



ARTICLE

Received 12 Nov 2015 | Accepted 29 Mar 2016 | Published 10 May 2016

DOI: 10.1057/palcomms.2016.11

OPEN

A feminist genealogy of posthuman aesthetics in the visual arts

Francesca Ferrando¹

ABSTRACT This article aims to reassemble a feminist genealogy of the posthuman in the arts, with a specific focus on the visual works conceived by female artists after the rise of what has been retrospectively defined as first-wave Feminism. Starting with the main avant-garde movements of the first half of the twentieth century—specifically, Futurism, Dadaism and Surrealism—this genealogy analyses the second-wave Feminism of the 1960s and 1970s, with its integral exploration of the body highlighted by performance art. Following this, it takes into account the third-wave Feminism of the 1990s and its radical re-elaboration of the self: from Cyberfeminism and its revisitation of technology, to the artistic insights offered, on the one side, by critical techno-orientalist readings of the futures, and on the other, by the political and social articulations of Afrofuturism and Chicanafuturism. Lastly, this genealogy accesses the ways contemporary female artists are dealing with gender, social media and the notion of embodiment, touching upon elements that will become of key importance in fourth-wave Feminism. This article is published as part of a collection dedicated to multi- and interdisciplinary perspectives on gender studies.

¹ Liberal Studies, New York University (NYU), New York, USA

Introduction

This article aims to emphasize the extraordinary number of (self-identified) women who have contributed, with their radical imagination, to the shaping of posthuman aesthetics, featuring techno-mythologies, cyborg embodiments and rhizomatic bodily performativity, even before the birth of the cyborg as a theoretical framework was conceived and the term “posthuman” popularized. In this endeavour to reassemble a feminist genealogy of the posthuman in the arts, this article will specifically focus on the visual works conceived by female artists after the rise of what has been retrospectively defined as first-wave Feminism, which took place in the late nineteenth and early twentieth century. Starting with the main avant-garde movements of the first half of the twentieth century—specifically, Futurism, Dadaism and Surrealism—this genealogy will analyse the second-wave Feminism of the sixties and seventies, with its integral exploration of the body highlighted by performance art. Subsequently, this article will take into account the third-wave Feminism of the nineties and its radical re-elaboration of the self: from Cyberfeminism and its revisitation of technology, to the artistic insights offered, on the one hand, by critical techno-orientalist readings of the futures, and, on the other, by the political and social articulations of Afrofuturism and Chicanafuturism. Finally, it will access the ways contemporary female artists are dealing with gender, social media and the notion of embodiment, touching upon elements that will become of key importance in fourth-wave Feminism. Starting with an overview of bioart by presenting ORLAN’s¹ body reshaped by protechnological ethics and aesthetics, this article will explore Lee Bul’s cyborgs, Mariko Mori’s androids and Cao Fei’s avatars, to conclude with a presentation of Natasha Vita-More, the transhuman philosopher and multimedia artist who is engaged with the idea of redesigning the human body itself as a work of art. The ways in which female artists have been addressing the notion of human embodiments and gender identities throughout spaces and times will offer valuable insights into the possibilities inscribed in the shaping of our posthuman futures.

Methodological premises

In the posthuman² era, the decision to strictly focus on works produced by (self-identified) female artists could be criticized as essentialist, for it suggests the possibility of pursuing an analysis based on a set of bio-cultural characteristics. I shall thus clarify that such a move is currently needed for strategic reasons, to re-establish an inclusive genealogy of the posthuman itself. Posthumanism is becoming a highly fashionable trend. By going mainstream, the hierarchical schemata that (Critical, Cultural and Philosophical) Posthumanism (Wolfe, 2010; Braidotti, 2013) wishes to deconstruct are reappearing, affected by what may be defined as hegemonic essentialism—that is, the historiographical tendency and methodological habit of quoting “thinkers, artists or theorists who belong to the cultural hegemony” (Ferrando, 2012: 13) who often are, in the current episteme, white and male. In line with a posthumanist methodology, this genealogy wishes to maintain a comprehensive and inclusive way of recognizing the large variety of artists who have contributed to the development of Posthuman Studies. Given such premises, I will adopt a strategic essentialist standpoint (Spivak, 1987) to emphasize the centrality of female artists in the development of posthuman aesthetics. And still, it is important to remark that there is no specific type of woman who can symbolically represent every woman ever born, but there are women (in the plural form) with different social and individual characteristics. The postmodern feminist shift offered controversial interpretations of the concept of “woman” itself,

presenting it as a cultural construct (Butler, 1990) to the extent of what has been criticized as a “Feminism without women”.³ In the following, I should mention that I will only address artists who were born after the first wave of Feminism, although not all of them defined themselves as feminist. From a queer perspective, it shall be noted that a considerable number of them shared an open view on sexuality, which did not fit into heterosexual normativity.

Another important aspect to highlight is that this genealogy will focus only on the visual arts, not including artists who have expressed posthuman intentions in other forms, such as science fiction (that is, Octavia Butler, Marge Piercy and Kathy Acker), electronic music (such as Pauline Oliveros, Laurie Anderson and Pamela Z) or dance (Pina Bausch, Anna Halprin and Tai Lihua, among others). There are different reasons why I have chosen this type of analysis. Visual culture has played an increasing role in the development of Western civilization, becoming central in the elaboration of Modernity, as Foucault (1975) pointed out in his articulation of Panopticism; it has replaced logocentrism, turning into a distinctive feature of Postmodernism, to the extent that Baudrillard (1994) saw the simulacrum not as a copy of the real, but as a reality of its own, the hyperreal. Cybernetics has only augmented the power of representation. Programmers have developed codes that mostly relate to one sense, the sight, leaving other senses such as taste, smell and, to a lesser extent, touch, in a marginal position. In the words of Judith Halberstam and Ira Livingston: “The posthuman body is a technology, a screen, a projected image” (Halberstam and Livingston, 1995: 3). Our posthuman present is visual, interactive and linkable; the power of representation in knowledge production is becoming less and less innocent, if it has ever been.⁴

A radical genealogy

Focusing now on the artists, it is worth explaining why I will not be able to offer each of them the space they deserve. More than glorifying the individual genius, my point is to emphasize the great variety of women who have visualized the posthuman shift through their art works, generating original perspectives on areas of representation commonly associated with white male imagination (women’s skills were traditionally confined to fields that, for being women’s activities, were not considered “art” but “craft”, such as textiles and pottery).⁵ As Leonard (2003: 19) has pointed out: “science and technology are themselves generally viewed as masculine pursuits”. But science and technology are first imagined, before they are performed. In Albert Einstein’s words: “Imagination is more important than knowledge. Knowledge is limited. Imagination encircles the world” (Viereck, 1929: 117). With this genealogy, I would like to share the contribution brought by female artists’ radical imagination to the settings of the forthcoming times. Following, I will first focus on paintings and collages representative of some of the main avant-garde movements of the first half of the XX century; I will then move on to consider the visual power of documented performances within the rise of second-wave Feminism. Lastly, following third-wave Feminism, I will present different types of visual arts in the contemporary art scene, stressing their hybrid and multimedia approaches that will give rise to fourth-wave Feminism.

Futurist, dada and surrealist grandmothers

Futurism. To reassemble a map of posthuman grandmotherhood, I will focus on the three main avant-garde movements that arose in Europe at the beginning of the XX century: Futurism, Dadaism and Surrealism. Let us begin with Futurism—the term was coined

by Filippo Tommaso Marinetti in “The Futurist Manifesto” (1909/2006), and shall not be confused by the contemporary use of the word to refer to scientists and social theorists engaged in the attempt of predicting the future of humankind and life in general. There are many reasons why Futurism should be listed in this genealogy, including the fact that it has been regarded as one of its sources by Transhumanism, especially in Europe and, particularly, in Italy.⁶ First of all, I would like to emphasize its drive towards the future, which was not perceived as something to come in a chronological way, but it was welcomed in a “here and now” mode, and it relied in accepting the new possibilities offered by the present. Futurism was about dynamism; its artistic research was not aimed to express objects in movement, but movement itself, creating an aesthetic of simultaneity. To generate a space for dynamic imagination, Futurism wished to pose a symbolic break from the past. This is one of the crucial differences with Posthumanism, which, to fully embrace the future, does not disregard the past. On the contrary, Posthumanism draws on many different sources, histories and herstories,⁷ in an academic attempt of inclusiveness that opens to other species and hypothetical life forms: from non-human animals to artificial intelligence, from aliens to the possibilities related to the physic notion of a multiverse. As I have stated in a previous article: “Posthumanism offers a theoretical invitation to think inclusively, in a genealogical relocation of humanity within universality (‘Posthumanism’ as a criticism of humanism, anthropocentrism and universe-centrism), and alterity within the self (‘Posthumanism’ as a recognition of those aspects which are constitutively human, and still, beyond human comprehension)” (Ferrando, 2014b: 220).

