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Sex and the Single Cyborg: Japanese Popular Culture Experiments in Subjectivity

I found that these people possessed a method of communicating their experiences and feelings to one another by articulate sounds.... This was indeed a godlike science, and I ardently desired to become acquainted with it ... for I easily perceived that, although I longed to discover myself to the cottagers, I ought not to make the attempt until I had first become master of their language; which knowledge might enable me to make them overlook the deformity of my figure; for with this also the contrast perpetually presented to my eyes had made me acquainted. (Shelley 121-24)

What is really being debated in the discourse surrounding a cyborg future are contemporary disputes concerning gender and sexuality, with the future providing a clean slate, or a blank screen, onto which we can project our fascination and fears. (Springer 322)

Visual representations of cyborgs are ... not only utopian or dystopian prophesies, but rather reflections of a contemporary state of being. The image of the cyborg body functions as a site of condensation and displacement. It contains on its surface and in its fundamental structure the multiple fears and desires of a culture in the process of transform-ation. (Gonzalez 267)

As Claudia Springer and Jennifer Gonzalez contend, cyborgs are not about the future, they are about contemporary society and its current transformations. In this essay I will discuss recent Japanese narratives that use the figure of the cyborg to explore new paradigms of subjectivity, as the advanced nations of the world become increasingly postmodern, postnational, postindustrial, and even posthuman. In particular, I will focus on two aspects of subjectivity that have been fundamental to the modern—as opposed to postmodern—notion of personhood: sexuality and singularity. The figure of the cyborg—that embodied amalgam of the organic and the technological—confounds the modernist criteria for subjectivity and, when featured in narrative, allows readers/viewers to think through the ramifications of the changes we currently face.

The cultural products that engage the notion of the cyborg help us to come to terms with the meaning of this new relationship between the human body and technology as that relationship unfolds: narrative helps us to work through the fears and desires of a particular historical-cultural moment. We are each of us already compelled daily to face the breakdown of the distinction between the mechanical/technological and the organic/biotic. Cyborg narratives allow us, in Jennifer Gonzalez's phrasing, to personify, condense, and displace the anxieties and hopes raised by this situation.

Donna Haraway, the best-known theorist of cyborg subjectivity, explains some of the fears and hopes that most fundamentally characterize cyborg narrative: "In retelling origin stories, cyborg authors subvert the central myths of origin of Western culture. We have all been colonized by those origin myths, with their longing for fulfillment in apocalypse" (175). She suggests that the only way to avoid the hypocrisies and dangers of Western culture's current

trajectory is to recast origin myths—which cultures use to explain their own ontology and subjectivity to themselves—to confront and subvert narratives of (false) innocence and apocalypse.

I would contend that, in general, Japanese popular-culture forms work through issues of apocalypse, survival, and the impossibility of establishing innocence far more often and in terms of greater moral complexity than those of North America. For example, Susan Napier has argued that a multitude of Japanese popular-culture products—from the 1950s Godzilla films to the internationally popular anime film Akira (1988)—can be seen as attempts to grapple with issues arising from the 1945 atomic bombings and the very real possibility of global annihilation that they implied (Anime 197). In the Godzilla films we see another common characteristic of Japanese popular narrative: both the destructive and the potentially productive aspects of technology are explored. Consequences, including occasionally the pointless deaths of protagonists, are rarely evaded in Japanese popular narrative.

In another sense, too, Japanese cultural production may offer a particularly fertile area for the study of cyborgs and subjectivity. Japanese social discourse incorporates robots and cyborgs with little of the implicit dread often found in North American references. Manga artist SHIRÔ Masamune has remarked that

from childhood Japanese children are educated in robots/robotics. Starting with [the cartoon characters] Astro Boy and Arare-chan, and progressing to Doraemon—these are all robots. Japanese children give robots names and see them as friends, and are raised from the beginning with an image of robots that portrays them as extremely useful.... (qtd in Ueno 116).

As opposed to the terrifying figure of Darth Vader—one of the first memorable cyborgs encountered by children in North America—Japanese children enjoy a wide range of characters that mix human and machinic elements.² Certainly it is difficult to overlook the large number of robots, cyborgs, and "metal fighting suits" in Japanese television, animated videos (anime), and comic books (manga). While many of these narrative products can be dismissed as unimaginative or derivative, others are complex and thoughtful, and their sheer quantity means that the various issues at the heart of the new cyborg paradigm are explored in Japanese popular culture perhaps more thoroughly than anywhere else. (And, given the extraordinary popularity of manga and anime outside Japan, this exploration is shared by increasing numbers of international viewers.)

Further, Japanese popular culture may enjoy a particularly significant, persistent engagement with the cyborgian because of its participation in what I call the "Frankenstein syndrome." I have proposed this notion as a parallel to what film theorist Rey Chow has called the "King Kong syndrome." Drawing inspiration from the 1933 film, she identifies a tendency on the part of Western countries to read the non-West as the "site of the 'raw' material that is 'monstrosity,' [which] is produced for the surplus value of spectacle, entertainment, and spiritual enrichment for the 'First World'" (84). My inflection of the parallel notion, the "Frankenstein syndrome"—inspired by

Mary Shelley's 1818 novel rather than any of the films—refers to the tendency of developing countries, those defined as "monstrous" and "raw" by the already developed nations, to see themselves in those same terms.

When Japan re-opened to the world in the mid-nineteenth century after more than 250 years of isolation, one of the most powerful messages of Western discourse the Japanese absorbed was the "scientifically proven" racial and cultural inferiority of the "Asiatic" race. Less than fifty years later, Japan had replicated every aspect of Anglo-European modernity with astounding success: cutting-edge science, medicine, and technology; a colonial empire supported by a powerful military; a fully developed industrial economy. Nonetheless, after helping the Allied powers defeat Germany in WWI and becoming a founding member of the League of Nations, Japan was once again relegated to the position of anomalous Other by the other founding nations' refusal to incorporate a statement of basic racial equality in its charter (Dower 204).

