



The Modernistic Posthuman Prophecy of Donna Haraway

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Donna Haraway's (1991) vision of a post-gender cyborg has (re)sparked feminist interest in reclaiming patriarchal technological tools as a source of liberation from gender oppression. These utopian, cyborgian dreams of the dissolution of body and gender dualisms however, are flawed. This failing is founded on Haraway's underestimation of the gender-influenced relationship between: the historical legacies of the cyborg; linguistic metaphors and symbols; and the lived subjective technological experiences of embodied materiality. Consequently, despite Haraway's fantastical claims of the cyborg being able to transgress traditional hierarchical bodily-based binaries, this cyborg vision is distinctly modern in a nostalgic, linear, and utopian construction. As a result, these idealistic cyborg visions can be linked paradoxically to patriarchal discourses; the Cartesian philosophies of Christian religion; and the posthuman prophetic desires of the Extropian transhuman collective (Extropy Institute, 2003a, 2003b; More, 2003), such as featured in the works of Hans Moravec (1988) and Kevin Warwick (2002).

Keywords: cyborg; Donna Haraway; posthuman; transhuman; Extropian; Hans Moravec, Kevin Warwick

Introduction

By defining our everyday realities, metaphors can prevent conflicting or contradictory understandings to socially accepted definitions (Lakoff and Johnson, 1980). Socio-cultural change however, serves to alter and change these metaphorical conceptions to new sociological knowledges. Accordingly, Donna Haraway (1997, 1995, 1992a, 1992b, 1992c, 1991) asserts the intimate relationships occurring between the traditional dualistic structures of organisms and technology, has altered human ontology to cyborg ontology. The historical metaphors of the body and gender are pervasive however, as “the fact that they are metaphorical never occurs to most of us” (Lakoff and Johnson, 1980: 26). Therefore, despite technological innovations, these oppressive legacies can continue to influence the framework of ‘new’ understandings. In this fashion, cyborg militaristic origins have been influential upon the contemporary cyborg and thus, paradoxically, Haraway’s cyborg can both overcome *and* reinforce bodily-based dichotomies. As a result, the Harawayian dream of a cyborg utopian and post-gender social reality connects to modernity’s humanist stories of linear progress and continual improvement. In turn, these visions are also repeated in the trans/posthumanism of the Extropians (Extropy Institute, 2003a, 2003b; More, 2003). These utopian ideals overlook the material and subjective lived experiences with cyborg technology, where patriarchal cultural legacies and Cartesian Christian values continue to be exercised through and on cyborg bodies. As a result, this critical engagement with the cyborg is concerned with Merleau-Ponty’s (1962) formulation of embodiment as an omnipresent lived experience of “being-in-the-world” (Heidegger 1962: 33, 65), and with the relationship between embodiment, technology, and gender, as examined by feminist theorists such as Balsamo (1996, 1988), Braidotti (2002, 1996), and Springer (1996, 1994). Through such understandings, the concrete reality of lived, material embodiment and the accompanying embedded character of gender, highlight that while the cyborg can challenge dualisms, this confrontation should not be simply considered a post-gender utopia.

The Cyborg

Origins

The word ‘cyborg’ (**cy**bernetic **org**anism) was originally coined in 1960 by Manfred Clynes and Nathan Kline (1960). As engineers working for the United States’ N.A.S.A. (National Aeronautics and Space Administration) program, Clynes and Kline’s (1960) cyborg vision is a human/machine hybrid that modifies humans for space, rather than creating extraterrestrial human-friendly environments. Therefore, the cyborg is a liberating mechanism from human environments via a “self-regulating man-machine system” (Clynes and Kline, 1960: 30). Considered to be more flexible than human organisms alone, this hardware-based ‘man-machine’ system is incorporated into a space suit that alters various bodily functions (Tomas, 1995; Clynes and Kline, 1960). Clynes and Kline (1960) cyborg vision is therefore a ‘superman’ dream of ‘postbiological evolution’, which fuses space exploration with medicine, implants, and electronic modification to create human dependence, rather than interdependence, on machines (Gray, 2002; Tomas, 1995).

