

Prosthetics Imagery: Negotiating the Identity of Enhanced Bodies

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Abstract

'Prosthetics Imagery: Negotiating the Identity of Enhanced Bodies' is an explorative journey of an art gallery space, following social narratives of perfecting the human body through technological intervention. It is an invitation to re-consider notions of 'normality', 'autonomy' and 'beauty'.

Motivated by the need to create an open, transdisciplinary debate on the controversial subject of human enhancement, I argue that bioart can be used as tactical media for exposing the sociocultural narratives that currently frame technical development. For exploring how 'identity' becomes a poly-semantic concept, negotiated at the intersection between biology and technology, my chosen case-study is the *HUMAN+: The Future of Our Species* (2011) exhibition from Science Gallery, Trinity College, Dublin – namely the artistic photo series by Howard Schatz of Aimee Mullins and her designer-signed prosthetics.

Setting the scene: an invitation to rethink Otherness

In 1999, during London Fashion Week, Aimee Mullins was a runway model for designer Alexander McQueen. Few knew that the long brown boots with baroque design were actually wooden legs, and that Mullins was a double-amputee. Besides being a double champion sprinter in the Paralympics, a model and an actress, Aimee Mullins is also a world-famous activist in re-branding 'invalidity', transforming the category of *unable* into *superable*.

Displaying twelve leg prototypes (designed by Alexander McQueen) during a highly popular, viral Internet *Ted* talk, Mullins describes her own incentive to 'move away from the need to replicate human-ness as the only aesthetic ideal' (Mullins 'Aimee Mullins and her 12 pairs of legs') as a plea for an idealised form of free and unified humanity. Her public appearances usually provoke the public and generate ethical discussions; Mullins succeeded in opening a battlefield not only for value-sensitive design in human

enhancement devices, but also in changing the conventional parameters of beauty – with deep echoes questioning the social *status quo* defining a ‘lacking’ body as a disabled body.

My research comes from a fascination with how hybrid, technologically modified human bodies are imagined, represented, and inscribed with politics and power. In particular, I will examine the *Portraits of Aimee Mullins* exhibit from the *HUMAN+: The Future of our Species* curatorial project (Sciencegallery.com), at Dublin Science Gallery, in 2011. The *Portraits of Aimee Mullins* invites rich critical interrogation; a double amputee, Mullins does not overcome her disability by hiding it, but instead re-fashions her own body, exploring new human identities. Doing so, she can be seen to open new ground for exploring the social acceptability of enhancement practices and technologies.

From development to implementation, technology is anything but neutral; values constantly shape scientific practices and technological artefacts. Twenty-first century technologies are already transforming our everyday life, perhaps irreversibly affecting values, beliefs, mental models and social interactions. The fusion of digital and biological technologies expands the realms of the (scientifically) possible, ushering in new breakthroughs, while simultaneously signalling new ethical and moral concerns.

Consider the already existing examples of enhancement technologies that are currently challenging the public domain in fields like medicine, design, education and law: limb prosthetics with additional functions to natural limbs, engineering of intelligent artefacts, personality modification through pharmaco-therapy, deep brain stimulation, tissue engineering, gene doping, patenting life and even designing babies. Most importantly, as the convergence of *GRIN* technologies – genetics, robotics, information technology and nanotechnology – is expected to enable us to create anything we please (Garreau 120), human enhancement may even change us at an ontological level. New identity patterns could emerge, softening the social precepts of the ‘normal’ and thus changing the power relations that assess Otherness.

Therefore, this article approaches two primary questions: how might human enhancement practices construct new forms of Otherness, re-negotiating identity? And how can artistic work influence the socio-cultural perception of enhanced bodies? At the core

of this analysis is the theoretical conceptualisation of bioart (art using life as a medium) and an examination of the role of social imaginaries (a fixed set of normative assumptions, corresponding to a specific society). In the following, I will sketch an overview of the institutional setting of displaying the *Portraits of Aimee Mullins*, in order to explore the gallery as an empowering instrument of scenario-making, using the concept of social narratives. Continuing with a focus on prosthetics as enhancement artefacts, I will be framing *Portraits of Aimee Mullins* in the context of biopolitical theory. I will analyse the subjective construction of normality of the human body, in order to assess bioart as a practice that changes the condition of spectatorship, empowering the viewer to reassess his/her own identity.

