Negativizing emotive coloronyms: A Kazakhstan-US Ethno-Psycholinguistic comparison

Негативные эмоциональные цветные наименования: этнопсихолингвистическое сравнение Казахстана и США

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Abstract
Neurotargeting prioritizes emotions in understanding collective unconscious and individual behavior. Comparative emotive linguistics reveals cross-cultural emotional expression variations. Despite extensive emotion research, gaps remain due to differing response norms. Psychology understands emotions well, but lacks universal classification, hindering linguistic description. Confusion between emotion and emotive obscures psychophysiological and verbal distinctions. Nonverbal emotives, reflecting emotions, require analysis of generation and expression mechanisms. This study examines color's role in conveying negative emotions in Kazakh writer A. Nurpeisov's "Blood and Sweat" and American writer T. Dreiser's "Trilogy of Desire." Authors use linguistic and nonverbal methods to portray emotions. Hypothesis: color as emotive state designation functions with "permissible-acceptable" and "good-bad" evaluations, evident in shaping emotional reality perception. Analyzing coloristic negative emotives uncovers ethno-cultural expression mechanisms.

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metaphorical models, connecting emotive coloronyms with basic emotional concepts. Findings aid standardizing cognitive mechanisms for understanding mental experiences and comparative emotive linguistic terminology.

**Keywords:** negative emotion, color, emotive, emotive coloronym, artistic text, psycholinguistics, different structural languages.

**Introduction**

Different ethno-linguistic cultures develop their own standard of color perception, which affects the psycho-emotional state of a person (Rathod, 2014; Sutton, & Altarriba 2016). At the same time, the verbalization of these states is conveyed by various concepts that can make up the repertoire of emotives assigned to a particular emotion (Antipenko, 1995; Dupina et al., 2013; Monastyrskaya, 2008; Osintseva, 2019). This separation between the verbalization of negative emotions and the emotion itself began to occur only now (Shamay-Tsoory et al., 2014; Stefansky, 2009; Tokareva, 2021, Rong, 2021), which puts the task of distinguishing emotives, terminological apparatus, classification parameters in the first place in modern research.

Emotivity colors our life, creating a variety of coordinate systems for regulating the ethnosociocultural behavior of an individual in a particular society. Censure and/or approval were and remain powerful tools for the formation of a person's speech and behavioral matrix (Jensen, 2014; Ruan, & Karabulatova, 2021; Shakhovskyi, 2018; Zhang et al., 2023).

Emotive linguistics originates in the works of V.I. Shakhovsky (2019), starting from the understanding that emotions are an important component of the mind, the linguistic consciousness of a modern person belonging to a certain linguistic culture. The emotional experiences presented in the language are understandable for one particular language (Ulyanova, 2011). Emotions are inherent in the specific national experience of this people (Shakhovsky, 2019). A person reflects the world, and emotions serve as an intermediary between the world and its reflection in language. It is difficult to adequately describe the language system without taking into account people's emotions. Emotional states and relationships are directly related to the assessment and understanding of reality. A person experiences different emotions, so they feel in the process of forming a linguistic picture of the world. In this process, language is a means of reflection, and emotions are a form of reflection of reality.

According to researchers like A. Yu Vychuzhanina, N.A. Kravasvky, V.I. Shakhovsky, it is necessary to appreciate the importance of human emotion in linguistic works. The linguistics of emotion has made a huge contribution to solving the problems of emotivity, emotive semantics, classification of emotional vocabulary, etc. Emotions have been repeatedly investigated in this direction. For example, in the dissertation work of A.K. Kalzhanova, the relationship of emotive language means and color designation in different structured languages was described (Kalzhanova, 2004). H.M. Nurmukanov devoted his work to the study of emotionally expressive words of the Kazakh language (Nurmukhanov, 1969).

Currently, works devoted to the study of emotional vocabulary in a comparative-contrastive aspect are becoming especially in demand (Lin et al., 2021; Qin et al., 2022). According to the theory of the psychological basis of emotions, all speech acts are emotional. Recently, researchers have found that emotional information can be transmitted through color-expressing language units. The color-emotion ratio has not gone unnoticed by researchers. It is relevant to identify and study the role of color...
values in the expression of emotions. A number of research papers are devoted to this issue. For example, N. A. Bagdasarova studied the mechanisms of emotion formation in her dissertation “Lexical means of expression of emotions in the context of different cultures” (Bagdasarova, 2004). In particular, a decrease or increase in body temperature and the use of color for its description (based on materials in English and Russian).

According to the author, a drop in body temperature is associated with words and phrases that contain certain emotions and semantics of the word “cold”. The increase in temperature is expressed by color markers. For example: blood stinks in the living quarters, get rid of grief, get better. Changes and deviations that occur in the human body under the influence of emotions are directly reflected in the emotional language units. She suggested that an increase or decrease in body temperature is caused by emotions such as fear, anger, and jealousy (Bagdasarova, 2004). N. A. Krasavsky considered the compatibility of the name of emotions and color names on the basis of materials in Russian and German (2011). According to the author, the conceptosphere of emotions and colors is ontologically related to each other. This is because both different emotions and colors have both positive and negative signs. Modern onomastics considers color designations under the term coloronym (Borisova, 2008). Previously, instead of the term “coloronym”, such terms as "colour name", "colour naming" were used, which are found in the works of R. M. Frumkina (1984), A.P. Vasilevich (1987). In foreign linguistics – "colour naming" (Mylonas, & MacDonalds, 2012). According to psychologists, the mental stress experienced by a person can be divided into positive or negative ones.

That is, a person constantly strives to evaluate the phenomena that occur in the environment. In associative psychological studies, it is established that colors have an evaluative value. This also happens in the language. For example: gray days, schwarze Gedanken. In addition, the author also pays attention to the dictionary definitions of colors in his article. In the dictionary definitions themselves, you can see that colors have a positive or negative semantic coloring. The author gives an example of the word black (the name of the color): "Black - trans. Gloomy, bleak, malicious, criminal "(Krasavsky, 2011).

