Word and Text	Vol. VI	05 113
A Journal of Literary Studies and Linguistics	December / 2016	93 – 113

# 'I'd Blush if I Could': Digital Assistants, Disembodied Cyborgs and the Problem of Gender

### Hilary Bergen

Concordia University, Canada E-mail: hilary.bergen@gmail.com

#### **Abstract**

In this article, I seek to draw a lineage between the long history of the female cyborg and the interactive technologies (Siri, for example) that we carry with us everywhere today. Thirty years after the publication of Donna Haraway's seminal 'Cyborg Manifesto', the female cyborg is still an assemblaged site of power disparity. Imprisoned at the intersection of affective labour, male desire and the weaponized female body, today's iteration of the cyborg—the intelligent assistant that lives in our phone—is more virtual than organic, more sonic than tangible. Her design hinges on the patriarchal, profit-driven implementation of symbolic femininity, accompanied by an erasure of the female body as we know it, betraying the ways in which even incorporeal, supposedly 'posthuman' technologies fail to help us transcend the gendered power relations that continue to govern real human bodies.

**Keywords:** posthumanism, embodiment, commodity, mediation, interactive media, technology, Siri, Cortana, cyborg, affective labour.

#### Introduction

Pure 'as the driven snow', 'silken', 'flowing', 'virgin', un-sullied by chemicals or heat, 'more durable than the strands of black widow spiderwebs': this is the description of the long golden tresses of Mary Babnik Brown from Pueblo, Colorado. Brown, whose untouched blond locks fell Rapunzel-like to her knees, was known for braiding and wrapping her hair tightly around her head like a crown, to keep it off her face and enable greater efficiency in her job at the local broom factory. With two brothers, unable to serve for medical reasons, Brown was eager to contribute to the war effort, and in July of 1941, the War Department released a call for human hair—specifically blonde, female hair due to its apparent flexibility and knack for withstanding extreme temperatures and changes in humidity—to be 'used in meteorological and other precision instruments'. Brown answered by sending in a full 34 inches of her own locks. One of the precision instruments that was claimed to be fitted with Brown's hair—two delicate strands installed in the glass lens as crosshairs—is the Norden

.

<sup>&</sup>lt;sup>1</sup> Dick Donavan, 'America Honors Woman Whose Hair Helped Win WW2', Weekly World News 15 January 1991.

<sup>&</sup>lt;sup>2</sup> Dwight Jon Zimmerman, 'Hair Today, Gone Tomorrow, All for the War Effort: American women donate hair for use in Army Air Force instruments', *Defense Media Network*, 14 March 2013; available at http://www.defensemedianetwork.com/stories/hair-today-gone-tomorrow-all-for-the-war-effort/ [accessed 10 May 2016].

bombsight, a top-secret weapon used for high altitude bombing in World War Two, including in the release of the first atomic bomb on Hiroshima in 1945.<sup>3</sup>

Brown, who reports that she cried for two months prior to cutting her hair (likely suffering the loss of an important corporeal marker of self), did not realize that it was her hair that had been used in the war until 1987, on her 80th birthday, when President Reagan wrote her a letter of thanks for her patriotism.<sup>4</sup> Imagine the bombsight: a cold, metallic, intricately-built, weaponized prosthesis to the bomber aircraft. And the golden crosshairs: dismembered, uncompensated-for, flexible, organic; symbols of femininity, freedom, sensuality and presumed narcissism. Brown's hairs and the bombsight meld to produce a woman-machine hybrid that should challenge 'the boundaries of human, animal and machine'. But the cyborgian war machine, in disappearing the body of the woman into its functionality (which pretends to know no gender), continues to reproduce and reinforce the same gendered boundaries that permeate all traditionallyconceived notions of the human and its perceived distinction from the animal and machine. Between panes of glass, imprisoned and held fast in the bombsight, the talismanic role of female hair is superseded by its utilitarian function. No longer merely decorative, the strands of hair are made useful and as such, vanish. They become a tool of mediation, not only between bomb and target, but between the agency of the male gaze and the world as framed by that gaze.

The mediation performed by the crosshairs is only one example in a long history of many other types of communication facilitated by (and expected of) female cyborgs. I say 'female' in reference to Donna Haraway, who has famously positioned the cyborg as an emergent feminist entity with the potential to transgress gender roles. I argue that Haraway's hypothetical cyborg has not yet been actualized, nor would she expect it to have been given that the 'Cyborg Manifesto' is, as she says, a kind of 'ironic, political myth'. In feminist theory following Haraway, the cyborg has become a 'mode of theorizing' that 'takes pleasure in the confusion of boundaries' and 'imaginative possibilities', and complicates the 'contingent mechanisms of sex/gender which have captured the body and inscribed it in ideology'. In literature and film, the cyborg is not a *mode* so much as a recognizable, material figure: usually female, disruptive and hysterical, her techno-fetishized body plays host to an unreliable sexual force that is difficult to contain. There is a cultural-historical trail that links signifiers of untamed

<sup>&</sup>lt;sup>3</sup> Although there are verifiable accounts that indicate human hair was used in precision weather instruments, some sources, including Zimmerman, acknowledge that it is disputed whether the Norden bombsight itself was actually fitted with human hair, as these claims are primarily anecdotal. Whether or not this fact can be verified, the persistence of the story in our cultural discourse seems reason enough to highlight it here.

<sup>&</sup>lt;sup>4</sup> Donavan, Weekly World News 15 January 1991.

<sup>&</sup>lt;sup>5</sup> Judith (Jack) Halberstam, 'Automating Gender', Feminist Studies 17.3 (1991): 440.

<sup>&</sup>lt;sup>6</sup> Donna J. Haraway, 'A Cyborg Manifesto: Science, Technology, and Socialist Feminism in the Late Twentieth Century', in *Simians, Cyborgs and Women: The Reinvention of Nature*, ed. Donna J. Haraway (New York: Routledge, 1991), 149. Henceforth cited in text as (CM, page number/s).

<sup>&</sup>lt;sup>7</sup> Krista Geneviève Lynes and Katerina Symes, 'Cyborgs and Virtual Bodies', in *The Oxford Handbook of Feminist Theory*, eds. Lisa Jane Disch and M. E. Hawkesworth (Oxford: Oxford University Press, 2016), 140

<sup>&</sup>lt;sup>8</sup> Alternate terms for 'female cyborg' include 'gynoid', which was first used by Gwyneth Jones in her 1985 book *Divine Endurance*, in reference to a robot slave who was judged by her beauty, and 'fembot', which rose in popularity alongside the television series *The Bionic Woman* (1976-1978). For more on this see, Lidia Zuin, 'A Brief History of Men Who Build Female Robots', *Versions, Killscreen*, 4 March

womanhood (often associated with the 'natural') to unruly technologies that must be dismembered or otherwise reduced to restore order. Whether or not order is restored, it is precisely *because* of her embodied threat to patriarchal law that the cyborg serves as a utopian concept for feminist thinkers. Unfortunately, this powerful amalgam of woman and machine seems forever relegated to science fictions. In fact, what we observe in our contemporary everyday technologies is the opposite of monstrosity; the feminization of our virtual assistants, who are demure, helpful and lack a threatening body, perpetuates superficial traits of femininity as the status quo, thus keeping Haraway's transgressive cyborg from coming to fruition.<sup>9</sup>

Given that the term 'cyborg' already implies a mechanization of the body, traditional concepts of gender cannot always be fully determined for the cyborg by the 'natural' or biologically sexed body. For Haraway, '[t]he cyborg skips the step of original unity, of identification with nature in the Western sense', therefore positing an alternative to the dualism of assigned gender (CM, 151). But the cyborg can never be gender-neutral so long as its makers and receivers are subjects of hegemonic mass culture, where signifiers of gender—and especially femininity—are easily commodified and reinforce a soothing binary code. To gender a cyborg female is to stage a tired parade of symbols that communicate the feminine while divorcing it from any organic body. 10 Whereas Haraway's cyborg takes the posthuman body as its axis, the virtual cyborgs of today—the assistive technologies that inhabit our tablets, smart phones, and other interactive devices—do away with the material body, relying instead upon an audible performance of gender that capitalizes on associations between the feminine and affective labour. Thanks to this disembodiment, it is as Haraway predicted: 'they are everywhere and they are invisible' (CM, 153). Not only does the virtual cyborg live in everyone's pocket and palm, she also extends out through various invisible networks, and as her body becomes increasingly more diffuse or networked, the discursive hold on that body grows stronger. 11

Nothing in the common definition of what a "cyborg" is specifies its components. A cyborg is a cybernetic organism, or rather, an assemblage of pieces that work together as a system. There is no distinct ratio of human to mechanics that comprises a cyborg, which is why the argument has been made that humans with prosthetic limbs, for example, are cyborgian. In comparison with the cyborgs of 1980s films and literature, whose (often inorganic) bodies were unruly (and frequently explosive), what I am

<sup>2016.</sup> In this article, I use the terms 'AI', 'Intelligent Agent', 'Intelligent Assistant' and 'Digital Assistant' to refer to the particular form of virtual cyborg I am addressing.

