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## Авторские техники акцентирования темпоральных характеристик в повести Р. Брэдбери «Лед и пламя»: когнитивный подход

#### Демина Е. А.

**Аннотация.** Цель исследования – продемонстрировать тот факт, что в романе Р. Брэдбери «Лед и пламя» используются авторские приемы усиления темпоральных характеристик, одним из которых является стилистическая конвергенция. 18 фрагментов были разделены на три группы на основании ассоциированных с ними моделей: «время = жизнь растений», «время = жизнь животных», «время = человек». Были тщательно проанализированы темпоральные лингвистические средства. Новизна исследования определяется, с одной стороны, выявлением двух авторских техник изображения времени: встраивания (использование лексической единицы с темпоральной семантикой как компонента другого стилистического приема) и слияния (сочетание двух разных стилистических средств в одном элементе). С другой стороны, было доказано, что эти инструменты позволяют выделить голос персонажа. Результаты исследования свидетельствуют о том, что преобладающие темпоральные характеристики в повести – высокая скорость и цикличность. Было показано, что эллипсис, заглавные буквы, восклицательные и вопросительные предложения, повтор цифры «8» маркируют индивидуальность восприятия времени персонажем в его несобственно-прямой речи. Удалось установить, что персонификация растительной жизни и самого времени, обилие временных метафор, подчеркивающих его быстрое течение, обусловливают уникальные особенности письма Брэдбери.

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## Author's techniques of emphasizing temporal characteristics in R. Bradbury's novel "Frost and Fire": A cognitive approach

#### E. A. Demina

**Abstract.** The aim of the study is to demonstrate the fact that in the novel "Frost and Fire" by R. Bradbury the author uses techniques that can emphasize temporal characteristics, stylistic convergence being one of them. 18 fragments have been classified into three groups based on cognitive time models they render: "time = plant life", "time = animal life", "time = human". Linguistic means depicting different temporal features have been closely analyzed. The novelty of the study is determined, on the one hand, by detecting two author's techniques that can emphasize time properties: embedding (use of a lexical unit with temporal semantics as a component of other stylistic device) and fusion (combination of two different stylistic tools in one unit). On the other hand, these tools have been proved to single out the character's voice. The results of the research indicate that predominant temporal properties in the novel are high speed and cyclicity. It was shown that ellipses, capital letters, exclamatory and interrogative sentences, repetition of the number "8" mark the individuality of the character's perception of time in his indirect speech. It was possible to establish that the personification of plant life and time itself, the abundance of temporal metaphors emphasizing its rapid flow determine the unique features of Bradbury's manner of writing.

#### Introduction

Time is an integral part of our existence; many studies being devoted to exploration of this phenomenon. Each science contributes to understanding of the essence and properties of time in its various manifestations: physical, philosophical, historical, cultural, linguistic, artistic, physiological ones. However, despite the impressive amount of accumulated information related to the nature of this phenomenon, time presents a vast field of research yet to be carried out.

In modern linguistics considerable attention is paid to the peculiarities of the transformation of physical time into artistic one through different linguistic means. However, the problem of verbalizing different characteristics of time in science-fiction texts has not been paid due attention to. The topicality of this research conducted at the intersection of cognitive linguistics and literary studies is determined by the need to identify specific cognitive

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models of time associated with verbalization of various temporal properties in the novel "Frost and Fire" by R. Bradbury, as this novel presents the character's unique perception of time influenced by the phenomena of the physical world. This might allow us to understand the specifics of transforming physical time through our mind and language in a science fiction text, which will enrich the number of previously studied cognitive models of time and specific means of its verbalisation.

To achieve our objective, we set the following tasks:

analyzing and classifying of linguistic means expressing various temporal properties (e.g., speed, reversibility, compression) used in Bradbury's novel "Frost and Fire";

- determining temporal characteristics expressed most vividly in the novel;
- identifying cognitive models of time belonging to the characters of the novel.

19 fragments were selected from the novel as the illustrative material, with the criterion for selecting being the use of various linguistic means rendering time properties. Lexical meanings of words were specified in "The Britannica Dictionary" and "Cambridge Dictionary".