These scientific-militaristic origins of the cyborg dreamed of a future where, similarly to the Christian soul, annoying restrictions of embodiment and bodily constraint could be overcome via technologically influenced medical developments (Kunzru, 1997). As a creation of both science and science fiction, these militaristic applications of the cyborg as overcoming the ‘natural weaknesses’ of the body are distinctly Cartesian in viewing

the body as a manipulative and disposable mechanism of 'meat'. Consequently, cyborg origins offer little to developing human ontology beyond Western patriarchal and Cartesian-Christian conceptualisations of hierarchical duality.

Haraway's Contemporary Cyborg

For Donna Haraway (b.1944), this cyborg ideology has been surpassed with a contemporary definition. Importantly, this new definition is based on an "ironic political myth", where the contemporary cyborg is the "illegitimate offspring" of the "inessential" cyborg militaristic "father" (Haraway, 1991: 151). This illegitimacy is based on the cyborg's innate ability to erase hierarchical and traditional dichotomies, which ignores genealogical history (Haraway, 1991). Consequently, the postmodern children of modernity's real (Freud) or symbolic (Lacan) cyborg father, break ancestral legacies (the Oedipal socius), of the family. This allows the cyborg to "set aside the Enlightenment figures of coherent and masterful subjectivity" (Haraway, 1992a: 87) unified in 'nature', and question those oppositions that have been foundational in how humans think of themselves and the surrounding world. Therefore, the cyborg is not simply the scientific-militaristic fusion of cybernetics and organisms but, by extension, a hybrid of other basic dualistic assumptions that affect the everyday self-conceptualisations of the population. Cyborgs thereby challenge not only the organic/technological distinction, but other sacred dualisms of modernity via their singular or multiple boundary crossings, such as human/animal, physical/non-physical, mind/body, public/private, nature/culture, active/passive, right/wrong, reason/emotion, primitive/civilized, whole (total)/part (partial), maker (God)/made (man), truth (reality)/illusion (fiction), and male/female (Kunzru, 1997; Balsamo, 1996; Haraway, 1991). These fusions create family ties between previously distinct categorisations: "I need my sibling species [such as the OncoMouse™, a transgenic animal incorporating human genetic material] to get me through this life story; our bodies share substance; we are kin" (Haraway, 1997: 120, 1995: xi-xii)¹. As a result, technological figures are "both us and not-us" (Haraway 1997: 82), in a "family [that] is a mess" (Haraway, 1997: 121). Hence, by challenging the established socius with singular or multiple hybrid fusions, the cyborg can become a tool of empowerment that confronts basic modernistic and oppressive socio-cultural dualistic assumptions (Haraway, 1992b). This type of cyborg therefore, is ontologically different to Clynes and Kline's (1960) proposed cyborg ontology. On the other hand, like Clynes and Kline's (1960) cyborg, Haraway's cyborg ontology is enabled through the knowledge generated by, and the interventions of, technology.

Importantly however, these cyborg (technoscientific) figures are not simply material entities, but embodied "material-semiotic actors" (Haraway 1997: 11). These material-semiotic actors are constructed and marked by understandings and practices of the body, technology, and linguistics, as founded on situated knowledges (Haraway 1997, 1992b, 1991, 1989). This means cyborg bodies are "compounds of hybrid techno-organic embodiment and textuality", where "text, machine, body, and metaphor" fuse (Haraway 1991: 212; 1989: 16). In this fashion, Haraway draws attention to the materiality of being, as well as the embodied knowledges, which construct the body.

Therefore, the collapsing of modern distinctions such as man/woman in the material-semiotic cyborg exposes traditional assemblages to be active and flexible social constructions, which can be questioned and reconstructed (Haraway, 1992b). Elements crucial to the cyborg, such as contradiction and imitation, are thereby part of gender. As a result, the complex set of oppressive fictions that constrain both men and women (Cornell 1992) can be, in the vein of Butler (1990), transformed beyond the confines and limitations of sex. It is therefore important to use cyborg imagery to shift

and challenge traditional representations and understandings of women (Penley, 1991 in Howell, 1995; Haraway, 1991).

Taking pleasure in these boundary transgressions of the cyborg, Haraway (1991: 150, emphasis added) blurs reality/fiction by asserting “the cyborg is a creature in a *post-gender* world”, while proposing “we are cyborgs”. In this fashion, Haraway (1991: 181) understands the importance of the cyborg as a “utopian dream of the hope for a monstrous world without gender”, meaning the cyborg should be embraced in “the promises of monsters” (Haraway, 1992b: 295). Nevertheless, despite Haraway’s (1991) acknowledgement of the utopian and dystopic past, present, and future potentials of technoscience; “bodies are maps of power and identity. Cyborgs are no exception” (Haraway, 1991: 180); she focuses on a cyborg utopia² “as an imaginative resource suggesting some very fruitful couplings” (Haraway, 1991: 153).

