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POSTHUMANIST INTERACTION AND CERAMIC ART LANGUAGE

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Abstract:
This study aims to examine how posthumanist thought redefines the concept of creativity and its impact on ceramic art. Conventional notions of creativity position the artist as a central and singular subject; however, this approach has proven insufficient in material- and process-oriented disciplines such as ceramics. The research problem is based on the premise that considering material and technology as merely passive elements in the creative process is an inadequate perspective within contemporary production practices. The study employs a qualitative analysis method, conducting a literature review on the fundamental principles of posthumanist thought and the concept of creativity, followed by an examination of creative processes in ceramic art where humans, materials, and technology coexist (coexistence). The findings indicate that with the increasing role of AI-driven algorithms and robotic systems in artistic production, the creative process in ceramic art has shifted from a human-centered approach to a multi-layered and relational production model. This transformation repositions material and technology as active, creative agents, fostering the development of new aesthetic approaches and production techniques.

Keywords: posthumanism, ceramic art, algorithmic culture, AI, coexistence, digital creativity

1. Introduction

Throughout history, art has been considered as a human-centered production practice; the artist's individual creativity, mastery and aesthetic intuition have been prioritized. This understanding has defined the creative process as a field largely shaped by the conscious intervention of humans. However, post-humanist thought, which has developed since the end of the 20th century, has begun to question this traditional approach and has suggested evaluating art production within the interaction of multiple actors such as humans, materials, technology and nature. This perspective removes the artist from the position of an absolute subject and conceives the creative process as a network, an area of interaction. Ceramic art, in particular, is one of the areas where this interactive understanding becomes most visible.

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Because clay is shaped not only by the intervention of the human hand, but also by non-human factors such as gravity, humidity, heat, time, error, collapse and cracking.

Posthumanist art offers a new understanding of production in which technology intervenes in the creative process and the boundaries between the biological and the mechanical become increasingly unclear. Vilém Flusser, while evaluating the impact of digitalization on art, emphasizes that the creative process is not solely based on human skill, but that technological tools and algorithmic systems transform the nature of art. Stelarc's performances, in which he extends the human body with robotic extensions, are one of the most radical examples of this transformation. Just as Duchamp's Fountain (1917) served as a threshold that transformed the meaning of art, Stelarc's interventions with artificial limbs are among the cult productions of posthumanist art.

This transformation is observed not only in performance art, but also in material-oriented disciplines such as ceramics. Especially with the development of digital production techniques, artists working in the field of ceramics have turned to works that center on the joint production of humans, technology and materials. For example, Juliette Clovis combines nature and the artificial in her ceramic work *Sternocera* (2017), opening up space for non-human aesthetic experiences by placing structures resembling insect shells on the surface of clay. In his work *Jenny's Dream* (2018), Ben Snell mixed data written by an algorithm with his own ashes and reproduced it on a 3D printer, thus including the human body in the posthumanist production process. Michael Eden's 3D printed ceramic work *After Saly II* (2018) questions the relationship between production tools and the process of creating meaning by recoding traditional forms and motifs with digital algorithms. The Emerging Objects collective brings together architecture, design and ceramics with their work *Seed Stitch* (2019), making visible the symbiotic relationship between data, materials and the production process. Sergei Isupov's *Burden II* (2021), on the other hand, continues the figurative approach and presents representations that go beyond human senses in an effort to objectify the inner world of the figure. In Adam Chau's work *Generated Love Series* (2023), patterns produced with artificial intelligence replace human touch and embody the active role of technology in aesthetic production. In this context, posthumanist ceramic art represents not only a technical innovation but also an ontological transformation. It goes beyond the human-centered understanding of aesthetics and production and offers an art practice based on the participation of multiple actors. Therefore, posthumanist thought repositions ceramic art not only as a formal means of expression but also as one of the most striking examples of posthuman creation.

In a self-reflexive context, ceramic art is re-evaluated as a post-humanist creative field centered on the dynamic interaction between material, technology and randomness. My studies on this subject are research I have carried out in my own ceramic art. As someone who researches the subject and occasionally produces in the field of ceramics, I believe that it is important to examine post-humanist art in the context of ceramic art. In this context, my work titled *Systematic Chaos* (Figure 1), dated 2015, is an example in terms of its relationship with creative post-humanism. This work is discussed in the words of Prof. Dr. Simber Atay in his related article as follows:

"The ear gives life to grotesque beings by creating new genetic codes and chimeric creatures. It also processes isolated body parts, sometimes using ecological initiative, and fetishizes these parts in a transgressive way, so that when we look at these works, we hear the Lacanian BwO (bodies without organs) formula, as Zizek also stated: ''c'est moi, la verité, qi parle''. I am the real one, I am the one speaking." (Atay, 2023, p. 106)

Figure 1: Yusuf Can Kulak, *''Systematic Chaos''*, 2015;
Exhibited at Saatchi Art Gallery in 2018. (©Yusuf Can Kulak).

Ceramics, as a creative performance, strongly reflects the dialectical relationship between aesthetics and technique. While the artist creates an aesthetic form by interacting with the physical properties of the material, technological tools and processes are also involved in this creative process. Digital technologies and robotic systems expand the artist's control while combining with the unique dynamics of the material to create new aesthetic and technical languages. This relationship shows that art is not only a manual skill but also a performance shaped by technology. The Oxford English Dictionary defines the term posthumanism in two ways. In the first definition, posthumanism is explained as a way of thinking in which the self is fragmented and social-historically shaped, as a reaction against the fundamental principles of humanism. This approach is particularly associated with postmodern and feminist discourses. The second definition includes the idea that humanity can be transformed or surpassed by technological advances or evolutionary processes, and this definition is considered to be of science fiction origin (Herbrechter, 2021: 5). Both definitions emphasize the central role of technology in the posthumanization process. In other words, the process of humans becoming posthuman is shaped by technological transformation. Posthumanism is a conceptual paradigm that questions the anthropocentric approach of modern thought and invites us to rethink the relationship between humans and their environment. Since the Enlightenment, humans have been seen as a figure with control over reason, subject and nature, and this perspective has been reflected in the understanding of science, technology, art and ethics. However, technological developments, environmental crises and innovative approaches in social sciences in the 20th century have begun to question whether humans are special subjects. Through these

discussions, posthumanism proposes to examine the relationships of humans with other things within a more inclusive and symbiotic framework rather than a hierarchical one. Posthumanism finds wide application in fields such as philosophy, science fiction, art and environmental ethics, and the roots of creative posthumanism can be traced back to classical mythologies.

