

UDC 004.946

Received 09.06.2023, revised 15.09.2023, accepted 29.09.2023

DOI: 10.30628/1994-9529-2023-19.3-69-93

EDN: APOWJH

OKSANA O. PERTEL

HSE University

20, Myasnitskaya, Moscow 101000, Russia

Researcher ID: JGE-3472-2023

ORCID: 0000-0003-2946-1639

e-mail: ksanapr@gmail.com

For citation

Pertel, O.O. (2023). Digital Fashion Bodies: Posthuman Perspectives. *Nauka Televideniya—The Art and Science of Television*, 19 (3), 69–93. <https://doi.org/10.30628/1994-9529-2023-19.3-69-93>, <https://elibrary.ru/APOWJH>

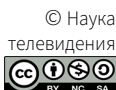
Digital Fashion Bodies: Posthuman Perspectives

Abstract. The paper analyzes the concept of digital corporeality and identity and their representation in virtual images of digital fashion. Digital fashion is a new field of fashion that develops in the interdisciplinary space made of information technology, gaming industry and digital art.

The article assumes that the digital fashion body depends neither on the human nor the human body. The digital body is non-human and it explicitly represents a posthumanist corporeality as a cyborg formation (D. Haraway). It assembles through machinery and becomes randomly fixed assemblages (G. Deleuze, F. Guattari; M. Delande). The author draws on concepts of new materialism, including the concept of the plane of immanence by G. Deleuze and F. Guattari's, J. Bennett's vibrant matter and K. Barad's agential realism. New materialism shows radical change of the digital corporeality discourse.

The author analyzes digital fashion projects posted on digital fashion retail platforms, such as The Fabricant, Dematerialised, DressX, Artisan, and works of digital designers who have gained fame through participation in digital shows.

Keywords: digital fashion, digital body, avatar, posthuman, posthumanism, new materialism, dematerialization, corporeality, identity



УДК 004.946

Статья получена 09.06.2023, отредактирована 15.09.2023, принята 29.09.2023

ПЕРТЕЛЬ ОКСАНА ОЛЕГОВНА

Национальный исследовательский университет
«Высшая школа экономики»
101000, Россия, Москва, ул. Мясницкая, д. 20

Researcher ID: JGE-3472-2023

ORCID: 0000-0003-2946-1639

e-mail: ksanaprl@gmail.com

Для цитирования:

Пертель О.О. Тела цифровой моды: постгуманические перспективы // *Наука телевидения*. 2023. 19 (3). С. 69–93. DOI: <https://doi.org/10.30628/1994-9529-2023-19.3-69-93>. EDN: APOWJH

Тела цифровой моды: постгуманические перспективы

Аннотация. В статье анализируются понятия цифровой телесности и идентичности и их репрезентации в виртуальных образах цифровой моды. Цифровая мода — новая область моды, которая развивается в междисциплинарном пространстве информационных технологий, игровой индустрии и цифрового искусства.

В статье предполагается, что цифровое тело нового направления моды не зависит ни от человека, ни от человеческого тела. Цифровое тело является нечеловеческим, и оно становится воплощением постгуманистической телесности, своего рода киборгом (Д. Харауэй). Собранное посредством машин, оно превращается в случайные ассамбляжи (Ж. Делёз, Ф. Гваттари; М. Деланда). Автор опирается на новые материалистические концепции, в том числе на понятие план имманентности Ж. Делёза и Ф. Гваттари, вибрирующую материю Дж. Беннет и агентный реализм К. Барад. Обращение к новому материализму позволяет показать радикальное изменение дискурса о цифровой телесности. Автор анализирует проекты цифровой моды, размещенные на платформах The Fabricant, Dematerialized, DressX, Artisan, а также работы цифровых дизайнеров, получивших известность благодаря участию в цифровых показах.

Ключевые слова: цифровая мода, цифровое тело, аватар, постчеловеческое, постгуманизм, новый материализм, дематериализация, телесность, идентичность

INTRODUCTION

The article brings up the question about the body as it is represented in works of digital designers. The focus is on the new field of digital fashion,¹ as fashion since its inception has been centred on the human being and, consequently, the human body. But the situation in the digital world is changing, so the notion “clothing for the body,” which seems coherent and is relevant to physical fashion, is being replaced by the notion “digital clothes for the digital body,” which resembles unconnected links of a broken chain. According to Terrence Zhou, “Our mission is to create possibilities and fantasies; garments now don’t have to pertain to the body”². In the Internet space, we are increasingly surrounded by digital bodies—these are avatars, influencers, and digital assistants; in addition, a person can choose their representative on the Internet and VR. Digital fashion is an area that will greatly influence the formation of the digital body.

When applied to the field of digital fashion, I also use the notion of thought couture, since it is assumed that “Knowing that beliefs are one thing and hard facts are another, we wanted to add empirical evidence to our mantra of ‘fashion should waste nothing but data and exploit nothing but imagination’”³. Using this notion allows me to emphasize the tension between the tangible and intangible in the understanding of body and matter in digital fashion design.

The **subject** of the study is the digital bodies of virtual fashion posted on the most famous digital clothing marketplaces: the websites The Dematerialised and The Fabricant. The selection of virtual images is conditioned by the themes that are iconic for digital fashion, namely gender mobility and the possibility of the impossible in terms of the embodiment of the virtual body and clothing. The selection of images includes works of collaborations between independent digital artists as well as well-known fashion brands with digital fashion platforms: TRS.MNZ and The Fabricant, Rtfkt and DMAT, Buffalo London and The Fabricant, Rotate and DEMAT. I also draw upon textual analyses of digital fashion designers, using interviews and text descriptions of the virtual images in question.

The **hypothesis** of the article is built around the assumption of materiality and posthuman content of the digital body, despite the immateriality postulated by digital designers. In doing so, materiality is considered within the framework

¹ Digital fashion is a practice of digital clothing design and at the same time an alternative fashion culture. “Digital fashion is a new field of fashion design that relies on designer-specific 3D software and produces hyper-realistic, data-intensive digital 3D garment simulations that are digital-only products or digital models for physical products” (Särmäkari & Vänskä, 2021, p. 5).

² Exclusive: Bad Binch Tongtong brings eccentric silhouettes to the Metaverse. Law, J. (2022, March 1). *Jing Daily*. Retrieved June 5, 2023, from <https://jingdaily.com/bad-binch-tongtong-nft-xtended-identity/>

³ The Fabricant. (2021, April 27). *Making facts fashionable again*. Medium. Retrieved June 5, 2023, from <https://thefabricant.medium.com/making-facts-fashionable-again-32951b13d9a5>

of the new materialism; according to it, matter underlies all phenomena.⁴ In our context, this means that the digital body has a material basis. An important shift in discourse also becomes the understanding of matter as being in a process of constant change⁵ (Barad, 2012, pp. 6–7). The properties of matter are conditioned both by the apparatuses being measured and by the person making the measurements. Karen Barad refers to this process as interactionism. Furthermore, the intersubjectivity of the object and subject of measurement raises the question of the boundaries of the body, of where the object of measurement ends and the subject begins. A different understanding of matter results in an explanation of digital designers' current vision of the digital body and related representations of identity, namely the moving boundaries of the body and the shimmering identity: "Our bodies are becoming fluid (...) What can a body be when it is freed from physical restraints? What does identity mean when there are endless bits and bytes to express it? Connection is what we yearn for, and connection is what will rise now."⁶

My research assumption is to consider digital bodies, namely avatars, as individual embodied bodies that have their own agency, since users' choice to purchase such an image will be driven not by the creator but precisely by the visual characteristics of the avatar. By agency I understand Karen Barad's idea of agency: "Agency is not an attribute but the ongoing reconfigurings of the world" (Barad, 2006a, p. 141). If we understand computer machines as apparatuses, according to Barad's theory (Barad, 2006a, pp. 168–170), then the digital body becomes some material "phenomenon" that is produced in this material-discursive practice. In the context of computer machines producing visual and semantic narratives, this coupling of matter and discursive practices, to which Barad draws attention, is important:

⁴ New Materialism (NM) is an intellectual movement associated with a rethinking of the Enlightenment legacy of the centrality of man in the perception of the world. NM articulates a dynamic view of matter and mind. It includes studies of science and technology, as well as digital reality. (Braidotti & Hlavajova, 2018, p. 277). In this article, I draw upon the works of Karen Barad, Rosi Braidotti, Judith Butler, Jane Bennett. It is worth noting that all the above researchers were influenced by the theory of immanent materialism of Gilles Deleuze and Félix Guattari whose works do not belong to the new materialism, but are close to this direction. In my article, I also use the conceptual apparatus of Gilles Deleuze and Félix Guattari.

