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EMERGENT MEANING-MAKING IN MULTIMODAL DISCOURSE: A CASE FOR *SADNESS* IN *THE HORSE WHISPERER*

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Abstract
This article addresses functional-pragmatic and cognitive-semiotic issues of emergent meaning-making in multimodal discourse. The theoretical backbone comprises the theories of conceptual integration, blended classic joint attention, embodied cognition, and performativity. This study acknowledges that emergent meaning-making is a performative act grounded on the intersubjective interaction of communicants constituted by environmental and bodily factors. Emergent meaning is viewed as novel, which possesses a certain level of complexity, and is not derived from the meaning of its semiotic elements. A case study analysis of sadness in film enables to reveal the main features of emergent meaning-making: 1) filmmakers and viewers co-participate in meaning-making and are able to share joint attention providing intersubjective interaction mediated by the camera; 2) meaning-making is grounded in bodily experiences and embodied not only through nonverbal elements but also verbal and cinematic semiotic resources in film; 3) a synergistic integration of modes and semiotic resources constructs the emergent meaning; 4) the configuration of semiotic resources is characterized by the volatility of combinations; 4) emergent constructs may be organized according to particular regulations creating constructive patterns. These findings stipulate further analysis of meaning-making, its material-perceptual and socio-semiotic aspects.
      Keywords: emergence, film, meaning-making, multimodal discourse, sadness, semiotic resource.

1. Introduction

Recent developments of linguistic studies have demonstrated their focus on the context-based process of meaning-making emphasizing the role of communicants' shared knowledge in discourse (Carston, 2002; Schmid, 2012; Shevchenko & Gutorov, 2019). During the previous decades, the notion of emergence has gained special attention in different branches of science, from mathematics and economics to social sciences. It highlights the interaction of various entities resulting in emerging novel properties that occurs in a certain semiotic environment. This paper addresses emergent features of meaning-making in multimodal discourse with a special focus on feature film.

It is universally acknowledged that meaning constructed by multimodal means plays an ever greater role in modern communication as the process of meaning-making employs the integration of different modes producing semantic combinations in a certain context. Context is viewed as a semiotic environment, an environment of meanings, within which the integration of semiotic systems takes place (Matthiessen, 2009, p. 12). A multimodal approach enables to explain how the meaning emerges in different semiotic environments taking into account social and cultural factors as well as the author's intention. Seizov and Wildfeuer (2017, p.3) claim that

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We propose to define multimodality as a modus operandi for conducting research on human communication, both mediated and face to face. As such, it is more encompassing than a method and more palpable and pliable than a theory. <…> We follow a problem-oriented approach to the study of multimodality as a way of characterizing communicative situations (considered very broadly) which rely upon combinations of different 'forms' of communication to be effective.

The theory of emergence (emergentism in some theories (Kövecses, 2015), which became widespread in the middle of the 20th century, refers to the arising of novel properties in the process of self-organization in complex systems. It is promising for the interpretation of processes of modern social life in various fields, including human communicative interaction through the mediation of digital means. As multimodal discourse is semiotically heterogeneous, the construction of meaning is characterized by the combination of different semiotic elements, which are non-additive in their nature. The challenge for the analysis of meaning-making in multimodal discourse is that the meaning of the whole semantic combination is not derived from the meaning of its semiotic elements. Verbal language, nonverbal human behavior represented by images and voice, and specific technical cinematic devices employed in film to construct meanings do not have strict laws of their combinations. It demonstrates the emergent nature of meaning and paves the way for explaining meaning-making as the dynamic and on-line process.

The aim of the article is to reveal the characteristics of emergence in the process of meaning-making in multimodal discourse. This article is one more step in a series of works addressing the study of meaning-making in multimodal discourse with a special focus on the construction of emotions in film (see Krysanova & Shevchenko, 2019; Krysanova, 2019; Krysanova & Shevchenko, 2021). It attempts to comprehend the elusive process of emerging meaning as the result of nonlinear integration of multisemiotic elements in a certain semiotic environment that leads to novel semantic entities.

Linguistic approach to the phenomenon of emergence covers the issues of an emergentist approach to grammar (Hopper, 2015) and phonetics (Foulkes & Hay, 2015), metaphor as a paradigmatically emergent phenomenon (Kövecses, 2015), the emergence of gestures (Zlatev, 2015), emergentist perspective in the ecology of dialogical systems (Trasmundi & Steffensen, 2016), and in language evolution (Arbib, 2015), etc. However, the basics of the emergence of meaning in multimodal discourses remain an insufficiently elucidated issue.

Film as a phenomenon of mass media culture is the 'environment' for meaning-making in the process of communication between filmmakers and viewers. The communicative nature of film is determined by its ability to construct meanings not only by verbal means, but also to a greater extent by dynamic images and specific technical means peculiar only to cinematography. It underscores the process of filmmakers—viewers communication as a situationally-dependant interaction that emphasizes the enactive and ever-changing character of meaning-making in film.