Ihab Habib Hassan, who first used the term in his 1977 article "Prometheus as Performer: Towards a Posthumanist Culture," discusses the nature of the terminology from different perspectives. Hassan identifies Prometheus with artists: "*Prometheus is our artist. It animates space and time; it animates desire. It inflicts pain*" (Hassan, 1977: 850). In addition, Prometheus' liver is constantly eaten by an eagle, and he is reborn each time. His mind is the place where imagination and science, myth and technology, language and numbers sometimes meet (Hassan, 1977: 835). In posthumanist thought, the idea that humans are completely separate from and central to other beings is rejected. Instead, it is argued that humans are also a part of evolutionary, environmental and technological interactions, and that humans cannot be understood without understanding this multiplicity. Donna Haraway's ''Cyborg Manifesto'' (Haraway, 2006), Rosi Braidotti's publications ''Posthuman'' and ''Posthuman Knowledge'' (Braidotti, 2021a), (Braidotti, 2021b), which she addresses in line with her ''Posthumanist Philosophy'', Katherine Hayles' ''How Did We Become Posthuman?'' (Hayles, 1999). The works of Karen Barad, Cary Wolfe and many other thinkers are among the leading texts of this paradigm. These thinkers have focused on postanthropocentric political and aesthetic practices in which humans and non-humans co-exist, co-experience, and co-produce in distributed cognitive environments, networks of humans, animals, machines, software, or environments (Herbrechter, 2021: 1). Posthumanism makes it possible to develop new ethical and aesthetic understandings by grasping the technological power and biological multiplicity of humans. On the related subject, Rosi Braidotti makes serious criticisms of humanism by addressing the subject-object debates. Braidotti questions the relationships between human and non-human beings, us and them or subject and other. In this context, he re-opens the discussion of social and moral value judgments. In addition, Braidotti sees Leonardo da Vinci's ''The Vitruvian Man'' (Figure 2) design in the center of the circle as a doctrine symbolizing the idea of the progress of human abilities at the biological and moral level and uses it as an emblem of humanism (Braidotti, 2021: 25). This design is considered the classical male ideal, and Braidotti uses this reference to base his critique of humanism.

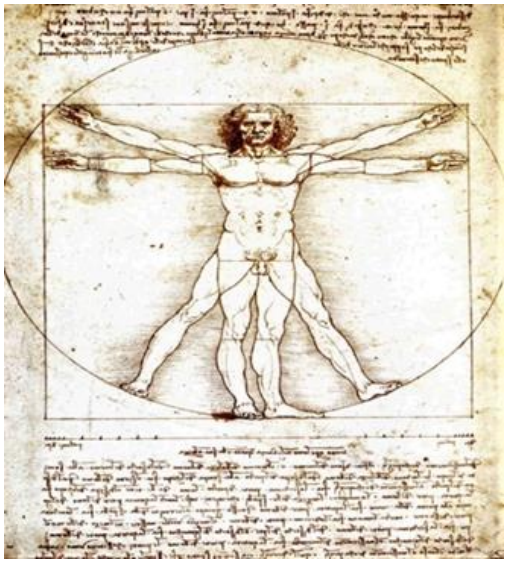

Figure 2: Leonardo da Vinci, *''The Vitruvian Man''*, c.1492/90, Venice. (s)
(Italian Renaissance Art, 2024). https://www.italian-renaissance-art.com/Vitruvian-Man.html

Posthumanism emerges as a concept belonging to new materialist thought that rejects the classical idealized body. This way of thinking aims to reduce the anthropocentric status quo in the context of the deconstruction of humanism. Posthumanism offers a critical perspective through discussions of who is an object and who is a subject, and expresses the intersubjective relationship between humans and technology. Technology creates a radical change in the way knowledge and the body are understood by expanding the biological boundaries of humans (Hayles, 1999). Posthumanism sees technology not merely as a tool but as a creative and effective partner. However, historically speaking, hybrid figures, the combination of humans and non-humans, have been seen before. Grotesque things such as minotaurs and centaurs are examples of such hybrids (Dorin, 2015: 263). Post-humanist thought corresponds to the grotesque body definition that articulates the human body against its nature. These ideas are also frequently discussed in science fiction works. For example, Mary Shelley's novel Frankenstein, written in 1818, is one of the fundamental examples of post-humanist art (Milner, 2010: 14-15). In this context, post-humanist art is based on archetypes such as Prometheus, Golem, and Frankenstein and bodily transformation achieved with digital prosthetics (Atay, 2023: 105). Non-human art no longer requires a human as either a producer or an observer and becomes an art independent of humans (Herbrechter, 2021: 1). This future design evolves beyond the relationship of humans with nature, towards the idea of new life forms and non-organic bodies. The rise of technology lays the foundation for a new utopianism (Robins, 2013: 22). The development of cybernetics and the inclusion of digital technologies in the process indicate that this transition has begun. N. Katherine Hayles states that this transition may have positive consequences for humanity (Hayles, 1999: 291). However, such changes carry risks for the future of our current species.