The objective of *HUMAN+* is to mediate universal and contextual modes of knowledge-making. In a critical and engaging way, the *HUMAN+* exhibition reveals socio-technical scenarios, visions and expectations inspired by the promises and threats of human enhancement technologies. It explores the philosophy of human-media relations in terms of poly-semantic conceptualisations of identity, personhood, autonomy, accountability and privacy in a *HUMAN+* era.

Described by Michael John Gorman, the Science Gallery Director, as ‘a combination of a sweet shop and a pharmacy, an Alice-in-Wonderland world of pills, promises and prosthetics’ (7), the *HUMAN+* is a ‘state-of-the-art public participation tool’. Attempting to frame a snapshot of the intertwined relations between the social, the biological and the technical, the gallery can be seen to participate in the construction of these relations, as an institutional actor. It becomes part of shaping the discourse by unsettling the viewers and putting moral imagination at work. In the following, I will start by depicting the context of uncertainty in relation to socio-technical developments in order to show that imaginative exercises are essential at early stages of innovation.

Opening up a field of speculation: fictional insights into real technological developments

According to Donna Haraway (“The Promises of Monsters”), nature itself is not an objective ‘given’, but a negotiation field, a trading zone;

it has a constructed character, rather than a simple descriptive facticity. Analysing how scientific practices are continuously shaped by sociocultural practices and tacit knowledge, Haraway's 'biopolitics of postmodern bodies' explores 'the ways in which the notion of an agential, intentional, self-aware and autonomous subject is variously instituted into a range of contexts within contemporary technoscience' (Thacker 305). However, starting with an intense medicalisation of society (Conrad), the distinction between 'making people better' and 'making better people' becomes a problematic one. Notions of *normality* in terms of intelligence, abilities and behaviour are constantly shifting historically and culturally, now being at the border of reshaping the very definition of *humanity*. Consequently, a new set of ethical and political questions emerge upon life fulfilment (for example prolonged lifespan, enhanced body and mind functions, potential to genetically redesign ourselves or our children), thus opening new paths for the pluralisation and diversifications of health norms as social conditions. Media productions and science fiction literature propose images of enhanced humans as transhumans (humans with distinguishable non-human characteristics, such as inter-species traits) or posthumans (beings that completely surpassed the human condition in a new evolutionary era). How can we assess the ontological differences between these categories, and what will be the social status of unenhanced humans?

A possible answer is given in *The Social Control of Technology*, where David Collingridge explains how, at an early technological development stage, when applications are still in formation and thus can be influenced in one direction or another, we usually lack the relevant knowledge for deciding the best direction for society. In the case of human enhancement, the intertwining of biology and technology opens not only ethical and scientific uncertainty about shaping one's identity but also new moral concerns in political, philosophical, cultural and aesthetic debates. The possibility of changing humans at the somatic, cognitive and even existential level opens 'the phenomena of the unclassifiable', drawing on a liquid normative culture (as philosopher Zygmunt Bauman defined late modernity) with complex ethical questions that cannot be answered.*

* See Zygmunt Bauman 'Liquid Modernity'.

In the frame of the *HUMAN+* exhibition, I argue that artistic exercises of imagination and scenario making are part of a process of early reflection, enriching the ethical assessment of emerging technologies. With its speculative approach, bioart can be read as an empowering tool for gallery-goers, encouraging them to question not only the scientific habits of thinking, but also social and political assumptions surrounding technologically modified biologies (such as foreignness, or of being 'less than a human').

Heralding the human fetish for competition and perfection, the debate on human enhancement is constantly exposed to ambivalence between fiction and fact. Even if some enhancement technological applications do not yet exist in material reality, in the form of 'dreams, with all their metaphysical, ideological, and popular and other dimensions, they are already' here (Dupuy 243). Fiction draws a boundary-pushing playground, 'kick-starting our thinking' (Garreau 109-111). The *HUMAN+* exhibition explores the underlying social assumption behind enabling technologies (or, in Žižek's terms, the 'unknown knowns' (*The Reality of the Virtual*) – the pervasive values invisibly interfering with the knowledge-making process) as fictionalised truths. The speculative approach stimulates critical awareness, thus offering a locus for rehearsing a moral response towards a possible state of facts, before the facts have even been established.

