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TRANSFORMATIVE PERSPECTIVES: A POST-CRITICAL VIEW. UNRAVELING ORLAN'S VISION OF AUGMENTED REALITY, POSTHUMANISM, BODY ART, AND FEMINISM

Abstract: This article delves into the daring practices of the French artist ORLAN, investigating her visionary approach through the lens of a post-critical perspective. We explore the dynamic interplay between new digital technologies, such as augmented reality, posthumanism, body art, and feminism, as embodied in ORLAN's transformative works. Drawing from a post-critical stance, we analyse the transformative potential of ORLAN's art, moving beyond mere critique to propose constructive alternatives. Augmented reality and her surgical digital performances in which she alters her body enable ORLAN's interventions to challenge established norms of identity, personification, and aesthetic sensibilities. Following this, she considers technology to be the extension of the human body throughout her practices. The collaborative and dialogic dimensions of ORLAN's augmented reality installations resonate harmoniously with the tenets of a new wave of critical theories, fostering participatory environments and nurturing communal engagement. By embracing a post-critical lens, this analysis unveils the transformative vision of the artist, underscoring its seminal import within the sphere of fine art movements, feminism, and the reconceptualisation of identity, embodiment, and aesthetics.

Keywords: ORLAN, augmented reality, posthumanism, fine art movements, feminist discourse, identity, embodiment, aesthetics, post-criticism.

Background and Context of the Artist

"This is my body, and this is my software" (ORLAN 2022). ORLAN, born Mireille Suzanne Francette Porte, is a renowned French multimedia artist known for her provocative, boundary-pushing artworks and performances. She gained international recognition for her innovative use of digital technologies in her daring performances that very often involved surgical alterations to her body. ORLAN challenged preconceived notions with her art, steeped in humor, parody, and the grotesque. Besides augmented reality, which will be analysed in this article, she masters and expresses herself through diverse artistic practices, including sculptures, photographs, performances, videos, artificial intelligence, and robotics. What sets her apart are her out-of-the-norm ideas that transcend the limitations of traditional mediums crossing transdisciplinary borders that are considered distressing by the majority. Her originality of expression makes her a potent platform for engaging in public debate, addressing pressing issues such as natural determinism, gender, power dynamics, religion, cultural segregation, and racism.

Through new and creative strategies of artistic expression boldly intertwining not only the human and the digital but also art and technology, ORLAN's body becomes a multi-tool. She coins the term "carnal art" in her 1989 manifesto, placing herself within the vanguard of artists who engage in provocative and innovative explorations in pursuing the convergence of human identity, scientific techniques, and cutting-edge technologies.

Importance of a Post-Critical Perspective

While addressing this from a post-critical perspective, we can define what the term means and what it encapsulates. In the work "Critique and Postcritique," which presents the ideas of Felski and Anker, a comprehensive examination is undertaken to explore the philosophical and political underpinnings that underlie the development of critique as a multifaceted theoretical framework. This work develops a definition of the term "critique" by delving into the critic's predisposition and contextualizing critique as a pivotal political endeavor within the domain of cultural and social history.

Felski utilises "critique" to describe a way of thinking and writing influenced by Kant, Nietzsche, Marx, Freud, Foucault, and feminist and postcolonial theories. This

approach involves uncovering hidden aspects in cultural products and is referred to as the "hermeneutics of suspicion" (Callahan). Further focusing on "the 'post-' of post-critique denotes a complex temporality. An attempt to explore fresh ways of interpreting literary and cultural texts that acknowledges, nonetheless, its inevitable dependency on the very practices it is questioning" (Felski and Anker 1).

The post-critical approach to art criticism allows us to move beyond traditional judgment and delve into the transformative aspects of an artist's vision. This perspective aligns well with ORLAN's experimental and disruptive art, prompting us to contemplate its impact on society and innovative potential. Post-criticism delves more deeply into the artist's intentions and the intricate layers of meaning in the artwork compared to regular critique. This method enhances our understanding of art's role as a catalyst for transformation and challenges our preconceived notions about norms and paradigms.

