Lexico-Semantic Change in the Kazakh Language of the COVID Era

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Abstract—**This article discusses lexical and semantic changes during the COVID-19 pandemic. In this article, we describe semantic shifts, new concepts, and neologisms associated with the COVID-19 pandemic based on the results of an associative survey. A total of 142 respondents voluntarily participated in our online survey. The term 'coronavirus' was taken as a stimulus word. Respondents had to answer what colour and number the word 'coronavirus' is associated with. The results of the study show that the stimulus 'coronavirus' in the minds of people activates the colours *red, green, black, blue, yellow* and very weakly causes associations with *brown, white, gold, purple, colourless*, as well as the frequency of the number 19. Additionally, according to the results of the study, it can be said that during the COVID-19 pandemic, negative meanings of colourative vocabulary were actualized (except green, because this colour began to symbolize safety), and numbers and some new concepts that have a nonpositive colouring appeared.**

Index Terms—**lexico-semantic change, linguistic innovations, COVID-19, coronavirus, pandemic**

I. INTRODUCTION

As of January 13, 2022, the number of people infected with coronavirus exceeded 315 million, and the death toll was more than 5.5 million (https://covid19.who.int). This makes the COVID-19 pandemic one of the most dangerous events in human history (Poorolajal, 2021). The COVID-19 pandemic has affected the psychology, economy, and lifestyle of people around the world (Dubey et al., 2020; Alonso-Matielo et al., 2021). Additionally, COVID-19 has greatly influenced the use of language and created a specialized discourse (Tan et al., 2020), generating a wide range of new words reflecting the social changes caused by the pandemic (Gustiloetal., 2021). According to Paton (2020), "some of the terms with which we have become so familiar over the past few weeks through the news, social media, and government briefings and edicts have been around for years (many date from the nineteenth century), but they have achieved new and much wider usage to describe the situation in which we currently find ourselves. The compilers of the Oxford English Dictionary (OED) have published an additional issue of words related to COVID-19. The dictionary, along with lexical innovations, indicates the presence of new meanings to already existing words. For example, the meaning of the English word *elbow bump* in 1981 has changed: "Gene Banks of the Duke basketball team speaks of the hand slap, high five,..*elbow bump* and other varieties of shakin". The word *elbow bump* means 'high five'. In the 2020

OED issue, the following definition is given: *elbow bump n. (a)* a blow with or to the elbow; an injury resulting from this; *(b)* a gesture (usually of greeting or farewell) in which two people lightly tap their elbows together as an alternative to a handshake or embrace, esp., to reduce the risk of spreading or catching an infectious disease (https://www.oed.com/view/Entry/60163?redirectedFrom=elbow+bump#eid1305595900). That is, during the pandemic, a new gesture appeared—a greeting associated with security measures. A recent study reports that new words specific to COVID-19 have started to be used daily in Nigerian English (NE) in areas such as education, media, healthcare, and religion (Oluwateniola et al, 2021). Lexical innovations during the COVID-19 pandemic were formed primarily in the English language (Balabekova et al., 2022). For example, Al-Salman and Haider (2021) created a corpus of neologisms related to COVID-19. Their study demonstrated the productivity of word-formation methods of affixation, compounding, blending, clipping, and acronyms in the creation of neologisms, and noted the creativity of the English language and its ability to respond to crisis situations (Al-Salman & Haider, 2021). Another work on neologisms says that new words related to COVID-19 are used in the form of nouns, adjectives, and verbs in social networks and at briefings (Asif et al., 2021). Such lexical innovations, new concepts related to COVID-19, are becoming increasingly widespread 'like a virus' in the modern Kazakh linguistic and cultural space. These innovations covered all spheres of life: economy, education, health, etc. In this article, we will try to show lexico-semantic changes in the language of the COVID-19 epoch based on an associative survey.

II. METHOD

A. Participants

A total of 142 people participated in the study (Among them there are 118 women and 24 men). The average age of the survey participants was 37.3 (16-70). The vast majority of the study participants were students.
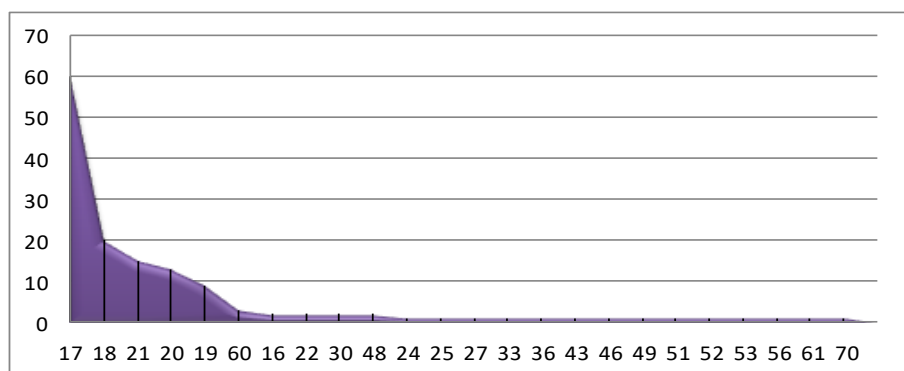

