicon proposed by Hou from a dynamic and three-dimensional perspective, the semantic situation of the neologisms in the context of the pandemic was analysed. The results show that most of the anti-pandemic neologisms conform to the seven types of meanings and seven attributes. A part of the neologisms has the deficiencies of unscientific word formation, discriminatory semantics, and infantilisation. In addition, there are two significant discoveries, the first of which is the four-level distribution of neologisms: cyber language, general spoken language, general written language, and elegant language. Secondly, it was found that there are two kinds of relationships between the parody words and the original words: lexical superposition and lexical distancing. Summarising and analysing these neologisms in the post-pandemic era has theoretical and practical value for contemporary language application and can provide linguistic insight into how agencies can respond to emergencies in the future.

Keywords: lexical semantics; lexical pragmatics; China; anti-pandemic; neologisms

INTRODUCTION

The COVID-19 pandemic has had a huge impact on Chinese society and has given rise to a large number of neologisms. In response to the more recent outbreak, there has been a proliferation of neologisms, and the multiple mutations of the COVID-19 virus and the emergence of new conditions, such as long COVID, have all led to the emergence of numerous terms and expressions to explain and respond to these situations.

From a linguistic perspective, this is a major linguistic phenomenon that provides important materials for linguistic research. These neologisms serve as a linguistic reference for humans in their battle against epidemics and pandemics, helping them to understand challenges and maintain the stability of human society. Therefore, an investigation of the neologisms produced during the pandemic is needed, which is the purpose of this study: to discover the types of these neologisms, their relationships, meanings, and pragmatic features, as well as their advantages and shortcomings.

Scholars have already begun to take notice of these neologisms and conduct preliminary studies, such as the homophonic phenomenon and euphemistic meaning of neologisms (Jiao, 2020) or the structure of neologisms (Daif, 2021). Others have analysed the classification and meaning

of neologisms and traced the reasons for their emergence (W. Q. Luo & Wang, 2022). However, most of these studies have only focused on the conceptual meaning of these neologisms and have neglected the other six meanings based on Leech's lexical meanings. In addition, there has been little detailed analysis of the neologisms' meanings in use. For example, some of these words and phrases have caused controversy and have been abandoned or replaced with more acceptable neologisms, a process leading to the evolution of neologisms.

By analysing the text, this study argued that a combination of lexical semantics and lexical pragmatics enables us to examine the occurrence, development and use of anti-pandemic neologisms in China, both as a whole and in detail.

Gao and Shi (1963) argue that the meaning of a word is a reflection of people's general understanding of the object to which it refers. Furthermore, the function of a word's meaning is to indicate what it represents (Qian, 2008). According to Rosch (1973, 1975), word meanings consist of prototypical categories and edges, and the prototypical meaning of a word is its most original and typical meaning. This theoretical foundation of lexical semantics emphasises that "word meanings are the names of categories, and many words' meanings display characteristic prototype effects" (Taylor, 2015, p. 286). Therefore, the meanings of the large number of neologisms that emerged in China during the COVID-19 pandemic can be seen as generalised perceptions of things, phenomena, relationships, and so on. A fundamental and clear understanding of the nature of neologisms should start from this perspective.

Notwithstanding these views of word meaning, this is one of the more difficult propositions to explain in linguistics; Bloomfield (1935) believes that the meaning of words is a combination of the speaker's situation and the listener's reflection and that the speaker's situation is more important. This is because speakers can use similar, narrowed or metaphorical uses of words, which detract from the prototypical meaning of the words. At the same time, in actual communication, the cognitive ability of the listener and the environment in which they are placed are equally important, and the same word may have different meanings in the understanding of the speaker and the listener. Thus, Bloomfield (1935) also admitted that the study of meaning is the weak point in the study of language, and it will remain until human knowledge far exceeds its current level. While Bloomfield noted the possible cognitive distance between speaker and listener, we find that static word meanings are unstable in actual communication due to the influence of the environment, and "the concept communicated by the use of a word often differs from the concept encoded" (Wilson, 2003, p. 274). Sometimes, it has expanded or narrowed the prototype of the objective thing it generalises. To understand the speaker's intention, the listener must look for the real meaning intended by the discourse in three ways: context, logical meaning, and prototypical meaning (Zhao, 2020). Therefore, after finishing the analysis of the basic situation of word meanings by using lexical semantics, its deficiency of focusing only on static semantic features and semantic relations is revealed, and then we can introduce the emerging theory of lexical pragmatics to make up for its deficiency.

In 1998, the concept of lexical pragmatics was defined as "a research field that tries to give a systematic and explanatory account of pragmatic phenomena that are connected with the semantic underspecification of lexical items" (Blutner, 1998, p. 115). This theory deals with several aspects of word meaning. Firstly, the narrowing and broadening of the Lexicon. The main focus is on how specific linguistic information is understood and processed in communication. The second is on how the structure of words in communication has been handled. To summarise, in Wilson's words, it's about studying "some words are strictly defined and loosely used." (Wilson, 2003, p. 277). Therefore, we can use it to discover the occurrence of Chinese anti-pandemic

neologisms and their meanings that are closely bound to culture, history, and society and are more able to show their usage. Lastly, we can use it to explore the prototype category extension of a word (Ran, 2012).

