WAYS OF CREATING NEOLOGISMS IN RAY BRADBURY'S NOVELS "FAHRENHEIT 451" AND "THE MARTIAN CHRONICLES"

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INTRODUCTION

The continuous development of language is a crucial condition for its existence, manifested in the emergence of new words. The process of exploring the world, the introduction of new concepts, societal changes, scientific and technological progress occur continuously, demanding the language to provide the necessary number of new lexical units. This led to the emergence of neology as a branch of lexicology (the science of new words). The works of the French researcher A. Darmster made a significant contribution to the theory and practice of neology. American and English linguists have also achieved success by diligently developing lexicographical aspects of neologisms (compiling dictionaries of new words and supplements to explanatory dictionaries).

However, the theory of neology has not yet formed as an independent field. On average, over 800 new words appear in the English language each year – more than in any other language in the world. This fact requires English linguists not only to record new lexical units but also to study their qualities, formation, and functioning. Neologisms usually go through several stages of socialization and lexicalization before being included in the neologism dictionary¹.

Among the problems and tasks of neology, the following can be highlighted:

1. Identifying and correctly explaining the meanings of new words;

2. Formulating new trends in language development based on new linguistic units;

3. Determining the ways of their formation.

¹ О. Дзюбіна. Проблематика визначення терміна «неологізм» (на матеріалі англійської мови). *Філологічний дискурс*. 2017. № 6. С. 221–228.

Neologisms are a characteristic feature of works in the science fiction genre. The use of numerous innovations serves as a indicative characteristic of the author's individual style and is an integral part of the linguistic portrayal of the described world and its peculiarities. Therefore, identifying and explaining authorial neologisms (occasionalisms) is important and relevant at all times.

Despite the prejudiced attitude of linguists in the 18th century towards the phenomenon of language neologization (it was believed that neologisms "ruin" the national language), the replenishment of vocabulary is a historically inevitable process necessary for the language to meet the needs of society in communication and in consolidating the results of understanding reality, in the development and enrichment of the nation's culture.

The process of exploring the world, the emergence of new concepts, changes in societal life, progress in science and technology occur continuously, requiring the language to provide speakers with the necessary number of new lexical units. A large number of new words appearing annually in the English language demands researchers not only to document but also to analyze them.

Processes of integration, globalization, computerization, and politicization require the language to provide speakers with the necessary number of new lexical units. The large number of new words appearing annually in the English language demands researchers not only to document but also to analyze them, attempting to correspond to the trends in the development of the English language. English and American linguists such as J. Algeo, R. Baayen, G. Cannon, C. Cutler, W. Lee, J. Simpson, and others have dealt with practical lexicographic problems of neologisms.

1. Neologisms formed by compounding

As already mentioned, an occasionalism is a neologism created by the author of a literary work with a specific stylistic purpose. During the analysis of the material, three main methods of neologism formation were identified. The first group consists of neologisms formed by compounding, the second group includes neologisms formed through semantic innovation, and the third group encompasses artificially created neologisms.

The first group of occasionalisms is formed through compounding. This method involves creating a compound word in which the lexical meanings of both components merge to form a new semantic unit with a novel meaning. These elements are used to diversify the lexicon that the author employs in their invented context and composition, while simultaneously linguistically reflecting potential innovations within the imagined world.

Examples belonging to this group include:

1. "[...] the silent, **air-propelled train** slid soundlessly down its lubricated flue in the earth and let him out with a great puff of warm air"².

"Air-propelled train" (noun phrase) is a neologism that denotes a fictional type of transportation somewhat similar to modern subway systems. According to the context, it can be inferred that the term's name is derived from the principle of the transport's operation. The "air-propelled train" moves through a powerful stream of air in underground tubes. While the relevance of this neologism to the plot may be minor, it allows for a deeper exploration of the complex structure of Bradbury's created microcosm.

Due to regular usage of this mode of transportation in the narrative, the term "air-propelled train" has been given several synonyms by the author:

1."Sometimes I ride **the subway** all day and look at them and listen to them", The term "subway" of American origin is used to name the urban railway system where electric trains move through tunnels underground. Due to a similar purpose and operating principle, the term was employed as a synonym for the neologism "air-propelled train"³.

2. "Now as the vacuum-underground rushed him through with a hot whispering".⁴ According to the Cambridge Dictionary, "vacuum" means "a space without any gas or other matter in it, or space from which most of the air or gas has been removed"⁵. Given the specificity of the fictional transport's operation (movement through tunnels powered by a strong air stream from underground tubes), the author found it appropriate to use this term as a synonym for the neologism "air-propelled train."

3. "There were people in the suction train but he held the book in his hands,".⁶ According to the Cambridge Dictionary, "suction" means "the act of removing air from a space resulting in a lower pressure in that space, either causing liquid, gases, or other substances to enter, or causing two surfaces to stick together". Therefore, this term is one of the possible synonyms for the "*air-propelled train*" due to the specific operation of this fictional transportation.

4. "they did not run, there was no place to run; the great air-train fell down its shaft in the earth".⁷ The term "**air-train**" is also an apt synonym as it encompasses both the name of the transportation and the means by which it moves through underground tunnels.

² Bradbury R. Fahrenheit 451. London: HarperCollins Publishers, 2008. P. 10.

³ Ibid. P. 43.

⁴ Ibid. P. 102.

⁵ Cambridge Dictionary. URL: https://dictionary.cambridge.org (дата звернення: 14.2.2024)

⁶ Bradbury R. Fahrenheit 451. London: HarperCollins Publishers, 2008. P. 102.

⁷ Ibid. P. 103.

5. "For my ears when I ride the subway-jets"⁸. "Subway-jets" can also be considered an occasionalism formed by compounding. It provides an explanation of the conditions and operating principles of the "air-propelled train," making it a suitable synonym.

6. "He put his hand into the glove-hole of his front door and let it know his touch"⁹. "Glove-hole" (noun) is the designation for a technological device. In the plot, the operation of the "glove-hole" involves reading fingerprints or the entire hand and granting access to any premises. Although this device exists and is actively used today, at the time of the nove's publication, fingerprint technology was only utilized for forensic purposes.