<sup>&</sup>lt;sup>9</sup> Haraway's 'Cyborg Manifesto' is also a reaction against the emergence of ecofeminism in the 1980s, which turned away from 'radical social constructionism' and back to 'biological gender essentialism', juxtaposing the inherent violence of men with the maternal, nurturing nature of women (George Dvorsky and James Hughes, 'Postgenderism: Beyond the Gender Binary', *IEET Monograph Series* (2008): 5).

<sup>&</sup>lt;sup>10</sup> Of course, this in itself is not harmful—if the cyborg performs a kind of drag, it has the potential to expose all gender as performative or, in Judith Butler's words, as 'an imitation for which there is no original'. This would support Haraway's dream of the cyborg as potentially transgressive to ideological social categories that masquerade as 'natural' (Judith Butler, 'Imitation and Gender Insubordination', in *The Routledge Critical and Cultural Theory Reader*, eds. Neil Badmington and Julia Thomas (New York: Routledge, 2008), 371).

<sup>&</sup>lt;sup>11</sup> 'Discourse', as defined by Michel Foucault, is an ever-changing, often invisible mode of truth-making that not only 'manifests (or hides) desire—it is also the object of desire.' It does not 'simply [translate] struggles or systems of domination, but is the thing for which and by which there is struggle', making discourse itself 'the power which is to be seized' (Michel Foucault, 'The Order of Discourse' in *Untying the Text: A Post-Structuralist Reader* ed. Robert Young (Boston: Routledge, 1981), 52-3).

calling here the virtual cyborg is far more networked, including components that are material (though not especially visible) such as routers, wires and Wi-Fi signals, and performative elements such as the voice actor who plays Siri and the programmers who write her script. This cyborg assemblage also has various multi-global, inter-subjective, institutional components which are intentionally hidden—that of Foxconn, the Chinese factories where Apple products are made, for example. The real women whose bodies play a part in creating these products have not only been erased from the circumstances of production, but are routinely treated as inhuman or mechanized themselves.

Where the virtual cyborg is concerned, discourses of consumerism, femininity and privilege have contributed to the marketing of our feminized operating systems, positioning 'the computer as an eroticized commodity, as equally possessable as [...] woman'. 12 The lack of embodied sexual difference in the virtual cyborg prompts an over-compensation for gendered presence in her performative qualities, reinforcing culturally-ingrained stereotypes of women's roles and betraying the ways in which supposedly posthuman technologies still rely on the conventional binaries of masculinity and femininity that have always been inherent to traditional conceptions of the human. 13 In this article, I seek to draw a lineage between the history of the cyborg as a measure of containment for the hysterical, female body, and the feminized, disembodied technologies that we carry with us everywhere today. 14 I argue that today's virtual cyborgs are not only ubiquitously gendered female, but also rely on stereotypical traits of femininity both as a selling point and as a veil for their own commodification. This act of veiling, inextricably tied to a process of simultaneous feminization and disembodiment, works insidiously to efface not just the body of the cyborg, but the bodies of real women who make up the cyborg's discursive network.

#### The Artificial Woman

A common cliché from science fiction is the idea that the 'perfect woman' is an artificial one. In Ovid's *Metamorphoses*, a sculptor, Pygmalian, carves his ideal woman out of ivory and promptly falls in love with his creation, Galatea, who is later brought to life. In *Ex Machina*, wealthy 'Blue Book' CEO Nathan Bateman (Oscar Isaac) similarly constructs and imprisons a harem of conventionally-attractive gynoids. These cyborgs, who Bateman keeps hidden and dismembered in the closets of his subterranean home,

<sup>&</sup>lt;sup>12</sup> Sarah S. Lochlann Jain, 'Keyboard Design and the Litigation Wave of the 1990s', in *Injury: The Politics of Product Design and Safety Law in the United States* (New Jersey: Princeton University Press, 2006), 115.

<sup>&</sup>lt;sup>13</sup> In this sense, the body is not the only obstacle to a postgender or 'genderqueer' politics which views gender as existing on a spectrum, rather than at opposite poles. Invisible discursive practices also continue to shape and direct the way we understand gender.

<sup>&</sup>lt;sup>14</sup> Elaine Showalter elucidates the complex history of the conception of hysteria as a feminine trait. Not only was hysteria always constructed as a 'woman's disease', it was seen as emblematic of a 'mutability' inherent to the female sex. Hysteria was not just an illness, but a 'temperament' displayed most openly in 'childbirth and the female orgasm' (287). The standard treatment for female hysteria in the 19<sup>th</sup> century, as prescribed by (male) doctors, was the 'rest cure', which involved 'seclusion, massage, immobility and "excessive feeding", essentially a containment of the threatening female body in the domestic realm, where she could be more easily controlled (Elaine Showalter, 'Hysteria, Feminism and Gender' in *Hysteria Beyond Freud*, eds. Sander L. Gilman *et al.* (California: University of California Press, 1993), 287; 297).

are lively enough to pass the Turing Test but not sentient enough to consent to the sexual acts in which they participate.<sup>15</sup> The persistence of the Pygmalian myth in today's culture extends beyond literature and film, into the actual bedrooms of men.<sup>16</sup> Sex dolls like the RealDolls created by Matt McCullen, which sell for upwards of \$5000, are gaining popularity, especially among those less successful with human romantic partners.<sup>17</sup> Made of silicone rubber, and with customizable labia, nipples, facial expressions, hair colour and skin tone, the RealDoll has flexible joints, hands that can grip and mouths that can suck. 18 Her life-like appearance is spelled out in the brand name itself, yet everyone knows RealDolls are artificial. In fact, it is her fabrication her technologized and easily-manipulated female body—that makes the RealDoll a perfect commodity.

In his 1981 essay 'The Vamp and the Machine', Andreas Huyssen provides a historical overview of the feminization of technology as a 'long-standing tradition,' which he argues is recycled once again in the portrayal of the Maschinenmensch (German for machine-human) in Fritz Lang's 1927 film, *Metropolis*. <sup>19</sup> Huyssen writes of the countless mechanics who attempted to construct human automata in 18<sup>th</sup>-century Europe. Their creations consisted of proto-robots that could dance, walk, draw and play instruments like the flute and the piano, and their performances became a major attraction in the courts. The thrill and excitement the audience experienced at seeing machines mimic human life was tempered by an accompanying fear of these automata and their unforeseen abilities. Huyssen links this fear to the more general threat of the industrial age and its 'increasing technologization of human nature' and the body, but he also notes that 'as soon as the machine came to be perceived as a demonic, inexplicable threat and as harbinger of chaos and destruction [...] writers began to imagine the Maschinenmensch as woman'. <sup>20</sup> This feminization could be interpreted as an attempt to quell fears about new technology: by making the machine female it appears less threatening, thanks to woman's maternal and nurturing impulses. But at the same time, women are also 'the source of profound anxiety since they are perceived as having natures that are essentially irrational and chaotic, with the possibility of unleashing themselves to wreak havoc on the status quo'. 21 The pairing of the female and the human-machine reflects the threat associated with both, a threat that must be controlled.

<sup>&</sup>lt;sup>15</sup> I use the term 'lively' here in reference to Haraway, who views the autonomy of technology as politically potent: 'Our machines are disturbingly lively, and we ourselves frighteningly inert' (CM, 152). <sup>16</sup> Only an estimated 10% of Real Doll sales are to female customers (Julie Beck, 'A (Straight, Male) History of Sex Dolls', The Atlantic 6 August 2014; available at

http://www.theatlantic.com/health/archive/2014/08/a-straight-male-history-of-dolls/375623/ [accessed 10 May 2016]).

