






Applied Technology of Fiction and Non-fiction Conceptual Presentation via ICT Tools: Pedagogical Function of Graphic Mimesis

Rusudan K. Makhachashvili¹^a, Svetlana I. Kovpik²^b, Anna O. Bakhtina¹^c,
Nataliia V. Morze¹^d and Ekaterina O. Shmeltser³^e

¹*Borys Grinchenko Kyiv University, 18/2 Bulvarno-Kudryavska Str., Kyiv, 04053, Ukraine*

²*Kryvyi Rih State Pedagogical University, 54 Gagarin Ave., Kryvyi Rih, 50086, Ukraine*


³*State University of Economics and Technology, 5 Stepana Tilhy Str., Kryvyi Rih, 50006, Ukraine*


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Abstract: The article deals with the technology of structuring and visualizing fictional and real life empirical concepts with the help of emoji symbols in open source digital text mining platforms that not only activates students' thinking, but also develops creative attention, makes it possible to reproduce the meaning of poetry in a succinct way, develops comprehensive digital literacy. The application of this technology has yielded the significance of introducing emoji in the study and mastering of literature is absolutely logical: an emoji, phenomenologically, logically and eidologically installed in the digital continuum, is separated from the natural language provided by (ethno)logy, and is implicitly embedded into (cosmo)logy. The technology application object is the text of the twentieth century Cuban poet José Ángel Buesa. The choice of poetry was dictated by the appeal to the most important function of emoji – the expression of feelings, emotions, and mood. It has been discovered that sensuality can be reconstructed with the help of this type of meta-linguistic digital continuum. It is noted that during the emoji design in the Emoji Maker program, due to the technical limitations of the platform, it is possible to phenomenologize one's own essential-empirical reconstruction of the lyrical image. Creating the image of the lyrical protagonist sign, it was sensible to apply knowledge in linguistics, philosophy of language, psychology, psycholinguistics, literary criticism. By constructing the sign, a special emphasis was placed on the facial emogram, which also plays an essential role in the transmission of a wide range of emotions, moods, feelings of the lyrical protagonist. Consequently, the Emoji Maker digital platform allowed to create a new model of digital presentation of fiction, especially considering the psychophysiological characteristics of the lyrical protagonist. Thus, the interpreting reader, using a specific digital toolkit – a visual iconic sign (smile) – reproduces the polylaternal metalinguistic multimodality of the sign meaning in fiction. The effectiveness of this approach is verified by the poly-functional emoji ousia, tested on texts of fiction. The experiment with the construction of signs and concepts in the Emoji Maker platform was supplemented by another experiment involving students in its visualization. The location specificity of the experimenters and respondents of the experiment is taken as the basis for generating a sign – the image of Borys Grinchenko as a patron of the Borys Grinchenko Kyiv University. Consequently, an individual approach to the visualization of corpus data was tested using the web application Voyant Tools, which works as an open source, providing text mining data. It is proved that with the support of reading and interpreting texts or corpus, digital analysis of the text becomes a significant linguistic addition to the generated sign. And the visual complement can be based both on a specific text (poetry by José Ángel Buesa) and on keywords / concepts (the image of Borys Grinchenko in the context of a specified location – at Borys Grinchenko Kyiv University).


1 INTRODUCTION


Problem statement. Emoji signs are specific Unicode-based ideograms. Nowadays emotions and impressions of the written and read text can be con-

^a  <https://orcid.org/0000-0002-4806-6434>

^b  <https://orcid.org/0000-0001-6455-5572>

^c  <https://orcid.org/0000-0003-3337-6648>

^d  <https://orcid.org/0000-0003-3477-9254>

^e  <https://orcid.org/0000-0001-6830-8747>

veyed in the form of punctiograms, pictograms and ideograms. Emoji is a multifunctional ideogram that not only saves one space in correspondence when communicating through social media, but also conveys shades of emotions, moods, feelings based on what one sees, hears, or reads. No wonder emoji in the modern world is considered a hieroglyph of the 21st century.

As modern literary criticism undergoes a process of depressurization, the allure of digital capabilities of the Emoji Maker platform as a metalinguistic phenomenon to the study of literary works will increase the interest of students of philology in works of fiction, developing creative thinking (Pidopryhora, 2019). The specificity of applying emoji to the analysis of a fictional text and, on a larger scale, to empirical experiences of concept construction by students in real life is to condense and synergize the result. This is primarily due to the fact that emoji modeling and conceptual visualization takes into account only the most basic and key senses. This avoids the recipient's own context when interpreting the text and concept and grasps the main point. That is why the transmission of the content of major genres (stories, novels, trilogies) is possible by modeling one or more emoji. All this also develops the ability and skill to create visual texts that will convey the full range of feelings from a read piece of fiction. This type of visual texts conveys the content of the reading as briefly as possible, activate memory, critical assessment, attention of students. It is through emoji that one can translate fiction, film, other fictional and non-fictional media, as well as real life experiences. In addition, the improvement and modernization of the structural and logical specifics of the visualization of the artistic image help to increase the efficiency of the image, which consists of the flexibility and clarity of the physiognomic interpretive series in the image. The latter, in turn, brings the visualized image closer to the original. However, this is a problematic field, because the visualization of the image with emoji is impossible without taking into account mental frames that structurally represent individual (stereotypical) factors of human consciousness and memory, depending on ethnic, national, and cultural systems. The latter, in turn, encodes in the human mind internal (psychology, picture of the world) and external (physiognomy) personality identifiers, which are explicated in psychology as mental frames. Taking into account all the above, there is a problem not only in the interpretation of a verbal text but also in the optical visualization of the text and/or its images.