In conclusion, an in-depth and comprehensive study of the lexical meanings of Chinese anti-pandemic neologisms is necessary. The second point is that the process of people using language is a complex and continuous process of making choices about the meaning of the language. This process is influenced by factors such as the speakers and listeners and the environment they live in. We cannot deviate from the contextual factor and only elucidate the prototypical meaning of the anti-pandemic neologisms. The third is that lexical pragmatics can make up for the deficiencies of lexical semantics, and the two are complementary, and combining them for lexical meaning study can show the word meanings as a whole.

Studying these neologisms can assist in creating new neologisms that can be used more scientifically and rationally in times of major emergencies, avoid ambiguity and increase social influence and recognition. Horizontally, this is a panoramic perspective to understand the linguistic pathways, classes, and concepts of Chinese anti-pandemic neologisms. Longitudinally, it is possible to understand the context, lexical narrowing, and lexical broadening of Chinese anti-pandemic neologisms. Although we are already in the post-pandemic era, many anti-pandemic neologisms have become important common words in China, and some problems of these neologisms are presented and discussed constructively in this paper. This is of great theoretical and practical value for modern language applications.

LITERATURE REVIEW

The number of research results is currently limited, with the earliest being by Jiao (2020), who found that most of the neologisms for anti-pandemic are created in the way of harmonics and believes that this is a development from the traditional Chinese context of harmonic rhetoric, to express double meaning and euphemism. In addition, Jiao (2020) believes that the main reason for the emergence of neologisms is that there are "empty spaces" in the lexical system that do not meet the needs of anti-pandemic expression. However, at the time of her publishing, it was only six months into the pandemic, so the number of neologisms was not large, and the paper discussed only a few harmonic neologisms and lacked a holistic perspective, but the author could still conclude that neologisms tend to be serialised and clustered.

Daif (2021) argued that the COVID-19 pandemic has influenced changes in Chinese vocabulary and analysed the word formation process of the word 新冠病毒(novel coronavirus) from the perspective of Chinese word building, an approach which follows the principles of the Chinese composition method. Secondly, he believes that the principles of economy, clarity, and conventionality of language are the basis for the selection of the term 新冠病毒 from among several related terms. In addition, he analyses neologisms such as 封城 (lockdown) and 战疫 (anti-pandemic) as war-like words that have new meanings in the context of fighting pandemics. In his analysis, he identified several characteristics of neologisms. First, neologisms present in stages, and corresponding neologisms were produced at different stages of the pandemic. Secondly, neologisms are explosive and timely, and to meet the needs of communication, neologisms were produced in large numbers. Third, neologisms have an empathy effect, especially the use of war-like words. Fourth, they are targeted and innovative, and neologisms focus on people's communicative needs and hot events. However, only ten examples of neologisms are

given in the paper. He admits in the conclusion to his paper that he did not collect a large number of anti-pandemic neologisms but only wanted to further understand the process of neologism creation, so the collection of a comprehensive list was not relevant to his purpose.

W. Q. Luo and Wang (2022) collected a large number of neologisms and classified them into types such as specialised terms, newly created words, old words used in new ways, and Internet words. They argue that the reasons for the emergence of new neologisms involve four aspects: socio-environmental background, internal linguistic motives, information media development, and discourse subject transformation. However, the study does not present detailed information on neologisms that were produced during 2019-2021 nor discussion of the semantic features of some words. Its main contribution is in classifying neologisms and tracing the reasons for their emergence without performing a detailed analysis of the lexical and pragmatic features of these neologisms.

Zhao (2020), Zhang (2020), Wang (2020), Yuan (2020), S. Y. Luo and Shang (2021), and Ding et al. (2021) studied anti-pandemic slogans from the perspectives of pragmatics, sociology and rhetoric, and explored the artistic features, linguistic characteristics and social functions of anti- pandemic slogans in the context of the COVID-19 pandemic. Among them, Zhao (2020) uses the relevance theory in pragmatics, analysed anti-pandemic slogans in terms of pragmatic enrichment, and found that the anti-pandemic slogans were mostly constructed in the form of pragmatic expansion.

In addition, Chen (2021) analysed Chinese, English, and Japanese pandemic neologisms from the perspective of sociolinguistics and concluded that Chinese anti-pandemic neologisms are mostly harmonic words for the reason that they conform to popular psychological identity.

Current research on these neologisms is limited and superficial. Therefore, a comprehensive study of this corpus is necessary.