Another important difference between Futurism and Posthumanism regards life. In its attempt to decentre the human from the centre of the discourse, Posthumanism opens to environmentalism and animal rights; if it embraces technology as essentially human (Gehlen, 1957; Stiegler, 1998), it still warns about its destructive side, already experienced through many catastrophes, such as the drop of the atomic bomb or the ecological impact of industrialization. By contrast, the futurist exaltation of contemporary challenges included the fascination with war, defined by Marinetti as “the only world’s hygiene” (Marinetti, 2006: 14), and with machines, as we can read in his “Technical Manifesto of Futurist Literature” (1912/2006): “we are preparing for the creation of mechanical man, one who will have parts that can be changed” (*Ibid.*: 113–114). Even though the term “cyborg” was articulated much later by Clynes and Kline (1960), we can trace in Futurism the fatherhood of such conceptualization. Marinetti also foresaw its militaristic developments; in “Extended Man and the Kingdom of the Machine”,⁸ he wrote: “This non-human, mechanical species, built for constant speed, will quite naturally be cruel, omniscient and war-like” (*Ibid.*: 87).

The fascination with speed, machinery and war was shared within the movement by men and women alike, as remarked in the “Manifesto of Futurist Woman” (1912/2001).⁹ Despite of the chauvinist and contradictory value of the futurist discourse,¹⁰ a high number of female artists joined the movement, as an act of challenge and criticism towards the female stereotypes of self-denial and sacrifice theorized hitherto for women. There are many futurist painters we can recall, such as Rougena Zátková (1885–1923), Benedetta Cappa Marinetti (1897–1977), Marisa Mori (1900–1985), Olga Rozanova (1886–1918) and Alexandra Exter (1882–1949), but I will focus in particular on two specific artists for different reasons: the Russian painter Natalia Goncharova (1881–1962), and the Italian painter Olga Biglieri Scurto (1916–2002). Natalia Goncharova¹¹ was not only one of the main contributors to Russian Futurism, but also one of the founders of Rayonism, a style of abstract art that she developed in

1911 with her companion, painter Mikhail Larionov (1881–1964), after hearing a series of lectures about Futurism by Marinetti. Rayonism focussed on representing the rays of light reflected from objects, rather than objects themselves, in a pre-intuition of the central role of light in virtual reality and the consequent electrical infrastructure of cyberspace. Our other posthuman futurist grandmother is Olga Biglieri Scurto, Barbara,¹² who I will present not only for her futuristic paintings and attitude (she became a patented pilot at only 18 years of age, before she even encountered Futurism), but also for the fascinating twist in her own poetics. Her life crosses the XX century, starting with her adhesion to Futurism, passing through World War II and the death of her husband; she then encountered Feminism and the philosophy of Luce Irigaray, which she elaborated in her “noetic paintings”; she finally became a strong supporter of the peace movement and donated her piece “L’Albero della Pace” (1986) to the Hiroshima Peace Memorial Museum.

Dada. If Futurism sustained the war and the Fascist drive to colonization, Dada arose at the outbreak of War World I as a cultural movement of protest against such expansionist policies. Henry Ball, author of the first Dada Manifesto (1916), stated: “For us, art is not an end in itself (...) but it is an opportunity for the true perception and criticism of the times we live in” (Ball, 1974: 58).¹³ Before presenting our dada grandmothers, I would like to mention the prosthetic work of US artist Anna Coleman Ladd (1878–1939), who produced masks of thin copper for soldiers who were disfigured in World War I; such masks were sculpted and painted to resemble the portraits of the soldiers before their disfigurement. The connection between war mutilations and dada aesthetics has been widely remarked. As Stanton B Garner has stated: “To place (...) the body-object hybrids of Dada collage and photomontage next to war-time prosthetic devices, (...) is to glimpse the wider cultural field where the modern body was fragmented, altered, and re-imagined” (Garner, 2007: 507). Anti-bourgeois and anarchistic in nature, Dadaism strongly repudiated the war, as we can read in Ball’s words: “The war is based on a crass error. Men have been mistaken for machines. Machines, not men, should be decimated” (Ball, 1974: 22). More than ludditism, what characterized Dadaism was a cynical approach towards ideas of progress and control. Dada artists did not reject the machine, they actually embedded the mechanic in their aesthetics. Some of them, such as Marcel Duchamp (1887–1968) and Francis Picabia (1879–1953), went so far as to develop a dada machine art, but the specificity of such machines can be found in their futility and nonsense, in a interpretation of the new that radically differed from Futurism: the advances of technology were recognized by Dadaism as part of a larger reality, chaotic and existentially unstable, anticipating the uncanny feelings often associated with cyborgism.¹⁴

Even if there are many dada artists whose artworks have contributed to create a posthuman canon, such as Sophie Tauber-Arp (1889–1943), Sonia Delaunay (1885–1979) and Beatrice Wood (1893–1998), in this visual genealogy I will focus on German artist Hannah Höch (1889–1978), following Matthew Biro’s suggestion, who places the motherhood of the cyborg in the Dada movement,^{15,16} and, specifically, in her collages. Extending the origins of the cyborg to Dadaism offers not only the possibility of an alternative genealogy to the functional definition articulated by Clynes and Kline of cyborgs as “self-regulating man-machine systems” (Clynes and Kline, 1960: 31) conceived “to meet the requirements of extraterrestrial environments” (*Ibid.*: 29), but also to the militaristic one foreseen by Marinetti. Such re-rooting, as Biro has stated, “expands the concept beyond its traditional definition (...) including the cyborg as representing hybrid identity in a broad sense” (Biro, 2009: 1). The art form

adopted by Dadaism to visualize such synthesis was collage; Höch developed this technique far more than any other Berlin dada artists. The cyborgian nature of many of her photomontage's figures blends genders as well as colours, ethnicities and ages, eventually suggesting that these traits are not immutable. Höch was deeply aware of the changes women were facing on a social and individual level in the postwar period,¹⁷ and one of her central concerns was to visually represent such a shift: female cyborgs ultimately became much more prevalent in her art.

The dada roots of the posthuman are traceable not only in its aesthetics, but also, specifically, in the use of techniques such as the collage, as presented, and the assemblage, that is, the artistic process of putting together found objects in two or three-dimensional compositions, which found in dada artist Elsa Von Freytag-Loringhoven (1874–1927) and in sculptor Louise Nevelson (1899–1988) some of its pioneers. On one side, due to biotechnology, genetic engineering and nanotechnology, life itself has become more and more of a “biotechnological assemblage” (Waldby, 2000); on the other, the environmental concerns of posthuman ethics, which invest in recycling policies and sustainability, spontaneously delve into such tradition. Posthumanism also shares with Dadaism the acceptance of the nonsense, which is embedded in its own meta-narratives: in its attempt to decentre the human, Posthumanism is still thought and theorized by humans, in a human-centric system of signs.

Surrealism. Surrealism spread internationally from the 1920s onward, becoming one of the most influential movements of the period. It developed out of Dadaism, and it elaborated the nonsense in evocative juxtapositions and non-sequiturs. On the footsteps of Freud, Surrealism gave full recognition to the unconscious, dream symbolism and free associations. Surrealist aesthetics bent the laws of physics to provoke surprise and mystery, which replaced the dada uncanny; to release the creative potential of the unconscious mind, surrealists adopted techniques such as automatic writing and drawing, defined as “automaticism”.¹⁸ Surrealism, though, did not aim to express a transcendence of the real; its intent was to deepen the understandings of the world perceived by the senses, extending its foundations over what had been historically confined to “the reign of logic” (Breton, [1924]1972: 9), as Breton defined it in the “First Surrealist Manifesto” (1924). In his words: “I believe in the future resolution of these two states—dream and reality—which are seemingly so contradictory, into a kind of absolute reality, a surreality” (*Ibid.*: 14). In its attempts of avoiding dualisms, Posthumanism owes to Surrealism the retrieving of such aspects of life: the dream world can offer a unique space of visualization; the possibilities opened by the future are already embedded in the mystery of the present; the conscious becomes the unconscious, in a fluid view from which the field of posthuman psychology is currently emerging.