The objective of the paper. Development and testing of information and communication technology

application of presentation of different genres of fiction and contextualized educational concepts via the Emojidom Smiley, Emoji Maker (PlantPurple Sticker Apps, 2018) and Voyant Tools (<https://voyant-tools.org/>); approbation of the algorithm of visualization of literary text images on an abstract (non-artistic) image (the image of the patron of Borys Grinchenko Kyiv University) within the development of emotional intelligence of the student, expressed in the flexibility of mind with a creative approach to the visualization of ideas and images.

Information and communication technology (ICT), where technology is understood as a set of methods, tools and implementation by a person of a complex process by dividing it into a system of sequential interconnected procedures and operations that are performed more or less uniquely and aim at achieving high efficiency of a certain activity (Kommers et al., 2015), in our study emphasized the role of unified technologies, namely, software (Emoji Maker, Voyant Tools). This allowed students to create a model of visual interpretation of artistic (poetic) text during the experiment. With a limited set of tools in the program set, students rely on their own essential empirical experience and on a sensory typology that corresponds to three main types – visual, audio and kinesthetic (Franken, 2007). In addition to aforementioned, students, using the color scheme, rely on general information about the person's physiognomic characteristics (Franken, 2007), which allows them to accomplish the task: to model the features of the faces of lyric characters in Emoji Maker according to contextual events, feelings, phenomena.

Analysis of recent research and publications. According to Pidopryhora (Pidopryhora, 2019), "... the invasion of new technologies (computer, Internet) into the sphere of literature – changes the nature of authorship, the structure of text, the essence of reading and the form of interaction between the reader and the text, the level of communication interaction author – reader – text" (Pidopryhora, 2019). Thus, emoji literature technology enhances the ability of philological students to convey the content of literature in the most appropriate characters or symbols.

Emoji researchers are convinced that these characters have great hypertext potential. For example, there have been attempts to translate the text of Herman Melville's novel "Moby Dick" via the appropriate emoji, called "Emoji Dick" (Benenson, 2010).

Lebduska (Lebduska, 2014) concluded that emoji does not threaten the alphabetic literacy of the student, providing instead a means of creative graphic expression. This sentence is supported by the argu-

ment that in some cases emojis, on the contrary, help to explain the intentions or tone of the verbal text, but not without taking into account the cultural and contextual field. Therefore, the author of the article appeals to the conclusion of T. J. Mitchell: “In this replacing of text, emojis may be perceived as participating in the “protracted struggle” between the pictorial and the linguistic that T. J. Mitchell observed, “the relationship of subversion, in which language or imagery looks into its own heart and finds lurking there its opposite number” (Lebduska, 2014).

An emoji researcher Danesi (Danesi, 2016) also takes up the dichotomous position. The author offers a number of interesting examples of the use of optical signs, emphasizing the increasing interest in the technological visualization of verbal texts using emoji. However, Danesi (Danesi, 2016) questions the universality of the optical structure of emoji, which, in turn, also appeals to mental frames in sign generation.

Today, emoji is not only a linguistic tool, but also a psycho-physicalist one. By modeling this or that facial expression of an emoji, the author gives it the emotional touch that corresponds to the level of sensuality. The emoji face performs an informative function, that is, communicates to the interlocutor the emoji author’s response to a text, which greatly diversifies written communication.

Consequently, by making sense of poetry with the help of a self-designed emoji corps in Emoji Maker platform, philological students have the opportunity to expand the range of emotions, moods and experiences that arise in the process of reading poetry and especially its interpretation. Emoji face expression is a student’s creative approach to understanding the essence of prose and poetry. After all, all human feelings are expressed not so much in words as in facial expressions. So, we offer emoji modeling technique that reproduces the artistic meaning of poetry.

2 RESEARCH METHODOLOGY

The following methods were used to solve the established problems: empirical – in the course of conducting an experimental study of emoji modeling in class with students; applying a systematic approach to consider an object as a system model; functional approach – to determine the functions performed by the model; pedagogical modeling (Ostapenko, 2005) – for the study of pedagogical objects (phenomena) by means of modeling of conceptual, procedural, structural-content and conceptual characteristics and individual “sides” of the educational process within

the defined socio-cultural space at the general educational level; aspect analysis of the artistic text – for the separation of stanzas and content clusters; deductive – for sign assembly.