Kazakh linguists (Pansat, & Khalikova, 2023), addressing the problem of the interaction of color and emotion, argue that a person's internal emotions, conveyed in texts through color characteristics, act as a powerful ethno-linguistic and cultural means of psycho-emotional comprehension to enhance the expressive effect of influence on the recipient.

A new stage of research in the terminology of emotive coloristics is associated with the actualization of cognitive linguistics, which not only emphasizes the role of color in cognition of the world, but also explains the importance of color in the linguocognitive mechanisms of visual perception of objects. Cognitive linguistics is based on the results of psychological studies, which reveal a rigid "fixation" of a particular emotion on a certain color (Basin, & Khatous 2007; Berdnikov, 2004; Sycheva, 2016). Thus, emotions belong to the sphere of psychological concepts, being the basis of emotional concepts. Emotional concepts, in turn, make up an emotional picture of the world. The emotional picture of the world is understood, following N. A. Krasavsky, as a "set of emotional representations, emotional concepts transmitted by individual concepts" (Krasavsky, 2008: 18). At the same time, the emotional picture of the world, acting as an evaluative reaction of human consciousness when mastering the world, correlates with the emotive linguistic picture of the world, which is verbally realized in emotives. The emotive is a linguistic unit of the emotive picture of the world, performing both the function of expressing the emotions of the producer/addressee and the function of emotional impact on the recipient/ addressee (Ulyanova, 2011). The lability of the boundaries of emotion and its verbal expression has caused misunderstanding of the phenomenon of emotion and its verbalizations.

Materials and methods

In our article, we will look at emotions in the artistic text and ways to convey them in the text. The reason for considering a literary text is that fiction presents a wide variety of emotional situations, describes the verbal and nonverbal emotional behavior of the characters and the type of communication. In this sense, fiction is a very valuable treasure (Shakhovsky, 2008: 187). At the same time, emotions have certain characteristics for representatives of each nation. The cultural features of the expression of each emotion are evaluated and understood differently by representatives of different cultures. That is, it depends on the environment in which each nation was born, national history and values, etc. We used lexicographic sources, methods of analysis.
of dictionary definitions of emotions in order to identify ways of transmitting emotions through colors in Kazakh and English. In this article, we will analyze the ways and methods of color transmission of negative emotions in an artistic text. In particular, we can consider the negative emotions expressed in the works of the great Kazakh writer, translator A. Nurpeisov "blood and sweat" (Ymyrt, Sergelden, Kuyreu) and the American writer, publicist and novelist, public figure T. Dreiser "Trilogy of Desire" (The Financier, the Titan, the Stoic).

The analysis of emotional states in these literary texts is based on the traditional classification of emotions (Ekman, 2017) in comparison with pre-selected material about experiences significant for literary heroes. In the proposed classification of negative emotive coloronyms, only those speech models that clearly convey the negatively colored component of emotion with the fixation of the color of emotional experience are taken into account.

The main basic emotions are distributed along the poles of the maximum rating from plus to minus (Izard, 1999), while the very division into positive, neutral and negative emotions is relative. Thus, anger refers to negative emotions, but a positive connotation is found in the characteristic "righteous anger". At the same time, the emotion joy characterizes, as a rule, a positive psycho-emotional state, but the expression "frenzied joy" contains a negative meaning. In addition, such an emotion as surprise has an ambivalent character without a clear link to the negative or positive pole of the emotional reaction to the suddenness, spontaneity of certain circumstances. In this regard, the classification of emotions, as well as the assessment of psycho-emotional states can change both within one ethno-linguistic culture and beyond.

Verification of emotional experiences mentioned in the works of T. Dreiser and A. Nurpeisov is based on 10 groups of emotions identified by B. I. Dodonov (1987), based on pragmatics (tabl.1).

Table 1.

<table>
<thead>
<tr>
<th>Verification of emotional states in the literary texts of T. Dreiser and A. Nurpeisov</th>
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<tbody>
<tr>
<td>1. Altruistic emotions</td>
<td>they realize the basic needs of a person in assistance, assistance, patronage to other people</td>
</tr>
<tr>
<td>2. Communicative emotions</td>
<td>the need for communication</td>
</tr>
<tr>
<td>3. Glorious emotions (from Lat. gloria – glory)</td>
<td>They are conditioned by the needs for self-affirmation, encouragement, fame. Basic type of emotional situation: real or imaginary “reaping laurels”</td>
</tr>
<tr>
<td>4. Praxic emotions</td>
<td>The need for activity, assessment of its success/failure Basic needs: overcoming danger, overcoming certain “boundaries”, on the basis of which there is an interest in fighting</td>
</tr>
<tr>
<td>5. Pugnic emotions (from Latin pugna – struggle).</td>
<td>Basic frailties: the desire to comprehend the mystery, the sacred, the hidden, everything unusual, extraordinary, inexplicable</td>
</tr>
<tr>
<td>6. Romantic emotions</td>
<td>Basic needs: accumulation and hoarding, acquisition, &quot;collecting&quot; of objects, etc.</td>
</tr>
<tr>
<td>7. Acquisitional emotions</td>
<td>Basic needs: satisfying the &quot;information hunger&quot;, obtaining any new information, achieving &quot;cognitive harmony&quot;</td>
</tr>
<tr>
<td>8. Hedonistic emotions.</td>
<td>Basic needs: bodily, mental comfort, enjoyment</td>
</tr>
<tr>
<td>9. Gnostic emotions and/or intellectual feelings</td>
<td>Basic needs: finding a person in harmony with himself and the world around him</td>
</tr>
</tbody>
</table>

The interpretation of linguistic expertise of a literary text for the determination of categorical characteristics of emotions requires the use of such a gradation. Conducting free and directed associative experiments in multilingual cohort groups of students from Kazakhstan, Russia and China allowed us to determine that the basic emotions are perceived by the absolute majority of respondents in the standard response system: positive, negative and neutral. The emphasis on the color characteristic of emotion gave reason to operate by dividing into positivizing emotive coloronyms and negativizing emotive coloronyms for the linguistic description of emotive states in a literary text. A distinctive feature of emotive coloronyms is the absence of neutral coloring when using the color characteristic of emotion.
These metagraphs of emotion blocks are considered through the prism of the so-called "color circle" (Itten, 2019), thanks to which there is a relationship between the perception of color and emotion.