Figure 1 Age of Participants

B. Materials and Questions

In our work, we took the word *coronavirus* as a stimulus. The word coronavirus was first used in the journal *Nature* in 1968 to refer to new viruses (Almeida et al., 1968). Scientists Tyrrell and Fielder (2002) introduced the exact scientific name. The beginning of the use of this word in Kazakh media began in January 2020 (Kazakhstanskaya Pravda, 2020a). According to some reports, *coronavirus* was the most commonly used term in January 2020 (Schweinberger et al., 2021). The main reason why we use the word *coronavirus* as a s*timulus* is because this word is used very often in comparison with others in Internet resources, i.e., We can say it is the most popular in the 'coronalexicon' (for this term, see Gustiloetal., 2021). At the moment (January 23, 2022) in the NOW (News on the Web) case, the frequency of its use is 2524680 (https://www.english-corpora.org/now/).

The main data of the study are the answers in the questionnaire. The questionnaire asked questions about the age and gender of the participant and the study. The research questions were as follows:

Your age?
Your gender?
What faculty do you study or work at?
What colour do you associate with the word 'coronavirus'?
Explain why you associate coronavirus with this particular colour?
What number would you associate 'coronavirus' with?
Why did you choose this number?

With the help of the participants' responses, lexical innovations related to COVID-19 were analysed. Based on these data, new colours, numerical concepts and values were determined. The article also uses materials from dictionaries and scientific papers (Kashgari, 1998; Kononov, 1978; Khassenov, 2021; Levitskaya et al., 2000; Zhanuzakov, 2008).

C. Procedure

The experiment was conducted in October 2021. We have prepared the questions in Google Forms (https://docs.google.com/spreadsheets/d/1gQYVdCnNAuDnl6sPsA2_gEfXynytwCn7KwuT6T7wXIY/edit#gid=10235 17653). The main research questions were related to colours, and numbers were related to colours and numbers. The participants willingly answered the research questions.

D. Data Analysis

For data analysis, we chose Mayring's (2000) qualitative content analysis. A particular advantage of this method is that it allows us to harmoniously combine both qualitative and quantitative indicators. In addition, this method allows you to see the hidden content of the text, something that is not openly stated in the text but is present in it. By systematically assessing the meaningful meaning of the text, it becomes possible not to reduce the analysis of the text only to quantitative indicators. As a result, a theoretical study of the problem under study becomes possible. This makes it possible to see more clearly the interaction between theory and empirical material. A scheme of step-by-step analysis of inductive education of the studied categories is being created. Categories arise from a specific text and develop further in the process of their evaluation (Kirpikov, 2018). The specification of this method is that the researcher 'translates' verbal information into a more objective nonverbal form (primarily quantitative); in the study, there is an ascent from text to nontextual reality (social reality in all its diversity).

III. Results

The COVID-19 pandemic has led to the emergence of new concepts. The virus has not only changed the behavior of society but also formed new concepts in the minds of people in society, that is, speakers. The results of the study show that the *coronavirus* stimulus in people's minds activates the colours *red, green, black, blue, yellow* and very weakly causes associations of *brown, white, golden, purple, colourless.*
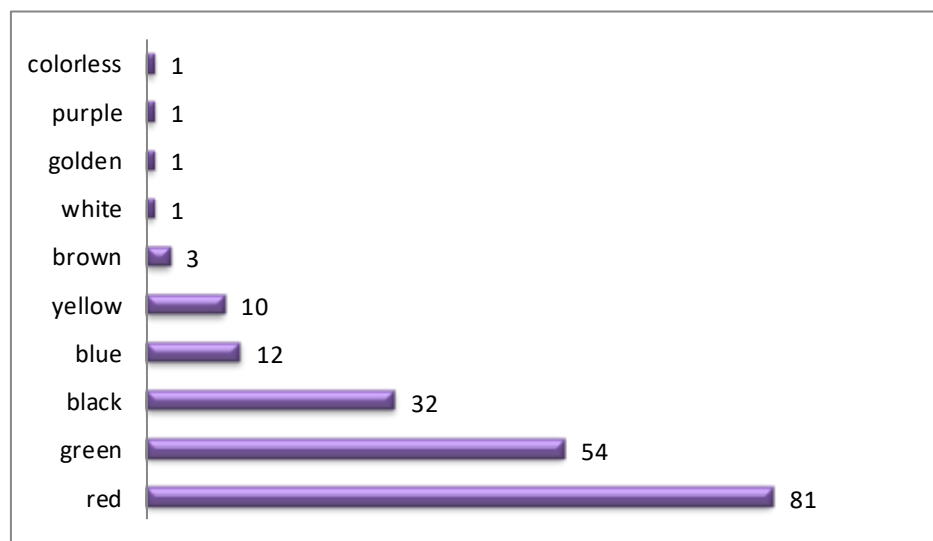