METHOD

The study was a qualitative linguistic analysis. The methods used to conduct this study were inductive and integrative, and on this basis, several case studies were conducted. Currently, there are very few concepts and definitions of anti-pandemic neologisms (Daif, 2021; W. Q. Luo & Wang, 2022). For our purposes, we have chosen the definition of W. Q. Luo and Wang (2022). The neologisms (including phrases) used in this research included only terms that appeared during the pandemic (2019-2023) that were created to fight against the pandemic and included (i) newly created terms and (ii) old terms with new meanings. In addition, W. Q. Luo and Wang (2022) argue that Chinese anti-pandemic neologisms also include medical terms, which were originally used in communication among practitioners of specialised disciplines, such as 飞沫传播 (droplet transmission), but most of them have only the conceptual meaning, no obvious other lexical semantics and lexical pragmatics features. Therefore, they do not fall within the scope of this study.

DATA COLLECTION PROCEDURE

The time frame for data collection in this study was from the outbreak of COVID-19 on December 1, 2019, until January 8, 2023, when China announced the decision to manage COVID-19 with measures against Class-B infectious diseases. There are three main sources of data collection: (i) news and documents released by the government in mainland China. Xinhua News Agency,

People's Daily Online, and Chinese government portals at all levels were important sources of data, (ii) major Chinese news websites, inter alia, The Paper, Phoenix, Sina, and NetEase. and (iii) neologisms that appeared on the internet with a high frequency of use and influence. Weibo and Douyin were the main sources of data.

Surveying the vast amount of information available, we focused on two kinds of terms: (i) newly created terms and (ii) old terms with new meanings.

The two kinds of neologisms that were collected were screened in two ways.

The first was to search the Contemporary Chinese Dictionary (7th edition) prepared by the Institute of Languages of the Chinese Academy of Social Sciences, which was written according to the instructions of the State Council of the People's Republic of China to determine lexical norms and is the most authoritative Chinese dictionary in China. If the word to be looked up was not included in the dictionary, it was recognised as a newly created term. If the word to be looked up had been included in the dictionary, but there was no explanation related to the fight against the pandemic, it was recognised as an old word with a new meaning.

The second was to conduct a web search of the two kinds of neologisms that were collected. Searching with Baidu, the world's largest Chinese search engine, if the word appeared between December 2019 and January 2023, it was recognised as a newly created term. If the word appeared before December 2019 but was related to the fight against the pandemic, it was recognised as an old word with a new meaning.

Terms that did not meet the above criteria were not included in the study.

Finally, a total of 316 neologisms were collected, demonstrating a large number and variety of lexical innovations, which provide sufficient textual data to support this neologism study.

DATA ANALYSIS

First, from the perspective of lexicology, we analysed the ways that neologisms are created, the internal constructions, inter-word semantic relationships, and the types of neologisms. This is the premise of the study. We then conducted a descriptive examination of neologisms using the theory of lexical semantics. There are various views on lexical semantics, among which Leech's *Semantics* is exemplary. This book presents seven types of word meanings, and the relationship between word meanings and communication is the focus, making it important for observing the basic situation of Chinese anti-pandemic neologisms. However, Leech is also honest about the fact that there are always problems of demarcation between the seven types and "I do not wish to give the impression that this is a complete catalogue, accounting for all that a piece of language may communicate" (Leech, 1981, p. 20). This also proves that different contexts can lead to ambiguity in word meaning and difficulty in defining the scope, which can be further analysed by pragmatics.

The use of neologisms was then analysed in the context of anti-pandemic constructs using the theory of lexical pragmatics. Since pragmatics is a relatively new discipline, there is still no definite conclusion about the characteristics of word meanings. However, Chinese scholar Hou Guojin's detailed summary of the seven attributes of words in lexical pragmatics is a very authoritative view, which we use as a theoretical basis to analyse anti-pandemic neologisms.

It was found that Leech's seven types of meaning and the seven attributes proposed by Hou Guojin are related and comparable. For example, Leech's opinion of Conceptual Meaning and Hou's opinion of Expressibility have relevance in describing the basic meanings of words, so these two were grouped together, and Leech's opinion of Social Meaning and Hou's opinion of Relevance both emphasise the impact of the social environment on the meaning of words, so they

were grouped together and so on, divided into a total of seven groups. The collected neologisms were then placed into these seven comparative groups to be observed and analysed to ascertain their semantic and pragmatic characteristics, differences, or combinations.

FINDINGS

WAYS OF CREATING NEOLOGISMS

From the perspective of lexicology, the collected anti-pandemic neologisms were sorted and analysed. Four major categories were identified: (i) *compound*, (ii)*parody*, (iii) *conversion*, and (iv) *calque*.