This important problem requires a consistent solution of tasks such as: 1) to clarify the conceptual and terminological apparatus for this work; 2) to compare the symbolism of color in the Anglo-American and Kazakh linguistic cultures; 3) to study the representation of the standards of basic color meanings of negative emotions; 4) to consider negative emotive coloronyms with their lexical and semantic variants according to the explanatory dictionaries of English, Russian and Kazakh languages to identify universal and idioethnic; 5) conduct directed and free associative experiments with Kazakh-Russian-English polylinguists in order to model the associative fields of the main color meanings of negative emotions; 6) create an architecture of language models aimed at reconstructing the content of the basic concepts of color presented in the idiolects of T. Dreiser and A. Nurpseisov, in conjunction with negative emotives; 7) carry out clarifying verification universal and ethno-psycholinguistic features of the studied negative emotive coloronyms.

These tasks are solved by using the method of modeling emotive concepts and conceptual analysis in order to identify the features that form the structure of the concept, taking into account their classification, integration and post-interpretation. In addition, an important place is occupied by directed and free associative experiments in order to determine the psycho-emotional potential of emotive coloronyms of the negative spectrum in the idiolects of T. Dreiser and A. Nurpseisov. Since we are faced with the difficult task of making comparisons in the planes of different structural languages, it is seen as defining the definitional analysis of negative emotions and negative emotive coloronyms in English and Kazakh with access to the conceptual analysis of emotives.

Results

There is no single emotional base between psychologists and psycholinguists. P. Ekman (2017) identifies six basic emotions (happiness, surprise, hate, fear, sadness, anger), while the famous psychologist K. Izard (1999) shows 12 basic emotions based on the model. The more elements are included in the definition of a psychoemotional state, the stronger the emotivity of the experience is transmitted in the text, which makes it possible to more clearly verify the emotion to the recipient of this text. Since, the science that studies the problem of emotions does not have a stable list of basic emotions, we decided to consider the negative emotions and colors that we encountered more often in our works of art. Emotions and colors are summarized in Table 2.

Table 2.
Color designation of negative emotions.

<table>
<thead>
<tr>
<th>Negative emotions</th>
<th>Color designation</th>
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</table>
| Anger, fury       | Black, blue, gray, red, pale, color change.
| Jealousy          | Red, yellow, black.                       |
| Surprise          | Black, red, color change                  |
| Shame             | Black, red                                |
| Hate              | Black, white, color change                |
| Fear              | Gray, blue, red, dark, fading, discoloration (shoots). |
| Sadness           | Black, color fading.                      |
| Grief             | Gray, red, pale, color change             |

Let's illustrate the data in the table with examples.

Anger.

1. Endy jengesine tipti oshigip aldy, kany kainap, kejdikke bitken kishkentai tomai kulaktyn ushy duyladap kyzara bastardy (Nurpseisov, 2004: 276). *(He was angry with his sister-in-law. His ears started to get red)*

2. *She moved toward the door; but Butler jumped up now and stopped her. His face for the moment was flushed and swollen with anger.* (Dreiser, 2016: 477) "Why not?” inquired Hand, grimly and heavily, turning squarely about and facing him. "It doesn't appear that you have extended any particular courtesy to Hull or Stackpole." *His face was red and scowling.* (Dreiser, 2016: 343)
Jealousy

1. Adyra kalsyn! Keshe emes pe edy, seri jigit kelgende jeldey esip, ayagy ayagyna timei ktkeny? Bir uiden kese, bir uiden tabak jiyp, esynyzyd alyp bitken jok pa edy? O, juzikara! O, karabet! (Nurpeisov, 2004: 20) (Damm her!) She said with hatred. As it was necessary to accept her dog, so she ran, bitch! From some asked a plate, others bowl. ran, bitch! And then it got heavier…

2. – Ne deidy? Kaynym – au, judyryktai baltaymnin nesin bolemiz. Ozim derbes alam – dep karakatyn kasynda turgan kisilerden kizganguyndai, aja kozimen ata bastady. (Nurpeisov, 2004: 193) (What? What’s there to share? Karakatyn shouted. — And the filly is skinny, it’s not enough for me!)

3. Her eyes blazed hotly, her color rose high and strong. She breathed heavily. (Dreiser, 2016: 252)

Surprise

1. She flushed, trembled, turned pale, in the grip of this strange storm, but drew herself together. It was wonderful—heaven. (Dreiser, 2016: 97)

2. She was strangely self-contained, enigmatic, more beautiful perhaps because more remote than he had ever seen her before. In a strange flash this young American saw the isles of Greece, Cytherea, the lost Atlantis, Cyprus, and its Paphian shrine. His eyes burned with a strange, comprehending luster; his color, at first high, went pale. (Dreiser, 2016: 362)

Shame


2. Slowly, in spite of herself, a telltale flush rose and mantled her brown cheeks. It always did when he looked at her. (Dreiser, 2016: 103)

3. She looked up, then arose—for he slowly drew her—breathless, the color gone, much of the capable practicality that was hers completely eliminated. She felt limp, inert. (Dreiser, 2016: 103)

4. Since it has not, I merely wish to say to you—and Mr. Haguenin’s face was very tense and white—“that the relationship between you and me is ended. (Dreiser, 2016: 207)

Fear

1. Ony Karatazdyn Baibishesi korip, iskke kiruge gana shamasjetty. Tili kurmelp, oni kuarryp, juke arksyn suiei tura kaldy. (Nurpeisov, 2004: 249). (Karataz’s baibishse saw him and only managed to get inside. Her tongue twitched, and she stood with his back to the truck.)

2. Bayagy kip-kishkentay kezinen bastap ozi jaksy biletin katal akenin ak kirigip, kizil kozi, kaysi birde ozinen otirip oskiriip kalatyn yzaly ashish miskili sesine tusedi de, tagy da tusi demde buzzilip, dir-dir etip kaltyrap koya beredi: “Kudai-ai, ozin koldai gor. Jerge karap kalmasam kaitsyn…” (Nurpeisov, 2004: 305). (She remembered her father’s inflexible, tough temper, remembered his white eyelashes, red eyes, his snorting, his venom, and again fear entered her soul. “Oh God, help me, don’t leave me! I’m afraid… It’s scary!”)