• Bradbury R. Frost and Fire. 1946. https://fliphtml5.com/xsgw/jncr/"Frost\_and\_Fire"\_%281946%29\_by\_Ray\_Bradbury\_- Moodle/13/;

- Cambridge Dictionary. https://dictionary.cambridge.org/;
- The Britannica Dictionary. https://www.britannica.com/dictionary/.

The theoretical basis of our research includes the works by U. Eco (Эко, 2002) describing the literary techniques of time acceleration and deceleration; Z. Turayeva exploring occasional, context determined meanings of tense forms (Тураева, 1979, p. 57-117); G. Zolotova, who studied specific features of perceptual time (Золотова, Онипенко, Сидорова, 2004); other linguists exploring the phenomenon of artistic time (Кандрашкина, 2016; Позняк, 2020). We also found relevant the psychological approach to time of researchers who examined the structure of time perception and its components: succession, rhythm, rate (Вайнштейн, Поликарпов, Фурманов et al., 2004), as well as cognitive investigation of time carried out by T. Zuyeva (Зуева, 2017), O. Bronnikova (Бронникова, 2017).

The choice of the research methods is determined by the aim and tasks of the paper. The methods of linguistic description and contextual analysis were applied to define language means that express time properties and detect the specifics of their functioning in the context. Besides, we resorted to the method of cognitive-semantic analysis to point out cognitive models of time and to understand what phenomena of the physical world can influence time perception. We also used the quantitative method to calculate the number of groups which the fragments were divided into, and the number cognitive models of time detected in the novel.

The practical significance of the present paper is conditioned by the possibility of using its findings in the courses of lectures and practical classes in cognitive linguistics and literary studies in universities.

#### **Discussion and results**

Time in fiction is a specific reflection of physical time, it has features that make it very different from its original. Unlike physical time, the *speed* of which is constant, the speed of time in a literary text can vary from a complete stop to a rapid "run". According to U. Eco, time deceleration is often created due to extended descriptions and insignificant details, it includes descriptions of objects, characters, landscapes; at the same time, the author can accelerate time in the narrative writing about important events (Эко, 2002, p. 28-125). This speed variability of fiction time corresponds to the psychological basis of physical time perception: hours, days and weeks filled with significant and interesting events seem short. On the contrary, the period of time during which nothing special happens, actions are monotonous and routine, seems quite long (Вайнштейн, Поликарпов, Фурманов et al., 2004, p. 28; Клименков А. 4 типа восприятия времени. Почему так сложно соблюдать сроки и что с этим делать // Хабр. 18.03.2023. https://habr.com/ru/articles/723266/). Z. Turayeva believes that speed of events may depend on various elements of the context: the lexical meaning of the verb (verbs of movement), sentence structure, means of communication. Tense forms can acquire occasional, context-conditioned emotional and expressive meanings (TypaeBa, 1979, p. 77).

Fiction time can be *reversible*, that is it can literally go backwards, which happens quite frequently in science fiction texts during a character's time travel to the past. Besides, the linear course of time may be broken by various flashbacks based on a character's recollections or on his/her flashforwards: plans for the future, prognosis of events, etc. (Cavannagh M. 6 Ways to Manipulate Time in Fiction // C. S. Lakin. 09.07.2018. https://www.livewritethrive.com/2018/07/09/6-ways-to-manipulate-time-in-fiction/).

Time can be *dense*, that is full of events (narration), and *rarefied*, having few actions (description). Literary texts do not portray the entire time stream: *discreteness* of fiction time allows to stress the most significant fragments, which makes it a powerful means of making the plot dynamic. *Compression* of time in literary texts takes place when the narrator sums up long period of physical time using as few words as possible: one sentence can compress centuries.

Time in fiction may often be presented via the opposition of temporal parameters: repeatability – singularity, momentariness – eternity; duration – brevity of the depicted event, homogeneity – heterogeneity of situations. The deceleration and acceleration of time, as well as its reversibility, discreteness, density, compression are associated with individual perception of literary characters and are related to perceptual time of a human being.