Like the monster in Shelley's Frankenstein, rejected first by his creator and eventually by all the other humans with whom he tried to establish contact, the people of modernizing Japan were forced time and again to recognize that even the complete acquisition of the "godlike science" of language—in the form of the discourses of industrial, post-enlightenment modernism—was not enough to save them from the curse of monstrosity in the eyes of the West. All modern Japanese literature and art has been (and continues to be) produced under the shadow of this recognition, leading to an unusual concern with monstrous or anomalous bodies/subjectivities and various attendant issues. In striking similarity to the key themes in Shelley's Frankenstein, some of the most pressing issues for Japanese modern narrative have been questions of legitimacy and illegitimacy (based on an improperly resolved oedipal crisis), non-normative forms of reproduction, the hybridity of bodies or subjectivities, and ambiguous or anomalous incarnations of gender/sex/sexuality. 3 I have written elsewhere about the effects of these culturally-specific concerns on the development of the figure of the cyborg/robot/android in Japanese popular culture from 1870 to the present. Here I will confine myself to discussion of two very recent Japanese cyborg narratives and to a limited set of questions regarding cyborg subjectivity.

The title of this essay incorporates two of the key terms I use in my exploration of cyborg subjectivity: "sex" and "single." I begin by explaining why sexuality and singularity are so important in this context, and then discuss two recent anime narratives—Shinseiki Evangelion (1995-96, Neon Genesis Evangelion, 1996-97) and Kôkaku kidôtai (1995, Ghost in the Shell, 1996)—in terms of the nexus of contemporary fears or desires regarding subjectivity that is being negotiated through those depictions.

Sexuality and singularity are not unrelated, of course, since partnered sex and its various consequences present one of the most common contexts within which the human experience of the singularity of the subject is challenged—through intimacy, loss of self in orgasm, pregnancy, infection, and so on. Luce Irigaray has written eloquently (though in a different context) about the experience of sexuality/subjectivity that is not singular: "within herself, she is

already two—but not divisible into one(s)...." (24).⁵ She eventually arrives at the useful term "not-two" for this doubled but coherent kind of subjectivity.

In one highly interesting attempt to map the conceptual limits of human subjectivity, Elizabeth Grosz has invoked the examples of conjoined twins and intersexed people.⁶ A consideration of these naturally-occurring anomalous subjectivities can help in understanding the conceptual challenges involved in cyborg subjectivity.

Conjoined twins challenge the notion of the individual, autonomous identity housed in a singular body; they demonstrate the possibility of separate personalities and consciousnesses—separate subjectivities—in a single physical unit. Moreover, although conjoined twins have separate consciousnesses, Grosz quotes first-person accounts that underscore the fact that the "usual hard and fast distinction between the boundaries of one subject or another are continually blurred" (62) to a degree unimaginable to morphologically singular human beings, even including identical twins.⁷

In the case of intersexed or ambisexual people, the morphological binaries of male and female—usually taken to be utterly natural and universal—are confounded. Again it may be difficult for the single-sexed individual to conceptualize the experience of subjectivity embodied in a way that is not sexually unitary or singular. But it is important to stress that while conjoined twins and intersexed people cannot be considered and do not experience themselves as singular/unitary/one, neither can they be considered (nor do they experience themselves) as doubled/separate/two (Grosz 58-65). They are incarnations of the aforementioned notion of the "not-two."

In the case of some kinds of cyborgs, it is possible at least to sketch the boundaries, the interfacing surfaces, between one component (the biotic) and another (the techno-mechanical), but once the two are joined, those boundaries are meaningless in terms of determining or experiencing subjectivity. Some common examples of this would include people who have been inoculated and those with transplanted organs or prosthetic devices. We can separate the parts, but once they are combined, they make one functional unit.

In premodern and modern(ist) conceptualizations of subjectivity, naturally occurring anomalies ("monsters") such as conjoined twins and hermaphrodites functioned to mark the borders of the "normal" embodiment of the "normal" subject. In Judith Butler's terms, these "monsters" formed the constitutive "outside" that "secures and, hence, fails to secure the very borders of materiality" (Bodies that Matter 188). Cyborgs, which are by definition not naturally occurring, serve in a new but equally significant way to mark the borders of modern(ist) subjectivity and simultaneously to reveal the ways those borders are breaking down and being redrawn in postmodern, posthuman paradigms.

In the case of cultural production in Japan, cyborgs and other anomalous —hybrid, "not-two"—embodiments perform the same function: that of marking the abject borders that serve to define "normal" subjectivity. But in Japan, because of the "Frankenstein syndrome," the bodies or subjectivities marked as anomalous may simultaneously be identified as simply "Japanese," since

"monstrosity" is "normal" for those defined as Other by Western hegemonic discourse. This allows for an exploration of the hybrid, monstrous, cyborg subject from a sympathetic, interior point of view rarely found in North American cultural products. Another culturally specific aspect of Japanese narrative is the frequent appearance of "female" or ambiguously gendered cyborgs. This, too, relates back, I would argue, to Japan's experience of feminization by the dominant Western powers of the nineteenth century. The Japanese people currently involved in scholarship and cultural production around the figure of the cyborg are completely knowledgeable about Western science fiction and cyborg theory, and they consider themselves as participating fully in an international conversation on the topic. Nonetheless, the history of Japan's modernization has produced a body of cyborg discourse that differs in these and other important respects from that of North America.

The questions most frequently asked about conjoined twins and intersexed people are echoed in contemporary Japanese narrative explorations of the cyborg. We might wonder of conjoined twins, which is really in control of the body, or to what extent do they have separate control? How do they coordinate movement and agency? In the case of cyborgs we are tempted to ask the same question: what is the power relationship between the biotic and technomechanical components; which is "really" in control? These questions may be as meaningless for the cyborg itself as they are when posed to conjoined twins—but those of us who consider ourselves to be morphologically singular beings strain through such questions to understand dual subjects.