Figure 2 The Result of Colour Associations

During the COVID-19 pandemic, we see the activity and frequency of using the number 19. In addition, the results of the study showed that *coronavirus* is associated with 2020, 0, 3, 2019, 8, 1, 13, 7, 6, 20 and other figures (results in Figure 3).
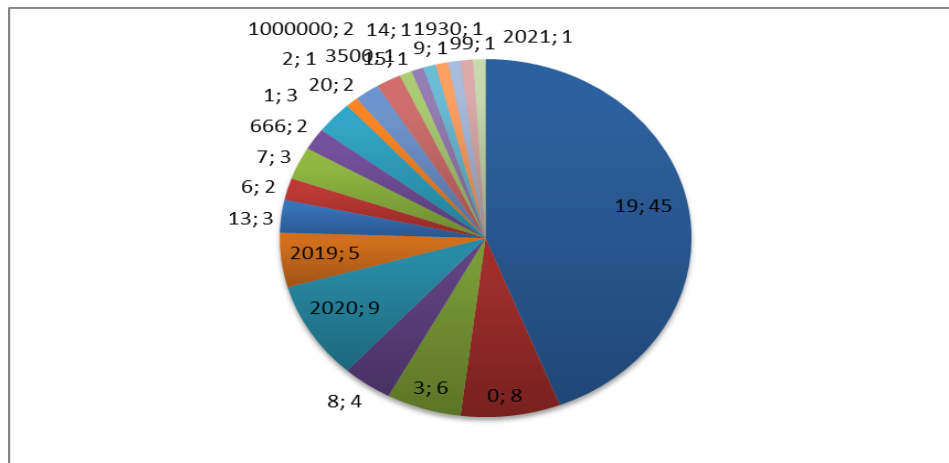
Figure 3 The Result of Numerical Associations

IV. DISCUSSION

A. Colour

Colour symbolism occupies a special place in the culture of any nation. This has been mentioned in many studies. The semantics of flower names have both positive and negative connotations. However, the COVID-19 pandemic that is currently being experienced shows that negative meanings of colourative vocabulary have been actualized, and some new concepts have appeared. In our study, the colour that caused the most reactions was red. Of the 142 respondents, 81, that is, the vast majority of participants, associated *coronavirus* with *red*.

Жауап 12 – Себебі қызыл түс қанның түсі қорқынышты болғандықтан. Коронавирустен дәл солай қорқамыз

[Answer 12 – because red is a terrible colour, the colour of blood. We are also afraid of the coronavirus].

Жауап 22 – Коронавирустан көп адам қайтыс болды. Ал өлім десе көз алдыма қан келеді. Қанның түсі қызыл

[Answer 22 – more people have died from the coronavirus. In addition, death is blood. Blood colour red].

Many respondents gave similar answers. In Western countries, red is a symbol of martyrs and sacrifices, especially because of its association with blood (Feisner, 2006). In some regions of Africa, red is the colour of mourning, meaning death (Bradley, 2001). Kazakhs used to put flags (signs) around the yurt, denoting the death of relatives (Kaidar, 2009). By colour, people determined the age of the deceased. A stranger who came to the village (aul) knew by the colour of the mourning flag what age a person was. The red flag symbolized the death of the young. In stable expressions in the Kazakh language, the word red is associated with war, scandal, and fight: *қызыл қырғын* 'war', 'massacre'; *қызыл қанға боялды* 'I was covered in blood because of the fight'. These concepts were associated with the *coronavirus* stimulus. During the COVID-19 pandemic, there was no war in which human blood was shed. However, most of the responses in our study showed associations with blood. Robertson (1996) writes that red causes the strongest reaction among all colours, and the reaction level gradually decreases with orange, yellow and white. In this regard, the red colour is used to indicate the maximum level of warning, danger. For example, the most dangerous area of the virus is marked in red.

One of the colours actualized in people's minds during COVID-19 is green. This colour is primarily associated in human consciousness with concepts related to summer (light, forest, leaf, grass, garden, cucumber, etc.) (Cherkasova, 2008). From the results of our study, it can be seen that in the following year (2021), this colour began to be associated with a *virus*, a *bacterium*.

Жауап 11 – Вирустың, бактерияның түсі елестейді

[Answer 11 – The colour of the virus, bacteria].

Жауап 13 – Вирустарды жасыл түспен елестетемін

[Answer 13 – I represent viruses in green].

Жауап 18 – вирус жасыл тусти

[Answer 13 – The virus is green]

Жауап 49 – Жасыл түспен бактерияларды белгілейді

[Answer 49 –Mark bacteria in green].

Жауап 129 – Жасыл себебі вирустардың көбісі жасыл түрде бейнеленеді

[Answer 129 - Green, because most viruses are displayed in green].

Жауап 134 – Вирустын суретті жасыл болып шығады барлық жақта

[Answer 134 – The image of the virus in all countries is depicted in green].

The green colour also began to be used as a symbol indicating 'safety', 'a healthy person'.

Жауап 70 – Жақсылық нышаны болса екен

[Answer 70 – A symbol of goodness].

Жауап 105 – Ауырмаймын

[Answer 105 – I'm not sick].

Жауап 140 - Казир тек жасылдар гана емин еркин журетин болды тек солар гана адам сиякты сондыктан сол туспен байланыстырдым

[Answer 140 – Now only the greens can move freely.Only they are like people, so I associated them with this colour].