7. "Have you ever watched the jet cars racing on the boulevards down that way?" 10 .

"Jet car" (noun phrase) is a neologism that denotes a fictional type of private transportation. In the plot, it may achieve high speeds, unlike other classes of vehicles mentioned in the novel. For instance, "beetle"¹¹ or "beetle car" refers to the vehicles used by firefighters.

"The jet-bombs going over, going over, going over, one two, one two, one two, six of them, nine of them, twelve of them, one and one and one and another and another and another, did all the screaming for him".

"*Jet-bomb*" (noun phrase) is a neologism representing a type of explosive bomb designed to travel through the air along a predicted trajectory. In the plot, the country is on the brink of another atomic war, and the city is frequently bombed:

"The bombers crossed the sky and crossed the sky over the house, gasping, murmuring, whistling like an immense, invisible fan, circling in emptiness".

"The firehouse trembled as a great flight of jet planes whistled a single note across the black morning sky".

"Jet planes" (noun phrase) are airplanes propelled by air-reactive engines. At the time of writing and publication, the term was considered a neologism, but after stages of visualization, acceptance, and lexicalization, it entered normal language use. As mentioned before, in the plot, the country is on the brink of atomic war, and the city is often bombed by such planes:

8. "There was a shriek and the jets from the city were gone overhead long before the men looked up".

"Just had another call on the old ear-thimble".

⁸ Bradbury R. Fahrenheit 451. London: HarperCollins Publishers, 2008. P. 110.

⁹ Ibid. P. 17.

¹⁰ Ibid.

¹¹ Ibid. P. 50.

"Ear-thimble" is a neologism formed by creating a new compound noun. According to the Cambridge Academic Dictionary, a "thimble" is "a small, hard cover, shaped like a cup, which fits over the end of a finger to help you push a needle through material when sewing". From this information, English readers can have a general idea of what this neologism means. "*Ear-thimble*" is a small cup-shaped cover that people wear in their ears. From the context, it is easy to conclude that the "ear-thimble" is a device used for receiving messages, comparable to a modern Bluetooth headset. The text also introduces several synonyms for this neologism.

1. "There was only the singing of the **thimble-wasps** in her tamped-shut ears"¹².

Synonym "*thimble-wasp*" is also considered an occasionalism, in the context denoting the earphones that Mildred, the wife of the main character, uses to listen to music.

1. "She had both ears plugged with *electronic bees* that were humming the hour away"¹³.

The synonym *"electronic bees"* also refers to earphones that block thoughts and replace them with mindless entertainment.

3. "Well, then, why didn't he buy himself an **audio-Seashell broadcasting** *station* and talk to his wife late at night, murmur, whisper, shout, scream, yell?"¹⁴.

"Audio-Seashell broadcasting station" refers to small radio receivers that fit into the ears like hearing aids or headphones and are used for communication.

4. "The *electric thimble* moved like a praying mantis on the pillow, touched by her hand"¹⁵.

The synonym "electric thimble" also denotes a device used for receiving messages.

5. "He found the **audio-capsule**, he heard your voice, he was going to trace it"¹⁶.

"Audio-capsule" is another synonym for the device that functions as headphones. In this specific situation, these headphones were almost imperceptible and used for secret communication between the characters.

6. "I'm sorry there's no way I can go with you this time, by ear-phone".¹⁷

The occasionalism *"ear-phone,"* like the previous one, refers to a small device in the ear used for secret communication.

¹² Bradbury R. Fahrenheit 451. London: HarperCollins Publishers, 2008. P. 21.

¹³ Ibid. P. 28.

¹⁴ Ibid. P. 57.

¹⁵ Ibid. P. 64.

¹⁶ Ibid. P. 168.

¹⁷ Ibid. P. 175.

7. "The **Mechanical Hound** slept but did not sleep, lived but did not live in its humming".¹⁸

The neologism "Mechanical Hound" represents a reality related to advanced technologies available at the time of the novel's story. It refers to an artificial metal animal-shaped machine programmed to search for and neutralize targeted individuals. This is one of the mechanisms of intimidation and control over society that firefighters use to carry out their duties. "Mechanical Hound" is a noun phrase that, despite its structural simplicity, carries significant semantic and conceptual weight.

8. "At night when things got dull, which was every night, the men slid down the brass poles, and set the **ticking combinations** of the olfactory system of the Hound and let loose rats in the firehouse area-way, and sometimes chickens, and sometimes cats that would have to be drowned anyway, and there would be betting to see which the Hound would seize first".¹⁹

"Ticking combinations" is an example of a fictional neologism with scientific and technical content that Bradbury uses to provide specialized grounding to his text and further expand the realm of sensory exoticism. This neologism is used to name the process occurring in the *"olfactory system"*²⁰ inside the *"Mechanical Hound,"* enabling the robot to identify dissidents it pursues by adjusting specific biological parameters.

9. "[...] They just run the answers at you, bing, bing, bing, and us sitting there for four more hours of *film-teacher*".²¹

The neologism "*film-teacher*" (noun) is another example of a conceptual element related to the educational methods used in the novel's education system, supporting the perspective of the social and political system. This concept makes it clear the compulsion towards automation applied to many aspects of citizens' social life. It also indicates another crucial aspect – the elimination of human contact, as observed in replacing family relationships with watching a television program that the novel's character Mildred refers to as "family".²²

Despite the absence of more detailed information about the term "*film-teacher*," some characteristics can be extrapolated: apparent automation and pre-recorded video shown to students as a film in class, explaining the educational material.

With the passage of time and technological development in the second half of the 20th and early 21st centuries, this neologism ceased to seem as

¹⁸ Bradbury R. Fahrenheit 451. London : HarperCollins Publishers, 2008. P. 35.

¹⁹ Ibid. P. 36.

²⁰ Douglas N.A. The Hitchhiker's Guide to the Galaxy. London, Pan Books: 1979, 224 p.

²¹ Bradbury R. Fahrenheit 451. London : HarperCollins Publishers, 2008. P. 42.