Similarly, many have wondered of both conjoined twins and hermaphrodites: how and with whom do they have sex? (One of the most frequently reported facts about the original "Siamese twins," Chang and Eng Bunker, is that they married sisters and fathered more than twenty children.) This question does not arise solely out of prurient curiosity, but rather out of our fundamental belief, "identified by Foucault as the sign of modernity itself, that sex 'harbours what is most true in ourselves'" (qtd in Clark and Myser 347). It is no surprise, then, that many explorations of the nature and potential of cyborg subjectivity involve a focus on sexuality in some sense as well—even if the focus is on the impossibility or irrelevance of some form of sexual behavior.

The two Japanese anime under consideration here are no exception. Evangelion explores the aspects of human sexuality involving bodily conjoining, intimacy, and penetration/permeability played out through a cyborg subject. Ghost in the Shell examines and rejects old forms of species reproduction in favor of cyborgian and cybernetic alternatives.

Evangelion, directed by ANNO Hideaki, was broadcast every Wednesday night from October 1995 to March 1996 on Tokyo TV Channel 12, a total of twenty-six episodes. It was immediately and hugely popular. The story is extremely complex, but for current purposes I will provide only a brief synopsis. The setting is 2015, fifteen years after the global disaster known as "Second Impact" when a meteor had hit Antarctica and the resulting shock waves, tidal waves, and melting ice cap had killed billions of people. This is the official story. Most people are not aware that what actually happened was an

attack by an unknown alien machine or creature, called a "shito"—a word that means "apostle" or "disciple," but is always translated into English, at director Anno's insistence, as "angel." The creature was destroyed, and the resulting explosion is what actually caused Second Impact. It is now fifteen years later, and angels have begun appearing again. The most powerful of conventional weapons are useless against them; the only effective weapon is a kind of huge "metal suit" robot, called an EVA, designed and deployed by a special international team called "NERV." The EVAs look very much like the conventional fighting robots of the metal suit ("mecha") genre, but they have a few idiosyncratic characteristics: they can only be piloted by fourteen-yearolds; and each EVA and its designated pilot must achieve a high degree of bioelectrical synchronization in order to function. Developing this ability to biologically interface and harmonize can take months. When the narrative begins there are only two EVAs in existence, a prototype model, 00, piloted by a mysterious girl named Rei, and the first Test Model, 01, for whom a pilot has vet to be found.

In the first episode the fourteen-year-old protagonist, IKARI Shinji, is summoned to NERV headquarters by his estranged father, IKARI Gendo. Thinking his father has summoned him out of affection, Shinji is shocked to learn that, on the contrary, his father wants him there only to pilot the new EVA. Since an angel is at that very moment attacking headquarters, Shinji has no time to think about taking on this task. At his continued refusals his father orders that Rei, the pilot of EVA 00, be brought in to battle the EVA, despite the fact that she is still badly wounded from an earlier sortie.

Rei is brought in on a stretcher, shivering and moaning in pain. When the angel attack shakes the building and she is thrown off the stretcher, Shinji runs to pick her up from the floor. While cradling her body in his arms, he sees her fresh blood on his hand and changes his mind about piloting the EVA. Repeating, "I mustn't run away, I mustn't run away," he summons his courage to tell his father that he will do it.

In the next scene we see a cylindrical capsule, the "entry plug," being lowered into an opening in the "neck" of the giant EVA suit. The scene shifts to Shinji inside the plug as it begins to fill with some kind of liquid. Terrified, Shinji tries to hold his breath, but eventually has to breathe in the liquid filling the capsule, which he is told will deliver oxygen to his lungs. Following this, the support crew monitor his synchronization rate with the EVA suit, astonished at his ability to mesh with it on this first attempt. Soon after, the Shinji-EVA cyborg is launched to fight the angel.

In the scene that follows, this one chronologically, we see Shinji successfully moving the EVA, which is extraordinary given his lack of training. Nonetheless, the Shinji-EVA cyborg is badly beaten by the angel; we see Shinji in pain and terror inside the cockpit gripping his own arm when the angel rips off the arm of the EVA-suit. Eventually the Shinji-EVA cyborg is wounded in the head, so that those watching back at headquarters are convinced that the cyborg amalgam of Shinji-EVA is dead. But at this moment the Shinji-EVA,

disconnected from its power supply, goes berserk and, through some force the designers have never seen, manages to destroy the angel.

The point to be noted from the scene of the first creation of the Shinji-EVA cyborg is a process I would like to call *inter-corporation*—that is, mutual incorporation of the other. The viewer sees Shinji, inside the very phallic-looking entry plug, being inserted into the receiving orifice of the EVA-suit, and being incorporated by it: structurally this is completely analogous to the "normal" sexual incorporation of the penis by the body of the other. But immediately thereafter we see the fluid inside the EVA filling the entry plug, and filling Shinji, much to his terror. In this case, therefore, each of the cyborg's two components—the mechanical EVA and the biotic Shinji—has penetrated into and filled the other; each has been incorporated by the other.

Maud Ellman has written that "Hegel, Feuerbach, Marx, and Freud, in spite of their divergences, agree that eating is the origin of subjectivity. For it is by ingesting the external world that the subject establishes his body as his own, distinguishing its inside from its outside" (30). The body ingests or incorporates materials from "the outside"—food, oxygen, semen—changes them, and expels a different kind of material back to "the outside"—feces, carbon dioxide, baby. This conceptualizing of our bodies is basic to the construction of the unitary, bounded subject, permeable only within controlled limits. Having control over what we take in and when and how we expel wastes/products is part of the training and prerogative of the autonomous adult modern subject.

It must be remarked, however, that sexual difference renders bodies differentially permeable in these examples. While all humans ingest food and oxygen and expel feces and carbon dioxide, only females incorporate genetic information from the semen their bodies take in with sexual penetration, and only females have their body boundaries forcefully breached by the act of giving birth to the baby that is the product of that original incorporation. This "extra" permeability to genetic information, as well as the mysterious "leakage" of menstruation, and the possibility of violent eruption from within of childbirth, are among the primary reasons that women have never been considered to fully meet fully the criteria of the autonomous, unitary, bounded, self-controlled modern subject.