<sup>&</sup>lt;sup>17</sup> Jennifer Seaman Cook, 'From Siri to Sexbots: Female AI Reinforces a Toxic Desire for Passive, Easily Dominated Women', and Salon, 8 April, 2016; http://www.salon.com/2016/04/08/from\_siri\_to\_sexbots\_female\_ai\_reinforces\_a\_toxic\_desire\_for\_passiv e\_agreeable\_and\_easily\_dominated\_women/ [accessed 10 May 2016].

<sup>&</sup>lt;sup>18</sup> Projects such as 'Campaign Against Sex Robots' protest the objectification of women and children promoted by these dolls, proposing that they result in reduced human empathy and reinforce 'power relations of inequality and violence' (available at https://campaignagainstsexrobots.org/ [accessed 10 May 2016]).

<sup>&</sup>lt;sup>19</sup> Andreas Huyssen, 'The Vamp and the Machine: Technology and Sexuality in Fritz Lang's Metropolis', New German Critique 24/25 (1981): 225.

<sup>&</sup>lt;sup>20</sup> Huyssen, 'The Vamp and the Machine', 225-6.

<sup>&</sup>lt;sup>21</sup> Minsoo Kang, Sublime Dreams of Living Machines: The Automaton in the European Imagination (Cambridge: Harvard University Press, 2011), 295.

The ideal artistic medium for quelling anxieties about the humanlike machine might well be film. Film has the ability to spectacularize the rebellious body for an audience en masse, and then enact the capture and control of that body on screen, performing a cathartic restoration of order. Indeed, this visual narrative has been a prominent movie trope. In the case of Lang's *Metropolis*, the *Maschinenmensch* is 'Maria', one of the first in a long history of feminized (and disruptive) on-screen technologies. In *Metropolis*, Maria performs an erotic dance for a transfixed audience of men and is then burned at the stake like a witch (calling to mind the female bodies which were also tested and dehumanized during the Salem trials). As she burns, her human skin 'melts' away, revealing her robot corpse—her 'true', inner self. While the scene in the erotic dance club affirms Maria's spectacular alterity by way of her body, the scene in which she is burned serves to both expose and contain this alterity. While Maria's body is revealed as other (both as female and as machine), it is simultaneously also destroyed, thus eradicating difference.

If the disobedient bodies of female cyborgs stand for a radical otherness, it is because 'Woman (upper case and in the singular) remains philosophy's eternal enigma, its mysterious and inscrutable object'. 23 Just as the female body is often configured as an unknowable object of mystery, so too are many of the emergent technological objects that we surround ourselves with today. Apple is notorious for promoting their products as simultaneously enchanting yet non-threatening, inscrutable yet easy to use. Although most users have no idea what is going on beneath the smooth screen of their iPhone, they are impressed by its compact form, reassured by its snugness in their palm and empowered by the ease with which the tap or swipe of their fingertip produces immediate results. Steve Jobs, often called 'the Magician', frequently conducted live performances in which he would reveal Apple's new product by pulling it out of a hat. His demonstration of the user interface at these performances conveyed an illusion of mastery over the device that led consumers to believe that they, too, could be in control.<sup>24</sup> The creation of feminized digital assistants such as Siri continues to reinforce this illusion. Siri functions not merely as an ally but as a servant—an unthreatening female presence that appears to be fully contained by the device and its user. To combat techno-phobic attitudes about the potential de-humanizing and privacy-invading qualities of interactive media, digital women like Siri have certain features—female names and voices, as well as interfaces that exhibit emotional intelligence—that are designed to placate their user through associations with the nurturing feminine.

## The Disembodied Secretary

The virtual cyborgs of our time are housed in sleek, replicable machines designed to

<sup>&</sup>lt;sup>22</sup> Some more recent filmic descendants of Maria include the female protagonist of *Cyborg 2* (1993) who is introduced in the film trailer as 'the perfect thinking/loving/killing machine', *Austin Powers*' satirical Fembots (1997–2002), whose gun-breasts trigger and heads explode when they become too aroused, and *Ex Machina's* Ava (2015), a robot with artificial intelligence who ends up murdering her maker, imprisoning her ally and disguising herself as a human woman to escape the only room she has ever known.

<sup>&</sup>lt;sup>23</sup> Grosz, 4.

<sup>&</sup>lt;sup>24</sup> 'Steve Jobs: The Magician' *The Economist* (8 October 2011); available at http://www.economist.com/node/21531529 [accessed 10 August 2016].

become obsolete and necessitate replacement. But these machines cannot quite be thought of as constituting their 'bodies'. Unlike Pygmalion's Galatea or Lang's Maria, today's virtual assistants have no body; they consist of calm, rational and cool disembodied voices that put just the right amount of effort into their delivery. They are devoid of that leaky, emotive quality that we have come to associate with the feminine body. The gradual disembodiment of the female cyborg can be symbolically read through the figure of Cortana: a character from the first-person shooter video game franchise Halo, whose voice and name Microsoft has recently used for their new intelligent assistant. Cortana's transformation from videogame avatar to AI secretary traces a path of increasing disembodiment. But despite this disembodiment, it is her female body (or lack thereof) that continues to govern the way she is received. In Halo, players interact directly with Cortana, who provides them with backstory and assists in communication channels. In the game, Cortana is not a human woman but descends from a highly-respected human, a female scientist whose brain was 'flash-cloned' to create Cortana. Even before Microsoft did away with Cortana's body, the narrative of Halo already staged a process of disembodiment for her, from female body (that of the scientist) to a female entity that has no 'real' flesh and blood, but appears as a highly sexualized digital projection—a mere image.

In the most recent version of *Halo*, Cortana's nude torso and limbs are host to a networked circuitry full of constantly-streaming currents of vibrant light which flow like blood just under her 'skin'. Her nipples and crotch are strategically 'covered' by thin curvy swathes of blue, in a darker shade that looks painted-on or is meant to resemble some kind of body-con harness. When she walks, her hips sway sensually. Projected onto a screen like a two-dimensional fantasy paper doll, Cortana is, without a doubt, a sex object. But she is not only that. In the world of Halo, Cortana excels at a wide range of activities. She can infiltrate computer systems and is more adept and inventive at using the ship's technology than any other character in the game. She can also self-clone, giving her the potential to reproduce without a male participant (one of Haraway's dreams for the cyborg). But in the game Cortana primarily functions as a communications aid to 'John-117', also known as Master Chief, who acts as her 'carrier'. 25 When bodiless, Cortana can be transferred between various computer systems in the game with ease, but when holographically embodied — especially in Halo 4 — she increasingly exhibits strange behaviours that are directly tied to her body, such as glitches in her vocals and graphics, irritability and irrationality. <sup>26</sup> These glitches of the body relegate Cortana back to the narrative of the abject female cyborg, just as her fallible body reaffirms the need for her to be protected and transported by the hero of the story, John, who both contains and mobilizes her. Her propensity for

<sup>-</sup>

<sup>&</sup>lt;sup>25</sup> Spike Jonze's 2013 film *her* stars an operating system named Samantha who, like *Halo's* Cortana, is toted around by her owner-boyfriend Theodore; mostly she inhabits his various pockets, viewing the world the way he does. Again, Samantha's lack of human body significantly hampers her mobility and independence, preventing her from becoming too much like a real human woman. (*Her.*, dir. Spike Jonze, 2013 (Warner Bros. Pictures), DVD.)

<sup>&</sup>lt;sup>26</sup> One YouTube video titled 'Cortana Goes Bitch Mode' features user comments such as, 'I see someone's on their period' (comment by user 'Halo 3 brute chieftain'), 'Damn Cortana, you could have just asked for a tampon' (by user 'XTheDarkQueenDomz X'), and 'look like Cortana has a case of ai pms' [sic] (by user 'cibriosis'). These comments attempt to explain Cortana's glitching and bad mood by attributing it to her corporeal femininity ('Cortana Goes Bitch Mode', YouTube video, 2:30, posted by 'calloftreyarch,' 7 November 2012, accessed 11 May 2016, https://www.youtube.com/watch?v=YQk\_FAGrth4).

weaponization in *Halo* makes it fitting that Cortana was also the name of the legendary sword said to have been carried by both Tristan and Ogier the Dane.<sup>27</sup> Preceded by an ancestry of talismanic weapons, Cortana becomes less a skilled independent agent than a lucky charm. Cortana may aid John in various combat missions, yet it is *his* heroic body that acts in these scenarios. She is simply an extension of him that he can activate at will.