Perceptual time in literature expresses the speaker's real or mental position in time and space in relation to the events of the text. It is a "continuous process of perception, speech-thought" and it allows you to sense the movement of time in the text (Золотова, Онипенко, Сидорова, 2004, р. 24).

In cognitive linguistics time relates to understanding of an individual as an integral biosociocultural organism who exists at the intersection of the biosphere, psychosphere, sociosphere, noosphere and who interprets reality by means

of language (Пиксендеева, 2020). The core of the concept of "time" in the phraseology picture of the world is formed by three main frames: cyclic time, linear time and "point" time. The concept of "time" is ethnocultural and gets its linguistic embodiment in various cognitive onomasiological models (Зуева, 2017, p. 105-108).

In fiction perceptual time is embodied vividly in "represented speech" (Banfield, 1973) also known as "narrated consciousness" technique (Cohn, 1966) or "free indirect speech" (Pascal, 1977). In the present paper represented speech is defined as transmission of thoughts, feelings in the 3rd person narration preserving a character's manner of speaking and philosophical views (Demina, 2021).

Let us turn to the analysis of the linguistic means and corresponding cognitive models of time in the novel "Frost and Fire" published in 1946. Sim, the main character of the novel, must survive on the planet where time flies and the climate is extreme. People live most of their short eight-day lives in the caves enjoying the sunlight only at dawn when the air is not too hot to breathe, and they can find food.

We have classified the fragments of the novel into three groups based on the cognitive models of time they render. The first group relates to flora, the second group is connected with fauna, the third one is anthropological.

Let us analyze Fragment 1 from Group 1:

**Fr. 1.** ((The valley (**suddenly**: 1) blushed with (**impulsive** color: 2): 3)). ((Plant life, thawing in the (precipitant dawn: 4), shoved out: 5)) from most unexpected sources. (It flowered as you watched: 6). (Pale green tendrils appeared: 7) on scoured rocks. (**Seconds**: 8) (**later**: 9), (ripe globes of fruit twitched: 10) upon the blade-tips. Father gave Sim to his mother and harvested ((the **momentary**: 11), **volatile** crop: 12)), thrust scarlet, blue, yellow fruits into a fur sack which hung at his waist (Bradbury, 1946, p. 279).

It is possible to point out the following lexical markers expressing Sim's perception of instant events: words with temporal semantics (the adverbs "suddenly" and "later" (1, 9); adjectives "impulsive", "momentary" "volatile" that illustrate great speed of natural processes (2, 11, 12); the noun "seconds" (8)). The adjectives mentioned above combining with nouns function as epithets (2, 12). Practically the whole extract presents personification of flora, it allows us to sense amazingly fast growth of fruits: the valley turning instantly red (metaphor in No. 3), plants moving to the surface (5), their flowering (6), appearance of tendrils (7) and then of ripe fruits (10), all this lasting several seconds. Convergence of stylistic devices here (the metaphor and epithets combined with personification) make the fragment very expressive. In addition, if we consider the first sentence of the paragraph (3), we will see that lexical means with temporal semantics "suddenly" and "impulsive" are the components of a larger unit, that is of a metaphoric sentence. We call this tool *embedding* and define it as *the use of a temporal lexical marker within another stylistic device in a sentence or a phrase.* Such temporal characteristics as high speed of time and discreteness are portrayed with the help of the above-mentioned linguistic means. The cognitive model can be described as follows: "time = plant life".

In the next fragment from the second group animal life is depicted on the background of flora to render temporal characteristics:

**Fr. 2.** ((Plants grew (**instantly**: 1): 2)), (birds were flung like pellets across the sky: 3). Smaller, legged ((animal life **rushed**: 4) frantically: 5)) through the rocks; everything tried to get its living down in the (**brief**: 6) (**hour**: 7) of respite (Bradbury, 1946, p. 275).