2. The Evolution of Posthumanist Art and the Transformation of Technology in Art

Throughout history, the view that art is a human practice has been dominant. However, even though the presence of human beings in art was considered natural for a long time, this does

not mean that non-human things do not exist in art. The phenomenon of post-humanist art defines or eliminates the relevant classifications at this point. Because to put an end to this kind of debate, it reveals that everything non-human leads to stochastic processes, and there are stakeholders that change the paradigm. In this vein, posthumanism, as an emerging theoretical paradigm that embraces contemporary challenges, both technological and ecological, attacks humanist and anthropocentric presuppositions of art. This is seen in two ways: the first as an aesthetic practice that criticizes humanism; the second gives priority to works that take this approach radically, taking seriously, even literally, the idea of postanthropocentrism and non-human art (Herbrechter, 2021: 2). Posthumanist art offers different approaches to human nature and future. Posthumanism, which questions the current state and potential of humans but differs in its approaches and basic emphases, argues that not just one subject but everyone or everything can be a subject in interaction. This view creates both positive and negative thoughts about the future of man. Although it cannot be expressed as non-human art, post-humanist art can be briefly expressed as art without humans, even though it no longer has a human being as a producer or observer. Posthumanist art has been categorized in different ways by Herbrechter as Body and Performance Art, Science Art / Laboratory Art, Bioart / Transgenic Art, Animal Art, Environmental Art, Anthropocene Art, Art and Climate Change (Herbrechter, 2021: 21-49). Therefore, it becomes clear that there are technical and theoretical differences in the production and consumption dimensions of posthumanist art, which can be expressed in various ways. However, in this research, a more general approach was adopted without considering the relevant categories one by one. Post-humanist art thought is seen as a new approach. We are in the process of preparing for the post-human condition in the desired new world order, both socially and morally. The prevailing view is that this process takes place in four broad stages. In a broad perspective, the development of the relevant stages has risen to a very different plateau with the contribution of the first being robotization, the second being androidization, the third being cyborgization, and the last component being artificial intelligence (AI). Those who embrace this process enthusiastically tend to trust the idea of technological progress and see the increasing cyborgization of humans and their co-evolution with and perhaps surpassing of AI as a positive and necessary next step. These people are often called transhumanists, which differs from posthumanist thought because they welcome human enhancement with current and future technologies (Herbrechter, 2021: 7).

This process is the main process that explains how humans become post-humanist (post-human appearance), and these phenomena are a transformation point for humanity. This process is a whole and the subject discussed is the main components gathered at the center of Posthumanist utopianism. The first of these stages, the idea of robotization, is based on the idea of automatons that goes back thousands of years in human history. For example, the water-powered vending machine developed by the Greek engineer Ktesibius in Ancient Greece between 150-100 BC is seen as an important stage in the robotization process (Batukan, 2017: 15). Czech writer Karel Čapek laid the foundations of modern robotics discourse by using the concept of "robot" for the first time in his play R.U.R. (Rossum's Universal Robots), written in 1920. This term, derived from the Czech word ''robota'' (forced labor), gained an important place in early science fiction works that examined the social impacts of artificial intelligence and automation (Ackerman, 2024). The concept of android, which describes humanoid machines,

emerged in science fiction works and was first used for the French science fiction character Hadaly. The android idea, which gained importance in the 1950s and 1960s in order to rapidly develop the industry with robots, enabled the first robots to be designed as assistants in daily life (Batukan, 2017, p. 20). In this field, Wabot-1 (1970-1973) and Wabot-2 (1980-1984), developed by the Japanese Waseda Robot company, are the first personalized robots with anthropomorphic features. These robots are known as the first personal robots in history (Arbulu, 2009: 45-46). Cyborg corresponds to a post-human appearance as a hybrid species formed by the combination of living and artificial systems.

According to Donna Haraway, cyborg is a combination of machine and organism expressed on a theoretical level and is a part of both fiction and social reality (Haraway, 2006: 10). This combination is also related to the concept of autopoiesis, since the cyborg represents the combination of both biological and technological processes as a self-generating, self-sustaining and self-evolving system. In this context, not only digital cybernetic technologies but also performance art that explores the relationship between science and art emerge in an autopoietic context. Autopoiesis simply means self-creation (Tureng Dictionary, 2025). It describes the capacity of organisms to maintain their structural integrity through interactions with their environment. This concept belongs to biology and has been used in both bioart and other expressions. Cyborgs shape this dynamic through the interaction of living and artificial components, ensuring the continuity of their own structures. This perspective reflects a post-humanist world in which the boundaries between humans and machines are becoming increasingly blurred. There is also the phenomenon of the autopoietic artist. The autopoietic artist is defined in two ways by Mark Bishop in his article ''Autopoiesis in Creativity and Art'', (2016). The autopoietic artist consists of two functionally different types of agents: The first is a swarm of attention agents, ant-like and guided by stochastic diffusion search (SDS) principles. The second definition is a swarm of drawing agents that is bird-like and guided by particle swarm optimization (PSO) principles. The task of attention agents is to select meaningful areas for drawing agents to reinterpret. In this context, the autopoietic artist is constantly involved in the process of perceiving and reconstructing his environment (Bishop, 2016). Unlike androids that mimic human features, cyborgs offer a structure in which biological and technological elements are directly articulated. The first known cyborg in history was a white rat with an osmotic pump attached to it in the USA in the late 1950s (Bell, 2005: 152). Performance artist Stelarc, one of the important representatives of post-humanist art, performed a series of performances with a third hand limb designed and produced as a robotic mechanism in Japan between 1980 and 1988. The third hand is a cybernetic limb attached to Stelarc's right arm that contains a haptic feedback system for grasping, releasing, rotating, and tactile sensation (Broeckmann, 2017; Herbrechter, 2021). Artists such as Stelarc, Antunez Roca, Eduardo Kac, Orlan, M. Abramovich, Henrik Olesen, Pierre Huyghes, Cristinan Ghinassi, Patricia Piccini, Agi Haines, Daniel Lee are among the artists who exhibit important examples of posthumanist art. In the context of creative posthumanism, Antunez Roca has achieved a posthuman (cyborg) appearance by prosthetically attaching various cybernetic organs to bodies. Antúnez Roca's performance Epizoo (1994) is a striking example of posthumanist art that reconfigures subject-object relations through the interaction of the human body, technology and audience. The structure, which allows the physical intervention of the viewer with electro-mechanical systems