Studies have shown that black is a symbol of evil, death and danger in the traditions of many peoples (Kassia, 2016; Kaidar, 2009). In the Turkic languages, as Kononov (1978) defined, the word *qara* (black) has approximately twenty meanings, the main of which are 1) dark, gloomy, 2) severe, and 3) sad, unhappy. The Kazakh people had traditions such as *kara zhamylu* (literally: to wear black, to dress in mourning) and *kara tigu* (literally: mourning/black flag) (Zhanuzakov, 2008; Kaidar, 2009). In the old days, when a person died at home, a mourning flag was placed outside the yurt. As previously reported, the symbolism of colour played an important role in the picture of the Kazakh world and meant the age of the deceased: *if the deceased is old, they put a white flag, if young- a red flag. If the deceased is a middle-aged person, a red and white flag was put up (one side is white and the other is red)*. However, their common name was *qaraly tu* (mourning flag), literally meaning *black flag*. It was a message about a tragedy. Such symbols, meanings associated with the colour black, the word *black*, belong to universal concepts inherent in many peoples of the world. These values were also updated during the COVID-19 pandemic.

Жауап 2 – Мен үшін қауіп сол түстермен байланысты. Коронавирус әсерінен біршама адамнан айырылғанымдықтан шығар. Айырылу қауіпі де бірнеше рет төнген болатын. Мен үшін қауіп пен қорқыныштың түсі

[Answer 2 – For me, the danger is connected with these same colours. Most likely because I lost several people due to the coronavirus. More than once threatened with loss. The colour of danger and fear for me].

Жауап 9 – Пандемия кезінде көп туысқан мен жолдастарымыздан айырылып қалғандықтан

[Answer 9 – Because we lost many relatives and comrades during the pandemic].

Жауап 16 – Себебі арты өлімге ауруға апарғаннан соң қараңғылықты елестетемін

[Answer 16 – Because it leads to death and illness, I imagine the darkness].

Жауап 19 – Қара түс жақсылықты көрсетпейді

[Answer 19 – The black colour does not bode well].

Жауап 44 – Бала кезден адамдар санасында барлық нәрсені жақсы - жаман деп екіге бөледі. Осы қасиетті бейнелеу үшін түстерді де қолданады. Яғни қара жаман, ақ жақсылық дегендей...

[Answer 44 – Since childhood, people divide everything in their minds into good and bad. People also use colours to represent this quality. That is, black is bad, white is good...].

Жауап 73 – Қара түс мен үшін қорқыныш түсі

[Answer 73 – Black is the colour of fear for me].

In Kazakh, the word *qaraly khabar* means 'mournful message', 'mourning message' (lit. black news). This is also reflected in the responses of respondents.

Жауап 40 – Қанша үйде қаралы хабар келуде

[Answer 40 – In many homes, a mourning (black) message comes].

Жауап 75 – Қаралы хабардан соң

[Answer 75 – After the mourning (black) message].

The document, which tells about the death of a soldier at the front during the Great Patriotic War, was called 'karakagaz' (mourning/black letter). This unit was a neologism of that time, which arose on the basis of the meaning of the word black 'sad', 'mourning'. COVID-19 became a trigger that caused, due to emotional shock, the "temporary phrase" *qara paket* (black package) (human bodies packed in a black package).

Жауап 139 – Қара пакет.

[Answer 139 – Blackpackage].

In society, the information in one of the morgues lays the bodies of people wrapped in a black bag, illustrated by a photo, quickly spread over the Internet (Azattyq radiosy, 2020). The photo remained in the minds of some people as a "temporary sign" of this disturbing period full of uncertainty.

Figure 4 People in the Morgue, Packed in a Black Bag (Azattyq radiosy, 2020)

As is known, all over the world, the zones of spread of coronavirus and their display on television, in mass media are based on the principle of traffic lights. This, as well as the appearance of the Kazakh application *Ashyq* (an analogue of the British NHS COVID Pas), contributed to the emergence of the association of yellow and blue colours. The *Ashyq* mobile application allows, through the use of a QR code and integration with the general database of the Ministry of Health of the Republic of Kazakhstan, to determine the status of a visitor: whether he or she is currently a carrier of the virus or not. The colours in the *Ashyq* application display the visitor's status. The red status indicates restriction of movement and compliance with a strict regime of home isolation for persons under outpatient supervision. Yellow – partial restriction of movement - the user is indicated in the PCR database as a contact: visits to grocery and hardware stores, pharmacies are allowed no further than 500 meters from the place where the patient observes the home isolation regime. Blue – there are no restrictions on movement for this status, except in places where PCR is mandatory. The green status means that there are no restrictions on movement, and this user is indicated in the database as having passed the PCR test with a negative result for COVID-19.

Figure 5 Application Ashyq (Dastur, 2021)

Жауап 68 – «Ашық» қосымшасы мен орналасу аймағына байланысты
[Answer 68 – Connections with the application "Ashyq" and the area of distribution]

Жауап 128 – Вакцина салуға байланысты. Егер жасыл болса, екпе алды, қызыл болса, короновируспен ауырған, көк короновируспен ауырмаған, бірақ екпе алмаған дегенді білдіреді
[Answer 128 –Depending on the vaccine. If it is green, it means that you are vaccinated; if it is red, it means that you have contracted coronavirus; blue means that you have not been infected with coronavirus but have not been vaccinated].

