#44

Zeszyty Artystyczne

TKANINA ARTYSTYCZNA
Wobec współczesności

TEXTILE ART
In the face of contemporary times

Uniwersytet Artystyczny
im. Magdaleny Abakanowicz
w Poznaniu

2(44)/2023

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Zeszyty Artystyczne
nr 2 (44)/2023, s. 451-461
doi: 10.48239/ISSN123266824411

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Current creative research attitudes related to contemporary textile art Interface theory in textile means. *Textile means as a means of communication*

Introduction

The main hypothesis of interface theory and its existence in the realm of textile means is as follows: Textile, meaning the textile structures found at the surface of a material, emits a certain kind of information. We call such information that textile holds and emits 'the interface'. The information content found at the textile surface is registered through senses: visually (through sight) or tactilely (through touch). Textile structures that are formed through human imagination have a synaptic role and link the imaginary (that of the mind) with the analogue (manual). We have to mention that by imagination we mean a certain form of the rational command transferred onto the hand receptors that further materialize works of art.

For such information transference to be possible, two main factors that influence the subject (a human) – without whom the imagination could not be formed – are necessary. The first comprises the subject's ability to filter external stimuli and turn them into logically concise ideas, meaning the ability to transfer and transform the imagination from the abstract into the material world using brain power. The second factor refers to the ability to synchronize ideas with the manual skills that are used to coordinate and execute the process of materialization. We have to mention that these two factors are necessary because they sublimate a human idea into textile means. It is of the utmost importance to distinguish a means from a medium, them being very disparate notions. By a medium we mean an environment in which a given subject filters the information and transfers data further developed into the imagination. It represents the surroundings in which perception takes place and the subject moves, and throughout which the ambient light, sound, smell or touch dissipate. It is an environment, not a *means* by which information is transferred. These are the preconditions needed for a subject to develop their imagination and go from a medium regarded as an ambient environment to means of materialization. The instruments of a materialization are the imagination as an integral part of a subject/human, motoric skills as means of materialization of ideas, and the materialized textile surface that emits a certain amount of information. It should be emphasized that the peripheral hand receptors that materialize human imagination are the most significant in the establishment of this hypothesis. The synchronization of the rational and material depends on the incessant act of gathering information by observing, listening, smelling, touching. The knowledge about the external world gathered in such a way differs from the knowledge gained via books, images, parents or teachers, which is a different kind of apprehension. By the perception of data gathered by our mind and registered in a logical way, we further develop our imagination: we extract information, which is transferred into an idea that creates the additional impulse for a human body to move and materialize logical contents.

Means is a surface where the greatest action takes place. In our case, this kind of action happens in the materialization process. By this, we mean the transference of rational writing that is constantly being synchronized and coordinates the rational (that of the mind) and manual (analogue). The process in which the subject creates a work of art (that is formed by means of textile in our case) by imagination is considered a form of interface. Our attitude is that when a subject's ideas (meaning their imagination, directed by motoric skills) are reflected onto the surface of a textile (interface), this means it becomes a transmitter. The content is literally absorbed into the textile means by manual skills, hence the

knowledge gathered in such a way functions as a source of information (interface), a condition necessary for the aforementioned textile structure to contain a certain amount of information. The structure of the perception model can be presented as follows:

Surface of object (*interface*) – imagination (*subject*) – motoric skills (*means*) – environment in which the subject exists (*medium*)

One of the important conditions that influence the forming of the interface is the environment in which a person exists and perception takes place. It consists of a multitude of objects, events and other living creatures, but only a few of them are significant in terms of perception. It is a variety of actionable possibilities perceived by a subject in a certain environment. Cognitively, what an environment has to offer is limited to the subject's capabilities of logical processing via perception and further transforming the information gained into an idea that is fully materialized later. Imagination can also be interpreted as the information impulse flowing through a human organism that provokes different physical reactions manifested through the subject's demeanor (materialization phase).

In order to justify this thesis, we will present an approach to interface theory that builds through a materialized work of art. In order for it to be legit, we will engage with our own original work of art. We will make a comparative analysis of our own interface theory, alongside other philosophical aspects of the already established theory, which will be shown and compared. We will explain the theory through a concrete materialized example of a work of art mainly motivated by human imagination.

