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Posthuman visions: Creating the technologized body

ABSTRACT

As medical technology continues to progress, we are able to correct deficiencies in the body through means such as cochlear implants and prosthetic limbs. This has led some scholars to argue that we are creating technologized, cyborg bodies. However, these technologies have also enabled us to correct perceived cultural flaws in the body. This article explores the nature of the body through the lens of posthumanism, examining ways that individuals attempt to reshape their bodies through cosmetic surgery and other forms of body modification. Specifically, this article examines the practice of hymen restoration, Genesis Breyer P-Orridge's artistic endeavours in cosmetic surgery and Stelarc's cybernetic experimentations. These cases yield three potential visions of the body: the body must be restored; bodies must be unified; and the body must evolve. Such visions have consequences; the ways in which the body is rhetorically constructed influence how people choose to alter their own bodies. By considering the body itself as medium and as an interface with other technologies, we can better theorize what it truly means to be human.

KEYWORDS

body modification
cyborg
Genesis Breyer
P-Orridge
posthuman
Stelarc
transhuman
virginity

Shannon Larratt (2002: 7), the editor of *Body Modification Ezine*, boldly proclaimed, 'I am not my biology. I will be the one to decide what my body grows into'. A century ago, which is a mere moment in the eternal scheme of things, such a statement would have seemed the height of hubris. After all, biology was, for the most part, destiny. What one looked like could be altered mainly in so far as one had access to adequate food and managed to remain

free of debilitating diseases. Now modern medical technologies allow us to become different shapes and even change sex.

Yet we are no longer content to correct physical pathologies of the body, but are now attempting to correct cultural flaws in the body as well. In the human calculus, there is no defect too great or too small to be corrected. As Virginia L. Blum argues, cosmetic surgery ‘holds out a technological and economic solution (if you have the money, the technology is there) to the very dilemma posed by the way capitalism manages femininity by simultaneously commodifying it, idealizing it, and insisting on its native defects’ (2005: 110). Yet it is not only the feminine body that is held up as defective. Some argue that *all* bodies are defective. Stelarc states that ‘it is time to question whether a bipedal, breathing body with binocular vision and a 1,400-cc brain is an adequate biological form’ (1991: 591), and comes to the conclusion that ‘THE BODY IS OBSOLETE’.

This article explores how some have begun altering their physical bodies in response to the social and technological landscapes that they inhabit. For some, these alterations are cultural imperatives, for others they are philosophical endeavours and artistic statements. Yet, I will suggest that for all of them, there is an impulse to go beyond the generally accepted contours of the body to reconstruct and even transcend the body – in other words, they strive to become *posthuman* or *transhuman*. Posthumanism and transhumanism can be seen as interconnected but distinct ideas, but for the purposes of this article I will consider them as roughly equivalent and use the umbrella term ‘posthumanism’ because both share the fundamental ideal of transcending perceived limitations of humanity through the use of technology. Elaine Graham writes, ‘The philosophies and practices of transhumanism exhibit a will for *transcendence* of the flesh as an innate and universal trait, a drive to overcome physical and material reality and strive towards omnipotence, omniscience, and immortality’ (2002a: 69). With modern medical science, individuals are able to literally shape their bodies into whatever they wish and some have begun to do so. Although many have done this in the quest for beauty or physical perfection, this article will explore three ideas that rest on the fringes of body alteration: women who attempt to regain their virginity through a procedure called hymenoplasty; Genesis and Lady Jaye Breyer P-Orridge, who together were trying to create a third entity through surgical practice; and Stelarc, a performance artist who pushes the limits of the body through suspensions and prosthetics.

LIKE A VIRGIN (AGAIN)

Men have long attempted to regulate female sexuality. One example of this is the requirement of an intact hymen as a sign of virtue. One form of hymen surveillance can be seen in the virginity tests or pelvic examinations that declare a woman sexually ‘pure’, such as those that previously took place in Turkey. Serap P. Pelin (1999: 257) writes, ‘almost every member of [Turkish] society shows some kind of interest in the virginity test. Among the reasons given for this test is that it helps to “protect women”. From the viewpoint of a civilized individual, this given reason is a sign of how tragic the situation is’ (see also, Cindoglu 1997; Kandela 1996). Such tests are still in effect in countries such as South Africa (Amnesty International 2011: 297), Afghanistan (Sachs 2011; Southon 2008), Zimbabwe (Chimhete 2010) and Nigeria (Haruna 2010). At the time of this writing, Egypt’s courts had just handed