Similarly to Firestone’s utopian social vision of a techno-based post-gender reality that is free from biologically-based oppression (Braidotti, 2002; Firestone, 1970), Haraway (1991) presents the cyborg as (another) liberating source to escape gender stereotypes (Dixon, 2003; Balsamo, 1988). In this way, desire for gender reconstruction through dichotomist transgression is nothing more than a utopian dream, where the future reality will be more desirable than the present (Horner, 2001). Hence, such cyborg concepts are an escapist futuristic solution from the dissatisfaction with “the inadequacies and injustices of [contemporary] human life” (Springer, 1994: 163), which reconciles the self/other in a Lacanian Imaginary realm (Springer, 1994). In this fashion, the blurring of reality/imagination (Haraway, 1991) is a repetition of old feminist stories that reduces the depths of the: materiality of the concrete and embodied lived experience; structural embedded nature of gender; and the rhizomatous role of technology, which is creating ‘real’ oppression. Thus, as “the body is our general medium for having a world” (Merleau-Ponty 1962: 146), our ‘real’ embodied experiences are cyborg ‘facts’, that should remain to be potently significant for cyborg anthropology.

The powerful lived experience of the body and its intentionality is seen in the phantom-limb syndrome, where the absent limb of an amputee can be ambivalently (omni)present in a dual ontology of presence/absence (Merleau-Ponty 1962). Consequently, our understandings of the body should not only be conceived as transcending the flesh, but also dependent on our familiar lived experiences of the body. In other words, the embodiment of being-in-the-world is vital for the development and understanding of agency as experienced in ‘reality’. As a result, the concrete (cyborg) body continues to be a site of oppression; “an interface ... a field of intersecting material and symbolic forces; it is a surface where multiple codes ... are inscribed” (Braidotti, 2002: 25). In this fashion, cyborgs are not simply the new ontology or new embodied ‘flesh’ envisioned by Haraway (in Kunzru 1997), as sexualised markings on the (cyborg) body (Foster 1996) increase, rather than decrease, the gender divide. Furthermore, the immediate and everyday experience of the lived physical body (*Leib*) within a common life-world (*Lebenswelt*) (Merleau-Ponty 1962), continues to reassert the need to be aware, and to respect, the present social construction of human ontology as gendered³. In turn, the interrelation between materiality and discourse are important in the production of ‘reality’. Therefore, while Haraway acknowledges the social influences on material-semiotic actors, she focuses on cyborg post-gender ‘fiction’ at the expense of cyborg-gendered realities. Thus, it is important to consider what this ‘reality’ actually means for the lived experiences of cyborg bodies.

An example of this ‘real’ cyborg experience is the dominant transition of the androgynous human body to an enhanced masculine male cyborg body. This reassertion of gender differences and dualisms occurs through the technoscientific knowledges of military warfare, biomedicine (cyborg sex), and the popular icons of

action figure toys and science fiction stories (Gray, 2000). By repeating the fantasies of modernity, this means women have become (or are again) the main losers (Braidotti, 1996) in a cyborgian 'hypermascularity'. In this vein, "cyborg images reproduce limiting, not liberating, gender stereotypes" (Balsamo, 1988: 341). As a result, the futuristic and untroubled embracement of cyborg technologies is a technologically-based idealistic and whimsical reconciliation of dualisms (Horner, 2001), which does not erase sexual difference and otherness (Braidotti, 2002). Thus, gender dissolution requires more than acknowledging and figuratively reconstructing dualistic social constructions through machines, as "the question is not cyborg possibilities in and of themselves, but how the cyborg has been constructed by patriarchal discourse" (Rose in Dery, 1994: 217).

These understandings reveal that technoscience and the material-semiotic cyborg continue to: uphold modernism's patriarchal stories and desires of domination, control, and progress; (re)create oppressive dualistic categories; and/or uphold the precious sanctity of humanity and Christian Cartesian philosophy. This suggests that while it is permissible to dissolve some dualistic assumptions (such as human/machine), other dichotomies are guarded ferociously and/or subtly (re)produced (such as man/woman). Therefore, while cyborgs can create new possibilities, the structural inequalities and dualisms of patriarchy can also be intensified (Braidotti, 1996). Significantly, in her utopian post-gender cyborg fantasy, Haraway's cyborg connects to and intensifies the linear and paradisaical vision of modernism and Cartesianism. This can be explicitly demonstrated through the connection of Haraway's cyborg to the transhumanist and posthuman prophecies of the Extropians.