Interface as an integral part of a means of textile

We will present the interface as an integral part of a means of textile that emits information. We will try to synthesize this newly gathered fragmented interface state into a wholesome unit. We will integrate the interface into a wider system whose basis has already started forming in philosophy and other disciplines. We will showcase an approach to interface building that refers to a concrete object, namely a carpet.[1] In this case, the carpet concerned deviates from its stereotypical appearance and function. As the source of information, we will examine a human being (meaning the interface), who is able to sublimate personal data into an inanimate matter of textile means.

» 1 Arpad Pulai, *Biocarpet Textile Garden* (2019), https://www.youtube.com/watch?v=PwG_GjRKNaM.

The Textile Garden carpet

Structural interface development

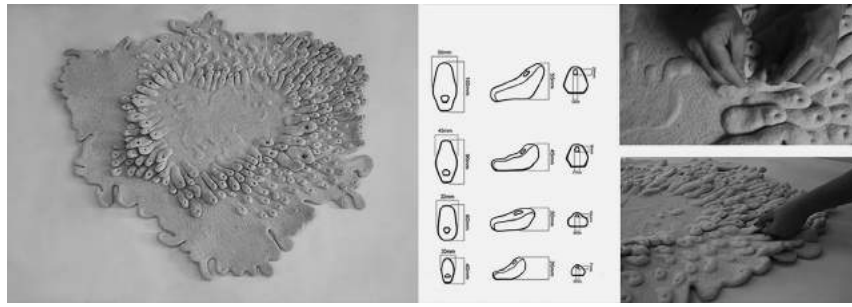
The Textile Garden carpet is a product of human imagination, meaning a subject that sublimates a certain filtered amount of information from the outside world into textile means. In this case, woolen fibers that are able to shape structural values are the main means of the information transference: the interface. The textile means of woolen fibers emit certain data that are transferred via the subject's manual skills. In order to understand why this transference happens in this way, we have to start from the subject and his mind. Reason is a means by which sensory input is ‚transferred' to the mind. Behind that mind there is an ‚I' as a subject on the transcendental level, towards which all human activities are directed.[2] This attitude is corroborated by Gibson's theory of perception, which does not treat the interface as an external object, but as the objects or raw information reasoned by the subject in our case. Although we do not negate the objective existence of external objects nor their physical confluence as a possible means, Gibson states that our sensory input regarding objects existing in time and space is determined by the sensory system itself.[3] It can be stated that the sensory system functions as a source of information adjusted to the subject by its form. Senses, meaning sensory organs in the process of perceptive cognition, match the interface by their function because they allow the senses stimuli in the form of sensory input, which as a ‚means of transference' further directs them to the mind. Reason needs the ‚interface' because it cannot transfer raw sensory stimuli because they lack the appropriate form: they are not organized into a time-space structure. Hence, the appropriate form that is later materialized is created only after the mental processing of the information and its mutual coordination with motoric functions.[4] All of the sensory input is organized in time and space. It is important to mention that the process of gathering knowledge on the transcendental concepts differs from person to person because each person has different practical experience. In this case, the structural values of the carpet contain sublime information that the subject takes in by perceiving the raw data and then filtering and adjusting it to textile means. After data accumulation, this means emits certain information to other subjects. Data processed and emitted in such a way become acces-

» 2 Oleg Jeknić, *The Interface Theory* (Belgrade: Center for Media and Communications, Faculty of Media and Communications, Singidunum University, 2014), 119.

» 3 James, J. Gibson, *The Ecological Approach to Visual Perception* (Hillsdale, New Jersey–London: Laurence Erlbaum Associates Publisher, 1986).

» 4 Jeknić, *The Interface Theory*, 119.

sible to the perceptive stimuli of other subjects, who further process the secondary filtered information and adjust it to their potential experience, which includes visual as well as tactile perception.