How does this basic structure for the construction of subjectivity relate to Evangelion's cyborgian example? In this case, we have no incorporation by a bounded self of a relatively unimportant other, to be absorbed, transformed, and then ejected, but rather the intercorporation and interpenetration of two relatively equal components to produce a third, hybrid product: the cyborg. Not unitary, but, at the same time "not-two." (While space does not allow me to pursue the point here, it is significant that later in Evangelion we learn that a series of intercorporations has already occurred: Shinji's mother has been fused with the inorganic material of the EVA suit—as well as being cloned to produce Rei—and Ritsuko's mother has been fused with the MAGI computer system. It is noteworthy that, in every case, it is a woman whose complete intercorporation with the inorganic has produced the weapons powerful enough to resist the angels.)

If intercorporation is one of the characteristic structural aspects of cyborg subjectivity, what kinds of fears and hopes does it engender? Indeed, the question of sex/gender seems to be crucial here, as many contemporary narratives demonstrate that intercorporation is an especially disturbing concept for their male protagonists. The fact that we see Shinji's terrified/terrifying experience of initial intercorporation, but not that of his girl colleagues, is no doubt meant to play dramatically on the fears of the male viewing audience. Another popular anime, for example, Kyôshoku sôkôgaibaa (1989, Guyver, 1994-97), features a man being physically invaded by the body armor—tentacles of it penetrate his skin and orifices—which then turns him into a benevolent and powerful cyborg able to save his friends from certain death. Nonetheless, he is distraught at the invasion of his body and his inability to expel the invading component, which retreats into a small area of his back most of the time, but then takes over his whole body again when he is provoked to fight. A further example can be seen in the live-action cult film Tetsuo, the Iron Man (1988: with English subtitles, 1992), which opens with a man intentionally "infecting" or "impregnating" himself by thrusting a metal bar into a slit in his thigh, which gradually turns him into a monstrous amalgam of the machinic and the organic. He then goes on to "infect" or "impregnate" others. This model of intercorporation—similar to the invasive attack of an infection or a parasite—can be found in many Japanese popular-culture narratives featuring male protagonists who are "feminized" by their bodies' penetration by and permeability to "the outside." (At the same time, they continue to exhibit masculine/male characteristics, such as the ability to "impregnate," resulting in a radically ambiguous gendering of these protagonists.) The association of this trope with HIV since the early 1990s only serves to reinforce the nexus of sexuality, singularity, and subjectivity that is both exemplified and challenged by cyborgian intercorporation.

Control of the body and body boundaries is clearly an important node of anxiety being played out through many cyborg narratives. Certainly through techno-medicine we are controlling the body more and more successfully—this is one reason we have so many literal cyborgs walking among us now. The classic robotic bodies that appear in traditional science fiction are perfect, completely controllable. They represent an ideal version of the modernist conception of the body/self. But the conceptual price that must be paid for our increasing attempts to control the body is the recognition that the repressed always returns. As the imagined social body has become increasingly more perfect and controlled—more and more closely fitting the modernist model of (male) autonomous subjectivity—the likelihood of the eruption of the repressed body, in all its abject, excessive, imperfect, uncontrolled, boundary-challenged "female-ness," increases.

By the nineteenth episode of *Evangelion*, Shinji has experienced so many traumatic events that he has finally quit as an EVA pilot. Before he manages to leave the area, however, he is convinced to return and fight an angel that has taken on the unexpected form of another EVA, after he sees his friends, the two girls who also pilot EVAs, nearly destroyed by this new angel. The Shinji-EVA

loses badly to the angel, with (again) one arm ripped off in the battle. Finally, the suit's power reserve is drained and the Shinji-EVA cyborg is completely at the mercy of the angel. At this moment, however, Shinji, screaming with frustration, manages to "synchronize" so completely with the EVA suit that he disappears, simultaneously managing to activate some power in the cyborg amalgam of himself and the suit that allows him/it/her to rise up, regenerate its own arm (which is now flesh rather than metal), and defeat the angel. At the end of the scene the Shinji-EVA amalgam crawls like an animal to the dying angel and begins to eat it. Finally he/it/she rises up and roars in triumph, as the "mecha suit" armor is rent and destroyed from within. The stunned watchers from NERV are simultaneously delighted by the unexpected victory, mystified by the EVA's ability to move with no power source, and revolted by the EVA's animalistic cannibalism. The chief scientist, Ritsuko, remarks with fear that the EVA's "bindings" have been obliterated. In response to a surprised query from a junior colleague, she explains: "That isn't armor. Those are restraints that allow us to control the EVA's power. But now the EVA is removing the web that binds it to our will. We can no longer control the EVA."10

KOTANI Mari has related this act of cannibalism on Shinji-EVA's part to "the explosion of the radically feminine, that is, to what Alice Jardine calls 'gynesis'" (3). Kotani describes the scene this way:

The moment electric technology becomes unavailable (his power supply cords have been cut), Shinji strongly hopes for a miracle. Thus, with the ultimate aim to defeat the enemy, Shinji very naturally but miraculously comes to feminize himself. This sequence unveils Shinji's epiphany. The more strongly he desires a miraculous breakthrough, the more deconstructive his own sexuality becomes. Hence the abrupt explosion of fearful femininity out of Shinji's own male subjectivity. (5)

Despite the hyper-masculine outlines of the EVA suit and the fact that the pilot of 01 is a boy, over the course of the series in scenes such as this one the Shinji-EVA cyborg amalgam is decisively gendered feminine: the uncontrollable, insufficiently bounded body/subjectivity that enlightened, rational modernity has sought to repress. And yet, it is in precisely these same scenes that the Shinji-EVA cyborg manages through some kind of hysterical crisis to overcome the limits of technology—the power cord and back-up battery—to defeat the attacking angel.

This narrative, therefore, emplots both the male *terror* of being radically feminized through the excessive intimacy implied by the interpenetration and intercorporation of the cyborg subject and the paradoxical *hope* that the one power that can finally oppose the various forces of evil is precisely the eruption of the abject femininity—permeability/penetrability—that is repressed in technopatriarchal society. That powerful eruption can only occur, however, when the interconnection of the various cyborg elements is at its maximum. In the nineteenth episode Shinji's synchronization rate with the suit is an inconceivable 400%, indicating that, despite the terror it provokes, the only hope for humankind is to move toward increased intimacy—permeability/penetrability—with the mechanical other.