Surrealism also brought attention to the environment, which, as previously stated, characterizes critical Posthumanism. As Rosemont notes: “always implicit in surrealist thought, a radical ecological awareness is increasingly explicit in movement publications after 1945” (Rosemont, 1998: LI). Such awareness merged, for instance, in the paintings of US artists Katherine Linn Sage (1898–1963), whose large, surreal sights recall futuristic landscapes and science fiction movies. Both aesthetically and content-wise, posthuman evocations can be found in the works of Dorothea Tanning (1910–2012) and Leonora Carrington (1917–2011), whose interest for animal imagery, world mythologies and occult symbolism deepened after meeting the Spanish-Mexican surrealist painter Remedios Varo Uranga (1908–1963), who was influenced by a wide range of mystic and hermetic traditions, both Western and non-Western: from Carl Jung's archetypal



Figure 1 | Dithyrambe (1972), by Leonor Fini.

Note: Image reproduced with permission of Richard Overstreet, on behalf of the estate of Leonor Fini; Copyright (@ Estate of Leonor Fini, 2016). This figure is not covered by the CC-BY 4.0 licence.

psychology to Helena Blavatsky's Theosophy, George Gurdjieff's spiritual teachings and the Sufi tradition. In this section, I would also like to mention Lois Mailou Jones (1905–1998). Born in the United States, Jones spent a long time in Paris. Some of her paintings recall surrealist suggestions, such as “The Fetishes” (1938). What deeply inspired Jones' work was the Harlem Renaissance, which was flowering at the time, the African-American experience and African traditions. Her masks transgressed the traditional divide between the human realm and the divine, while “The Ascent of Ethiopia” (1932) re-inscribed the African diaspora within a spiritual time and space, visualized through symbolic imaginary, technological artifacts and the human arts.

Two other artists to consider are Argentinian-born artist Leonor Fini (1907–1996), and Mexican painter Frida Kahlo (1907–1954); interestingly enough, neither of these artists claimed an affiliation to the surrealist movement, even if their works have been labelled as such. I have decided to focus on Fini not only for the excellence of her work, but also for her intriguing personality, and, in particular, for her taste of the masquerade, which actually derived from a curious biographical experience. When Leonor was a child, after her parents had divorced, her father tried on various occasions to kidnap her, so her mother ingeniously started to disguised her as a boy to hide her identity. In her reiterated act of cross-dressing, Leonor fully experienced not only the social mimicry of gender performativity (Butler, 1990), but also its fascinating theatrical side. The idea of metamorphosis



Figure 2 | Leonor Fini (1948).

Note: Image reproduced with permission of Richard Overstreet, on behalf of the estate of Leonor Fini; Copyright (@ Estate of Leonor Fini, 2016). This figure is not covered by the CC-BY 4.0 licence.

became central in her work, which featured female sphinxes, androgynous figures, cats and powerful women (see Figs. 1 and 2). Carnavalesque aesthetics were embedded in her everyday life, as she later stated: “only the inevitable theatricality of life interests me” (Webb, 2009: 127). Her use of the mask and costumes was not aimed at misleading individual recognition (there was no mystery about who was wearing them, and Leonor sincerely enjoyed such attention),¹⁹ but was meant to represent the different identities inhabiting the persona: “With costumes and masks I feel I become an extension of myself” (Webb, 2009: 127). Fini’s posthuman sensitivity drove her work and her life, as she recalled: “I experience an erotic world where there is no divergence, no hostility, where everything mixes together (...) I like to feel myself in a state of metamorphosis like certain animals and certain plants” (*Ibid.*: 105).

Frida Kahlo could be included in such genealogy for many different reasons, but I will focus on a specific aspect of her work, which is rarely debated in enthusiastic transhuman accounts of techno-bodies: pain. Frida contracted polio at age 6; when she was 18 she almost died in a tragic bus accident, her body was seriously damaged and she never fully recovered. Her condition led to more than 30 surgeries, to the impossibility of a healthy pregnancy, with consequent miscarriages and therapeutic abortions; to the amputation of three toes and, some years later, of her right leg to the knee. Her paintings depict a complex symbolism, where self-portraits and autobiographical references cohabit with pre-Columbian gods, Christian imagery and animal-human hybrids. Frida’s dark Surrealism is “without hope” (to mention the title of one of her paintings, 1945); it is not rooted in the dream world, but in the embodied experience—personal, social

and political. In her own words: “They thought I was a Surrealist, but I wasn’t. I never painted dreams. I painted my own reality” (Kettenmann, 1993: 48) – a reality that has been physically and emotionally challenging: “my paintings (...) have a message of pain in them” (Tibol, 1993: 67). Her damaged naked body stands as “a socialized body, a body that is open by instruments, technologized, wounded—as Jean Franco pointed out—its organs displayed to the outside world”. In a diary she kept towards the end of her life, next to a drawing of her body, Frida wrote: “I am disintegration” (Fuentes and Kahlo, 1995: 225). This female body, subject and object of an autobiographical public narrative, never turns into a fetish nor into an impersonal site of “mechanical eroticism” (Baudrillard, 1991: 119), to borrow Baudrillard’s term, which he used in the essay “Crash”²⁰ on JG Ballard’s homonymous novel.²¹ This essay actually provoked a strong response, which I found useful in analysing Kahlo’s poetics. Specifically, Vivian Sobchack’s criticism suits the purpose very well: “there’s nothing like a little pain to bring us (back) to our senses and to reveal Baudrillard’s apocalyptic descriptions of the postmodern techno-body as dangerously partial” (Sobchack, 1991: 328). Frida’s technologized bodies do not leave space for naïve celebration of prosthetic futures, in which the flesh is dismissed as an old-fashioned element that can (and will) be easily substituted; her paintings carry all the grief related to such techno-reconfigurations.

Our feminist mothers: from the seventies to the nineties. After presenting the three main artistic avant-garde movements of the first half of the XX century, in this section I will focus on the artistic scene connected to the second wave of Feminism, which began in the sixties and flourished through the seventies. The theoretical contribution of Feminism to Posthumanism is crucial. The fact that Feminism brought into question male symbolism as universal has been fundamental to the posthuman effort of decentring the human and its anthropocentric logos from the centre of the discourse. On the claim that “the personal is political”, the body became the first space to be reclaimed from patriarchal ontological constriction; performative art seemed an appropriate tool for such purpose. As performer Cheri Gaulke pointed out: “in performance we found an art form that was young, without the tradition of painting or sculpture. Without the traditions governed by men” (Goldberg, 1998: 129). Since many of the artists of the time shared the postmodern criticism of strong ideologies and distanced themselves from strict labels, in this section I will present our posthuman feminist mothers by subject of interest.

Let us start with the problematization of the inner and external boundaries of the human body, which, as previously mentioned for Kahlo’s work, cannot be simplified by the superhero iconography common in transhuman accounts,²² but it is also marked by blood and pain. As Pastourmatzi recalls: “Only in fiction are the magical transmutations from flesh to text and text to flesh ubiquitous and painless” (Pastourmatzi, 2009: 214). Many artists could be listed here, starting with French performer Gina Pane (1935–1990), the mother of Body Art, whose self-mutilations represented, in the words of Michel Thevoz, a “profanation of humanistic values” (Thevoz, 1984: 119). In the sixties, US artist Hannah Wilke (1940–1993) developed her vaginal imagery, which included tiny vulval sculptures made of chewing gum and then stuck to her naked body, achieving a grotesque confusion of lines between the flesh and the gums. Her last work, “Intra-Venus” (1992–1993), posthumously published, consisted in a photographic record of her body changing as a result of chemotherapy and bone marrow transplant. Another posthuman mother to be mentioned here is Serbian-born Marina



Figure 3 | Yayoi Kusama (2012).

Note: This image is covered by the CC BY 2.0 licence and is attributed to Vagner Carvalho (<https://commons.wikimedia.org/w/index.php?curid=38789947>).

Abramović (1946) who, in an interview given in 1990, stated about her previous work: it “had a lot to do with pain and injuriousness in order to push the body to its border, even to the border between life and death” (Goy, 1990: n. pag.). In “Rhythm 0” (1974), she placed upon a table 72 objects that people were allowed to use on her, including a gun and a single bullet. Still an active artist, Abramović is constantly questioning boundaries on a personal and cultural level. In her own words: “I don’t have any feeling of nationality. I travelled so much that I really took the whole planet as a studio. And in a way I even think it’s too small” (*Ibid.*). One of her ongoing series of sculptures titled “Transitory Objects for Non-Human Use” (1993–present) includes a “Chair For Non-Human Use” (1995), whose legs are so high that no human being could possibly sit on it.