Transhumanism, Posthumanism, Extropians, and Haraway's Cyborg

Extropians are a loose collective of transhumanists who, although subscribing to individual political doctrines, optimistically believe that technological advances are challenging human biological limitations and socio-historical certainties (Extropy Institute, 2003a). Thus, values shared by Extropians, seen in 'The Principles of Extropy' (More, 2003), are viewed as achievable through different technological-based mechanisms (Extropy Institute, 2003b). These principles, consisting of: perpetual progress; self-transformation; practical optimism; intelligent technology; open society; self direction; and rational thinking (More, 2003), are founded on humanist ideals of innate human goodness and rationality, and a desire for progress, activity, and self-improvement (Extropy Institute, 2003b). At the same time, these principles also go beyond humanism in a technological imperative for species evolution (Extropy Institute, 2003b). Consequently, transhumanist improvements to humanity will surpass the annoying restrictions of biological and organic human evolution to facilitate a posthuman condition (Clarke, 2002), of variant 'postbiologicalism'.

For the Extropian Hans Moravec (1988), such evolutionary strategies will imperatively occur through the technological separation of the mind and body. In Moravec's (1988) post-biological future of artificial intelligence, it will no longer be wise to remain consciously connected to the human body due to the evolutionary pace of machines (Springer, 1996): "we have very little choice, if our culture is to remain viable" (Moravec, 1988: 100). This externalisation process involves the transferral of the mind into a machine-based system, such as a robot or computer disc. The result of mind transmigration is an immortal and potentially multiple human existence without a body (Dery, 1996; Moravec, 1988), thus rendering the body obsolete (Foster, 1996; Springer, 1996). Correspondingly, human existence becomes one of personal freedom, where technology allows Cartesian-Christian liberation of the conscious soul from the bondage of the body (Moravec, 1988). This postbiological future is further elaborated by the Extropy Institute (2003b: <http://www.extropy.org/faq.htm>, accessed 08/07/04),

who believe sex and gender will become mutable, allowing the possibility of “negsexuals, solosexuals, technosexuals, postsexuals, multisexuals [,and] VRsexuals”.

These evolutionary and optimistic beliefs in the technological inevitability to improve bodily imperfections are additionally explored in the cybernetic experiments of Kevin Warwick, who has been widely referred to as “Professor Cyborg” (Brown, 1999: <http://www.salon.com/tech/feature/1999/10/20/cyborg/>, accessed 11/08/04). In 1998, Warwick (2002) implanted a silicon chip transponder into his left arm. This chip allowed his body movements to be electronically detected and, like a remote control, activate numerous electronic items, such as doors, computers, and lights via human/chip locality (Warwick, 2002). Additionally, this electronic detection facilitated Warwick’s movements to be remotely monitored and recorded, allowing the creation of a computer log on his habitual movements. Despite this monitoring, however, Warwick “wasn’t in the slightest worried or even upset about the computer monitoring”, as it facilitated a positive gain of extras for his life, “rather than losing something” (Warwick, 2002: 84).

Like Moravec (1988), Warwick (2002) advocates implant technologies on an evolutionary, convenience, and imperative basis, where the enhancement of the human body will improve communications, increase information absorption, and supersede the body’s physical limitations for new found human freedoms: “The human body and the human brain are fine as far as being a human is concerned; but they are very, very restricted and limited when we look into the future” (Warwick in Brown, 1999: <http://www.salon.com/tech/feature/1999/10/20/cyborg/>, accessed 11/08/04). Therefore, the posthuman Extropian imagination exhibits a literal desire and need to become a machine through bodily transcendence (Horner, 2001; Foster, 1996). In this vein, the Extropian cyborg embraces the original programme of Clynes and Kline (1960), where the restrictions of embodiment and organic fragility are exceeded (Kunzru, 1997). This postbiological future of human evolution creates a higher form of being that is beyond mortality; facilitated by radically transforming the definition of ‘human’ through the technological imperatives of ‘downloading’ and ‘nano-medicine’ (Horner, 2001; Dery, 1996). Thus, these techno-evolution stories exhibit the desire to achieve immortality by denying the body and reflecting repulsion for, and ultimate control over, the least manageable and most vulnerable life event – death (Zuboff, 1988). This transcendental program reflects religious doctrine, where the mind transcends the ‘dead’ body in the quest for eternal life. This vertical accession in the return to paradise ignores the body, and treats it as expendable (Dery, 1996; Springer, 1996).