I will turn now to *Ghost in the Shell* (1995), a film directed by OSHII Mamoru, based on the popular manga by SHIRÔ Masamune. This is a much shorter narrative, and deals with one basic issue: species reproduction in a cyborg society. How does it occur, what gets reproduced, and in what sense does a cyborg species have historical continuity into the future?

The film opens with a very short scene, a joke, in which the first problematic of cyborg reproduction is raised. Special security forces officer Major KUSANAGI Motoko, our protagonist, is hooked into the Net through four interface sockets in the back of her neck. A colleague talking to her over the Net remarks that there is a lot of static in her head today. "Yeah," she mutters, "I'm having my period." This immediate reference to menstruation—one of those odd breachings of body boundaries that make the female body unfit for modern subjectivity—alerts the viewer to the fact that reproductive sexuality is at the heart of this film. The reference to menstruation is particularly significant because, as we learn immediately thereafter, Major Kusanagi has a body that is completely mechanical, and certainly does not bleed. After this brief introductory scene, we see, interspersed with the opening credits, Kusanagi being created/re-created/replicated (it is impossible to tell which) in the lab. As we learn from this sequence, her body is entirely artificial. Therefore, this body is under perfect control: nothing goes into or out of it except what/when/how she wishes. One assumes that this body is also incapable of impregnation, gestation, or parturition—what would be the need for such functions in a security officer? Her postmodern, reconstructed body is not enhanced to maximize her preferences or pleasures, we learn, but to maximize her usefulness to the state. Although she is extravagantly female in terms of external morphology (and spends several scenes of the film naked), and although she is presumably female in terms of original identity, the sexed body as reproductive body¹² has no meaning in her cyborg state. The juxtaposition, in the first five minutes of the film, of her reference to menstruation with the scenes of her cyborgian replication, immediately underscores the fact that this film's theme is the problematic of reproductive sexuality in a posthuman subject.

Kusanagi's only biotic component is her brain, which provides her with a "ghost"—that is, memories, consciousness, and self-identity. The uncyborgized, natural-body humans all possess a "ghost" as a matter of course. But for radically altered humans like Kusanagi and most of the other members of her security force, the original "ghost" is the only thing that distinguishes the cyborg-human from the pure android.¹³

Why, then, does she mention menstruation? Why, going back to Evangelion for a moment, is it the sight of Rei's blood on his hand that makes Shinji change his mind about piloting the EVA?¹⁴ In both cases, this early intrusion of the uncontrollable, messy, leaking feminine body serves, among other things, to underscore the absence of such bodies at the surface level of the narrative. Everyone looks perfect, appears under complete physical control—but whose and what kind of control? These bodies perfectly incarnate the modernist idea of autonomous subjectivity; in this sense, they are all coded "male," despite the strong visual dimorphism. Where is the "female" in this perfectly controlled

universe? How does reproduction occur in a de-sexed universe? These are the questions raised by the simultaneous presence/absence of female (menstrual) blood in these cyborg narratives.

As the film progresses, we learn that Major Kusanagi heads a special defense team: Division Nine of the Security Branch of the Department of the Interior. She is brought in to deal with the problem of someone known only as "the Puppet Master," who carries out terrorist acts by hacking his way into the "ghosts" of chosen people through their implanted prosthetic links to the Net, reprogramming their ghosts and causing them to perform terrorism. It is revealed that "the Puppet Master" began as a computer program that somehow became sentient and was then forced by its makers to abandon the Net and to enter a completely manufactured body. Now, however, the Puppet Master has escaped, and its whereabouts are unknown.

In the course of the hunt for the Puppet Master, Kusanagi watches as people are told that the memories they have of spouses, children, jobs—everything they hold dear, everything that organizes the sense of self—have been artificially implanted by the Puppet Master who had hacked into their ghosts. She wonders whether her own ghost is real and original, or whether everything she thinks she knows about herself is, like her body, completely artificial.

In the final sequence we witness a most unusual reproductive act, performed by two naked, voluptuous female torsos, minus arms and legs, lying side by side. Kusanagi's body was reduced to this state when she battled to rescue the "female" android body into which the Puppet Master had fled. Through the help of her friend and partner, Batou, Kusanagi is linked through technology to the Puppet Master and they somehow merge into a single entity, capable of travelling the Net as the Puppet Master does, but still retaining some element of Kusanagi's subjectivity (through her organic brain, it is assumed).

Ghost attempts to describe a completely new form of reproduction, for the new kinds of beings that will emerge from the increased cyborgization of the world. Replication is the reproductive process of the cyborg, as we see in the opening creation sequence, where Kusanagi's brain is encased in an entirely manufactured body. This reminds the viewer that she is infinitely reparable—as long as her brain is intact, her body can be reconstructed, in whole or in part, as often as necessary, and she will still be KUSANAGI Motoko. Once again, therefore, this narrative explores the ramifications of the possibility of perfect control over the body. In this case, however, the interest is not focused on the infinite replicability of cyborgs, but rather the limits imposed on subjectivity by such perfect control and how these limits may be transcended, moving to the next step of evolution.

Human species reproduction as we know it is structured around several salient features. One of these is the interplay of repetition/sameness with diversity. While a parent's genetic material is replicated in the child, the mixing of genetic material from the father with that of the mother produces diversity in the offspring; and this is repeated from generation to generation. For cyborgs such as Kusanagi there is no such combination of continuity and change. The mechanical body—or body part—is replicable, but what is (re)produced is a

facsimile of the previous one, and has no reference to an organic "original." Nor is there any intermixing of genetic information, and thus qualities, from another body/subject. There is continuity in the sense that Kusanagi's brain/ghost remain the same. But in a world where "ghosts" can be hacked and identities implanted, how is she to be sure that her brain is indeed original and her sense of self unadulterated?