3. But I’m doing a great deal,” she replied, softly, a little breathless and a little pale. (Dreiser, 2016: 98)

4. He was cogitating as to what might happen to him in case his son failed, for he was deeply involved with him. He was a little gray in his complexion now, frightened, for he had already strained many points in his affairs to accommodate his son. (Dreiser, 2016: 271)

Grief

1. Akbala kup-ku. Kany kashkan bop-boz erin dirildep, oksik kyskan kokirek koterlip-basylip, koz toil jaq molytip omiruainna tamdy (Nurpeisov, 2004: 378). (Akbala turned pale. The pale lips were trembling, and her breasts rose and fell, and her eyes filled with tears.)

2. Asireese, dal osyndai olik shigip, el – jurt yzy-shu bop jatkanda, kozinen jaq, oninen kan kashyp sup-sur bop alatyndy (Nurpeisov, 2004: 58). Especially when such a corpse comes out, and the people are noisy, there were no tears in his eyes and he was pale.

3. His fat, white lips were trembling—wabbling nervously—and big hot tears were coursing down his previously pale but now flushed cheeks. (Dreiser, 2016: 339)

Sadness

These patterns are based on the works of classical writers of Kazakh and English languages. Although Kazakh and English are different in structure and genetically distant languages, both languages are widely used to express emotions in color. So, we found that in literature, authors use different colors to express the same emotions. For example, in Kazakh, the author used red to represent emotions of embarrassment, in English-white.

In works of art, authors use various language tools to convey the feelings and emotions of the characters to readers. N. E. Ezhova suggests 4 types of use of various language tools for the purpose of expressing emotions (Ezhova, 2003). The first is a nominative – descriptive type. In this form, the author also uses language units to describe the gestures and facial expressions that accompany these emotions with a specific word that expresses emotions.


2. But Stener was so frightened that at the moment it looked as though there was little to be done with him. His face was a grayish-blue: his eyelids and eye rings puffy and his hands and lips moist (Dreiser, 2016: 318)

In the examples above the authors further refine their emotions by describing the changes in the characters facial expressions using the words sadness and fear directly, the color of the face has faded, and using words and phrases such as jabyrkap bet-oninin boiaui onip, His face was a grayish-blue: his eyelids and eye rings puffy and his hands and lips moist.

The second is a characteristic type. Language units that describe certain feelings and emotions are used here. The names of emotions are not found in the text. For example:

1. Asirese, dal osyndai olik shigip, el – jurt yzy-shu bop jatkanda, kozinjen jas, oninen kan kashyp sup-sur bop alatyn-dy (Nurpeisov, 2004: 58). Especially when such a corpse comes out, and the people are noisy, there were no tears in his eyes and he was pale.

2. I'm not strong enough. If they didn't know, if you hadn't told them, it might be different, but this way--" He shook his head sadly, his gray eyes filled with a pale distress. (Dreiser, 2016: 319)

Without giving emotional names in these examples, the authors try to describe the emotions and feelings of the characters as best they can through various language tools. In these examples, the rhythm of the voice is also important. It is not difficult to see emotions in phrases such as: yzy-shy bop, kozinen jas, oninen kan kashyp sup-sur bop alatyn-dy, not strong enough. If they didn't know, He shook his head sadly, his gray eyes filled with a pale distress

The third is a nominative type. This type is distinguished by the use of language units that express them, including the name of feelings and emotions.

1. Her face paled slightly as she read it; and then her hand trembled--not much. Hers was not a soul that ever loved passionately; hence she could not suffer passionately. She was hurt, disgusted, enraged for the moment, and frightened; but she was not broken in spirit entirely. (Dreiser, 2016: 382)

2. Tanirbergen mirs etti. Ademi betine ashy miskil shaupp, ishte jatkan yza men yzygardy tsnyttip sup-sur bop sustiya kaldy (Nurpeisov, 2004: 294) (Tanirbergen mattered. A bitter smile spread across his beautiful face, revealing the anger and rage that lay inside him)

The expression, taken from the work of T. Dreiser, clearly describes the changes in the character's face and inner feelings. In addition, the emotion born from feelings is expressed. In the following example, A. Nurpeisov concretizes the emotions of anger by transmitting the feelings and emotions of the hero through changes in movements and facial expressions.
Fourth, it is the use of language units expressed in all 3 types. This type gives a complete description of emotions. For example:

1. She paused for a moment, uncertain how to take this, *the while she whitened, grew more tense, more spiritual than she had been in many a day*. Now she felt desperate, angry, sick, but like the scorpion that ringed by fire can turn only on itself. What a hell life was, she told herself. *How it slipped away and left one aging, horribly alone!* Love was nothing, faith nothing—nothing, nothing! (Dreiser, 2016: 402).

2. Zhasaganbergen yzalana kuldi. Algi jas jigitin ileli judeu juzine kafta teuip, du etip kizara tusidi de, lezde bozardy (Nurpeisov, 2004: 172). (*Zhasaganbergen laughed angrily.* The young man’s anger returned to his face, turning red and instantly got pale.)

The emotions expressed in the examples are not only clearly expressed, but also transmitted through different language units. In the examples analyzed in all forms, colors that express and characterize negative emotions are widely used.

As empirical material shows, the use of color characteristics to define a negative emotion occurs through its metaphorical designation. Metagraphs (Pic. 1) of negativizing emotive coloronyms are based on such conceptual ontologies as "The human world", "The Objective world", "The Natural World", demonstrating the complex nature of the relationship of these spaces with each other in the internal picture of the world of a native speaker.