Lexical means that have been detected here are: words with temporal semantics (the adverb "instantly" (1), the verb "to rush" (4), the adjective "brief" (6), the noun "hour" (7); a hyperbole pointing out momentary transformation of plants (2); a comparison in which birds do not fly calmly, they are compared with bullets shot into the sky (3); the epithet "frantically" expressing extreme speed of motion (5)). Convergence of stylistic devices (the hyperbole, comparison, an epithet) occurs again. Embedding was detected in No. 2, here the adverb of temporal semantics is a part of a hyperbole. Temporal characteristics rendered here are: high speed of time, compression (many actions were done during 1 hour) and discreteness (1 hour in the early morning is described, since just one hour at dawn was full of real life). The cognitive model is: "time = animal life".

The third group comprises fragments associated to an anthropological cognitive model of time. It embraces four subgroups: Subgroup 3a ("time = human physiology"); Subgroup 3b ("time = a short life cycle"); Subgroup 3c ("time = learning"); Subgroup 3d ("time = the moment 'now' in human life"); Subgroup 3e ("time = a long-life span"). The next extract refers to Subgroup 3a:

**Fr. 3.** Sim's mother, trembling (**now** and **again**: 1), staring at the man, fed Sim pebble-fruits, valley-grasses and ice-nipples broken from the cavern entrances, and (eating, eliminating, eating: 2) (**again**: 3), he (grew larger, larger: 4) (Bradbury, 1946, p. 273).

Linguistic means that express cyclicity here are: 1) syntactic markers, the so-called "homogeneous units", expressed by Participle I used three times (2); 2) lexical markers with temporal semantics: repetition of the adverb "again" alongside with "now" introduces habitual actions (1, 3); repetition of the adverb in the comparative degree "larger" (4) accentuates the importance of digestion for the rapid growth; the Participle I "eating" is also repeated twice (see No. 2). Such temporal characteristics as cyclic character and discreteness of time are reflected in monotonously repeated actions the character performs: getting food, digesting, eliminating, growing. The cognitive model is: "time = human physiological processes".

In Fragment 4 Bradbury describes adaptation of the colonists to the terrible conditions of the planet:

**Fr. 4.** ((Their pulses (**quickened**: 1): 2)), (two hundred: 3), (five hundred: 4), (a thousand beats a **minute**: 5). (Their skins thickened: 6), (their blood changed: 7). ((**Old** age came: 8) (**rushing**: 9): 9a)). (Children were born: 10) in the caves. ((*Swifter, swifter, swifter*: 11) *the process*: 12) (Bradbury, 1946, p. 276).

Linguistic means found in the fragment include syntactic repetition expressed by parallel and partially parallel constructions (2, 6, 7, 8, 10); homogeneous constructions (the ordinal numerals: No. 3, 4, 5) used in increasing order

to emphasize amazingly fast heart beating the colonists adapted to; ellipsis alongside with the repetition of the adjective "swifter" (11, 12). There are also grammar markers: predicates in the Past Simple, not in the Past Perfect that express *the past* experience reversing time and compressing it. Lexical markers depicting high speed of time are also present: the metaphoric use of the verb "to rush" in respect of senility personifies this stage of life (9a); the verb "to quicken" (1), the adjective "swifter" (11) share the meaning of fast movement/process. Thus, in this fragment we deal with convergence of several stylistic devices: homogeneous combinations (the numerals), grammar markers (Past Simple), parallel constructions, a metaphor, repetition, ellipsis, all these make the fragment extremely expressive. Furthermore, we have two cases of *embedding*: in No. 12, where "swifter", a lexical marker of high time speed, is repeated three times and is a part of elliptical construction, thus a lexical tool (repetition) fuses with a syntactic one (ellipsis) here. We identify *fusion* as *simultaneous use of two different stylistic tools in one unit (a phrase or a sentence)* to point out temporal characteristics. The second case of embedding can be detected in No. 9a, where the verb "to rush" is introduced in the metaphor. Temporal characteristics accentuated here include reversibility (flashbacks), compression and high speed. The cognitive model is "time = human physiological processes" (heartbeat accelerates from 200 to 1000 beats per minute; skin and blood properties transform; old age comes quickly).