integrated into the artist's body, positions the body as both a controllable surface and a technological interface. This performance not only transcends the human-machine dichotomy, but can also be related to the concept of autopoiesis, as Roca's body, despite being open to external interventions, functions as a system that constantly redefines itself and produces its meaning through these interactions. Epizoo thus makes visible the systemic and relational nature of posthumanist art by bringing together bodily autonomy, technological mediation and ethical audience participation.

Another important example of post-humanist art is Eduardo Kac, who used biotechnology and digital media to produce transgenic works that question the boundaries between humans and nature, as well as using robotic technologies to insert microchips into his own body. In particular, his work, "GFP Bunny", involves the creation of a fluorescent green rabbit through genetic engineering and highlights the potential of posthumanist thought to transform non-human life forms through biotechnological interventions (Kac, 2005).

In the context of post-humanist art's relationship with algorithms and robotic technology, Anish Kapoor's concrete sculptures produced with cement material are designed through special software, while the mortar material is built layer by layer by a 3D printer (Arts Observer, 2012). Anish Kapoor's cement-based sculptures, produced using algorithmic software and 3D printing technologies, represent a posthumanist approach to art that radically questions the human-centered understanding of creative action. This productive collaboration between the artist and digital systems reminds us of the potential of machine intelligence that Alan Turing put forward with his universal computation model. The universal machine (1936), theoretically formulated by Turing, was an independent information processing system capable of performing any computation through symbolic operations; this theoretical framework has enabled creative algorithms to take an active role in the production of art today. In Kapoor's works, algorithms are not just instrumentalized codes, but intellectual actors participating in the formation of aesthetic forms. In this context, while art production takes place within a cybernetic feedback loop between humans and machines, the creative agent now takes on a distributed and plural structure. As N. Katherine Hayles puts it, "*posthuman subjectivity involves an awareness integrated with computational systems*" (Hayles, 1999); Kapoor's practice embodies this integration on artistic grounds. Thus, the artist constructs a new aesthetic regime in which computational systems accompany artistic creativity; this regime reflects both the contemporary projection of Turing's machine thinking and the claim of posthumanist art to redefine creative subjectivity.

Cristina Ghinassi's (2016) work, ''Code Switch #1'', questions the impact of epigenetic changes on participation in artistic processes, while aesthetically investigating the changes that performance and video art make on the embodied reality of the artist and the bodies of the participants. Ghinassi's artwork draws on epigenetics research, a branch of biology that investigates genetic interactions between the body and the environment. Epigenetics is used as a metaphor in art. The artist adopted a strict diet and lifestyle by giving one-hour performances in front of a digital camera for twenty-eight days and measured the changes in his genetic traces as a result (Micali & Pasqualini, 2019: 154). The posthuman effect creates an ethical-onto-epistemological shock that removes the human from being the center of the universe. Human thought and aesthetics are no longer at the center, but are shaped in a pulsating dynamism between difference and repetition, relationship and perception. In this context, it is one of the

first aesthetic actions that can help us understand posthuman aesthetics (Micali & Pasqualini, 2019: 156). The artist expresses the Switch performance as follows:

> *"Cristina Ghinassi: The Switch performance is the artistic outcome of Code Switch #1, a research Project in which we wanted to prove how performance and video art can cause epigenetic changes in individuals who practice the art form."* (Relji, 2017)

The connection between Ghinassi's work and the posthuman effect allows us to understand a process in which art involves not only humans, but also biological and genetic interactions.

Obvious Collective's Belamy Family series is a significant example of posthumanist art, radically redefining the boundaries between technology and art. The sale of their AI portrait Edmond de Belamy at Christie's New York for $432,000 in 2018 established the trio as pioneers in the field of digital art and strongly established the integration of AI into the creative process in art history (Christie's, 2018; Lebenson Gallery, 2025). By transforming digital code into an aesthetic form through the GAN (Generative Adversarial Network) algorithm, Obvious Collective questions the traditional human-centered paradigm of art. The Belamy Family portraits reveal the role of AI as a non-human actor in the creative process, creating a posthumanist aesthetic field where the boundaries between human and machine are blurred. The five pictorial works demonstrate that the concept of the artist is not limited to humans, with the inclusion of algorithms and artificial intelligence in aesthetic decision-making mechanisms, and emphasize the creative agency of technology. In this context, *The Belamy Family* is considered a concrete example of posthumanist aesthetics with the originality and autonomy brought by GAN technology. At the same time, it is also interesting in terms of Benjamin's concept of the "*aura of the singular work of art*", since these works are technically reproducible and create a new form of authenticity by turning visual uncertainties created by algorithmic errors into an advantage (Benjamin, 1936). Thus, the work of the Obvious Collective stands out as a posthumanist intervention that both ensures the acceptance of artificial intelligence in the art market and transforms the human-centered understanding of the creative subject on aesthetic, ethical and ontological levels.