down a ruling ending virginity tests of female protestors performed by army officials at military prisons (Fadel 2011). Lest one think that this behaviour is the province of third-world nations only, consider that during the 1970s Great Britain required virginity testing for female immigrants who planned to marry (Travis 2011). There is even a market for virginity. A woman in Salt Lake City, Utah, stands charged of attempting to sell her 13-year-old daughter's virginity for \$10,000 (Alberty 2011) and a sex-trafficking gang offered underage virgin girls to wealthy businessmen at prices up to £150,000 (Gill and Wilkes 2010). Others actually sell their virginity of their own free will. A 21-year-old Belgian student allegedly sold her virginity through an online escort site for £45,000 (Sparks 2011) and a 19-year-old New Zealand student reportedly sold her virginity for \$45,000 (Holloway 2010). In short, there is considerable interest in female virginity. The height of violence in such a system of sexual surveillance can be seen in the case of 'honor killings' in which a woman found without a hymen on her wedding night is killed by male relatives of her own family to 'cleanse the shame' (Kandela 1996: 1615). That a woman's sexual – and human – worth should be dependent on whether or not she experiences physical pain, torn flesh and bleeding underscores the institutionalization of male sexual pleasure at the expense of the woman's.

Even so, in some cases, male control of the female hymen has been circumvented through the use of surgery or deceit. Modern women can mimic the appearance of an intact hymen through hymenoplasty, or surgical restoration of the hymen (see Bekker et al. 1996; Cindoglu 1997; Kammel 2006; Kandela 1996; Saharso 2003). Kathleen C. Kelly (2000: 18) notes, 'The sheer variety of ways to test virginity – and of the ways to cheat on a test – calls into question the idea of a stable, readable, knowable female body'. Perhaps this is why it is not simply enough to regulate action; desire itself must be brought into conformance with masculine assumptions of feminine (non) sexuality (see Lunceford 2008, 2010). Such norms have evolved over time. Laura Gowing (2003: 82–83) writes that in the 1600s sex was seen as a vital part of womanhood and essential to her health; 'not until the eighteenth and nineteenth centuries did women grow up advised that sexual desire was not their business'. This was accomplished by a campaign of stigma associated with female desire. Gowing argues, 'The valorization of female pleasure in medical literature and popular culture did not legitimate the idea of an active female sexual body: sexual initiative was socially men's prerogative, and female sexual assertion could always be associated with whorishness, witchcraft and sin' (2003: 85).

Western women are also getting into the act of altering their genitals and even restoring their hymens without the need to evade death. Rather, they do so for different reasons. For \$3000, one can simply be a virgin again (Dolce Vita Laser Center 2009). What is unclear is why anyone would actually want to go through the experience again, considering that for many women it is a painful, unpleasant experience (see Elmerstig et al. 2009; Sprecher et al. 1995). Luce Irigaray writes,

Woman, in this sexual imaginary, is only a more or less obliging prop for the enactment of man's fantasies. That she may find pleasure there in that role, by proxy, is possible, even certain. But such pleasure is above all a masochistic prostitution of her body to a desire that is not her own, and it leaves her in a familiar state of dependency upon man. Not knowing what she wants, ready for anything, even asking for more,

so long as he will 'take' her as his 'object' when he seeks his own pleasure. Thus she will not say what she herself wants; moreover, she does not know, or no longer knows, what she wants.

(1985: 25)

Hymenoplasty is a procedure designed to be painful for the women and of questionable worth to the man (such procedures seem geared towards heterosexual couples that see virginity merely in terms of vaginal penetration). Yet a *Wall Street Journal* article quotes one woman who underwent the procedure in preparation for her seventeenth wedding anniversary as saying 'It's the ultimate gift for the man who has everything' (Chozick 2005). Another woman in the same article stated, 'I thought it would add that extra sparkle to our marriage' (Chozick 2005).

Perhaps this is one reason that women are also complicit in what are often considered patriarchal structures of control. For example, Barstow (1999: 503) explains that female genital mutilation (FGM) is often performed on women by women: 'Untrained midwives most often perform the surgery... The initiates are generally restrained by two or more females who are often aunts or other family members'. Although the idea of restraining a girl in order to remove parts of her labia and clitoris and infibulate her vagina may seem horrifying to westerners, the question of how to end practices such as FGM is far from clear because of the socially constructed nature of sexual and gender norms in the societies in which it is practised. In her exhaustive review of the literature on female genital surgeries, Carla M. Obermeyer concludes,

Two such questions concern the symbolic valuations of these practices in relation to the assessment of their perceived risks and benefits, and the social construction of the links between the anatomy and physiology of the genital organs on the one hand, and sexuality and gender on the other. Some of the differences in these two areas between the cultures that practice female genital surgeries and those that are horrified by these customs may be so fundamental that they belong in part to the realm of the 'unknowable'.

(1999: 97)

Lenore Manderson also notes that infibulated labia are seen as normal in societies that practise FGM: 'Women in Australia who have been infibulated are similarly shocked at the appearance of uninfibulated genitals: "Well, I'm not letting my daughter look like that" (fieldnotes 2000)' (2004: 295).