Discussing art and artworks has always been a multifaceted and subjective issue. Subjectivity can impose limitations when analyzing artworks, particularly when considering Dufrenne's theory of aesthetic experience in art. This theory centres on the idea that art is an immersive and subjective experience capable of eliciting distinct emotional responses, depending on and reflecting the viewer's imagination, cognitive processes, and cultural background. Dufrenne's research suggests three principal means by which the artwork is offered to the audience as a whole: "Through its matter, as it is offered to perception, it has the being of the sensible; through his dream, when he is represented, he has the being of an idea; by expression, the being of a feeling" (Dufrenne 211). By focusing on the multi-layered nature of experiencing art and approaching this from a post-critical perspective, we can achieve a more open-minded and diverse examination of ORLAN's groundbreaking and experimental artistic discourse. It also allows us to acknowledge that multiple valid readings of the same artwork can coexist.

Moreover, as the article encompasses Augmented Reality artworks by ORLAN, it is crucial to incorporate Katja Kwastek's theory, which delves into the aesthetics of interaction in augmented reality (AR) art. Kwastek underscores the immersive and interactive nature of the medium, highlighting the integration of physical and virtual elements and the significance of contextual settings in shaping aesthetic experiences. Interactive art, according to Kwastek, invites action from the audience, with the artist refraining from interference while the work is exhibited (Kwastek xvii). Kwastek

characterizes interactive art as "a hybrid," blending various elements of performing, visual, and time-based arts into a single object. This approach has created a new space in the contemporary art spectrum, involving novel interactive art practices that incorporate digital technologies. To experience fully this type of artwork, viewers may need to engage in the actions offered by the artwork. Despite the fact that many artworks are typically experienced in a museum or gallery setting, AR artwork and ORLAN's digital works are accessible to the public on the internet. While this diminishes the artist's control over the experimentation of the artwork in a curated environment, AR takes a global democratic stance by becoming a medium of expression available to anyone with a smart device. Approaching art from this perspective opens us to new and profound insights, such as the aesthetics of interaction in digital art, a phenomenon presented by Katja Kwastek and rapidly spreading among digital artists. This enriches our understanding of art's role in shaping cultural narratives.

Significance of Digital Technologies in Art

Digital technologies have sparked a profound transformation in the art world, providing modern artists like ORLAN with unprecedented opportunities to challenge traditional artistic boundaries. Throughout history, art and science have engaged in a longstanding rivalry, dating back to the Renaissance, creating an apparent divide between the two disciplines. The theoretical and immeasurable nature of art seems disconnected from scientific endeavors, especially with the emergence of enlightenment and the emphasis on objective scientific procedures.

Nevertheless, in the early 20th century, the development of technology and the growth of knowledge sparked a revival of the transdisciplinarity seen in the Renaissance. A notable example of a multi- and transdisciplinary approach in the Renaissance period is attributed to Leonardo da Vinci, who not only dealt with art but also used his knowledge to transcend and intertwine fields such as architecture, science, engineering, and mathematics (Pires 40). It is interesting to note that Pires mentions Leonardo's involvement in dissection to understand better human anatomy (Pires 37), while ORLAN approaches carnal art as a form of sharing and understanding the body's individuality. Both artists achieve this by exploring the newest technologies of their respective eras. As a result, artists, in general, exploiting technology, led to the creation

of fresh art movements like the Bauhaus and Futurism. These advancements continued to expand with the development of information science and cybernetics, culminating in interactive new media art genres such as digital art, virtual art, and Net art (Dolejsova 7).

Despite initial concerns about the potentially dystopian implications of technology, the human pursuit of novelty remains steadfast, propelling continuous innovations aimed at enhancing human capabilities, intelligence, and overall performance. Posthumanist thought has been central to critical theory since the 1970s, addressing pressing issues in gender studies, post-structuralism, cultural materialism, and postmodernism (Dolejsova 8-10). It serves as a vital crossover point for research in both the arts and sciences, aiming to explore how recent technological and scientific advancements are reshaping our understanding of humanity.