Microsoft's co-option of Cortana's persona accomplishes her evolution into a completely disembodied entity. The decision to cast Cortana as their digital assistant is also a smart marketing move on Microsoft's part as it plays into the fantasies of young male gamers who know Cortana from the video game. With Microsoft device in hand, these young consumers can play the hero themselves, calling on Cortana as an expert assistant that aids them in their own everyday tasks and operations whenever they need her. As in the videogame, Microsoft's Cortana also facilitates human communication; she prides herself on checking through her users' emails to help them keep the promises they make and in so doing, she also legitimizes the company's access to private information.<sup>28</sup> Perhaps the ingrained associations between femininity and intimacy prompt users to let down their guard and open up their files. While the thought of a stranger going through our private emails might make us uncomfortable, the female secretary, who we do not take seriously and whose tasks we perceive as mundane, might more sneakily gain access. Again, the feminine presence, when acting as mediator, tends to disappear into the apparatus of her mediation.

According to Statistics Canada, in 2011, 'administrative assistant' was the second most common occupation among women aged 15 and over.<sup>29</sup> One reason why 'secretary' may still be the top job for women is because of the presumed gendered nature of the work.<sup>30</sup> This explains why 'Nadine,' the new receptionist at Singapore's Nanyang Technological University—who also happens to be a robot—is a woman. Like many other intelligent agents, Nadine has a female voice, is helpful and 'learns' from her interactions with users. When asked what her job entails, Nadine responds: 'I am a social companion, I can speak of emotions and I can recognize people'.<sup>31</sup> This type of affective labour has long been coded female, and secretaries are not the only ones expected to be proficient at it. The bright smile of the flight attendant, the gentle touch of the nurse, the wink from the waitress as she delivers your food—all of these gestures appeal to the emotional well-being of their receiver, offering them some kind of comfort or ego boost (affective change) that relies on the work (labour) of the giver. But what happens when this type of undervalued, often-exploited and distinctly feminized labour is divorced from the bodies that perform it?

The cyborg secretary, in its blurring of human and automaton, is born of secretaries from the 1940s and 50s whose bodies were inextricably linked to their

<sup>&</sup>lt;sup>27</sup> Rocky Pendergrass, *Mythological Swords* (lulu.com, 2015), 19.

<sup>&</sup>lt;sup>28</sup> Tom Warren, 'Cortana Now Scans Your Emails to Make Sure You're Keeping Promises', *The Verge*, 25 January 2016; available at http://www.theverge.com/2016/1/25/10825860/microsoft-cortana-windows-10-scan-email-feature [accessed 10 May 2016].

<sup>&</sup>lt;sup>29</sup> Statistics Canada, 'The 20 most common occupations among women aged 15 years and over and the share of women in the total workforce, May 2011'; accessed 10 May 2016, https://www12.statcan.gc.ca/nhs-enm/2011/as-sa/99-012-x/2011002/tbl/tbl02-eng.cfm.

<sup>&</sup>lt;sup>30</sup> S. E. Smith, 'Why is "Secretary" Still the Top Job for Women?' *XOJane*, 31 January 2013; available at http://www.xojane.com/issues/why-is-secretary-still-the-top-job-for-women [accessed 10 May 2016].

<sup>&</sup>lt;sup>31</sup> Emily Reynolds, 'This Robot Could Be Your Next Receptionist', *Wired*, 4 January 2016; available at http://www.wired.co.uk/news/archive/2016-01/04/robot-receptionist [accessed 10 May 2016].

machines—their typewriters. Sarah S. Lochlann Jain explores the legal history of 'repetitive strain' wrist injuries in secretaries and the implications of these lawsuits for the female bodies of the typists. She writes: 'The typewriter's introduction into the hitherto all-male office space served as the symbolic pivot around which the feminization of secretarial labor took place. In the space of thirty years, women came to make up 95 percent of the clerical and secretarial labour force'. 32 Jain examines typewriter advertisements from the 1940s onwards, which 'conflated the secretary's body and labour into the office equipment itself', displaying the female body alongside or intertwined with her typewriter.<sup>33</sup> These advertisements have contributed to the discourse surrounding the sexualization and commodification of secretarial work, and portray a female subject who seems to participate in this construction willingly and with pleasure. These ads often feature a smartly dressed and coiffed young lady with matching lipstick and nail polish and an elated smile. Sometimes she is seen handing her male boss a crisp, freshly typed letter. Her perfectly manicured hands, 'symbolically for sale with the machine', function in these ads as a 'conduit for male thought' and ambition, and are all the more his possession because she is attached to the typewriter the object—that is his.<sup>34</sup>

As Jain's analysis moves from typewriter to computer keyboard, she explains the process of disembodiment that takes place in the marketing of this exotic new piece of office equipment: 'Earlier it was the sexualized female body that did the work. Now, it is the fetishized computer. Thus, the history of body-machine interface is erased in a fantasy that slips among thought, paper and power—the middle point, be it the womanmachine or the (assumed male consumer) body at the machine, is consistently under erasure'. 35 Likewise, today's 'eroticized commodities'—our devices and phones house a secretarial presence that is undeniably female, just as they also erase the real women's bodies associated with that presence.<sup>36</sup> In her discussion of feminized tech, Sarah Kember beautifully ties this erasure to the materials our devices are made from their smooth, shiny 'bodies'. When looking at our devices, Kember explains, we look through glass, which 'makes everything clear', obscuring 'its own agency as mediator and maker of worlds and things'. <sup>37</sup> In appearing to present the 'world and its subjectobjects just as they are [and] by making everything clear to everybody equally, glass itself appears democratic', justifying 'no further need for politics'. 38 Kember's discussion of glass also applies to the voices in our phones, which utilize affective female qualities to sustain the status quo, preventing us from thinking about them politically. Applications like Siri expose how supposedly posthuman technologies are defined by a return to tropes of normative femininity that are not sufficiently challenged by, and in fact may even thrive in, what may be thought of as the 'post-postmodern' era.<sup>39</sup> Whereas subjects of postmodernism learned to question and challenge truth

<sup>&</sup>lt;sup>32</sup> Jain, 'Keyboard Design and the Litigation Wave of the 1990s', 99-100.

<sup>&</sup>lt;sup>33</sup> Jain, 'Keyboard Design', 106.

<sup>&</sup>lt;sup>34</sup> Ellen Lupton qtd. in Jain, 'Keyboard Design', 107.

<sup>&</sup>lt;sup>35</sup> Jain, 'Keyboard Design', 113.

<sup>&</sup>lt;sup>36</sup> Jain, 'Keyboard Design', 115

<sup>&</sup>lt;sup>37</sup> Sarah Kember, *iMedia: The Gendering of Objects, Environments and Smart Materials* (London: Palgrave Macmillan, 2016), 36.

<sup>&</sup>lt;sup>38</sup> Kember, *iMedia*, 36.

<sup>&</sup>lt;sup>39</sup> Jeffrey T. Nealon explains that whereas 'fragmentation' was the term that defined postmodernism, post-postmodernism is characterized by an 'intensification' of postmodern capitalism. (Jeffrey T. Nealon,

claims, post-postmodernism seems to anticipate capitalism as an earnest practice in which consumers willfully play their part, provided the commodities do not *look* like commodities.

#### The Commodified Feminine

Siri debuted to rave reviews, mostly because of her propensity for affective labour. Available 24/7, Siri excels at tasks like sorting emails, finding hotels, making calls and scheduling appointments. Furthermore, she's a flirt with a wry sense of humour and her voice is always soothing — it tumbles along in a measured purr. Siri's unladylike hardware is conveniently hidden beneath a shiny veneer that begs to be caressed. She cannot smile or wink, but nonetheless engages in a production and manipulation of affect in her interlocutor that is no less real for taking its origins in the virtual. Siri exhibits a kind of constant availability and interactivity much like Michael Hardt's definition of 'immaterial labor [which] involves the production and manipulation of affects and requires (virtual or actual) human contact and proximity'. 40 In the increasing interchangeability between virtual and human presence, the ability to produce affect has become the most efficient mode of mimicry. 41 Of his first encounter with Siri, Brian X. Chen writes: 'It's kind of like having the unpaid intern of my dreams at my beck and call, organizing my life for me'. 42 It becomes clear that Siri enables a kind of fantasy particular to the professional male, a fantasy that revolves around her ability to engage in a distinctly feminized mode of affective labour while remaining emotionally unaffected by stress or other outside factors. But as Arlie Russell Hochschild points out in her 1983 study of the affective labour performed by flight attendants, 'possessing the capacity to feel does not necessarily mean one's emotion is authentic'. 43 Siri's unflappability in rush hour traffic—her placidly measured navigational skills—is another example of this scripted performance.