Acceleration of time in the novel occurs in 90% of the cases examined. However, when Sim and his girlfriend Lyte manage to reach the only spaceship that sustained little damage after the crash and get into it, they feel that time aboard this ship flows dramatically slowly:

**Fr. 5.** He had a dim sense of (**time**: 1) (passing, of thinking, struggling: 2), (to make his heart go: 3) (**quick**, **quick**: 4) ... (To make his eyes focus: 5). But ((the fluid in his body (**lagged**: 6) quietly: 7)) through his settling veins and (he heard his pulses **thud**, **pause**, **thud**, **pause** and **thud** again: 8) with lulling (**intermissions**: 9). He could not move, (not a hand or leg or finger: 10). It was an effort (to lift the tonnage of his eyelashes: 11) (Bradbury, 1946, p. 307).

Here we can see the following syntactic markers: homogeneous units expressed by the gerunds (2), by the nouns (10); parallel constructions with the repetition of the verb "to make" (3, 5). Lexical signals are: use of temporal nouns (1, 9); repetition expressed by the adjective "quick" (4) and by the infinitive with the meaning of deceleration: "pause", "lag" (6, 8); the hyperbole that stresses the heaviness of Sim's eyelashes (11); a metaphor in No. 7, where the verb "to lag" stresses steady flow of blood called "the fluid". This fragment again presents stylistic convergence combining a lot of tools: a metaphor, a hyperbole, homogeneous combinations, repetition and parallelism. Embedding can be traced in No. 4, where a temporal adjective "quick" is repeated twice and is used between two parallel constructions (3, 5); in No. 8 the verb "pause" is also repeated, it alternates with "thud", the two of them being homogeneous units; the verb "to lag" is a part of a metaphor (7). Slow speed of time is depicted in the fragment, which sharply contrasts with other extracts. The cognitive model is: "time = human physiology".

The next subgroup of fragments (3b) presents Sim's perception of 8-day life cycle. In Fragment 6 Sim recollects his prenatal experience and thinks about what expects him:

**Fr. 6.** Even while in his mother's flesh some racial knowledge or some strange far wild (voice had told: 1) him (he was being formed: 2) (**rapidly**: 3), shaped and propelled out (**swiftly**: 4). ((Birth was (**quick**: 5) as a knife: 6)). (Childhood was over in a **flash**: 7). (Adolescence was a sheet of lightning: 8). (Manhood was a dream: 9), (maturity a myth: 10), ((old age an inescapably (**quick**: 11) reality: 12)), ((death a (**swift**: 13) certainty: 14)) (Bradbury, 1946, p. 276).

Grammar markers expressing reversibility are the forms of the Past Perfect (1), the form in the Past Progressive Passive (2), which is retrospective, since it presents Sim's recollections of his embryonic experience. Lexical means expressing fast pace of time are: adverbs (3, 4), adjectives (5, 11, 13); a hyperbole in No. 7 (childhood is compared to a flash, i.e., to an instant); multiple metaphors in No. 8, 9, 10, 12, 14 (young age strikes like a lighting; manhood and maturity seem unreal; only senility and death are frighteningly inevitable). As we see, the colonists had no future. Besides, in No. 5, 11 and 13 words with temporal semantics ("quick", "swift") are embedded into the metaphors. Temporal characteristics comprise reversibility (flashbacks), fast speed of time, cyclic character, discreteness of time (stages of human life). The cognitive model reflects both cyclicity and swiftness of time: "time = a short life cycle".

It is important to note, that number "8" is repeated many times in the novel, this close or distant iteration contributing to both cyclicity and discreteness of time in most of the novel. It also becomes one of the markers of Sim's voice. Although "8" is normally associated with eternity, endless existence, here it denotes a vicious cycle which no one (except Sim) could break, an 8-day life, repeated tortures of people doomed to short survival:

**Fr. 7.** And he would live exactly **eight days**. The violence of this thought! **Eight days**. **Eight short days**. It was wrong, impossible, but a fact (Bradbury, 1946, p. 275-276).

**Fr. 8. Eight days** from now he'd stand half-blind, withering, dying, as his father now stood, staring uselessly at his own wife and child. This day was an **eighth** part of his total life! (Bradbury, 1946, p. 276).

**Fr. 9.** And how could he accomplish a life mission that huge and depressing in **eight** short, vanishing **days**? (Bradbury, 1946, p. 277).