²² Ibid. P. 65.

strange and new as it did during the years of the first publication of the novel "Fahrenheit 451." A modern equivalent of this neologism is the "video lesson," which is gaining popularity today.

10. "And most of the time in the cafes they have the **joke-boxes** on and the same jokes most of the time"²³.

"Joke-boxes" (noun) corresponds to a futuristic neologism coined by Bradbury to emphasize the temporal difference between the "present" and "future" in the novel. The term was formed by a play on words from "jukeboxes."

The term denotes one of the methods that exist in the novel for public entertainment. It is related to the tendency to constantly occupy society, limiting social interaction.

11."The flutter of cards, motion of hands, of eyelids, the drone of the *time-voice*"²⁴

"*Time-voice*" corresponds to another technological creation of the author. This neologism is a compound noun phrase and denotes a system installed in homes that informs the inhabitants, for example, about a doorbell.

In the novel, there are four synonyms for the neologism "time-voice":

1. "The voice-clock mourned out the cold hour of a cold morning of a still colder year".

In this excerpt, "voice-clock" accurately reflects another function and purpose of "time-voice" as a clock.

2. "The front door voice called softly"²⁵.

The synonym "front door voice" demonstrates the function of a doorbell.

"- why doesn't the door-voice tell us"²⁶. Like the previous example, "door-voice" also serves the purpose of a doorbell.

3. "The alarm-voice in the ceiling chanted"²⁷.

In this case, "*alarm-voice*" performs the function of a fire alarm in the fire station.

12. "[...] but like all houses it had been given a thin fireproof plastic sheath many years ago " 28 .

"Fireproof plastic sheath" is a noun phrase created by combining concepts. It refers to a layer of plastic material with fire-resistant properties that buildings were equipped with to prevent fires. This became another

²³ Bradbury R. Fahrenheit 451. London : HarperCollins Publishers, 2008. P. 43.

²⁴ Ibid. P. 45.

²⁵ Ibid. P. 88.

²⁶ Ibid. P. 94.

²⁷ Ibid. P. 140.

²⁸ Ibid. P. 48–49.

reason for the change in the duties of firefighters since accidental building fires were minimized. The neologism is encountered three times in the text:

1. "[...] and this **preservative shell** seemed to be the only thing holding the sky"²⁹.

The synonym "preservative shell" also conveys the meaning of a fireresistant shell.

*"The fire-proof plastic sheath on everything was cut wide, and the house began to shudder with flame"*³⁰.

This synonym "fire-proof plastic sheath" is identical in meaning to "fireproof plastic sheath" but differs slightly in spelling.

"Yes, the White Clown's on tonight!"³¹.

"White Clown" is a noun phrase consisting of an example of the conceptual content of the analyzed novel, emerging from the fictional social system it belongs to The neologism "White Clown" contributes to expanding the understanding of available entertainment for citizens and corresponds to an imaginary character appearing in television programs broadcast on giant screens in every home.

2. "[...](he had visited the bank which was open all night and every night with **robot tellers** in attendance)[...]"³².

"*Robot tellers*" is a noun phrase reflecting an invention of science and technology in the novel's world. These are artificial workers used by banks so that their clients can use services even when no human employees are working, thereby introducing a 24-hour work schedule for the institution.

2. "[...] and the orange Salamander slept with its kerosene in its belly and the *firethrowers* crossed upon its flanks [...]"³³.

The neologism *"firethrowers"* (noun) is formed from the word "flamefhrowers." Ray Bradbury replaced the real element "flame" with "fire" to create a new term. The term refers to the firefighting tool in the author's alternative reality, installed in fire trucks and designed for spraying fire.

"We now take you to the Sky Room of the Hotel Lux [...]" [37, p. 192]³⁴.

The neologism "*the Hotel Lux*" is a noun phrase associated with the fictional social system of the novel and is also the proper name of an imaginary company, in this case, a hotel. Thus, Bradbury shows more aspects of his imaginary world by developing specific names for them.

3. "[...] for a half-hour of Just-Before-Dawn, a programme of ".

²⁹ Bradbury R. Fahrenheit 451. London : HarperCollins Publishers, 2008. P. 49.

³⁰ Ibid. P. 36.

³¹ Ibid. P. 96.

³² Ibid. P. 119.

³³ Ibid. P. 135.

³⁴ Ibid. P. 192.

"Just-Before-Dawn" is a noun phrase that denotes another component of the leisure dimension of the analyzed novel, related to the measurement of leisure. In this case, the neologism "Just-Before-Dawn" is one of the television programs, thanks to which the governmental institutions of this fictional world keep the population "occupied." The name itself indicates that this broadcast starts late at night, just before dawn, signifying that citizen' leisure should continue at any time of the day.

13. "[...] We're **book-burners** too. We read the books and burnt them, afraid they'd be found".³⁵

"Book-burners" (noun) is a complex neologism with a specific meaning in Bradbury's novel world. In "Fahrenheit 451", owning books is considered a crime, and they are hunted down and burned by firemen. However, in this context, the term refers to dissidents who managed to escape the authorities. Living in fear of being discovered with books, they memorize the content and burn the books themselves.

14. "They had a house of crystal pillars on the planet Mars by the edge of an empty sea, [...]" ³⁶

"Crystal pillars" (noun phrase) is a neologism that provides the reader with an idea of the peculiarities of Martian culture and lifestyle. In this example, we understand that a distinctive feature of Martian homes is transparent crystal columns.

15. "[...] and every morning you could see Mrs. K eating the golden fruits that grew from the crystal walls, [...]". (there as well)

"Golden fruits" (noun phrase) is another neologism that allows the reader to imagine specific features of Martian culture and lifestyle. The golden-colored fruits that grow directly inside Martian homes are a daily part of their diet.

16. "[...] and every morning you could see Mrs. K eating the golden fruits that grew from the **crystal walls**, [...]". (there as well)

Building upon the previous neologism, "*crystal walls*" (noun phrase) provides more detailed information about the environment. The "golden fruits" grow directly from the crystal walls inside the Martian homes.