There are some artists whose works are crucial to this genealogy for the challenges they raised to the anthropocentric perception of the human in confronting their own identity. I would like to mention Japanese-born Yoko Ono (b. 1933), Cuban-born Ana Mendieta (1948–1985) and Japanese artist Yayoi Kusama (b. 1929). Ono was part of the Fluxus group, which, inspired by movements such as Dadaism and the Gutai, used an intermedia approach and highlighted the connection between art and everyday objects, focussing more on the artistic process than on the final product itself. In such spirit, Ono identified the common housefly as an alter ego (“Fly”, 1970), in a video portraying interspecies connection. Mendieta’s environmental art, on the other side, features her body merging with the earth and other natural objects found *in loco*, including grass growing through her body. The minimal intervention of her performances contrasts with the monumental alterations of some of her male contemporaries, such as Robert Smithson (1938–1973), whose work depended on heavy machinery to be completed. In Mendieta’s performances “Siluetas” (1973–1980), the human figure—sometimes reproduced in fire or blood—is not separated from the environment, in a holistic approach that resonates with posthuman environmental awareness and an overcoming of dualistic ontologies. The human becomes an ephemeral concept, in an organic vision of life as a force constantly shaping and evolving. Yayoi Kusama will bridge us to the next section on technology. Kusama has developed through her life performances and environmental installations characterized by obsessive repetitions and accumulation, based on dreams and hallucinations occurring since her childhood. Her “infinity nets” and polka dots seems to pre-announce computer-generated visual patterns: in a subversion of perspectives, the dots are the



Figure 4 | Ascension of Polkadots on the Trees (2006), by Yayoi Kusama.

Note: This image was in the public domain at the time of publication. The copyright holder is User:Sengkang (<https://commons.wikimedia.org/w/index.php?curid=1297624>). This figure is not covered by the CC-BY 4.0 licence.

subjects, while the humans become part of their infinite tendency to multiply, one more layer of repetition (see Figs. 3 and 4). Her series of “Mirror/Infinity rooms”, produced since 1963, recalls the universe in expansion. It is worth mentioning that Kusama, who was very active in the New York avant-garde movement of the 60s, staged the first “homosexual wedding” to be performed in the United States: the happening took place in 1968, one year before the Stonewall riots.

Let me conclude this section by mentioning the work of other artists who, in different ways, elaborated on the interaction between humanity and technology. First, there is the work of Japanese artist Atsuko Tanaka (1932–2005). Her “Electric Dress”, which dates as early as 1956, was simultaneously a sculpture and a performance: it not only became one of the iconic images of the Gutai, but it also represented an important antecedent to the feminist tradition of wearable art. German artist Rebecca Horn (b. 1944) began her body-extension series in 1968. In her performance “Unicorn” (1972), she wore a long horn on her head and, to hold it, white straps on her naked body, which strongly resembled the ones portrayed in Frida Kahlo’s painting “Broken Column” (1944). Horn produced sculptures designed to be attached like prostheses to the bodies of performers to lengthen their fingers and arms, resonating with Marshall McLuhan’s theory of new media technologies as “extensions of man” (McLuhan, 1964). In her artistic investigation, she foregrounded the relationship between technology, power and gender, creating “extensions of women”. In the Eighties, she worked on a series of art machines, such as the “Painting Machine” (1988), about

which she stated: “My machines are not washing machines or cars. They have a human quality and they must change” (Horn *et al.*, 1993: 27), enacting an overcoming of the traditional binary opposition between the human and the mechanical.

Brazilian artist Lygia Clark (1920–1988) did not directly explore the possibilities offered by advanced technologies, and still, as Simone Osthoff has remarked: she “opened conceptual ground for practices similar to those of electronic performance and telecommunications art, with their emphasis on fluid, intangible exchanges” (Osthoff, 1997: n. pag.). Clark’s emphasis on interactivity, marked by the necessary manipulation of objects by the viewer to unfold different shapes and forms (Bichos, c. 1960), largely preceded the development of interactive media. Her multisensory devices, such as the “Sensorial Hoods” (1997) and the “Abyss-Masks” (1967), offered new perceptive experiences, which anticipated virtual reality simulations. Before passing to the third and final part of this genealogy, I would like to pay homage to many more artists who have contributed to the posthuman imaginary, among others: Joan Jonas (b. 1936), Adrian Piper (b. 1948) and Linda Montano (1942) for their performative works; Ulrike Ottinger (b. 1942), Dara Birnbaum (b. 1946) and Steina Vasulka (1944) for their video works; Louise Bourgeois (1911–2010), Nancy Grossman (b. 1940) and Senga Nengudi (b. 1943) for their sculptural works; Francesca Woodman (1958–1981) and Cindy Sherman (b. 1954) for their photography.

Our digital sisters: from the nineties till today. The early nineties marked the birth of Cyberfeminism. The unexpected success of Haraway’s “Cyborg Manifesto” (1985) strongly contributed to its popularization, in a historical moment when cyberculture was establishing its narratives and art was reshaping into new forms, such as cyberart, web art, new media art, electronic art, software art, digital art, telematic art. The tremendous possibilities opened by virtual reality, which included computer-simulated environments, where to experience different gender identities (whose effects actually proved to be less revolutionary than expected)²³ were theoretically inscribed within Cyber Feminism, which stressed multiplicity, nomadicity and connectivity. Its practices were participatory and decentred; its goals were mainly concerned with making the digital realm a woman-friendly space, which would not perpetuate patriarchal agendas. Cyberfeminism represents an important antecedent of Posthumanism. Although the term “posthuman” had first appeared a decade earlier within the frame of postmodern literature, and specifically, in the writings of Ihab Hassan,²⁴ it started to be popularized in the writings of the time.²⁵ Its use became familiar within academia after the publication of “How We Became Posthuman” (1999) by Katherine Hayles, who already in 1995 was writing: “Standing at the threshold separating the human and the posthuman, the cyborg looks to the past as well as the future” (Hayles, 1995: 322). The historical and herstorical passage between the human and the posthuman is the cyborg.

In this section, I will present the artists in three areas, which could be referred to as “Bioart”, critical “Techno-Orientalism” and “Afrofuturism”. Bioart, in the strict sense, is a very young and ethically controversial form of art, which works with live tissues, bacteria and living organisms; in the broad sense, it might include artists who address biotechnology merely from a symbolic or conceptual perspective. The connection between Posthumanism and bioart²⁶ is complex. On one side, the posthuman attempt to decentre the human species, by placing it among any other species and forms of life, seems to be shared by bioartists, as Ionat Zurr, one of its very pioneers, warns: “We have to be careful of human arrogance. We need to be posthumanist. For us, species is not important” (Solon, 2011: n. pag.). On the other end, removing



Figure 5 | The reincarnation of Saint ORLAN (1990), by ORLAN.
Note: Image reproduced with permission of ORLAN; Copyright (© ORLAN, 2016). This figure is not covered by the CC-BY 4.0 licence.

boundaries can serve as a theoretical strategy for unconditional human dominance, as Vandana Shiva remarks: “Boundaries have been an important construct for ecological restraint. ‘Removing boundaries’ has been an important metaphor for removing restraints on human actions, and allowing limitless exploitation of natural resources” (Shiva, 1995: 281). Bioart is too often concerned strictly with the artist’s vision, a human in a god-like position for life to be used in the name of art; in so doing, it ontologically separates the concept of creating life from caregiving.²⁷ In this genealogy of posthuman sisterhood, let us introduce the work of Kathy High (b. 1954), who actually reverses such a tendency: in “Embracing animals” (2004–2006), she exhibited three live transgenic lab rats she adopted after purchasing them from a science research facility, where they had been microinjected with human DNA as part of an autoimmune disease research on illnesses similar to High’s own medical condition. Her live installation emphasized the exchanges between human animals and other species.