At the same time, the persuasive potential (Clark, 2009) transforms the conceptual value matrix (v1-v5) of the target audience through a multimodal presentation of information with a complex structure architecture (mv1, mv2). In this regard, there is a need to improve the methodology of the analysis of meanings, based on semantic networks, frames, semantic networks, production rules, which in one way or another have a limited character. Concept graphs are a network of interconnected memory traces, the relationships between which can be identical, shared or completely separated. The use of a system of complex metagraphs, in our opinion, allows us to combine the achievements of various ideas about emotion in an interdisciplinary way using machine learning methods and intelligent systems.

The metagraph approach (Gapanyuk, 2019) seems promising in the verification of emotive coloronyms, since it allows us to consider the network of emotive experiences not only in the form of "horizontal" layers, but also in the form of "vertical" columns through color-visual characteristics. Thus, the ambivalence of emotions is organically "embedded” in a multidimensional metagraph model of emotions and emotive vocabulary. In this regard, it can be assumed that each fragment of the metagraph contains vertices/ or metavertices (v1-v5) that act as "reference" nodes of both the process itself and the connections of "edges" (e1, e2, e3, e4, e5, e6), thanks to which a new meaning formation occurs using the parameters of conceptual ontologies (Pic.1). The above analyses of emotives as verbalizers of emotions act as simpler edges in the metagraph.

For example, the relationship between the neuro-psychophysiological characteristic of emotion and its verbal expression, developed by H. Lövheim (2012), can also be inscribed in a polycode multiyometagraph model of emotive vocabulary within the framework of the ethnolinguocultural picture of the world of a native speaker.

W. Levelt's psycholinguistic model of speech reproduction presents language output as an extensive system of processing modules working independently of each other (Levelt, 1999), representing two complex metagraphs: 1) rhetorical/semantic/syntactic metagraph; 2) phonological/speech metagraph. The rhetorical/semantic/syntactic metagraph is responsible for conceptualizing the speaker's intentions and mapping them to the surface structure of words, and the phonological/phonological metagraph contains a set of articulatory instructions for expressing the surface structure and transmits them to the articulatory system for execution.

The multidimensional-metagraph model is dynamic due to the inclusion of polycode scaling parameters with an emphasis on a variety of measures and measurements (MVe), facts and features, aggregation rules and metagraph processes (MVs, MVi). As a result, the resulting metahedron can be described using recursion, since it allows you to detail a fragment of a metagraph through nested metaedges (Pic. 1). A given vector of decoding an emotive coloronym can be presented as a directed message for a potential recipient, based on the universal experience of the collective human unconscious, the ethnoscociocultural tradition and the individual picture of the addressee's world (Pic.1).
It should be noted that the metagraphic representation of emotion allows not only to recreate the process of encoding/decoding psycho-emotional states in the form of a metagraphic process of formation and reproduction of emotivity in the speech and behavioral practice of society, but can also contribute to the collection and attachment of metagraphic data (which in this case act as analogues of metagraphic aggregation rules) in order to process polycode data at each level a multidimensional metagraph model for data granularity with a transition to lower levels.

The vocabulary of the subject world itself becomes one of the dominant sources of figurative and metaphorical interpretation of the world of emotions. For example, negativizing emotive coloronyms metaphorically represent a negative spectrum of emotions with the maximum pronounced productivity of verbal predicates of the physical process, which somehow relate to semantic groups of action manifested through “freezing” (chilling white horror), “glow/illumination” (blinding hatred), “fire” (withering anger), “boiling” (boiling blood), “melting” (melting whitish hope), “sounding” (crystal transparent laughter of irony), “destruction” (black destructive thoughts). The repertoire of semantic groups of verbs correlates with the classification of predicate vocabulary proposed by L. M. Vasiliev (2005).

Thus, A. Nurpeisov describes anger as a living being: "The anger of the young man returned to his face" (Nurpeisov, 2004: 172). At the same time, a change in complexion characterizes the "movement" of anger, therefore, the speed of mood change describes a sharp jump in complexion: "it turned red and instantly turned pale" (Nurpeisov, 2004: 172).

The idea of emotion as a living being, which is characterized by its own life cycle, can be traced in the verbs of the physical process in the analyzed different-structured languages, which makes it possible to attribute this characteristic to the universals of human perception of psycho-emotional states, demonstrating the involvement of the nuclear components of meaning in the process of secondary nomination based on metaphorical attribution of color characteristics.

Based on this, it can be assumed that the anchoring of a color attribute to a particular emotion is a universal version of the collective unconscious, in which the bundle "emotion + color" contains a linguomental trigger that acts as a pattern that activates one or another emotional trace of universal memory (Jung, 2010).

Since the topic of emotions and attribution of emotives responsible for determining a particular emotion, the degree and intensity of its manifestation, the use of the metagraph model itself seems promising due to the possibility of
preserving topological relations for subsequent in-depth analysis without converting the structure into a numerical vector and without losing implicit cognitive-pragmatic patterns in the works of T. Dreiser and A. Nurpeisov.

The main characteristic features of A. Nurpeisov's trilogy "Blood and Sweat" are traditionalism, variability, polyelement, polyfunctionality and orientation to the folklore tradition of transmitting information with the help of "uzun kulak"/"long ear" (the so-called steppe mail - I. B., etc.), which brings this work closer to such genres of Kazakh folklore as tolgau (lit. reflections), in which zhysrau (folk singers, storytellers) narrated about the past history, great people of the people, etc.

The color characteristics of the emotive perception of reality illustrate the specifics of immersion into the inner world of the writer, which allows you to show new accents of perception of yourself and reality: vanity, deprivation and hardships of life, awareness of the chthonic end and the proximity of death, acceptance of your own physical weakness and your loved ones, devaluation of the importance of social rules in the collapse of the state system, awareness of the importance of harmony with by yourself and nature, etc. Currently, the experience of emotional and evaluative perception of life, presented by T. Dreiser and A. Nurpeisov in his novels is important due to the fact that the global geopolitical cataclysm forces us to reconsider the culture of relationships with ourselves and the world, relying on the achievements of ethno-linguistic and confessional cultures (Qin et al., 2022; Munnes et al., 2022). In this regard, such ethnolinguistic cultures, complex in their ethogenesis (as Kazakh and Anglo-American), are beginning to be characterized from the mythological and mystical positions of Christianity and Islam. As a result, the aura of sacredness in the everyday permeates both works under consideration, forming a mysterious mixture of pagan, Muslim and Christian views in the literary and artistic picture of the world by A. Nurpeisov and T. Dreiser.