Persistent use of this number and the word "day" refers the reader to life span of an average person, which can often last up to 80 years. So, one can suppose that Bradbury's day equals to 10 years of a real person's life with the same stages mentioned in the novel. This hidden hint makes the reader realize that time does fly.

Discreteness of time expressed by multiple numerals often combined with repeated temporal nouns "night" and "day" in Extracts 10-14 (No. 1, 2, 4, 5, 7, 9, 10, 11, 12, 13) is also evident in Sim's regular count down:

**Fr. 10.** ((This (**day**: 1) was ((an eighth part: 2) of his total life!: 3)). He must enjoy (every **second**: 4) of it (Bradbury, 1946, p. 276).

**Fr. 11.** ((One fourth: 5) of his life was over!: 6)) Babyhood was gone. He was **now** a young boy (Bradbury, 1946, p. 285). **Fr. 12.** (The **night**: 7) came and passed and then ((started (the second **day**: 8): 9)) (Bradbury, 1946, p. 283).

Fr. 13. (Only (five more days: 10) of life: 11) (Bradbury, 1946, p. 286).

Fr. 14. (The third night: 12) and (third day: 13) passed (Bradbury, 1946, p. 290).

In Fragments 10-14 exclamatory sentences (3, 6), ellipsis (11) and inversion (9) mark Sim's voice to bring out his amazement at high speed of time.

In Subgroup 3c we find the following extract:

**Fr. 15.** The creative (**time**: 1) of anyone individual was perhaps a matter of twelve (**hours**: 2) out of his entire (**span**: 3). Three quarters of one's life was spent learning, (a **brief**: 4) (**interval**: 5) of (creative power, the senility, insanity, death: 6) (Bradbury, 1946, p. 289).

One should point out the following lexical markers with temporal meaning: nouns (1, 2, 3, 5); the adjective (4). Homogeneous units expressed by non-temporal nouns (6) break the life cycle into short stages. Thus, discreteness of time becomes noticeable here again. The cognitive model might be described as follows: "time = learning", as <sup>3</sup>/<sub>4</sub> of life was devoted to education.

Subgroup 3d includes the fragments in which time of the colonists is compressed in one moment – "now", since only this moment matters to them:

Fr. 16. ((An hour: 1) is half a life: 2)) (Bradbury, 1946, p. 285).

**Fr. 17.** There was only (**NOW**: 3) for each human. (**Yesterday**: 4) didn't matter, ((**tomorrow**: 5) stared them vividly in their very faces: 6)) (Bradbury, 1946, p. 290-291).

Linguistic markers include lexical means: temporal adverbs that split time (3, 4, 5) and the noun (1); personification (tomorrow is associated with death is personified due to the use of the verb "to stare" and the epithet "vividly" (6)); a hyperbole (2). Besides, we can point out a graphic means: the adverb "now" (3) is capitalized by Bradbury to stress its value for the colonists. Temporal characteristic demonstrated in Extracts No. 16, 17 are: discreteness, compression and high speed of time; the cognitive model being "time = the moment "now".

Subgroup 3e includes fragments related to linear time perception that Sim's ancestors from his mother planet have: **Fr. 18.** The dream people talked always of (*tomorrow and living*: 1) *and* (*not tomorrow and dying*: 2) (Bradbury, 1946, p. 287).

As to linguistic markers, we have identified a stylistic device that we define as *opposed iteration*: the adverb "tomorrow" combining with the conjunction "and" is repeated in syntactically parallel constructions to compare two opposed views on future. In addition, the use of the adverb "tomorrow" is metaphoric as it is associated to life. So here we deal with a unique case of embedding (the use of temporal adverb in the metaphor) and fusion (this metaphor is repeated twice in parallel constructions). Temporal characteristics are: normal speed of time, its linear character. The cognitive model is "time = long life".