COMPOUND

A total of 217 compound neologisms were collected that were formed by using Chinese morphemes and combining them in an idiomatic manner. The analysis revealed that the five word-formations of Chinese compounds were met:

1. Modifier-Head compound, for example, 口罩令（mask mandate），碰肘礼（elbow bump）
2. Verb-Object compound, for example, 封城（lockdown），战疫（anti-pandemic）
3. Parallel Compound, for example, 从严从紧（rigorous and strict），日清日结(overall every control and clear)
4. Subject-Predicate compounds, for example, 口罩荒（mask shortage;），疫情软着陆(pandemic soft landing)
5. Verb-resultative compounds, for example,应筛尽筛（all suspected cases must be screened），连点成片(connecting all the dots into one piece)

PARODY

A collection of 39 parodies, primarily based on Chinese four-character idioms, was developed. The analysis revealed that parody words share the same pronunciation as their original counterparts but differ in lexical meaning in two ways:

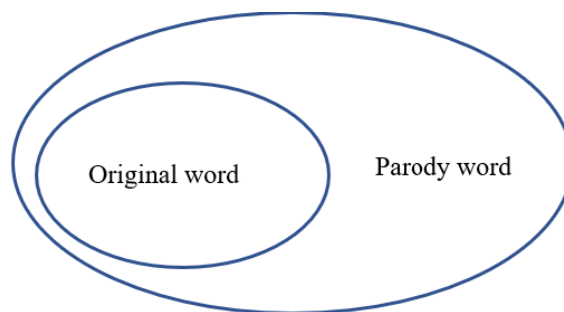First: Parody words which combine the lexical meanings of both the parody and original words (Figure 1).

FIGURE 1. The superimposition of the lexical meaning of the parody word and the original word

For example:

1. Parody: 万无疫失．The original word is 万无一失, which means to be sure of success; the parody word means Control the pandemic to be a complete success.
2. Parody: 小心疫疫．The original word is 小心翼翼, which means very cautiously. The parody word means we must be very cautious when fighting against the pandemic.

Second: Parody words create a distance between the parody word and its original counterpart (Figure 2). The parody takes the pronunciation of the original word and replaces one or two morphemes to imitate it. Figure 2 represents the fact that the parody word has the same pronunciation as the original word, yet their meanings are different. The rectangle in the centre represents their same pronunciation, and the arrows pointing in different directions indicate their different meanings.
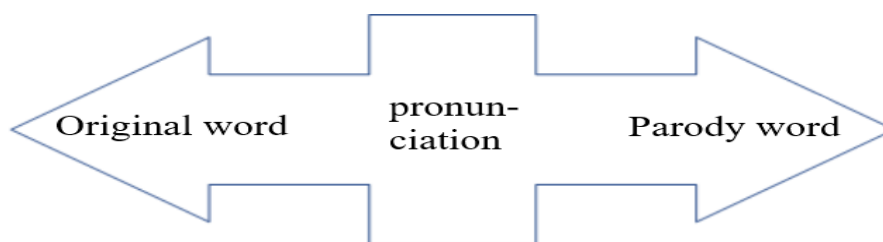

FIGURE 2. The distancing of the parody word from the original word

For example:

1. Original word: 金盆洗手．Meaning "to give up an old business" or "wash one's hands of something".
    Parody: 矜喷洗手．Meaning "Everyone should often spray their hands with alcohol and wash their hands".
2. Original word: 有理有据．Meaning "well-founded or rational".
    Parody: 有礼有距．Meaning "People are expected to maintain both courtesy and social distance during an outbreak".

CONVERSION

Conversions, characterised by a strong cyberspeak style, typically generate new meanings by building upon the original words. A collection of 46 conversions were found. Examples include:

1. 通风报信：originally referred to secretly informing one of the opposing parties about the other's secrets. In the context of the pandemic, it now means to open windows more often for ventilation and report any abnormalities to the pandemic manager.
2. 公羊 originally referred to a ram, while 母羊 referred to an ewe. However, in the context of the pandemic, they are now used as metaphors for male and female COVID-19-positive patients. In Chinese, 羊 (sheep) and 阳 (positive) are pronounced the same.

CALQUE

Calques refers to the process of incorporating vocabulary from the English language into the Chinese language. A collection of 14 Calques were found. The following are examples:

1. 大流行: The original word is "pandemic" in English. On March 11, 2020, WHO declared in Geneva that the COVID-19 outbreak "can be characterised as a pandemic" (Ghebreyesus, 2020). This term was not commonly used in China before. Instead, terms such as 瘟疫 (plague) and 全球性传染病 (global infectious disease) were used.
2. 超级传播者: The original word is superspreader. In the past, Chinese society used terms such as 毒王 (King of Poison, Drug lord) to express this concept.

SEVEN MEANINGS AND SEVEN ATTRIBUTES

CONCEPTUAL MEANING AND EXPRESSIBILITY

TABLE 1. Conceptual Meaning and Expressibility

Scholar	Opinion	Content
Leech	Conceptual Meaning	The central factor in linguistic communication that is integral to the essential functioning of language.
Hou	Expressibility	All things or events that humans can think of or that humans can categorise and conceptualise can, in principle, be expressed in words or discourse.

It is found that in non-pandemic contexts, the meaning of these terms is difficult to understand accurately, and the "conceptual meaning" indicated by Leech becomes superficial and does not explain the neologism. Horn (2002) argued that when decoding a message, one cannot rely on linguistic knowledge alone but must also rely on social knowledge of the real world and the situation/context in which language occurs. In the pandemic context, new things are renamed; this reflects the expressibility of words in pragmatics.