Both writers gravitated towards a naturalistic representation of reality in their novels, using color markers of attribution of emotion. So, sadness, depression, prostration is conveyed by A. Nurpeisov in the novel "Blood and Sweat" through the perception of the steppe through the eyes of the protagonist, who sees only the "gray-brown spots" of grazing sheep dusted with steppe dust. It should be noted that psychophysicologists point out that the very excitability of the emotionogenic structures of the cerebral cortex depends on the form of external behavior, while the ratio of the level of excitability of emotionally positive and negative brain waves correlates the direction of behavior (Slezin, 1989). It is no coincidence that I. V. Kalita (2017) emphasizes that gray color characterizes a negative spectrum of emotions: from mild rejection to deep depression.

The presented table allows us to consider the common markers of negative emotional evaluation in the novels of T. Dreiser and A. Nurpeisov (Table 3).

Table 3.
Linguocolor comparative characteristic of negative emotions

<table>
<thead>
<tr>
<th>No</th>
<th>Name of the negative emotion</th>
<th>Emotive coloronym</th>
<th>realization</th>
<th>T. Dreiser</th>
<th>A. Nurpeisov</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>indifference</td>
<td>indifferent red steppe</td>
<td>Clyde: white, glam. seemingly indifferent.</td>
<td>Clyde was white and glam. He stood to one side, seemingly indifferent.</td>
<td>The indifferent red steppe sleeps, it says nothing to the lonely rider.</td>
</tr>
<tr>
<td>2</td>
<td>Anger</td>
<td>merciless clarity, red and black dress with a very dark red poke</td>
<td>Pugnic emotions (from Latin pugna – struggle).</td>
<td>She had come garbed in a red and black dress with a very dark red poke bonnet to match</td>
<td>She was still quite a boy, but with a child's merciless clarity I realized how hard her life was... her young rival... drove her out of the house. What? What's there to share? Karakatyn shouted. — And the filly is skinny, it's not enough for me!</td>
</tr>
<tr>
<td>3</td>
<td>Jealousy</td>
<td>her color rose high and strong, Karakatyn</td>
<td>Romantic emotions</td>
<td>Her eyes blazed hotly, her color rose high and strong. She breathed heavily.</td>
<td></td>
</tr>
</tbody>
</table>
Color occupies a key position in the construction of detailed associative connections in a literary text, since color is one of the most common semiotic systems and has a significant cultural and symbolic meaning (Itten, 2019). A. Nurpeisov widely uses the technique of color painting, with which he describes the emotional perception of reality, creating an individual image of the steppe in the perception of the linguistic color palette of the feelings of the heroes: *The indifferent red step sleeps, it says nothing to the lonely rider* (Nurpeisov, 2004: 32).

From this expanded metaphor, it can be seen that the color characteristic has not only the traditional nominative function of color designation, but also performs an emotionally expressive function. Before us is an overlay of two images: steppe grass acquires a red color in autumn. In Anglo-American linguoculture, it is the color of gold and wealth. However, in the steppe Kazakh culture, it is a sign of the approaching winter, as well as a symbol of an unfriendly neighbor with blond hair based on the “friend – stranger” dichotomy, so here the definition of “indifferent” is: the steppe is red and indifferent. At the same time, T. Dreiser's intactness, indifference has a white color, which is due to the fact that people turn white at the moment of fainting and loss of consciousness: *Clyde was white and glam. He stood to one side, seemingly indifferent* (Dreiser, 2016: 23).

The classic dyad of life and death in is transmitted through red and black, where black symbolizes death with the collapse of all the hero's hopes for happiness (Dreiser, 2016: 410-411). T. Dreiser dresses nature in black on the day of Roberta’s death as if in mourning. Also, Clyde’s nightmares, which signify imminent misfortunes, are painted in an oppressive black palette.

Automatic determination of the emotive tonality of texts with linguocolor comparative characteristic of negative emotions is a step-by-step work of experts and artificial intelligence. This algorithm is presented in the form of the following author's scheme (Pic.2).

**Pic.2. Structure of the Emotive coloristic map of the art texts of T. Dreiser and A. Nurpeisov.**
Thus, the presented architecture of the linguo-emotive map of texts with coloristic emotives acts as a hierarchically complex metagraph of psycho-emotional and symbolic-semiotic effects on the recipient, which are realized at the verbal level (directly through the word), at the nonverbal level (color symbolism in the characteristics of objects and subjects, acting as an evaluative marker with an additional emotive meaning) and at the paraverbal level (for example, intonation and tempo-rhythmic drawing of a literary text, highlighted by the author’s punctuation marks and graphons), which all together organizes a system of polyvariant emotive coloronyms in the mental internal map of the producer and recipient (Pic. 2). The use of a coloronym as a marker with an additional emotive meaning strengthens archetypal ideas about the world, reproducing myths in the consciousness of a modern native speaker of language and culture. Emotion, with its not fully understood mechanism of regulation and influence on the speech-teaching profile of an individual, acts as the realization of the actions of some deity and/or spirit. In this regard, the coloring of emotion illustrates the operation of the law of cause and effect with an emphasis on the unconscious mythologeme of the archeohistory of the origin of emotional response: “Once a supernatural being performed a certain action for the first time, and since then this event has been repeated identically” (Hübner, 2004: 122).

Based on the definition of the character of coloronyms with an emotive negating meaning in the literary texts of T. Dreiser and A. Nurpeisov, we come to the conclusion that the color designations of negative emotions are a kind of emotive concepts as ethno-socio-culturally conditioned linguistic formations. Their ethno-sociocultural conditionality is formed specific socio-cultural, ethno-psycholinguistic standards and rules of a particular community that make up the ethno-cultural value code, which includes traditions, customs, peculiarities of everyday life, stereotypes thinking, mores and behaviors.