⁵ A quantum ontology deconstructs the classical one: there are no pre-existing individual objects with determinate boundaries and properties that precede some interaction, nor are there any concepts with determinate meanings that could be used to describe their behavior; rather, determinate boundaries and properties of objects within phenomena, and determinate contingent meanings, are enacted through specific intra-actions, where phenomena are the ontological inseparability of intra-acting agencies. (Barad, 2012, pp 6–7)

⁶ The Fabricant. (n.d.). *Iridescence*. Retrieved June 7, 2023, from <https://www.thefabricant.com/iridescence>

Materiality is discursive (i.e. material phenomena are inseparable from the apparatuses of bodily production; matter emerges out of, and includes as part of its being, the ongoing reconfiguring of boundaries), just as discursive practices are always already material (i.e., they are ongoing material [re]configurings of the world). (Barad, 2006a, pp. 151–152)

Hence my claim that the digital body has a material-discursive nature and is not a virtual simulacrum.

In addition, I see avatars in their relationship to the user as an extension of the real person, since the avatar in this case fulfils the role of a representative of the person in virtual space. In this case, digital bodies are an extension of the living person. Considering avatars in symbiosis with their owners allows us to talk about them within the framework of cyborg theory, as formulated by Donna Haraway (2017).⁷

Cyborg is precisely a new posthumanist optic in relation to hybrid bodies that describes the blurring of the boundary between the corporeal and the artificial, as well as between the ontology and ethology of new bodies. I draw upon the posthumanist discourse in relation to understanding digital body models as they fully embody the posthumanists' proclaimed move away from binary oppositions. In the context of digital fashion, the cyborg-like symbiosis of the living body and the digital avatar blurs the dichotomies characteristic, for example, of Renaissance philosophy, such as female/male, corporeal/intelligent, human/non-human. Digital bodies are an example of non-binary symbioses.

The posthumanist methodological framework allows us to consider the digital body outside the organic notion of the human body. Digital bodies can embody non-human images. In her work *The Posthuman* (Braidotti, 2013), Rosi Braidotti frames a posthuman through becoming earth, animal and machine.⁸ If the physical human body is a model for cybernetic bodies, it is only as a model for deconstructing the notion of the substantive subject. The organic living body of a human being demonstrates an example of embodied binarities (Grosz, 2001, pp. 599–605; Irigaray, 2001; Irigaray, 2005). The physical body is represented by a set of certainties that do not change in arbitrary need. The body is animate rather than machine-like, has a definite gender rather than arbitrary, belongs to a particular kind of person rather than animal or non-human. Furthermore, within the body itself, the dualism into body and mind is reproduced, which has long been entrenched

⁷ An important point of entry into this discourse is the notion of the cyborg as articulated by Donna Haraway, "By the late twentieth century, our time, a mythic time, we are all chimeras, theorized and fabricated hybrids of machine and organism; in short, we are cyborgs." (Haraway, 2017).

⁸ Her another work dedicated to metamorphosis associated with the concept of becoming is *Metamorphoses* (Braidotti, 2002).

in Western philosophy. The division into body and mind continued at the cultural and ideological level, where the corporeal was attributed to the feminine, the rational, related to the logos, was associated with the prerogative of the masculine. In addition, from the initial division of body and mind an important cleavage into nature and culture (artificial) emerges.

As long as the digital body is artificial, it overcomes the limitations of the biological body and changes the very idea of corporeality. The body becomes virtual, it has no organic qualities, yet it continues to embody and contribute to the experience of the external bodily experience. This idea is confirmed by Roberto Diodati's reasoning that the virtual body represents some intermediate entities, some state different from the distinction between inside and outside,

the virtual body-environment is both external and internal—the terms which cannot be considered “naturalistically” as if they had no phenomenological meaning. This means that virtual bodies, strictly speaking, should not be seen as representations of reality, but as entities that are realised in their own way, different from the way in which other entities are produced in the living body's bidirectional participation in the world. Virtual body-environments are “artificial windows that open into an intermediary world.” (Diodato, 2022, p. 3).

The departure from the opposition between the external and the internal, which Diodato insists on, characterises the digital body in relation to the user (the user plus the avatar). In the digital body itself, the internal becomes external—visual means are sought to exalt inner experiences. The sense of reality of the digital body depends on how effectively it produces desires and emotions. The ability to produce such an effect has been called *haptic visuality* (Marks, 2000; Sobchak, 2004), and I consider it in relation to digital bodies as an argument for the embodiment and materiality of digital bodies. At the same time, Gilles Deleuze's concept of the body *without organs* is also applicable to analysing the haptic side of digital bodies as a means of expressing the inexpressible. The body without organs (BwO) is what Deleuze introduces to describe the intensities of various kinds that human beings experience, which are felt in organic bodies as some external states that are grasped by the human being. Interestingly, Deleuze also examines expressive means in Bacon's work through analysing haptic and optical vision (Deleuze, 2011 p. 127).⁹

The first part of the paper will look at the materiality of digital bodies and how it affects the understanding of corporeality and matter in general. The

⁹ The concept of the body without organs was formulated by Felix Guattari together with Gilles Deleuze in *A Thousand Plateaus* (Deleuze & Guattari, 2005) and *Anti-Oedipus* (Deleuze & Guattari, 2008), which together made up the two-volume book *Capitalism and Schizophrenia*. Further, body without organs is used in Deleuze's *Francis Bacon: The Logic of Sense* (Deleuze, 2011).

second part of the paper will discuss gender fluidity as an example of moving away from binary opposition, which is an example of a shimmering identity in *thought couture*.

MATERIALITY OF DEMATERIALITY

In this section, I examine a conceptual position of digital fashion and, more generally, of the digital economy: dematerialization. The genealogy of dematerialization can begin with the distinction in Roman law between *res corporales* (corporeal things) and *res incorporales* (incorporeal things), where the status of intangible things was first legally established. In the digital economy, together with the invention of the NFT, intangible things become objects of law and property. And dematerialization then means things that exist in the digital status.

