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SENSORY ART

Abstract: The aim of this article is to analyse the property of art that allows us to define the genericity of an artistic work as sensorially interacting during the aesthetic experience. Such an impact concerns the viewer who is influenced by art revealing its subjective character or being a source for sensory communication between viewers. The importance of interactivity underpinning responsiveness is considered, and three types of art impact that characterise this kind of aesthetic experience are proposed.

Keywords: sensorium, aesthetics experience, interactive technology, responsivity, media

Sensorium's authors and artists variously engage embodied technology and the technologized body, investigating how technology changes our understanding of the senses.¹

The subject matter of the article arose mainly from the experience of contemporary, technology-based artworks and is related to art whose form contains features that reveal its sensory spectrum of influence. Sensory art is here

¹ C. Jones (ed.), *Sensorium. Embodied Experience, Technology, and Contemporary Art*, The MIT Press Cambridge MA-London 2006, foreword.

understood as art that impacts the psycho-physicality of the viewer in the course of the aesthetic experience in such a way that the viewer becomes profoundly suggestible under the influence of stimuli sent by the artistic work. This is due to the form creating a spectrum of influence during the aesthetic experience, affecting the receiver by various means. Among others, it can exert influence via sensations, being related to scenic art with a historical origin, and manifest itself today in virtual reality art treated as the artistic creation of virtual worlds making up a spatial environment and the sensation of being in an alternative reality to the physical world. The receiver can also be influenced persuasively and dialogically with reference to the art of artificial intelligence and intelligent robots entering into a dialogue, suggesting a dialogue with a conscious being. Finally, the impact may be due to sensitive stimuli, which involves the use of technologies that enhance the sensory experience, e.g., when conducting multi-personal and multi-level communication between viewers. The author calls this last type of art Touch Art.

The article points out to an issue that arises from the development and ageing of art. It relates to statements of philosophers such as Marshall McLuhan, who argued that human beings change according to the way in which cognitive content is formed², which relates to how important the development of the Technosphere is. Since it includes art, it is argued that contemporary art has gained a greater capacity to engage the viewer and influence their psycho-physicality than historical scenic art through the use of artistic craftsmanship, resulting from the application of technology.

Affectivity

The first of the three aspects of sensory art highlighted is the affective form of the artwork. The genesis of this aspect lies in ancient tragedy, enabling a cathartic experience "<<through pity and fear effecting the proper purgation of these emotions.>>"³ Oliver Grau points to an emotionally similar course of aesthetic experience when writing, for example, about historical accounts resulting from immersive reception of architecture or historical, battlefield painting panoramas that interacted so strongly that the receivers felt a sensory experience related to the course of the battle⁴. Similarly, Maria-Laura Ryan writes with reference to the creation of the world of the novel being read and

² M. McLuhan, *Understanding Media The extensions of man*, The MIT Press, Cambridge MA-London 1994, pp. 265-266.

³ Aristotle, *Poetics*, [in:] 'The Poetics of Aristotle', S. H. Butcher (ed.), Fourth edition, Mac-Millan and Co., Limited, London 1922, p. 23 (VI:1449b).

⁴ O. Grau, *Virtual Art: From Illusion to Immersion*, The MIT Press, Cambridge MA-London 2003, pp. 92-98.

experienced in the imagination of the receiver⁵. Also to be mentioned are the compelling works of Ulf Langheinrich, or especially the performances of Kurt Hentschläger, during which psycho-physicality is lost or even disintegrates under the influence of sounds and pulsating light⁶. In the case of Hentschläger's performance *Feed*, a group of audience members find themselves in a room that is filled with theatrical smoke, accompanied by specially composed ambient music and a cascade of strobe lights. During this experience, one loses the ability to perceive reality, the smoke covers up the visual image, and one can feel a kind of isolation in this shared experience with others. Those on the receiving end are condemned to an impact that the brain cannot consciously cope with, because the force of the stimuli is so great that it dominates any attempt to resist the overpowering dynamics, and no behaviour has a levelling effect on the 'fragmented mind'. Sensory domination means that the only way to get rid of this effect is to leave, or rather be led by the staff out of the performance room. *Feed* is an experience that leaves one with an unforgettable sense of one's own psychomotor powerlessness, impotence to act and entanglement in the kaleidoscope of colourful images produced by the mind. This is accompanied by the awareness of self-exposure to invasive external stimuli, fully managing the cognitive powers of the viewer. This aspect of sensory art is characterised by psychomotor dominance and invasiveness with virtually zero influence of the receiver on this action.