The final extract below does not belong to any group. Slow speed of time on the mother planet is portrayed in a multifaceted way via description of the climate, plant life, birds and human physiology and activities, two different worlds being compared in one fragment:

**Fr. 19.** Overhead the metal seeds flew by in a heaven that was a (**steady, even**: 1) temperature. Things were (**slow, slow**; **slow**: 2). Birds (**lingered**: 3) upon gigantic ((trees that took a hundred, two hundred, five thousand (**days**: 4): 4a)) to grow. (Everything **remained**: 5) in its place, (the birds did not flicker: 6) nervously at a hint of sun, (*nor did the trees suck back frightenedly*: 7) when a ray of sunlight poured over them. In this dream people strolled, they (**rarely**: 8) ran, the heart rhythm of them was (**evenly**: 9) (**languid**: 10), (not **jerking**: 11) and insane. (The grass **remained**: 12), and (did not burn away: 13) in torches (Bradbury, 1946, p. 287).

Lexical markers with temporal semantics include the adjectives that contribute to slowing down of time, to depicting its smooth steady pace (1, 2, 10), the Participle I (11), static verbs (3, 5, 12); the noun (4), adverbs (8, 9). The adjective "slow" is embedded into repetition (2), which decelerates time significantly. Grammar inversion fuses with personification as on the mother planet trees were not afraid of the sun and stayed in one place (7). The verb "to flicker" (6) meaning "appear for a short time or to make a sudden movement" is used in the negation to contrast two different worlds and two models of time perception; the same effect is achieved by negation in No. 7, 11 and 13. Homogeneous constructions represented by the numerals in increasing order combine with the noun "day" embedded into them to emphasize long life of trees (4a). Thus, we deal with convergence of stylistic devices in the excerpt again.

Summing up, we should note that the novel "Frost and Fire" is a story about time perception. Temporal characteristics are verbalized by means of a large number of stylistic tools via various cognitive models.

#### Conclusions

Thus, we have arrived at the following conclusions. Verbalization of time properties in the novel is diverse and multilevel, it includes various lexical, syntactic, grammar, graphic devices. Lexical means with temporal semantics portraying speed and discreteness of time have proved to be the most frequent ones in the novel. However, personification of plant life and time itself, as well as abundance of temporal metaphors accentuating frantic speed of time have proved to be the most expressive. Besides, the constant count down of days and consistent repetition of number "8" stress both high speed and cyclic character of time in the novel. Ellipsis, exclamatory and interrogative sentences, parallelism, homogeneous combinations produce the same effect. The Past Simple is used instead of the Past Perfect to express priority of actions; the Past Progressive replaces the Past Perfect Progressive to denote prior continuous actions. Grammar inversion has been found to stress speed of time. The use of capital letters to point out the moment "NOW" is a single case, but it is very eye-catching since here we deal with time compression: for the colonists time is condensed in one moment. The above-mentioned linguistic devices mark the character's voice, the singularity

of his time perception. Convergence of various stylistic tools turns out to be a characteristic feature of Bradbury's manner of writing, a technique that can be found practically in each fragment. Other stylistic tools that can also be regarded as the author's specific techniques are embedding and fusion. Embedding of temporal lexical means into other stylistic devices occurs frequently to enhance this or that time characteristic, in most cases it is high speed and cyclicity. Fusion of different stylistic means (e.g., grammar and lexical ones in one linguistic unit) is a less frequent tool that can also intensify speed of time.

In this novel the speed of time, discreteness and cyclicity are expressed most vividly; acceleration of time prevailing in many cases (16 fragments). Normal pace of time and its linear character have been detected in three fragments which contrast sharply with the rest of the extracts. Bradbury depicted two different patterns of time perception in the novel: the cyclic one and the linear one. The cyclicity of time accompanied by its great speed is replaced by its linear perception and slowing down after the main characters get aboard the spaceship to leave the planet.

Different anthropological factors, plant and animal life play a significant role in time perception and verbalization. Seven cognitive models of time from 18 extracts have been detected in the paper: "time = plant life" (1 fragment), "time = animal life" (1 fragment), "time = human physiology" (3 fragments), "time = a short life cycle" (9 fragments), "time = learning" (1 fragment), "time = the moment "now" (2 fragments); "time = a long life span" (1 fragment). Hence, anthropological factors play the most significant role in time perception.

Prospects of further research might include identifying new cognitive models of time and specific techniques that can make time properties more prominent in texts of different genres.

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