17. "[...] or cleaning the house with handfuls of **magnetic dust** which, taking all dirt with it, blew away on the hot wind. [...]". (there as well)

"Magnetic dust" is a noun phrase that names another aspect of Martian daily life. Using the known meanings of *"magnetic"* and *"dust"*, readers can understand that this is a powder helping with cleaning, which, when blown away by the wind, takes all dirt with it.

³⁵ Bradbury R. Fahrenheit 451. London : HarperCollins Publishers, 2008.P. 194.

³⁶ Bradbury R. The Martian Chronicles., 2015.P. 8.

18. "[...] Afternoons, when the fossil sea was warm and motionless, and the **wine trees** stood stiff in the yard, and the little distant Martian bone town was all enclosed, and no one drifted out their doors, [...]". (there as well)

"Wine trees" is a neologism that refers to a unique botanical feature of Martian flora. Understanding the individual meanings of *"wine"* and *"trees"*, readers can infer that these trees produce grape-like fruits within the enclosed yard of Martian homes.

19. "[...] you could see Mr. K himself in his room, reading from a **metal book** with raised hieroglyphs over which he brushed his hand, as one might play a harp. [...]"³⁷.

"Metal book" is a noun phrase that refers to an electronic device for reading books. Readers can infer that Martians have made significant advancements in electronics, and this term, though not existing in our world, is semantically connected through the combination of familiar words.

"And from the book, as his fingers stroked, a voice sang, a soft ancient voice, which told tales of when the sea was red steam on the shore and ancient men had carried clouds of metal insects and electric spiders into battle". (there as well)

"Metal insects" is a noun phrase referring to a type of weapon used by ancient Martians, as described in the "metal book." Through the combination of familiar words, readers can understand that these are not real insects but rather a form of weaponry.

"And from the book, as his fingers stroked, a voice sang, a soft ancient voice, which told tales of when the sea was red steam on the shore and ancient men had carried clouds of metal insects and **electric spiders** into battle". (there as well)

20. "Electric spiders" is another noun phrase that describes a type of weapon used by ancient Martians, as narrated in the "metal book". Similar to "metal insects", this neologism suggests a form of battle strategy involving deadly electric spiders.

21. "[...] I went through your 'rocket' as you call it." He tapped the hull. "I hear it. Auditory fantasy." [...]".³⁸

"Auditory fantasy" is a noun phrase, a fabricated term used by the Martian psychologist to denote one of the symptoms of the Martian disease – the ability to create auditory illusions.

22. "[...] *He drew a breath. "I smell it.* **Olfactory hallucination**, induced by sensual telepathy." [...] "(there as well)

"Olfactory hallucination" is a noun phrase, a term coined by Bradbury to represent another symptom of the Martian disease – the ability to produce

³⁷ Bradbury R. The Martian Chronicles. 2015. P. 8.

³⁸ Ibid. P. 52.

smell-related illusions. This is induced through what the psychologist calls "sensual telepathy".

23. "[...] He drew a breath. "I smell it. Olfactory hallucination, induced by sensual telepathy." [...]".(there as well)

"Sensual telepathy" is a noun phrase invented by Bradbury to explain the method through which the symptom of "olfactory hallucination" is transmitted.

24. "[...] He kissed the ship. "I taste it. Labial fantasy!" [...]".³⁹

"Labial fantasy" is a noun phrase, a term created by Bradbury to denote another symptom of the Martian disease – the ability to create taste-related illusions.

25. "[...] Look at you! Why, you've even changed your eye color from yellow to blue, your skin to pink from brown. And those clothes, and your hands having five fingers instead of six! **Biological metamorphosis** through psychological imbalance! And your three friends - "⁴⁰.

"Biological metamorphosis" is a term created by Bradbury to describe the final stage of the Martian disease, where the patient undergoes physical transformations before being killed.

26. "[...] Biological metamorphosis through psychological imbalance! And your three friends – ". (there as well)

"*Psychological imbalance*" is a term coined by the Martian psychologist to refer to deviations in the mental state of his patients.

27. "[...] Why do you want to go back with them? So you can keep up with the Joneses? To buy a gyro just like Smith has? To listen to music with your **pocketbook** instead of your glands? There's a little patio down here with a reel of Martian music in it at least fifty thousand years old. It still plays. Music you'll never hear in your life. You could hear it. [...]". (there as well)

"Pocketbook" is a neologism (noun) formed by compounding, referring to a device on which you can listen to music. Although the text doesn't provide a specific description of this occasionalism, based on the words from which it is composed – "pocket" and "book" – one can infer that the device resembles a small book, easily fitting into a pocket.

28. "He had to drag her around back of the stand where the two machines stood, his truck, which he had used steadily until a month ago, and the old Martian sand ship which he had bid for at auction, smiling, and which, during the last three weeks, he had used to carry supplies back and forth over the glassy sea floor [...]".⁴¹

³⁹ Bradbury R. The Martian Chronicles. 2015. P. 52.

⁴⁰ Ibid. P. 53.

⁴¹ Ibid. P. 231.

"Sand ship" (noun) is a neologism that refers to Martian transportation allowing easy movement across the planet. From the context, it becomes clear that this vessel "sails" over the dead sea, cutting through the bottom with its sharp nose. The sea is called dead or sandy because water disappeared from Mars about ten thousand years ago. The sand ship has a blue color, and various parts are mentioned in the text, such as "the sail, the emerald body, the bronze hull points, the moon-white tiller". Additionally, red and blue pennons hang above it, and it emits a loud whistle while in motion.

29. "[...] At first his own ship would not move, then he remembered the sand anchor and yanked it in". (there as well)

"*The sand ancho*" is a neologism referring to a part of Martian transportation, the "sand ship," which, when stopped, digs into the sand, preventing the ship from moving.