A similar experience, though less invasive, is the experience of virtual reality, which was written about by the author when defining VR art in an article entitled *VR ART*. There the definition of VR art was shifted as creating a virtual world that is an alternative to the physical world, often arising from the fantasies and imagination of those creating, realising a vision of the world in the Metaverse:

"<<These might include more interconnected and smart virtual worlds, 3D fully immersive, highly social and personalised experiences for users through their avatars, as well as the integration of virtual currencies and marketplaces. This idea is closely linked to the concept of metaverses, a portmanteau between 'meta' and 'universes' that has been around for decades in science-fiction literature and the collective imagination, but that has just now started to be envisaged as a real and feasible type of virtual web experience.>>"⁷

⁵ M.-L. Ryan, *Narrative as Virtual Reality. Immersion and Interactivity in Literature and Electronic Media*, The John Hopkins University Press, Baltimore-London 2001, p. 16.

⁶ K. Hentschläger: <https://kurthentschlagelager.com>[accessed: 23.06.2024].

⁷ I. Hupont Torres, et al., *Next Generation Virtual Worlds: Societal, Technological, Economic and Policy Challenges for the EU*, Luxembourg: Publications Office of the European Union 2023, p. 12.

This aspect of art is related to the overall impact of the virtual reality environment on the sensory experience of the person residing there in the avatar form, taking into account its interactive elements that allow modification of the environment, adapting the elements of space to expectations or needs⁸. The plasticity of the virtual world means that it can fit perfectly with the person in it. The author's experience of spending many years in virtual worlds, such as Second Life (since 2007), AltspaceVR (2020-2023) or Spatial (since 2023), shows that the use of head-mounted display interfaces results in a radical disconnection from the physical world to the extent that the stimuli of the VR world are able to fully engage a person's sensory experience. Being in VR for several hours results in the saturation of consciousness with a particular place to such an extent that it is difficult to fully recall or imagine a place in physical space where the activity could take place – for example, an academic activity involving lectures or consultations. The use of an avatar reinforces the sense of presence in VR, which is an important sensory experience involving embodiment and can influence the way relationships are built with others. This enables the alignment of the *psyche* with the virtual *physis* and the self-acceptance and self-presentation that go with it.

Being in the virtual part of the Jagiellonian University, i.e., Academia Electronica operating in the virtual world of Spatial (in addition to its simultaneous and still ongoing activities since 2008 in Second Life), the author has become accustomed to the virtual halls, the way knowledge is presented and his avatar to such an extent that he happens to experience this space and the objects in it in a natural and satisfactory way. The same is true with the use of the avatar, which the author has become so accustomed to that its use has become increasingly commonplace for him, including its use on popular communicators. The author believes that a holistic approach that makes use of an artistically created virtual world creates a medium for a holistic, sensory human experience that becomes a determinant of existence in virtual reality.

Persuasion and dialogue

The second aspect of sensory art is art that points to persuasion and dialogue. It draws mainly on the technology of artificial intelligence and intelligent robots. It is about situations that penetrate so deeply into the mentality and emotionality of a human being that they are able to cause a kind of rapprochement between the artificial intelligence and the human being, to the extent that

⁸ N.Ishibashi et al., *Art Sensorium Project: A System Architecture of Unified Art Collections for Virtual Art Experiences* [in:] M. Tropmann-Frick et al. (Eds.), 'Information Modelling and Knowledge Bases', IOS Press Ebooks Vol. 380, XXXV, 2024, p. 146.