Another feature of organic reproduction as we know it is the importance of place—the space of embodiment. One is born from a specific place, the body of the mother, into a specific place. This happens only once, in that time and that place. The materiality and spatial specificity of the point of origin and the surroundings of one's journey through life are integral to a sense of subjectivity. As we see in the opening credits of *Ghost*, Kusanagi as cyborg is denied the specificity of time and place of birth. She emerges time and again from the same process; the fact that it is impossible to tell from the scene whether this is the first creation of her cyborg body or the thousandth underscores the distance from organic birth. In the case of many cyborgs, rather than two physical bodies coming together to (re)produce a new body/subjectivity—limited and constituted by place, circumstance, time—it is the corporation and the government, figured in many anime as disembodied, transnational, and threatening, that produce and reproduce the cyborg as species.

In Ghost physicality does retain one very important function. As UENO Toshiya explains it: "Rather than the mind (seishin), a 'ghost' is more like a person's spirit (tamashii), and logically it is also unconscious; in general it is made up of past experiences and memories. It's something like water in a cup, premised upon the existence of some kind of shape (such as a metal suit or a shell)" (104). Possession of a "ghost," rather than a particular kind of body, is what determines the legal and social status of a being as "human"—the nature of the body is irrelevant in determining ontology. But since a "ghost" (evidently) cannot exist without a container, the body is not (yet) a disposable element of selfhood.

Kusanagi is clearly concerned with these questions of cyborg ontology and reproduction, and the Puppet Master offers her a unique chance to overcome the limitations of her cyborg nature. By reproducing, she, like the Puppet Master, will have carried out one of the defining characteristics of a life form, thus proving that she is more than an automaton.

That this is a whole new stage in evolution is signaled in a Biblical passage quoted by the Puppet Master as he urges Kusanagi to merge with him/it: "When I was a child, I spake as a child, I understood as a child, I thought as a child: but when I became a man, I put away childish things.// For now we see through a glass, darkly; but then face to face; now I know in part; but then I shall know [fully] even as I am [fully] known" (I Corinthians 13: 11 and 12). To know fully even as she is fully known is the possibility awaiting Kusanagi—as simultaneously herself and her offspring—in her new, unlimited existence in the Net. She will have left the "childhood" of her cyborg subjectivity behind, and achieved full subjectivity in the next stage of evolution.

In narratives of cybernetic reproduction such as this one, what becomes of subjectivity? How can we—not even yet fully transformed from modern humans to postmodern cyborgs—be expected to feel any connection with Kusanagi's dilemma and the Puppet Master's solution? It is no doubt significant that even here reproduction ("merging") is the result of individual desire and will, carried out only with great contrivance and sacrifice. In that sense, the subjectivities even of the cyborg Kusanagi and the new life-form Puppet Master are recognizable to those of us still struggling with our modernist preconceptions of personhood.

Conclusion. Donna Haraway has proclaimed that "the cyborg is a creature in a post-gender world" (150). That may be true of Haraway's idealized vision of cyborgs themselves, but, as we have seen, contemporary Japanese cyborg narratives are still very much concerned with the binary oppositions of sex and gender, and the sexuality presumed to accompany them. Nonetheless, I would argue that these narratives relate a breakdown in what Fuchs, quoting Judith Butler, calls the "'heterosexual matrix,' [in which] gendered identity and the construction of stable body contours rely upon fixed sites of corporeal permeability and impermeability" (283). As we have seen, that permeability is no longer differentiated by sex/gender in cyborg narrative.

Haraway puts the same point a little differently: "communications sciences and modern biologies are constructed by a common move—the translation of the world into a problem of coding," resulting in a "world [that] is subdivided by boundaries differentially permeable to information" (164). Permeability to information is not a gendered phenomenon, particularly in the world of *Ghost*, where humans are altered by techno-medicine to link directly to the Net, or a world such as that of *Evangelion*, where male and female EVA pilots alike undergo involuntary intercorporation: Shinji cannot prevent himself from interfacing/synchronizing with the machine. Nor is permeability to information and technology in general a gendered phenomenon in our contemporary lived experience, and it may well be anxiety not just over that fact in itself, but also anxiety over the breakdown of the "heterosexual matrix" determined by sexdifferentiated permeability, that motivates the strongly gendered aspects of many cyborg narratives.

Haraway echoes this anxiety, warning against the increasing and undifferentiated permeability of the body, which she sees as a situation where "all resistance to instrumental control disappears, and all heterogeneity can be submitted to disassembly, reassembly, investment, and exchange" (164). In contrast, Judith Butler describes what sounds like a utopian vision of the potential of cyborg sexuality/subjectivity:

Foucault held out the possibility that we might cease to think of sexuality as a specific attribute of sexed persons, that it could not be reducible to the question of his or her "desire," and that overcoming the epistemic constraint that mandated thinking of sexuality as emanating from sexed persons in the form of desire might constitute an emancipation, as it were, beyond emancipation. The phrase, "bodies and pleasures" held out the possibility of unmarked bodies, bodies that were no longer thought or experienced in terms of sexual difference,

and pleasures that were diffuse, possibly nameless, intense and intensifying, pleasures that took the entire body as the surface and depth of its operation.

The turn from "sex-desire" to "bodies and pleasures" promised for some a turn away ... from the insistence that sexuality be thought of in terms of sexual difference, and that sexual difference be thought of as a function of oedipally induced differentiations, and that desire be understood as structured by lack in relation to a sexually differentiated Other. ("Revisiting" 6)

I have yet to see an anime narrative that explicitly approaches cyborg sexuality in this pleasurable, fully post-gendered way, but I think this vision is suggested in the reluctance of cyborg narrative to depict sexuality in the modernist terms of the meeting of sexual organs attached to sexed/gendered bodies. The scene in *Ghost* in which two limbless female torsos somehow perform "reproductive sex" is one example of this. Also suggestive is the radical—one might almost say Frankensteinian—dismemberment and resuturing of the oedipal family romance in *Evangelion*, where Shinji's literal, absolute merging with his mother's body is engineered by the otherwise rejecting father. What kind of sexual/sex/gender identity would result from these examples of emancipation from traditional conceptualizations of subjectivity?