From utopian perspectives to apocalyptic scenarios, opponents and proponents of human enhancement have raced to offer 'collected fables of the future' (Garreau 110). Valuable resources at a very early stage of socio-technical development, these stories not only unfold possible consequences of our current decisions, but also expose the narratives we live by and the way they shape our perception.*

Deliberative processes using scenario-making techniques are based on the idea that stories play a vital role in our personal and social lives. Narratives offer thinking structure for organising experiences that otherwise might seem ungraspable. This remains valid in the context of human enhancement – where each future scenario is an attempt to tame the uncommon; an exercise of coherence, of integrating Otherness or the Indefinable; an attempt to locate things and, most importantly, our own moral position in relation to them.

* See Lakoff and Johnson 'Metaphors we live by'.

Demystification of scientific knowledge requires new forms of praxis; thus, in epistemological terms, I understand the *HUMAN+* exhibition as an institutional context for *meta-knowledge* (Grunwald 2004): knowledge about the creation of knowledge, namely social assumptions, scientific premises, conditions of validity, tensions and uncertainties of decision-making and ethical evaluation of enabling technologies. However, the chosen approach is to connect different 'imagined worlds' (Appadurai 7) across the scientific and artistic knowledge-making communities, unfolding their vocabularies of engagement and justification grammars.

As an attempt to advance the critical discussion on normative ambiguity, connecting the 'imagined worlds' across the scientific and artistic knowledge-making communities might seem uncertain work. Arjun Appadurai's 'social imaginaries' (*Modernity at Large*), inspired by Benedict Anderson's 'imagined communities' (*Imagined Communities*), defines imagination as a social practice: 'imagination is now central to all forms of agency, is itself a social fact, and is the key component of the new global order' (Appadurai 31). Therefore, in the context of bioart, I argue that understanding how 'fantasy often runs away with fact' (Hagoort 'Cognitive Perfection') frames each gallery-goer's imagination as a preamble form of agency. The reason for linking two theoretical discourses, social imagination and agency, is to reveal how imagination can potentially be a premise of agency.

Using life as an artistic medium, bioart reveals the affective charge of enhancement practices, along with modes of crisis and concern that, in Robert Mitchell's view, are often ignored by both lay and expert decision-makers. It thus impacts on the perception of spectators by creating critical consciousness (63). Allowing the viewer to have the position of 'experimenter' of the new identities represented (*ibid*), bioart's means of identification change the condition of spectatorship. According to Mitchell, bioart creates an *embodied sense of spectatorship*; viewers become instantly aware of their status as biologic entities and the socio-political capital attached.*

* The regime of spectatorship changes when the subject (the owner of the gaze) recognises itself in the object of the gaze: something that could be interpreted as an unsettling 'coming-out of one's self' and a simultaneous return. In the case of *Portraits of Aimee Mullins*, they witness the alteration of Life as they experience it. The biology of spectators is connected to that of the work of art; but life is

Bioart encourages a sense of life as emergence (Mitchell 11) and, by framing spectatorship as a medium, triggers a sense of becoming-a-medium (70). Mitchell places an emphasis on the embodied nature of the gallery-goers' experience, in the oscillation between an embodied sense of being-an-agent and an embodied sense of being-a-medium (71). In my interpretation, the becoming-a-medium and becoming-an-agent translate simultaneously a feeling of vulnerability and a feeling of empowerment. A feeling of vulnerability for being constituted and imagined (a moment of Althusserian understanding of oppression); a feeling of empowerment for being the owner of that imagination. The spectator, simultaneously a subject and an agent, is caught in-between.

In order to both narrow the focus on technologically-modified bodies and draw a contextual analysis of *Portraits of Aimee Mullins*, finally revealing its imagery potential for changing social narratives, I will depict one of the emerging ramifications of human enhancement: prosthetics, as a reframing of therapy versus enhancement. Prosthetic interventions increasingly extend the performance of human biology towards 'hyper-abilities', revealing a new consciousness of the human body. Aesthetically and functionally augmented, prosthetic devices demand a revolutionary re-territorialisation of the body, questioning things which might otherwise be taken for granted. In doing so, they produce an increased awareness not only of the body's potential, but also of its new limits in the context of enhancement, where the body exceeds its functionality, yet it remains biological.* The result is 'a strange body that is constantly surpassing itself, a body-more-than-a-body' (Thacker 268), no longer limited to the biological parameters and its material sources.

no longer a simple *fact* held in common by the gallery-goers and the represented enhanced bodies. In my interpretation, life's artistic exploration cancels its facticity. Being used as a medium, it becomes the subject of a transformative process.