Example 1: 大疫灭亲

Conceptual Meaning: A pandemic exterminates relatives. The meaning of this word is unintelligible.
Expressibility: 大疫灭亲 means that during a pandemic, one should self-isolate and not have dealings with other people, not even relatives. This situation can be expressed in an explanatory statement or by creating a new word.

Example 2: 毒王

Conceptual Meaning: King of Poison or Drug lord.
Expressibility: During a pandemic, a person who infects more than ten people with the virus is called a virulent king or Superspreader.

CONNOTATIVE MEANING AND PROCESSIBILITY

TABLE 2. Connotative Meaning and Processibility

Scholar	Opinion	Content
Leech	Connotative Meaning	The communicative value of an expression that, by virtue of what it refers to, has value over and above its purely conceptual content.
Hou	Processibility	The words spoken have an original intelligibility; the pragmatic principle that governs the " Processibility " of the listener is the Clarity Principle: 1. The listener can decipher the meaning of the speaker's words. 2. The listener can distinguish deliberate usage from casual usage. 3. The listener can interpret the lexical, functional, stylistic, cultural, and other values of the words. 4. The listener can interpret the meaning and intention of the discourse served by the words.

Example 1: 吹哨人

Connotative Meaning: In the Chinese cultural context, the act of 吹哨 "blowing the whistle" has the meaning of reminding, warning, and danger.

Processibility: When the new term 吹哨人, "whistleblower", appears in Chinese news reports, the public can understand its metaphorical or additional meaning.

Example 2: 毒王

Connotative Meaning: In Chinese, it can refer to drugs such as heroin or toxic substances that represent danger and fear. Meanwhile, the meaning of 王 is king or the most powerful person. 毒王 has appeared in many Chinese martial arts novels.

Processibility: In the context of a pandemic, the term 毒王 appears in news reports or online platforms, and the public can clearly understand its new meaning, which refers to a virus carrier who infects a large number of people.

SOCIAL MEANING AND RELEVANCE

TABLE 3. Social Meaning and Relevance

Scholar	Opinion	Content
Leech	Social Meaning	A phrase conveys information about the social circumstances in which it is used. In part, we decode the social meaning of a text by recognising different dimensions and levels of style within the same language.
Hou	Relevance	The production and use of words must be contextualised. They should be related to the people who use the language, their society, and their culture.

It was found that many anti-pandemic neologisms have the same lexical meaning but exist in different linguistic contexts and were created to suit different communicative domains. This proves that anti-pandemic neologisms have a register of language.

At the same time, the phenomenon of substitution or evolution of some words has occurred. These words started with negative connotations, mostly cyber words. They have gradually been replaced by terms with neutral or positive meanings in news reports or government

announcements. This phenomenon is related to Leech's "principle of politeness". However, L. Zhou and Zhang (2018, p. 717) argue that the politeness phenomena in China demonstrate culture-specific characteristics that cannot be accounted for within Leech's framework of politeness. Politeness in Chinese can be defined as appropriate or acceptable behaviour at a generalised high level. It confirms that there are four essential elements, namely, Modesty, Respectfulness, Friendliness, and Refinement, which are anchored to politeness as appropriateness. The substitution or evolution of anti-pandemic neologisms likewise reflects the needs of different levels of society and culture.

Furthermore, by analysing the collected anti-pandemic neologisms, they can be organised into four layers of registers: (i) cyberspeak, (ii) generally spoken language, (iii) generally written language, and (iv) elegant words (in the style of ancient Chinese). Some word meanings have four layers, while others have only one or two layers. This layering can be shown by four crossed triangles (Figure 3).
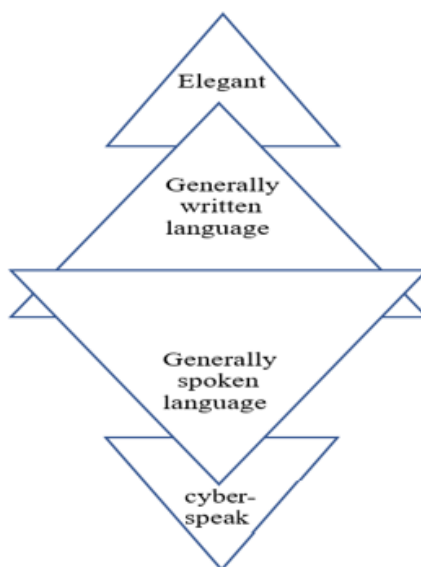

FIGURE 3. Four register layers of anti-pandemic neologisms

There are examples in the tables below.