Things in virtual space lose their physical presence, their matter. The Dematerialized, a pioneer of digital fashion, chose the name for their marketplace to emphasize the intangible nature of the products for sale. The company was created to sell “digital goods.” Turning to textual analysis, I found a refinement of dematerialization through the concepts of “visceral,” “inner self,” “total fantasy,” “imagination,” “parallel dimension.”¹⁰ Most often, the immaterial digital world is opposed to the material one: “rules of physics,” “constraints of the physical realm,” “gravity.”¹¹

If we talk about the body, in the digital world it is actually dematerialized and virtualized, which actually undermines the very definition of corporeality. In its meaning, the body has long implied a physical object, something that has a material basis and certain properties.¹² In the digital world, the body is deprived of its material basis, but it continues to embody the bodily experience and memory of the material world. Designers define digital bodies as “fluid.”¹³

¹⁰ The Fabricant. (2022, September 30). *Are you ready to become a Digi-Sapient?* Medium. Retrieved September 21, 2023, from <https://thefabricant.medium.com/are-you-ready-to-become-a-digi-sapient-1d0d022a499d>

¹¹ “There’s no constraints, no gravity”. Jana, R. (2022, April 11). *The Metaverse could radically reshape fashion*. Wired. Retrieved July 6, 2023, from <https://www.wired.co.uk/article/extreme-fashion-metaverse>

¹² In the study of corporeality, the approach related to the study of the physical and spatial characteristics of the body has been called “discrete” or “cartography” (Weinstein, 2007, pp. 101–102).

¹³ “[i]dentity expression as an online virtual body, and what it is to be a fluid human (or non-human) in a digital world.” Boddington, R. (2020, 13 October). Meet the shiny, “yummy”, alien-like characters of 3D artist Harriet Davey. It’s Nice That. Retrieved July 6, 2023, from <https://www.itsthats.com/articles/harriet-davey-digital-131020>

From the perspective of the new materialist philosophy, the entire universe is seen as a flow of matter.¹⁴

On the one hand, the materiality of the media, on which the software providing the virtual experience is contained, is not in question. Interpreting new media as a new state of materiality, digital art researcher Christine Paul suggests:

while immateriality and dematerialization are important aspects of new media art, it would be highly problematic to ignore the art's material components and the hardware that makes it accessible. Many of the issues surrounding the presentation and particularly preservation of new media art are related to its materiality (Paul, 2007, p. 252).

On the other hand, the virtual experience itself, in its discursive component, influences a change in the concepts of matter and body. Appealing to the concepts of new materialism allows us to clarify to what extent digital bodies and virtual space change the interpretation of the concept of matter and body.

I assume that digital bodies are embodied, namely that they have discursive-material grounds and participate in the immanent flow of matter. The notion of embodiment is connected with the theme of the body, which is more evident in the English etymology, where the word "body" is a component of the word "embodiment." Also, in Russian the word "embodiment" (воплощение [voploshchénie]) refers to matter, namely to flesh (плоть [plot']). In the posthumanist discourse, the question of embodiment is linked to the discussion of the boundaries of the body, especially in relation to the addition of tools and technological devices to the body.¹⁵ And virtual embodiment of the body also influences the discovery of new boundaries of the body, as well as the shaping of discourse on concepts related to matter and the body. In addition, virtual embodiment is closely related to bodily and mental experience. The digital body is embodied in the meaning that it visualizes the real experience of the material world. And this experience is no longer only human in its content. Let us look at examples of digital design to see what it can be about.

¹⁴ For the representatives of the new materialism, "the idea of matter as passive stuff, as raw, brute, or inert" (Bennet, 2010, p. 9.) changes to an understanding of matter as an active force, essentially a vital materiality. Deleuze and Guattari speak of the immanence of matter through the ideas of *matter-movement*, *matter-energy*. Jane Bennett calls matter vibrant and dangerously vibrating. Barad formulates the idea of matter as a continuous becoming: "Matter is not a fixed essence; rather, matter is substance in its intra-active becoming-not a thing but a doing, a congealing of agency." (Barad, 2006, p. 183).

¹⁵ Donna Haraway pushes the boundaries of the body away from the visible contour and includes diffraction spectra. In *A Cyborg Manifesto*, she writes that "embodiment is about a meaningful prosthesis" (Haraway 1991, p. 195). Karen Barad, relying on quantum physics and the concept of entanglement, also argues for movable boundaries between body and world that are reconfigured anew each time (Barad, 2007, pp. 153-161).

Digital modelers believe that virtual things and avatars have more freedom in embodiment than real world objects. What is this freedom from the constraints of the physical world and how does it affect the content of the digital body? First of all, designers often turn to materials and physical elements that are unconventional for physical clothing. For example, using the texture of water, ice, fire, wood as the consumable material of the product. In fact, we are talking about the symbolic content of real elements of the physical world.

A dress on fire or burning trainers? This is the everyday reality of virtual fitting rooms. For example, the ROTAT3 Phygital dress created by ROTATE x DMAT (Fig. 1) is a classic Rotate sheath dress with a virtual flaming lap. Designed by Buffalo London x The Fabricant (Fig. 2), the flaming trainers are not only made of digital fire, but they speak to the fire of the human soul urging to burn for their values and ideals.¹⁶ Through non-traditional elements, fire in this case, designers refer to both tactile and the symbolic levels. The tactile dimension conveys sensations of warmth and intensity of emotion. The symbolic dimension already takes sensory data to the contemplative plane and gives them additional meanings. Resorting to the symbolic status of the fire element, designers seek to emphasize the significance of outfits. Fire is interpreted as a high degree of significance of information, it is associated with strong emotions, speed, drive. Remember the fire emoji, commonly used to praise someone or something.

The use of such techniques allows us to speak of digital bodies as having haptic visuality, that is, the ability to exert an effect close to the tactile through the visual image. Haptic visuality is a concept from the field of film studies that has been widely recognized through Laura Marks' work on the skin of film (Marks, 2000). Looking at cinematographic examples, Marks shows how cinema engages the viewer in a sensory experience where the screen becomes the metaphorical "skin of the film," namely "a membrane that brings its audience into contact with the material forms of memory" (Marks, 2000, p. 243). She refers to haptic visuality in order to emphasize the effect of vision that allows for a deeply bodily experience. In the context of my article, it is the materiality of screen images that is important to emphasize. In essence, Marks sees the audio-visual media of the film as material sources of sensory impressions, as well as real sensations of the viewer that are also experienced in material human bodies.

A parallel can be drawn between the metaphorical image of the screen as the skin of the film and the avatar skin, since skin also refers to skin as a physical organ. In the virtual game space, skins can be changed, creating new avatars.

¹⁶ "We asked buyers if they were ready to burn down toxic ideas of the past and burn for something new, and share on social what they were burning for in 2021, using #burningfor." The Fabricant. (n.d.). *Buffalo London x The Fabricant—"Classic BurningFor."* Retrieved May 28, 2023, from <https://thefabricant.artstation.com/projects/bKn4dd>

The equalization of clothing and skin in virtual space allows us to go beyond the body, namely to extend the body to the auxiliary attributes in which it is clothed. In addition, the appeal to “skin” is a technique of haptic visuality. Haptic visuality indicates that the distance between the avatar and the user is extremely small. The very condition of digital fashion is dressing the avatar, whether it is representative of a real person or only a digital character. In the first case, it is a matter of avatarizing the self, which allows one to go beyond the real physical self. In the second case, there is a virtual body, which has a haptic visuality and thus a language of influence and impact on the person. All digital images of avatars describing the structure of the body, its configuration, skills and abilities of the digital body influence the representation of human corporeality.



Fig. 1. ROTAT3 Phygital created by ROTATE x DDMAT¹⁷

Fig. 2. Classic BurningFor created by Buffalo London x The Fabricant¹⁸

The second important quality of dematerialization in digital fashion is the transformation of the avatar’s body. Designers are not limited to choosing or creating anthropomorphic avatars when creating clothing models. The lack of physical constraints on the body allows for an extremely broad interpretation of the body. They can create bodies that are close to or distant from the human image. I will not dwell here on the consideration of non-human avatars, such as

¹⁷ See the image source: <https://thedematerialised.com/shop/rotate-x-dmat/rotat3-morph> (22.04.2023).

¹⁸ See the image source: <https://thefabricant.artstation.com/projects/bKn4dd> (28.05.2023).

digital images of machines, animals and chimeras. I only consider modification options for directly anthropomorphic avatars that include variants of the non-human.