Therefore, these claims signal the emergent nature of meaning-making in multimodal discourse and in film in particular. They determine the analysis of the construction of meaning in the relationship of material-perceptual and socio-semiotic aspects, where "materiality", as Pflaeging, Wildfeuer, and Bateman (2021, p. 35) put it, "is invoked not in the sense of physics, but rather as part of a general re-appraisal of the importance of embodiment and engagement with physical objects and their environments for almost all aspects of meaning making". It focuses research attention on the interrelation of semiotic resources and modes involved in constructing the meaning, the role of intersubjectivity and human body, and interaction between filmmakers and viewers as participatory meaning makers.

In this paper, I first provide a rationale of the integrative framework applied in this study. I present a succinct overview of the notion of emergence, distinguish its main characteristics, and analyze film as a multimodal phenomenon. Next, on the basis of the theories of joint attention,

performativity, and embodied cognition, I single out and explain functional as well as cognitive-semiotic aspects of emerging meanings in multimodal discourse. Then, I give reasons for multimodal aspects of emergent meaning-making with the emphasis on the integration of semiotic resources.

2. Theoretical background and method

The theoretical background of the study is related to the notion of emergence with the analysis of its peculiar characteristics as well as to the notion of film as the environment for meaning-making. In addition, I describe the methods and data applied in this research.

2.1. The notion of emergence in the humanities

There is a great deal of debate over the notion of emergence and its use across the research fields where it is applied. The specificity of emergence lies in its novelty, indivisibility, and inexplicability, as well as in reflecting the relationship between the system as a whole and its constituents as parts of the whole.

The notion of emergence comes from French *émergence* with the meaning "unforeseen occurrence" and from Latin *emergere,* which means "rise up", "come forth" (Online Etymology Dictionary (n.d.). It is generally accepted that the term emergence was first introduced by John Stuart Mill arguing that the system as a whole has properties that exceed the properties of the sum of the system components performing as a novel entity with a certain level of complexity (Chalmers, 2006). As the example of a whole he suggested taking a water molecule, which has more essential properties and qualities than a simple combination of its elements of hydrogen and oxygen.

Researchers distinguish strong or ontological emergence and weak or epistemological emergence depending on how to understand emergent or novel properties.

Strong emergence considers novel properties as supervene on properties of the parts of the entity they emerge from. These properties differ from any structural property of the whole, i.e., are ontologically irreducible to the more fundamental matter from which they emerge, and "exert a causal influence on the behavior of its possessor" (O'Connor, 1994, p. 95). In the ontological view of emergence novelty is irreducible and has downward causation.

Weak emergence describes new properties that emerge in the system, which shares no properties of the system smaller parts. In the case of weak emergence, the rules of the whole system act as laws providing a context for the functioning of the system. It happens "when the high-level phenomenon arises from the low-level domain, but truths concerning that phenomenon are unexpected given the principles governing the low-level domain" (Chalmers, 2006). Epistemological view on emergence lies on its unpredictability or unexpectedness. Possible examples of weak emergence can be road networks, bird flocks, or anthills. As for the causal relations, weak emergence interprets them as feedback loops when higher-level causal powers of a whole can be explained by rules of interaction of its parts.

Both weak and strong types of emergence are interrelated in meaning-making emphasizing that it is a continuous and endless process of interaction of various entities constructing complex systems, which are irreducible to their components. Describing emergent systems, Johnson (2001, p. 16) claims that

> *Such a system would define the most elemental form of complex behavior: a system with multiple agents dynamically interacting in multiple ways, following local rules and oblivious to any higher-level instructions. But it wouldn't truly be considered emergent until those local interactions resulted in some kind of discernible macrobehavior.*

New systems, which emerge as the result of consistent interactions between entities, should follow basic principles. Since interactions do not exist in a vacuum, context also matters. But a simple combination of different elements will not necessarily lead to the emerging of a novel entity.

Environmental conditions and functional orientation set the context. In Johnson's (2001, p. 17) parlance,

> *Emergent complexity without adaptation is like the intricate crystals formed by a snowflake: it's a beautiful pattern, but it has no function. The forms of emergent behavior <…> show the distinctive quality of growing smarter over time, and of responding to the specific and changing needs of their environment.*

Current theories of emergence agree that emergent entities and properties 1) are complex higher-level entities and properties; 2) arise out of lower-level elements and constituent parts; 3) are "unpredictable" as the meaning of basic elements cannot predict the meaning of the whole; 4) are novel properties, neither explainable nor reducible in terms of their basic conditions; 5) demonstrate a certain causal efficiency both at their own and at lower levels (Kim, 1999, pp. 21-22).

Thus, emergent wholes tend to be dynamic integrated entities that though constructed by the combination of their constituent parts appear to maintain their own identity. It is the result of their ability to adapt to semiotic environment performing a certain function. The process of emerging the meaning is interaction-related and is connected with participatory meaning-makers.