30. "In the living room **the voice-clock** sang, Tick-tock, seven o'clock, time to get up-...", "...seven-nine, breakfast time...", "...eight-one o'clock, off to school, off to work, run, run, eight-one"!.⁴²

"The voice-clock" (noun) is a neologism created by compounding, representing a clock in the form of a voice. Both the context and the word formation reveal its meaning. The author creates an auditory image of a clock that "sings," delivering each message in rhyme. However, the reader does not receive a visual image of this clock, leaving it unclear how it looks and operates. This once again demonstrates that Bradbury creates fantastic images, primarily because it is a condition of the science fiction genre.

31. "In the kitchen **the breakfast stove** gave a hissing sigh and ejected from its warm interior eight pieces of perfectly browned toast, eight eggs sunnyside up, sixteen slices of bacon, two coffees, and two cool glasses of milk" 43 .

"The breakfast stove" (noun phrase) is a neologism indicating a stove that autonomously prepares breakfast, including both hot and cold items. However, the image remains incomplete. The reader is left in the dark about how this stove works and what it looks like. The author does not pay attention to details because, for him, this neologism is primarily a condition for developing the content of the text, and filling in the details is left to the reader's imagination.

32. "Out of warrens in the wall, tiny robot mice

darted. The rooms were a crawl with the small cleaning animals, all rubber and metal. They thudded against chairs, whirling their mustached runners, kneading the rug nap, sucking gently at hidden dust. Then, like

⁴² Bradbury R. The Martian Chronicles. 2015. P. 279.

⁴³ Ibid. P. 280.

mysterious invaders, they popped into their burrows. Their pink electric eyes faded. The house was clean".⁴⁴

33. "Robot mice" (noun phrase) is a neologism formed by compounding, with the second word specifying the type of object. The context provides a detailed and vivid description of these cleaning robots – made of rubber and metal, with mustached runners, pink electric eyes, and a cleaning process involving various actions. Unlike other instances, this neologism is more concrete, and the author gives the reader a somewhat complete understanding of the object.

2. Neologisms formed through semantic innovation

The second highlighted group of occasionalisms in Bradbury's novels «Fahrenheit 451" and "The Martian Chronicles" is formed through reinterpretation or semantic innovation. In other words, an innovative meaning is added to an existing word in the language.

1."*He knew that when he returned to the firehouse, he might wink at himself, a minstrel man, burnt-corked, in the mirro*".⁴⁵

The neologism *"firehouse"* (noun) is used to expand the perception of the social system in the novel. Since the firefighters in the novel do not perform their traditional function (putting out fires) but rather provoke them, the word "firehouse" has acquired a new meaning and becomes a neologism.

The synonym *"fire station"* is also used in the text and, due to a similar shift in semantic load, is considered a neologism:

*"He walked out of the fire station and along the midnight street toward the subway..."*⁴⁶.

2. "I rarely watch "parlour walls" or go to races or Fun parks",⁴⁷

The highlighted term is a noun phrase and refers to television screens placed around the room. For a better understanding, according to the novel's concept, enthusiasts can purchase four such screens for each wall for "... *only two thousand dollars*".⁴⁸

The text frequently uses the definition of 'parlour walls", and to avoid repetition, the author employs synonyms, which can also be considered neologisms:

4."How long you figure before we save up and get the fourth wall torn out and a fourth wall-TV put in"?;(there as well)

⁴⁴ Bradbury R. The Martian Chronicles. 2015. P. 281.

⁴⁵ Bradbury R. Fahrenheit 451. London : HarperCollins Publishers, 2008. P. 10.

⁴⁶ Ibid. P. 10.

⁴⁷ Ibid. P. 16.

⁴⁸ Ibid. P. 30.

The synonym "*wall-TV*" directly refers to a television screen the size of a wall.

"... or the musical wall lit and all the coloured patterns running up and down, but it's only colour and all abstract". 49

5. The synonym "*musical wall*" conveys the function that" "parlour wall" can perform.

"He felt he was one of the creatures electronically inserted between the slots of the phono-colour walls, speaking, but the speech not piercing the crystal barrier"].⁵⁰

6. The synonym "*phono-colour wall*" also conveys the function and quality of the concept of "parlour walls". "Will you turn the parlour off"?.⁵¹

"Parlour" contains identical information as the full neologism "*parlour* walls" since it is used as its abbreviated form.

"Any man who can take a TV wall apart and put it back together again, and most men can nowadays, is happier than any man who tries to slide-rule...".⁵²

The synonym "*TV wall*", *like* "*wall-TV*", has a straightforward meaning – a television the size of a wall.

7. "If you're not driving a hundred miles an hour, at a clip where you can't think of anything else but the danger, then you're playing some game or sitting in some room where you can't argue with the **fourwall televisor**"⁵³.

The synonym *"fourwall televisor"* emphasizes that there are four such wall-mounted television screens (one on each wall).

"The same things could be in the 'parlour families' today. The same infinite detail and awareness could be projected through the radios and televisors...".

"Parlour family" is a noun phrase, and its meaning stems from the conceptual content created by the novel's author. The neologism refers to characters in television shows constantly broadcast on "parlour walls", from which the name originates. This "parlour family" plays a larger and more significant role in people's lives than their actual families, friends, or close ones. By using this occasionalism, Ray Bradbury helps readers understand the nature of the society depicted in the plot. Therefore, due to its significant impact on society, this concept frequently appears in the narrative and consequently has a synonym:

⁴⁹ Bradbury R. Fahrenheit 451. London: HarperCollins Publishers, 2008. P. 43.

⁵⁰ Ibid. P. 62.

⁵¹ Ibid. P. 52.

⁵² Ibid. P. 80.

⁵³ Ibid. P. 53.

"Does your **'family'** love you, love you very much, love you with all their heart and soul, Millie"?.⁵⁴

The synonym "family" is used as a shortened form of "parlour family". Since, in context, this concept has acquired a new and more important meaning for society than its traditional meaning, it is clear from the context that the main characters mean the characters from the "parlour family" when using the word "family".

3. "She was an expert at lip-reading from ten years of apprenticeship at **Seashell** ear-thimbles".⁵⁵

Ray Bradbury wrote the word "Seashel" with a capital letter, which, etymologically, is a common noun in English. Except when the word is at the beginning of a sentence or is the first person singular, only proper nouns, which are individual names of specific entities, such as nicknames, names, geographical names, book titles, etc., are capitalized. The author likely imitated the use of capital letters for proper nouns to make the word "Seashell" a neologism.