> Artificial Life is the study of man-made systems that exhibit behaviors characteristic of natural living systems. It complements the traditional biological sciences concerned with the analysis of living organisms by attempting to synthesize life-like behaviors within computers and other artificial media (Hayles 232).

Technology has developed from a mere object to a vital part of human existence as time has passed, generating a profound and intimate link between individuals and the digital domain. This shift led to blurred boundaries between artist and spectator, with the audience actively co-creating the artwork. Technology became the primary link between art and science, linking the two worlds and serving as a driving force. This transition is consistent within the branch of the posthumanist movement that deals with digitalization, which examines the complex interaction between humans and technology in an age of increasing cyberculture. Post-humanism, which encompasses techno-optimism and techno- skepticism, illustrates society's rising interest in the man-machine dilemma (Dolejsova 5).

> The posthuman does not really mean the end of humanity. It signals instead the end of a certain conception of the human, a conception that may have applied, at best, to that fraction of humanity who had the wealth, power, and leisure to conceptualize themselves

as autonomous beings exercising their will through individual agency and choice. (Hayles 286)

On the other hand, to emphasise the particular difficulty of defining posthumanism, Cary Wolfe, in *What is Posthumanism?*, refers to posthumanism as not posthuman at all "—in the sense of being 'after' our embodiment has been transcended—but is only post-humanist, in the sense that it opposes the fantasies of disembodiment and autonomy, inherited from humanism itself" (xv).

It is important to mention that this specific article focuses only on the strand of post-humanism that deals with technology. Therefore, adopting a transdisciplinary approach, as discussed above, ORLAN breaks anatomical limits with the use of new technologies, while exploring a feminist discourse. What is important to her is the intricate connection between technology, art, and human identity. She embraces the transformative potential of digital art in shaping and expanding the future artistic landscape.

Defining Post-Criticism and Its Application to Art

Post-criticism, as a theoretical framework, challenges the traditional notions of critique that tend to focus on evaluation and judgment. Instead, it encourages a richer understanding of the ideas, intentions, and impact, of the artwork.

According to Gavin Butt, post-criticism redefines the role of the critic, emphasising their active engagement with the subject matter. It views criticism not as a mere table of judgments but as a performative act deeply influenced by the critic's historical and subjective existence. This approach challenges conventional art-historical narratives, disrupting the distant perspective of the historical observer. The emphasis is on experimental and writerly processes, allowing for a more dynamic and subjective interpretation of art and history. It encourages a more nuanced and self-aware approach to criticism, fostering deeper insights into the complexities of the subject at hand (Butt 11).

In the realm of Visual Culture, rethinking the traditional dynamics between creators (makers), the objects of visual attention, and the audience can lead to exciting insights beyond conventional critique. The critical apparatus developed in the 1970s and

1980s laid the foundation for unraveling the relationships between subjects. They objected by questioning authorial authorities and epistemological assumptions and emphasising knowledge as a product of interconnected subjectivities within various texts (Butt 119).

Augmented Reality in Fine Art: A Historical Overview

The innovative augmented reality (AR) technology offers users rich, immersive experiences by seamlessly fusing digital data with the physical world. In contrast to virtual reality, augmented reality, through its groundbreaking technology, enhances our sense of reality without replacing it, by overlaying virtual images, movies, sounds, and other sensory inputs onto our environment using sophisticated computer vision, sensor systems, and machine learning (Bimber 4).