**Discussion**

The terminological apparatus of emotive comparative ethno-psycholinguistics is currently undergoing a stage of rapid formation (Berdnikov, 2004; Dael et al., 2020; Jensen, 2014; Rathod, 2014; Kalita, 2017). Only recently, researchers have begun to distinguish between the psychophysiological state of emotion and verbal attribution of emotional experience (Basin, & Krutous, 2007; Shakhovskiy, 2018). The complexity of the spectrum of psycho-emotional states experienced predetermined the use of color verifiers in determining the shade of feelings and emotions.

In this regard, the analytical analysis presented by D.N. Borisova (2008) is interesting in the article "On the problem of choosing the term color for the name of forms of color designation in the language". Within the framework of our research, it is significant to analyze studies devoted to the consideration of words and expressions that are assigned to the designations of color shades in various languages, with the identification of five trends in the terminological description of lexemes with a coloristic component and the development of unified methods of terminological nomination in this area: color designation, color name, color term, chromatonym, coloronym (Borisova, 2008: 36).

As L.A. Kalimullina clarifies, color designations are “adjectives denoting color, formed from the names of various objects of the surrounding reality and having a pronounced etymology” (Kalimullina, 2004: 5). At the same time, the term "color designation" is not universal. Along with it, synonymous terms such as “colour naming” (Watts et al., 1986), “color adjective” (Ishmael, 2015), “color vocabulary” (Berdnikov, 2004) or “colorative” (Perfilova, 2014), and “coloronym” (Polyakova, 2013) are used. Thus, there is currently a discrepancy in the choice of a single term for the designation of tokens with the meaning of color and its shades. At the same time, it is immediately emphasized that coloronyms are metaphorical and anchored to a particular emotion (Kalita, 2017; Jonauksaite et al., 2020; Vychuzhanina, 2009). Interest in the psycho-emotional component of color also led to the expansion of the terminological apparatus of the coloristic repertoire (Mylonas, & MacDonald, 2016).

Numerous theories interpreting the meaning of color are based on the universal psycho-emotional co-values of the color spectrum that affects a person. At the same time, to date, one of their most famous remains the theory of B. Berlin and P. Kay, which is aimed at finding universal patterns in the evolution of color terms (Berlin & Kay, 1969: 45). The main place in this theory is occupied by the concept of basic color naming (“Basic color term”). The authors have identified 11 terms of color designations that are universal in most languages of the world.

Our work shows that despite the presence of universal meanings (such as: red is a struggle, life, and black is death), there are obvious
discrepancies with the traditional perception of color in the artistic paintings of the world of Kazakh and American writers, which is due to the specifics of the representation of author's emotions in a literary work. For example, the green color in T. Dreiser’s works is ambivalent in its emoticons, being used both as a symbol of reborn life (which coincides with the ancient Turkic interpretation of green, which has been preserved in the Kazakh language), and as a sign of impending trouble, since in American culture green is a symbol of greed, disease and jealousy, since it was noticed that mold and any rotting organic remains and/or waste also have a green color. Hence, the green color can be associated with corruption, witchcraft, malice, envy, corruption, disgust, madness and chthonic horror. “The decadent and weird nature of some of the bogs and tarns on either side of the only comparatively passable dirt roads <…> strewn like deserted battlefields with soggy and decayed piles of fallen and crisscrossed logs <…> in the green slime that an undrained depression in the earth had accumulated. Only - only - these tall, dark, green pines - spear-shaped and still, with here and there a dead one - ashen pale in the hard afternoon sun, its gaunt, sapless arms almost menacingly outstretched” (Dreiser, 2016: 108).

A. Nurpeisov, in the very title of his trilogy, uses the iconic lexeme “blood”, which is a universal symbol and cult status in all languages and cultures (Savchenko, 2010), therefore, the color of blood (as well as its symbol – red paint) became, apparently, one of the first basic colors that mankind got acquainted with in archaic times (Rogalevich, 2004: 194). The word “sweat” forms an antonymous pair to the lexeme “blood”, which has long been stigmatized in Western culture due to an unpleasant smell and ethno-cultural trauma due to the epidemic of the so-called “English sweat” (Heyman et al., 2018). In Kazakh linguoculture, increased sweating in men symbolizes high physical achievements, strength, fortitude, masculinity (Kaskabasov, 2014).

The symbolism of the blue color is due to the obvious observation of the blue of a cloudless sky in good weather. In this regard, the sacralization of the blue color occurred in the mythologized consciousness of the individual, thanks to which the sky in all cultures is associated with the world of spiritual and/or sacred support, the place of the presence of gods and spirits, angels, heroes and ancestors. In this regard, the experience of divine ecstasy, elation, related to Gnostic emotions, is associated with the blue color. Clyde’s inner state, his soul, etc. Dreiser through the image of the crystal clear, bright blue water of the Chain River and the lake at the Cranston cottage, where Clyde spent time in love with Sondra.

However, the other polarity of blue is a dark blue color, almost turning into black. Therefore, the dark blue color acts as a sign of swirling darkness, fallen angels, danger. Hence the main symbol of dark blue is demonic evil. It is no accident that the waters of the ill-fated lake appear dark blue, almost black in T. Dreiser’s reflection: "The bright blue waters of the Indian Chain. The blue waters of this bright lake without as contrasted with the darker ones of Big Bittern. But just then a long aisle of green trees giving out at the far end as he now recalled upon a square of lawn, and the lake itself, the little inn with its pillars, verandah, facing the dark blue waters of Big Bittern” (Dreiser, 2016: 108).

At the same time, the coloristic thinking of Kazakhs defined light blue or bright blue, the heavenly color as a symbol of God-Heaven and his word manifested in color (Mazhitaeva et al., 2013). However, dark blue was not defined as a sign of the devil’s powers, but as evidence of the wrath of the Heavenly Father. According to S. S. Turganbayeva (2011), the Western type of culture is characterized by imitation of nature, naturalism, pragmatism, individualism, extroversion. While the eastern type of culture is focused on symbolism, abstraction, contemplation, introversion, spirituality, which allows people of the East to be open to nature, the cosmos, trusting being (Turganbayeva, 2011: 29). However, these conclusions are not supported by experimental material, which makes it possible to question the significance of these factors in understanding the role of color in culture. As our observations of the neuro-aesthetic functional of the color designations of objects in the text as a hidden interpretation of the emotional states of the characters in the works of T. Dreiser become more capacious and compressed in the works of Western fiction, for which there is no need to use Eastern macaronisms and / or references to archetypal images. The sacred layer of the color scheme in T. Dreiser’s works of art is implicit and understandable only to the initiate, appearing to the uninitiated only as a dry pragmatic solution.