The central concern of posthumanism is the power of science to transform the human body and mind. While posthumanists are interested in the microbiological entanglement that biotechnology opens to human intervention, they question the place of humans in the universe within an ecological and geopolitical framework (Herbrechter, 2021: 8). In this context, posthumanist aesthetics goes beyond the anthropocentric understanding of art and addresses the consequences of human exploitation of the planet. Many questions are also raised in the field of art. How can one think and exhibit a world in which one is no longer at the center of representation? This question stands out as one of the fundamental issues of contemporary art. In contemporary art, the artist has always been at the center of the work in terms of expressing and conveying his emotions. However, with the involvement of algorithms in the art production process, this central position is changing. Although the artist behind the algorithm still remains the "real" artist, it could be argued that the tool (i.e. the algorithm) is closer to the center of the creative process. While the intention and inspiration come from the human who designs and

uses the algorithm, art production is now shaped by the collaboration between man and machine. In this context, the creative partnership between man and machine has become closer than ever (Lebenson Gallery, 2025).

3. Posthumanist Creativity: New Expressions and Transformation in Ceramic Art

Reflections of posthumanist thought in the field of art can be seen especially in cyber art, performances with digital prostheses, and works on bodily transformation. These practices offer a new aesthetic language by treating the body as a fragmented structure. It can be said that post-humanist art, under the influence of postmodern anachronism, has both romantic and avant-garde features (Atay, 2023: 105). The creative post-humanist approach in art offers an understanding that removes the human from the center and includes materials, technology and stochastic processes in production. In this research, instead of a broad interdisciplinary study, the focus was on ceramic art. Ceramic art, which interacts with conventional methods and digital technologies, can be directly or indirectly associated with post-humanist creative processes. In this context, the concept of "coexistence" manifests itself as a dynamic production process in ceramic art, where natural and digital materials, human and artificial intelligence, traditional and contemporary techniques come together. Although ceramics is a material that is shaped by hand, it creates a new field of expression when combined with 3D printing, algorithmic modeling and robotic production processes. This union emphasizes the co-existence of not only materials but also humans and machines in creative processes. Technological advances offer new opportunities by transforming production methods in ceramic art. Artificial intelligence-supported algorithms are integrated into design processes, and these designs are transformed into physical form with 3D printers. The use of digital data in interactive works creates a radical transformation in art practice by changing the traditional production-consumption relationship. At this point, the concept of "coexistence" points to an understanding of art in which human and machine, physical and digital work in harmony. The artist is no longer just a producer, but a part of a creative ecosystem that also includes technological systems and materials. In this context, ceramic art is becoming one of the important intersections of contemporary art as a field where humans and technology co-exist, transform and feed each other. While artificial intelligence and digital technologies offer new opportunities to artists, excessive dependence on technology carries the risk of weakening subjective creativity. Therefore, it is important to create a balanced production process in which the artist and technology collaborate. Today's cyberceramics artists use algorithms like ChatGPT to develop their ideas, Midjourney, DALL-E and Artbreeder to create images, Blender and Rhino for 3D modeling. Additionally, programs like Adobe Color, Colormind and Coolors play an important role in color palette selection. Digital technologies and artificial intelligence-supported tools are reshaping the production and consumption forms of contemporary ceramic art.

3.1. Posthumanist Ceramic Artists: New Creative Practices and Works

In this research, examples of creative post-humanist interaction based on co-production with artists in ceramic art using artificial intelligence, algorithms and robotic devices are discussed. These art and design works, shaped on the basis of coexistence, were examined and interpreted

descriptively. The studies reveal how human-machine collaboration in ceramic art develops new aesthetic understandings and production methods. To begin with, the posthumanist view in the context of human-machine collaboration, this view restructures humans in a way that they can seamlessly integrate with intelligent machines. According to Katherine Hayles, "*In the posthuman era there is no fundamental difference or absolute boundary between corporeal existence and computer simulation, between cybernetic mechanism and biological organism, between robot teleology and human goals*" (Hayles, 1999: 3). In this context, being a cyborg, defined as a human-machine hybrid, allows humans to transcend traditional boundaries within post-humanist thought. In this process where body and technology integrate, humans cease to be merely biological beings; they become part of a system that increases their functionality. As Hayles emphasizes, this combination can also be observed in the production of ceramic forms. For example, a ceramic artist or master working with an electronic ceramic lathe participates in the process of creating form by attaching his body to the machine. In this process, the interaction between the body and the machine gradually deepens; the human adopts the functionality of the machine, while the machine adapts to the creative potential of the human. This causes the distinction between subject and object to become blurred. At the end of the process, the question arises as to whether the machine is a part of the human or whether the human is an extension of the machine. This is where Deleuze and Guattari's concept of the "rhizome" comes into play. Organic (human) and mechanical (machine) elements intertwine to form a new whole (Sutton & Jones, 2016: 21). In this context, the harmony that a ceramic artist/master establishes between his body and the machine while working with an electric lathe becomes one of the fundamental elements that position him as a posthuman being.

3.2. Juliette Clovis, Sternocera (2017)

Juliette Clovis (1978) is a contemporary French visual artist. Clovis' artistic research is shaped around two fundamental axes: The first is the idea of a universal and constantly transforming life cycle; the second is the search for a balance where contrasts and oppositions come together. The artist's current production is largely shaped around porcelain material and examines the concepts of body, nature and transformation in a posthumanist context through his sculptural practice (Clovis, 2025). Especially in his recent works, Clovis investigates the relationship between humans and nature, the contradictions this relationship contains and the consequences of forms of intervention in nature. Human existence, which causes the gradual destruction of the natural environment, is represented in the artist's production with metaphorical sculptural images in which fauna and flora adapt to environmental changes (Inspiration Grid, 2020). This approach directly overlaps with the ecological approach of posthumanism. The metaphors he uses in his works, on the one hand, direct the viewer to visual prophecies symbolizing the birth of a new species, on the other hand, invite him to confront allegorical structures symbolizing the revenge of nature and pointing to the inevitability of death. Emphasizing that humans are not a single subject, the artist constructs these narratives mostly on chimerical - grotesque bodies equipped with half-animal, half-plant surfaces. The symbols in question, snakes, butterflies, chrysanthemums, vanitas representations and eggs, are taken from the classical art historical image repertoire representing both life and death, and therefore cyclicity, and assume a strong meaning-bearing role in the artist's iconographic language. Juliette Clovis's Sternocera was

created during a residency program at the Nedde Insect Museum (France). The artist used over 500 real insect wings to create this striking piece where the incredible colors of the insect wings contrast strongly with the purity of the porcelain biscuit (Demilked, 2018). This impressive work goes beyond anthropocentric aesthetics and questions the hierarchy between nature and art. In a posthumanist context, this work, Sternocera, emphasizes that humans are not only creative but also a being who establishes a symbiotic relationship with nature. The direct use of insect wings creates a narrative in which the boundaries between species are blurred and natural materials are integrated with art.