The concept of AR has historical roots. Ivan Sutherland's visionary work in the 1960s laid the groundwork for virtual reality by envisioning an ultimate display that could transport users into a Wonderland-like realm (Sutherland 506-508). Before Sutherland, Mort Heilig introduced the Sensorama simulator in the late 1950s, and Charles Wheatstone's invention of the stereoscopic viewer in 1832 contributed to the concept of depth perception (Bimber 3). This historical evolution in virtual reality technology highlights the significance of Sutherland's contributions, which built upon previous developments and formed part of an evolutionary process in the field. In the context of fine arts, the integration of AR started gaining momentum in the 20th century. Artistic movements such as Bauhaus embraced the aesthetics of machines and technology, exploring new forms of artistic representation influenced by industrialization and urbanization. Artists like Vsevolod Meyerhold and Oskar Schlemmer experimented with biomechanical theater and triadic ballet, incorporating technology and mechanization into their performances. Along these lines, such artists who have experimented with technology were driven to expand the boundaries of artistic expression; ORLAN's use of AR represents a continuation of this trajectory, enabling her to create multi-sensory and participatory art experiences. With its ability to blend seamlessly the virtual and physical worlds, AR opens up exciting possibilities for various applications, from interactive art to global democracy (Geroimenko 61).

Post-Humanism and Its Implications for Artistic Expression

The concept of post-humanism challenges the traditional understanding of the human as a fixed and autonomous entity. In ORLAN's art, we observe themes of hybridity, where technology and the human body intertwine, blurring the lines between organic and synthetic. The expansion of posthumanist theory regarding technology, as mentioned earlier, is a response to society's growing concern about the intricate relationship between humans and robots. Due to the speculative nature of the subject, researching it necessitates a complex and multidisciplinary approach.

In her studies, Dolejsova noted that post-humanism emerged in the latter half of the 20th century. The 1970s blended scientific inquiry with science fiction. Drawing from the mathematical communication theory and inspired by cyberpunk dystopia, posthumanism envisions a shift from the human to the posthuman state. This concept of physical disembodiment, rooted in Claude Shannon's notion of disembodied information from the 1940s and the rise of the cyborg concept in the 1960s, plays a central role in the posthumanist discourse (Dolejsova 8-13). Dolejsova's research highlights the need for transdisciplinary exploration, contemplating the implications of this envisioned transformation of the human form into the posthuman realm. The idea of the cyborg, a fusion of digital technology and organism, clarified the concept of artificial creatures and technologically enhanced people. Through various technological prostheses, these people lengthen their bodies, increasing their physical and mental capabilities. Such conceptual practices were expanded when Dolejsova pointed out that the roots of post-humanism can be traced back to conflict theories that emerged in the latter half of the 20th century (19). These theories provided a fertile ground for socially conscious movements, challenging the dominant perception of the white man as the foundational force in the global system. Notably, posthumanism is not exclusively concerned with technology, which is the strand chosen for this analysis. Feminism, queer advocacy, anti-racism, environmentalism, and animal rights activism have also emerged as prominent forces within this movement.

Augmented Reality and the Transformation of Identity: ORLAN's Surgical Digital Performances

ORLAN's iconic surgical performances involve altering her body to embody different archetypes, historical figures, or imaginary characters. Augmented reality is pivotal in bringing these performances to life, allowing viewers to witness the transformation in real time using video cameras and internet transmissions, and fostering a unique engagement with her art. ORLAN's engagement with queer and feminist discourse in art is evident in her work, as we will further develop while analysing her works, noting that she dauntlessly confronts societal norms of identity, challenging gender norms and transposing towards personification. She deconstructs and reconstitutes, embracing the fluidity and multiplicity of identities, appropriating and subverting the art historical canon, reclaiming the female body as a potent site of agency and self-expression.

In performances like *The Reincarnation of Saint ORLAN*, where she undergoes multiple plastic surgeries to resemble famous artworks, she questions and ruptures boundaries between art and life. A post-critical approach can emphasise the performative aspect of the piece and the transformative impact it has on both the artist and the audience. In her art, ORLAN employs the concept of "the gaze" to disrupt and confront "the male gaze", which objectifies and confines women. She does that by taking control of her representation. The artist challenges instead the viewer's passive gaze, inviting them to acknowledge their role in perpetuating societal norms of both personification and objectification.

