

The Erotic Life of Machines

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What is it like to be a cyborg? What does it mean to be a virtual, 'posthuman' being? What does it look like? How does it feel?

I want to approach these questions by looking at a music video. Chris Cunningham's video for Björk's song 'All Is Full Of Love' was made in 1999. The song first appeared on Björk's 1997 album *Homogenic*; what we hear in the video is not the album version of the song, but a later remix by Mark Stent.¹

Questions of virtuality, and of posthumanity, are much in the air today. We live in a time of massive technological, as well as social and political, change. Much of this change has to do with globalization, that is to say, with an economy that networks itself ubiquitously across the planet, thanks to the instantaneous transnational communication of flows of information and money. Concomitant with this transformation is a devaluing of the material and the local. This is often expressed in terms of a switch from physical reality to virtual reality. To use the terms of Manuel Castells, we are moving in the direction of a culture founded on a 'space of flows' that replaces the old 'space of places', and a 'timeless time' that replaces the time of history and memory, as well as the time of daily routine under industrial capitalism.² In line with these transformations, the dominant narratives of the new technological culture are cyberfictions of disembodiment. We ourselves are said to be made out of 'information', rather than bodies and physicality, or even atoms and forces. And this information is generally seen as being a pattern that can be incarnated indifferently in any number of material substrates: carbon, silicon, whatever. The mind, supposedly, is software that can be run on many different kinds of hardware. Some computer scientists (for instance, Hans Moravec and Ray Kurzweil³) even wax rhapsodical about the prospect of abandoning our archaic, fallible organic bodies, and downloading our minds into computers or robots, sometime in the foreseeable future.

In line with this, imaginative cyberfictions – science fiction novels and films – have often expressed an extreme ambivalence regarding the body. That is how William Gibson presents the problematic of virtual reality in *Neuromancer*, the canonical text of cyberpunk science fiction. At the very start of the novel, Gibson describes how his protagonist Case 'lived for the bodiless exultation of cyberspace'. Case had 'a certain relaxed contempt for the flesh. The body was meat'. When his nervous system

was hacked, so that he couldn't jack in to cyberspace any more, 'it was the Fall'. Case 'fell into the prison of his own flesh'.

A similar ambivalence can be found in the Wachowski Brothers' immensely popular 1999 film *The Matrix*.⁵ In this movie, all of physical reality as we know it turns out to be a mere virtual simulation, run by evil machines in order to confuse and exploit us. The film's fantasy of redemption involves rejecting the constraints of physicality, thus allowing the hero to negotiate the world with all the fluidity and power that video-game special effects are able to provide. Neo (Keanu Reeves) can manipulate a spoon, making it float in the air or do whatever else he wants, precisely because he knows that 'there is no spoon'. The film thus tries to have it both ways: it denounces virtual reality as a prison, but offers salvation in the form of an even greater immersion in virtuality.

Many critical thinkers have responded with fear and alarm to the apparent virtualization of human existence. Theorists as different as Arthur Kroker, Albert Borgmann, and Hubert L. Dreyfus have warned us, in apocalyptic terms, about the dangers of the virtual. I am inclined to think, however, that all such warnings are futile: they have already come too late. For as Katherine Hayles argues in *How We Became Posthuman*, a transformation along these lines has already happened. There is no going back. We can no longer think of ourselves in terms of the old-fashioned, centred liberal humanist subject. We are already posthuman. What remains open to contestation, according to Hayles, is *what sort of* posthuman we are turning into. She expresses the hope that we can reject fantasies of disembodiment and mental omnipotence, and instead find a more embodied form of posthuman existence.

It is in this spirit that I am interested in Björk and Cunningham's 'All Is Full of Love' video. I will argue that the video provides a counter-fiction to these more mainstream narratives of virtual disembodiment. Björk and Cunningham do not critique virtualization, so much as they open up its potentials. They (re-)find or rediscover the body at the very heart of virtual reality and cyborg-being.

The video is a miniature science fiction narrative. It's about robots. But Cunningham poses the question of virtuality largely in formal and perceptual terms. Indeed, he disclaims any deep thematic content to his videos: 'There's no intelligence behind them', he says in an interview. 'I'm not trying to make a social statement or let people know what I think about things. The videos that I do are pure manipulation of sound and picture, and most decisions are made on a reflex action'. Indeed, Cunningham edits his videos more for effects of time and rhythm than he does for narrative or meaning. 'All Is Full of Love' is best understood in terms of this reflex action, this synaesthetic manipulation of sound and picture.

Chris Cunningham has a synaesthetic sensibility. He is unusually attentive to the interplay of images and sounds. In his work, we never get the impression (so common in mainstream music videos) that the image track is just an illustration of the music on the sound track. Nor do we get the opposite impression (familiar from Hollywood films) that the sound track's sole purpose is to ground and validate the action on the image track. But Cunningham's strategy is also not the classically modernist one —

such as we get in Godard's films, most notably – of a radical disjunction between sound and image. There is no alienation-effect in Cunningham's videos. Rather, we get an ongoing, dynamic give and take between the senses. Sounds and images continually relay one another, respond to one another, and metamorphose into each other.