All of this points to the desire to modify our bodies in order to maintain a kind of socially constructed ideal. Some scholars have argued that we are creating a technological body, but I suggest that the technologizing of the body is not merely the ability to incorporate information technologies and prosthetics into our flesh, but also the ability to mould and shape the body into a particular image through the use of technology. As Graham notes,

New digital and biogenetic technologies – in the shape of media such as virtual reality, artificial intelligence, genetic modification and technological prosthetics – signal a 'posthuman' future in which the boundaries between humanity, technology and nature have become ever more malleable.

(1999: 419)

It is hard to imagine a more fundamental element of identity than one's sex, but the impulse to alter one's sexuality goes beyond surgery and into the realm of mechanical and chemical devices. Lewis Mumford claimed that 'temporary sterilization – so-called birth control – was perhaps the most important to the human race of all the scientific and technical advances that were carried to completion during the nineteenth century' (1963: 260). Valerie V. Peterson (2010) likewise argues that birth control functions as a powerful means of controlling not only sexuality, but gender roles and social norms as well. She suggests that birth control 'won't make women less human, nor will it make them into men, but it will make them less wedded to biological destiny and more complicated as a sex' (Peterson 2010: 16). Birth control pills may seem mundane because of their ubiquity, but this in no way changes the fundamental function of the pill, which is to alter the chemical make-up of the body in order to prevent conception and reproduction. Likewise, the use of surgery to recreate the no longer extant hymen is both a physical and a social reconstruction of not only the woman's vulva, but also her sexual history. The urge to modify one's sexuality, which seems to be a core attribute of human nature, points to a deep-seated desire to alter the body. More importantly, it demonstrates the perceived necessity of altering one's sexuality to more fully comply with cultural imperatives.

Sexual behaviour does not take place in a cultural vacuum. Peter L. Berger and Thomas Luckmann argue that 'sexuality and nutrition are channeled in specific directions socially rather than biologically, a channeling that not only imposes limits upon these activities, but directly affects organismic functions' (1966: 181). One can reasonably ask whether either the traditional modes of FGM or those sanctioned by the medical profession are technological impulses or, in the case of the body modification subculture, a kind of future primitive impulse. How, for example, do we explain the impulse to pierce genitalia? Some means of modifying the body are culturally acceptable and others are not. As Gloria G. Brame et al. observe, 'Breaking a nose and sawing off cartilage to construct a snubbed proboscis is currently sanctioned; inserting jewelry in a penis to heighten sexual response is viewed with horror' (1993: 301). Where does modification cross the line? We already have the technology and ability to perform sex reassignment. What is the difference between FGM and medically sanctioned genital plastic surgery, such as labiaplasty and vaginal rejuvenation? After all, some scholars draw stark similarities between these two practices (e.g. Sheldon and Wilkinson 1998). Will we eventually begin creating hermaphrodites? All of these are pressing questions that we currently seem ill-equipped to answer. It seems that our technological abilities have outrun our ability to consider these technologies and practices from an ethical standpoint. In our quest to determine whether something is possible, we seem to have overlooked the questions of whether or not we *should* do it and *why* we do it.

Despite the potential to radically reconfigure the body, cosmetic surgery seems more about enhancing one's sexual desirability in culturally understood ways than attempting to transcend or subvert those cultural imperatives. Ollivier Dyens (2001) argues that our standards of beauty are based on physical cues that display good health, a strong immune system and sexual potency. 'This relationship between the "effectiveness" of a body and others' lust for it is an example of the biological reality. We are sexually attracted to what we are biologically at a specific moment in time. Standards of beauty are controlled by organic needs' (Dyens 2001: 20). However, Dyens also notes that we are shifting to a form of culturally defined beauty:

We are attracted to Hollywood stars not only because of their biological beauty (i.e., organic effectiveness) but also because of their cultural productivity. What we seek today are bodies sculpted by culture. A Hollywood star, male or female, who has had cosmetic surgery, is a cultural being, and this is what seduces us.

(Dyens 2001: 21)

We are no longer curing diseases of the body with practices such as hymenoplasty, but rather pathologies of culture and society.

GENESIS BREYER P-ORRIDGE'S QUEST FOR PANDROGENY

Leopoldina Fortunati argues that in postmodern society

Many differences, even between men and women, or more specifically, between the world of production and reproduction, have disappeared, or are at least less clear cut. There is a tendency at the social level to fusion, to the formation of hybrids, to the development of similarity.

(2003: 79)

Although Fortunati seems to be speaking metaphorically, modern surgical techniques provide no barriers to making hybridity a reality. One person that is actively attempting to create such a hybridity is Genesis Breyer P-Orridge.

Born Neil Megson, P-Orridge has led an interesting life, to say the least, and has become accustomed to pushing the envelope of what is considered acceptable (see P-Orridge 2002). In reality, his life has been his art and his art has been his life. As a member of the art collective Coum Transmissions, and the influential industrial band Throbbing Gristle, he and his associates were denounced by a member of Great Britain's Parliament as 'wreckers of civilization' (Keenan 2003: 19). In another band, Psychic TV, his 'Temple ov Psychick Youth' organization created *First Transmission* (Psychic Television 1982), a video that was denounced as satanic ritual abuse in a documentary that aired on British TV, despite *The Mail on Sunday* calling the documentary 'one of the most misleading and deceptive documentaries to appear on British television for many years' (quoted in Keenan 2003: 226; see also Kirby 2011). The tape was obtained through a raid on P-Orridge's home while he was away with his family in Thailand, and resulted in a warning that if he returned to England he would be arrested. The resulting stress led to the break-up of his marriage and his continued exile from England (see Keenan 2003: 223–30).