* Often, there is no visible separation between the digital (software) and the physical (hardware) integration of technology within the body (wetware), hence the importance of studying the competing significances, representations and imaginations of the body as hybrid space, where boundaries between therapy (as a restorative practice) and enhancement (as an overcoming practice) are challenged. If medical treatment is regarded as assuring the functioning of the body on species-typical parameters, enhancement means moving beyond them (Daniels).

Giving up the therapeutic mind-set and accepting a re-contextualisation of the body results in considering its potential to be re-designed in a new configuration. In the following, I will argue that imagination is a precondition of agency, an empowering tool for exposing and perhaps radicalising the underlying social assumptions on normality and disability.

Imagination as a premise for agency: unsettling sociocultural assumptions in value-laden technological design

What we think of as ‘natural’ biological parameters cannot be reduced to socially neutral categories. Social narratives determine what is defined as a body or mental ability, whether a particular individual owns that ability (or has the *right* to), and how and to what extent should she/he be allowed to pursue it further. These narratives are undoubtedly powerful determinant factors of our reality once our actions are based on them. In this sense, as the conceptual battle takes place in the realm of the social imaginary, foresight narratives of enabling technologies are empowering tools; thus, imagination can be understood as a preamble form of agency.

I find an enriching perspective coming from *The De-Description of Technical Objects* (Akrich 1992), where technology sociologist Madeleine Akrich’s notion of the ‘design script’ of technological artefacts shows how devices have incorporated programmes of social action. Akrich provides an in-depth analysis of how the designers are ‘inscribing the vision of the world in the technical content of an object’ (Akrich 208), thus redirecting the user’s moral aspirations to political profiles. This view is recurrent in Knorr Cetina’s research on how ‘semiotics, rhetoric, and the metaphor of society as behavioural text, have led to specific methods of how facts are constructed’ (147). However, if designed artefacts are in conformity with specific social scripts (determined by cultural, economic and political assumptions), this does not mean that the end user cannot be empowered to shape these scripts.

Portraits of Aimee Mullins reveal her as simultaneously an active writer and a performer of the design script according to which her own body relates to the prosthetic, subverting the common views on amputee bodies. Her imaginative use of prosthetics challenges notions of therapy and enhancement, announcing the advent of bodies falling under new medical categories, changing

the way the body's biology is treated and perceived in relationship with technology. Mullins attaches to her cutting-edge prosthetics a strong aesthetic and political statement. By questioning whether disability is a body property or actually a social status granted by others, she stimulates 'new developed arenas of medical knowledge' (Conrad 15-16).

Therefore, being actively empowered to shape social imaginaries can be a way to answer our stringent ethical concerns on human nature and its newly performed identity. Born without shinbones, Aimee Mullins can be seen to refuse to subscribe her body to the social paradigm of 'lack', instead proposing creative alternatives to social assumptions. From wooden sculpted legs, optic fibre and even soil legs with growing potatoes, the imaginative experimentation with replacement tests and pushes possibilities for social acceptance.

The epistemic and normative boundaries between humans and nonhumans are challenged by the eccentric, the non-conformist, and the unusual analogy with feline-shaped prosthetics. In a radical sense, these types of enhancement offer significant non-human designed features. During her TED speech, Aimee Mullins stated that the *anthropomorphic shape* should no longer be a point of reference. The whimsical, fanciful devices reveal human enhancement as actually augmenting the body's capacity not only for functionality but also for expressivity (the blunt 'body ornamentation'), as a relational-conversational art between the viewer and the wearer.

Performing multiple identities and inviting prosthetic designers to 'stop compartmenting form, function and aesthetic' by walking casually with her wearable sculptures, Mullins opens the possibility of new expressions using her own ('lacking') body: 'Poetry matters. Poetry is what elevates the banal and neglected object to the realm of art' (Mullins 'Aimee Mullins and her 12 pairs of legs'). And poetry is not only present in the extensions she wears, or their gripping design, but also in her own 'lacking' body and the ways in which she performs it, with a constant ability to redefine what a body can be. By rejecting the conventional definition of 'less', the absence of limbs becomes an open-ended possibility to reconfigure the appearance and the functionality of human biology in unprecedented ways, thus disturbing social precepts.