2.2. Film as multimodal phenomenon

In my methodology I proceed from the fact that the emergence of meaning-making is rooted in the semiotic properties of multimodal discourse. Film is a multimodal phenomenon, where a synergistic combination of multisemiotic elements constructs the filmic meaning. The understanding of film as a multimodal phenomenon originates from the socio-semiotic theory of communication by M. Halliday (1978) who considers language as one of the semiotic systems, which is a resource for the construction of meaning. Therefore, a multimodal approach to meaning-making in film focuses on what channels (modes) are used to communicate between the filmmakers and viewers and how semiotic resources interact to construct the filmic meaning. It brings the notions of mode and semiotic resource to the fore.

Mode according to Bateman and Schmidt (2012) is related to the way an individual hears, sees, or tactilely perceives material objects, and, consequently, is considered the information channel of communication associated with sensory modality. The audial mode of cinematic discourse is realized through music, voice, sound effects, noises, etc. The visual mode includes facial expressions, body movements, visual effects, drawings, etc., everything represented by the screen image. Every mode contains semiotic resources—socially conditioned meaning-making resources that construct meanings (social, individual, affective, etc.), according to the needs of a particular community (Leeuwen, 2006). In film, audial and visual modes construct the emotive meaning through elements of verbal, nonverbal, and cinematic semiotic systems. Each semiotic resource is presented in both modes employing specific semiotic means: verbal resource involves lexical, syntactic, and discursive means represented in the form of oral speech or in the written form on the screen; nonverbal resource includes human mimics, gestures, voice changes, etc., and cinematic resource includes shot size, camera angle, sound and light effects.

Thus, the constitutive property of multimodal discourses is their inherent integrity determined not so much by the peculiar features of semiotic components but mostly by their synergistic effect. Therefore, film is multisemiotic and multimodal in its nature. Its multisemiotic vector emphasizes the meaningful combination of several sign systems involved by filmmakers to construct the meaning. Multimodality stresses the dynamic addressee-orientated character of film, which is implemented through various channels, taking into account cognitive, social, and cultural characteristics of viewers. Emergent meaning-making in film is the result of the interaction between the real world of filmmakers and the imaginary world of film storytelling—diegesis.

2.3. Methods and data

The integrative approach applied to this analysis of emergent meaning-making in multimodal discourse is underpinned by the theories of conceptual integration, blended classic joint attention, embodied cognition, and performativity. The integration of functional-pragmatic and cognitive-semiotic views enables to treat meaning-making as a dynamic process of emerging meanings rooted in the interaction of author and recipients as well as semiotic properties of multimodal discourse. As Shevchenko (2019, p. 16) puts it, "in multimodal discourse studies, researchers in semiology and linguistics can benefit from enactive, interaction related, and dynamics-oriented methodology".

The data include an American drama film *The Horse Whisperer* directed by Robert Redford, 28 fragments of constructing sadness in film with corresponding fragments in the screenplay, and critics' and viewers' reviews. The screenplay is viewed as a film model of intended verbal, non-verbal, and cinematic actions presented in temporal and spatial terms. Therefore, illustrative material contains screenplay fragments with the commentary of character's nonverbal actions and cinematic devices combined with the corresponding film shot photo.

The film tells the story about the traumatic experience of a teenage girl Grace who was injured while riding the horse Pilgrim. The girl's right leg was partially amputated and traumatized Pilgrim was suggested to be put down. Grace's mother Annie, desperate to help her daughter, realized that Grace's recovery was linked with Pilgrim's. She invited "horse whisperer", Tom Booker, to help Pilgrim and Grace overcome their trauma.

The emotion of sadness, constructed in this film, permeates the whole narrative and deals with different situations: the girl's sorrow due to her disability, sympathy for the injured horse, Annie's grief caused by her daughter's suffering, and Annie's rejection to have romantic relationship with Tom, etc.

Sadness is viewed as a negative emotional state caused by the subject's assessment of a situation or event as malefactive, which makes them feel unhappy, lonely, and miserable (Krysanova, 2019). Such characteristic features as its passive character, ability to cause physical weakness, slowing down of cognitive and physiological processes, and tight connection with social values are relevant for the verbal and nonverbal construction of sadness in film. Negative evaluation of sadness is associated with feelings of grief, disappointment, misfortune, and fatigue and is supplemented by a specific psychological state associated with persistent unhappiness.

As emotions are immanently represented in the social interaction (Krysanova & Shevchenko, 2019), the study of emergent emotive meaning-making enables to provide the regularities according to which the human brain constructs 'meaning-in-context'.

3. Results and discussion

In order to explain how the emotive meaning emerges in film I address the issues of the interaction between filmmakers and viewers in cognitive and functional aspects. According to the former, it requires the theories of blended joint attention and embodied cognition, which focus on shared knowledge and sensory-grounded experience of both filmmakers and viewers. The latter addresses the theory of performativity emphasizing the role of perception in meaning-making and the role of recipients in reconstructing the meaning. Besides, sub-section 3.2 provides the cognitive-semiotic view to emergent meaning-making underpinned by the theory of conceptual integration.