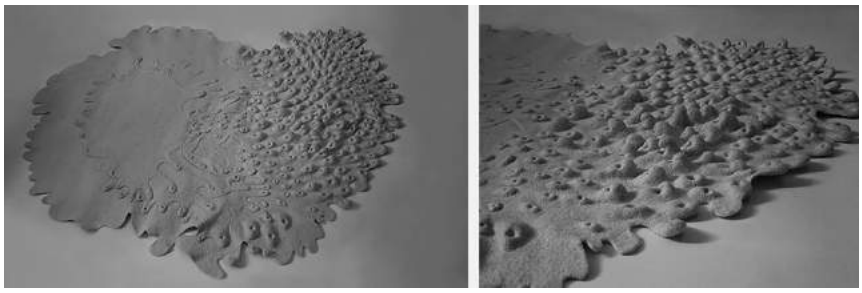


Il. 1.
Biocarpet Textile Garden. Photo: Arpad Z. Pulai

Everything that we experience visually from the outside world is an image, and by image we mean a certain existence that is something more than what the artists of structural values call things – something that exists in between a thing and a phenomenon. Such understanding of matter is a mere comprehension by ordinary human consciousness. Following that, the material world is the accumulation of information-images that are neither phenomena nor matter itself. According to Bergson, the world representation cannot be determined as realistic or idealistic. We agree with the supposition that there is one image that stands out from the rest and is known by both our internal and external perception: it is called affection, or our body.[5] Affections owned by the subject are most significant because they select the information and manually, carefully and coordinately transfer selected information through textile means. This is confirmed by the words of Henri Bergson, who claims that "our body, meaning the subject that aims to move objects, is the center of the action".[6] The action of the subject is the purpose of pure perception and it represents an answer to the external stimulus of the nervous system. Therefore, pure perception is not an epistemological method as it does not produce cognition but an action.

» 5 Henri Bergson, *Matter and Memory, Essay on the relation of body and spirit* (Belgrade: Geca Kon Publishing House, 1927), 1.

» 6 Bergson, *Matter and Memory, Essay on the relation of body and spirit*, 4.



Il. 2.
Biocarpet Textile Garden (Sea snail hatchery). Photo: Arpad Z. Pulai

The next example of perception is reduced to the level of a common man, where the acknowledgement of an object begins outside of the body – in space. Such an image goes through the body as a way of trembling or a nervous system shock. As a reaction to the received stimulus or so-called perception, affection happens in the body.[7] According to Bergson, perception happens outside the body, while affection happens within it. Given that, under the notion of 'affection' we think of imagination that is being activated by external stimuli and continues its activity on the inside of its being. Bergson argues that affection is something that is felt inside ourselves. It is a state that stems from a certain particular spot in our body.[8] We think that that spot is the mind which forms consciousness and allows us to take in certain forms of information from the outside world to our inner one, the world of imagination. Pieces of information are images that belong to objective and subjective sphere and serve as the only plane of expansion that is perceived and felt and where the inner and the outer border. The process of pure perception includes body as a plane that receives external images and is considered as a form of the external phase of perception. According to Oleg Jeknić that is the affection but according to us that is the imagination that builds bodily sensations and receives information from the external objects and transform them into internal sensations.[9] Because of that, sensations received by the external stimulus go to a phase of the ‚internal' perception. In that phase the internal perception that reacts to bodily sensations turns external stimuli into imagination; meaning, formed images where nothing is being added on but that which the subject receives from the outside world. Imagination is a center where the peripheral stimuli come into contact with bodily motoric. Even though the purpose of raw perception is not cognition but action, still it is a com-

» 7 Jeknić, *The Interface Theory,* 143.

» 8 Bergson, *Matter and Memory, Essay on the relation of body and spirit,* 19.

» 9 Jeknić, *The Interface Theory,* 143.