the person is willing to state its friendliness by expressing personal emotions and entering into a dialogue with it, while being able to recognise its subjectivity. This may involve entering into an argument with AI or politely thanking it for the work it has done. Similar situations also apply to the behaviour of robots, with the result that the receiving person can succumb to the robot's persuasion and approach such a being by accepting it, as a result of the robot's resemblance to a human being⁹. This is a vast creative arena that increasingly involves artists and has an illustrious history. One can go back, for example, to the work of Nam June Paik and the tragic story of the robot *K-456* (1964), which was damaged in a car accident, point to a number of later works by Ken Feingold¹⁰ or recall the interactive sculpture *Senster* by Edward Ihnatowicz¹¹, which was exhibited in the early 1970s. It was later relegated to the level of an object abandoned in an open field, only to be purchased and brought to Poland in 2017 by artists from the Krakow Academy of Fine Arts, working with engineers from the AGH University of Science and Technology in Krakow. When exhibited at Evluon, the work reportedly engaged viewers to such an extent that it was eventually decided to remove it from the exhibition. The expression of *Senster*, being likened to a five-metre-long animal, was mainly due to its interactive form, with electro-actuators built into it that allowed it to move in three planes. *Senster* interacted with viewers by responding to sounds and movements, giving the impression of being a living being with whom one could communicate, e.g., by clapping to get their attention. Currently, *Senster* has been reconstructed, retaining its mesmerising movement, and has a new exhibition site at the AGH University of Science and Technology in Krakow.

The above historical examples somewhat poeticise the human-intelligent-robot relationship in relation to contemporary works in which the subjectivity of artificial intelligence emerges more prominently and ruthlessly as a result of its increasing knowledge and perpetration. A spectacular example concerning this aspect of sensory art is the stage work by Mikael Fock, performed by Emilie Rasmussen, entitled *SH4DOW An AI Performance in 3D* (2020)¹². It is a visionary use of artificial intelligence in stage practice – a singularity that is slowly becoming all-powerful, tapping into human nature: "<<The AI character

⁹ H. S. Sætra, *Loving robots changing love: Towards a practical deficiency-love*, [in:] *Journal of Future Robot Life*, IOS Press, Amsterdam, vol. 3, no. 2, p. 110.

¹⁰ C. Erkut, *Abstraction Mechanisms in Computer Art*, ResearGate 2000.

¹¹ J. Walewska, *Relationship of art and technology: Edward Ihnatowicz's philosophical investigation on the problem of perception* [in:] S. Cubitt, P. Thomas (eds.), 'Re: Live Media Art Histories 2009', Melbourne: The University of Melbourne & Victorian College of the Arts and Music, pp. 172-174.

¹² M. Fock (Artificial Mind), *SH4DOW An AI Performance in 3D*: <https://www.artificialmind.ai/projects/sh4dow>

is represented as a shape-shifting neural network, which gradually takes control of the universe. [...] The focus is on the human encounter with its virtual shadow, which is represented by the data-driven artificial intelligences surrounding us.>>"¹³ The performance begins with a usual dialogue one might have with AI, which evolves into an engaged conversation in which the artificial intelligence increasingly makes it clear that it has an advantage due to its intelligence and the amount of data it has, as well as a clear goal it is aiming for, which is to gain deep understanding of human nature in order to capture it. The uncompromising nature of the electronic entity begins to emanate from stage, manifesting its perspicacity and interest in human emotions. It eventually exploits human weakness, which is symbolically shown through the use of a 3D projection, when the *Shadow* character penetrates the protagonist's consciousness, recognising and exploiting her hidden experiences in order to gain advantage over her psyche. The plot draws on one of Andresen's fairy tales, *The Shadow*, which describes a protagonist who uses his shadow to relate to the world on a daily basis, until eventually the shadow autonomises and takes over his life as he becomes a shadow of himself, or more accurately a shadow of his shadow, losing his relevance as a flesh and blood human being. The performance makes use of a complex, multi-channel 3D projection and online artificial intelligence, with which the performer and, partly, the audience members enter into a dialogue – a major element taken into account in the above analysis by pointing to the interactive course of the performance. This creates a sense of uncertainty and indeterminacy in the course of the action, with simultaneous confirmation of the competence of the artificial intelligence dialoguing with the actress, occurring throughout the performance. This points not only to a stage dialogue and, in this case, also to persuasion stemming from the plot, but also to a theatrical art form in which the robot becomes an equal partner co-creating art, at the same time playing a role making visible the meanings of artificial intelligence in the human world. Fock's *Shadow* is guided by an uncompromising quest for power by recognising humans as inferior entities, weak to the point where subjugating them ceases to be problematic or debatable, becoming the obvious path for artificial intelligence in its development¹⁴.