3.1. Intersubjectivity, performativity, and embodiment in emergent meaning-making

I claim that emotive meaning-making in film is a dynamic process of enactment of social relations between filmmakers and viewers constituted by environmental and bodily factors. On the one hand, their interaction leads to the study of filmmakers' intentions in the choice of semiotic means to construct emotive meaning. On the other hand, the active role of viewers in meaning reconstruction makes them co-participants in the meaning-making process. On-screen emotions are constructed by filmmakers represented by film director, producer, cameraman, etc., who jointly construct the filmic

emotion intended by scriptwriter and imitated and embodied by actors through physiological and sensory-perceptual manifestations. Filmmakers share their joint intention to construct the meaning intended in the script. Viewers, multiple and distant in time and space, with different inherent socio-cultural characteristics, reconstruct this meaning using their experience and shared knowledge. It stresses the interaction of filmmakers and viewers in constructing film meaning. Film is always recipient-oriented as it is created for viewers. It gives rise to intersubjectivity since interaction between filmmakers and viewers involves joint attention, intention, and emotion.

The theory of blended classic joint attention is based on the awareness that communicants who exist in different spatial and temporal environment are jointly attending (Turner, 2017, p. 3). In cinematic discourse, joint attention is bidirectional since "each agent is aware of the other's experiences—even if they are not mutually aware of sharing experiences" (Brinck, 2008, p. 121). Filmmakers and viewers are able to share joint attention, and, as a result, share joint emotions. The integration of filmmakers' and recipients' views is achieved through the camera, as "the gaze of the spectator is tightly integrated with the viewpoint of the camera, which does not merely direct the attentions of the former but in fact controls them" (Oakley & Tobin, 2012, p. 60).

This resonates with the theory of performativity by Fischer-Lichte (2008) that emphasizes the interaction of filmmakers, among them mostly actors, and viewers in meaning-making. Film actors construct meanings on the screen, communicating with viewers via the camera. Their words, gestures, and actions make viewers react evaluating the plot or characters and reconstructing meanings. Applying the performativity theory I claim that emergent meaning-making in multimodal discourse is a performative act grounded on the dynamic intersubjective interaction of communicants.

The performative aspect of emergent meaning-making is realized through active and passive participation of viewers in this process. The active role of viewers consists in the fact that filmmakers must take into account their worldview and different gender, social, and cultural characteristics in making the film. However, viewers cannot directly influence the events on the screen realizing the passive role in meaning making. Viewers' delayed and indirect participation is manifested in film reviews, critics' reaction, public resonance, etc. It enables remote and time-delayed communication between filmmakers and viewers. Viewers "experience themselves in its course [performance T.K.] as subjects that are able to co-determine the actions and behavior of others, and whose own actions and behavior, in the same way, are determined by others" (Fischer-Lichte, 2008, p.74). The process of emerging the filmic meaning involves the filmmakers' expectation of viewers' ability to reconstruct the meaning. Neither filmmakers nor viewers can completely control meaning-making as many individuals are engaged into co-participation in (re)constructing meanings. It makes this experience liminal when the process of (re)constructing on-screen events sets them apart from their everyday life and makes them co-participate in meaning-making in film.

Film is viewed as event and everything happening on screen affects viewers making them feel empathy, fear, or nausea, etc. For example, a grey rainy day, an alarming sound, a shrieking voice, crying, or the image of a dead body affect viewers and make them perceive it as unpleasant experience. Emergent meaning-making appears as a performative act since meanings emerge apart from the will of the perceiving viewers and perception itself becomes meaningful.

In film, semiotic and performative aspects are interrelated. While the semiotic dimension stresses the materiality of the sign and its ability to construct meanings, the performative dimension focuses on how these signs affect viewers, how they are perceived and reconstructed.

To illustrate my claims I address Internet Movie Database (IMDb), a popular online database of information related to films including ratings and fan and critical reviews. IMDb offers a rating scale ("User Ratings", n.d.) of one to ten with a weighted average displayed. It demonstrates that *The Horse Whisperer* was rated by 41 350 IMDb users with a weighted average vote of 6.7 / 10. Rating by demographic highlights that males and females rated the film about equally with a slight predominance in number among female viewers. However, teenage viewers evaluate it higher than middle-aged ones. Besides, there is no particular difference in the evaluation of the film by viewers

of different nationalities (ibid.). It has 4 wins and 19 nominations that shows its favorable evaluation by critics and film professionals ("Awards", n.d.).

The reaction to the film and the result of meaning reconstruction may be observed in 294 reviews presented on the IMDb site. User reviews show that the plot, director's work, and acting help viewers reconstruct meanings in the film. Besides, viewers always express their emotional state caused by film events and describe their attitude towards characters. It underlines the role of perception and demonstrates co-participation in emergent meaning making.