munication process. The interaction is between the external and internal stimuli, the interaction process takes place between the imaginary and the manual. The subsequent transference of the already processed data is additionally done by the internal factors which we have named the current manual perception. The current manual perception creates a communication link between the imagination and manual skills. A term ‚manual perception' speaks about the mutual communication between sight and touch. It is a result of the cognitive process that comes from the interaction with the current perception and the existing memory of a subject and their manual skills. We have to take into consideration Oleg's statement that the subject does not go from perception towards the idea, but vice versa, which further confirms our finding about pre-existing memory of the reasoned object that the subject has.[10] Just as we can claim that the visual focus of the subject depends on the previous experience, we can also claim the same regarding the motoric skills connected to the visual experience. The subject adjusts their visual focus to the pre-existing manual skills. In that way a certain amount of the information visually acquired by the subject is realized with the help of already adopted mental and manual skills, and, as a structural value, is transferred onto textile means which is in this case called structural interface. By structural interface we mean tactile, structural information that transfers a certain shape, form, which is perceived, filtered and developed into the imaginary, internal content by the subject. Such sublimed information we materialize with the help of our manual skills. As a definite content of textile means structural interface contains tactile information gathered by the perception of the external stimuli. Certain shapes taken from the nature the subject singles out and simplifies in order to adjust their form to a means and technique used. In this phase of data transference, the woolen fibers take over the role of the interface (that of the idea-imaginary) and are used to materialize the processed perception of the subject by their manual skills. Textile means as an object of communication, meaning cognition, becomes available to the subject in the form of materialized structural values. Structural values are the information in the carpet's body, integrated via subject's skills, therefore a specific form of information adjusted to further cognitive processing.[11] In our opinion, tactile values that make the information have to be made by one's body and perception happening within the subject. In other words, in order to relate it to consciousness, body actually homogenizes the information. Homogenization happens on multiple levels, both cognitively and manually. The process of homogenization finishes the ma-

» 10 Jeknić, *The Interface Theory,* 144.

» 11 Arpad Pulai, *Behance, Biocarpet Textile Garden* (2019), https://www.behance.net/gallery/83014141/Biocarpet.

nual procedure, which we see as a mechanism by which the information obtains the final form and meaning. Now the subject, meaning woolen fibers, shape the world of tactile information which is in the homogenization with textile means. The carpet's body, its structural values are now the material bearers of subjectivity, because the accumulated information that it holds is being emitted outwardly, towards the other subjects. Therefore, the carpet's body is permeable for the external influences and functions as the structural interface which other subjects can get to. Tactile values of the carpet become the object of affection, means that link the (carpet's) body area with other subjects' perception. In some cases, tactile information is available for pure perception only, not the logical cognition. The availability depends on the experience of the subject, their cognitive and motoric actions. The information emitted that contains structural values of the carpet is not strictly defined as a theoretical notion anymore, but becomes materialized. There is an exceptional risk that those structures can go unnoticed unless the subject's focus aligns with their experience. The information recognition happens if the individual interest is compatible with the values of the object the subject observes. The subject recognizes the information in the form that is tailored to their abilities and needs. In our example, the tactile values of the carpet are those perceived by sight, while their structural sensations are defined by touch. The carpet's content as the user interface makes a kind of an epistemological barrier of our cognitive system, because we cannot apprehend the objective world outside of that barrier, only what appears as the content on that barrier, what we have got as its representation. The representation example is a structural form on the surface of the carpet that the subject recognizes through sight and touch. We need to back up this theory by Oleg's example of a theoretician Donald Hoffman who considers the perception theory relative depending on the subject's perception. The author makes an example of a wild tiger as the perceptible category of his interface, where the animal is categorized as a potential threat to life or the objective reality. If the tiger is the objective reality then the danger is huge as well, while the understanding of the phenomenon of the tiger as a notion seems pretty harmless. Hoffman does not take the image of the tiger literally but he takes it into consideration. The evolution of his interface is modeled to the point where he states that it is better for us to take the image seriously than to risk harm. In other words, we never perceive the object, only its image. We leave room for a thesis that reasoning, and not perception, is a method for gaining truth on the world itself. Oleg states that, even though the contents of our perceptive interface do not offer the truthful imagery

of the objective world, it does not stop us from creating theories on that world and testing their hidden meanings.[12]

In our case, the structural interface has got a clear emission of the information, defining it as a meeting point of several entities, including external stimuli, imagination, and manual skills of the subject. It is especially significant that the interpretation of the interface depends on the user (functions, values), which means that each user develops their own specific, internal model represented by the given interface. We could say that the users create a personal, mental-tactile interface based on the concrete user interface.