Moreover, while the Extropian Principle of ‘Open Society’ asserts Extropians are not utopian and avoid perfection through “openness to improvement” and “appreciating the diversity in values, lifestyle preferences, and approaches to solving problems” (More, 2003: <http://www.extropy.org/principles.htm>, accessed 08/07/04), their desire for rational progress and enhancement (re)creates a philosophical regression to hierarchical Cartesian divisionism. By (re)creating this split between reason/emotion and the “body-species” of us/them (Stelarc, 1998: 116, 118), an inferior “subspecies” emerges (Warwick, 2002: 157). Hence, individuals who do not choose to mutate their bodies and sexuality are viewed as “plain ole’ sexuals who remain nostalgic of the 20th Century” (Extropy Institute, 2003b: <http://www.extropy.org/faq.htm>, accessed 08/07/04). As a result, Extropians paradoxically maintain nostalgia for the phallogocentric legacy of patriarchal control and power by creating a hierarchical dualistic system based on difference; separating the “technological elites” (the ‘haves’; those who mutate) from the “technopeasants” (the ‘have-nots’; those who remain immutable) (Gandy, 1989: 62):

... I put forward a case that in the future, becoming a cyborg, with the help of implants, would give individuals much greater powers than those who remained

human ... [Those who remain human] would become part of the subspecies human race. (Warwick, 2002: 157)

Technology thus becomes the contemporary saviour that overcomes human biological constraints and limitations imposed on us by an external superior being and/or transcendental g/God at birth. Essentially, this treats the body as a material, unnecessary, and objectified structure of accidental and manipulative nature, which can be abandoned and changed (Nayar, 2002). For Australian cybernetic performance artist and trans/posthuman Stelarc, this bodily objectification is supported by “Cartesian convention, personal convenience and neurophysiological design”, as “people operate merely as minds” (Stelarc, 1998: 117). In this sense, Extropians are technological determinists in believing “evolutionary progress” occurs through technology (More, 2003: <http://www.extropy.org/principles.htm>, accessed 08/07/04), rather than the Harawayian-cyborg co-evolution and equality of human/machine convergence (Gray, et al., 1995). Furthermore, by using technology to overcome the imperfections created by g/God, the Extropians replicate the position of evolutionary creator (God) and human saviour (Jesus), who lead the masses to a higher and better form of immortal life (heaven), by healing their fragility and sins (notably, located in the mortal body). As a result, Extropians are joined to Christian philosophy and Cartesian bodily-objectification. Furthermore, Extropian desires for ‘Perpetual Progress’ suggest technologies will continue to positively improve the cyborg body (More, 2003), (re)producing, yet again, modernity’s stories of linear progress and improvement.

Similarly, Haraway (1997: 44) blurs science/religion to celebrate escapist fantasies of salvation, where “the Eucharist of biotechnology” becomes a religion that leads to alternative and improved ways of cyborg being (McCormick, 2000). Importantly, the Eucharist is a strong Christian religious metaphor for transcendental spiritual flow. As the supreme sacrament, the Eucharist embodies a faith in divinity, redemption, the eternal life in heaven, and Christ Himself (Brumley, 1996). Additionally, religious faith is strengthened through the Eucharist, as it is considered the home of spiritual love (Brumley, 1996). Through her celebration of “the Eucharist of biotechnology”, Haraway (1997: 44) thus posits biotechnology as a loving and divine Jesus-figure that will forgive us for our Oedipal sins. By forgiving these Oedipal sins, the cyborg liberates to a higher form of spiritual and heavenly life, this being a post-gender utopia. Therefore, while Haraway (1991: 150) claims “the cyborg incarnation is outside salvation history” and hopes for “unity across race, gender, and class” (Haraway, 1991: 173), she also repeats stories of improvement and paradise in a genderless and utopian future (Haraway, 1991). This entwining of the symbols of Christian faith and the cyborg therefore exploits the cyborg/posthuman as an ideal transcendental “saviour-figure” (Tatman, 2003: 51), in spite of Haraway’s (1997: 132) criticisms of “Christian salvation history” and longings for “the Garden of Eden” (Haraway, 1991: 151). In this fashion, while the OncoMouse’s™ “promise is decidedly secular, she [sic] is a figure in the sense developed from Christian realism” (Haraway 1997: 79), such relations highlight the power of religious metaphors in the cyborg genealogy, including Haraway’s own conceptualisations. The semiotic stories of Christian salvation history and their role in patriarchal science are thereby continued by Haraway whom, by employing the same discourses, reinforces the dualistic structures she wishes to overcome. Therefore, the promise embodied in Jesus for “the union of humanity and divinity in a universal salvation narrative” (Haraway 1992a: 90), has become embodied in the cyborg. In this fashion, DuPont’s⁴ cyborgian “better things for better living” (in Haraway 1997: 9, 84), (re)creates the (un)filling promises of Christian union and salvation.