3.3. Ben Snell, Jenny's Dream, (2018)

Ben Snell is a New York-based artist whose practice explores the materialities and ecologies of computation. Ben Snell's work focuses on exploring computational power as the raw material of our time. Using contemporary techniques in dialogue with traditional motifs, he positions technology as a mirror to reveal the self as a computational being. Emphasizing questioning and introspection, his work takes the form of drawings, photography, and sculpture. Jenny, an algorithm, is tasked with extracting the morphological essence of Greek and Roman sculpture. For every sculpture he sees, he tries to transform it into its most basic components. The artist's Jenny's Dream (2018) is a work that is a ceramic production of the image created by the algorithm that emerged in this context and the artist's dialectical vision. The artist explains his posthumanist creative act regarding the process of creating the work with the following words:

> *"I believe that the computer fundamentally acts in ways similar to us, but we have a very lacking vocabulary to describe the machine's behavior in ways that we can understand on an intuitive, emotional level. I adopt a more accessible and metaphorical language set to describe algorithms to give new meaning to the machine's actions and to do so in a way that is respectful of its audience. So, I don't speak in the technical language of computer scientists in terms of implementation details, but instead in a realistic way that acts as a mediator between us and the machine."* (Snell, 2025)

Ben Snell's "Jenny's Dream" (2018), draws a conceptual parallel to Salvador Dalí's iconic work "The Persistence of Memory" (1931) with its melting clock forms. Like Dalí's melting objects representing the subconscious and the fluidity of time, Snell's sculpture, shaped by artificial intelligence data, questions the precision of form and materializes the imaginary projections of digital memory. Both artists construct a speculative narrative about time, memory, and existence through deformations that disrupt the perception of reality.

3.4. Michael Eden, After Saly II, (2018)

Michael Eden is a contemporary artist combining ceramic and digital fabrication techniques. By reinterpreting conventional ceramic forms with digital methods such as 3D printing, he produces post-humanist works that blend art, design and technology with porcelain and polymer-based materials. The works he designed and produced with digital tools have made him an innovator in ceramic art. Eden is an artist who explores contemporary themes by reimagining historical objects with digital fabrication and materials. His MPhil project at the

Royal College of Art provided him with the opportunity to combine craft skills with digital technology, allowing him to examine the relationship between the hand and digital tools. In After Saly II, Sally, a 3D scan of a bath fairy from the State Russian Museum was used as a starting point and articulated with a swirling water cascade meticulously created in Rhino 3D software. After the design was 3D printed, it was coated with copper and then given a verdigris patina (Eden, 2025). Michael Eden's After Sally II, with its monochrome surface texture and dynamic form shaped by digital production, transcends the traditional flowerpot typology and becomes a sculptural expression. This structure, which gains movement with organic lines, stands on the border between form and function, while establishing a meaningful connection between the past and current production technologies as an aesthetic object.

3.5. Emerging Objects, Seed Stitch (2019)

Emerging Objects' Seed Stitch Wall is a prototype of a 3D printed ceramic wall covering system (Emerging Objects, 2016a). This project demonstrates how the replication application of 3D printing allows for mass differences. Rather than focusing on a single subject in the process, Seed Stitch draws attention to stochastic effects. That is, it represents a posthumanist method of production. Another project, realized in San Luis Valley, Colorado in 2019, emphasizes the relationship between humans, materials and technology through the combination of clay, 3D robotic technology and art (Emerging Objects, 2019b). Revealing the influence of creative posthumanism and ceramic art on sophisticated structures in different formats, the project aims to push the boundaries of sustainable and ecological construction.

3.6. Sergei Isupov, Burden II (2021)

Sergei Isupov's ceramic figures deal with the transition between the body's inner world and its outer surface. The internal organs, animals, humans and imaginary images drawn on the figures' body surfaces reveal the individual's multiple identities and subconscious. Isupov's works overlap with posthumanism's assessment of identity as a fluid and plural structure rather than a fixed and individual structure. Through the images written on the body, the artist removes the human from an absolute whole; by weaving its inner world with images of nature, animals and machines, he makes the body's boundaries permeable. Isupov's approach criticizes the perception of the human as a "*singular and immanent subject*" and draws attention to the multi-layered nature of the body. The artist's works are seen to be quite related to posthumanism in terms of both discourse and production. In works such as ''*Close Your Eyes Open Your Eyes, Burden II, Butterfly Catcher, Life's Work and Strong*'', animal faces and features generally represent the beast or natural animal instincts that contradict reason and intelligence. The images and expressions in his works are male/female/animal - symbolic, metaphorical and aimed at providing individual interpretation (Ferrin Contemporary, 2025). The artist's works touch upon chimeric beings, which are archetypes, and therefore grotesque bodies, and these definitions are revealed in his work ''Burden II, 2021''.