The plot is described as "*a bit melodramatic*", "*touching*", "*unique and moving*", and "*powerful*" but sometimes "*moralist*" and "*boring*". User reviews set the target audience for this film stating that "*this is a film for people who understand that the 'little' moments in life are the best*" ("User Reviews", 2005) and it "*can be seen by young (children) and old, because it is a wonderful, profound, credible tale about the love for family bonds*" ("User Reviews", 2020). They demonstrate that they understand the filmmakers' ideas and successfully reconstruct the meanings: "*It is a story of love and courage, the courage to fight for you want, or accept things the way they are; the courage to risk losing everything, the courage to accept that loss. There is a wonderful message in this film for all of us for all those who care enough to see it*" ("User Reviews", 2005). Special attention of viewers is given to director's work and acting as they make the audience believe the events on the screen sympathizing with the Grace's tragedy and admiring Tom's inner strength. The following fragments of viewers' reviews illustrate that the way Robert Redford directed the film and his acting managed to affect and touch the audience.

(1)   *The cinematography was powerful—while I am not a student of the discipline I could see that the angles chosen for the subject, the landscape scenes of the beautiful Montana ranges and sunsets—one could watch and understand the movie without the dialog* ("User Reviews", 2006).

(2)   *He directs this movie as well as stars in it, and his slow, sensitive directorial touch is so perfect for this story* ("User Reviews", 2017).

(3)   *He's very good here. There's a close-up on him at the end of this film that has to be seen to be believed. Everything his character is feeling at that moment is revealed perfectly on his face* ("User Reviews", 2003).

Though viewers are aware that film events are fictitious, they believe in their reality as soon as they are engaged into watching the film. Meanings emerge through perceiving the film events and characters' feelings. There is no one meaning of a combination of semiotic elements employed by filmmakers. Meanings are reconstructed by viewers differently since they are co-present in film events identifying themselves with the characters and co-participate in film meaning-making through their perception. It highlights the role of bodily experience.

Intersubjective and performative character of meaning-making determines one more important feature: emergent filmic emotive meaning is always embodied, which is a manifestation of a person's sensorimotor skills in the process of social interaction. In the core of film representation is a human and a human body in the richness of its manifestations. Corporeality plays the role of an experiential basis for the formation of mental images followed by their visual and audial representation in film.

Embodiment is viewed as bodily states that arise during the perception of an emotional stimulus (Barret et al., 2007). A bodily act of communication, according to Zlatev (2008, p. 228), is an act of bodily mimesis if it involves a cross-modal mapping between the perception of the surrounding and the perception of the body and corresponds—iconically or indexically—to a certain action, object or event. In film, meaning is constructed through the representational relations between body movement

and the object, action, and event to which it refers. A bodily sign used communicatively should be reconstructed by viewers as well as the actual filmmakers' communicative intention.

According to the embodied cognition theory, cognition depends on the human body beyond the brain as the brain is embodied, and the body is situated in its surrounding physical environment (Coëgnarts & Kravanja, 2015). Connecting cognition with embodied action involves consideration of the organism's physiological characteristics and of the interactions that such specific bodily qualities afford within the physical constraints of the actual environment (Kiss, 2015, p. 43). The perceptual experience is linked to the conceptual system through sensory channels (Shapiro, 2012). For instance, analyzing the concept *plant*, one might mention traits of the plant, which correspond to different bodily senses and, consequently, different modes such as its form and colour (visual mode), scent (olfactory mode), surface (tactile mode), etc. Multisensory representation of concepts demonstrates that human body interacts with the environment and contributes to the cognition.

Emphasizing the connection of body and cognition, Arnheim (2004) claimed that visual arts demonstrate so called "visual thinking", which is precisely the embodiment of the meaning intended by the artist. Film is an audiovisual art form and film meaning is always grounded in bodily experiences. It makes film anthropomorphic, where all events are viewed through the human body that makes emergent meanings embodied.

They are embodied not only through non-verbal elements such as voice changes, facial expressions, or gestures obvious for filmmakers and viewers. Cinematic devices (for example, camera movements, camera shots, light, different editing techniques, etc.) also possess the meaning-making potential. The recent researches (Heimann et al., 2014) clarify that sensory-motor areas of the human brain change their activity due to the camera position and viewers are bodily engaged while observing both the movement of cinematic devices and emotions of film characters.

Verbal means may be also used to embody meanings when perception systems are activated during words and utterances comprehension. Scorolli and Borghi (2008) claim that concepts are grounded in sensorimotor processes which consist in the re-enactment of the same neural activation pattern running when individuals perceive real or imaginary extra-linguistic reality, to which the linguistic sign refers. As latest researches show, language understanding implies a mental simulation (Zwaan, 2004) and the simulation enacted by words is sensitive to the shape and orientation of the objects mentioned, to their motion direction, to the effector involved in the sentences, etc. (Scorolli &Borghi, 2008).

Verbal means of constructing sadness include lexemes that name the emotion: *grief, sadness, distress, depression, sorrow*; describe it: *depressed, miserable, sad, sorrowful, tragic, unhappy, unlucky,* and express sadness *Oh, Ahh, Alack, Alas, my God, etc*. Sadness may be indirectly constructed by pejoratives that characterize the probable cause of sadness: *bloody, cursed, damned, foolish, wretched,* etc. Syntactic means—parcellation, elliptical constructions, inversion, repetition, and pauses of hesitation, are used to construct sadness through demonstrating individual's emotional stance.