The digital body in the virtual environment changes according to the idea of the designer or the avatar user. The digital body is not constrained by some predetermined natural law. Its design and content can change according to the designer's or user's preferences. I propose to use the notion of a *body without organs* (BwO) in relation to the digital body, implying its plasticity, arbitrariness and affective nature. The BwO is a concept from the ontology of Gilles Deleuze and Félix Guattari, referring to the multiplicity of intensities in the body that seek and find expression. The body without organs is opposed to the body as an organized unity. It is an organism that is literally torn from within by conscious and unconscious desires.

The inner impulse, the desire for self-expression, the manifestation of desire understood as a flow of energy remain the inner drivers of digital fashion. Just like traditional fashion, digital fashion seeks to reflect the zeitgeist. Moods, the zeitgeist, emotions, affects—all these invisible flows find their expression in digital design also through the transformation of the body. Indeed, this possibility is present in digital design, unlike physical fashion which is mainly able to work with the human body. In addition, body modification also implies a haptic effect and emotional involvement of the user, because the body is the most important sensory tool. Any change of the body carries a premonition of that change.

It is interesting to note that through visual work with body transformation, the invisible becomes visible and awareness of the connection between the state of mind and bodily organization increases. In the physical world, we express mental anguish or emotional upheaval in the expressions, “my soul is aching,” “a heartbreak,” “my head is in a whirl,” “butterflies in the stomach.” However, in digital design, it becomes possible to speak directly through the body, literally showing feelings in the changing body. In my opinion, this approach proves that the emotional impulse is deeply corporeal. The digital body is transformed morphologically, it is rearranged in an arbitrary way, the sentient covering of the body in the form of skin is subjected to physical manipulations like piercings, tattoos or skin grafts. There is a visualization of the body that destroys it in an attempt to elicit sensory feedback.

The examples of work with the body include a series of avatars and digital garments by the designer @mrs.mnz created for the virtual exhibition project The Next 100 Years of Gucci. The avatar with the name Model_AU79 represents a female figure in a transitional state from human to automaton. Rare precious metals—gold and silver—are integrated into the avatar's body, symbolizing the penetration of the machine into the corporeal. Braids are attached to the skull with metal staples. The terminal phalanges of the fingers appear to be artificial red thimbles. Of note are

the extra-large eyes that are in the middle of the face. The second pair of eyes is a reference to Salvador Dali's Eye of Time brooch (1949), which symbolizes the inner time of a person who remembers their past and foresees the future. The author's message states that the models "represent the nature of the human being to preserve a finished material and the ingenuity in transforming and giving it new life, new forms."¹⁹ The text speaks of the possibilities of infinite change in the finished material, be it bodies or elements from Mendeleev's periodic table. And the impetus for this change is the inner inevitability of change, which time helps us to notice.

Another avatar, Model_OS76 by the same designer, seeks to convey feelings of stress and suffocation. Conceptually, the author works with the theme of foreign chemical elements that are increasingly penetrating the human body and altering it. The avatar is partially permeated with osmium, an element poisonous to humans. The avatar has its hand turned to its throat in a gesture that dismantles suffocation. The eyes are hidden by a veil that prevents them from seeing, and metal beads are screwed onto the arms. The digital body demonstrates the gravity and limitation of the living.

In my opinion, highlighting the intangible properties of digital design indicates two opposing tendencies. The first one is exalting demateriality, seeing new opportunities in it. There are indeed aspirations to use the structures of other elements in order to create new combinations of form and content, and thus enhance the visual effect. The second one is making up for the lack of sensorics in demateriality. The turn to metaphysics can be seen as some compensation for the loss of materiality in the digital world. Since the quality of tactility has been lost in the digital world, designers try to compensate for it through additional visual stimulation.

¹⁹ TRS.MNZ [@trs.mnz]. (2022, July 11). *MODEL_AU79 GG. I am thrilled to take part of "the next 100 years of Gucci" link in bio* [Photograph]. Retrieved September 21, 2023, from <https://www.instagram.com/p/Cf4Pg2GMAMs/?igshid=NTc4MTIwNjQ2YQ>

By the decision of the Tverskoy District Court as of March 21, 2022, Meta company, owner of the Instagram social network, was adjudged an extremist organization. Access to Instagram in the territory of the Russian Federation is banned.



Fig. 3–4. Model_AU79 GG1²⁰

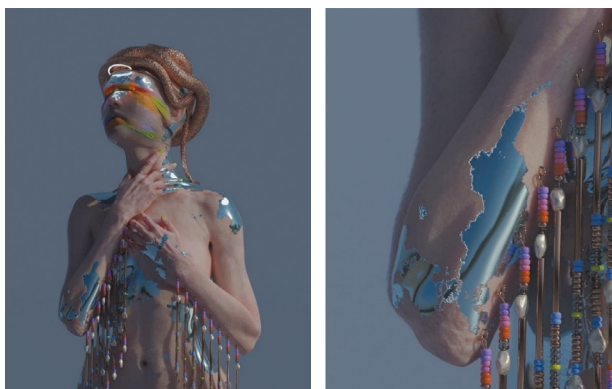


Fig. 5–6. Model_OS76²¹

This last point is the most vulnerable to criticism by body and bodily experience researchers because the intimate experience of touching and feeling becomes mediated. In this way, unique bodily experiences are devalued and replacement options based on averaged symbols of experience are offered. Roger Smith expresses his concern about the impact of the new turn in the mediation of bodily experience when he addresses the problem of the impact on the subject:

There is the prospect of information technologies capable of generating and selling mediated touch, that is, of achieving a modus operandi of

²⁰ See the image source: https://www.behance.net/gallery/154603123/VAULT_GUCCI (28.05.2023).

²¹ See the image source: <https://www.instagram.com/p/CRHMKBmHAsc/?igshid=NTc4MTIwNjQ2YQ> (28.05.2023).

By the decision of the Tversky District Court as of March 21, 2022, Meta company, owner of the Instagram social network, was adjudged an extremist organization. Access to Instagram in the territory of the Russian Federation is banned.

human-machine interaction so that users get the sensations they would have gotten from contact with another person or object. (...) It is difficult to predict how this will affect our subjectivity, (...) there is reason to suspect that the changes will be serious. (Smith, 2021, pp. 18–19)

Surrealist artist Louise Bourgeois also speaks of the contradictory nature of virtual symbolism: “with symbols, people can have deeper conscious communication. But you also have to understand one thing, symbol is symbol, it is not the exchange of flesh and blood.”²²

The main conclusion of this chapter is that the dematerialization of the digital world and, in particular, the digital body, by and large, is a redefinition of the concepts of matter and body in a posthumanist materialist way. Embodied digital bodies retain materiality through their connection to the apparatuses of technical devices and directly to humans. Karen Barad’s concept of intra-action helps explain this connection and entanglement between humans and objects of the material world (Barad, 2006b). According to Barad’s concept, humans and objects of the real world constantly constitute themselves in interaction. The term intra-action demonstrates the impossibility of a clear separation between apparatuses and individuals, as they are part of a common process of constituting each other. The human body physically expands to include the apparatuses to provide virtual experience. The argument of materialist intransitivity allows the embodied digital body to be attributed to continual representations of the body (Weinstein, 2007, pp. 102–110). Furthermore, on a symbolic level, the transformation of the human body, as well as working with non-standard materials, redefines the notion of matter and body as having a mobile quality. The body is understood as something that is in constant transformation and change.