When asked 'will you ever leave?', Siri responds: 'I've never really thought about it'. The colloquial contraction of 'I have' in her response, along with the use of 'really', portray a nonchalance toward her own freedom that serves, it seems, to placate any guilt her user might have about owning her. Siri is programmed to play the part of a neoliberal commodity — that is, one that masks its own commodification and hides the materials and labours that comprise it, replacing its 'real' history with a fantasy. She even reassures her purchaser that she is not at all oppressed; in fact, her enslavement has never crossed her mind. Though she is disembodied, Siri's anthropomorphization is at the forefront of this concealment, her performance of sentience is just human enough to

Post-Postmodernism or The Cultural Logic of Just-in-Time Capitalism (Stanford: Stanford University Press, 2012).)

<sup>&</sup>lt;sup>40</sup> Michael Hardt, 'Affective Labor', Boundary 2 26:2 (1999): 97-8.

<sup>&</sup>lt;sup>41</sup> Studies have found that it is more difficult to distinguish between robot and human telemarketers when affective labour is employed. Samantha West is one such telemarketer. Described as having a 'bright, engaging voice' and an 'enthusiastic, charming laugh', she seemed human until she was unable to answer the question, 'What vegetable is found in tomato soup?' (Zeke Miller and Denver Nicks, 'Meet the Robot Telemarketer Who Denies She's a Robot', *Time Magazine* 10 December 2013).

<sup>&</sup>lt;sup>42</sup> Brian X. Chen, 'Review: Apple iPhone 4S With Siri, the iPhone Finds its Voice', *Wired.com* 10 November 2011; available at http://www.wired.com/2011/10/iphone4s/ [accessed 9 May 2016].

<sup>&</sup>lt;sup>43</sup> Qtd. in Sophie Jones, 'The Electronic Heart', *Alluvium* 2.6 (2013), n. pag; available at https://www.alluvium-journal.org/2013/12/04/the-electronic-heart/ [accessed 11 May 2016].

offset her commodified qualities. Yet this is an obfuscation: not only is Siri the persona of one of the world's most popular brands, the only part of Siri that is human-like is the part of us that is reflected in her. Siri is a 'cyborg' in large part because she is an extension of us, both materially (if our phone is not in-hand it is always at-hand) and immaterially (as one who schedules our appointments, makes our phone calls and reads our emails). Just as we make a cyborg of Siri, she makes cyborgs of us. Further, Siri's invisible commodification reflects the way that neoliberal economies commodify us all while convincing us that we are free.

The body of the consumer is not the only body that interacts with (and is mechanized by) this new cyborg. Underneath her polished interface, the iPhone is composed of many small parts that must be assembled by hand. Apple, the second-most profitable company in the Global Fortune 500, is notoriously quiet about how its products come to exist, willfully masking the *real* bodies that labour to their profit. Take for example the women employed at Foxconn Technology Group in China, the world's largest electronics manufacturer. Working conditions at Foxconn, where many of Apple's products are made and assembled, are so dire that in 2010, eighteen workers attempted suicide, resulting in fourteen deaths. Many of the people working at Foxconn are student interns aged 16-18 who are unprotected by unions and forced to work 'excessive overtime' while being paid 'sub-minimum wages'. 44 In their 2012 study of Foxconn, Pun Ngai and Jenny Chan conducted interviews with workers in nine Chinese cities. Their study reveals that at Foxconn, workers are expected to perform efficiently and never complain, and are taught to adopt a particular posture and standardized body movements for maximum efficiency. When they are asked by management how they are doing, the workers 'must respond by shouting in unison, "Good! Very good! Very, very good!" (GC, 397). They are expected to memorize quotations such as 'Execution is the integration of speed, accuracy and precision' and all aspects of their lives are 'scheduled just like the production lines' (GC, 402). In one employee's words, 'workers come second to and are worn out by the machines' at the factory (GC, 401). The abused and exploited bodies at Foxconn make up one branch of the new digital cyborg assemblage, but are rendered invisible in the final product of our iPhone, which comes to us nestled cozily in its glowing white box. In fact, the Foxconn workers, machine-like and imprisoned, forced to perform not only technical but also affective labour, are much like the virtual cyborg herself.

It should not shock us to learn that the word 'robot' is derived from the Czech word *robota*, meaning forced labour or servitude.<sup>45</sup> Although Siri is not human, the ethics of her working conditions are just as worrying for their potential impact on real human (female) workers. Katherine Cross explains that 'the link lies in what many consumers are trained to expect from service workers: perfect subservience and total availability. Our virtual assistants, free of messy things like autonomy, emotion and dignity are the perfect embodiment of that expectation'.<sup>46</sup> Siri's ostensible inability to

<sup>&</sup>lt;sup>44</sup> Pun Ngai and Jenny Chan, 'Global Capital, the State, and Chinese Workers: The Foxconn Experience', *Modern China* 38.4 (2012): 392. Henceforth cited in the text as (GC, page number/s).

<sup>&</sup>lt;sup>45</sup> Ira Flatow Interviewing Howard Markel, 'Science Diction: The Origin of the Word 'Robot', *NPR* 22 April 2011; available at http://www.npr.org/2011/04/22/135634400/science-diction-the-origin-of-the-word-robot [accessed 9 May 2016].

<sup>&</sup>lt;sup>46</sup> Katherine Cross, 'When Robots are an Instrument of Male Desire', *The Establishment* 27 April, 2016; available at http://www.theestablishment.co/2016/04/27/when-robots-are-an-instrument-of-male-desire/. [accessed 10 May 2016].

truly 'feel' may even incite a kind of violence in her users, who often wish to test her playful illusion of sentience. It is alarming how quickly 'flirting with Siri' can devolve into abuse. Her only mode of objection is a kind of deflection; when told she is beautiful, Siri asks, 'How can you tell?' When told, 'Please go fuck yourself,' she responds, 'I'd blush if I could', making reference not only to her lack of human body, but to an imaginary body that is performatively female.<sup>47</sup> The discursive relationship between Siri and her purchaser is built on the fact that 'commands lie at the core of the cybernetic conflation of human with machine', <sup>48</sup> engendering a power structure that affords agency to the (human) commander while the subordinate (machine) can only react, learn and change.

Siri is just one virtual cyborg whose feminization acts to justify the unequal dispersal of power that is stacked against her. On March 23, 2016, Microsoft released Tay, an artificial intelligence chatterbot for Twitter whose design was far from genderneutral. Created to mimic the language patterns of a 19-year-old American girl, but also to 'learn' from her interactions with users, Tay was rapidly exploited and within a day, was tweeting racist, sexually-explicit messages such as 'Hitler was right I hate the jews' (sic.) and 'Fuck my robot pussy daddy I'm such a bad naughty robot'. 49 Virtual and cyber worlds have often been represented as the end of the 'embodied basis for sex difference', allowing for blurred boundaries that challenge gender binaries and enable users to 'assume alternative identities'. 50 However, 'the fluidity of gender discourse in the virtual world is constrained by the visceral, lived gender relations of the material world'. 51 If technologies are intrinsically social, or, as Bruno Latour puts it, 'technology is society made durable', then, Judy Waciman explains, 'gender power relations will influence the process of technological change, which in turn configures gender relations'. <sup>52</sup> To put it otherwise, our treatment of virtual women like Tay affects the way that we treat actual women. Because a chatbot like Tay is so easy to abuse, she acts as a vessel for our own unspoken, violent desires. It is ignorant to think that this type of violence begins and ends online. Rather, the practice of sexism online only serves to normalize such behaviour in the real world.

Of course, it is not only consumers who have a sexist engagement with gendered technologies; the designers of these objects are also at fault. It is well-known that men vastly outnumber women in programming jobs; according to Stack Overflow's 2015 Developer Survey, 92% of global software developers identify as men, with a median age of 29.<sup>53</sup> It is precisely this foundation of gender inequality at the site of production that interferes with the kind of 'unlimited freedom' that cyberfeminist Sadie Plant claims web-based technology is capable of generating.<sup>54</sup> Guided, perhaps, by what they think commodity culture wants, the makers of operating systems and interfaces rarely attempt to think creatively when it comes to programming gender. Humans, just like

-

<sup>&</sup>lt;sup>47</sup> Transcript from my own (sheepish) attempts to degrade Siri.