"She was an expert at lip-reading from ten years of apprenticeship at Seashell ear-thimbles". (there as well)

"There was a tiny dance of melody in the air, her Seashell was tamped in her ear again, and she was listening to far people in far places [...]" ⁵⁶.

"And in her ears, the little Seashell, the thimble radios tamped tight, and an electronic ocean of sounds, of music and talk and music and talk coming in, coming in on the shore of her unsleeping mind".⁵⁷

In each of the three examples above, the same word "Seashell" was used differently in the sentences, functioning as different parts of speech. For example, in the first example, "Seashell ear-thimbles," "Seashell" precedes a compound noun and acts as an adjective. In the second and third examples, *"her Seashell"* and "the little Seashell", respectively, "Seashell" follows adjectives and functions as a noun.

According to the Cambridge Academic Dictionary, "Seashell" refers to "the empty shell of a small sea creature" ⁵⁸. From the context, it is clear that the neologism, as an adjective, describes the form/appearance of "ear-thimbles", and as a noun, it serves as a synonym for the same "ear-thimbles".

"Three seconds later the game was done, the rat, cat, or chicken caught half across the area-way, gripped in gentling paws while a four-inch hollow

⁵⁴ Bradbury R. Fahrenheit 451. London: HarperCollins Publishers, 2008. P. 54.

⁵⁵ Ibid. P. 28.

⁵⁶ Ibid. P. 56-57.

⁵⁷ Ibid. P. 20.

⁵⁸ Cambridge Academic Content Dictionary. Cambridge University Press, 2008. 1156 p.

steel needle plunged down from **the proboscis** of the Hound to inject massive jolts of morphine or procaine".⁵⁹

The highlighted neologism "proboscis", as per the Cambridge Academic Dictionary, is explained as "the long nose of some animals, or the long tubelike mouth of some insects". Bradbury adapted it to fit the context of the plot, giving the word a new meaning. In the novel, "proboscis" (noun) is a part of the "Mechanical Hound" from which a needle extends during the capture of a lawbreaker to inject a toxic substance into the victim's body.

"At night when things got dull, which was every night, the men slid down the brass poles and set the **ticking combinations** of the olfactory system of the Hound [...].⁶⁰

In the provided quote, besides *"ticking combinations"*, formed by compounding words, another neologism is used: "olfactory system" (noun phrase). This occasionalism is created by reimagining and is explained in a Wikipedia article as "the sensory system used for smelling (olfaction)". ⁶¹ In the novel, this refers to the fictional "Mechanical Hound's" olfactory system, where the process of "ticking combinations" occurs to identify and adjust specific biological parameters of the pursued dissident.

"Five minutes after a person is dead, he's on his way to the Big Flue, the Incinerators serviced by helicopters all over the country".⁶²

Similar to "Seashell", "Big Flue" (noun phrase) is capitalized even though "flue" is a common noun by origin. The Cambridge Academic Dictionary defines it as "a pipe that leads from a fire or heater to the outside of a building, taking smoke, gases, or hot air away"⁶³. In the novel, due to the state's social structure, traditional burials are abolished, and cremation is implemented. Therefore, "Big Flue" is a large furnace where people go after death. Bodies are transported by helicopters, and the entire process takes only a few minutes.

8. "What possessed the 'Outs' to run him"?.⁶⁴

"Outs" (noun) is the official name of one of the political parties existing in the reality of *"Fahrenheit 451"*. The author intentionally chose such a name to emphasize the undesirable nature of a potential voter and used a neosemy to give the word the status of a neologism in the novel.

⁵⁹ Bradbury R. Fahrenheit 451. London: HarperCollins Publishers, 2008. P. 36.

⁶⁰ Ibid.

⁶¹ Wikipedia. URL: https://en.wikipedia.org/wiki/Olfactory_system (дата звернення: 26.01.2024)

⁶² Bradbury R. Fahrenheit 451. London: HarperCollins Publishers, 2008. P. 78.

⁶³ Cambridge Academic Content Dictionary. Cambridge University Press, 2008. 1156 p.

⁶⁴ Bradbury R. Fahrenheit 451. London : HarperCollins Publishers, 2008. P. 136.

"Outs" is a crucial conceptual element for understanding the dynamics of the election process and to underscore the manipulation of citizens who need to choose the "righ" candidate for the presidential post.

9. "They had the fair, brownish skin of the true **Martian**, the yellow coin eyes, the soft musical voices" ⁶⁵.

The word "**Martian**" (noun) should be considered a neologism formed by semantic restructuring since names of all races and peoples derived from planet names are neologisms. In the lexical dictionary, the word "Martian" is defined as "a supposed inhabitant of the planet Mars" ⁶⁶. However, Martians themselves have a different name for their race on the planet (see pp. 48-49).

10. "Here's your scarf." He handed her a phial. "We haven't gone anywhere in months".⁶⁷

According to the Cambridge Academic Dictionary, "*scarf*" is "a piece of cloth that covers the shoulders, neck, or head for warmth or appearance".⁶⁸ In Bradbury's context, "scarf" (noun) is a neologism referring to a vial containing liquid that transforms into a scarf.

11. "He was a jovial, smiling man, if one could believe the mask he wore, for upon it was painted not one smile, but three. Behind it, his voice was the voice of a not so smiling **psychologist**".⁶⁹

In the lexical dictionary, the word "*psychologist*" is defined as "an expert or specialist in psychology"⁷⁰. Due to telepathic abilities, deviations in the psyche of Martians manifest differently than in humans. Therefore, the work of a psychologist on Mars has little in common with the activities of an ordinary Earth psychologist. This suggests that "psychologist" (noun) is a semantic neologism, with its meaning more closely aligned with the original meaning of the word than in many other cases.