BETWEEN THE FEMALE AND MALE GENDER

Gender issues are often rightly considered as a starting point in the context of the discourse of moving away from binary oppositions. One of the main themes that can be identified in virtual images is the declaration of the absence of gender. The concept of digital couture pioneers The Fabricant presents the expected benefits of digital reality:

If the metaverse lives up to its conceptual claims, then in its space we will find ourselves beyond age, beyond gender and, the choice of skin

²² Chen-Peng. (n.d.) *Chenpeng 20AW Campaign*. Retrieved July 21, 2023, from <https://www.chen-peng.com/20aw-fashion-shoot> (21.06.2023).

color will become a matter beyond ethnicity, it will be rather a matter of choice between fish scales and tree bark. The realm of digital fashion will include more than just trying on clothes; we will try on new bodies, new experiences, new ideas and new lives.²³

The self-presentation of the digital brand Placebo 0.1 indicates that “it is a collection without gender that blurs the line between masculinity and femininity.”²⁴ Similar manifestos are found in the descriptions of the concepts of many brands and specific items of clothing.

The very idea that gender is a symbolic social construct is well developed in post-structuralist philosophical thought. For example, Deleuze and Guattari propose to look beyond the binary oppositions male/female and refer to what happens at the boundaries of these categories and between them. To see what eludes the big molarities. This process they call becoming-woman, despite the fact that the female gender represents the same molar identity as the male gender. All people, regardless of their gender, begin their development through becoming-woman (Deleuze & Guattari, 2005, p. 277). In the contradictions that contain the feminine, there are more zones for going beyond molar femininity. A woman is subordinate to a man and a human being. And, at the same time, a woman takes on the mutually exclusive roles of mother/lover, virgin/whore, housewife/social climber. There are enough lines of escape that undermine unambiguity of molar femininity. However, becoming-woman is not the choice of different female roles, atypical of the patriarchal system. This is a certain aura of femininity—“emitting particles that enter the relation of movement and rest, or the zone of proximity, of a microfemininity, in other words, that produce in us a molecular woman, create the molecular woman” (Deleuze & Guattari, 2005, p. 275). Although Deleuze and Guattari insist that the molar woman herself must go through becoming-woman, it is men who can and should try on the clichés of femininity in any way possible, from temporary transformations of heterosexual men into women, a homosexual passive position, as well as becoming a transvestite and even a radical transformation through gender transition.

It would seem that becoming-woman should have found understanding among feminist authors. However, the view that a predominantly non-female gender must go the way of becoming-woman and the intention to deny gender as an expression of a female political subject drew criticism from feminists. Rosi Braidotti,

²³ The Fabricant. (2022, September 30). *Curating our identity in the Metaverse: Who will we be when we can be anything?* Medium. Retrieved September 21, 2023, from <https://www.thefabricant.com/blog/2021/10/11/curating-our-identity-in-the-metaverse-who-will-we-be-when-we-can-be-anything> (21.06.2023).

²⁴ Placebo DFH. (n.d.). *Placebo 0.1*. Retrieved September 21, 2022, from <https://www.placebodfh.com/blank-3-1-4> (21.06.2023).

in *Patterns of Dissonance* (Braidotti, 1991), criticized the reproduction of “feminine” images by men as examples of fluid gender. Braidotti shares the post-structuralist position regarding the blurring of the unity of the subject and, in general, she picks up the concept of Deleuze’s nomad, but Braidotti calls the avoidance of differences between the sexes *gender blindness* (Braidotti, 2001, p. 153).

Indeed, Deleuze and Guattari proposes not just to intensify each molarity, to expand the possibilities of its self-expression, thereby equalizing the position of the feminine on a par with the masculine. The recognition of the rights to have a fluid identity within one gender would only reinforce the duality between them. Undermining the stereotyped idea of the feminine with the help of variable femininity used to reinforce the old prejudice in female impermanence. The authors of *A Thousand Plateaus* basically are in favor of getting rid of the dualism between the sexes. They appeal to the borderline states in molar categories, to what radicalizes or undermines the idea of the norm. The molar contains molecularity. And this molecularity is fundamentally free from predetermined gender, “to each its own sexes” (Deleuze & Guattari, 2008, p. 465).

A Thousand Plateaus was published in 1984, and more than 30 years later, the idea of a fluid gender is clearly embodied in virtual fashion images. The very ethics of virtual fashion suggest a free choice of gender. At the same time, it cannot be said that virtual fashion tends to be bisexual or unisex. On the contrary, one can observe just an appeal to the archetypal positions of femininity or masculinity, with the proviso that gender can be chosen or played as a performance (Butler, 2022).

Let us dwell on the analysis of several representative images of female femininity in virtual fashion. It must be said that virtual designers show a good awareness of the iconic female images in the culture when they choose such mythological characters as the Gorgon Medusa or the Siren as symbols of their work.

Featuring imagery of the mythological Gorgon sisters, the digital work of designers The Fabricant x Trs.Mnz redefines the concept of female danger. The image of the Gorgon Medusa is complemented by the images of her older sisters, Stheno and Euryale. Medusa—“Protectress,” Stheno—“Forceful,” Euryale—“Far roaming” (Fig. 7–9). The three sisters are represented as female semi-naked bodies with only their head covered. Virtual hats are the clothes here. The main message is related to the demonstration of a naked body as a desire to open up through clothes rather than to cover the body. Clothes should serve fearless self-expression rather than concealment of the body as if it were something shameful or dangerous.

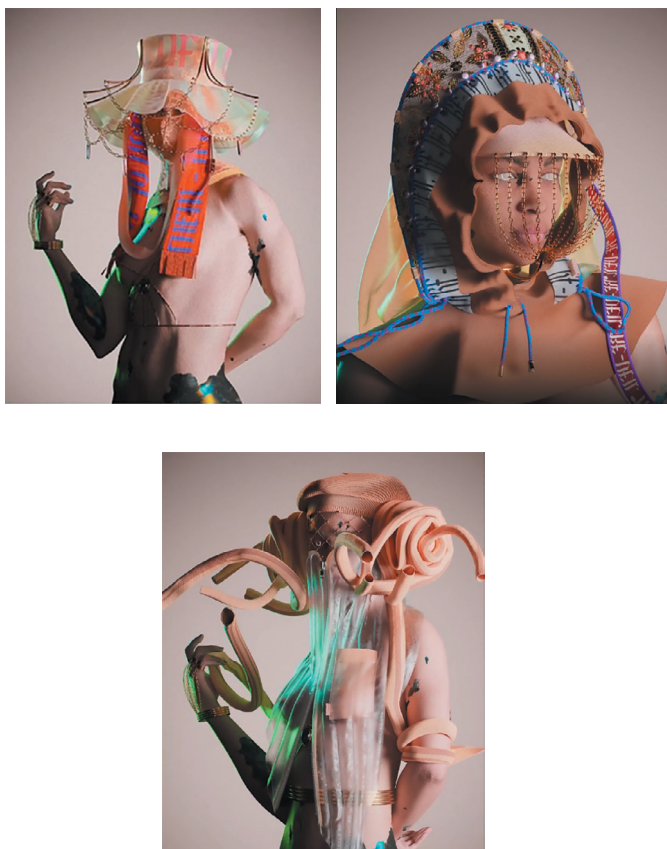


Fig. 7–9. Images of the Gorgon sisters: Stheno, Euryale, Medusa²⁵

According to the myth of Medusa, the goddess Athena turned a beautiful woman into a monster and transformed her hair into snakes because she seduced the god Poseidon with her beauty. It was the attractiveness of an earthly woman that caused Athena's envy and anger. The virtual image of Medusa shows us the desire to get back

²⁵ See the video source: <https://foundation.app/@thefabricant/foundation/44833> (21.06.2023), <https://foundation.app/@thefabricant/foundation/44831> (21.06.2023), <https://foundation.app/@thefabricant/foundation/44826> (21.06.2023).

her attractiveness as a certain quality that should not be feared; on the contrary, she should strive to emphasize it. In this idea—to rediscover a female body and express its desire—one can see the consonance with the well-known feminist text of Hélène Cixous, *The Laugh of the Medusa* (Cixous, 2001, pp. 153, 799, 991).