ORLAN²⁸ (b. 1947) is one of the few artists whose importance in the growing field of posthuman art has been unanimously recognized. She has a large body of work, which began in the early sixties, but in this genealogy I will only focus on the art she has produced after the nineties. ORLAN’s work symbolically marks the passage between the seventies and the cyberfeminist nineties, fully embracing the possibilities opened by advanced technologies. In her digital photographic series “Self-Hybridizations” (started in 1994), she merged her facial features with non-Western iconographies; her bioart project “The Harlequin’s Coat” (2007) featured a biotechnological coat made of coloured diamond shaped petri dishes, containing pieces of skin of different origins. More specifically, I will now focus on her work with plastic surgery: see Fig. 5, for the strong impact it had on the elaboration of posthuman artistic domains. ORLAN was the first artist to use cosmetic surgery as a medium of artistic enquiry, but she deviated its normative purpose of realigning bodies to specific aesthetic canons. As she stated in her “Carnal Art Manifesto” (1989/2010): “Carnal Art is not against aesthetic surgery, but against the standards that pervade it, particularly, in relation to the female body, but also to the male body. Carnal Art must be feminist” (*Ibid.*: 29). “The Reincarnation of Saint-Orlan” (1990–1993): see Fig. 6 involved a series of plastic surgeries in the course of which the artist started to morph herself with respect to ideal features of the feminine as depicted by male artists in the history of art; exaggerating some of these features, she turned such bodily reconfiguration into an anti-aesthetic process.



Figure 6 | ORLAN (1997).

Note: This image is covered by a CC BY-SA 4.0 licence and is attributed to Fabrice Lévêque (<https://commons.wikimedia.org/w/index.php?curid=36619853>).

ORLAN's operations were staged as mediatic performances and screened live in different locations. The focus was, in her own words: "the spectacle and discourse of the modified body which has become the place of a public debate" (*Ibid.*: 28). Her perception of the flesh as a public stage for disruption of social normativities resonates with Mikhail Bakhtin's notion of the grotesque:²⁹ "Contrary to modern canons, the grotesque body is not separated from the rest of the world. It is not a closed, completed unit; it is unfinished, outgrows itself, transgresses its own limits" (Bakhtin, 1941/1965/1984: 26). ORLAN has not only offered a feminist switch to plastic surgery; constantly challenging fixed notions of identity, her research has extended the nomadic subjectivity (Braidotti, 1994) to the biological self (see Figs. 5 and 6).

US artist Natasha Vita-More is also redesigning the human body, but if ORLAN's work is rooted in a materialist feminist perspective, Vita-More is a futurist and one of the main theorists of Transhumanism. Her "Primo Posthuman" is the prototype of the "new human genre", a media design and a conceptual work (see Fig. 7). Her redesigned human body features: "a sensorial mix, assured performance, motion in concert with physique, seamless fusion of body and technology, equilibrium of logic and passion" (Vita-More, 2005: n. pag.). The role of the artist in the visualization of the future is central in Vita-More's poetics, as she resumes: "artistic options will expand in creating new practices for designing of biosynthetic bodies, sensorial extension, cognitive enrichment, gender diversity, identity transfer, and radical life extension" (Vita-More, 2011: 78–79). In her view, art, science and philosophy go hand in hand, supporting and inspiring each other. I would like to end this part on bioart mentioning one more artist: Australian artist Patrizia Piccinini (b. 1965). Piccinini does

not work directly with live material, but she uses her artistic practice as a site to reflect on the possibilities opened by biotechnology, and on its impact upon life. In her anthropomorphic sculpture "The young family" (2003), a hybrid human-pig mother is portrayed with her babies in a very informal pose, provoking a sense of normality and familiarity through a cross-species representation. She is one of Donna Haraway's favourite artists: "When I first saw Patricia Piccinini's work a few years ago—Haraway recalls—I recognized a sister in technoculture. I experienced her as a compelling story teller in the radical experimental lineage of feminist science fiction" (Haraway, 2007: n. pag.).

Moving now to the second area mentioned earlier, critical Techno-Orientalism,^{30,31} I will present the work of Lee Bul (b. 1964, South Korea), Cao Fei (b. 1978, China) and Mariko Mori (born 1967, Japan), but I would also like to mention Shu Lea-Cheang (b. 1954) and Hiromi Ozaki (b. 1985). Let us start with Lee Bul. Her series of "Cyborg" sculptures (1997–1998) have no face; their female bodies are missing parts, they are disabled. Far from the glamorization of the female body in Japanese manga and Korean anime culture, Bul's cyborgs provoke uneasiness. In her words: "All I've done is push the logic of male fantasy to its darkest extremities" (Wetterwald, 2003: 179). On the other side, video and photographic artist Mariko Mori, a former fashion model, casts herself precisely in the role of the animated heroines of mainstream iconographies, posing into questioning, as Makiko Hara has recalled, "the borderline between the subject and the Other" (Hara, 2001: 242), between the real and the fantasy, the physical and the digital. It is also worth noticing that Mori futuristic, iconic, postfeminist characters share a transcendental sensitivity specific to her Japanese religious background. As Naho Kitano has explained about Japanese Animism and Robotics: "In Japan, there is a traditional belief of the existence of spiritual life in objects or natural phenomena (...). I strongly believe that, in Japan, autonomous or intelligent robots are easily accepted socially because of the belief in its spirit" (Kitano, 2007: 1–4). Another artist who blends the line between physical reality and virtual reality is net artist Cao Fei. Her documentary "Imirror" (2007) was filmed entirely in Second Life, and the direction of the movie was credited to her SL avatar China Tracy. Fei explored the effects of an immersive use of online identities on the self, questioning what is real and what is fantasy not only in the narratives of the movie, but in its meta-narratives too. Her work, focussed on the potential of online personas, harmoniously bridges third- and fourth-wave Feminism. It is important to note that, if Internet is one of the main fields of interest for fourth-wave Feminism, intersectionality (Crenshaw, 1989) is one of its fundamental analytical tools.

Let us now consider Afrofuturism, a term coined by Mark Dery in 1993³² to refer to the contribution of the black experience to the settings of the upcoming times. Afrofuturism and Posthumanism share common theoretical ground and a crucial difference with Futurism, in their recognition of the importance of acknowledging the past, based on the same premises: "human" is not a neutral term, and it carries a history of privileges. For instance, women, people of colours other than white, disabled people and so on have been repeatedly deprived of such status. In particular, the African-American diaspora, which caused a forced erasure of private and public histories, makes it crucial to keep the past and present in the visualization of desirable futures. Many artists have contributed to such narratives. Let us start with Wangechi Mutu (b. 1972), a Kenyan-born artist whose collages melt together the aesthetics of traditional African crafts with science fiction imaginary, bionic prosthetics and Surrealism (see Figs. 8 and 9). Her visionary cyborgism is fully aware of the sexual and racial difference. In a interview for the CNN, she

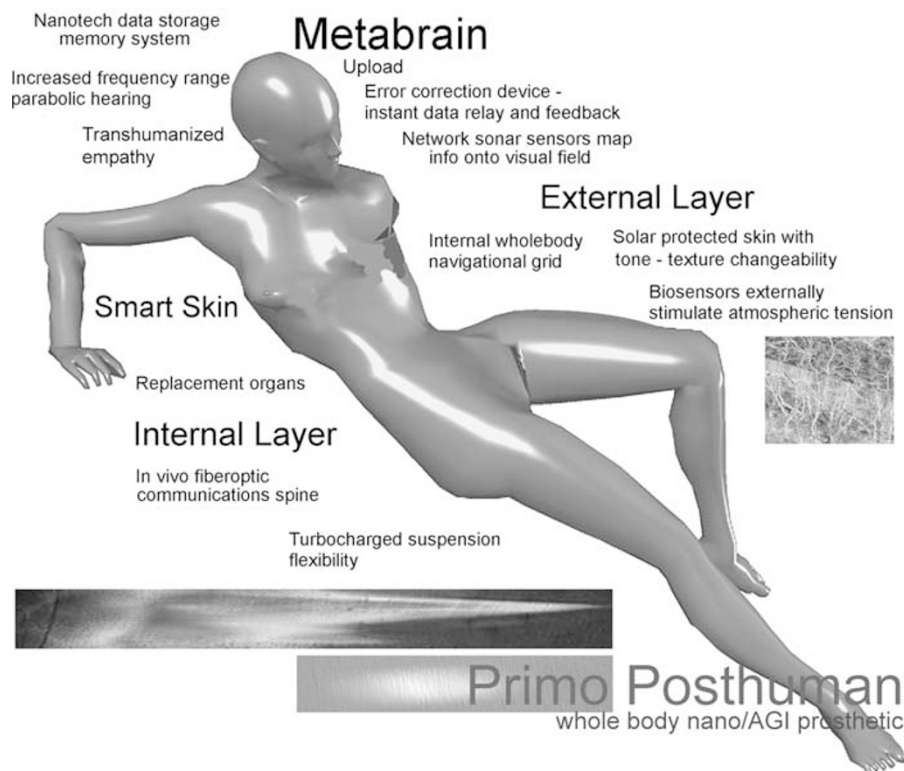


Figure 7 | Primo Posthuman (2005), by Natasha Vita-More.