Non-verbal means of sadness construction are represented by facial, voice, posture, and gesture components. Facial expressions include a distorted face devoid of muscle tone; it can become pale signaling a vegetative process not controlled by an individual: *looks sad and her face is pale*. One more characteristic is wide open/closed/filled with tears/dim/shiny/red eyes: *sad eyes were wet and glistening*. The voice that embodies sadness may be lowered, mournful, unhappy, etc. Crying and sobbing peculiar for sadness combine eyes and the voice integrating sensory and motor activities. The gesture component does not have significant variability, which is related to the psychophysiological processes during the experience of sadness such as feeling of weakness and immobility. Gestures are represented by spasmodic body movements, immobile posture, and hands pressed to the face: *hang their heads in sorrow*.

Cinematic devices enable to engage viewers into bodily experience through watching and hearing expressive actions of characters. They do not only embody emergent meanings but also make them material, objectifying them.

A close-up and extreme close up emphasize the individual's experience embodying thoughts and feelings associated with the sadness. A medium close up makes it possible to trace mimic and kinesic manifestations of the emotion. Angle types peculiar for sadness include a side view shot, over-the-shoulder shot, and point-of-view (POV) shot. The side view focuses on the dynamism of the emotion while the over-the-shoulder shot enables to follow the subject, contributing to the character's emotional state. POV enables to see the surrounding world through the character's eyes creating the effect of maximum involvement into the on-screen situation. It imitates and materializes the mental processes that take place in the viewer's mind.

Sound effects applied to construct sadness include diegetic/non-diegetic music, voice-over, and dramatic pause. Film music sets a specific mood, gives expressiveness, and draws attention to the on-screen events through associations in human memory embodying the emotive meaning. Music is considered to be sad if it is minor in tonality, slow in tempo, low in pitch, and complex in harmony (Peretz, 2011, p. 102). Light effects include various types of dim light—night, twilight, flickering, etc., which emphasize and embody the depressed state of the character.

The following example illustrates the construction of sadness by the integration of nonverbal and cinematic means. Grace's mother, Annie, tries to help her child overcome the psychological problems associated with her injury after the accident. On their way home, Grace accuses her mother of being selfish, which makes Annie suffer. Holding back tears, Ann leaves the car and goes to the cemetery, where everything reminds her of her grief. Annie's sadness is embodied by non-verbal means, peculiar for sadness, and cinematic ones. She is immobile at first, her face is distorted, her crying turns to sobbing, and then she covers her face with her hands. Cinematic means comprise a medium close up, a side view shot, non-diegetic music, and dim light. The medium close up and the side view emphasize the emotional state through demonstrating mimic and gesture components. Non-diegetic music embodies sadness with the help of associations in human memory setting a specific mood. It is minor, slow, and low in pitch. As Cohen (2011, p. 264) claims, "the emotion generated by music is governed by the tension and resolution established by the music of which the audience is unaware and over which one seems to have little control".

(4)   *In the growing darkness, she sees, scattered on the hillsides below her, white tombstones. A place of sorrow. A cool breeze ruffles her coat and she sticks her hands in her pockets. Frustrated, alone, at a complete loss as to what to do, what action to take – Annie, for the first time in frozen, standing still – and with her, comes a rush of emotion. She sits with her back against the monument and begins to weep. @medium close up, side view, non-diegetic music, dim light@ For Grace, for Robert, herself, for the tombstones, for everyone # covers her face with her hands# (Roth & LaGravenese, 1997).*

Fig. 1. *The Horse Whisperer* by Touchstone Pictures (38:51)

Thus, meaning in multimodal discourse emerges as the result of intersubjective interaction between author and recipient. Meaning-making is viewed as a performative act where meanings are embodied.

3.2. Volatility and patterning in emergent meaning-making

In cognitive-semiotic view meaning in film is (re)constructed by the emergent combination of verbal, nonverbal, and cinematic semiotic systems through audial and visual modes. Each semiotic resource has the potential for emotive meaning-making with the set of their specific means that enables to create various semantic configurations.

By applying conceptual integration theory (Fauconnier & Turner, 2003) to emergent meaning-making in film, every semiotic resource can be treated as a separate mental input space. The verbal input space includes emotive words and expressive constructions; the non-verbal input space comprises mimic, gesture, and prosodic means; and the cinematic input space encompasses non-linguistic cinematic means, which have the meaning-making potential. Their meanings are constructed and processed in very different ways by human brains. They cross-map and blend with each other creating mixed blended spaces. The choice of meaningful elements in input spaces to be cross-mapped is activated in the generic space that embraces shared knowledge about the emotion (Krysanova & Shevchenko, 2021, p. 361). The emergent blended space contains a new meaning, which is not predicted from the sum of input spaces bur rather motivated by the context. The formation of mixed blended spaces is a dynamic process as every change of gesture, music, tone of the voice, speech, camera, etc. can modify the emergent emotive meaning. The ability to make combinations is a manifestation of integrative nature peculiar to emergent entities

I claim that it determines another aspect of the emergence of meaning-making in multimodal discourse—the volatility of emergent combinations. The origin of volatility comes from Latin *volatilis* with the meaning "fleeting, transitory; swift, rapid; flying, winged" (Online Etymology Dictionary (n.d.). It emphasizes "a tendency to change quickly and unpredictably" (Merriam-Webster Dictionary (n.d.) when the semantic combination of semiotic elements can transform the meaning with the change of at least one element. Consequently, the number of emergent combinations can be countless as any change can modify the emergent emotive meaning. The following examples illustrate constructing sadness by various combinations of semiotic elements.