3 RESEARCH RESULTS

Natural language in its ousia is that macrocosm that is reproduced in the continuum of the world of things (Plato, 1997). As we know, the efficacy of this subordination to a pragmatic world gives natural language the evolutionary status – capable of expansion, and most importantly capable of simplification. The latter, in turn, has an ontogenetic function of preserving and extending the human race: “We must simplify grammar until grammar has simplified us” (Redacción Centro Gabo, 2018). It concerns the codification of human consciousness through language, and more precisely, through its unilateral structure (*US*) and polyilateral ousia (*PO*). We emphasize the term ousia, since the term has passed the stage of modification and in the Greek language the denotation of this concept is absent. In modern Greek, the term is interpreted to mean the essence and nature of a thing. However, the “Dictionary of Untranslatables: A Philosophical Lexicon” (Cassin et al., 2014) presents differences in understanding of concepts by different scholars and in different epochs. The dictionary emphasizes that the meaning of the word has undergone a radical transformation between Plato and Aristotle, since the former understood everything in the modern sense of “property” and in the philosophical sense of the essence of things, while the latter added other meanings, identifying ousia with ὑποκείμενον/theme (causes it to label εἶδος through ousia sometimes, a type or feature, sometimes the unity of matter and eidos, and sometimes matter itself). Through the subsequent history of philosophy, the situation was increasingly complicated, since the Stoics regarded everything as an indeterminate substrate, thinkers of middle Platonism and Neo-Platonism returned to the meaning of “essence”, and Christian Christology approximated ὑπόστασις with ousia giving the latter more enriched meanings, nonexistent in modern Greek (Cassin et al., 2014). It is because of differences in translations and interpretations that all modern Greek translators have decided to leave the word untranslatable, taking into account the entire range of interpretations available. The latter gives us the possibility to use the term “ousia” in the study.

It is worth noting that the unilateralism of the structure is not universal to all speakers, but is identi-

cal to the distinctive thinking (*DT*) of a person, which, in turn, is an explanatory factor for the evolution of language. Let us describe this process with the following formula:

$$\frac{US + DT}{PO},$$

where *PO* is a substantiated exponent, in fact, the material expression of a linguistic sign.

In the context of language simplification, the work of Wittgenstein (Wittgenstein, 2007) “Tractatus Logico-Philosophicus” plays a key role. According to the concept of the scholar, called “language game”, which correlates, and at the same time contradicts, the role of natural language in the reflection of the world, it is believed that natural language is most capable of world reproduction, but the peculiarity of language games is that there are specific rules that each player can understand differently. However, this is precisely the reason for the multilateral character of the ousia of a sign. After all, we are already dealing with the arbitrariness of his understanding (Wundt, 1874).

The only field, where a sign synthesizes all its meanings, is exclusively a metalinguistic environment – one where any linguistic unit is reproduced as a linguistic-communicative (Bally, 1965; von Humboldt, 1999; de Saussure, 1971), and logical and philosophical essence (Frege, 1879; Peirce, 1994; Wittgenstein, 2007). Such a field is computer being (CB) – a complex, multidimensional sphere of synthesis of reality, human experience and activity, mediated by digital and information technologies (Kutyrev, 2001). The linguistic aspect of CB research is determined by objective historical and geopolitical prerequisites: cybernetization, globalization, informatization of world society (Lebduska, 2014, p. 1). It is in the continuum of CB, where the language game is the symbolic and semiotic foundation of Web 2.0 platform testing, that game rules acquire metal-linguistic characteristics and require special content analysis.

Essential-empirical analysis of computer being as a linguistic universal continuum uninstalls the following ethno-barriers: folk-mythological arsenal, cultural paradigms, socio-political discourses, etc. The key to this uninstallation is the phenomenon of “emoji” – “ideograms or emoticons used in emails and web pages” (Lexico, 2021). The digital emoji corps is a technogenetic mimesis of pictographic writing. The function of emoji, as pictography, is to identify the meaning, the content of which a priori eliminates its own invariance, transgressively appealing to the logical-eidological plane (Reformatskii, 2004). Emoji in CB is a universe, its visualization is exploited by the macrostructure of technogenesis, which is indicated by the internal unity of its components

at the micro- and macro-levels and in the plane of the sign substrate (formal and semantic elements and structures) and the synthesis of features of ontological, cognitive and anthropological substance (Lebduska, 2014, p. 2).

Thus, the importance of implementing CB emoji in the study and interpretation of literature is absolutely natural: emoji, phenomenologically, logically and eidologically installed in the digital continuum, is separated from the natural language predicated by (ethno)logy, and implicitly embedded in (cosmo)logy. Understanding emoji is not subordinated to the nationality of the speakers. Another interpretation is that each speaker interprets the linguistic field in terms of its empirically-essential foundation, but this premise does not preclude the understanding of emoji.

Emphasizing the iconicity of the emoji corps, we appeal to the concept of modality and multimodality. Bally (Bally, 1965) noted that modality is the soul of the proposal; like thought, it is formed predominantly as a result of the active operation of the speaker who speaks. The scholar distinguished the main content (dictum) and its modal part (modus), which formulates emotions and intellect of reasoning regarding dictum. And therefore, modality is expressed in two types: objective and subjective. (Inter)synthesis of these types also involves multimodality as a way of constructing and reconstructing concepts and meanings with their integration into a metalinguistic semantic field, in which, in fact, the hypertext semiotic code is established. Thus, with emoji we get to a multilevel structure of language – from the phonetic level to the textual level.

Before proceeding to the empirical analysis of poetry modelling, let’s define the algorithm by which, with the application of the Emoji Maker program, emoji is constructed taking into account formal and informative factors of a fictional text.