The Kazakhs' use of blue instead of green is a distinctive feature. For example, the *green market* in Russian is translated into Kazakh as the *blue market* (kok bazar). The same phenomenon was observed in the responses of the participants, that is, the *virus* and the *bacterium* were described in blue (for example, answers 53, 68, 87). The language innovation caused by the COVID-19 pandemic is a description of the area of spread of the virus by the names of colours, i.e. Red means 'danger zone', yellow means 'medium danger', and green means 'safe'. If this is displayed according to statistics, then it looks like this:

More than 50 cases per 100 thousand population, R is more than one – this is a red zone.

From 25 to 50 cases per 100 thousand people, R is more than one - this is the yellow zone.

Less than 50 cases per 100 thousand people, R less than one – this is a green zone (Sputnik, 2020).

Жауап 6 – Короновирустың таралу деңгейі осы үш түспен байланысты

[Answer 6 – The level of spread of the coronavirus is associated with these three colours]

Жауап 27 – Себебі, бұл коронавируспен ауырған Қазақстан аймағының түстері болған. Үнемі жаңалықтардан осы түстер жайлы баяндайтын.

[Answer 27 – Because they were the colours of the region of Kazakhstan, charged with coronavirus. They were constantly talking about these flowers in the news].

The designation of a dangerous or safe zone in three colours (red, yellow, green) began to be used during the COVID-19 pandemic. If we pay attention to the studies related to colour symbolism, it is determined that black means north, white (in some sources yellow) - west, red - south, blue - east (Gabain, 1962; Kononov, 1978; Pritsak, 1954; Khassenov et al., 2022).
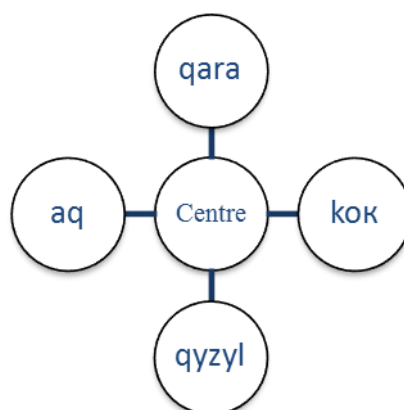

Figure 6 Classification of Colours by Cardinal Directions: 'qara' - black, 'kok' - blue, 'qyzyl' - red, 'aq' – white

Kononov (1978) proves that the word *qara* (black) means 'north'. For example, names formed in combination with the word *qara* (black): *Qara Orda* (Black Horde) – 'Northern Horde', *Qara kum* (Black Sand) – main horde; in the Turkish and Kazakh languages, *qara zhel* (yel) 'cold north wind'; the word *qara* as part of oronyms, hydronyms, ethnonyms also denote the northern direction. According to von Gabain (1962), according to the Chinese tradition among the Turks, the word kyzyl red symbolized the south. She considers the name of the desert *Kyzylkum* to be similar to the "Southern Sand". Kononov (1978) argues that there are no data in the Turkic languages indicating the 'southern' meaning of the word *qyzyl*. In the names of toponyms in southern Turkey, the predominance of the word *qyzyl* was observed (Jahit, 2013). The word *aq* is found in many toponyms, hydronyms, and ethnonyms. According to the landmark, the white symbolizes the 'west'. For example, the Mediterranean Sea in Turkey is also called *Ak deniz* - the Western Sea. The Caspian Sea for a long time was called *Aq Teniz* - the White Sea. Additionally, the word *saryg* (yellow) also means the 'west'. In the ancient Khazar and Bulgarian languages, the word *saryg* (yellow) means 'white' (Kononov, 1978). However, the word *zhasyl* (green) does not occur in the symbolism of space at all. As we have already noted, the Kazakh people (in general, the Turkic peoples) used *blue* instead of *green*. *Kok* (blue) denotes the east. Notably, the COVID-19 pandemic has given rise to a new territorial designation. At the moment, the phrase-calque paper *zasyl aymaq* (green zone) has the meaning of 'safe territory' for native Kazakh speakers. In addition, *qyzyl aymaq* (red zone) and *sary aymaq* (yellow zone) belong to the category of phrases that have not been used before.

The results of the study showed that colours such as *white, purple, brown, golden, and colourless* lie in the passive layer of linguistic consciousness. The reason why *white* is not relevant during the COVID-19 pandemic is that in human consciousness, this colour is a symbol of goodness and light. Since the pandemic has led to the death of many people and is a catastrophe for all mankind, we believe that the "finding" of *white* in the periphery of *linguistic* consciousness is natural. In the Kazakh language, as part of stable phrases, the word *qonyr* (brown) means 'simple', 'modest', and the words *purple, colourless, golden* are not actively used, and these colours have no symbolic potential.