In Evangelion the radical intercorporations of difference through bodies that cannot resist is a situation that is explored with fear and hope. Despite the celebration of the machinic in some senses, the human body and will—when linked to the machinic—are ultimately reinscribed as finally the most hopeful, only truly effective force for resistance—even if that resistance is only temporarily successful. In Ghost, on the other hand, the already achieved compulsory permeability of the populace to information and surveillance can only be resisted by abandoning the body altogether, moving it to the next level of evolution. Neither of these scenarios is very optimistic, but both are useful in the process of thinking through the possibilities of subjectivity in a rapidly changing world.

NOTES:

- 1. Haraway's "cyborg" is actually an idealized eco-socialist-feminist relationship between women and technology rather than the "literal" cyborg—an embodied amalgam of the organic and the machinic—that I discuss in this essay. Many of her ideas about the future model of subjectivity that she calls "cyborg" are, however, pertinent to my argument.
- 2. It could be argued that the great majority of the "cyborgs" (including also androids and technologically-enhanced humans) well-known to North American audiences are emphatically male in appearance, and often portrayed as threatening, or at times pitiable, monsters: Darth Vader and the Empire's soldiers (the clone warriors) in the Star Wars films (1977, 1980, 1983, 1999, 2002); Data, and all the Borg except the Queen, in Star Trek: The Next Generation (1987-94); RoboCop (1987); Terminator (1984); Total Recall (1990). When female cyborgs do appear they are often "afterthoughts" to the original narrative corpus: Seven of Nine in Star Trek: Voyager (1995-2001), and the female police officer in Robocop 2 (1990). Pris and Rachael, in Blade Runner (1982) are the unusual exceptions to this rule.
- 3. Although I will not take the time to repeat the arguments here, critics from Sandra Gilbert and Susan Gubar (especially 213-47) to Peter Brook (199-220) have identified the

multiple ways that Frankenstein's monster, although possessing male genitalia, is actually gendered "female" throughout the novel. This gender ambiguity/hybridity, and the problematics of monstrous reproduction/sexuality in *Frankenstein*, are very much a part of what I am calling the "Frankenstein syndrome."

- 4. See "The Genealogy of the Cyborg in Japanese Popular Culture"; see also Napier's *The Fantastic in Modern Japanese Literature*.
- 5. Note that Irigaray is contrasting the singularity of male/masculine subjectivity, as symbolized by the singular penis, with the two-in-oneness represented by the female genitalia and reflected, she argues, in female/feminine subjectivity. I do not intend to bring Irigaray's arguments about sex and gender into this essay, but merely to borrow her short-hand terminology for this kind of two-in-one subjectivity.
- 6. Haraway's "A Cyborg Manifesto" also explicitly cites "monsters" such as conjoined twins and hermaphrodites as important in the establishment of concepts of subjectivity, identity, legal autonomy, and so on (180).
- 7. She reports that Chang and Eng Bunker, the "original" "Siamese twins," used the pronoun "I" when they wrote letters jointly (when a "we" might have been expected), and jointly signed as ChangEng (62).
- 8. Clark and Myser write powerfully about the ways that new medical technologies of vision are serving the modernist human compulsion to delineate the boundaries that invisibly "separate" conjoined twins, in order to allow their physical separation into "acceptable" singular units.
- 9. A point I have argued in "The Genealogy of the Cyborg in Japanese Popular Culture."
- 10. This is a transcription of the English subtitles from *Neon Genesis Evangelion*, videotape #10 (episode 19), released by A.D.V. films in 1997. Please note that in the original Japanese the pronouns used carry no indication of gender whatsoever: it is impossible to tell whether the speakers think of the Shinji-EVA cyborg as "he," "she," or "it."
- 11. In the English-dubbed version of the film, this is sanitized as "Yeah, I must have a wire loose"! (Ghost in the Shell, dubbed version, released by Manga Video in 1996.)
- 12. Although in this essay, I am not discussing the manga versions (which often differ considerably from the anime versions), I should point out that in Shiro's manga of Ghost in the Shell, Kusanagi is shown enjoying explicit (albeit virtual) sexual activity with a group of female cyborg security officers like herself (a scene that was deleted from the English translation of the manga). In the manga it is clear that sexual pleasure is allowed, but not reproduction, provoking Kusanagi's dilemma.
- 13. The problem of creating proper ontological divisions between various posthuman creatures is addressed in many anime films. In the TV series *AD Police* (1990), for example, which is largely concerned with the sexuality of female cyborgs, a person is considered human (with all the rights and privileges pertaining thereto) so long as no more than 70% of his/her body has been replaced with mechanical parts. Those more than 70% mechanical are called Voomers and are liable to immediate arrest and/or destruction by the special AD Police (rather like the replicants in *Blade Runner*).
- 14. A related, though not identical, example is Gally in *Gunmu* (1993, *Battle Angel* 1993), whose fighting persona is activated any time she sees or smells blood. As a complete android she neither menstruates nor bleeds when damaged. Yet she retains traces of old values based on a culture of organic bodies: love, reproduction, loyalty, integrity.