In order to for us to easily understand the way of the information building, meaning the interface and its shifts from one form to another, we will present the interface building hierarchy: Perception of the subject is in correlation to peripheral source of information – processed internal information (imagination) is correlated with manual skills of the subject – structural values found on the carpet are correlated with other external factors that perceive aforementioned values of the carpet.

Conclusion

The interface theory presented in this paper is considered relative. Its theoretical as well as physical survival depends on many external and internal factors that our constantly oscillating. We will remind the reader that many external factors are a form of stimulus that activates the subject's inner states. These stimuli have different levels of action that influence the developmental level of the interface directly. Because of that, we cannot state with full certainty that the interface can completely materialize itself through the subject. We have to be aware that our assumption about the interface and its materialization can exist only when the minimum of preconditions for the action within the subject and amongst external factors is satisfied. Materialized interface can be sustained with the least amount of information that the subject accumulates, but the question is raised whether that information can be clearly emitted and readable to the other subject. That is why we have withheld the assumption that all the factors that make a well-structured interface (in theory) are at the lowest developmental level. Still, we cannot escape the fact that we have supported our theory with an example of textile means. We have used a materialized work of art – a carpet built from structural values and explained through a given thesis. So, when we think about the conditions that build the interface, we talk about the subject and their ability to perceive the external stimuli and transport them. An even heavier emphasis is

» 12 Jeknić, *The Interface Theory*, 180.

put on communication between perceptive and manual functions of the subject during creation. We argue that the transference of the structural information is a skill and that it is relative because it is developed on an individual level. The interface is a source of information formally adjusted to our cognitive apparatus. Our apparatus is not adjusted well enough to read all the developmental levels of the interface because the cognitive threshold of every subject is different, and their compatibility sometimes mismatched. As a result of all of this, there is a poor understanding of the information emitted. That is the reason why a materialized work of art is not understood well enough, when the cognitive methods have a low threshold compared to the information that the object describes itself with. Misunderstanding or complete understanding of a work of art is the simplest way to describe a degree of the structural interface development; it depends on the technique the subject uses and the object that processes the information perceptively and applies it during the materialization. On the objective plane, every activity of the subject that gives birth to some kind of an action is considered the interface. Its definition can be regarded as the final outcome of our research. But still we cannot neglect the fact that the interface is a relative thing that is bound by imagination and without which the subject could not develop any further. On that basis we can conclude that the mind, meaning the imagination, is in fact the main driver of human activity and structural interface development. ●

Abstract

This paper mainly focuses on the interface theory and its communication as a means of information transference. We have compared a carpet as a part of an artistic project with our assumption of the interface theory development. This paper`s main goal is to explain the connection between the structural values of the interface and the carpet materialized through a means of textile by comparative analysis. Through this analysis, we will try to connect the development of the textile qualities of the carpet with the structural interface building.

Keywords:

Interface, textile, medium, means, subject, object, structural interface.

Bibliography

1. Bergson, Henri. Matter and Memory, *Essay on the relation of body and spirit*. Belgrade: Geca Kon Publishing House, 1927.
2. Jeknić, Oleg. *The Interface Theory*. Belgrade: Centar for Media and Communications, Faculty of Media and Communications, Singidunum University, 2014.

3. Gibson, J. James. *The Ecological Approach to Visual Perception*. Hillsdale, New Jersey–London: Laurence Erlbaum Associates Publisher, 1986.

4. Pulai, Arpad. *Biocarpet Textile Garden*, 2019. https://www.youtube.com/watch?v=PwG_GjRKNaM (17.01.2023).

5. Pulai, Arpad. *Behance, Biocarpet Textile Garden*, 2019. https://www.behance.net/gallery/83014141/Biocarpet (19.01.2023).

Zeszyty Artystyczne

#44 / 2023 / rok XXXII

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ISSN 1232-6682

Wersją pierwotną czasopisma jest wersja drukowana.

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Stworzenie anglojęzycznej wersji publikacji – płatne ze środków Ministerstwa Edukacji i Nauki na podstawie umowy nr RCN/SP/0363/2021/1 stanowiących pomoc przyznaną w ramach programu „Rozwój czasopism naukowych”.

nakład 100 egz.

ISSN 1232–6682