B. Numerical

Since ancient times, people have attached special importance to the symbolism of numbers. Each nation attaches to a specific number a symbolic, sacred meaning associated with the perception of the environment, natural phenomena, knowledge, and faith. The mysterious mystery of nature is hidden in numbers (Khassenov et al., 2021). For example, the origin and creation of the world is connected with the numbers in the sacred books. The Bible says that the universe was created in six days. The narrative ends with the first three verses of the second chapter of Genesis, where it is said that the Creator "rested on the seventh day from all His works that He had done", and "God blessed the seventh day and sanctified it, for in it he rested from all His works that God had created and created" (see Genesis 1:1-2:3). That is, the seventh day is the 'act of creation'. For many people, seven is sacred, sacred. Similarly, the history of other numbers has its own motives to be sacred and symbolic. During the pandemic, number 19 became a landmark (iconic). The vast majority of our respondents linked the *coronavirus* stimulus to the onset of the COVID-19 pandemic.

Жауап 16 – Себебі 2019 жылы шықты
[Answer 16 – Because it started in 2019].
Жауап 18 – Өйткени сол уакытта басталды
[Answer 18 – Because that is when it started].
In some answers, it is written that they took from the title COVID-19.
Жауап 12 - Ковид 19 атымен
[Answer 12 –Connected by the title of Covid 19].
Жауап 13 - Covid 19 дегенен алдым
[Answer 13 –Took from COVID 19].
Жауап 37 - Ковид 19. 2019 жылы індет ресми түрде басталды деп есептеледі
[Answer 37 –Covid 19. It is believed that the epidemic officially began in 2019].
In some reactions, the *2020* response is due to the spread of the pandemic in the Republic of Kazakhstan, since officially the first patient with coronavirus infection was registered in Kazakhstan on March 13.
In some reactions, the answer *2020* is due to the spread of the pandemic in the Republic of Kazakhstan, since the first patient with coronavirus infection was officially registered in Kazakhstan on March 13 (Kazakhstanskaya Pravda, 2020b).
Жауап 15 – Себебі 2020 жылы пайда болған ауру
[Answer 15 – Since the disease appeared in 2020].
Жауап 50 – Өйткені 2020 жылы "короновирус" деген инфекциясы біздің елімізге келді
[Answer 50 –Because in 2020 the so-called "coronavirus" infection came to our country].
During the spread of the coronavirus, many people did not believe in it, some said that it was fiction, some believed that it was a virus that scientists invented to destroy and reduce the number of people around the world, and there are still people in society who do not believe in the existence of the virus. This group of people who adhere to conspiracy theory is represented in the answers by the number 0.
Жауап 19 - Себебі ғалымдардың қолымен пайда болған вирус түрі
[Answer 19 –Because the virus was created by the hands of scientists].
Жауап 23 – Бар-жоқ тағы белгісіз
[Answer 23 –Whether there is or not is still unknown].
Жауап 121 – Себебі, сол аурудан ештеңке болмады
[Answer 121 –Because nothing happened from this disease].
Жауап 141 – Үйткеніі ойдан жасап алған өмірде жоқ қорқыныш 0 жоқ
[Answer 141 –Because it's fiction. No in life. Fear. No 0].
The number 0 is a symbol of nothing, emptiness. This symbolic meaning is reflected in one answer.
Жауап 10 – "0" санымен байланыстырған себебім, бұл вирус бізде көптеген қиындықтар, апаттар, кісі өлімдерін алып келіп жатыр. "0"саны жоқ деген ұғымды білдіргендіктен, бұл вирустың да солай жоғалғанын қалаймын.
[Answer 10 –The reason for which I was associated with the number "0" is that this virus brings us many troubles, catastrophes, murders. Although I have the appearance that the number "0" does not exist, I want this virus to disappear as well].
Since the beginning of the COVID-19 pandemic, many people have died. This caused people to panic. Here, we see the appearance of new semes (meaning) of the number 0, as 'destruction', 'catastrophe' due to a large number of deaths.
The values of 1, 3, 6, 8, 13 and other numbers in the study indicate that they have a negative connotation. The number 1 was used mainly in the values 'first', 'main', depending on the situation (answers: 111, 114, 115, 138). Negative colouring prevails in the respondents' emotions. For example, the problem occupied first place (answer: 114). In the 72nd answer was given: *Zhalgyz kozdi Zhalmauyz* (One-eyed old woman Zhalmauyz). In the tales of the Turkic peoples (Kazakh, Kyrgyz, Uzbek, Uighur, Nogai, etc.), the demonic image of an old woman is depicted as a seven-headed, terrible hero sucking human blood. Most likely for this reason, one respondent associated the *coronavirus* with an evil, *terrible Zhalmauyz.*
Number 3 in the study was associated with the duration of the pandemic (response 3), failure (4), and threat (47). For some respondents, the number 6 represented the virus itself and magic.
Жауап 21 – Магиямен байланыстырамын
[Answer 21 – I associate with magic].
Жауап 88 – Білмеймін, вирустың бейнесі дөңгеленгеннен болар, дөңгеленіп жазылатын сан іздеген шығармын. Санасыз түрде 6 саны ойыма түсті
[Answer 88 – I do not know, maybe the virus image is rounded, I'm probably looking for a rounded number. Involuntarily, the number 6 came to my mind].
Both answers here are related to each other. Because in the minds of the participants, it seems to us, the virus was in the form of a hexagon (the word *corona* in Russian means 'wreath', 'crown', and the shape resembles a hexagon). However, two participants gave two different contents: one connected magic with the *corona*, and the other described the virus through a figure with six corners.