Note: Image reproduced with permission of Natasha Vita-More; Copyright (@ Natasha Vita-More, 2016). This figure is not covered by the CC-BY 4.0 licence.



Figure 8 | Histology of the Different Classes of Uterine Tumors (detail), 2006.

Source: Image reproduced by permission of Wangechi Mutu; copyright (@ Wangechi Mutu, 2016). This figure is not covered by the CC-BY 4.0 license.

stated: “what I’ve been trying to sort of do is (...) give the women a kind of strength that the machine supposedly represents for the man. It’s like they’re taking it back and they become these cyborgs, these fierce female cyborgs” (Mutu, 2011: n. pag.). US artist Denenge Akpem is both an artist and an academic theorist. She has done extensive work on divulging the concept of Afrofuturism, which she defines as “an exploration and methodology of liberation, simultaneously both a location and a journey” (Akpem, 2011: n. pag.). In her performative installation “Rapunzel Revisited: An Afri-Sci-Fi Space Sea Siren Tale” (2006), she transforms herself into a hybrid human-jellyfish, with lighted fibre-optic tentacles. Her work re-defines concepts of race, gender and humanity with a holistic approach. Jamaican-born Renée Cox (b. 1960) is a photographer who stages her own body in self-portraits which deconstruct racist and sexist stereotypes. In the series “Raje” (1998) she poses as her alter-ego, Raje, a superheroine who fights for racial justice. Between the many other afrofuturist posthuman sisters I would like to mention: Kara Walker (b. 1969), Fatimah Tuggar (b. 1967) and Tanekeya Word (b. 1983).

Related to Afrofuturism is Chicanafuturism, a term coined in 2002 by Catherine S Ramírez to explore the relation between the Chicana experience and the future, with a special emphasis on its technological and scientific developments (Ramírez, 2002). Chicanafuturism also explores a re-definition of the human through Latin American history and exploitation: “Chicanafuturism articulates colonial and postcolonial histories of *indigenismo*, *mestizaje*, hegemony, and survival” (Ramírez, 2008: 187). Some of the artists who delve into this area of investigation are: Alma Lopez, Marion C Martinez (1954), Coco Fusco (1960) and Laura Molina (1957), whose character “Cihualyaomiquiz, The Jaguar”, created in 1994, represents an avenging Mexican-American super heroine ready to die for social justice (see Fig. 10). Before ending



Figure 9 | All Rosey (2003).

Source: Image reproduced by permission of Wangechi Mutu; copyright (@ Wangechi Mutu, 2016). This figure is not covered by the CC-BY 4.0 license.

the third and last section of this genealogy on cyberfeminist posthuman artists, I would like to mention some of the many whose works, for a matter of space, I could not present. Between the others: media theorist and artist Sandy Stone (b. 1936), digital artist Linda Dement (b. 1959); video-game artist Mary Flanagan (1969), video-artist Shirin Neshat (1957); photographer Shadi Ghadirian (1974) and her work *Ctrl+Alt+Del* (2006); US performer Narcissister and her revisitation of the masquerade.

Concluding remarks

This genealogy elaborates on the richness and variety of the artists presented, emphasizing the contribution of female radical imagination to the present and to the forthcoming times. Starting with the main avant-garde movement of the first half of the twentieth century, Futurism, Dadaism and Surrealism, this genealogy passes through the sixties and seventies, with the feminist exploration of the body opened by performance art. It lastly takes into account the nineties and its radical re-elaboration of the self: from Cyberfeminism and its revisitation of technology, to the insights of bioart; from critical techno-orientalist readings of the future, to its political and social articulations, pointed out by Afrofuturism and Chicanafuturism. The great variety of works, inputs and perspectives presented, demonstrates the need to maintain a comprehensive methodological approach of the posthuman, avoiding cultural appropriations and discriminatory erasures. I would like to think of this article as an attempt



Figure 10 | Cihualyaomiquiz, *The Jaguar* (1994), by Laura Molina.

Note: Image reproduced with permission of Laura Molina; Copyright (@ Laura Molina, 2016). This figure is not covered by the CC-BY 4.0 licence.

to pay homage to all of these visionary artists, whose works have radically contributed to the configuration of posthuman aesthetics and, more in general, to the manifestation of the posthuman turn.

Notes

- 1 In ORLAN's Website, under "Frequently Asked Questions and Common Mistakes", it is stated that ORLAN is written in capital letters.
- 2 The posthuman is an umbrella term for different types of movements, including Posthumanism, Transhumanism, New Materialism, Antihumanism and Metahumanism. On the differences and relations between all these movements, see Ferrando (2014a). On the specific differences between Posthumanism and Transhumanism, see Ranisch and Sorgner (2014).
- 3 Such criticism is emphasized in the title of Tania Modleski's homonymous essay, 1991.
- 4 In Rosi Braidotti's words: "to see is the primary act of knowledge and the gaze the basis of all epistemic awareness" (Braidotti, 1994: 80).
- 5 It is also important to stress that the notion of "art" is based on ethnocentric canons. As emerged from postcolonial critiques, only the artistic production of Western civilization has been accounted in the discipline broadly defined as "History of Art", while art originated in other parts of the world, when not regarded as "craft", has been generically labelled as "ethnic art".
- 6 Roberto Campa, the President of the Italian Transhumanist Association, has stated: "siamo gli eredi del futurismo italiano e russo, siamo neofuturisti, anche se il prefisso 'neo' non dovrebbe nemmeno essere necessario. Il futurismo è per definizione un movimento di idee e d'azione che rinnova perennemente se stesso, guardando sempre avanti" (Guerra, 2009).
- 7 In the late sixties, the neologism "herstory" was coined as a revisitation of "history", which, even though it originally derives from ancient Greek ἵστωρ (witness) and so it did not embed the masculine form in its signifier, perfectly suited its signified, in a sort of semiotic freudian slip. In their work "Words & Women", Casey Miller