Furthermore, in reference to Haraway’s (1991) ‘post-gender’ reality, this vision implicitly creates an Extropian subspecies split between gendered (dystopic) and non-gendered (utopian) bodies. While Extropian mutable-gender acknowledges the pervasiveness of gender in Western society, Haraway only explicitly identifies a post-gender state as desirable. In this way, humans will surpass (or have surpassed), gender as we know it

or, at least, how it is presently conceptualised. Therefore, Haraway employs her own Extropian ideal of species evolution by challenging the 'known' gendered material and semiotic body through technology (cyborgs), in order to become 'something other than'. In this fashion, Haraway agrees with Warwick (2002) that bodies are limited in their present (gendered) form. Hence, the nostalgic liberation envisaged by the differing, yet similar, Harawayian and Extropian techno-optimism, serves to (re)create the hierarchical and judgemental binaries of Cartesian Christian philosophy, Western cultural beliefs, and modernity (McCormick, 2000). As a result, these cyborg discourses use the objectified body in a program of a unified utopianism (Therrien, 1993, in Dery, 1996), which involves the body being "subjected, used, transformed, [and] improved" (Foucault, 1979: 136) for a better quality of (cyborg) life. Thus, while the Extropian cyborg is ontologically different to Haraway's cyborg, both cyborgs share salvation, utopian, and dualistic dreams.

Patriarchy and Cyborg Containment Technologies

As patriarchy has influenced technological development and design, cyborg technologies can also embrace a hierarchy that defines technological usage and application. Therefore, despite espousing on equality of participation, regulations and disciplinary techniques are placed upon different bodies (Green, 2001). This cyborg contempt for particular bodies is evident in the restriction and/or exclusion of certain bodies from virtual reality (VR) game systems (Green, 2001; Horner, 2001). This marginalisation occurs through warning signs, which provide little or no explanation for excluding bodies that deviate from the male (cyborg)-determined 'norm':

Warning! Do not play this game if you:

- Are less than 100cm tall;
- Are pregnant or may be pregnant [potentially all women in modern constructionist paradigms];
- Are under the influence of alcohol or drugs;
- Have high blood pressure or a heart ailment;
- Have neck or spinal pain;
- Have eye disease;
- Need assistance walking;
- Have experienced muscle twitches, loss of awareness while watching TV, playing video games or being exposed to strong light stimulation. (sign next to a virtual reality game system, in Green, 2001: 166, emphasis in original)

Therefore, while VR is technologically advanced, it is philosophically regressive by differentiating between bodies and paying homage to Cartesian dualisms (Penny, 1995). This highlights how cultural legacies affect who can and cannot 'be' cyborg, and who can and cannot reap the benefits of cyborg technologies (Gray, et. al., 1995). Hence, cyborgs are embedded in a socio-cultural temporality that continues to privilege male dominance and control (Penny, 1995), by making the male body "the standard in the game of [cyborg] signification" (Laqueur, 1990: 22):

The philosophy of technology ... has been articulated entirely from a masculinist perspective in terms that metaphorize and marginalize the feminine. In real social discourse, this claiming of technology has been reinforced by, and ... encouraged, a male monopoly on technical expertise, diminishing or excluding the historical contributions of women to technological developments. (Tenhaaf in Penny, 1995: 203)

Cyborg utopianism also ignores the vast and real potential of cyborg technologies to be used against the wider population for control and surveillance, and thus create