One of P-Orridge's recent projects had him working with his most recent wife, Lady Jaye Breyer P-Orridge (before her untimely death in 2007 from a heart condition and stomach cancer) to create a third entity – a project they called 'pandrogeny'.

In our quest to create the pandrogyne, both Genesis and Lady Jaye have agreed to use various modern medical techniques to try to look as much like each other as possible. We are required, over and over again by our process of literally cutting up our bodies, to create a third, conceptually more precise body, to let go of a lifetime's attachment to the physical logo that we visualize automatically as 'I' in our internal dialogue with the SELF.

(P-Orridge 2006: 346)

Yet this desire to divest oneself of a particular subjectivity is not unique; Stelarc echoes such a sentiment when he argues that

we have kind of a metaphysical history in Western philosophy of promoting the subject, of prefacing most of our statements with the word 'I', which I maintain only indicates *this* body. But people metaphysically want to ascribe some kind of intrinsic inner essence with the 'I'. I think it is totally unwarranted.

(quoted in Abrahamsson and Abrahamsson 2007: 296)

For Stelarc, the problem is not the mind's image of the self but the idea of agency. Performances such as 'Ping Body', in which electrodes were triggered by other users remotely to induce involuntary muscle contractions and movements in Stelarc's body, trouble the idea of volition in the body. But agency and identity are two different things; involuntary stimulation of one's body does not remove the individual from the system.

Both P-Orridge and Stelarc share a sentiment that has been around since the seventeenth century when René Descartes proclaimed that 'it is certain that this "I" – that is to say, my soul, by virtue of which I am what I am – is entirely and truly distinct from my body and that it can be or exist without it' (1960: 74). For P-Orridge, the desire is to let go of the visual component of one's self-conception, the iconic representation of one's essence. Despite his apparent disavowal of an intrinsic essence that constitutes the self, we will see that Stelarc seems much more invested in the notion that one's essence is independent of the body and thus is much more aligned with Descartes' standpoint. If the body is obsolete and the essence only resides in that specific body, then what is left? And where, exactly, is Stelarc?

Others have weighed in on this Cartesian split as well. Andy Clark states that 'I think of myself not just as a physical presence but as a kind of *rational* or *intellectual* presence' (2003: 132). Perhaps Clark puts it best when he states that

There is *no self*, if by self we mean some central cognitive essence that makes me who and what I am. In its place there is just the 'soft self': a rough-and-tumble, control sharing coalition of processes – some neural, some bodily, some technological – and an ongoing drive to tell a story, to paint a picture in which 'I' am the central player.

(2003: 138)

Clark provides an escape from the Cartesian split between mind and body, providing a both/and rather than either/or dichotomy. This seems much more in line with P-Orridge's sense that the self is constructed in concert with other forces, yet P-Orridge retains the ideal that the self remains independent of the body. Indeed, P-Orridge seems to argue that the self *cannot* be changed through changes to the body and that the body itself can be remade to more fully conform to the desired image of the self. The desire to break away from the visual representation of the self is not merely an academic or religious exercise, but rather the desire to create a 'conceptually more precise body'. As such, P-Orridge does not actually escape the visual representation of the self, but instead replaces that representation with another that seems more accurate – but to whom? It seems that all P-Orridge accomplishes in the process is creating a body that seems more in line with the already existing icon of the self.

Despite the image of cutting up each other's bodies through surgery, this is a romantic impulse; for P-Orridge, it is all about unity: 'As a couple we want to become more and more one' (Quoted in Wolfson 2004: 13). Yet P-Orridge's appearance calls into question the ability to succeed in his endeavour. First of all, there seems to be little of the hybridity that one would expect. In short, he looks much more like her than she looks like him. Granted, they actually both got matching breast implants and she had some work done on her nose and chin to look more like him, but he still looks like her with tattoos. As such, this seems more a homage to love, a desire to be like another, than the creation of something new. However, this may not be entirely their doing; they were perhaps unwilling, but certainly unable, to push the experiment to its logical conclusion. Lady Jaye's obituary notes that 'the couple drew the line at anything more drastic than their matching breast implants', and quotes her as saying, 'I would really prefer us to not have to lose anything [...] If I could have a penis attached, I would do it tomorrow, but for him to lose any part of the body that could give pleasure, that's not the idea' (Anon. 2007).