Example 1. COVID Front Line Staff

TABLE 4. COVID Front Line Staff

Layers of registers	Neologisms	
Cyberspeak	大白 Baymax	白卫兵 White Guards
General Spoken Language	志愿者 Volunteer	
General Written Language	核酸检测员 Nucleic acid testers	防疫工作者 Anti-pandemic worker
Elegant Word	逆行者 Countermarch person	

TABLE 5. Affective Meaning and Iconicity

Scholar	Opinion	Content
Leech	Affective Meaning	Language reflects the personal feelings of the speaker, including his attitude toward the listener or his attitude toward something he is talking about.
Hou	Iconicity	Also known as isomorphism, means a verifiable and understandable connection between discourse/words and their meaningful content. Words with Iconicity can also have: 1. Expressivity. 2. Humour or interestingness. (contains several subordinate principles: Metaphor Principle, Metonymy Principle, Banter Principle and Irony Principle)

Example 1. XBB.1.5

Affective Meaning: In this pandemic, Western naming of the virus mostly uses mythological figures, such as Centaurus, Gryphon, and Cerberus, among others. Some argue that "we must also acknowledge the considerable fear still associated with COVID, which could be exacerbated by attributing such terrifying names to each new form of the virus that emerges" (Trauer & Hughes, 2023, para. 15-16). Overall, using scary mythical characters as the nomenclature for the virus exacerbates people's fear of the virus.

Iconicity: In China, XBB.1.5 is translated as 狮鹫 or 海妖, which directly translates to the meaning of Gryphon. However, in the Chinese context, it is just an easy-to-remember written word for a virus and does not have the same fear-empathy effect as in the West. In China, this virus is jokingly called 小宝宝 (little baby) or 瞎逼逼 (chattering nonsense). The reasons are: (i) the first consonant of the three morphemes of these two words combined is "XBB," which makes it easy to remember; (ii) XBB, which appeared three years after the pandemic, is indeed a "little baby"; and (iii). Chinese society has developed antibodies to the exaggerated propaganda of Western media and thinks that they are "chattering nonsense" (Zheng, 2023, para. 3). This also reflects the characteristics of the Metaphor Principle, as well as the Banter Principle and Irony Principle in Iconicity.

Example 2. 红区

Affective Meaning: In Chinese culture, red is a positive colour that indicates joy, celebration, popularity, etc. In the Western context, however, red generally indicates blood, danger, and other negative meanings; thus, in the Western context, "Red Zone" means a dangerous area.
Iconicity: In the context of the pandemic and the Chinese media's borrowing from Western culture, the term "Red Zone" has taken on a new meaning, denoting an area of danger. In Chinese news reports, the term "Red Zone" is put in quotation marks, indicating that it is not a generic meaning but a new word.

REFLECTED MEANING AND EFFORTLESSNESS

TABLE 6. Reflected Meaning and Effortlessness

Scholar	Opinion	Content
Leech	Reflected Meaning	Reflected Meaning is the meaning in cases of multiple conceptual meanings when one sense of a word forms part of our response to another sense.
Hou	Effortlessness	The generation and use of words must save effort, time, money and ink.

Reflected meaning and effortlessness have resulted in the generation and widespread use of cyberspeak-style anti-pandemic words. Examples include:

阳间 and 阴间

Reflected Meaning: 阳 in Chinese has three prototype concepts: (i) the sun, (ii) brightness, and (iii) the cosmic philosophical concept of yin and yang. The meaning of 阴 is the opposite of 阳. However, in the context of a pandemic, the medical meanings of 阳 and 阴 are widely accepted, with 阳 representing infection with the virus (positive), which is associated with danger and anxiety, and 阴 indicating no infection (negative), which is associated with safety and peace of mind.

Effortlessness: 阳间 originally denoted the world where human beings live. 阴间 denoted the world where people go after death. In the context of the pandemic, to save effort, the widely accepted reflected meaning of "yin and yang" is combined with other morphemes in a large number of ways to form new words. In this case, 阳间 means an office in a company where all the staff are infected with the virus, and 阴间 means the opposite. With only two syllables and two morphemes, a noun that would normally require a long definite article to be explained and understood is now summarised.

In addition, all the four-character parodies show a combination of Reflected Meaning and Effortlessness. Parodies such as 大疫灭亲, by first reminding people of familiar original words, not only have a brief form but also convey rich meanings and even emotional significance. This makes it easier for people to understand quickly and saves time.

COLLOCATIVE MEANING AND FELICITY

TABLE 7. Collocative Meaning and Felicity

Scholar	Opinion	Content
Leech	Collocative Meaning	Collocative Meaning consists of the associations a word acquires on account of the meanings of words which tend to occur in its environment.
Hou	Felicity	Felicity requires that words be used appropriately, following the phonological, morphological, syntactic, semantic, and pragmatic requirements. The generation and use of words should be in line with the civilised and polite rules of society.

Example 1. 超级传播者 and 毒王

Collocative Meaning: "超级传播者" Superspreader is a medical term with written overtones. It appears in medical or related content. Before its appearance, the only term used in Chinese media reports was 毒王, "King of Poison".

Felicity: In the context of the pandemic, the Chinese media and society quickly realised that the "King of Poison" has the disadvantage of "stigmatising" the patients. Thus, it was changed to "superspreader", which is in line with "felicity" or "politeness".

Example 2. Military terms (战疫, 大总攻 as examples)

Collocative Meaning: These are usually found in reports or documents of military warfare, indicating various aspects of the military. Its pairing with the pandemic highlights the seriousness and urgency of the pandemic.