12. "The psychologist shut his eyes and scratched his nose. 'This is the most incredible example of sensual hallucination and hypnotic suggestion *I've ever encountered*".⁷¹

In the American Psychological Association dictionary, the term "hypnotic suggestion" refers to a treatment method using hypnosis for various conditions, harmful habits, neuroses, sleep disorders, memory and attention disturbances, etc.⁷². However, this noun phrase is considered a neologism in

⁶⁵ Bradbury R. The Martian Chronicles. Санкт-Петербург : КАРО, 2015. р.9

⁶⁶ Lexico Dictionary. URL: https://www.lexico.com (дата звернення: 28.01.2024)

⁶⁷ Bradbury R. The Martian Chronicles. Санкт-Петербург: КАРО, 2015. Р. 15.

⁶⁸ Barnhart K.R. Some thoughts about neologisms before starting BDNE IV. Dictionaries. Neology Forum, 1995. V.16. P. 50–63.

⁶⁹ Bradbury R. The Martian Chronicles. 2015. P. 49.

⁷⁰ Lexico Dictionary. URL: https://www.lexico.com (дата звернення: 28.01.2024)

⁷¹ Bradbury R. The Martian Chronicles. 2015. P. 51.

⁷² American Psychological Association Dictionary. URL: https://www.apa.org/

the text because it acquires the opposite meaning. In the novel's plot, "hypnotic suggestion" is not the influence of a doctor on a patient but rather the influence of the patient on the doctor and other people. The author uses this neologism in the psychologis's language to create the impression of his professionalism.

13. "The old Martian names were names of water and air and hills. They were the names of snows that emptied south in stone canals to fill the empty seas. And the names of sealed and buried sorcerers and towers and obelisks. And the rockets struck at the names like hammers, breaking away the marble into shale, shattering the crockery milestones that named the old towns, in the rubble of which great pylons were plunged with new names: **IRON TOWN, STEEL TOWN, ALUMINUM CITY, ELECTRIC VILLAGE, CORN TOWN, GRAIN VILLA, DETROIT II**, all the mechanical names and the metal names from Earth".⁷³

This excerpt suggests that the future population assigns earthly names to cities, settlements, landscapes, and geographic objects. The names highlighted graphically by the author in the text are considered semantic neologisms since, although the names sound similar to existing geographic denominations, their descriptions have nothing in common.

14. "...the stove was making pancakes...".⁷⁴

Unlike the example "The breakfast stove", the author used only the word "stove" to denote this appliance, making this noun a semantic neologism. It is not an ordinary stove but a special one capable of autonomously making pancakes.

15. "In the cellar, **the incinerator** glowed suddenly, and a whirl of sparks leaped up the chimney".

"The incinerator" (noun) is a semantic neologism. It refers to a conventional waste incinerator used for burning environmental waste. In the text, it implies something similar but different: a waste incinerator designed for burning household waste, located in the basement of the house. Thus, Bradbury proposed a unique alternative to modern waste disposal methods. However, creating this neologism was undoubtedly influenced by the author's knowledge of the existence of waste incinerators.

16. "The house gave ground as the fire in ten billion angry sparks moved with flaming ease from room to room and then up the stairs. While scurrying water rats squeaked from the walls, pistoled their water, and ran for more".⁷⁵

⁷³ Bradbury R. The Martian Chronicles. 2015. P. 174.

⁷⁴ Ibid. P. 283.

⁷⁵ Ibid. P. 286.

As evident from the text, *"water rats"* are actually firefighters. The author took an existing lexical unit and assigned it an entirely different meaning, making it a semantic neologism.

Unlike the neologism "*robot mice*", the noun phrase "water rats" has very little description in the text. However, thanks to the description of "robot mice", the reader can better imagine what the author means in this case. The ordinary meaning of the word also helps the reader form a more vivid picture. The association with water and rats is evident, and even if the reader has no prior knowledge of it, the name speaks for itself. With the choice of words, the author imbues his innovation with imagery.

3. Neologisms formed phonologically

The third highlighted group of occasionalisms, examples of which were found only in the novel "The Martian Chronicles", consists of neologisms formed phonologically, that is, artificial words created by the author "from scratch."

1. "**Mr. and Mrs. K**" had lived by the dead sea for twenty years, and their ancestors had lived in the same house, which turned and followed the sun, flower-like, for ten centuries".⁷⁶

Mr. K (III) and **Mrs. K (IIIa)** – the main characters in one of the first stories of "The Martian Chronicles" "February 1999: YLLA". The names of the characters are synonymous with the English word "ill" – *suffering from an illness or disease* ⁷⁷. Both characters in the story show signs of illness: Illa talks about strange visions and feels an attraction to a man (the captain of the first expedition to Mars) whom she has never seen in her life; Ill considers his wife sick and, wishing to rid her of this ailment, does not hesitate to resort to extreme measures.

2. "We haven't gone anywhere in months." "Except you, twice a week to **Xi City**." She wouldn't look at him"⁷⁸.

Xi City is the name of a city on **Mars that Mr. K** suggested visiting to his wife in the story "February 1999: YLLA". The name of the city is formed based on existing language models such as **New York City and Mexico City**.

3. "I was figuring," said the husband slowly. "I thought I'd call Hulle tonight. I'd like to talk to him about us spending some time, oh, only a week or so, in the Blue Mountains. It's just an idea -".⁷⁹

⁷⁶ Bradbury R. The Martian Chronicles. 2015. P. 9.

⁷⁷ Oxford Learner's Dictionaries. URL: https://www.oxfordlearnersdictionaries.com (Дата звернення: 12.01.2024)

⁷⁸ Bradbury R. The Martian Chronicles. 2015. P. 15.

⁷⁹ Ibid. P. 16.

Hulle is the name of *Mr. K's* friend whom he wanted to invite over. This occasionalism is relatively neutral since it is unclear what specific meaning the author intended.

4. "Whoever was knocking at the door didn't want to stop. **Mrs. Ttt** threw the door open"⁸⁰.

Mrs. Ttt is the **Martian** housewife who adamantly refuses to take the Earth astronauts seriously and provide them with any assistance. According to the onomatopoeic interpretation of the sound [t], it is associated with sharpness and awkwardness, expressing hatred and aggression. These characteristics are also observed in the heroine of the story "August 1999: THE EARTH MEN".