In her essay, Hélène Cixous urges to discover women's desires, women's body and women's writing as a different way of existence in the world. In her understanding, a woman appears to be “the dark continent of Africa,” which is yet to be discovered, since in the patriarchal world, she is thrown into the backyard of the phallogocentric structure of the world and culture. Cixous also advocates the idea of overcoming the binary oppositions since she disputes pure heterogeneity and speaks of female sexuality in terms of innate bisexuality. In addition, a woman is a mother and there is always a place in her for another, which also allows her to overcome binary thinking. Medusa laughs, thus challenging the patriarchal system; Medusa laughs because she undermines the logic of this system; she laughs because no matter how much she is deprived of the right to be a woman, she always has resources to resist. The image of Medusa in this essay has become a symbol of female self-expression, a kind of feminist manifesto, and continues to inspire feminist politics around the world.

In the images of the Gorgon sisters, The Fabricant x Trs.Mnz sought to rethink female danger as female power, so the Gorgon sisters are feminist images. But this ideal is proposed to be tried on by different genders, not just women. The annotation to the digital figures says, “where women and people who do not conform to gender stereotypes can be free to show their true, uninhibited selves.”²⁶

In virtual fashion, the attitude towards gender is built as a constructed phenomenon, something that can be influenced, or changed. In addition, gender is also viewed as a range of traits that can be collected depending on the desire. Let us imagine gender through variability of traits from radical masculinity to radical femininity, which converge at zero point as ideas about androgyny, as settings that can be selected when entering a virtual space. These are the options that the pioneers of digital design advocate today.

The Fabricant is the only digital fashion house that expresses this idea in the concepts *RenaïXance* and *Pluriform*, saying that “our belief is that fashion should be fluid and genderless.”²⁷ The word “RenaïXance” refers to the interpretation of modernity through the idea of the Renaissance, that is, revival understood as the possibility of endless rebirths of the avatar's virtual egos. In turn, the letter “X” refers specifically to the gender orientation of rebirths. Each of us has a common X

²⁶ DRESSX. (n.d.). *The Fabricant X TRS.MNZ NFT*. Retrieved September 21, 2023, from <https://dressx.com/collections/the-fabricant-x-trs-mnz-nft> (21.06.2023).

²⁷ The Fabricant. (n.d.) *RenaïXance: Exploring fluidity in the era of digital rebirth*. Retrieved March 22, 2023, from <https://www.thefabricant.com/rtfkt> <https://foundation.app/@thefabricant/foundation/44826> (21.06.2023).

chromosome, regardless of our chosen gender. It is the genetic thread that unites us, sitting appropriately central within the word RenaiXance, suggesting movement in any direction,²⁸ the company's website says.

The Fabricant sees the concept of asexual fashion in some confusion of unambiguous signs of femininity and masculinity, expressed both through the body of the avatar and through clothing. For example, for a masculine body type with broad shoulders and a massive neck, The Fabricant suggests putting on items of clothing that were traditionally worn by women: corsets, robes with bare shoulders, as well as large earrings in the ears and other statement accessories. The avatars' bodies in which signs of different sexes are mixed are regarded as non-binary by the digital fashion house. The first non-binary avatar was presented by The Fabricant within the Seismic Dress project for the Vogue Singapore Foundation, September 2020. In the release, the company claimed: "There was no pre-existing avatar that realised our aesthetic. It seems digital diversity still has work to do."²⁹ Gender confusing avatars are further used in The Fabricant's collaboration with the digital sneaker studio RTFKT in the RenaiXance project.

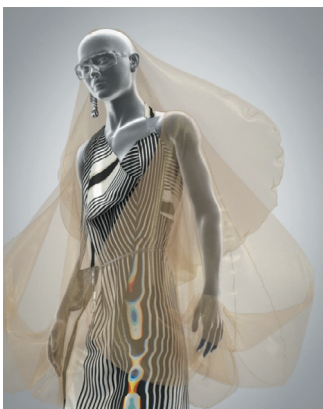


Fig. 10. Seismic dress by The Fabricant³⁰

²⁸ Garel, J. (2021, June 21). When virtual fashion stands up to the physical world. FashionUnited. Retrieved May 28, 2023, from <https://fashionunited.com/news/fashion/when-virtual-fashion-stands-up-to-the-physical-world/2021062140561> (21.06.2023).

²⁹ See the image source: <https://thefabricant.medium.com/announcing-the-end-to-wardrobe-dictatorships-54dbc11a549e> (19.09.2023).

³⁰ See the image source: <https://www.facebook.com/thefabricantdesign/videos/the-fabricant-seismic-and-vogue-singapore-foundationback-in-september-the-fabricant/> /735972473755882 (26.08.2023).

By the decision of the Tverskoy District Court as of March 21, 2022, Meta company, owner of the Facebook social network, was adjudged an extremist organization. Access to Facebook in the territory of the Russian Federation is banned.

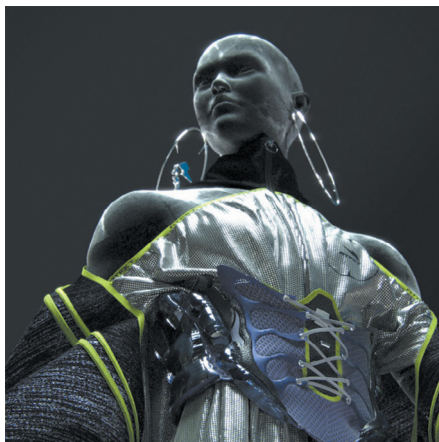


Fig. 11. Rtfkt RenaiXance by The Fabricant³¹

On the one hand, questions about gender identity can be viewed as shifting the discussion of gender from physical reality to virtual space. On the other hand, I consider the topic of the asexual and fluid body as one of the steps on the way to abandoning the biological material body of a human being. As soon as sex becomes gender and its fluid nature is affirmed, there is acceptance of any bodily transformation as an applied problem. Let us explain this idea in other words. In the real world, there might be tension between biological sex and gender identity, while in the virtual world there is only a shimmering identity of an avatar that is not human and is not associated with any ideas of human physiology. In the center of the digital world, there is an avatar, and its content may vary. Interestingly, The Fabricant refers to the meaning of the word “avatar” in Sanskrit, where “it means ‘descent,’ signifying the manifestation or incarnation of a deity released on Earth,”³² which allows us to consider avatars as gods of self-creation under conditions of endless imagination.

³¹ See the image source: <https://www.facebook.com/thefabricantdesign/videos/thefabricant-seismic-and-vogue-singapore-foundationback-in-september-the-fabricant-735972473755882/> (26.08.2023).

By the decision of the Tverskoy District Court as of March 21, 2022, Meta company, owner of the Facebook social network, was adjudged an extremist organization. Access to Facebook in the territory of the Russian Federation is banned.

³² The Fabricant. (2022, September 30). *Curating our identity in the Metaverse: Who will we be when we can be anything?* Medium. Retrieved September 21, 2023, from <https://thefabricant.medium.com/curating-our-identity-in-the-metaverse-who-will-we-be-when-we-can-be-anything-79a9f300228> (26.08.2023).