In the Kazakh ethno-linguistic and cultural consciousness, the semantic space of "blue" colors is realized through the archetypal images of "Blue Wolf"/ Kök Böri, "Blue God"/ Kök Tangri, which allowed researchers to assert that
all the great forces governing human civilization possess blue color (Zharkeynbezkova, 2011). The neuro-aesthetic psycho-emotional effect of the "blue color" is associated with the possibility of using a variety of emotive expressive language units that are able to convey to the recipient an understanding of the essence of the impersonal connection between earth and sky as an understanding of the concepts of ocean, sea, lake and river in the celestial and aquatic space. The Kazakh linguistic-color emotive map, according to scientists A.T. Khaiderov, A.T. Umirbekov, Z.T. Akhtamberdiyev (1986), who studied coloronyms in the Kazakh language, is saturated with semitones and various shades under the influence of color solutions inherent in the nature of steppe fauna and flora. In this regard, Kazakh researchers stressed the need to use the traditional "primary color" and "its shades". Also, based on experimental data, it was found out that the mixing of the main seven/or ten colors forms new certain colors (Khaiderov et al., 1986; Pansat, & Khalikova, 2023). According to A.T. Kaidar, who studied Kazakh color meanings in this way, the Kazakh language presents a palette of more than 150 color meanings consisting of one syllable, formed on the principle of reliance on a subject basis (Kaidar, 1998: 53). For example: blood red, cherry red, bright red, golden yellow, sky-blue, cast-iron black.

Today, emotive linguistics reveals a pronounced attitude to comprehending the cognitive aspect of language activity, conducting experimental procedures using big data on the conceptual analysis of the color representation of emotions as a linguistic phenomenon (Antipenko, 1995; Dodonov, 1987; Itten, 2019; Frunkina, 1984; Monastyrskaya, 2008; Stefansky, 2009; Vezhbitskaya, 2011; Vychuzhanina, 2009; Vasilevich, 1987, etc.). If earlier researchers turned only to the "conceptual core" of the word (Yartseva, 1968: 262), today more and more attention is paid to additional, connotative, emotive meanings that permeate all levels of the language system (Qin et al., 2022; Zhang, et al., 2023; Rong, 2021).

The very analysis of the cognitive-connotative nature of colorative emotives in the texts of T. Dreiser and A. Nurpeisov aims not only at studying the conceptual core of the concept "Color in negativizing emotive coloronyms", in which emotives and coloronyms themselves can act as sub-concepts, most clearly manifested in the peripheral zone, which has absorbed a huge space of connotative meanings. As can be seen from our analysis, in the literary texts of both writers, the toxicity of negativizing emotive coloronyms is usually demonstrated by accentuating the connotative meaning due to the context. The development of a recommendation information and analytical system for the recognition of negative emotive coloronyms includes typical and specific features of the use of machine learning and neural networks (Vorontsov et al., 2022).

The indicated problem demonstrates the need for clarity in the categorical features of the terminological apparatus of comparative emotive linguistics, which is necessary to solve problems related to the recognition of emotion, its characteristics and emotives, through which this emotion is realized and translated externally.

At the same time, the refinement of the conceptual and terminological apparatus of comparative emotive linguistics within the framework of this work allows us to create a more coherent architecture of the linguistic-color emotive map using digital tools.

Conclusion

Using the example of the analysis of the novels by T. Dreiser and A. Nurpeisov, the role of color designation in the transmission of the inner experiences of the characters and the reflections of the authors themselves was established with the identification of metaphorically related and indirect meanings of the transmission of negative emotions in the text.

The text itself is a rather complex object for research due to its multidimensional and multi-aspect nature, and the analytical consideration of the emotive plan is complicated by the ethnopsycholinguistic features of the author and the audience.

In works of art, colors can perform various functions. Psycholinguists have come to the conclusion that colors are used to describe emotions or express them. They describe the reaction of the characters to emotional situations. In addition to expressing emotions, it is used to create a visual image of emotions and feelings. Taking into account the analyzed examples, we came to the following conclusion: in literature, the usage of colors that express emotions in the text is carried out by several methods. The first is that when a character experiences an emotion, colors are used in the process of describing the same emotion, actions, or facial changes. In these situations, there may not even be Language units that we call emotions. Secondly, emotional states...
are transmitted using figurative means. For example, metaphors with color names, comparisons, epithets, and so on.

Color synchronies with emotions occurs in consciousness, and not in the surrounding world, since the nature of emotions is due to psychophysiology. The concept provides a connection between the existing representation in consciousness and the linguistic representation. Despite the fact that the data of psycho-emotional response are subjective, the concepts used are universal for the translation of the received experience.

The emotive co-meaning in the matrix of meanings of the concept “color” has the character of an ethno-lingu-cultural element, which is due to the connection with its connotation, which is predetermined by ethno-sociocultural norms and rules fixed in the value code of the ethnos.

The authors use negativizing emotive coloronyms with an emphasis on the experience of their ethno-linguistic culture, while the author's use of emotive metaphors of color to convey negative emotions is individually authorial.

The nuclear zone of emotive coloronyms with a negative dominant is a nominative of color designation. The peripheral zone includes numerous interpretations of coloronyms resulting from their representation in a literary text based on everyday communication. However, only the textual fabric is able to verify the connotative meaning of coloronyms that also convey emotional sound. This has not only conceptual, but also axiological cultural value, since it makes it possible to realize the values that are characteristic of a certain nation with its mentality.

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Bibliographic references


Ulyanova, M. A. (2011). The category of emotivity as a linguistic concept and the main approaches to its study. Topical issues of