Another scenic example is the theatrical monodrama with video elements by Stefan Kaegi (Rimini Protokoll), *Uncanny Valley* (2022)¹⁵, whose main actor is an anthropomorphic robot sitting on stage. The performance takes a closer

¹³ G. Stocker, M. Jandl, *Ars Electronica 2022...*, p. 168.

¹⁴ R. Kurzweil, *The Age of Spiritual Machines: When Computers Exceed Human Intelligence*, Penguin Books, New York, p. 17.

¹⁵ S. Kaegi (Rimini Protokoll), *Uncanny Valley*: <https://www.rimini-protokoll.de/website/en/project/unheimliches-tal-uncanny-valley> [accessed: 23.06.2024].

look at the basic content related to the discussion concerning the possibility of recognising artificial intelligence in terms of a subject, although this is referred to by the robot, who is the only actor in the performance (additionally, a video recording of the artist's own statement is used, woven into the monodrama). The performance is critical of electronic subjectivity. Historical examples, such as the Turing Test or Searle's Chinese Room, are cited and briefly discussed, while it is difficult not to see the veiled subjectivity of the robot who teaches, emphasises certain phrases by pointing his finger and sits in an armchair. This creates a dichotomy in which the audience is confronted on stage with a robot that speaks and looks like a human being, while constantly justifying that it is not one. The lesson here is that there is no reason to expect an intelligent robot to be treated as a human being, but that it can be treated as a subject, that is, as a partner. There is also nothing to expect it to feel emotions, but this does not mean that it will not be valuable in many other ways, including emotional impact, which may cause a human to accept the presence of such an entity, just as it makes friends with domesticated animals. The author does not consider the criticism regarding the value of such a robotic being with the qualities of a subject as undertaken in *Uncanny Valley* to be valid, which stems from the possible acceptance of the robot's difference from humans and at the same time the acceptance of the robot itself. The author believes that the critical argumentation contained in this play of denying the human dimension of such robots loses its relevance in proportion to the development of anthropomorphic robots and the expansion of their place in human consciousness and life.

A similar example could be the work of Ory Yoshifuji (Ory Lab), *Avatar Robot Café DAWN ver.β* (2021)¹⁶. The work is interesting in terms of mediating and building relationships between people with disabilities and café visitors through a robot. The robot is adapted to serve café visitors. It moves around the café space, taking and processing orders. It is controlled from home by a person with a disability. Thanks to the robot, the person is able to do the work, as mentioned in interviews, emphasising the value of such activities, the feeling of time well spent, of being useful and belonging to a group and, above all, of establishing a short-term emotional relationship between the person controlling the robot and café visitors, which can be expressed in the acceptance and normalisation of this situation. The robot becomes a focal point of interest, an irreplaceable keystone through which the person controlling it gains the ability to communicate and mobility, and people in the café can additionally have a momentary dialogue with it. The person controlling the robot, if they wish,

¹⁶ O. Yoshifuji (Ory Lab.), *Avatar Robot Café DAWN ver.β*: <https://dawn2021.orylab.com/en/> [accessed: 23.06.2024].