The number 8 means 'infinity', and it has a positive value. However, in our experiment, we see that this number, while retaining the value 'infinity', has the opposite association.

Жауап 2 – Шексіз. Шешімі жоқтай көрінді. Жақындарымызды шексіздікке алып кетті.

[Answer 2 – Without borders. It seemed that there was no solution. Our close ones took infinity].

Жауап 5 – Шексіздік, себебі көптеген жағдайлар орын алды

[Answer 5 – Infinity, because much has happened].

Жауап 65 –бұл шексіздік сияқты

[Answer 65 – It is as infinity].

The negative nature of the concept of 'infinity' in these answers lies in the perception of the coronavirus as 'inexhaustible', i.e., 'an infinite period of disease', i.e. Number 8 has become enantiosemic in semantics.

Other numbers in the research paper also have negative values. For example, the sema 'many' is represented by the numbers 99 (answer: 9) and 1000000 (answers: 61, 67, 119). In addition, coronavirus infection was associated with the famine of the 1930s (answer: 75) and the number of all oblasts (regions) in Kazakhstan (answer: 27. There are only 14 regions).

V. CONCLUSION

During the COVID-19 pandemic, some lexical innovations appeared. The results of our research show that new semes have been added to the already existing meanings of words, and new concepts have begun to form. Because COVID-19 is a global pandemic, the basic concepts came through English, i.e., a pluricentric language. As an example, the concepts of *qyzyl aymaq* (the red zone), *sary aymaq* (the yellow zone), *zhasyl aymaq* (the green zone) or green (zhasyl) colour began to symbolize 'security'. Second, new concepts have appeared based on existing word usage in the Kazakh language and in Kazakh society (the application *Ashyq*, the black package, 'infinity', etc.). The research work once again clearly confirms that the *coronavirus* stimulus is characterized by a negative colouration. During the COVID-19 pandemic, negative (-) values of *red, green, black* colours, as well as some numerals, appeared and became active.

REFERENCES

[1] Almeida, J.D., Berry, D.M., Cunningham, C.H., Hamre, D., Hofstad, M.S., Mallucci, L., McIntosh, K. & Tyrrell, D.A. (1968). Virology: Coronaviruses. *Nature*, *220*(5168). 10.1038/220650b0
[2] Alonso-Matielo, H., da Silva Oliveira, V.R., de Oliveira, V.T. & Dale, C.S. (2021). Pain in Covid Era. *Front. Physiol. 12*:624154. doi: 10.3389/fphys.2021.624154
[3] 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. 10.22363/2687-0088-2021-25-1-24-42
[4] Asif, M.,Zhiyong, D.,Iram, A.,Nisar, M. (2021). Linguistic analysis of neologism related to coronavirus (COVID-19). *Social Sciences & Humanities Open,4*(1). https://doi.org/10.1016/j.ssaho.2021.100201
[5] Azattyq radiosy (n.d.). *BQO densaulyq basqarmasyz helidetarapketkenmәjitkha navideosynyng Aqsajdatүsirilgeninrastady.* Retrieved July 17, 2020 from https://www.azattyq.org/a/30732642.html
[6] Balabekova, M., Khan, N., Tuite, Y., Kenzhegaliev, S., Zuyntayeva, Z., Kaliev, B., & Smagulov, Z. (2022). The Spread of English Language Elements During the COVID-19 Period. *Theory and Practice in Language Studies*, *12*(12), 2583-2590.
[7] Bradley, C.G. (2001). *Western world costume*. Mineola: Dover Publ.
[8] Cherkasova, G.A. (2008). *Russkij sopostavitel'nyj associativnyj slovar'.* Moscow.
[9] Dastur (n. d.). *HQO-lary azamattardy Ashyq qosymshasy arqyly qabyldajdy.* Retrieved June 14, 2021 from https://dasturkb.kz/%D1%85%D2%9B%D0%BE-%D0%BB%D0%B0%D1%80%D1%8B-% D0% /
[10] Dubey, S., Biswas, P., Ghosh, R., Chatterjee, S., Jana, M., Chatterjee, S., Lavie, C. J. (2020). Diabetes & metabolic syndrome: Clinical research & reviews psychosocial impact of COVID-19. *Diabetes & Metabolic Syndrome: Clinical Research & Reviews, 14*(5), 779-788. 10.1016/j.dsx.2020.05.035
[11] Feisner, E. A. (2006). *Colour* (2nd ed.). London: Laurence King.
[12] Gabain, A.V. (1962). Vom Sinn symbolischer Farbenbezeichnung. *Acta Orientalia Academiae Scientiarum Hungaricae, 15,* 111-117.
[13] Gustilo,L., Pura, M.C., Biermeier, T. (2021).Coronalexicon: Meanings and Word-formation Processes of Pandemic-related Lexemes across English Varieties. *3L: The Southeast Asian Journal of English Language Studies, 27*(4), 1-15. http://doi.org/10.17576/3 L-2021-2704-01
[14] Jahit, H. (2013). Semantika cveta v tyurkskoj toponimike. *Prepodavatel' XXI vek, 3,* 338-344.
[15] Kaidar, A. (2009*). Kazaktar ana tili aleminde.* Almaty: Daik-Press.
[16] Kashgari, M. (1998). *Dictionary of the Turkish language. Vol. 1.* Almaty: Khant.
[17] Kazakhstanskaya Pravda (n. d.). *Kazakhstanis are advised to limit trips to the Chinese province of Hubei, where the coronavirus is raging.* Retrieved January 21, 2020 from https://www.kazpravda.kz/news/obshchestvo/kazahstantsam-sovetuut-ogranichit-poezdki-v-kitaiskuu-provintsiu-hubei-gde-bushuet-koronovirus
[18] Kazakhstanskaya Pravda (n. d.). *V akimate Almaty otvetilinavoprosy o koronaviruse, volnuyushhie naselenie goroda.* Retrieved March 13, 2020 from https://kazpravda.kz/news/obshchestvo/v-akimate-almati-otvetili-na-voprosi-o-koronaviruse-volnuushchie-naselenie-goroda
[19] Khassenov, B. (2021). *Archetypal nature of sounds of the Kazakh language.* Karaganda.
[20] Khassenov, B., Adilova, A., Takirov, S.& Kaukerbekova, B. (2021). A new vision of numerical symbolism in calendar and life