Felicity: The pandemic, in the publicity of the Chinese government and the media, has been likened to a war for the survival of China. Thus, a lot of military terms, such as 战疫(anti-pandemic), 大总攻（general offensive）, etc., have been used to fight the pandemic.

THEMATIC MEANING AND EFFECTIVENESS

TABLE 8. Thematic Meaning and Effectiveness

Scholar	Opinion	Content
Leech Hou	Thematic Meaning Effectiveness	A speaker or writer organises the message in terms of order, focus, and emphasis. Effectiveness emphasises the contextual effect of the words used. Words should express meaning and have a good effect:

Leech's "thematic meaning" and Hou's "effectiveness" have something in common. Leech believes that meaning can be expressed by adjusting the order of words, emphasis, and so on, while Hou emphasises pragmatic strategies such as the form, meter, and beauty of words, as well as illocutionary force and illocutionary point, such as elaboration, instruction, promise, expression, inquiry, announcement, etc.

In most utterances containing anti-pandemic neologisms, the new term is the part that is emphasised and noticed and thus conforms to the thematic meaning of Leech. For example:

坚持"四早""四应四尽"……隔离资源保证转运收治日清日结，严格社区管控拧紧"水龙头"。

(People's Daily, 2022, para. 1).

In this news report, there are four new terms: 四早(four early), 四应四尽(four should and four as soon as possible), 日清日结(overall every control and clear), 拧紧水龙头(tightening the tap), and all of them appear after a verb, indicating emphasis and information focus. Furthermore, they not only reflect their pragmatic "effectiveness" through metaphors, parallelism, symmetry, and other rhetorical forms but also reinforce their thematic meaning.

Here are some examples:

Example 1. 拧紧水龙头

Metaphor is an important way to improve the effectiveness of language. In the news report above, controlling the source of the pandemic is metaphorically referred to as "tightening the tap," a new term that appears in a large number of speeches by Chinese government officials and media reports. As it was repeatedly used, its status was consolidated. This

vivid metaphor is significantly more effective than the bland phrase "control the source of the pandemic."

Example 2. Neologisms with an XAXB form

The beauty of form, speech, and meaning are also features of language effectiveness. This is represented by the large number of symmetrically structured terms (XAXB) that appear in the anti-pandemic neologisms. For example:

应 A 应 B: 应收尽收(all suspected and confirmed patients should be admitted to the hospital), 应转尽转 (all suspected patients should be transferred to the quarantine)

日 A 日 B: 日清日结(overall every control and clear), 日产日清（same day cleanup of medical waste generated）

They are not only formally and phonetically pleasing but also clear in meaning. In many cases, these words are used in parallel, appearing to be very imposing. This also reflects the illocutionary force of the word.

DEFICIENCIES OF ANTI-PANDEMIC NEOLOGISMS

SOME NEOLOGISMS ARE UNSCIENTIFIC

Qian (2008) believes that the standardisation of Chinese vocabulary is a demand for the internal development of the Chinese lexical system, and in the process of standardisation, there are three principles, namely necessity, universality, and clarity. Clarity means that the meaning of the words must be clear, accurate, and unambiguous. Among the Chinese anti-pandemic neologisms, there have been controversies and questions caused by unclear meanings of some neologisms. For example 时空伴随者(Company of time and space),跑帽滴漏 (air leak + water leak + liquid dripping + liquid leak) and 十字花转运 (cruciate flower transit) etc. These hastily coined words require an auxiliary explanation or illustration to understand their meanings. While they have some rationality, they may not be the most suitable words.

SOME NEOLOGISMS HAVE A DISCRIMINATORY MEANING

Leech (1981) says that "the greatest dangers to intelligent communication come with cases where the affective meaning becomes a major part of the message" (p. 45). In anti-pandemic neologisms, people's fear and disgust of the pandemic led to fear and disgust for those infected by the virus, and thus a large number of discriminatory words appear, such as "poison king", "ram", "ewe", and "little sheepman". This inhumane and stigmatising way of creating words should be taken seriously and prevented. At the same time, when creating neologisms, one must pay attention to ethical issues. Regarding loanwords in anti-pandemic neologisms, such as 中国病毒 (Chinese virus), the Chinese medical community believes that "Some social discrimination phenomena in language reflect discriminatory attitudes toward identity, region, occupation, etc. Language, both in social life and in foreign communication, should follow social ethical rules" (Ye et al., 2020, p. 377). It confirms that the discriminatory semantics of certain anti-pandemic neologisms are not in line with the requirements of human civilisation.

SOME NEOLOGISMS HAVE INFANTILISING FEATURES

"Infantilisation" is a concept borrowed from psychoanalysis and refers to the tendency of people to automatically lower their intellectual level. A large number of infantilisation phenomena have been observed in Chinese anti-pandemic neologisms. For example, some people called the virus 阿冠 (Aguan), and called the hospital named Fire God Mountain Hospital 小火 (Little Fire) and Thunder God Mountain Hospital as 小雷 (Little Thunder), and even gave nicknames to the forklifts working on the hospitals.