Although they could have each become a true hybrid, Lady Jaye observes that medical science was not quite ready for them to attain that goal. Sex reassignment surgeries generally repurpose existing tissues; one cannot create a fully functional, orgasm-inducing penis or vagina *ex nihilo* (see Sutcliffe et al. 2009). Thus, this may simply be a case in which technology has not caught up with imagination. However, medical technology still appeals to the common concerns, and there do not seem to be many individuals seeking to become hermaphrodites. After all, the general impulse when confronted with intersex individuals is to normalize them into one or the other sex. As David Valentine puts it, 'Erotic desires which fall outside the trinary of heterosexuality, homosexuality (either/or) and bisexuality (both/and), or which fail to make sense in terms of their basic logic of binary gender, are rendered unintelligible' (2003: 124).

Even if Genesis and Lady Jaye could have had full access to the range of possible medical technology, there still exists the question of whether they would have succeeded in the stated goal of creating a third entity. Rather, it seems that the goal is instead the eradication of the idea of gender altogether in favour of a kind of hybridity as a way to completely own the self. In the poem 'Breaking Sex!', Breyer P-Orridge proclaims:

This is the final war, a jigsaw
A war to re-possess your SELF
There is NO gender anymore
Only P-Androgeny is divine.

(2006: 346)

They suggest that one now has the choice to choose gender or to destroy it, with a strong preference for the latter; the ability to make this choice is essential to regaining control of one's self. Although this would be an individual choice, when considered in aggregate these combined personal choices would, in turn, have implications for the entire human race. When asked in an interview why he was pursuing the pandrogeny project, P-Orridge responded:

Because I feel deep in my heart that it's incredibly important to the species. I think that we're just supposed to evolve. I think that includes physically as much as in terms of consciousness. And perhaps there are

ways to play with our consciousness by working with our expectations and inherited bodies just like we did with inherited moral systems and inherited cultural systems. They can all be re-manipulated. Everything is malleable. And whatever I can utilize to really empower my senses – the malleability of consensus reality – is helpful. It has opened me up to speculations that I might otherwise just not come up with... Plus, I think it's sexy.

(quoted in Simunek n.d.)

For P-Orridge, the future is hybridity. 'This is not about becoming an Other, This is about returning to a state of perfect union' (P-Orridge 2006: 348). The unstated premise is that by physically becoming similar individuals will also become similar and thereby reduce conflict – utopia through body modification.

STELARC'S OBSOLETE BODY

While Genesis Breyer P-Orridge seeks to create through the body, Stelarc, it seems, seeks to create in spite of the body. Born Stelios Arcadiou, the artist now known simply as Stelarc has a peculiar way of demonstrating what he sees as the obsolescence of the human body. Whether through the stretching of the skin through the many suspensions that he has performed or the prosthetic experiments that he has done on his own body, his artistic vision is to explode the myth of the self-contained body as the pinnacle of creation.

Stelarc is unequivocal in his vision: 'It is no longer a matter of perpetuating the human species by REPRODUCTION, but of enhancing the individual by REDESIGNING. What is significant is no longer male-female intercourse but human-machine interface' (1991: 591). For Stelarc, then, the issue is not merely the use of technology but the very absorption of technology into the body. Stelarc notes that 'up until now we have designed our machines ergonomically to better match our bodies and our metabolism, but because machines now generally outperform us in precision, speed, and power perhaps it is time to change the body to better perform with its machines' (quoted in Abrahamsson and Abrahamsson 2007: 295).

The idea that interface can replace intercourse (sexual, civil or otherwise) is problematic in part because of the stark differences between machine language and human language. Daniel Kohanski notes that 'computer languages are compact, they have rigid formulations and precise syntax, and the very structures which make them comprehensible to a computer also make them obscure to a human being' (1998: 140). Kohanski further argues that

Ambiguities that another human being might overlook, and assumptions that other people will unconsciously accept, cannot be tolerated in a program. The requirements for precision and accuracy, and the level of detail at which these requirements are applied, mandate for greater discipline and control than we as a species are accustomed to accept.

(1998: 161)

This is not to say that human-machine interface is doomed from the outset, but one must recognize the limitations of the system and the various components within that system. Clark (2003: 5) notes that the human brain is excellent at certain things but not others, stating that the brain is, 'to put it bluntly,

bad at logic and good at Frisbee'. Yet logic is exactly what the machine requires. Although Georges Teyssot suggests that 'by remapping, reconfiguring and redesigning the body, Stelarc seems to have successfully actualised what had been announced by the cyborg's paradigm' (2005: 77), such proclamations of triumph may be premature. In order for Stelarc's vision to come to fruition, both machines and the human body must change significantly.