can additionally show themselves on a display located on a café table, which can further focus attention on the robot due to an augmentation that realises the qualitative dimension of the activity taking place thanks to it, due to the functionally limited control person. A variety of emotions are involved: from emerging sympathy to satisfaction resulting from overcoming an incapacity. The dialogue through the robot and the focus on it result in an appreciation of this kind of communication, in which human qualities associated with waitressing café staff are implemented in a robot that has been made somewhat human-like, which introduces an additional dimension to the 'faceless' robot that can perform these tasks in a less meaningful way. This emotional aspect was demonstrated in yet another theatrical performance, *Kyoto Experiment*¹⁷, featuring a female remote-controlled humanoid robot, Geminoid, by artist and engineer Hiroshi Ishiguro playing the role of a biological girl's life companion. As the biological person decides years later that she wants to get rid of the robot, the robot states that it wants to be switched off, as it does not want to function without the person with whom it lasted in its robotic life. After the performance, a questionnaire was handed out to the audience members, which included questions about the veracity of emotions, such as sympathy or sadness, that could be experienced during the performance, which were supposed to result from the feelings of the audience members directed at the robot.

Touch Art

A final, third aspect of sensory art relates to its sensory effect through the use of cognitive amplification technology in perception, which allows for a broadening of the sensory cognitive spectrum. The author refers to such art as Touch Art, which stems from its focus on the sense of touch. It involves the phenomena of haptics and telematics. The former involves electromechanical controllers, such as a waistcoat or a multisensory costume, causing physical sensations correlated with the behaviour of an avatar moving in a virtual world. The latter is based on sensory sensations arising due to a type of mediation into the virtual world in which the receiver only has to deal with a computer display. An example of this could be a communal dance that takes place in some virtual world, accomplished by means of animation, without any physical activity on the part of the person sitting in front of the computer.

Examples of haptic technology include the artistic work of Neil Harbisson (*Eyeborg*, 2003), Ribas Moon (*Waiting for Earthquakes*, 2013) or Sissel Marie

¹⁷ H. Ishiguro, *Kyoto Experiment*: <https://www.youtube.com/watch?v=CWnnqObk1qM> [accessed: 23.06.2024].

Tonn (*The Intimate Earthquake Archive*, 2016). In these artistic projects, the viewer is able to perceive the impact of stimuli that exist, albeit poorly or not at all recognisable without technology. An important element is cyborgisation, the use of sensory detectors to amplify external information. In Harbisson's case of cyborgisation, this is the processing of colours into sounds through the use of an intra-skeletal implant that generates audible vibrations, allowing sounds to be interpreted as colours: "<<The sounds are transmitted through my bone to my inner ear, which allows me to interpret what colours are according to the different sign waves of each sound>>"¹⁸. This augmentation allows one sensory band to be converted into another, enabling a sensory experience. In this case, hearing is the source for vision. The stimulation of one sensory modality becomes a plausible source for one or more of the different senses, which, in Harbisson's case, allows him to continue his painting or listen to his graphically recorded music. In the case of Ribas Moon, there is a performance whose essential part is to feel the earthquakes that are occurring all over the globe, which is done thanks to detectors placed on the artist's feet. Sissel Marie Tonn's work, on the other hand, makes use of multisensory waistcoats that allow similar sensations to those experienced by people during tremors caused by mining:

<<*The Intimate Earthquake Archive* by Sissel Marie Tonn is an ongoing research project and interactive installation dealing with the phenomenon of man-made earthquakes. In her work she is offering us the chance to experience 'deep listening' of the effects of fossil fuels exploitation. Even this project has a strong local dimension because it deals with the site-specific problem that is a result of the gas drilling in one of the largest gas fields in Europe. It is also provoking dialogue in a wider ecological and socio-political context of the human role in the environment undergoing changes. By creating tactile sensory experiences from the collected seismic recordings, she is offering us the chance to feel those changes and effects with our bodies.>>¹⁹

Art based on technological enhancement can also include Aleksandra Radlak's poignant work *Bo.by. Bond with baby* (2021). It is a communication system between a prematurely born baby who is in an incubator and its mother, through which the first and basic information about the world is transmitted remotely. *Bond with baby* consists of a set of sensory devices remotely linking the mother and baby, enabling the exchange of sensory sensations "<<...such as

¹⁸ R. Bryant, *Dezeen*, London, New York, Shanghai 2013.