3.7. Adam Chau, ''Generated Love Series'', 2023

Adam Chau is a post-humanist ceramic artist who produces innovative works combining digital technologies and craftsmanship in contemporary ceramic art. The artist uses the Mid Journey algorithm, an artificial intelligence-based software system, to create these images. The artist transfers the speculative images onto ceramic forms using digital printing. For example, terms like "*two men*" encourage AI to find realistic representations of the sought-after image, while adding subjective language using phrases like "*two gay men in love*" explores how a non-human system would process this (Chau, 2024). This approach of the artist fully expresses the coexistence co-production process. The artist questions the interaction between identity, cultural heritage and technology. In this work, digital prints applied to traditional porcelain forms come to the fore. Although classical European porcelain cups have been preserved aesthetically, the images on them reinterpret historical and cultural meanings, carrying a contemporary and political narrative. Adam Chau's work "Generated Love Series" stands out as a form of expression that questions identity, belonging and the reproduction of the concept of love in the digital age when evaluated in the context of Queer(er) culture. Chau processes non-normative emotions related to queer identity on ceramic surfaces with digital production techniques, while recoding concepts such as "love", "desire" and "longing" on both individual and collective levels. This series shows that queer existence suggests alternative ways of producing not only sexual orientation but also aesthetics and emotion; it also questions human-machine-emotion interactions with a posthumanist understanding of creativity and makes visible the possibilities of coexistence between species, identities and technologies.

The concept of hybridity stands out as one of the fundamental building blocks of posthumanist art. While hybridity refers to a structure in which biological, technological, cultural and conceptual boundaries are blurred, artists use this multi-layered structure to produce works that question and redefine new forms of existence. These productions, in which human, animal, machine and natural forms are intertwined, appear as hybrid expressions as concrete outputs of posthumanist art. In the productions of the relevant artists, the critical and experimental aspect of posthumanist thought is emphasized through themes such as the disintegration and reconstruction of the body and the union of organic and synthetic elements. Thus, hybridity functions not only as a formal aesthetic preference, but also as a strategy that makes visible the ethical, ontological and epistemological questions of the posthuman age. The researchers and artists discussed present important arguments to understand how post-humanist approaches are shaped in ceramic art. While post-humanist thought questions human-centered approaches in art practice, it also opens up discussion on the transformation of the artist's authority with the incorporation of artificial intelligence, digital production techniques and robotic systems into the creative process.

4. Conclusion

Posthumanism transcends the boundaries of anthropocentric thought and redefines humans within their biological, technological and environmental contexts. In art, this transformation transforms creativity from being an exclusively human act into a collaborative process with non-human actors. Ceramic art has become one of the areas where we can observe the effects of this

change. Ceramics, which is conventionally shaped by hand and has a strong connection with nature, has evolved into an art practice in which the material is accepted as an active creative element (plasticity capacity) with a post-humanist understanding. With increasing technological integration, ceramic production has been enriched with innovative methods such as 3D printers, artificial intelligence-assisted design processes and algorithmic creation. Thus, ceramic works have transformed into hybrid forms reflecting human-machine collaboration. This situation blurs the boundaries between humans and technology, organic and inorganic, and brings the idea of coexistence to the fore. Post-humanist art transforms the ceramic artist from a subject who merely controls production into an actor who creates collaboratively with materials and technology. In this context, the ceramic artist becomes a component that not only shapes but also interacts with the autopoietic (self-generating) nature of the material and the production process. Ceramic art, along with the opportunities offered by this new paradigm in terms of aesthetics and production, has a vast potential still waiting to be discovered. Artists should not limit their production processes solely to digital tools and software, but should also explore different forms of creation with cybernetic extensions, biomaterials, and interactive systems. In the future, the intersections of ceramic art and digital technologies will continue to radically change the way art is produced, exhibited and experienced.

References

Ackerman, E. (2024, January 16). The man who coined the word robot defends himself: Karel Čapek explains what everyone misunderstood about his creation. *IEEE Spectrum*. Retrieved from https://spectrumieeeorg.translate.goog/karelcapekrobots?_x_tr_sl=en&_x_tr_tl=tr&_x_tr_hl=tr&_x_tr_pto=tc

Arts Observer. (2012, May 24). *Anish Kapoor stages a mesmerizing forest of concrete*. Retrieved from http://www.artsobserver.com/2012/05/24/anish-kapoor-has-staged-a-mesmerizing-forest-of-concrete-at-gladstone-gallery/ (Accessed on: 11 December 2024).

AIArtists.org. (2025). *Ben Snell is a New York-based artist whose practice investigates materialities and ecologies of computation*. Retrieved from https://aiartists.org/ben-snell (Accessed on: 11 December 2024).

Atay, R, S. (2023). Creative posthumanism and Bogdan Rata. *Revue Des Sciences Politiques*, 79, 101–111. Retrieved from https://www.ceeol.com/search/article-detail?id=1195330 (Accessed on: 12 May 2024).

Batukan, C. (2017). *On soul in robotism, robot, android, cyborg and artificial intelligence*. Istanbul.

Bell, D. (2005). *An Introduction to Cybercultures*. Taylor & Francis E-Library. Retrieved from https://www.routledge.com/An-Introduction-to-Cybercultures/Bell/p/book/9780415246590?srsltid=AfmBOopF4Db9FLo9k1CY2YE2Gk6oGVQN79Cvp75fVzQ4p1H3cXjSFkuI

Benjamin, W. (1936). *The work of art in the age of mechanical reproduction*. In H. Arendt (Ed. & Trans.), *Illuminations* (pp. 217–251). Schocken Books.

Bishop, M. (2016, January 26). *Autopoiesis in Creativity and Art*. Retrieved from https://www.academia.edu/76302002/Autopoiesis_in_Creativity_and_Art?email_work_card=title (Accessed on: 26 January 2025).

Braidotti, R. (2021a). *The Posthuman* (Trans. Ö. Karakaş, 4th ed.). Istanbul. Retrieved from https://rosibraidotti.com/publications/the-posthuman-2/

Braidotti, R. (2021b). *Posthuman Knowledge* (Trans. S. Sam & E. Çapa, 1st ed.). Istanbul. Retrieved from https://rosibraidotti.com/publications/posthuman-knowledge/

Broeckmann, A. (2017). Body machine. In *Machine Art in the Twentieth Century* (pp. 167–221). The MIT Press. http://dx.doi.org/10.7551/mitpress/9780262035064.003.0006

Byung C., H. (2024). *Looking at the Digital World in the Crowd* (Trans. Z. Sarıkartal). İnka Publishing.