Despite the challenges of interface, embracing technology would, paradoxically, be a move to retain the essence of humanity. Clark (2003: 142) argues that 'such extensions should not be thought of as rendering us in any way posthuman; not because they are not deeply transformative but because we humans are naturally designed to be the subjects of just such repeated transformations!' Stelarc takes this a step further when he states that 'perhaps what it means to be human is about not retaining our humanity' (1999: 126). What is clear in Stelarc's writings, however, is that this is a condition that humanity has brought upon ourselves: 'in the terrain of cyber complexity that we now inhabit the inadequacy and the obsolescence of the ego-agent driven biological body cannot be more apparent' (Stelarc 1999: 122). Yet this is a natural consequence of technological change, it seems. Clark suggests that humanity and extensions of humanity go hand in hand: 'Plasticity and multiplicity are our true constants, and new technologies merely dramatize our oldest puzzles (prosthetics and telepresence are just walking sticks and shouting, cyberspace is just another place to be)' (2003: 8). But one cannot simply map new technologies onto old behaviours and other technologies because the introduction of a new technology completely alters the technological landscape. Marshall McLuhan noted that the

outering or extension of our bodies and senses in a 'new invention' compels the whole of our bodies to shift into new positions in order to maintain equilibrium. A new 'closure' is effected in all our organs and senses, both private and public, by any new invention.

(1994: 252)

Indeed, Walter J. Ong (1982) and others (e.g. Goody 1977, 2000; Havelock 1963, 1986; Lord 1960) have noted the dramatic change that was wrought in the psyche as we moved from orality to literacy.

But Stelarc is proposing something far more all-encompassing: 'In its present phase, technology becomes a component, rather than a container of the body' (1984d: 52). Yet such a component could never simply be integrated into the system without causing change as well. Martin Heidegger argues that technology is 'no mere means. Technology is a way of revealing' (1993: 318). What, then, would a technology that is integrated into the body reveal? First, there is the recognition that the supposed flaws in the body are actually flaws and that those flaws are worth correcting. Stelarc's observation that human beings cannot keep up with technological systems is as old as the tall tale of John Henry and his race against the machine. Of course this is a moral fable – John Henry wins the race, but dies as a consequence. There are certainly other areas in which the machine is more precise, faster or stronger, but these may not be altogether weaknesses, because when one chooses speed he or she may sacrifice thoughtful reflection; precision may come at the cost of creativity.

Yet there is an even more insidious force at work that may throw a wrench into Stelarc's vision – planned obsolescence. The world is full of floppy discs with forgotten files, tape drives, zip drives, Bernoulli drives and processors

that once seemed fast. This is only a small sample of hardware that was once state of the art. With this history as a guide, how can one suggest that Bluetooth headsets and SATA II drives will remain the state of the art? Even if the hardware would remain sound, there is still the question of software. Even the most carefully produced software is prone to bugs and imperfections (see Kohanski 1998: 73). To use a crass example, how many people would like to run some part of their body on Windows Vista? What happens when the system crashes? If the body is obsolete, the potential replacement parts do not seem much more attractive than what nature has provided. Still, for Stelarc, 'The role of technology becomes one of an evolutionary energizer' (1984d: 52).

Stelarc persists in his quest to overcome nature, suggesting that 'the question is not whether a society will allow freedom to express yourself, but whether the human species will allow you to break the bonds of your genetic parameters – the fundamental freedom to determine your own DNA destiny' (1984b: 76). But Stelarc observes that 'we are not capable, nor should we even try to engineer a total transformation of the human species – but we can modify chosen individuals' (1984b: 76), calling them 'bionauts' that 'could be launched on multiple evolutionary trajectories'. However, this seems reminiscent of the various eugenics experiments that have taken place in the history of humanity (see Allen 1999).

What Stelarc is really after, it seems, is a way to keep up with the constant flood of information, despite his railing against it:

Information is the prosthesis that props up the obsolete body. Information gathering has become not only a meaningless ritual, but a deadly destructive paralyzing process, mesmerizing and immobilizing the body, preventing it from taking physical, phylogenetic action. [...] The cortex craves for information, but it can no longer contain and creatively process it all.

(Stelarc 1984c: 24)

Elsewhere he argues that 'the role of information is really not what's important any longer, it's actually physically modifying, physically changing the form of the human body – redesigning the human body is what we should be striving to do' (Stelarc 1984a: 17). Yet some have argued that information and information technologies will change us anyway. Donna J. Haraway argues that 'communication technologies and biotechnologies are the crucial tools recrafting our bodies. These tools embody and enforce new social relations for women world-wide' (1991: 164). McLuhan makes a similar argument: 'In this electric age, we see ourselves being translated more and more into the form of information, moving toward the technological extension of consciousness' (1994: 57). It seems, however, that it is not with the shift in consciousness wrought by the infiltration of information technologies into our lives that Stelarc has a quarrel, but rather that this shift is not moving fast enough or in the right direction.