ORLAN's art also delves into augmented reality, exploring identity transformation through digital performances. In *Surgical Digital Performances*, the emphasis shifts to the interplay between natural and virtual selves, breaking down traditional concepts of self-representation. The use of augmented reality ruptures boundaries, inviting viewers to an experience that makes them question the very nature of identity and its fluidity. ORLAN's visionary artistic practice positions her among the pioneers who astutely recognized and harnessed the untapped potential of Augmented Reality. As an avant-garde artist, she fearlessly embraces this emerging technology, effectively integrating it into her transformative works, such as the *Peking Opera Facial Designs*. This series uses augmented reality to dematerialize the human body, allowing the audience to witness 3D avatars that interact with masks of Peking Opera. The artist emphasizes that

her artwork *Masques, Pékin Opéra Facing Designs et réalité augmentée* (2014) was not merely born out of a fascination with technology and augmented reality. Instead, it serves a significant purpose, allowing her to convey two essential messages about Peking opera (Nathalie Ernoult et ORLAN).

Firstly, by reinventing the acrobatics of the opera as a female artist, ORLAN challenges the traditional gender norms within Peking opera, where male performers historically portrayed women's roles. She reflects a feminist position by disrupting these conventions and extricates herself from the confines of traditional roles.

Secondly, ORLAN uses new technologies and augmented reality to break barriers and change mindsets. To challenge the highlighted perspective that modern society is deeply immersed in technology, yet there remains a reluctance to embrace technological innovations as valid forms of art, ORLAN cleverly disguises her augmented reality artwork in a seemingly traditional form of photographic prints. However, when viewers download the Augment application and scan the work, they are greeted with a 3D animated version of ORLAN, performing Peking opera acrobatics through her avatar.

Post-Humanism, Embodiment, and Feminism in ORLAN's Augmented Reality Art: Technology as an Extension of the Human Body

Through her AR experiences, which emerge as an enthralling platform intertwining posthumanist perspectives, embodiment exploration, and feminism, ORLAN presents a captivating world in-between real and digital. Here, human and non-human entities coexist in a dynamic interplay, provoking viewers to question traditional notions of humanity and its entanglements with technology. In these premises, we cannot develop the term "embodiment exploration" without mentioning the concept of body art. Body art has been intertwined with feminist discourse, as artists like ORLAN have used their bodies as a canvas. By analysing the intersection of body art and feminism, where embodiment is a philosophical concept that delves into how our physical bodies influence our experiences and perceptions in ORLAN's works, we gain insights into her transformative and empowering artistic vision.

According to Nicholas Thomas in his anthology on Body Art, this form of expression refers to "the temporary or permanent aesthetic modification of the body" (Thomas 11) and is also considered and acknowledged as an extension of our

identity (8). Such conceptions rely on the further fact that body art is adopted by those who not only seek to create a certain appearance but also look for an effect (14). The practice of body art has historical roots, starting from facial tattoos depicted on funerary masks from c. 100 BC but developing as an artistic practice with its roots in performance art in which artists used their bodies as a form of expression in the 1960s (Scouter).

The human body was the main subject of the Body Art movement, a potent artistic force that exploited it as a platform for social commentary and creative experimentation. In the field of body art, the artist experiences a profound transformation when their own body is observed being cut open, devoid of any sensations of suffering. In essence, body art is one way to explore the concept of embodiment in the realm of art. This extraordinary self-exploration allows the artist to witness their inner self down to the very viscera, presenting a new mirror stage of self-discovery. According to ORLAN, this powerful and unfiltered expression of body art defies traditional norms, unlocking a realm of boundless possibilities for self-understanding and artistic exploration (ORLAN 2023). Augmented reality extends ORLAN's artistic expression, blurring not only the real and digital space but also her physical body with the virtual realm. This symbiotic relationship with technology deepens the conceptual aspect of her work and enhances the message towards the audience. From a post-critical lens, by unraveling the complex interconnections underpinning our existences, her works prompt us to examine our identities and how they flourish in an increasingly digitised world.