When confronted with serious disasters, the public often uses infantilised language to flirt with the situation, echoing Huot's (2013) observation that language is a social reality. A reality in which many adults fail to demonstrate emotional or cognitive maturity. S. Y. Luo and Shang (2021) believe that this type of language is more fun and popular, more easily accepted by the general public and plays an important role in calming public panic. However, according to Atuahene (2016), the impact of the infantilisation of society is dignity deprivation and dehumanisation. Therefore, this phenomenon is not only a linguistic problem but also a sociological problem that deserves concern.

DISCUSSION

The interpretation of the prototypical meaning by deviating from the context is not sufficient to explain the anti-pandemic neologisms. By combining lexical semantics with lexical pragmatics, we can show the complete lexical meaning of anti-pandemic neologisms. Previous studies of Chinese anti-pandemic neologisms have been characterised by one-sided singularity; this current study is a major upgrade of the study of Chinese anti-pandemic neologisms.

This research presents a panoramic view of the basic lexical meanings, contexts, lexical narrowing, and lexical expansion of Chinese anti-pandemic neologisms by combining the seven groups of semantic meanings of Leech with the seven groups of pragmatic attributes of Hou. This combination and grouping are based on their relevance and similarity, such as the social meaning of Leech and the relevance of Hou. They are both concerned with the use of vocabulary in society and are, therefore, placed in the same group. However, this grouping is not fixed, and other combinations are possible. For example, the conceptual meaning of Leech and the Processibility of Hou can be grouped together. This is also the limitation of this research. In future research, different combinations of Leech's seven lexical meanings with Hou's seven pragmatic attributes will produce diverse content and results. Moreover, Leech's classification of word meanings is not the end of lexical semantics, and there is still room to develop Hou's Seven Pragmatic Attributes and perhaps other important attributes worth discussing (Hou, 2014). Therefore, the study of Chinese anti-pandemic neologisms can also be developed from the semantic or pragmatic theories of other linguists.

It is worth noting that the intersection of cyberspeak and elegant words is a special linguistic phenomenon. The neologisms of the four-character idiom category have both the playful, flirtatious, and light-hearted characteristics of cyberspeak, as well as the classical, elegant, and rich historical and cultural connotations of the elegant word. For example, 蝠为祸始 (bat is the beginning of the disaster) is derived from the original phrase 福为祸始 (happiness is the beginning of misfortune), which is an ancient Chinese philosophy of life reflected in many classical fables and writings, such as "The Old Man from the Frontier Lost His Horse" and the Tao Te Ching. In

Chinese folklore, because 福 (happiness) and 蝠 (bat) are homophonic, bats are considered an auspicious animal and are almost identical in folklore. However, as the pandemic was caused by a virus carried by bats, the word 蝠为祸始 not only has a clear meaning of flirting with the folklore meaning of bats but also has a deep classical philosophical thought. It is both an example of cyberspeak and an elegant word.

In addition, many ancient Chinese words or verses have been given new meanings in the context of the pandemic. Whether these should be included in the category of neologisms requires further investigation. For instance, in a report by the BBC, the ancient Chinese term 市恩 (meaning "to try to win someone's favor") was used to describe China's foreign aid, giving it an ideological connotation (Si, 2020). Another example is the use of a poem by the ancient Silla scholar Cui Zhiyuan in China's aid to Korea: "Great distance cannot separate us; We all live in a united world" (道不远人，人无异国)．In fact, in the context of the pandemic, all these verses can be regarded as a single term, conveying the meaning of foreign aid or solidarity against the pandemic.

CONCLUSION

The large number of Chinese anti-pandemic neologisms, which have had a significant impact on Chinese society, reflects a special and significant linguistic phenomenon on which, in the post-pandemic era, research is still limited and one-sided, and no comprehensive research has emerged. This research analysed and examined the meanings of Chinese anti-pandemic neologisms based on linguistics, using a combination of lexical semantics and lexical pragmatics. Firstly, the definition and scope of anti-pandemic neologisms were clarified. Secondly, their types and forms of creation were analysed, and finally, the Seven Lexical Meanings of Leech (1981) were described as corresponding to and combined with the Seven Attributes of Hou (2014) to show more clearly the lexical meanings and pragmatics of the neologisms in the context of pandemic situations. The results show that most of the neologisms conform to Leech's Seven Lexical Meanings and Hou's Seven Pragmatic Attributes. However, some parts of the neologisms have defects, which are mainly reflected in the three aspects; unscientific word creation, discriminative semantics, and infantilisation. There is still much room for research on Chinese anti-pandemic neologisms to expand. For instance, the contradiction and integration of official and folk discourse (Internet discourse) in anti-pandemic neologisms, the militaristic characteristics of anti-pandemic neologisms, and the vitality of anti-pandemic neologisms in the post-pandemic era are also worthy of in-depth research. Importantly, parody in anti-pandemic neologisms has both lexical and rhetorical characteristics and is of great value in linguistic and Chinese cultural studies.

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