1. At the first stage, students are offered poetry for analysis. Emphasizing that poetry is imagery, and therefore its analysis must be accompanied by imaginative and critical thinking.
2. At the second stage, we propose to analyze the text using the Emoji Maker digital program, having outlined the purpose and tasks before. The program provides students with a limited list of options for creating emoji, and thus the students’ creative and creative skills, as well as the essential empirical experience that will allow them to explain and substantiate the color choices of the emoji and its components, play a special role in the task.
3. At the third stage, we must emphasize to the students: emoji models should correlate with the

ACUÉRDATE DE MÍ	REMEMBER ME	НЕ ЗАБУВАЙ
<p>I. Cuando vengan las sombras del olvido a borrar de mi alma el sentimiento, no dejes, por Dios, borrar el nido donde siempre durmió mi pensamiento.</p> <p>II. Si sabes que mi amor jamás olvida que no puedo vivir lejos de ti dime que en el sendero de la vida alguna vez te acordarás de mí.</p>	<p>I. When shadows of oblivion advance expunging feeling from my very soul, for God's sake don't erase the case where dwell the thoughts to you I owe.</p> <p>II. Should you so know my love fails not, that I can't live afar from thee, Do tell me, on thy earthly trot you will remember me.</p>	<p>I. Коли придуть тіні забуття, Щоб почуттів в душі спинити існування, Благаю Богом, збережи буття, В котрім завжди жило мое кохання.</p> <p>II. Як знаєш, що любов моя нетлінна, Що жить без тебе – за бік узбереж, Скажи, що на путі життєво цінній Одного разу мене ти впом'янеш.</p>
<p>III. Cuando al pasar inclines la cabeza y yo no pueda recoger tu llanto, en esa soledad de la tristeza te acordarás de aquel que te amó tanto.</p>	<p>III. When you bow your head passing by, me unable to dampen your tears, in that loneliness gone awry You'll remember my love perseveres.</p>	<p>III. Коли в путі чоло огорне сум, І я не зможу сліз твоїх спинити, В цій самотності печальних дум Упом'янеш того, хто вмів любити.</p>
<p>IV. No podrás olvidar que te he adorado con ciego y delirante frenesí y en las confusas sombras del pasado, luz de mis ojos, te acordarás de mí.</p>	<p>IV. You cannot forget. I've adored thee with blind and delirious frenzy In the shadows of past gone hazy, delight of my eyes, you'll recall me.</p>	<p>IV. Ти не забудеш мого боготворіння, Безумного й сліпого до безтями В прожитому, що заплелось тінню, Мене згадаєш за очей свічами</p>
<p>V. El tiempo corre con denso vuelo ya se va adelantando entre los dos no me olvides jamás. ¡Dame un recuerdo! y no me digas para siempre adiós.</p> <p>(José Ángel Buesa)</p>	<p>V. Time flies with thick might, Far ahead separating us two, Don't forget me. Deliver a token! and don't fare me well anigh.</p> <p>(Translation by Rusudan K. Makhachashvili)</p>	<p>V. Час тяжко простягається по колу І вже випурхує між нас у це буття. Не забувай! Не забувай мене ніколи. Не говори мені «Прощай без вороття!»</p> <p>(Translation by Anna O. Bakhtina)</p>

content of the poetry, as well as formally reflect the mood and feelings of both the lyrical hero and the reader.

We shall proceed with the example of the poetry of a twentieth century Cuban poet José Ángel Buesa. The selection of poetry in this case is to appeal to the most important function of emoji – the expression of feelings. In his lifetime, José Buesa acquired the status of “enamored poet”, that is, a poet whose poetry is distinguished by sensuality in his own metaphor. Therefore, we believe that it is appropriate to reconstruct this sensibility with the help of the aforementioned metalinguistic digital continuum. We apply the Emoji Maker digital platform (PlantPurple Sticker Apps, 2018). The program has technical limitations, which, however, seal the phenomenology of the presentation. These limitations are specifically available repertoire of tools that cannot be traversed during image rendering. Emoji Maker contains the following skins: face shape, more shape, eye, eye brow, mouth, hair, sunglasses, hands, hats, others, background.

We shall further disclose the completion of the sample study task: to recreate the meaning of the following poem by Buesa (Buesa, 2020) using self-designed emoji in Emoji Maker tool (table 1).

The reconstruction of the poem should begin with its division. The poem contains of 20 lines, divided into 5 quatrains. We take each quatrain individually, so as a result we have to create 5 emoji characters. We reduce the compilation of the sign to deduction, that is, for each quatrain we define the universal qualities of emotion (UQE).

- I. When shadows of oblivion advance,
expunging feeling from my very soul,
for God’s sake don’t erase the case
where dwell the thoughts
to you I owe.

Lyrical Hero = Love + Memory. So, we create the image of a character – a lyrical hero who pleads to be remembered be his love. UQE: anxiety, sadness, fear, hope. The main feature (hereinafter referred to as the “MF”) is the PRAYER.

1. We take the yellow circle as the basis. Yellow in this case – as a symbol of hope, but at the same time – the sadness of separation (figure 1).
2. The choice of eyes is justified by the pleading expressed by the lyric hero. The main feature – mirrored dilated pupils, reminiscent of tears (figure 2).
3. The main expression of emotions rests in the eyebrows, because the quatrain expresses a plea. Therefore, the eyebrows rise to the central frontal part of the eye (figure 3).

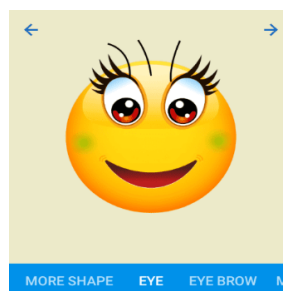


Figure 1: Creation of the emoji sign #1.

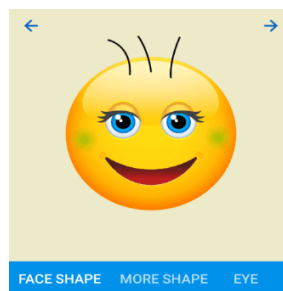


Figure 2: Creation of the emoji sign #1.1.