At the core of ORLAN's AR creations lies the creation of participatory environments where the artwork becomes a space for collective involvement and reflection, urging viewers to become active co-creators in the work and redefining the conventional roles in the artistic process. Her bold statements that challenge standard patriarchal systems by deconstructing and building again the female body, catalyse transformative discourse around the role of feminism in reshaping contemporary art and its ability to challenge the entrenched male-dominated paradigms. In the late '80s, technology revolutionised feminist art, taking it to a more radical level. French artist ORLAN's "carnal art" exemplified this shift, building on her earlier exploration of womanhood as a goddess and monster. In her *Documentary Study: The Head of Medusa* (1978), ORLAN challenged beauty norms by showcasing her menstruating genitals. With her ambitious project, *La réincarnation de Sainte-Orlan* (1990–1993),

she used plastic surgery to embody distorted beauty ideals and critique societal pressures on women's appearances by implanting two horns into her forehead. She now refers to them as "organs of seduction" (ORLAN 23). Her ideas transitioned from performances to AR portraits in the series. ORLAN's transformation into a "monster" symbolically depicted the issues she criticised while employing a strategy of grotesque expression. Notably, her incorporation of technology extended beyond the medical tools and procedures used during the surgical operations, which were also staged as medical events, captured by video cameras, and live-streamed to multiple galleries worldwide.

The audience witnessed the intense and unsettling images of blood, cuts, and skin fragments during her final surgery in 1993. Bounded by the eerie spectacle, the underlying message of ORLAN's artwork was clear – she aimed to challenge perceptions of the female figure as a mere physical object. Her multifaceted approach to technology showcased the complexity of human identity and embodied the essence of feminist praxis, calling for a deeper understanding and appreciation of women beyond their physical attributes. ORLAN's artistic exploration exemplifies how technology becomes an extension of the human body where the boundaries of humanity, identity, and empowerment dissolve, dismantling the oppressive structures that have long confined women's bodies and voices.

In conclusion, through the embracement of queer utopianism, ORLAN imagines a world that challenges societal norms, offering a diverse and inclusive understanding of identity and self. This was enlightened through the examination of three major works that include augmented reality or digital technologies – *Masques, Pékin Opéra Facing Designs* et réalité augmentée, *La réincarnation de Sainte-Orlan* and the *Documentary Study: The Head of Medusa*. They provide valuable perspectives into how ORLAN's work pushes the boundaries of artistic expression, becoming a platform for engaging with feminist discourse through her performances and creating spaces for unconventional cultural attention, where social contact is formed through provocative and transformative experiences. The informal networks and associations sparked by her art encourage viewers to explore from their perspectives, allowing for a multiplicity of interpretations and experiences, opening the discourse to a wider audience. ORLAN demonstrated through her practice what Martha Rosler deconstructed through her theories: that having a certain curated art-viewing public is a false conception and it

does not apply to this century. "Such conceptual practices expanded not only strategies of critique but the very notion of an institution – beyond the museum, as a societal structure that legitimises certain political, economic, and aesthetic paradigms" (Ugelvig 10).

References:

Anker, Elizabeth, and Rita Felski. *Critique and Postcritique*. Duke University Press, 2017.

Bimber, Oliver. *Spatial Augmented Reality: Merging Real and Virtual Worlds*. A K Peters/CRC Press, 2005.

Boas, George, and E. H. Gombrich. "Art and Illusion. A Study in the Psychology of Pictorial Representation." *The Journal of Aesthetics and Art Criticism*, 1960.

Butt, Gavin (Ed.). *After Criticism: New Responses to Art and Performance*. Blackwell Publishing Ltd, 2005.

Callahan Sara. *The archive art phenomenon: History and critique at the turn of the twenty-first century*. PhD Dissertation. Stockholm University, 2018.