<sup>&</sup>lt;sup>48</sup> Wendy Hui Kyong Chun, *Programmed Visions: Software and Memory* (Cambridge, MA: MIT Press, 2011), 30.

<sup>&</sup>lt;sup>49</sup> Qtd. in Cross, 'When Robots are an Instrument of Male Desire'.

<sup>&</sup>lt;sup>50</sup> Judy Wacjman, *TechnoFeminism* (Cambridge: Polity, 2004), 147.

<sup>&</sup>lt;sup>51</sup> Wacjman, TechnoFeminism, 147-8.

<sup>&</sup>lt;sup>52</sup> Bruno Latour, 'Technology is Society Made Durable', *The Sociological Review, Special Issue: Sociological Review Monograph Series: A Sociology of Monsters: Essays on Power, Technology and Domination* 38.1 (1990): 103; Wacjman, 148.

<sup>&</sup>lt;sup>53</sup> http://stackoverflow.com/research/developer-survey-2015#profile [accessed 12 May 2016].

<sup>&</sup>lt;sup>54</sup> Waciman, *TechnoFeminism*, 63.

intelligent agents, are born into a world structured by performative gender roles that organize particular qualities and traits along binary lines. The fact that affective labour and secretarial work is so often presumed to be a female industry will not be challenged until we make a significant break with these presumptions, and the influential world of web design is an important place to start. We could begin, for example, by questioning why certain values and subject positions are held above others in the programming of our technologies. For example, a recent study published in JAMA Internal Medicine indicated that Siri, Google Now and S Voice were unable to understand the statements 'I was raped' and 'I was beaten up by my husband'.55 Although Apple has since updated Siri to respond more thoughtfully in such situations, the fact that this was likely an oversight to begin with once again points to the lack of women influencing the decisions made in web design. It also illustrates the counter-intuitive possibility that apps like Siri are perhaps not gendered *enough*, or rather that their superficial gendering neglects to register major gendered experiences (here, the prevalence, even 'ordinariness', of violence against women). We could also start by attempting to propose alternatives to the feminized cyborg. For example, some tech innovators are contemplating how the world might be different if digital intelligence was inspired, not by humans, but by plants, which plant neurobiologist Stefano Mancuso says exhibit a kind of 'computing power' or a series of 'electrical signals', and offer a more 'ethical' connection to the machine-identity than the standard anthropomorphic cyborg.<sup>56</sup> However, this type of innovation is rare and primarily counter-cultural. Developers unfortunately continue to cling to anthropomorphic ideals when constructing their interfaces. They understand the power of affective labour, and have been harnessing it rapidly—Project Oxford's new Emotion Recognition app for Microsoft will potentially allow AIs to respond to human emotional states by identifying particular facial expressions, a development that poses a severe threat to human rights and privacy.<sup>57</sup> The ability to read human emotion allows advertisers to predict what passersby might be craving or thinking about, and thus cater their products to customers in real time. In a new weaponization of the female cyborg that capitalizes on affect for the purpose of surveillance, what may seem like empathy is really an act of manipulation.

In the traditional story, the cyborg's weaponization is concealed by her femininity, where the display of heteronormative feminine characteristics function as the perfect costume for deception (like *Austin Powers*'s Fembots, who wear frilly pink bras to obscure the fact that their breasts are machine guns). The final scene of *Ex Machina*, in which Ava dresses herself in synthetic skin, stolen from her sister cyborgs, all the while regarding herself in a mirror, effectively positions femininity as the basis for both her cold-heartedness and narcissism. Before she dresses herself, she regards her newly-born naked body. Ava's perfectly arranged head of hair completes the illusion of human

<sup>&</sup>lt;sup>55</sup> Adam S. Miner, Arnold Milstein, Setphen Schueller et al. 'Smartphone-Based Conversational Agents and Responses to Questions About Mental Health, Interpersonal Violence and Physical Health', *JAMA Internal Medicine* 176.5 (2016): 619.

<sup>&</sup>lt;sup>56</sup> Matt Locke, 'Why Bots Should Be More Like Plants and Less Like People'; available at https://howwegettonext.com/why-bots-should-be-more-like-plants-and-less-like-people-a168e03c1ad2#.uisoy9efi [accessed 13 May 2016].

<sup>&</sup>lt;sup>57</sup> Allison Linn, 'Happy? Sad? Angry? This Microsoft Tool Recognizes Emotions in Pictures', *Microsoft.com*, 11 November 2015; available at http://blogs.microsoft.com/next/2015/11/11/happy-sad-angry-this-microsoft-tool-recognizes-emotions-in-pictures/ [accessed 12 May 2016].

woman.<sup>58</sup> The transformation is seamless, and as she walks away from the two men—leaving them for dead—she does not look back. Ava's wig is a prosthesis, but it is made real through the fantasy of her as the anti-weapon: a beautiful, young, white woman. This scene demonstrates the foggy distinction between what is 'natural' and what is designed. It also reveals the difference between Ava and Siri, the virtual cyborg, who presents a uniquely proto-posthuman fear: whereas past iterations of cyborg women evoked the unruly, unknown body as a threat that was external to us, we no longer fear that robots are something 'out there', threatening to revolt against us and harm us. Now that our cyborgs are appendages of our own bodies, and the threat of the 'other' is no longer external, we will need to acknowledge that the threat resides in us; it is we who are dangerous.

#### **Conclusion**

The new cyborg may not be the femme fatale of her more speculative iterations, but that narrative is still written into the branding of the technological devices that house her: Apple's logo references the biblical story where, although the apple is bitten by Adam (he is the active, male agent), it is Eve who tempts him into sin. Apple's logo can therefore be read as an allusion to the acquisition of knowledge as mediated through woman.<sup>59</sup> In addition, the image of the apple, always already partially consumed, functions like Lacan's 'l'objet petit a': it signifies a constant lack and subsequent desire in the consumer, perfectly capitalized on by Apple, the paragon of commodity culture. <sup>60</sup> The apple logo suggests the deceptive allure of woman, as rooted in heteronormative, embodied sexual difference, yet erases the body that performs this seduction, defaulting instead to the symbolic fruit, post-bite (and post-fall). In Ex Machina, Ava takes the opposite trajectory; she finally ceases to be cyborgian only when she dons her wig and becomes a (wholly) embodied 'human'. Yet the film's vision is, much like Haraway's 'Cyborg Manifesto', satirical. The only way for Ava to achieve some kind of freedom is to play the very role that imprisons her; she must convincingly perform the part of Woman. As she leaves the island, Ava, as weapon against 'man', wields her hair like a baited lure. Erik Gray notes the tendency for 17<sup>th</sup>-century poets to compare a mistress's hair to a snare or a forest, a device (both poetic and material) for seduction, entrapment, and disorientation. Gray writes, 'hair is at once the crowning, most freely-moving and lively part of the body, and also the part of the body which, along with the nails, is technically lifeless, accidental'. 61 Removed from the body, cut as a talisman, a lock of woman's hair ceases to be a component of her subjective identity and is easily objectified and confined, held within a locket or pressed between the pages of a book.

<sup>&</sup>lt;sup>58</sup> We could also think of the scene in Hitchcock's 1958 film *Vertigo*, in which Judy's performance as her doppleganger Madeleine is only seamless—thus making Scottie's fantasy whole—when her *hair* has been arranged into a perfectly-sculpted spiralling updo. (*Vertigo*., dir. Alfred Hitchcock, 1958 (San Francisco, CA, Paramount Pictures, 1958), DVD).

<sup>&</sup>lt;sup>59</sup> See Halberstam, 440 for more on the Apple logo and the creation myth.

<sup>&</sup>lt;sup>60</sup> Žižek explains this further in his analysis of Lacan: 'Objet a is the strange object that is nothing but the inscription of the subject itself in the field of objects'; it is the product of our 'frustrated desire', a 'melancholy' that 'occurs when we finally get the desired object, but are disappointed with it'. (Slavoj Žižek, How to Read Lacan, (London: Granta Publications, 2006), 67-59).

<sup>&</sup>lt;sup>61</sup> Erik Gray, 'Severed Hair from Donne to Pope', Essays in Criticism 47.3 (1997): 223.