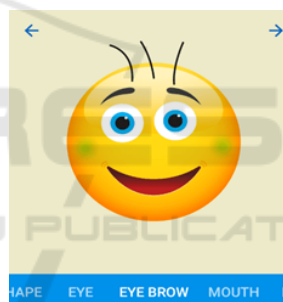


Figure 3: Creation of the emoji sign #1.2.

4. The corners of his lips are slightly down, which also testifies to the sadness of the lyrical hero (figure 4).

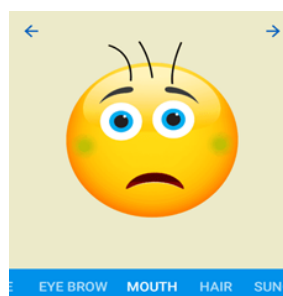


Figure 4: Creation of the emoji sign #1.3.

5. The choice of the lyrical hero’s hairstyle correlates with his essence – romantic nature. Therefore, the hair is blond, not too short, disinfected (figure 5).

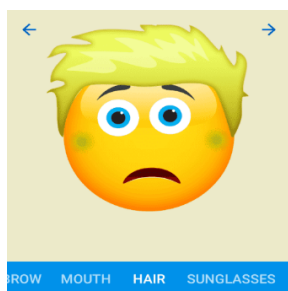


Figure 5: Creation of the emoji sign #1.4.

6. In this quatrain applications can also be defined by gesture: palms are opened, the geometry of which involves the coverage of the object of love (figure 6).



Figure 6: Creation of the emoji sign #1.5.

7. In addition, pleading can be emphasized with conditional tears, which gives the lyrical character the desired effect.

II. Should you so know my love fails not,
that I can't live afar from thee,
Do tell me, on thy earthly trot
you will remember me

Lyrical Hero = love + memory + incorruption. MF – ETERNITY. For the sake of this quatrain, in order to avoid repetition of images, one can portray a potential fiancée of a lyrical hero who mentions love. UQE: thoughtfulness, memories.

- Let us pay attention to the lips of the alleged girl: it ought to be a red, full mouth, closed, which will indicate the reflections of the heroine, her memories. The pupils of the eyes will look sideways and downwards, which will again indicate the girl's reflections (figure 7).
- Hairstyle is also important because the length of hair, color, style correlates with the character of the woman. So, based on the limited selection offered by Emoji Maker, we choose medium length, black hair. With this choice, we visualize a girl as a young person, ages 23–25 (figure 8).

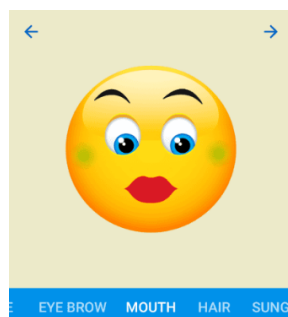


Figure 7: Creation of the emoji sign #2.

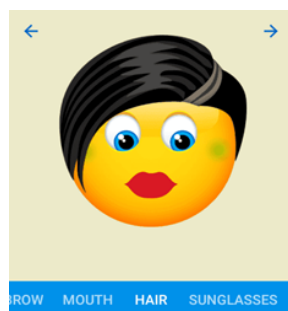


Figure 8: Creation of the emoji sign #2.1.

3. In digital age, communication cannot be imagined without gadgets. With that in mind, let's portray a girl with a mobile phone: so we can be interpretatively assumed that the girl's memories are symbolically stored on the device (photos, videos, etc.) – which is easier for students to relate to (figure 9).

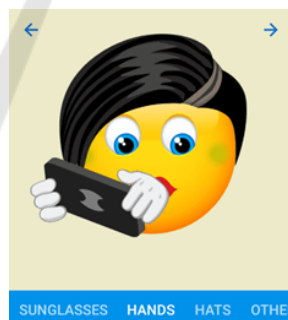


Figure 9: Creation of the emoji sign #2.2.

4. We can complete the image with a universal denotation of love – a heart (figure 10).

III. When you bow your head passing by,
me unable to dampen your tears, in that loneliness
gone awry
You'll remember my love perseveres.

Lyrical Hero = Love + Sadness + Memory + Thoughts. MF is loneliness. UQE: sadness, memories, longing, despair.

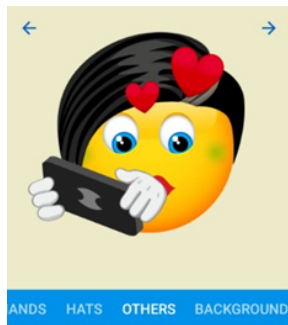


Figure 10: Creation of the emoji sign #2.3.

1. It is worth noting that in Spanish speaking cultures, green is the color of hope in love (Chester-ton, 2007, p. 15), and therefore, an emoji experiment with a green smiley is advisable. Because the hope of memories rests on the subject addressed in the poem by the lyrical hero, so here we portray the girl (figure 11).

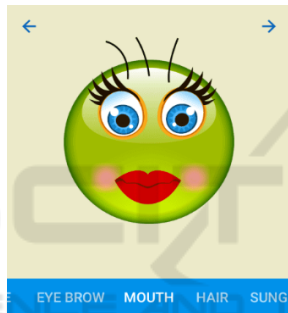


Figure 11: Creation of the emoji sign #3.