cycles. *European Journal of Science and Theology, 1*(17), 93-102.

[21] Khassenov, B., Adilova, A., Rapisheva, Zh. (2022). Colour symbolism in Turkic culture: a new look in the reconstruction of colour designation. *Pertanika Journal of Social Science and Humanities, 30*(4), 1753-1766. https://doi.org/10.47836/pjssh.30.4.15

[22] Kirpikov, A. R. (2018). Qualitative content analysis as a research method. In *XXI International Conference in memory of Professor L. N. Kogan "Culture, personality, society in the modern world: methodology, empirical research experience"*, March 22-23, 2018, (pp. 67-74). Yekaterinburg: UrFU.

[23] Kononov, A.N. (1978). Semantics of colour designations in the Turkic languages. In *Turkological Collection. 1975* (pp. 159-169). Moscow: Nauka.

[24] Levitskaya, L.S., Dybo, A.V., Rassadin, V.I. (eds.) (2000). *An Etymological Dictionary of the Turkic languages: Common Turkic and inter-Turkic bases in the letter "Q".* Moscow: Languages of Russian culture.

[25] Mayring, P. (2000). Qualitative Content Analysis [28 paragraphs]. *Forum Qualitative: Qualitative Social Research*, *1*(2), Art. 20, http://nbn-resolving.de/urn:nbn:de:0114-fqs0002204. (20.11.2021)

[26] Oluwateniola, K., Adebola, A. &Akinniyi, A. (2021). "Someone has been coronated" Nigerian English lexical innovations in the COVID-19 Pandemic. *Cogent Arts & Humanities, 8*(1). 10.1080/23311983.2021.1947559

[27] Paton, B. (2020). *Social change and linguistic change: The language of Covid-19 [Web log post].* Oxford English Dictionary. Retrieved https://public.oed.com/blog/the-language-of-covid-19 (12.11.2021)

[28] Poorolajal, J. (2021). The global pandemics are getting more frequent and severe. *Journal of Research in Health Sciences, 21*(1). doi:10.34172/jrhs.2021.40

[29] Pritsak, O. (1954). Orientierung und Farbsymbolik. *Seculum, 5,* 376–383. https://doi.org/10.7788/saeculum.1954.5.jg.376

[30] Robertson, S.A.(ed.) (1996). *Contemporary ergonomics*. London: Taylor & Francis.

[31] Schweinberger, M., Haugh, M., Hames, S. (2021). Analysing discourse around COVID-19 in the Australian Twittersphere: A real-time corpus-based analysis. *Big Data & Society*. https://doi.org/10.1177/20539517211021437

[32] St. Clair, K. (2016). *The Secret Lives of Colour*. London: John Murray.

[33] Sputnik (n. d.). *V krasnoy zone regionov net.* Retrieved October 22, 2020 from https://ru.sputnik.kz/health/20201021/15262454/V-krasnoy-zone-regionov-net--Minzdrav-Kazakhstana.html

[34] Tan, K.H., Woods, P., Azman, H., Abdullah, I., Hashim, R., Abdul Rahim, H., Mohd Said, N. E., Said, M., Lew, R., Kosem, I. & Hua, K. (2020). COVID-19 insights and linguistic methods. *3 L: The Southeast Asian Journal of English Language Studies, 26*, 1-23. https://doi.org/10.17576/3 L-2020-2602-01.

[35] Tyrrell, D.A. & Fielder, M. (2002). *Cold Wars: The Fight Against the Common Cold*. Oxford University Press.

[36] Zhanuzakov, T. (2008). *Explanatory Dictionary of the Kazakh language.* Almaty: Dike-Press.

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