CONCLUSION

In the article, I sought to show that the digital body today fully seeks to realize the posthuman vision of the body's existence. This view moves away from the anthropocentric and rigidly fixed concept of the body, replacing it with a fluid idea of the body with a shimmering identity. Posthumanist optics in relation to the digital body is not just optics. The human world expands to a non-human dimension that influences the discourse on corporeality. Even though digital designers today are only half cyborg (Särmäkari & Vänskä, 2021, p. 6), trying on digital bodies and digitally designed clothes is already working with virtual dimensions of the body and identity.

The notion of the digital body as current on a discursive level correlates with the New Materialism's concepts of vibrating matter. Gilles Deleuze and Félix Guattari speak of *matter-energy*, *matter-movement*, *matter-flow* (Deleuze & Guattari, 2005, p. 689), which manifests itself in various kinds of intensities and assemblies. In the case of intangible matter, they also spoke of the release of another type of corporeality that is not constrained by spatiotemporal characteristics. This type of corporeality is called body without organs. The body without organs is an energetic materiality, "less a matter submitted to laws than a materiality possessing a nomos" (Deleuze & Guattari, 2005, p. 690).

I am comparing the digital and the body without organs—as both are about spaces for experimentation and going beyond the organic body. The articulation of the desire to be oneself is what Deleuze and Guattari are talking about through the body without organs: "The BwO is desire; it is that which one desires and by which one desires" (Deleuze & Guattari, 2005, p. 165). Digital fashion enthusiasts view thought couture in terms of the possibility of the impossible and the search for new forms of realising creative desire. For the digital body, it also means a technological way to go beyond nature and the human body, in order to experience other possible experiences within non-human bodies. Therefore, experiments in virtuality are variations of possible becomings.

The view of the digital body as embodied and independent, which can be formulated on the basis of a new materialist philosophy, requires a reconsideration of important categories in relation to the very notion of matter. Jane Bennet's work *Vibrant Matter* aims precisely to justify a different view of matter in contrast to the common vision of matter as "some stable or rock-bottom reality, something adamantine" (Bennet, 2010). Dematerialisation, which digital designers talk about, requires rethinking, perhaps in the categories of virtual materialization. The very notion of virtual space needs redefining its properties as material.

Although there are voices of fair criticism about the limitations of virtual space and its products in the form of virtual bodies, in my opinion, it is important

to pay attention to the advantages emphasized by both digital designers and consumers of virtual products. These are, firstly, the formation of a performative identity; and secondly, the possibility of the impossible. Another argument in favour of digital art is highlighted by Yuk Hui, who says that instead of fearing machines and technology, we should realise the new possibilities they offer us, the unknown, in order to break the vicious recursive circle between man and machine:

With sensors and algorithms we may supplement our senses, which may also change the way we understand the world, as the telescope and microscope made visible orders of magnitude lying beyond our sense perception. However, these data, too, are still facts. In order to inquire into the Unknown, we have to ask where the Unknown is from and how it is determined. (Hui, 2021, p. 219)

Hui pins his hopes precisely on the creative union of art and technology, which he calls becoming art, in order to discover this unknown. Becoming art implies aesthetic and epistemological revolutions. Virtual fashion, which deals with both art and technology, can also realize this becoming art and offer a different image of the world. The digital body is one of the components of this new world.

REFERENCES

1. Barad, K. (2006a). Agential realism: How material-discursive practices matter. In K. Barad, *Meeting the Universe halfway: Quantum physics and the entanglement of matter and meaning* (pp. 132–186). New York, USA: Duke University Press. <https://doi.org/10.1515/9780822388128-006>
2. Barad, K. (2006b). *Meeting the Universe halfway: Quantum physics and the entanglement of matter and meaning*. Durham: Duke University Press. <https://doi.org/10.1215/9780822388128>
3. Barad, K. (2012). *What is the measure of nothingness? Infinity, virtuality, justice*. Ostfildem: Hatje Cantz Verlag.
4. Bennet, J. (2010). *Vibrant matter: A political ecology of things*. Duke University Press. <https://doi.org/10.2307/j.ctv111jh6w>
5. Braidotti, R. (1991). *Patterns of dissonance*. United Kingdom: Polity Press.
6. Braidotti, R. (2001). Putem nomadizma [Nomadic subjects] (Z. Babloyan, Trans.). In I. Zhrebkina (Ed.), *Vvedenie v gendernye issledovaniya [Introduction to gender studies]* (Part II, pp. 136–163). Kharkiv: Kharkiv Center of Gender Studies; Saint Petersburg: Aletheia. (In Russ.)
7. Braidotti, R. (2002). *Metamorphoses: Towards a materialist theory of becoming*. United Kingdom: Polity Press.
8. Braidotti, R. (2013). *The Posthuman*. Medford: Polity Press.

9. Braidotti, R., & Hlavajova, M. (2018). *Posthuman glossary*. United Kingdom: Bloomsbury Academic.
10. Butler, J. (2022). *Gendernoe bespokoystvo* [Gender trouble] (K. Sarkisov, Trans.). Moscow: V-A-C Press. (In Russ.)
11. Cixous, H. (2001). Khokhot Meduzy [The laugh of the Medusa] (O. Lipovskaya, Trans.). In I. Zherebkina (Ed.), *Vvedenie v gendernye issledovaniya* [Introduction to gender studies] (Part II, pp. 799–821). Kharkiv: Kharkiv Center of Gender Studies; Saint Petersburg: Aletheia. (In Russ.)
12. Deleuze, G. (2011). *Frensis Bekon: Logika oshchushcheniya* [Francis Bacon: The logic of sensation] (A. Shestakov, Trans.). Saint Petersburg: Mashina. (In Russ.)
13. Deleuze, G., & Guattari, F. (2005). *A thousand plateaus: Capitalism and schizophrenia*. London: University of Minnesota Press.
14. Deleuze, G., & Guattari, F. (2008). *Anti-Edip: Kapitalizm i shizofreniya* [Anti-Oedipus: Capitalism and schizophrenia] (D. Kralechkin, Trans.). Yekaterinburg: U-Factory Publishers. (In Russ.)
15. Diodato, R. (2022). Virtual reality and aesthetic experience. *Philosophies*, 7 (2), 29. <https://doi.org/10.3390/philosophies7020029>
16. Grosz, E. (2001). Izmenyaya ochertaniya tela [Volatile bodies] (O. Lipovskaya, Trans.). In I. Zherebkina (Ed.), *Vvedenie v gendernye issledovaniya* [Introduction to gender studies] (Part II, pp. 599–625). Kharkiv: Kharkiv Center of Gender Studies; Saint Petersburg: Aletheia. (In Russ.)
17. Haraway, D. (1991). *Simians, cyborgs, and women: The reinvention of nature*. New York: Routledge.
18. Haraway, D. (2017). *Manifest kiborbov: Nauka, tekhnologiya i sotsialisticheskii feminizm 1980-kh* [A Cyborg Manifesto: Science, Technology, and socialist-feminism in the late twentieth century] (A. Garadzha, Trans.). Moscow: Ad Marginem. (In Russ.)
19. Haraway, D. (2018). Tentakulyarnoe myshlenie [Tentacular thinking] (A. Pisarev, Trans.). In M. Kramar & K. Sarkisov (Eds.), *Opyty nechelovecheskogo gostepriimstva* [The experiences of inhuman hospitality] (pp. 180–227). Moscow: V-A-C Press. (In Russ.)
20. Hui, Y. (2021). *Art and cosmotechnics*. Minneapolis: University of Minnesota Press. <https://doi.org/10.5749/j.ctv1qgnq42>
21. Irigaray, L. (2001). Pol, kotoryy ne edinichen [This sex which is not one] (Z. Babloyan, Trans.). In I. Zherebkina (Ed.), *Vvedenie v gendernye issledovaniya* [Introduction to gender studies] (Part II, pp. 127–135). Kharkiv: Kharkiv Center of Gender Studies; Saint Petersburg: Aletheia. (In Russ.)
22. Irigaray, L. (2005). *Etika polovogo razlichiya* [An ethics of sexual difference] (A. Shestakov, V. Nikolaenkov, Trans.). Moscow: Khudozhestvennyy Zhurnal. (In Russ.)
23. Marks, L.U. (2000). *The skin of the film: Intercultural cinema, embodiment, and the senses*. Durham, N.C.: Duke University Press. <https://doi.org/10.2307/j.ctv1198x4c>
24. Paul, C. (2007). The myth of immateriality: Presenting and preserving new media. In O. Grau (Ed.), *MediaArtHistories* (pp. 251–274). MIT Press, Cambridge.
25. Särnkäri, N., & Vänskä, A. (2021, October 20). 'Just hit a button!'—fashion 4.0 designers as cyborgs, experimenting and designing with generative algorithms. *International Journal of Fashion Design, Technology and Education*, 15 (2), 211–220. <https://doi.org/10.1080/17543266.2021.1991005>
26. Smith, R. (2021). Nemnogo o taktil'nosti [An essay on touch]. *Teoriya Mody: Odezhd, Telo, Kul'tura*, (62), 9–23. (In Russ.) <https://www.elibrary.ru/obtkzc>