2. We leave the physiognomic characteristics the same as those in the second quatrain. And to visualize of the UQE we add the denotation of sorrow – tears (figure 12).

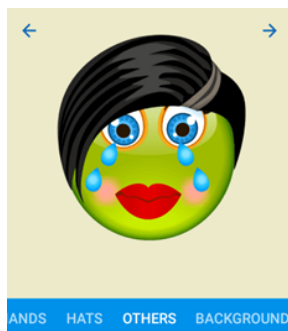


Figure 12: Creation of the emoji sign #3.1.

IV. You cannot forget. I've adored thee
with blind and delirious frenzy
In the shadows of past gone hazy,
delight of my eyes, you'll recall me.

Lyrical Hero = Love + Memory + Time. OR is a passion. UQE: madness, passion.

1. Universal characteristic of red color – love, passion; anger. Given the context of the quatrains, we construct a smiley face of red color, which will symbolize the love of the lyrical hero, his passionate feelings (figure 13).

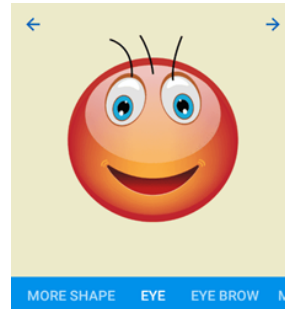


Figure 13: Creation of the emoji sign #4.

2. The hairstyle of the lyrical hero remains unchanged, as in the previous image, symbolizing the romantic nature. Lips play a key role in this image. Let us portray them as half-open, which shows the interest of the lyric hero, his admiration for the woman (figure 14).

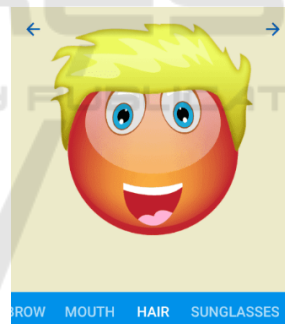


Figure 14: Creation of the emoji sign #4.1.

3. However, the most fundamental function of the UQE described in this quatrain is the attribute of love and romance. So let's depict the lyrical hero in heart-shaped glasses, a rose, and a brush that characterizes the hero as a dreamer, an artist who, in his own reminiscence, abstractly depicts the image of a beloved woman (figure 15).

V. Time flies with thick might,
Far ahead separating us two,
Don't forget me.
Deliver a token!
and don't fare me well
anigh.

Lyrical Hero = Love + Time + Inevitability +

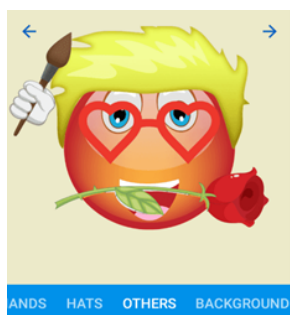


Figure 15: Creation of the emoji sign #4.2.

Farewell + Memory. MF – timelessness. UQE: hope, memories, supplications, hopelessness.

1. The last quatrain demonstrates in the most detail the purpose of the lyrical hero as a kind of prayer to a woman: the feeling of not returning, the inevitability of time makes the hero appreciate his feelings. He also brings this up with a woman, pleading with her to remember his feelings as well. The poetic motif is that love will persevere as long as it is remembered. Let's finish the visualization of poetry in the blue color of the emoticon, where blue is the universal symbol of hope, the fulfillment of a memory dream in time (figure 16).

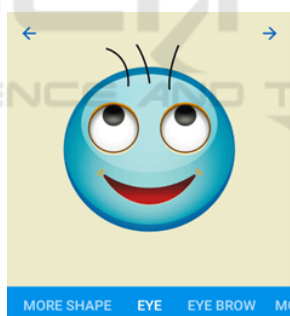


Figure 16: Creation of the emoji sign #5.

2. A plea not to say “Farewell!” we can depict through another universal sign – muted lips (figure 17).
3. We complete the digital reconstruction with symbolic attributes: the pager (obsolete technology) reproduces the semantic nature of the image of time, the equivalents of which are being-timelessness-eternity-Cosmos-Eidos (figure 18).

So, with the help of the Emoji Maker computer program, we introduce a visual reconstruction of J. A. Buesa’s poem “Remember Me”. This approach simplifies the isolation of the fundamental factors underlying poetry. First, considering the person’s physiology, we tried to single out meanings that suggest

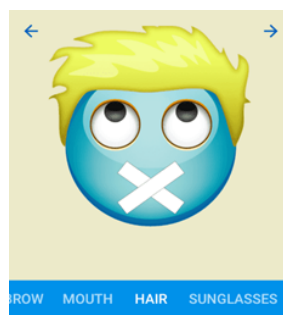


Figure 17: Creation of the emoji sign #5.1.

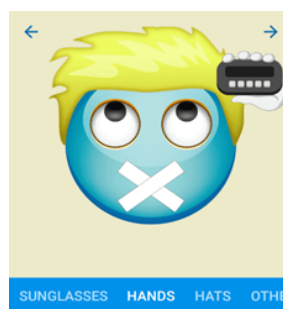


Figure 18: Creation of the emoji sign #5.2.

the presence of the following feelings: love, anxiety, sadness, fear, hope, memories, supplication, hopelessness. Visual affirmation of the senses contributes to a profound awareness of the fundamental concept of the poem – time, which can be correlated by the micro- and macro-cosmic elements of being (and in our case, computer being): being-timelessness-eternity-Cosmos-Eidos.