- and Kate Swift wrote: "When women in the movement use *herstory*, their purpose is to emphasize that women's lives, deeds, and participation in human affairs have been neglected or undervalued in standard histories" (Miller *et al.*, 1991: 146). In this passage, I am using the term "herstory" to refer specifically to the historical experience of women, which was mostly left unrecorded, but have been traced using alternative means, such as oral history, private diaries and handcrafts.
- 8 Written in 1910, it was first published in "Guerra sola igiene del mondo" (1915/2006, b) (*Ibid.*: 85–88).
 - 9 Written in 1912 by Valentine de Saint-Point as a response to Marinetti's Futurist Manifesto (1909/2006), it states: "Women are Furies, Amazons, Semiramis, Joans of Arc, Jeanne Hachettes, Judith and Charlotte Cordays, Cleopatras, and Messalinas: combative women who fight more ferociously than males, lovers who arouse, destroyers who break down the weakest and help select through pride or despair" (de Saint-Point, 1912/2001: 214).
 - 10 In "The Foundation and Manifesto of Futurism", Marinetti (2006: 14) wrote: "We wish to glorify war—the sole cleanser of the world—militarism, patriotism, the destructive act of the libertarian, beautiful ideas worth dying for, and scorn for women".
 - 11 In 2007 she became the world's most expensive female painter: her painting "Picking Apples" (1909) was sold for £4.9 million.
 - 12 I have discovered Barbara and her interest for Luce Irigaray, thanks to Prof. Francesca Brezzi, author of the exhaustive essay: "Quando il futurismo è donna. Barbara dei colori" (2009).
 - 13 It is interesting to note that, in the view of German philosopher Peter Sloterdijk: "Dada is basically neither an art movement nor an anti-art movement, but a radical 'philosophical action'. It practices the art of a militant irony" (1987: 391).
 - 14 For an articulated presentation of the cyborg and the uncanny, see Grenville (2001).
 - 15 Such roots were already pointed out by Jennifer González in the article "Envisioning Cyborg Bodies: Notes from Current Research" (1995).
 - 16 "The cyborg was, paradoxically, also a creature on which many Weimar artists and other cultural producers could project their utopian hopes and fantasies" (Biro, 2009: 1).
 - 17 On the other side, sexism was not affected by dada anticonventional attitude. As Makela (1997: 119) has underlined: "despite the lip service they all paid to women's emancipation, most of the male dadaists ultimately accorded Höch professional achievements little if any genuine respect".
 - 18 It is worth noticing that nowadays, in the era of the intelligent machines, the use of the word "automata" has been related to the capability of operating without external control, while this other meaning—the activity of processing without conscious thoughts—has been largely dismissed. The question "Can a machine have a consciousness?", which has been the centre of debate in the Philosophy of AI, could be interestingly reformulated, in a surrealist mode, as: since AI is free from the conscious mind, can it access a different kind of knowledge?
 - 19 I thank Neil Zukerman and the CFM Gallery for the precious insights on Leonor's work, art and personality.
 - 20 First published in 1976, this essay was reprinted in a special issue of "Science Fiction Studies" in November 1991, together with the critical responses to it by other theorists, including Katherine Hayles.
 - 21 "Crash" is a novel about symphorophilia and mechanophilia (Ballard, 1973).
 - 22 For instance, in the cover of the book "Human Enhancement" (Bostrom and Savulescu, 2009), a series of hyper-muscular men is portrayed in every position of canonical weight lifting, in an over-simplification of the topic and an universalization of specifically male characteristics as universal symbols of enhancement.
 - 23 As Sandy Stone (1991/2000: 524) phrased it in her essay "Will The Real Body Please Stand Up?": "No matter how virtual the subject may become, there is always a body attached".
 - 24 Literary theorist Ihab Hassan (1925–2015) was among the first to use the term "posthuman" in the article "Prometheus as Performer: Toward a Posthumanist Culture?" (1977), to then develop it in "The Postmodern Turn" (1987).
 - 25 For instance, one of the subchapters of Braidotti's essay "CyberFeminism with a Difference" (1996) focusses specifically on "Posthuman Bodies".
 - 26 From a feminist perspective, it is surprising how bioart does not acknowledge any of its roots to women's history of motherhood. The female body has been the site of creation of life since the beginning of humankind. More in general: "Women's bodily experiences of menstruation, coitus, pregnancy, and childbirth challenge the boundaries between body and external world" (Nicholson, 1997: 150).
 - 27 As it does not hold an immunitary system, the tissue produced will die as soon as it is touched to be displayed. Another example of such an approach is the case of the transgenic rabbit "Alba" (designed by bioartist Eduardo Kac in 2007), whose life and death remains undocumented.
 - 28 It is important to note that ORLAN does not classify her work as Body Art: "As distinct from 'Body Art', Carnal Art does not conceive of pain as redemptive or as a source of purification. (...) Carnal Art is not self-mutilation" (ORLAN, 1989/2010: 28). On the use of capital letters, see note 1.
 - 29 ORLAN herself uses this term in her Manifesto: "Carnal Art loves parody and the baroque, the grotesque and the extreme" (*Ibid.*: 29).
 - 30 The term was first coined by Morley and Robins (1995).
 - 31 I would like to note that these artists do not generally label themselves as "techno-orientalist", with some exceptions (Ueno 2001). Here, the term is employed to focus critically both on technology and on the construction of the "Orient" (Said, 1978) from specific Asian standpoints, thus promoting a greater cross-cultural awareness.
 - 32 Dery (1993) introduced it in his essay "Black to the Future: Interviews with Samuel R. Delany, Greg Tate, and Tricia Rose".

References

- Akpm D (2011) Are you ready to alter your destiny? Chicago and Afro-Futurism, Part 1 of 2. *Chicago Art Magazine* online publication 2 July, Chicagoartmagazine.com.
- Bakhtin M (1941/1965/1984) *Rabelais and His World*. Indiana University Press: Bloomington, IN.
- Ball H (ed) (1916) *Dada Manifesto*. In: Ball H *Flight Out of Time: A Dada Diary*. Viking Press: New York, pp 219–221.
- Ball H (1974) *Flight Out of Time: A Dada Diary*. Viking Press: New York.
- Ballard JG (1973) *Crash*. Jonathan Cape: London.
- Baudrillard J (1991) Ballard's crash. *Science Fiction Studies*; 55 (18): 313–320.
- Baudrillard J ([1981] (1994)) *Simulacra and Simulation*. The University of Michigan Press: Ann Arbor, MI.
- Berghaus G (ed) (2006) *Critical Writings: F. T. Marinetti*. Farrar, Straus & Giroux: New York.
- Biro S (2009) *The Dada Cyborg: Visions of the New Human in Weimar Berlin*. The University of Minnesota: Minneapolis, MN.
- Bostrom N and Savulescu J (2009) *Human Enhancement*. Oxford University Press: Oxford.
- Braidotti R (1994) *Nomadic Subjects: Embodiment and Sexual Difference in Contemporary Feminist Theory*. Columbia University Press: Cambridge, UK.
- Braidotti R (1996) Cyberfeminism with a difference. *New Formations*; 29 (Autumn): 9–25.
- Braidotti R (2013) *The Posthuman*. Polity: Cambridge, UK.
- Breton A ([1924/1972] 1972) *Manifestoes of Surrealism*. University of Michigan Press: Ann Arbor, MI.
- Brezzi F (2009) *Quando il Futurismo è Donna: Barbara dei Colori*. Mimesis: Milano, Italy.
- Butler J ([1990] (1999)) *Gender Trouble: Feminism and the Subversion of Identity*. Routledge: New York.
- Clynes ME and Kline NS (1960) Cyborgs and space. *Astronautics*; 5 (9): 26–27, 74–76. Reprinted. In: Hables Gray, C and Figueroa-Sarriera, HJ (eds) (1995), 29–34.
- Crenshaw K (1989) Demarginalizing the intersection of race and sex: A black feminist critique of antidiscrimination doctrine, feminist theory and antiracist politics. In: *University of Chicago Legal Forum*. University of Chicago: Chicago, IL, pp 139–167.
- De Saint-Point V (1912/2001) Manifesto of futurist woman. In: Caws MA (ed) *Manifesto: A Century of Isms*. University of Nebraska Press: Lincoln, NE, pp 213–216.
- Dery M (1993) Black to the future: Interviews with Samuel R. Delany, Greg Tate, and Tricia Rose. In: Dery M (ed) *Flame Wars: The Discourse of Cyberculture*. Duke University Press: Durham, NC, pp 179–222.
- Ferrando F (2012) Towards a posthumanist methodology: A statement. *Frame Journal for Literary Studies*; 25 (1): 9–18.
- Ferrando F (2014a) Posthumanism, transhumanism, antihumanism, metahumanism, and new materialisms: Differences and relations. *Existenz*; 8 (2): 26–32.
- Ferrando F (2014b) The body. In: Ranisch R and Sorgner SL (eds) *Post- and Transhumanism: An Introduction*. Peter Lang Publisher: New York, pp 213–226.
- Foucault M ([1975] (1995)) *Discipline and Punishment: The Birth of the Prison*. Vintage Books: New York.
- Fuentes C and Kahlo F (1995) *The Diary of Frida Kahlo: An Intimate Self-Portrait*. Abrams: New York.
- Garner SB (2007) The gas heart: Disfigurement and the dada body. *Modern Drama*; 4 (50): 500–516.
- Gehlen A ([1957] (1980)) *Man in the Age of Technology (European Perspectives)*. Columbia University Press: New York.
- Goldberg R (1998) *Performance: Live Art Since the '60s*. Thames and Hudson: London.
- González J (1995) Envisioning cyborg bodies: Notes from current research. In: Hables Gray C and Figueroa-Sarriera HJ (eds) *The Cyborg Handbook*. Routledge: New York, pp 267–279.
- Goy B (1990) Marina Abramović. *Journal of Contemporary Art*; online publication June 1990: Jca-online.com.
- Grenville B (ed) (2001) *The Uncanny: Experiments in Cyborg Culture*. Arsenal Pulp Press: Vancouver, BC.
- Guerra R (2009) Tutto il Potere ai Cyborg! Intervista a Riccardo Campa. *Associazione Italiana Transumanisti*; online publication 26 January 2012: Transumanisti.it.