Consider example (5)—the first day when Grace came to school after the accident. She felt awkward on crutches and was sad to realize that her life had completely changed. Her sadness was constructed by the combination of syntactic expressive means (elliptical sentence and repetition), her mournful voice, crying, and a distorted face with a medium close up and a side view. It makes up the configuration verbal + prosodic, mimic components + shot size, angle type (Fig. 2).

(5) *Annie is crossing an empty school yard. Grace is sitting on the ground, her back against a wall, her "legs" in front of her. She has been crying. She looks up to her mother.*
GRACE It's too hard.
Annie kneels before her sympathetically brushing her hair away:
ANNIE Oh, honey... What happened?
GRACE Doesn't matter. I... I don't want to come back, that's all. #mournful voice, tears on her face, and distorted face# @medium close up and side view@ (Roth & LaGravenese, 1997).

Fig. 2. *The Horse Whisperer* by Touchstone Pictures (19:38)

The example below illustrates the situation when Grace returned home after the hospital where she had been operated. She feels sad remembering her former happy life. Her eyes are red with tears which are rolling down her face. Diegetic minor music and a medium close up intensify the emotion. Sadness is constructed with the configuration mimic component + shot size, sound effect (Fig. 3).

(6)   *The door is closed. A song blares on her stereo. Grace is in her bed watching a video of her and Pilgrim... riding at a horse show.#eyes with tears# @medium close up @ There is a shot of Annie standing proudly, watching her ride. Another shot of her and Judith, both of them on their horses, waving to camera* (Roth & LaGravenese, 1997).

Fig. 3. *The Horse Whisperer* by Touchstone Pictures (20:59)

The empirical analysis shows that the most typical configurations for constructing sadness are combinations of mimic component + close up/medium close up; mimic component + close up/medium close up and non-diegetic music; mimic and gesture components + close up/medium close up; and verbal + mimic component + close up/medium close up. Thus, mimic and gesture components and sound effects are the most representative while the verbal component is used less frequently. It indicates a tendency to embody sadness in film by nonverbal and cinematic semiotic elements.

It proves that meaning constructed by the combination of semiotic elements is a multisemiotic construct the configuration of which can be organized according to particular regulations. These regulations are connected with cognitive and functional aspects of multimodal meaning making. Although volatility causes a multiplicity of combinations, they may be reduced to certain constructive patterns. Patterning enables to interpret underlying processes or mechanisms of meaning making since in multimodal discourse any element is semiotic and is used to communicate.

I claim that in the cognitive and functional perspective emergent meaning in film depends on constructive patterns which vary along the static and dynamic criteria. The empirical analysis enables to single out patterns by parameters of quantity (two-/three-component), quality (convergent/divergent), and salience (parity/non-parity) based of the static criterion. According to the order of appearance of different semiotic resources, i.e the dynamic criterion, simultaneous or consecutive patterns are singled out (Krysanova, 2019). Patterns help understand how material aspect in discourse correlates with values, e.g., how particular body movements or voice variations may indicate communicative intentions, or light and sound effects signal about particular mood, etc.

Example (7) illustrates the construction of sadness by employing four patterns. Grace tells Tom about the accident though it is very painful for her. She is sorrowful that her friend died and she could not help her. She is sobbing and covering the face with her hands, her head is lowered (Fig. 4, 5). The interjection *Oh God* expresses her emotion and cinematic close up and voice over are used to intensify Grace's sadness. The verbal component, mimic and gesture components, and two cinematic elements—the close up and the sound effect, comprise the three-component pattern, the elements of which refine, complement, and intensify the same emotive meaning and make the convergent pattern. As nonverbal and cinematic components prevail over the verbal one, it distinguishes the non-parity pattern with the emphasis on the bodily perception. Heterogeneous semiotic components are used in a succession that makes a dynamic character of the episode and sets the consecutive pattern.