Callahan, Sara. "Critique and post-critique in contemporary art history: Excessive attachment to suspicion in academia and beyond." *Arts and Humanities in Higher Education*, vol. 20, no. 1, 2021, pp. 42-65.

Cook, Peta. "The Modernistic Posthuman Prophecy of Donna Haraway." en.scientificcommons.org, 2004.

Dewey, John. *Art as Experience*. Capricorn Books, G.P. Putnam's Sons, 1934, pp. 1–12.

Dixon, Steve. *Digital Performance: A History of New Media in Theater, Dance, Performance Art, and Installation*. The MIT Press, 2007.

Dolejsova, Marketa. *Posthuman Tendencies in Performance Art: Interaction of Body and Code*. Singapore, 2013.

Dufrenne, Mikel. *Phenomenology of Aesthetic Experience*. Northwestern University Press, 2017.

Ferrando, Francesca. "A Feminist Genealogy of Posthuman Aesthetics in the Visual Arts." *Palgrave Communications*, vol. 2, no. May, Nature Publishing Group, 2016.

Geroimenko, Vladimir. *Augmented Reality Art: From an Emerging Technology to a Novel Creative Medium*. Springer, 2014.

Gigliotti, Carol. *Women and the Aesthetics of New Media*. 2003.

Hayles N. Katherine. *How We Became Posthuman: Virtual Bodies in Cybernetics Literature and Informatics*. University of Chicago Press, 1999.

Knobler, Nathan. *From Conceptualism to Post-Conceptualism: Art and the Performative in the Age of Interactive Media*. Routledge, 2021.

Kwastek, Katja. *Aesthetics of Interaction in Digital Art*. The MIT Press, 2013.

Nathalie Ernoult et ORLAN. "ORLAN, between artist and robot." Archives of Women Artists, Research and Exhibitions magazine, https://awarewomenartists.com/en/magazine/orlan-entre-artiste-robot/. Accessed 1 July 2023.

ORLAN, Fundatia culturala Intact, Centrul de Interes. *Les Films de Sainte-Orlan*. Cluj Napoca, 2022.

ORLAN. *Carnal Art*. ORLAN Official Website, https://www.orlan.eu/bibliography/carnal-art/. Accessed 21 June 2023.

Papagiannis, Hellen. *Augmented Human: How Technology Is Shaping the New Reality*. O'Reilly Media, 2016.

PiaMYrvoLD Studios Paris. *The Metamorphoses of the Virtual: 100 Years of Art and Freedom*. 2013.

Sauchelli, Andrea. "Functional Beauty, Perception, and Aesthetic Judgements," *The British Journal of Aesthetics*, Vol. 53, no. 1, 2013, pp. 41–53.

Souter, Anna. "Body Art Movement Overview and Analysis." TheArtStory.org, 02 Mar 2017. Updated and modified regularly. Content compiled and written by Anna Souter. Edited and revised, with Summary and Accomplishments added by Kimberly Nichols. Accessed 29 Sep 2023.

Sutherland, Edwin. *A Head-Mounted Three Dimensional Display. Proceedings of the Fall Joint Computer Conference (AFIPS)*, vol. 33, no. 1, 1968, pp. 757–764.

Sutherland, Edwin. The Ultimate Display. Proceedings of IFIP '65, 1965, pp. 506– 508.

Ugelvig, Jeppe. *Post-Critical: Modernist Critique and After*. Academia.edu, 2015.

Veltman, Kim. *Understanding New Media. Augmented, Knowledge and Culture*. University of Calgary Press, 2006.

Williams, Gilda. "Are We Post-Critical?" *Frieze*, 13 Nov. 2015, https://www.frieze.com/article/are-we-post-critical.

Wilson, Stephen. *Information Arts: Intersections of Art, Science, and Technology*. The
    MIT Press, 2002.

Wolfe, Cary. *What is Posthumanism?* University of Minnesota Press, 2009.