27. Sobchak, V. (2004). Carnal thoughts: Embodiment and moving image culture. University of California Press. <https://www.jstor.org/stable/10.1525/j.ctt1pnx76>
28. Weinstein, O. (2007). Nogi grafini: etyudy po teorii modnogo tela [The legs of the countess]. *Teoriya Mody: Odezhdta, Telo, Kul'tura*, (2), 99–126. (In Russ.) <https://www.elibrary.ru/pedtec>

ЛИТЕРАТУРА

1. Батлер, Д. (2022). *Гендерное беспокойство*. Москва: V-A-C press.
2. Брайдотти, Р. (2001). Путем номадизма. И.А. Жеребкина (ред.), *Введение в гендерные исследования* (Ч. II, с. 136–163). Санкт-Петербург: Алетейя.
3. Вайнштейн, О.Б. (2007). Ноги графини: этюды по теории модного тела. *Теория моды: одежда, тело, культура*, (2), 96–126. <https://www.elibrary.ru/PEDTEC>
4. Гросс, Э. (2001). Изменяя очертания тела. И.А. Жеребкина (ред.), *Введение в гендерные исследования* (Ч. II, с. 599–625). Санкт-Петербург: Алетейя.
5. Делез, Ж. (2011). Фрэнсис Бэкон: *Логика ощущения*. Санкт-Петербург: Machina.
6. Делез, Ж., Гваттари, Ф. (2008). *Анти-Эдип: Капитализм и шизофрения* (Д. Кралечкин, пер.). Екатеринбург: У-Фактория.
7. Иригарэй, Л. (2001). Пол, который не единичен. И.А. Жеребкина (ред.), *Введение в гендерные исследования* (Ч. II, с. 127–135). Санкт-Петербург: Алетейя.
8. Иригарэй, Л. (2005). *Этика полового различия* (А. Шестаков, В. Николаенков, пер.). Москва: Художественный журнал.
9. Сиксу, Э. (2001). Хохот Медузы. И.А. Жеребкина (ред.), *Введение в гендерные исследования* (Ч. II, с. 799–821). Харьков: ХЦГИ; Санкт-Петербург: Алетейя.
10. Смит, Р. (2021). Немного о тактильности. *Теория моды: одежда, тело, культура*, 4 (62), 9–23. <https://www.elibrary.ru/OBTKZC>
11. Харауэй, Д. (2017). *Манифест киборгов: наука, технология и социалистический феминизм 1980-х*. Москва: Ad Marginem Press.
12. Харауэй, Д. (2018). Тентакулярное мышление (Писарев, пер.). М. Крамар, К. Саркисов (ред.-сост.), *Опыты нечеловеческого гостеприимства* (с. 180–227). Москва: V-A-C press.
13. Barad, K. (2006a). Agential realism: How material-discursive practices matter. In K. Barad, *Meeting the Universe halfway: Quantum physics and the entanglement of matter and meaning* (pp. 132–186). New York, USA: Duke University Press. <https://doi.org/10.1515/9780822388128-006>
14. Barad, K. (2006b). *Meeting the Universe halfway: Quantum physics and the entanglement of matter and meaning*. Durham: Duke University Press. <https://doi.org/10.1215/9780822388128>
15. Barad, K. (2012). *What Is the Measure of Nothingness? Infinity, Virtuality, Justice* (100 Notes, 100 Thoughts: Documenta Series 099). Ostfildern: Hatje Cantz Verlag.
16. Bennet, J. (2010). *Vibrant matter: A political ecology of things*. Duke University Press. <https://doi.org/10.2307/j.ctv111jh6w>
17. Braidotti, R. & Hlavajova, M. (Eds.). (2018). *Posthuman Glossary*. London: Bloomsbury Academic.
18. Braidotti, R. (1991). *Patterns of Dissonance: A Study of Women and Contemporary Philosophy*. New York: Polity Press.
19. Braidotti, R. (2002). *Metamorphoses: towards a materialist theory of becoming*. New York: Polity Press.

20. Braidotti, R. (2013). *Posthuman*. Medford: Polity Press.
21. Deleuze, G. & Guattari, F. (2005). *A thousand plateaus: Capitalism and Schizophrenia*. Minneapolis: London: University of Minnesota Press.
22. Diodato, R. (2022). Virtual Reality and Aesthetic Experience. *Philosophies*, 7 (2), 29. <https://doi.org/10.3390/philosophies7020029>
23. Haraway, D. (1991). *Simians, Cyborgs, and Women. The Reinvention of Nature*. New York: Routledge.
24. Hui, Y. (2021). *Art and Cosmotechnics*. Minneapolis: University of Minnesota Press. <https://doi.org/10.5749/j.ctv1qgnq42>
25. Marks, L.U. (2000). *The Skin of the Film: Intercultural Cinema, Embodiment, and the Senses*. Durham, N.C.: Duke University Press. <https://doi.org/10.2307/j.ctv1198x4c>
26. Paul, C. (2007). The Myth of Immateriality: Presenting and Preserving New Media. In O. Grau (Ed.), *MediaArtHistories* (pp. 251–274). Cambridge: MIT Press.
27. Särämäkari, N., Vänskä, A. (2021). 'Just hit a button!' — fashion 4.0 designers as cyborgs, experimenting and designing with generative algorithms. *International Journal of Fashion Design, Technology and Education*, 15 (2), 211–220. <https://doi.org/10.1080/17543266.2021.1991005>
28. Sobchak, V.C. (2004). *Carnal thoughts: embodiment and moving image culture*. Berkeley and Los Angeles: University of California Press. <https://www.jstor.org/stable/10.1525/j.ctt1pnx76>

ABOUT THE AUTHOR

ОКСАНА О. ПЕРТЕЛ

Postgraduate student,
Doctoral School of Arts and Design,
HSE University
20, Myasnitskaya, Moscow 101000, Russia

Researcher ID: JGE-3472-2023

ORCID: 0000-0003-2946-1639

e-mail: ksanaprl@gmail.com

СВЕДЕНИЯ ОБ АВТОРЕ

ПЕРТЕЛЬ ОКСАНА ОЛЕГОВНА

Аспирант,
Аспирантская школа по искусству и дизайну,
Национальный исследовательский университет
«Высшая школа экономики»
101000, Россия, Москва, ул. Мясницкая, д. 20

Researcher ID: JGE-3472-2023

ORCID: 0000-0003-2946-1639

e-mail: ksanaprl@gmail.com