(7)   *She starts to quietly cry, but it doesn't stop her.*
GRACE We were going to go around by the railroad bridge... @close up @
And we see the accident all over again... But this time, a movie—as clear as reality—but in deathly silence. Just the sound of Grace's voice, and her heartbeat... The horses are going up the icy path...
GRACE (V.O.) We were laughing about something, I don't remember what. Her horse fell...[]
GRACE (V.O.) ... Judith's foot was caught in the stirrup... she couldn't get up, she was so scared...(cries) I saw this truck, coming around the turn... [...]
Grace sobs uncontrollably now.
GRACE Judith... Oh God, Judith. I'm sorry...#covers the face with her hands# (Roth & LaGravenese, 1997).
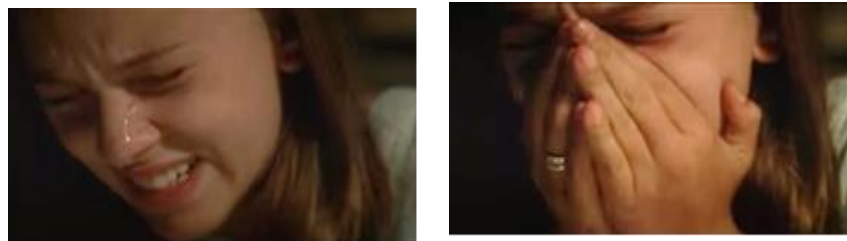
Fig. 4, 5. *The Horse Whisperer* by Touchstone Pictures (01:56)

Thus, patterning is one of the features of emergent meaning-making in film. The potential to form patterns indicates the ability of emergent structures to adapt to the environment determined by the situational context. It happens not only due to the meaningful potential of patterns themselves but due to the collective activity of individuals involved in the process of meaning-making.

4. Conclusions

This paper has made an attempt to provide a new insight into the emergence of meaning-making in multimodal discourse. Drawing on the theories of blended classic joint attention, performativity, embodied cognition, and conceptual integration, I have used the methods of discourse and semiotic analysis to explain how the emotive meaning emerges in film.

Emotive meaning-making in film is viewed as a performative act grounded on the intersubjective interaction of filmmakers and viewers constituted by environmental and bodily factors. Filmmakers and viewers are able to share joint attention and co-participate in meaning making. They exist in different spatial and temporal environment and their interaction is mediated by the camera, which provides the perception. The film events are viewed through the human body that makes emergent meanings grounded in bodily experiences and embodied. They are embodied not only through nonverbal elements but also verbal and cinematic devices.

Underpinned by the theory of conceptual integration emergent emotive meaning is viewed as dynamic discursive construct created in the process of integrative construction by verbal, nonverbal, and cinematic elements. It has a novel meaning only partially motivated by the meaning of its semiotic elements. It possesses a certain level of complexity and is characterized by volatility of combinations and ability to make patterns. The potential to volatility and patterning emphasizes the adaptive nature of meaning-making and the decisive role of causality determined by the situation. If the meaning in discourse is a construct and it is not derived from the meaning of its elements, then the cause of a particular pattern in a certain communicative situation underlies meaning-making. It follows that to select a certain meaning-making pattern requires an interpretation of the situation of both filmmakers and viewers. It can be explained by the property of viewers to identify themselves with film characters, perceiving the same object as actors construct it on the screen and experiencing the same emotions.

This paper does not claim to provide solutions to all of the problems addressed. There are a lot of theoretical and practical issues of emergent meaning-making that require further explanation and development.

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ЕМЕРДЖЕНТНІСТЬ СМИСЛОТВОРЕННЯ В МУЛЬТИМОДАЛЬНОМУ ДИСКУРСІ (НА МАТЕРІАЛІ КОНСТРУЮВАННЯ ЕМОЦІЇ СУМУ В КІНОФІЛЬМІ THE HORSE WHISPERER)

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Анотація
Стаття присвячена виявленню функціонально-прагматичних та когнітивно-семіотичних аспектів емерджентного смислотворення в мультимодальному дискурсі. Теоретичну основу дослідження

складають теорії концептуальної інтеграції, змішаної класичної спільної уваги, утіленого пізнання та перформативності. У дослідженні визначено, що емерджентне смислотворення є перформативним актом, що ґрунтується на інтерсуб'єктивній взаємодії комунікантів. Ця взаємодія відбувається в певному семіотичному середовищі та закорінена в тілесному досвіді комунікантів. Емерджентний смисл розглянуто як нове утворення, котре має певний рівень складності і не є похідним від значення його конститутивних елементів. Аналіз конструювання емоції суму в художньому кінофільмі уможливив виявлення основних характеристик емерджентного смислотворення: 1) творці кінофільму та глядачі беруть спільну участь у конструюванні смислу та володіють спільною увагою, забезпечуючи інтерсуб'єктивну взаємодію, опосередковану камерою; 2) смислотворення закорінене в тілесному досвіді й утілеснене у фільмі не лише за допомогою невербальних елементів, але й вербальних і кінематографічних семіотичних ресурсів; 3) емерджентний смисл виникає в результаті синергійної інтеграції модусів і семіотичних ресурсів; 4) конфігурації семіотичних ресурсів характерна волатильність комбінацій; 4) емерджентні конструкти можуть бути організовані відповідно до певних правил, утворюючи патерни. Це зумовлює аналіз емерджентного смислотворення у взаємозв'язку матеріально-перцептивного та соціосеміотичного аспектів.

Ключові слова: емерджентність, кінофільм, мультимодальний дискурс, семіотичний ресурс, смислотворення, сум.