“degrading cyborgs” (Gray, et al., 1995: 3). Therefore, like religion, technologies can be used as a “power mechanism” for the “few to dominate the many” (Therrien, 1993, in Dery, 1996: 169). This is evidenced in corporate, political, militaristic, and policing interests expressed in the surveillance potentialities of Warwick’s (2002) implantation experiments (Brown, 1999). Furthermore, Warwick’s (2002) subsequent implantation project, aimed at directly connecting the human nervous system to computer networks and ultimately between two people, was funded by, and used resources from, a variety of corporations. Warwick (2002: 141) however, fails to see the self-interests that may motivate business to contribute to his implantation experiments beyond the simplistic needs of promotion: “ ... they generally want something in return. The easiest way to deal with this was by providing publicity for the company on the back of what we are doing”.

As a result, problems with cyborg technologies can arise from unforeseen or unknown consequences that compromise concerns of privacy and protection. Hence, despite not being designed initially for surveillance, advanced technologies can increase bureaucratic power through an integration with other resources of disciplinary surveillance and control (Gandy, 1989). “Cyborg containment technologies” (Gray, 2002: 36) thus create, through the threat of constant surveillance and observation, a self-regulated and self-disciplined population of normalised ‘docile’ bodies (Staples, 1994; Foucault, 1979), as based upon existing socio-cultural structures. Correspondingly, a key issue in cyborg technologies is an understanding of the power relationships enabled by the militaristic C³I (command-control-communication-intelligence), which creates cyborgs that are not inevitably or inherently liberating (Haraway in Gray, 2002). This issue is ignored by the techno-utopianism of the Extropians, though considered by Haraway (1997, 1995, 1992b, 1991). Therefore, in the paradoxical makeup of the cyborg, cyborg technologies can be the ultimate form of oppression, while also embracing the ethos of liberation (Haraway in Gray, 2002; Gray, 2000).

Conclusion

The problem with Haraway’s (1991) formulation of a post-gender, utopian cyborg is an undervaluation of the influential power of the materially embodied experience, which is shaped by deeply embedded socio-cultural notions of gender. These legacies have resulted in cyborgs upholding the oppressive humanist narratives of Cartesianism, Christian religion, and modernity; while also challenging and (re)creating the same dualistic structures. Moreover, Haraway’s techno-based utopian fantasies repeat old feminist stories of liberation, where the cyborg is a ‘saviour-figure’ that rescues humanity. In this fashion, as the synonymic or metaphorical implications of language cannot be controlled or remade, Haraway cannot remove, restrict, nor contain the religious connotations of words. This is because, like the cyborg, words carry cultural baggage and symbolism. Consequently, the cyborg is a site of socio-cultural political contestation (Balsamo, 1988), meaning we should not be seduced by the idealistic and utopian post-gender cyborg. In our dreams for the future, the contemporary ‘reality’ should not be ignored at the expense of fantastical post-gender ‘imagery’, or through fears of essentialism. As Braidotti (2002: 25) asserts, “it takes more than machinery to alter patterns of thought”. Thus, while the cyborg can enable new ways of thinking about human ontology by “open[ing] up productive ways of thinking about subjectivity, gender, and the materiality of a physical body” (Balsamo, 1988: 343), cyborgs can also reassert the boundaries lost in a constructionist paradigm (Fuchs 1995). Thus, the multiplicity of cyborg possibilities should not be reduced to utopianism or the dystopic (Sofoulis, 2002), as mixing cyborg reality/fiction should not come at the expense of ‘real’ embodied cyborg experiences.

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NOTES

¹ The OncoMouse™ is a genetically engineered mouse who carries, in addition to its own genes, a human oncogene. This human oncogene predisposes the OncoMouse™ to develop breast cancers more quickly than its non-genetically engineered counterparts. Therefore, the OncoMouse™ is a (breast) cancer "tool-weapon" (Haraway 1992c: 39).

² It is acknowledged Haraway (1992b) later asserts the cyborg should not merely be conceived as utopian. Many of the themes presented in that paper however, are still relevant for later works.

³ It is not the intent of this paper to engage with the critique of corporeal feminists on Merleau-Ponty's (1962) universality of the body and failure to acknowledge the temporal socio-cultural context/s.

⁴ DuPont is the biotechnology company that 'manufactures' the OncoMouse™.