- Hables Gray C and Figueroa-Sarriera HJ (eds) (1995) *The Cyborg Handbook*. Routledge: New York.
- Halberstam J and Livingston I (eds) (1995) *Posthuman Bodies*. Indiana University Press: Bloomington, IN.
- Hara M (2001) Others in the third millennium. In: Grenville B (ed) *The Uncanny: Experiments in Cyborg Culture*. Arsenal Pulp Press: Vancouver, BC, pp 237–247.
- Haraway D (1985) Manifesto for cyborgs: science, technology and socialist feminism in the 1980s. *Socialist Review*; 80: 65–108.
- Haraway D (2007) Speculative fabulations for technoculture's generations: Taking care of unexpected country. In: Piccinini P (ed) (*Tender*) *Creature Exhibition Catalogue*; Artium. Online publication 2007 Patriziapiccinini.net.
- Hassan I (1977) Prometheus as performer: Toward a posthumanist culture? *The Georgia Review*; 31 (4): 830–850.
- Hassan I (1987) *The Postmodern Turn: Essays in Postmodern Theory and Culture*. Ohio State University Press: Columbus, OH.
- Hayles NK (1995) The life cycles of cyborgs: Writing the posthuman. In: Hables Gray C and Figueroa-Sarriera HJ (eds) *The Cyborg Handbook*. Routledge: New York, pp 321–335.
- Hayles NK (1999) *How We Became Posthuman: Virtual Bodies in Cybernetics, Literature, and Informatics*. The University of Chicago Press: Chicago, IL.
- Horn R et al (1993) *Rebecca Horn*. Guggenheim Museum: New York.
- Kettenmann A (1993) *Frida Kahlo, 1907–1954: Pain and Passion*. Taschen: Köln, Germany.
- Kitano N (2007) Animism, Rinri, Modernization: The Base of Japanese Robotics. Roboethics, ICRA'07 International Conference on Robotics and Automation, Rome (Italy) online publication April. Web: Roboethics.org.
- Leonard EB (2003) *Women, Technology, and the Myth of Progress*. Prentice Hall: Upper Saddle River, NJ.
- Makela M (1997) The misogynist machine: Images of technology in the work of Hannah Höch. In: Von Ankum K (ed) *Women in the Metropolis: Gender and Modernity in Weimar Culture*. University of California Press: Berkeley, CA, pp 106–127.
- Marinetti FT (1909/2006) The futurist manifesto. In: Berghaus G (ed) *Critical Writings: F. T. Marinetti*. Farrar, Straus & Giroux: New York, pp 13–16.
- Marinetti FT (1912/2006) Technical manifesto of futurist literature. In: Berghaus G (ed) *Critical Writings: F. T. Marinetti*. Farrar, Straus & Giroux: New York, pp 107–119.
- Marinetti FT (1915/2006a) Extended man and the kingdom of the machine. In: Berghaus G (ed) *Critical Writings: F. T. Marinetti*. Farrar, Straus & Giroux: New York, pp 85–88.
- Marinetti FT (1915/2006b) War, the sole cleanser of the world. In: Berghaus G (ed) *Critical Writings: F. T. Marinetti*. Farrar, Straus & Giroux: New York, pp 53–54.
- McLuhan M (1964) *Understanding Media: The Extensions of Man*. Signet Books: New York.
- Miller C and Swift K ([1976] (1991)) *Words & Women: New Language in New Times*. HarperCollins Publishers: New York.
- Modleski T (1991) *Feminism without Women: Culture and Criticism in a Postfeminist Age*. Routledge: New York.
- Morley D and Robins K (1995) *Spaces of Identity: Global Media, Electronic Landscapes and Cultural Boundaries*. Routledge: London.
- Mutu W (2011) Artist Wangechi Mutu: My lab is the female body. *CNN. African Voices*. Online publication 19 July, Cnn.com.
- Nicholson L (ed) (1997) Gynocentrism, women's oppression, women's identity and women's standpoint. In: *The Second Wave: A Reader in Feminist Theory*. Routledge: New York, pp 147–151.
- ORLAN. (1989/2010) Carnal art manifesto. In: Donger S and Shepherd S (eds) *ORLAN: A Hybrid Body of Artworks*. Routledge: Oxon, UK, pp 28–29.
- Osthoff S (1997) Lygia Clark and Helio Oiticica: A legacy of interactivity and participation for a telematic future. *Leonardo*; 4 (30): 279–289.
- Pastourmatzi D (2009) Flesh encounters biotechnology: Speculations on the future of the biological machine. In: Detsi-Diamanti Z, Kitsi-Mitakou K and Yiannopoulos E (eds) *The Future of the Flesh: A Cultural Survey of the Body*. Palgrave Macmillan: New York, pp 199–219.
- Ramírez C (2002) Deus ex Machina: Tradition, technology, and the chicanafuturist art of Marion C. Martinez. *Aztlan: A Journal of Chicano Studies*; 2 (29): 55–92.
- Ramírez C (2008) Afrofuturism/Chicanafuturism: Fictive Kin. *Aztlan: A Journal of Chicano Studies*; 1 (33): 185–194.
- Ranisch R and Sorgner SL (eds) (2014) *Post- and Transhumanism: An Introduction*. Peter Lang Publisher: New York.
- Rosemont P (ed) (1998) All my names know your leap: Surrealist women and their challenge. In: *Surrealist Women: An International Anthology*. The University of Texas Press: Austin, TX, pp XXIX–LII.
- Said E (1978) *Orientalism*. Random House: New York.
- Sandy Stone AR (1991/2000) Will the real body please stand up? Boundary stories about virtual cultures. In: Bell D and Kennedy BM (eds) *The Cybercultures Reader*. Routledge: London, pp 504–528.
- Shiva V (1995) Beyond reductionism. In: Shiva V and Moser I (eds) *Biopolitics: A Feminist and Ecological Reader on Biotechnology*. Zed Books: London, pp 267–284.
- Sloterdijk P ([1983] (1987)) *Critique of Cynical Reason*. University of Minnesota Press: Minneapolis, MN.
- Sobchack V (1991) Baudrillard's obscenity. *Science Fiction Studies*; 55 (18) online publication November, Depauw.edu.
- Solon O (2011) Bioart: The Ethics and Aesthetics of Using Living Tissue as a Medium. *Wired Magazine* online publication 28 July, Wired.com.
- Spivak G (1987) *In Other Worlds: Essays in Cultural Politics*. Routledge: London.
- Stiegler B (1998) *Technics and Time, 1: The Fault of Epimetheus*. Stanford University Press: Stanford, CA.
- Thevoz M (1984) *The Painted Body*. Rizzoli: New York.
- Tibol R (1993) *Frida Kahlo: An Open Life*. University of New Mexico Press: Albuquerque, NM.
- Ueno T (2001) Japanimation and techno-orientalism. In: Grenville B (ed) *The Uncanny: Experiments in Cyborg Culture*. Arsenal Pulp Press: Vancouver, BC, pp 223–231.
- Viereck GS (1929) What life means to Einstein: An interview. *The Saturday Evening Post*, 202, 26 October, 117, online publication: Saturdayeveningpost.com.
- Vita-More N (2005) Primo Posthuman. *Posthuman Guide*; online publication 2005: Natasha.cc.
- Vita-More N (2011) Bringing art/design into the discussion of transhumanism. In: Hansell GR and Grassie W (eds) *Transhumanism and Its Critics*. Metanexus: Philadelphia, PA, pp 70–83.
- Waldby C (2000) *The Visible Human Project: Informatic Bodies and Posthuman Medicine*. Routledge: London.
- Webb P (2009) *Sphinx: The Life and Art of Leonor Fini*. Vendome: New York.
- Wetterwald E (2003) Vestiges of the future. In: Bul L (ed) *Monsters*. Les Presses du réel: Dijon-Quetigny, France, pp 177–179.
- Wolfe C (2010) *What is Posthumanism?* *Posthumanities Series*. University of Minnesota Press: Minneapolis, MN.

Data Availability

Data sharing is not applicable to this article, as no datasets were generated or analysed during the current study.

Acknowledgements

This article is based on a talk delivered by the author at the Conference “Audiovisual Posthumanism” (University of the Aegean, Greece, 2010). The author would like to thank the organizers and participants for their constructive feedback. Thanks are also due to Prof. Achille Varzi, Prof. Evi Sampanikou, Ellen Delahunty Roby, Isabel De Lorenzo, Natasha Vita-More, ORLAN and Maëva Gomez, Laura Molina, Neil Zukerman and the CFM Gallery, Wangechi Mutu and Astrid Meek.

Additional Information

Competing interests: The author declares no competing financial interests.

Reprints and permission information is available at http://www.palgrave-journals.com/pal/authors/rights_and_permissions.html

How to cite this article: Ferrando F (2016) A feminist genealogy of posthuman aesthetics in the visual arts. *Palgrave Communications*. 2:16011 doi: 10.1057/palcomms.2016.11.



This work is licensed under a Creative Commons Attribution 4.0 International License. The images or other third party material in this article are included in the article's Creative Commons license, unless indicated otherwise in the credit line; if the material is not included under the Creative Commons license, users will need to obtain permission from the license holder to reproduce the material. To view a copy of this license, visit <http://creativecommons.org/licenses/by/4.0/>