5. "This is the planet **Tyr**," she said, "if you want to use the proper name." 81

In the same story "August 1999: THE EARTH MEN", **Mrs. Ttt** informs Earth guests that the Martian name for the planet Mars sounds like "Tyrr".

6. "[...]You evidently wish to see Mr. Ttt; he's upstairs in his study" ⁸²

Mr. Ttt is Mrs. Ttt's husband, one of the first inhabitants of Mars whom the members of the Second Expedition were supposed to meet. Similarly to the explanation of the meaning of Mrs. Ttt's name, the sound [t] conveys a certain association with hatred and aggression. These traits are also present in this character in the story "August 1999: THE EARTH MEN".

7. "Just take that silly note, though I don't know what good it'll do you, and go over that hill into the little town of **Iopr** and tell **Mr. Iii** all about it".⁸³

Iopr is the name of a small town on **Mars** where **Mr. Aaa** sent members of the Second Expedition to meet **Mr. Iii**, who could "help" them.

8. "So very funny. I'll have to tell Mr. Xxx about this"!.⁸⁴

The letter "X" is globally used as an unknown variable in mathematics, giving it the meaning of "unknown" or "secret". *Mr. Xxx is a Martian* psychiatrist who examines the members of the Second Earth Expedition on Mars, and they do not immediately understand his true intentions or the outcome of their conversation with him.

9. "What–what country are you from?" "**Tuiereol**. I came by the spirit of my body, years ago."⁸⁵

When the members of the Second Expedition to Mars end up in a Martian psychiatric institution in the story "August 1999: THE EARTH

⁸⁰ Bradbury R. The Martian Chronicles. 2015. P. 30.

⁸¹ Ibid. P. 31.

⁸² Ibid. P. 32.

⁸³ Ibid. P. 37.

⁸⁴ Ibid. P. 41.

⁸⁵ Ibid. P. 44.

MEN", some patients claim to have also come from "Earth". Thus, "*Tuiereol*" is the name of a fictional country.

10. "I'm from **Orri**, on Earth, a civilization built of silver"!⁸⁶.

This occasionalism also appears in the story "August 1999: THE EARTH MEN". Like the previous neologism, "**Orri**" is the name of a fictional country on "Earth". According to Miss Rrr, her planet is covered not by seas but by jungles, and civilization has reached the silver age.

11. "I'm Tomás Gomez." "I'm Muhe Ca.".⁸⁷

Muhe Ca is the name of a Martian who meets an Earthman on his way to a festival in the story "August 2002: NIGHT MEETING". The specific meaning intended by the author for this occasionalism is unclear, making it relatively neutral.

12. "I haven't escaped; there was nothing to escape. What do you mean? I'm on my way to a festival now at the canal, near the **Eniall Mountains**. I was there last night. Don't you see the city there?".⁸⁸

The **Eniall Mountains** is the name of fictional mountains. In the story "August 2002: NIGHT MEETING", due to a spatial and temporal glitch, Earthman Tomás Gomez accidentally encounters Martian **Muhe Ca**, who was heading to a festival near **the Eniall Mountains**.

13. "Genevieve **Selsor**!" She wept into the receiver. "Oh, I'm so glad to hear from you, whoever you are!".⁸⁹

Selsor is the name of the heroine in the story "December 2005: THE SILENT TOWNS", who decided not to return to Earth with her family and remained alone in an abandoned city on Mars.

CONCLUSIONS

The vocabulary of the English language is constantly expanding with new lexical units. Changes in communication needs have led to modifications in the ways and means of enriching the vocabulary. The wordformation system has acquired new derivational elements. Due to the close interaction between national variants of the English language and the absence of a barrier between literary and non-literary speech, the lexical potential is growing, fully realizing its word-formation potential.

Neologisms are lexical units that have entered all language spheres of communication and did not previously exist in that language or dialect. Neologisms are predominantly formed according to the word-formation laws of the respective language or dialect, borrowed from another language for

⁸⁶ Bradbury R. The Martian Chronicles. 2015. P. 45.

⁸⁷ Ibid. P. 139.

⁸⁸ Ibid. P. 142.

⁸⁹ Ibid. P. 253.

communication needs, or transitioned from the passive vocabulary. They possess formed semantic, pragmatic, and stylistic properties, perceived by speakers of a particular linguistic community as new and not yet recorded in dictionaries.

The classification of neologisms can be based on various features. Neologisms, according to the type of linguistic unit, are divided into neolexemes, neophrasemes, and neosemes; based on the degree of novelty, new formations are categorized as absolute or relative; based on the type of denoted reality, they can be new, old, actualized, dying, or nonexistent; and based on the method of formation, neologisms can be borrowed, word-formational, or semantic. Morphological neologisms are formed using affixation, compounding, abbreviation, and conversion.

During the analysis of the research material in the novels by R. Bradbury, "Fahrenheit 451" and "The Martian Chronicles", 94 neologisms were identified. A detailed analysis of each revealed three main methods used by the author in neologism formation, leading to the identification of three groups. The first group includes 56 neologisms formed by compounding. In this method, a complex word is created in which the lexical meanings of both components merge to form a new semantic unit. The second group consists of 25 neologisms that arose through reinterpretation or semantic innovation. This means that an existing word in the language acquired an innovative meaning. The third group, unique to the novel "The Martian Chronicles", comprises 13 phonological neologisms. These are artificially created words by the author, formed from individual sounds.

SUMMARY

Today, the English language, like most languages in the world, is experiencing a "neological explosion". The neological explosion is a massive influx of new words, the necessity of fixing and explaining which became a condition for the emergence of lexicology as a branch of linguistics, specifically the study of neologisms.

Within the framework of stylistic theory, neologisms are considered marked words, the meanings of words and idioms that, when used, are accompanied by an effect of novelty. The novelty of a new lexical unit is important for its classification as a neologism, as this characteristic has always been crucial for neology. However, this alone is not sufficient to consider a new formation a neologism.

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