As portrayed by Howard Schatz, Mullins' *Cheetah Legs* exemplifies a subverted social condition: the prosthetic limb does not represent a need to hide or replace the biological loss with a disguised normality (life *imitatio*). On the contrary, by refusing conformation to social expectations, it stands as a symbol of a power to create whatever it is that the wearer wants to create in that space.* What medical practice still labels as 'disabled' can now become architects of their own identities, redesigning their bodies from a place of empowerment (Mullins 'Aimee Mullins and her 12 pairs of legs').** Once again, imagination and artistic experimentation reveal a locus of agency, of ethical critique. From the line of thought of *Feminist Disability Studies*, 'this fantasy of the malleable body conforms to modernity's notion that the body is a neutral instrument of the omnipotent individual will, an instrument of agency that is both pliable and invulnerable, that we can control and alter' (Garland-Thomson 13).

By contrast, our 'able' bodies seem to bear more limited means of expression. Supportive technology for limb replacement is re-branded from simply maintenance to a complex augmentation of the body and hence its social construction and self-perception. Having replaced the visible priority of 'supporting' or 'assisting' as such, the basic idea of replacing function where it has been lost is not concealed, but enhanced with *value-sensitive design*. The aesthetic and value-laden choices can now be main drives in the development of prosthetic technology. The recent dramatic change

* Or, alternatively, opt for no substitute at all, showing how a 'lacking' female body is no less beautiful. Aesthetic value belongs not only to regulated, 'normalized subjects' (see Garland-Thomson *Integrating Disability, Transforming Feminist Theory*).

** With her carbon fibre cheetah legs, Mullins won two world records in her athletics career. However, vociferous critics debate technological augmentation as a possible threat to 'regular' athletes. Torbjörn Tännsjö makes a compelling reference to the sports philosopher Warren Fraleigh's notion of the 'sweet tension of uncertainty of outcome' (Tännsjö, 'Medical Enhancement' 320). Commenting on the tendency of applying prosthetics restrictions to avoid diluting the 'uncertainty' of victory, Tännsjö considers that 'it must have something to do with an aspect of the ethos which is not reducible to a simple matter of competition or aesthetics' (322). As a way of exploring human limits, the social substance of sports competitions is given by a notion of justice. Nevertheless, substituting therapy with enhancement and 'improving performance is *not* necessarily toxic to virtue. It simply shifts how virtue manifests' and thus does not deprive life from challenges (Caplan 206).

in prosthetics development demonstrates that ‘it is no longer a conversation about overcoming deficiency. It’s a conversation about augmentation. It’s a conversation about potential’ (Mullins ‘Aimee Mullins and her 12 pairs of legs’).

Subverting normality: the right to be unwell

Life as a concept became the new object of political reflection in the 1960-1970s. Michel Foucault’s ‘The Politics of Health in the Eighteenth Century’ (*The Foucault Reader*) defines the body as a biopolitical reality and depicts medicine as a biopolitical strategy. The philosopher described the ‘subtle colonization’ of medical knowledge (Esposito 27), showing how not only population as a living entity but also humans as species become the object of political power. As a writer who has explored power relations, Foucault revealed the biopolitical institutionalized mechanism of enforcing discipline upon individuals by taking control of their bodies (i.e. the *docile bodies* of militarized men, programmed in a correct utilization and posture of the body, or the birth-control policies initiated by the state). Modern biopolitics becomes a continuous attack on the possibility of politics (Vatter 7).

By questioning how far the individual will have the right to be unwell, genetically flawed or old, Foucault’s notion of biopower is highly relevant for the growing trend of the medicalization of society. This describes a process by which nonmedical problems become defined and treated as medical problems, usually in terms of illnesses and disorders (Conrad 4). In other words, nonconformity with social mandates related to identity, personal and social fulfilment (such as not having charisma) becomes pathologised and thus considered ‘curable’, without being *ipso facto* a medical problem (5-6).

Under the auspices of our constant drive for perfectibility, I will return to what is biopolitically framed as *imperfection*, exploring in the following the notion of disability; my argument will distinguish between (1) what is scientifically defined as the medical condition of disability and (2) its attached socio-cultural capital, one operating with images of a downgraded social status. The following paragraph will explore the potential of new medical categories to influence normative assumptions of the human body.