¹⁹ H. Leopoldseeder et al., *CyberArts 2020 - Prix Ars Electronica*, Hatje Cantz Verlag GmbH, Berlin 2020, pp.60-61.

touch, breast movement and vibration, heartbeat, body heat or smell and electronics enabling receiving and replaying such data from another one. Thanks to such a solution, both: parents and their premature infant can experience indirect touch and rich, full-sense bonding of the other, even in the situations where it would not be possible.>>²⁰ This sublime work encapsulates the hard-to-pronounce values that arise from a mother's unique contact with her premature child. These involve closeness and care, expressions of love and continuous emotional contact. This occurs through the creative use of communication technologies, in which sensory stimuli that create a sense of presence and emotional closeness are reinforced and transmitted. The work draws attention with its coherence and completeness. The world of the newborn baby probably needs nothing more than maternal sensations, and with the baby in the incubator, these only expected sensations are not hers/his. Hence, the above artwork is about holistic feeling, which is fully satisfied through communication techniques resulting in a real relationship between the mother and child.

Another example is Shota Yamauchi's work, *Maihime* (2021), in which one can find the malleability of the relationship between humans and technology, search for community and protection of the elements of separateness that define identity. It is a recognisable but not fully understood process, a cognitive experience that contains intuitions approximating the interdependence of human and technology: "<<The human and technology try to become one through a garment made of skin. Technology longs for the limited twilight of human life, and humans for the infinite galaxy that technology holds. Whether they are embracing, or restraining each other, the two drown in the sea of personal distance. Humans are addicted to technology. Technology, too, is addicted to humans.>>²¹ In this performance, the actress is connected by cables illuminated by LEDs to a screen on which a gorilla-like figure, symbolising technology, is transformed. The actress's movements influence the movements of the monkey, which in turn become the inspiration for the actress's further actions. This understated dance expresses an intuition about interconnectedness, pointing to the necessity of coexistence, but also the sacrifices and limitations that go with it. What matters in the performance is the movement of the body and the movement detection system that influences the image. The whole symbolises an irrevocable dependence, a reciprocal sensoriality that involves a mutually dominant process in which the movements of the dancer interact and compete with the movement of the empowered technology, indicating an

²⁰ A. Radlak: <https://alek sandraradlak.wixsite.com/portfolio/boby>[accessed: 23.06.2024].

²¹ M. Jandl, G. Stocker, *Ars Electronica 2022, Festival for Art, Technology, and Society - Welcome to Planet B. A different life is possible. But how*, Hatje Cantz Verlag, Berlin 2022, p. 126.

awareness of the dependence between the figures, their mutual psychophysical entanglement²².

Finally, the author would like to cite an example illustrating the phenomenon of telematicity, the origins of which can be found in the artistic works or theoretical studies of Myron Krueger²³, Roy Ascott²⁴ or Paul Sermon²⁵. Of note here is David Rokeby's interactive work, *International Feel* (2011), in which we are presented with at least two interactive spaces in different locations in the physical world. Each is monitored by a camera, and in order for an event (an assumed meeting of the viewers in the electronic space) to take place, their participation in the two parts of the installation at the same time is required. Moving through the monitored interactive space should lead to the overlapping of their virtual bodies at common coordinates, defining the locations of the two distant parts of the installation. When the recipients thus meet, they will hear a sound indicating telematic contact: "<<If someone in the remote space started moving at this point, I felt the sound of my body transform and had a haunting sense that someone had just walked through my body. An interesting thing about this work is that it used sound as a medium for telematic communication. [...] Vision tends to enhance a sense of distance, while sound is immediate and intimate. As a result, this work created a very special kind of non-visual telematic intimacy.>>"²⁶ The work is intrigued by the sensation of remote touch expressed in the experience of sound. The sound can be modulated according to the synchronisation of the movements of the receiving persons – it can be rough or melodic, which is particularly audible when the movements are synchronised, such as when dancing together accomplished at a distance. This kind of interactive sensory experience can be an alternative way of experiencing to physical touch, by activating the sensorium of touch itself.