In all of this, his art is a means of representing his vision. In doing so, he draws on a long line of performance artists who have explored the idea of the electrified body reaching back at least to 1730 when Stephen Gray suspended a boy and induced a negative charge on his body to allow him to attract small pieces of brass leaf (Elsenaar and Scha 2002: 17–18). But for Stelarc, there is more to the symbolism than the body electric: 'Stretched, pierced and

penetrated by technology, the skin is no longer the smooth and sensuous surface of a site or a screen. Skin no longer signifies closure. The rupture of surface and skin means the erasure of inner and outer' (Stelarc 1999: 119). Stelarc is concerned with the interior of the body as it relates to the exterior, both in environment and culture. For Stelarc, technology is the key that opens the body and transforms it into a posthuman body. As Haraway argues,

It is not clear who makes and who is made in the relation between human and machine. It is not clear what is mind and what is body in machines that resolve into coding practices. In so far as we know ourselves in both formal discourse (biology) and in daily practice (for example, the homework economy in the integrated circuit), we find ourselves to be cyborgs, hybrids, mosaics, chimeras.

(1991: 177)

Despite his apparent Cartesian leanings and his assertions that the body is obsolete, the body remains a fundamental part of his project. But Stelarc's relationship with the body seems complicated. Jane Goodall (1999: 162) describes how Stelarc refers to his body during performance 'as "the body", never as "my body"', but observes that 'every experiment he has performed has involved finely tuning into the capacities of the body in general, and his own body in particular'. Elaine L. Graham notes that 'Stelarc's body, albeit merged with and assimilated into machines, is the focus of his art, which seeks not to transcend embodied materiality but to chart its limits and potentials' (2002b: 197). However, Chris Fleming collapses Stelarc's body into a mere component of a technological system: 'Attaching to his body an ever-increasing collection of high-technology components, Stelarc is displaced as autonomous agent and is reinscribed as the fleshy hub of a whirring cybernetic system' (2002: 96). Yet the body remains the focal point of these performances that demonstrates the myriad ways that technology can penetrate, reconfigure and, if Stelarc is to be believed, evolve the body. For Stelarc, the body and technology are intertwined not only in performance, but in life as well. The idea that the creation of technology can then become a creation of self seems to be at the heart of Stelarc's work, and one cannot dismiss it simply because it is art; 'radical art functions as criticism because it exemplifies what its society *should* evolve into but has not' (Krukowski 1986: 281).

CONCLUDING THOUGHTS CONCERNING THE NATURE OF HUMANITY

The very notion of posthumanism calls into question what it means to be human in the first place. Many posthumanist scholars have been quite celebratory concerning the potential for technology to change the human condition for the better (e.g. Haraway 1991). There are, of course, detractors from this narrative of liberation through technology. Langdon Winner laments that

the writings of posthumanists show little awareness of their deep cultural biases and, indeed, of the breathtaking cultural arrogance their proposals involve. [...] their notions reflect unstated, unexamined preconceptions rooted in their own highly rarified, upper-middle-class, white, professional, American and European lifestyles.

(2002: 42)

Winner provides a stark example: 'Better genes and electronic implants? Hell, how about potable water?' (2002: 44). Melanie S. Millar likewise explains that

while affluent western feminists may see themselves as 'cyborgs' as they use digital technologies for creative and professional purposes, less advantaged women – such as those who assemble computer equipment or enter data – experience 'cyborg' life in a profoundly different and exploitative way.

(1998: 62)

Technology is not always liberatory; it can be used to free or enslave, and there are always unintended consequences of technology adoption (see Lunceford 2009).

The three cases that I have examined provide different interpretations of what it means to be human, but all centre on the body as a central component of performing humanity. We have entered the age of the plastic, malleable body, but what is less clear is how we will alter and shape that body. These cases suggest three competing visions of the plastic body. Those engaging in hymenoplasty represent those who would restore the body to its untainted, pre-sexual state. Theirs seems to be an impulse of reclamation that is strongly culturally bound. Kenneth Burke (1950: 20–23) suggests that a key function of any rhetoric is to foster a sense of identification and consubstantiality, but notes that such identification likewise implies a sense of division. In the case of many that engage in hymenoplasty, a woman finding herself on the wrong side may find that this division is a matter of life or death. Yet even for those western women who engage in the practice for the benefit of another, these women are also driven by a cultural imperative to be pure but sexual – the paradoxical virgin wanton. In a way, hymenoplasty allows for the illusion of both – a sexually experienced virgin (as if the tissue itself were what constituted virginity). Moreover, they respond to the cultural narrative of virginity as a gift that is to be given to someone else, preferably within the bonds of marriage or, failing that, at least within the bonds of love. In short, they have internalized the metaphorical construction of virginity=gift. By this logic, if the gift is mistakenly given to the wrong person, it must be restored in order to give it to the right person. As such, the rhetoric of restoration that surrounds this practice comes into clearer focus.