As depicted in the work of Italian contemporary philosopher

Roberto Esposito, *Bios: Biopolitics and Philosophy*, the disabled body has been territorialised by definitions of normality. Contingent on Judith Butler's *Precarious Life* and Jürgen Habermas' *The Future of Human Nature*, Esposito analyses the politicisation of biology through a 'paradigm of immunisation'. A passionate de-constructivist, he proposes *Bios* as a political philosophy of life, where life and politics circumscribe a paradigm of socio-political immunisation.

For Esposito, *Immunitas* is the opposite of *Communitas*. In the contemporary immunity paradigm, life is preserved only by being enclosed (Esposito 69) as modern 'sovereign power is linked theoretically to communal self-preservation and self-negation' (Campbell xii). However, inside the borders, the possibilities to evolve and improve are closed; thus, I interpret the non-immunisation potential as an affirmative absorption of the normative diversity. Applying Esposito's line of thought, it becomes visible how the social milieu is circumscribed to a tacit knowledge associating physical disability with social disadvantage, determining a negation of the 'abnormal': a rejection of Otherness. Assuming 'disability' to be biological *malus*, a visible 'lack' impacts upon the way one performs his/her own body in public, performing the rhetoric of social stigma and internalising it.*

My argument is that the advent of new medical categories directly corresponds to a value shift concerning the social assumptions behind what is defined as 'normal'. I find relevant the view of Gilles Deleuze on the distinction between difference and diversity. The philosopher claims that 'difference is not diversity. Diversity is given, but difference is that by which the given is given, that by which the given is given as diverse' (Deleuze 222). In this sense, images of Aimee Mullins can be read as an attempt to show how factual disability and factual ability should not be different from one another, but diverse. If bio-technological enhancement would determine a real (desirable) paradigm shift on what we think of as 'biologically normal' at the level of social construction,

* The 'lacking body' is thus shaped by a heavily medicalised societal discourse, where 'disability' is fashionably regulated as a reduction; this shows how the notion of 'impairment' is not isolated from its political signification. Lennard J. Davis, specialist in disability studies and human development, claims a strong connection between disability and the preservation of social status quo. Davis reminds us that disability '*must (...) be seen as ideology and not as knowledge*' (6).

this would imply no normative difference in the way the diverse is given and perceived not as different, but as diverse. By overcoming normative difference, normative diversity enlarges the circle of social acceptability. A relevant interrogation can bring into discussion portrayals of prosthetics athletes in the mainstream media, especially in the context of the Paralympics. Here, the intention to bring forth normative diversity is dwarfed by the positive stereotyped angle of heroic achievement, which aligns the message to the general rhetoric of normative difference, despite its intention.*

In the broad category of those medically labelled as normatively different ('physically impaired'), Aimee Mullins makes a strong statement for bodies with prosthetics: a medical condition is not necessarily objectively confining the human condition, and the normality of a human body is nothing but a social construction. Under the same social constructivism fall technological 'alterations' of the body, in the way our social perceptions are intertwined with the technological script of a body-attached device and the scientific practice behind it. In Deleuzian terms, by changing the way the diverse is being given, Mullins' artistic explorations of prosthetics have actively re-written the design script of prosthetics as enhancement devices.

Posthumanist Bioart: changing the condition of spectatorship

For the *HUMAN+* exhibition, Aimee Mullins' choice of agency is to invite gallery-goers to revisit their own assumptions of disability, normality and even beauty. Her portraits frame the lacking body as a promising body: a liminal space for enhanced body functions (high-speed athletic abilities) and, possibly, improved social acceptability (imagining a value shift). For the latter, Mullins' enhanced body and beauty challenges assumptions of disabled bodies as Otherness. This ambiguous view of the human body is reminiscent of what W.F. May describes as an 'openness' to the so-called 'unbidden' (Sandel 80), challenging that which 'semantically

* Media representations of people with disabilities usually fall into two categories: either heroic postures of high-achievers (such as Paralympians) or victimhood. Both can be criticised from a standpoint similar to Renzo Martens' provocative film, *Enjoy poverty, please!* where the artist challenges the complicity of the viewer in reiterating the inferiority of Otherness through exploitations of pity.

constitute[s]' (Harris 153) 'normal' anatomic functioning, and rejecting the traditional perspective of 'medicalising' society.