Chau, A. (2024). *Generated Love*. Retrieved from https://www.adamchau.com/portfolio/generated-love (Accessed on: 17 January 2025).

Christies. (2018, November 12). *Christie's Obvious and the Interface Between Art and Artificial Intelligence*. Retrieved from https://www.christies.com/en/stories/a-collaboration-between-two-artists-one-human-one-a-machine-0cd01f4e232f4279a525a446d60d4cd1 (Accessed on: 20 November 2024).

Clovis, J. (2025). Juliette Clovis About. Retrieved from https://www.julietteclovis.com/about (Accessed on: 13 April 2025).

Da Vinci, L. (c. 1490). *Vitruvian Man* [Drawing]. Gallerie dell'Accademia, Venice. Retrieved from https://www.italian-renaissance-art.com/Vitruvian-Man.html (Accessed on: 2 April 2025).

Demilked. (2023). Sternocera, by Juliette Clovis. Retrieved from https://www.demilked.com/sternocera-by-juliette-clovis/ (Accessed on: 13 April 2025).

Dorin, A. (2015). Artificial life art, creativity, and techno-hybridization. *Artificial Life*, 21(3), 261–270. https://doi.org/10.1162/artl_e_00166

Eden, M. (2025, January 21). *After Saly II, 2018*. Retrieved from http://www.michael-eden.com/form-and-transfrom/tjq8vtbxo4l25o8xcwiaogwyplln1f (Accessed on: 21 November 2024).

Emerging Objects. (2016a, January 11). *Seed Stitch*. Retrieved from https://emergingobjects.com/project/seed-stitch/ (Accessed on: 11 January 2025).

Emerging Objects. (2019b, October 6). *Mud Frontiers: Part II*. Retrieved from https://emergingobjects.com/project/mud-frontiers-part-ii/ (Accessed on: 6 October 2024).

Ferrin Contemporary. (2025). Sergei Isupov, on view. Retrieved from https://ferrincontemporary.com/portfolio/sergei-isupov/ (Accessed on: 10 May 2025).

Haraway, D. (2006). *A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century* (Trans. O. Akınbay). Agora Publishing. http://dx.doi.org/10.1007/978-1-4020-3803-7_4

Hassan, I. (1977). *Prometheus as Performer: Toward a Posthumanist Culture? The Georgia Review*, 31(4), 830–850. Retrieved from http://www.jstor.org/stable/41397536

Hayles, N. K. (1999). *How We Became Posthuman: Virtual Bodies in Cybernetics, Literature, and Informatics*. University of Chicago Press. Retrieved from

https://monoskop.org/images/5/50/Hayles_N_Katherine_How_We_Became_Posthuman_Virtual_Bodies_in_Cybernetics_Literature_and_Informatics.pdf

Herbrechter, S. (2021, July 7). *Posthumanist Aesthetics*. Retrieved from https://stefanherbrechter.com/wpcontent/uploads/2021/07/PosthumanistAesthetics.pdf (Accessed on: 17 December 2024).

Inspiration Grid. (2 Mart 2020). Porcelain Sculptures by Juliette Clovis. Retrieved from https://theinspirationgrid.com/porcelain-sculptures-by-juliette-clovis/ (Accessed on: 19 March 2025).

Kac, E. (2005). *Telepresence & Bio Art: Networking Humans, Rabbits and Robots*. University of Michigan Press. Retrieved from https://monoskop.org/images/e/eb/Kac_Eduardo_Telepresence_and_Bio_Art_Networking_Humans_Rabbits_and_Robots_2005.pdf

Kulak, C., Y. (2015). Systematic Chaos: Exhibited 2018: Saatchi Art. (©Yusuf Can Kulak).

Lebenson Gallery. (2025, October 30). *Famous French Art Collective: Obvious*. Retrieved from https://www.lebensongallery.com/collections/obvious (Accessed on: 30 October 2024).

Micali, A., & Pasqualini, N. (2019). *Posthuman Aesthetics: Perception and Relationality, Mapping the Field Through the Lens of Critical Posthumanism*. Retrieved from https://www.academia.edu/40431972/Posthuman_aesthetics_Perception_and_relationality_mapping_the_field_through_the_lens_of_critical_posthumanism

Milner, A. (2010). *Tenses of Imagination: Raymond Williams on Science Fiction, Utopia and Dystopia*. Peter Lang.

Reljic, T. (2017, May 8). *Codifying the Changes: Cristina Ghinassi & Edward Duca*. *Malta Today*. Retrieved from https://www.maltatoday.com.mt/arts/theatre_and_dance/76941/codifying_the_changes__cristina_ghinassi__edward_duca (Accessed on: 10 November 2024).

Robins, K. (2013). *Image: The Culture and Politics of Seeing* (Trans. N. Türkoğlu). Istanbul. Retrieved from https://www.routledge.com/Into-the-Image-Culture-and-Politics-in-the-Field-of-Vision/Robins/p/book/9780415145770?srsltid=AfmBOorZi9occHlun7LNfn9XH89pqmrdtDcWvocwohpbPuBnvQE_lQ22

Sutton, D., & Jones, M. D. (2016). *Deleuze from a New Perspective*. Collective Book. Retrieved from https://www.scribd.com/document/318753087/Damian-Sutton-David-Martin-Jones-Deleuze-Reframed-pdf

Tureng Dictionary. (2025, February 14). *Autopoiesis*. Retrieved from https://tureng.com/tr/turkce-ingilizce/autopoiesis (Accessed on: 14 February 2025).