For P-Orridge, the issue is creating another entity out of the unity of two other, separate beings. Yet such a prospect is, if not impossible, difficult. Even becoming one in the symbolic sense would challenge our ability to transcend the limitations of our communication abilities. Joshua Gunn (2008: 144) draws on Lacanian psychoanalysis to argue that there is no way to completely understand another because there is no way that two individuals can truly become one. From a linguistic sense, there is also no way to truly understand another completely. As Milton Dawes observes, 'Whatever we think, say, feel, do, expect, plan for, want, theorize about, etc., is incomplete, because we have not included all' (2005: 265). Finally, in a physical sense, we are 'bounded and set off from the rest of the world by the surface of our skins, and we experience the rest of the world as outside of us' (Lakoff and Johnson 1980: 29). However, there are some who are challenging this notion. For example, Kevin Warwick successfully conducted a nervous system to nervous system link through the Internet between himself and his wife Irena (Warwick 2004: 282–85). Yet we still seem a long way off from creating one (or three) out of two.

Through his character Zarathustra, Friedrich W. Nietzsche asked, '*I teach you the overman. Man is something that shall be overcome. What have you done to overcome him?*' (1978: 12). For Stelarc, man is not the pinnacle of creation, but rather a link in a long evolutionary chain. In response to Zarathustra's query, Stelarc would likely explain that to overcome man one must *recreate* man by integrating technologies into the body. As we create technologies that surpass the abilities of the body, we create possibilities of what we could become. Some of these are commonplace – many wear contacts, eyeglasses and hearing aids; some have prosthetic limbs, artificial joints and synthetic heart valves; the clothing we wear regulates our temperatures. Yet in looking at some of Stelarc's experiments, such as Third Hand, these additions to the body seem laughably cumbersome. Still, there is the possibility that Stelarc is simply ahead of his time and such additions may in the future become commonplace. As Clark observes, 'Perhaps all that can be said, with real certainty, is that the ideas and possibilities that Stelarc is exploring are not just theater' (2003: 119).

Thus, we have three conceptions of the body: the body must be restored; bodies must be unified; the body must evolve. In each of these cases, technology is the means by which the chosen aim is to be accomplished, but we always return to the body because embodiment is a fundamental part of the human experience. However, each vision has a different understanding of what the body is or should become. I do not think that such experiments as those performed by Stelarc will become commonplace anytime soon, nor do I think that P-Orridge's vision will come to fruition. Rather, I suggest that those who shape the body to fulfil cultural imperatives are those that map the future of the body. Thus, it may not be those that seek to reclaim the body that will triumph, but rather those that seek to *perfect* the body. If the perfect body is seen as virginal and painful, such a body will be highly prized and desirable, and if there is a way to create oneself in that image through medical technology people will do so. We are already moving in this perfectionist trajectory. People seek not just 20/20 vision with Lasik, but rather 20/15 vision, seeking to exceed normal vision. It is not enough to be adequate and such impulses can be seen in cosmetic surgery. Yet this is cyclical; cosmetic surgery not only reflects but creates our conceptions of what it means to be beautiful.

Although these three visions are not necessarily mutually exclusive, each requires a different trajectory to achieve the desired goal. Moreover, some would require drastic cultural shifts; for example, the case of hymenoplasty is at odds with P-Orridge's desire to eliminate gender altogether. Each case requires a particular set of cultural values in order for the vision to take hold. In his critique of posthumanist discourse, Winner argues, 'Nowhere is the obtuse arrogance of posthumanist rhetoric more apparent than in its incessant claim that the changes at issue are foreordained by history or, even better, by evolution itself' (2002: 42). Even if one were to grant that we are moving towards a posthuman future, the question remains of what that future would look like and what technological means one would employ to reach it. The means employed are far from inconsequential because, as Brett Lunceford suggests, 'The question of whether or not to adopt a particular technology transcends such issues as usefulness and ease of use. Technology is not value-neutral; those who create technology infuse those technologies with particular values' (2009: 43). Likewise, the technologies that one chooses to adopt reflect values held by the individual and the culture in which he or she exists. Winner notes that

Within the making and application of new technologies, there are always competing interests, contesting positions on basic principles, and numerous branching points in which people choose among several options, giving form to the instrumentalities finally realized, discarding others that may have seemed attractive. Modern history is filled with examples of technological developments announced as 'inevitable' that never took root – personal helicopters, atomic airplanes, videophones, and extensive colonies in outer space, among others.

(2002: 43)

Technology is only part of the equation. One must also consider the culture in which these technologies are employed.

The body is a wonderful medium on which we etch the imperatives of our culture, but it is a medium of limited quantity for each individual. Stelarc's vision of the modular body seems a long way off, although we can replace certain functions of the body. Yet there is considerable danger in modifying the body too greatly. Surgeries can be botched, implants may not take and people may even die in the pursuit of the ideal of beauty. As such, it seems prudent to move slowly into the next phase of evolution – if there even is a next phase – and tread lightly on the body. Repairing is one thing, but I am not certain that humans are quite ready to take the reins of (re)creation from Mother Nature just yet.

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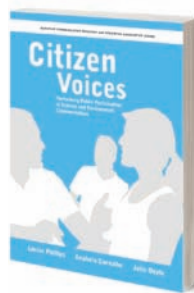
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