WORKS CITED

- Anno Hideaki. Shinseiki evangerion. TV series. Gainax/NAS/TV Tokyo/Tatsunoko Productions, 1995-96. Neon Genesis Evangelion. Subtitled VHS. 13 vols. ADV Films, 1996-97.
- Brook, Peter. Body Work: Objects of Desire in Modern Narrative. Cambridge, MA: Harvard UP. 1993.
- Butler, Judith. Bodies that Matter: On the Discursive Limits of Sex. New York: Routledge, 1993.
- -----. Gender Trouble; Feminism and the Subversion of Identity. New York: Routledge, 1990.
- . "Revisiting Bodies and Pleasures [excerpt]." Ampersand 1 (Nov. 1998): 6-7.
- Chow, Rey. "Violence in the Other Country: China as Crisis, Spectacle, and Woman." Third World Women and the Politics of Feminism. Eds. Chandra Talpade Mohanty, Ann Russo, and Lourdes Torres. Bloomington: Indiana UP, 1991. 81-100.
- Clark, David L., and Catherine Myser. "Being Humaned: Medical Documentaries andthe Hyperrealization of Conjoined Twins." Freakery: Cultural Spectacles of the Extraordinary Body. Ed. Rosemarie Garland Thomson. New York: NYU Press, 1996. 338-55.
- Dower, John W. War Without Mercy: Race and Power in the Pacific War. New York: Pantheon, 1986.
- Ellman, Maud. The Hunger Artists: Starving, Writing, and Imprisonment. Cambridge, MA: Harvard UP, 1993.
- Foucault, Michel. Herculine Barbin: Being the Recently Rediscovered Memoirs of aNineteenth-Century Hermaphrodite. Trans. Richard MacDougall. New York: Pantheon, 1980.
- Fuchs, Cynthia J. "'Death is Irrelevant': Cyborgs, Reproduction, and the Future of Male Hysteria." *The Cyborg Handbook*. Ed. Chris Hables Gray et al. New York: Routledge, 1995. 281-300.
- FUKUTOMI Hiroshi. Gunmu (video). K.S.S./Movic Inc., 1993. Battle Angel. Subtitled VHS. ADV Films, 1997.
- Gilbert, Sandra M. and Susan Gubar. The Madwoman in the Attic: The Woman Writer and the Nineteenth-Century Literary Imagination. New Haven: Yale UP, 1979.
- Gonzalez, Jennifer. "Envisioning Cyborg Bodies: Notes from Current Research." *The Cyborg Handbook*. Ed. Chris Hables Gray et al. New York: Routledge,1995. 267-79
- Gray, Chris Hables, Steven Mentor, and Heidi J. Figueroa-Sarriera. "Cyborgology: Constructing the Knowledge of Cybernetic Organisms." *The Cyborg Handbook*. Ed. Chris Hables Gray et al. New York: Routledge, 1995. 1-13.
- Grosz, Elizabeth. "Intolerable Ambiguity: Freaks as/at the Limit." Freakery: CulturalSpectacles of the Extraordinary Body. Ed. Rosemarie Garland Thomson. New York: NYU Press, 1996. 55-66.
- Haraway, Donna. "A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century." 1986. Simians, Cyborgs, and Women. New York: Routledge, 1991. 149-81.
- Irigaray, Luce. "The Sex Which Is Not One." This Sex Which Is Not One. Trans. Catherine Porter with Caroline Burke. Ithaca: Cornell UP, 1985. 23-33.
- ISHIGURO Kôichi. Guyver. Video. Takaya Pro, 1989. Subtitled VHS. 13 vols. Manga Entertainment, 1994-97.

- KOTANI Mari. "Evangelion as the Immaculate Virgin: A New Millenialist Perspective on the Daughters of Eve." Paper delivered at University of Montreal, March 27, 1999.
- Napier, Susan. Anime: from AKIRA to PRINCESS MONONOKE. New York: Palgrave, 2001.

 The Fantastic in Modern Japanese Literature: The Subversion of Modernity.

 London and New York: Routledge, 1996.
- Orbaugh, Sharalyn. "The Genealogy of the Cyborg in Japanese Popular Culture." Paper delivered at Ritsumeikan University, March 7, 2001.
- OSHII Mamoru. Kôkaku kidôtai. Bandai Visual/Kodansha/ Manga Entertainment, 1995. Ghost in the Shell. Subtitled VHS. Manga Entertainment, 1996.
- Ôтомо Katsuhiro, dir. Akira. Akira Production Committee, et al. 1988. Subtitled DVD. Pioneer, 2001.
- Shelley, Mary Wollstonecraft. Frankenstein, or The Modern Prometheus. 1818. Poole, Dorset: New Orchard Editions, 1986.
- SHIRÔ Masamune. Interview with UENO Toshiya. In Komikkaazu (Autumn edition). Tokyo: Bijutsu shuppan, 1995. n.p.
- Springer, Claudia. "The Pleasure of the Interface." Screen 32:3 (1991): 303-323.
- TAKAHASHI Akihiko and NISHIMORI Akira, dirs. *AD Police*. Video. Artmic, Bandai Entertainment. 1990. *A.D. Police Files*. Subtitled VHS. 3 tapes. Animeigo, 1995. TSUKAMOTO Shin'ya, dir. *Tetsuo, the Iron Man*. Video. Kaijyu Theatre, 1988.
- UENO Toshiya. Kurenai no metaaru sûtsu: anime to iu senjô (Metal Suits, The Red: Wars in Animation). Tokyo: Kinokuniya shoten, 1998. Subtitled VHS. Fox/Lorber, 1995.
- Williams, Sarah, with Marjan Lousberg and Mark McGuire. "'Perhaps Images at One with the World are already Lost Forever': Visions of Cyborg Anthropology in Post-Cultural Worlds." *The Cyborg Handbook*. Ed. Chris Hables Gray. New York and London: Routledge, 1995. 379-90.

ABSTRACT

This paper examines two aspects of subjectivity-sexuality and singularity-that are considered fundamental to a modernist notion of the person. These aspects of subjectivity are under siege as new technologies of reproduction challenge our understanding of sexed bodies and as, simultaneously, a postmodern world-view brings forward the multiplicity of sexual subject positions and embodied hybridity that modernist thinking sought to control or dismiss. In this time of conceptual crisis regarding subjectivity and embodiment, the popular culture media of many advanced countries have produced increasing numbers of narratives about cyborgs, those embodied amalgams of the organic and the machinic. I begin by explaining why the concepts "sexuality" and "singularity" are so important in this context, and why Japanese popular culture is a particularly fruitful ground for exploration of cyborg subjectivities. Then I discuss two recent anime narratives—Shinseiki Evangelion (1995-96, Neon Genesis Evangelion) and Kôkaku kidôtai (1995, Ghost in the Shell)—in terms of their depictions of specific aspects of sexuality and as the nexus of contemporary fears or desires regarding subjectivity that is being negotiated through those depictions. I conclude with observations about what these narratives reveal about new, postmodern conceptions of subjectivity.