Her photographs have a glossy, fashion magazine style. By choosing to represent her body as aligned with mainstream beauty norms, the photographer creates a semantic basis for communicating alternative views on disability. For example, Mullins' prosthetics do not remove her femininity, but enhance it. I argue that she heralds a contemporary female identity, countering what might be understood as a socially prevalent denial of one aspect of the disabled female body: sexuality (Garland-Thomson 19). By placing emphasis on the aesthetic value of a technologically modified body, the photographer Howard Schatz harnesses the affective and intuitive perception of enhancement practices. By circumscribing them to an ethical dimension, the artist shows how Mullins' absence of limbs 'both intensifies and attenuates the cultural scripts of femininity' (Garland-Thomson *Integrating Disability*).

Mullins does not overcome her disability by hiding it. The cheetah-shaped prosthetics applied to her body draws an analogy between the subjective perception of beauty and the subjective construction of normality.* Her strategy provides an important insight into the social dynamics and the perceived moral orders driving social acceptability. Experiencing a deconstruction of the 'normal', the reflective spectator becomes aware of how ethical narratives of enhancement are being shaped, as well as acknowledging the resources that she/he brings to bear on this process, as 'critical consciousness' (Mitchell 63).

From the discursive perspective of agency (displayed by empowered subjects changing social scripts, transforming fixity in uncertainty and proposing the unprecedented), *Portraits of Aimee Mullins* can be read as subversive. Using fiction as a fertile ground in a debate marked by ambiguity and ignorance. Instead of encouraging reflection from an isolated, protected space, bioart immerses the gallery-goer in a curated experience in which s/he becomes aware of his or her own social body in relation to the on-going construction of reality with all its affective resonances, particularly with regard to responsibility and empowerment; as in

* Contemporary notions of an ideal female body have also been 'framed as a moral imperative' (Garland-Thomson 14).

the words of Rosemarie Garland-Thomson, 'it is a way of describing the inherent instability of the embodied self' (1).

Arguably, bioart produces a feeling of tension, mediating social institutions, technical devices, and embodied individuals in new ways (Mitchell 113). The regime of spectatorship changes when the subject (the owner of the gaze) identifies with the object of the gaze (the portrait of a technologically-enhanced body). Posthumanist art is unsettling, because the object of representation, the body of a future *Other*, is a stand-in for the real, present body, establishing an ontological proximity between the two: Aimee Mullins' portraits 'encourage in spectators a sense of reality' (78), pushing the boundaries of social acceptability. Therefore, to my mind, as the spectator becomes a key element in the process, there is a direct connection between the bioart approach and the notion of empirical ethics, as the experience of *HUMAN+* creates awareness of the moral opinions, values and reasoning patterns that divide us or bring us together, both as individuals and as communities. Encountering difference, we become aware of ourselves. It can be both exciting and disturbing. But what remains at the very core of this experience is an essential rethinking of ourselves and others, provoking new questions and approaches towards the living. This provides a new perspective about an emerging constellation of people, communities, technological artefacts, scientific practices, political frames and organisations. By taking the privilege of articulating their frames of 'posthumanity', the exhibition shows how ethics is context-sensitive. The narrative engages the gallery-goers and confronts them with their own identity as biological subjects, reorienting what being human means and how it can be experienced reflectively.

Conclusion

This article has looked to unfold non-identitarian ways of conceptualising human bodies as technologically enhanced through an exploration of current and alternative understandings of prosthetics as an enhancement device; it has worked towards revealing how knowledge and power are deeply embedded in post- and/or trans-conceptualisations of human biology.

Howard Schatz' Portraits of Aimee Mullins opens human corporeality towards fictive, unfixed, liminal expressions of what

could further be accepted as 'able' or without 'lack' in the future, when enhancement practices might well become embedded in society and their cultural capital crystallised. Aimee Mullins' story is an invitation to 'celebrate all those glorious disabilities that we all have' (Mullins 'Aimee Mullins and her 12 pairs of legs'), rejecting the traditional perspective of 'medicalising' society by harnessing the normative difference between ability and disability. We do not share a common understanding of 'normality' or the 'essence' of humanity. Nor is there any common understanding of 'perfection' or of 'human flourishing'.

The exhibit enabled a different criteria for representing how spectators, as autonomous, biological subjects, are caught in the wider structure of the social body and are, potentially, becoming critically aware of what separates them from the reality of other bodies. Thus, on however small a scale, by entering the Science Gallery and placing themselves in a context of meaning-making, the gallery-goers may contribute with their own resources, expertise and tacit knowledge to the development of an ethical discourse.

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