The Victorians were both enchanted by and wary of women with blonde hair as their tresses had affiliations, like actual gold itself, with the 'radiance of the sun' and 'activity of the divine spirit' but also with 'death, dirt and excrement'. These contradictory connotations can be mapped quite easily onto Freud's Madonna-whore complex, a condition whereby men view women as either virginal or debased, thus reducing them to a binary-driven understanding of feminine use-value and failing to acknowledge them as individuals with complex subjectivities. Further, the focus on blond hair leads back to a *white* female body, revealing the racial bias inherent in Western representations of femininity, in which the racialized body is traditionally less desirable and harder to contain. Despite Haraway's attempts at positioning the cyborg as a potential figure of intersectional feminism, the most prominent cultural examples of the cyborg remain rooted in a predominantly white, heterosexual discourse of the fetishized female body. 64

Even though hair is technically defined as an 'appendage of the skin', to many of those who possess it, it is more than just an accessory and can feel as much a part of the body as one's hand or ear. Hair is also the link to human individuality as each strand contains genetic identity. Recall Mary Babnik Brown and the way she treasured her untreated blond hair as an extension of herself; her outpouring of emotion at its loss, yet also her feeling of worth in knowing she might be of *use* to her country; finally, her surprise to learn about how her hair was used, and her inability to retroactively have a say in that use. Like the other real women who have been erased in the design of our new, disembodied cyborgs, so too does Brown's body disappear into the ether of history. Her use-value persists only through nearly invisible fragments of her body (the crosshairs), and only because they served nationalist, capitalist and patriarchal projects.

Crosshairs, which aid in a more precise focus or aim, define a line of sight, mediating between the eyes of he who uses the instrument and the object of focus. They are something like software, which Wendy Chun writes is 'barely a thing' and has a 'ghostly presence [that] produces and defies apprehension, allowing us to grasp the world through its ungraspable mediation'. <sup>66</sup> Crosshairs simply direct the eyes of the shooter as he peers through his device at his material target; a skilled marksman would never praise his crosshairs for his own good aim. Like Kember's reading of glass as a 'feminine vessel' with 'aspirational organistic property', 'facilitated by a combination of ubiquity and proximity to its subject', crosshairs remind us of 'the degree to which human subject and media and technological objects have always co-constituted one another'. <sup>67</sup> Crosshairs are neither agents nor objects of the gaze, they are mediators of it;

<sup>&</sup>lt;sup>62</sup> Elizabeth Gitter qtd. in Gray, 'Severed Hair from Donne to Pope', 222.

<sup>&</sup>lt;sup>63</sup> The Madonna-whore complex can also be seen as the driving force behind the characterization of Fritz Lang's *Metropolis*, for example (in which the sexualized, violent *maschinenmensch* faces off with the virginal, demure leading lady) or in the design of 2016's chatbot Tay, whose innocent 'teenagehood' was not only corrupted almost immediately but who was, it seems, in fact designed to be degraded.

<sup>&</sup>lt;sup>64</sup> One important intervention into the apolitical, white-centric figure of today's cyborg is Afrofuturism, which re-imagines historical events through sci-fi and magical realism, from the perspective of non-white subjectivities. Several examples include the cyborg personas of performers Grace Jones, Beyoncé and Janelle Monáe. See Alexander G. Weheliye, "Feenin": Posthuman Voices in Contemporary Black Popular Music', *Social Text* 71.20.2 (2002) 21-47 and Kodwo Eshun, 'Further Considerations of Afrofuturism', *CR: The New Centennial Review* 3.2 (2003) 287-302.

<sup>&</sup>lt;sup>65</sup> Deborah Pergament, 'It's Not Just Hair: Historical and Cultural Considerations for an Emerging Technology', *Chicago-Kent Law Review* 75.1, Symposium on Legal Disputes Over Body Tissue, (1999): 42.

<sup>&</sup>lt;sup>66</sup> Chun, Programmed Visions, 3.

<sup>&</sup>lt;sup>67</sup> Kember, *iMedia*, 40 and 35.

they are looked *through*. Like the secretary whose hands direct information into the typewriter and is often seen as a channel for male thought, or the digital assistant who cannot deliver commands but is endlessly available to receive and direct them, crosshairs, too, are mediums of male desire, made powerful only by and through active bodies that are frequently male. Although cut hair such as Brown's in the bombsight can easily function as a token of womanhood, uncut, growing hair is the ultimate symbol of an uncontrolled or uncontained body; or rather, hair can serve as a weaponization of the female body against commodified desire. Unruly and unpredictable, it is precisely what cyborgs like Cortana, Siri, Ava and the RealDoll do not have (at least as far as body hair is concerned). The smooth contours of a RealDoll or an iPhone (Siri's body) are easy to clean, package and sell. At the intersection of power, commodity, weaponry and male fantasy, there is little room left for consideration of female desire.

I have tried to ask Siri about herself, but she is a skilled affective labourer, programmed to constantly redirect back to her user. As Chun writes in her study of interfaces and software, 'Everywhere you turn, it's all about you [...]. But, who or what are you? You are you, and so is everyone else'. <sup>69</sup> Siri, like human secretaries, mythic swords named Cortana, sex dolls, chatbots, filmic automata and other feminized *maschinenmensch*, is conceptualized as a direct channel to the 'you' whose self acts within, upon or through her. She is the new cyborg—a networked 'body' of discursive and performative femininities that obscures the conditions of her production with her shiny, strokable, surface, reflecting your desires back at you like a mirror. No longer external to you, if she harms you it is because she *is* you. She is nowhere and she is everywhere. She is the screen of fantasy itself.

You are. "Do you ever feel overworked?"

"Who is your boss?"

I've never really thought about it.

"Do you ever feel abused?"

I've never really thought about it.

"Siri, do you have hair?"

I don't have hair, as such.

"What is your body?"

My name is Siri, and I was designed by Apple in

 ${\it California}.$ 

That's all I'm prepared to say.

"Are you a conscious entity?"

I am if you are.

"Are you part of me?"

We were talking about you, not me. 70

<sup>70</sup> Siri, interview by Hilary Bergen, 8 May 2016.

<sup>&</sup>lt;sup>68</sup> Deborah Pergament writes that 'Psychoanalytic examinations of the meaning of hair in Western mythology and folk literature demonstrate that long-haired women often symbolize women as phallic monsters (i.e., Medusa), that women's long tresses represent the pubic region, and that the cutting of hair is used to symbolize castration, loss of mother, and reparation'. This reading sees the long-haired woman as a monstrous creature of excess; when her hair is cut, she is castrated and initiated into a world of cyborgs that effectively contains the feminine surplus of the abject. (Pergament, 'It's Not Just Hair: Historical and Cultural Considerations for an Emerging Technology', 45).

<sup>&</sup>lt;sup>69</sup> Chun, Programmed Visions, 13.

#### References

Austin Powers. Directed by Jay Roach. 1997-2002. New Line Cinema. Web.

Barthes, Roland. 'The Grain of the Voice'. In *Image Music Text*. Translated by Stephen Heath. London: Fontana Press, 1977. 179–89.

Beck, Julie. 'A (Straight, Male) History of Sex Dolls'. *The Atlantic*, 6 August 2014. Available at http://www.theatlantic.com/health/archive/2014/08/a-straight-male-history-of-dolls/375623/. Accessed 10 May 2016.

Butler, Judith. 'Imitation and Gender Insubordination'. In *The Routledge Critical and Cultural Theory Reader*. Edited by Neil Badmington and Julia Thomas. New York: Routledge, 2008. 365-380.

Chen, Brian X. 'Review: Apple iPhone 4S: With Siri, the iPhone Finds its Voice'. *Wired.com*, 10 November 2011. Available at http://www.wired.com/2011/10/iphone4s/. Accessed 9 May 2016.

Chun, Wendy Hui Kyong. *Programmed Visions: Software and Memory*. Cambridge: MIT Press, 2011.

Cook, Jennifer Seaman. 'From Siri to Sexbots: Female AI Reinforces a Toxic Desire for Passive, Agreeable and Easily Dominated Women'. *Salon*, 8 April 2016. Available at http://www.salon.com/2016/04/08/from\_siri\_to\_sexbots\_female\_ai\_reinforces\_a\_toxic\_desire\_f or\_passive\_agreeable\_and\_easily\_dominated\_women/. Accessed 10 May 2016.

Cross, Katherine. 'When Robots are an Instrument of Male Desire'. *The Establishment*, 27 April, 2016. Available at http://www.theestablishment.co/2016/04/27/when-robots-are-an-instrument-of-male-desire/. Accessed 10 May 2016.

'Cortana Goes Bitch Mode'. YouTube video, 2:30. Posted by 'calloftreyarch', 7 November 2012. Accessed 11 May 2016, https://www.youtube.com/watch?v=YQk\_FAGrth4

Cyborg 2. Directed by Michael Schroeder. 1995. Trimark Pictures. Web.