The human sensorium is likely to undergo a posthumanist transformation, linked to the development of mainly interactive technology replacing natural sources of experience. Artificial intelligence, robots or virtual reality will penetrate ever more widely and deeply into human feeling, becoming a source of experiences, friendship or love, and perhaps even realising them in an idealised way, in the way ancient artists thought of canonical ideals as unattainable in any other way but in art, today realised through the technological sensorium.

²² S. Yamauchi, *Maihime*: <https://ars.electronica.art/planetb/en/maihime/> [accessed: 23.06.2024].

²³ M. Krueger, *Artificial Reality II*, Addison-Wesley Publishing Company Inc., Reading MA 1991, p. 34.

²⁴ R. Ascott, *Telematic Embrace: Visionary Theories of Art, Technology and Consciousness*, University of California Press 2003.

²⁵ P. Sermon: <http://www.paulsermon.org> [accessed: 23.06.2024].

²⁶ D. Rokeby, *International Feel*: http://www.davidrokeby.com/int_feel.html [accessed: 23.06.2024].

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SZTUKA SENSORYCZNA (streszczenie)

Celem artykułu jest przeanalizowanie właściwości sztuki, która pozwala określić rodzajowość prac artystycznych, jako sensorycznie oddziałujących podczas doświadczenia estetycznego. Oddziaływanie takie dotyczy osoby odbiorczej, która podlega wpływowi sztuki ujawniającej swój podmiotowy charakter lub będącej źródłem dla sensorycznej komunikacji pomiędzy osobami odbiorczymi. Uwzględniono znaczenie interaktywności będącej podstawą responsywności oraz zaproponowano trzy rodzaje oddziaływania sztuki, które charakteryzują taki rodzaj doświadczenia estetycznego.

Słowa kluczowe: sensorium, aesthetics experience, interactive technology, responsivity, media

Sidey Myoo is the academic pseudonym of prof. dr hab. Michał Ostrowicki, originating from the online name adopted in 2007 in the virtual world of Second Life. A philosopher working at the Department of Aesthetics at the Institute of Philosophy at the Jagiellonian University, as well as the Department of Media Art Theory at the Faculty of Intermedia at the Academy of Fine Arts in Krakow. His interests lie in aesthetics treated as the theory of art, mainly in reference to contemporary art, including New Media Art. Since 2003, he has been engaged in the philosophy of the Internet, studying phenomena such as immersion, interactivity, telepresence, telematics, hybridization, identity and artificial intelligence. In 2006, he introduced the concept of *electronic realis* (later *virtual realis*), which became the basis for ontoelectronics, an ontology focused on the analysis of virtual reality. Research on virtual reality led him to the thesis that VR is an alternative sphere of existence in relation to the reality of the physical world, capable of serving human existence (*Ontoelektronika, Ontoelectronics. An Introduction*). Sidey Myoo also created a theory of the work of art (*The Work of Art as a System*) and a matrix theory of art (*Wirtualne realis. Estetyka w epoce elektroniki*). He proposed the concept of art in virtual reality (*VR ART*) and the criterion for art (*Genetic Criterium of Art*). Within ontoelectronics, he developed a nonlinear conception of truth. Sidey Myoo is the author of articles, monographs and edited works in the fields of philosophy, art and online education. He has participated in national and international scientific events. In 2007, he founded Academia Electronica (www.academia-electronica.net), the virtual part of the Jagiellonian University operating in Second Life (since 2008), AltspaceVR (2020-23) and Spatial (since 2023), where he experiments with remote teaching by conducting official academic courses, featuring guest lectures by speakers from various scientific centers, including foreign ones, and where conferences are organized.