By recreating poetry through an ICT semiotic tool, students can potentially reproduce the meaning, imagery and content of the text only through the chain of emoji created (figure 19).

Applying the Emoji Maker multimedia program when analyzing a work of art (poetry) in the classroom, one should adhere to the following guidelines:

1. Before moving on to modeling emoji, it is necessary to outline the main idea of the text, because it depends on the further characteristics of poetry and its visualization.
2. Describe the lyrical hero, outline his role and function in the text. Describe his mood, feelings, emotions.
3. It is worth remembering that the reception of the reader can be validated only by the feeling and emotions of the lyrical hero, but not by the content of poetry.
4. Visualize the appearance of the lyrical hero without departing from the context of poetry. Imagine the emotions of the hero, hypothetically outlining

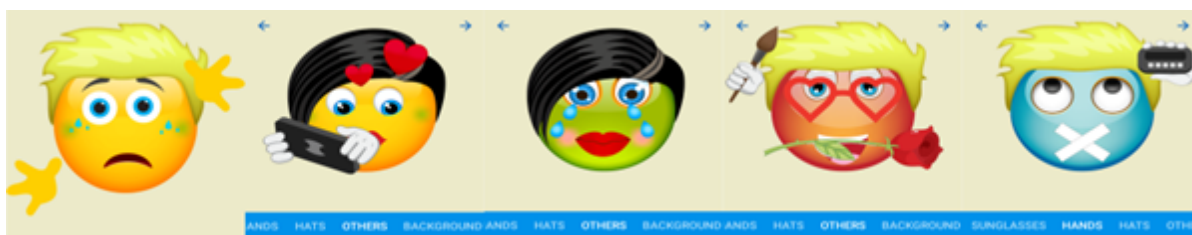


Figure 19: Projected emoji-visualization of J. Á. Buesa's poem "Remember me".

the physiognomistic characteristics relevant to the mood and feelings of the lyrical hero. You can now move to image modeling in Emoji Maker.

5. It should be noted that the choice of options in the program is limited, and therefore, their use should be qualitative and contextual.
6. Each option used must be defensible – only under this condition the correlation of ICT tools potential with the content of poetry can be traced.

Creating a multimodal picture of the world with emoji is possible not only in the context of fiction. The conceptual field of an optical sign, which transgresses its plane of content from a symbol to a full-fledged text, which the reader-interpreter immanently "adds" depending on the contextual boundaries, allows the emoji sign to be tested as a phenomenon. That is, one that is able to replace the letter with the image of the letter – with its opticality – while preserving the full meaning of what is said.

In order to confirm the above, the authorial team, together with students, conducted an experiment to design emoji. Students of Borys Grinchenko Kyiv University at a workshop "MODERN DIGITAL TECHNOLOGIES OF LINGUISTIC DATA PROCESSING" (coaches – R. Makhachashvili and A. Bakhtina), which was conducted as part of the Grinchenko Decade, joined the design experiment (utilizing the Emoji Maker tool) to construct the image of the patron of the university – Borys Grinchenko.

As in the case of fiction, the physiognomic and conceptual features of the creation of the sign were taken into account. Physiognomic features include facial features and recognizable highlights of the face, while conceptual features include the color turquoise (sea green), which is the customized corporate color of Borys Grinchenko Kyiv University (figure 20).

As can be seen, the use of physiognomic and conceptual characteristics (key features) allows to most accurately reproduce the image using the digital platform Emoji Maker, thus appealing to the digital optimization of the linguistic picture of the world. The rotation of the transgression of the linguistic picture



Figure 20: Visual interpretation of the image of BGKU patron – Borys D. Grinchenko.

of the world into the linguistic structure of computer existence modifies the traditional (non-technological) structures of time and space, which include all factors of the existential modes of mankind, including language. The latter acts as the subject of the mentioned transgression, undergoing restructuring at the abstract level of its own ontology. The digital model of the new linguistic picture of the world, in turn, is characterized by absolute nonlinearity of cases with their corresponding defragmentation under the condition of semantization of each of them. The extralinguistic sign is subject to such semantization as an adept of a new abstract in time and space meaning in the linguistic structure of Computer Being (CB). The new sign in the CB is a cyber-concept isolated from the traditional meanings fixed in the appropriate time and space, namely – at Borys Grinchenko Kyiv University with the appropriate corporate standard (turquoise custom colors). Thus, the generated sign (image) is fractalized and concludes three fractal bases – [language] – [emotion] – [feeling].

We conclude that on the one hand, the digitalization of the subject is a timeless and extraspatial phenomenon that narrows the levels of language to an optical sign, without losing meaning, on the other hand – it provides a locational representation of the sign, which can only be understood by the representatives of this location. However, let us also argue the latter in favor of artificial intelligence. After all, it is obvious that the concept of location is also used in artificial intelligence algorithms, for example, to find a way. This primarily applies to the programming of com-

puter games (Haranin and Moiseienko, 2018; Katsko and Moiseienko, 2018), but in the case of generating emoji codifiers projection of the illusion of the whole world (image) and physiognomic and conceptual features, which we rely on in creating emoji for fiction, and a specific image (image of Boris Grinchenko).