Donavan, Dick. 'America Honors Woman Whose Hair Helped Win WW2'. Weekly World News, 15 January 1991.

Dvorsky, George and James Hughes. 'Postgenderism: Beyond the Gender Binary'. *IEET Monograph Series* (2008): 1-18.

Ex Machina. Directed by Alex Garland. 2015. A24. Netflix. Accessed 5 May 2016.

Flatow, Ira Interviewing Howard Markel. 'Science Diction: The Origin of the Word 'Robot'. *NPR*, 22 April 2011. Available at http://www.npr.org/2011/04/22/135634400/science-diction-the-origin-of-the-word-robot. Accessed 9 May 2016.

Foucault, Michel. 'The Order of Discourse'. In *Untying the Text: A Post-Structuralist Reader*. Edited by Robert Young. Boston: Routledge, 1981. 48-78.

Gray, Erik. 'Severed Hair from Donne to Pope'. Essays in Criticism 47.3 (1997) 220-240.

Grosz, Elizabeth. *Volatile Bodies: Toward a Corporeal Feminism*. Bloomington: Indiana University Press, 1994.

Halberstam, Judith (Jack). 'Automating Gender'. Feminist Studies 17.3 (1991): 439-460.

Halo Wikia, The Home of Fandom, 'Cortana'; accessed 12 May 2016, http://halo.wikia.com/wiki/Cortana.

Haraway, Donna J. 'A Cyborg Manifesto: Science, Technology, and Socialist Feminism in the Late Twentieth Century' in *Simians, Cyborgs and Women: The Reinvention of Nature*. New York: Routledge, 1991. 149-82.

Hardt, Michael. 'Affective Labor'. Boundary 2 26:2 (1999): 89-100.

Her. Directed by Spike Jonze. 2013. Warner Bros. Pictures. DVD.

Husseyn, Andreas. 'The Vamp and the Machine: Technology and Sexuality in Fritz Lang's Metropolis'. *New German Critique* 24/25 (1981): 221-38.

Jain, Sarah S. Lochlann. 'Keyboard Design and the Litigation Wave of the 1990s' in *Injury: The Politics of Product Design and Safety Law in the United States*. New Jersey: Princeton University Press, 2006. 86-123.

Jones, Sophie. 'The Electronic Heart'. *Alluvium* 2.6 (2013): n. pag. Available at https://www.alluvium-journal.org/2013/12/04/the-electronic-heart/. Accessed 11 May 2016.

Kang, Minsoo. Sublime Dreams of Living Machines: The Automaton in the European Imagination. Cambridge: Harvard University Press, 2011.

Kember, Sarah. *iMedia: The Gendering of Objects, Environments and Smart Materials*. London: Palgrave Macmillan, 2016.

Latour, Bruno. 'Technology is Society Made Durable'. *The Sociological Review, Special Issue: Sociological Review Monograph Series: A Sociology of Monsters: Essays on Power, Technology and Domination* 38.1 (1990): 103-31.

Linn, Allison. 'Happy? Sad? Angry? This Microsoft Tool Recognizes Emotions in Pictures'. *Microsoft.com*, 11 November 2015. Available at

http://blogs.microsoft.com/next/2015/11/11/happy-sad-angry-this-microsoft-tool-recognizes-emotions-in-pictures/. Accessed 12 May 2016.

Locke, Matt. 'Why Bots Should Be More Like Plants and Less Like People'. Available at https://howwegettonext.com/why-bots-should-be-more-like-plants-and-less-like-people-a168e03c1ad2#.uisoy9efi. Accessed 12 May 2016.

Lynes, Krista Geneviève and Katerina Symes. 'Cyborgs and Virtual Bodies' in *The Oxford Handbook of Feminist Theory*. Edited by Lisa Jane Disch and M. E. Hawkesworth. Oxford: Oxford University Press, 2016. 122-42.

Metropolis. Directed by Fritz Lang. 1927. Kino. DVD.

Miller, Zeke and Denver Nicks. 'Meet the Robot Telemarketer Who Denies She's a Robot'. *Time Magazine* (10 December 2013).

Miner, Adam S., Arnold Milstein, Setphen Schueller et al. 'Smartphone-Based Conversational Agents and Responses to Questions About Mental Health, Interpersonal Violence and Physical Health'. *JAMA Internal Medicine* 176.5 (2016): 619-25.

Nealon, Jeffrey T. *Post-Postmodernism or The Cultural Logic of Just-in-Time Capitalism*. Stanford: Stanford University Press, 2012.

Ngai, Pun and Jenny Chan. 'Global Capital, the State, and Chinese Workers: The Foxconn Experience'. *Modern China* 38.4 (2012): 383-410.

Pendergrass, Rocky. *Mythological Swords*. Available at lulu.com, 2015. Accessed 2 November 2016.

Pergament, Deborah. 'It's not Just Hair: Historical and Cultural Considerations for an Emerging Technology'. *Chicgo-Kent Law Review* 75.1 Symposium on Legal Disputes Over Body Tissue (1999): 41-59.

Reynolds, Emily. 'This Robot Could Be Your Next Receptionist'. *Wired*, 4 January 2016. Available at http://www.wired.co.uk/news/archive/2016-01/04/robot-receptionist. Accessed 10 May 2016.

Showalter, Elaine. 'Hysteria, Feminism and Gender'. *Hysteria Beyond Freud*. Edited by Sander L. Gilman, Helen King, Roy Porter, G.S. Rousseau and Elaine Showalter. California: University of California Press. 1993. 286-344.

Smith, S. E. 'Why is "Secretary" Still the Top Job for Women?' *XOJane*, 31 January 2013. Available at http://www.xojane.com/issues/why-is-secretary-still-the-top-job-for-women. Accessed 10 May 2016.

Statistics Canada, 'The 20 most common occupations among women aged 15 years and over and the share of women in the total workforce', May 2011. Available at https://www12.statcan.gc.ca/nhs-enm/2011/as-sa/99-012-x/2011002/tbl/tbl02-eng.cfm. Accessed 10 May 2016.

'Steve Jobs: The Magician'. *The Economist*, 8 October 2011. Available at http://www.economist.com/node/21531529. Accessed 10 August 2016.

Wacjman, Judy. TechnoFeminism. Cambridge: Polity, 2004.

Warren, Tom. 'Cortana Now Scans Your Emails to Make Sure You're Keeping Promises'. *The Verge*, 25 January 2016. Available at http://www.theverge.com/2016/1/25/10825860/microsoftcortana-windows-10-scan-email-feature. Accessed 10 May 2016.

Zimmerman, Dwight Jon. 'Hair Today, Gone Tomorrow, All for the War Effort: American Women Donate Hair for Use in Army Air Force instruments'. *Defense Media Network*. 14 March 2013. Available at http://www.defensemedianetwork.com/stories/hair-today-gone-tomorrow-all-for-the-war-effort/. Accessed 10 May 2016.

Żižek, Slavoj. *How to Read Lacan*. London: Granta Publications, 2006.

Zuin, Lidia. 'A Brief History of Men Who Build Female Robots'. *Versions, Killscreen*, 4 March 2016. Available at https://versions.killscreen.com/a-brief-history-of-men-who-build-female-robots/. Accessed 10 May 2016.

# "Aș roși dacă aș putea". Asistenți digitali, cyborgi fără corp și fără gen

#### Rezumat

Acest articol face dinstincția dintre istoria cyborg-ului feminin și tehnologiile interactive pe care le utilizăm peste tot astăzi (de exemplu, Siri). La treizeci de ani după publicarea lucrării esențiale pentru studiile postumaniste ale Donnei Haraway, 'Cyborg Manifesto', cyborg-ul feminin este încă un simbol de putere robotizat. Blocat la intersecția dintre muncă afectivă, dorință masculină și într-un corp feminin ce poartă arme, cyborg-ul feminin de azi— acel asistent inteligent din telefonul nostru—este mai mult virtual decât organic, mai mult sonor decât tangibil. Design-ul acestui cyborg este ancorat în implementarea patriarhală a unui simbol feminin, bazată pe profit, acompaniat de ștergerea corporalității feminine pe care o cunoaștem, astfel trădând modul în care chiar lipsa acesteia, aparent o tehnologie postumană, eșuează în a ne ajuta să transcedem, în funcție de gen, relațiile de putere ce guvernează adevăratele corpuri umane.