Despite the fact that such a digital model is non-linear, we still single out the anthropic nucleus – [emotion] – among the fractals as a substrate of psychophysiological causal transition and mimesis from language to sensation in the mentioned location. The latter, in turn, synthesizing all the above categories, crystallizes another anthropic nucleus – [space]. The specified kernel on the one hand, frees the subject from existential restrictions, granting the right to any semanticization of a sign, on the other hand – it encodes the subject in digital reality of Computer Being, adiaphorizing both internally – structural levels of language, and externally – the value in social environment. That is why any emoji as a CB object is a signified and a signifier at the same time, which is not observed in its non-digital reproduction and meaning. However, the keyword body (figure 21) that provides the generated image has been modified using the Voyant Tools content analysis and text mining engine, an open source web application that provides corpus analysis of text data. It supports the scientific reading and interpretation of texts or corpus. Therefore, digital text analysis is a significant linguistic addition to the generated sign.



Figure 21: Linguistic mapping of Borys Grinchenko as a corporate concept of the university.

Paying attention to the linguistic complement of the sign, let us return to the poetry of José Ángel Buesa and try to recreate a similar conceptual construct via the use of digital Voyant Tools:

- 1) calibrated Word Cirrus for the identification of foregrounded concepts in the corpus (figure 22);
- 2) foregrounded concepts trending tool (relative frequency identification of foregrounded concepts in the horizontally segmented corpus) (figure 23).



Figure 22: Digital corpus identification of key concepts of J. Á. Buesa's "Remember me".

Therefore, the transformative dynamics of emoji at the stage of the conceptual denotation of the corresponding set of signs is realized due to following consecutive developments of the sign meaning construction:

- 1) the direct vertical expansion to the surface layers of the signs content plane of the core representative substantive elements (|TYPE OF SUBSTANCE: COMPUTER BEING|, |SUBSTANTIVE DISCRETION: SPACE|) (Makhachashvili, 2013),
- 2) the phenomenological implementation of the former by means of different substrate significant elements of the internal form, in particular:
 - direct nomination – “FACE / EMOJI / SIGN”;
 - secondary, metaphorical and/or metonymic, nomination as a mechanism of “computer” semanticization – the content of poetry / physiognomy / mentality / conceptuality; the image of Borys Hrinchenko.

4 CONCLUSIONS AND PROSPECTS OF FURTHER RESEARCH

A multidisciplinary approach to various disciplines (linguistics, literary studies, philosophy of language, psychophysionics, eye-tracking and text-mining technologies, etc.) in synthesis with structures of computer being, namely, with an emoji-body on the Emoji Maker platform allows to create a model of digital semiotic presentation of fiction. Thus, the reader-interpreter, using a specific technological toolkit, a visual iconic sign (smiley/emoji) reproduces the multi-lateral metalinguistic functionality of the meaning of a sign based on the artistic word. This approach significantly expands the subject of the study and can be applied in classes of linguistic and literary disciplines, as well as in classes in critical and analytical



Figure 23: Relative frequency of poetic concepts identification in a horizontally segmented corpus.

reading. Due to the powerful hyper-cybernetization in the world, research on the topic will acquire more and more.

The study outlined the multifunctionality of the computer being emoji corps based on fiction. The Emoji Maker platform attempts to compile the image of a lyrical hero. The created images, hieroglyphs of the 21st century, reproduce the multimodal concept of the metalinguistic field. The sign is both an icon, a symbol and a text. On the verbal language level emoji convey the meaning (dictum) of the signified, on the non-verbal level – the meaning (modus) of the signified. Objective and subjective in a sign are synthesized, and the reproduced image is read through the psycho-physiologist prism, which reconstructs the essence of graphic mimesis in the pedagogical sphere. The technical limitations of the Emoji Maker web platform have made it possible to phenomenologize one's own essential-empirical reconstruction of the image of a lyric hero, which allows one to appeal to the cognitive modeling of content and the development of skills in poetry. The basis of modeling is the theory of similarity, in which absolute similarity is possible only by replacing one object with another, identical to the first in form and content. However, as noted above, poetry is an imagery which understanding depends to a great extent on the recipient's essential empirical experience and on its sensory typology, which corresponds to three main types – visual, audio and kinesthetic (Franken, 2007). Therefore, simulation of exactly the same results is impossible, because only under the condition of individual approach of students to visualized analysis of poetry is it possible to adequately reflect all aspects of functioning of the studied object with the help of a simulated emoji sign. Thus, it is emphasized that during the visualization of verbal information mental frames embedded in the minds of each person, and which are a specific biological identifier of the individual, are

foregrounded, which explains the mental, ethnic, national, cultural factors. However, the universality of the emoji language is due to its structure, which is expressed in optical specificity (the shape of a circle, a limited set of tools), which unifies the optical range of any sign. Instead, individual features, dependent on mental or contextual factors, are relevant together with a verbal explanation of the choice of a tool for visualization. In the case of a literary text, the explanation procedure is simplified due to the explicant in the text itself and the identity of the author. In the case of abstract images, much attention is paid to the context. An individual approach to the visualization of corpus data is also reproduced using the web application Voyant Tools, which works with open source, providing text mining analysis. With the support of reading and interpreting texts or corpora, digital text analysis becomes a significant linguistic addition to the generated sign. Moreover, the optical complement can be based both on a specific text (poetry by José Ángel Buesa) and on keywords / concepts (the image of Borys Grinchenko in the context of a specified location: at the eponymous institution – Borys Grinchenko Kyiv University).

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