Marshall McLuhan famously argues that each change in the media we use corresponds to a change in the ratio of our senses. Cunningham's videos articulate a very different logic of sensation than those that dominated most of the twentieth century. They exemplify and explore a new regime of perception and of affect, one that is just starting to take shape in this new world of global capitalism, genetic manipulation, virtual reality, and electronic, digital media. I mean this not only in terms of the obvious relevance of what the video is about, but much more importantly, in terms of Cunningham's manipulation of the digital medium.

Another way to put this is to say that, whereas Godard radicalized the form of cinema, Cunningham is radicalizing that of video. Michel Chion, the leading theorist of film sound, says that the biggest difference between film and television is that the former is anchored by images, and the latter is anchored by sound. But in music videos, he suggests, 'the music video's image is fully liberated from the linearity normally imposed by sound'; and the relation of sound and image tracks 'is often limited to points of synchronization[...] the rest of the time each goes its separate way'. Cunningham pushes these formal tendencies as far as he can: partly by elaborate sound/image counterpoint, and partly by making these 'points of synchronization' central foci, around which all the other elements of both sound and image tracks circulate.

It's cold, ice cold, and all the more seductive for that. Björk has always been the palest of the Ice People. But here she is whiter than ever. For in this four-minute video, she is an android. She is being put together on an assembly line, even as we watch. In place of skin, a smooth white fibreglass shell fits over her frame. This shell is composed of many separate plates. Some of them haven't been attached yet. In Björk's neck, in her arms, and on the side of her head, we still see the underlying circuitry. There are plastic tubes, and wires, and knots of metal and black vinyl.

The video is mostly a study in different shades of white. Everything is streamlined, minimal, sleek, and elegant. Everything is clean, almost sterile. This highly stylized look recalls the bastardized modernist design of certain science fiction films. I think particularly of Stanley Kubrick and George Lucas. In fact, before he started making music videos, Cunningham worked for a year and a half on set design for Kubrick's long-planned but never-realized science fiction film AI (the film has now been made, alas, after Kubrick's death, by Steven Spielberg). As for Lucas, Cunningham says in an interview: 'Star Wars' is such a fucking fundamental influence in my work. It's all white costumes against black walls – everything's very classy'. ¹⁰ It is typical of Cunningham's sensibility that he praises Lucas for the 'classy' abstractions of his visual design, while deliberately ignoring his cheesy, self-consciously retro, feel-good narratives and characters.

What's most notable about the visual design of 'All Is Full Of Love' is what it excludes. In following cues from Kubrick and Lucas, and reverting to cool shades of white, Cunningham goes against nearly everything else that has characterized science fiction film and video for the last twenty years. In particular, he eschews the dominant visual style of recent science fiction films: the dystopian postmodern clutter pioneered by Ridley Scott in Blade Runner. 11 Scott transposes the look (oblique lighting, shadows, chiaroscuro, off-kilter camera angles) and feel (urban paranoia, exoticism, the femme fatale) of film noir into futuristic terms. A world in which the real has been entirely penetrated by technologies of simulation is figured by Scott in the form of a dark, grimy, rainy, overcrowded night-time cityscape. The darkness implies negativity, as a backdrop against which the excessively perfect forms of simulation (the icy blonde beauty of the replicants, or the alluring smiles of the women's faces on the enormous video billboards that loom over the city) are projected. The result is a doubly distanced nostalgia for a lost real. Scott's invocation of film noir stirs up feelings of alienation and vacancy. And these feelings are doubled by our oppressive awareness that this invocation is itself not authentic, but only a simulation.

Scott's approach has become the standard way to figure simulation and virtual reality in science fiction films, up to and including such recent works as *The Matrix*. (Even though *The Matrix* is also evidently influenced by the look and feel of American and especially Hong Kong action films, a *noir* sensibility still shines through in numerous formal details, like the set design of its grim non-virtual world, as well as in its overall paranoid sensibility.)

But Cunningham moves in a totally different direction. He works with gentle modulations of light, degrees of whiteness and luminosity. I can best describe this in terms of a distinction made by Gilles Deleuze. Discussing silent film of the 1920s, Deleuze distinguishes between French impressionist cinema lighting – in which darkness is simply the absence of light, or light at degree zero – and German expressionist cinema lighting, in which darkness is a contrasting, negative principle, always engaged in a dialectical battle against light. The German expressionist tradition is more familiar to us today, in large part because the same use of lighting, with the same metaphysical connotations, is carried over into the *film noir* of the 1940s and 1950s. Scott's accomplishment in *Blade Runner* is to adapt the lighting of expressionism and *film noir* for colour film; he and all his imitators in science fiction filmmaking have thereby extended a legacy that goes back at least as far as Lang's *Metropolis*: a radically dualistic, even Manichean, vision of the world, that gains added power from being projected into an imagined future.

Cunningham, however, moves in an entirely different direction. He is trying to make a color version, not of expressionism and *noir*, but of something entirely different and less well known. By impressionism, Deleuze is mostly referring to the French 'lyrical realism' of the 1920s and 1930s: the films of such directors as Jean Epstein, Marcel L'Herbier, Jean Grémillon, and (the best known today) the early Jean Renoir. While Cunningham is evidently more Kubrickian than Renoiresque, he is far more lyrical, and less obsessed with symmetry and rigidity, than Kubrick was. In any case, his videos espouse what can best be called a pluralistic monism, in sharp contrast to the radical dualism of the expressionist tradition.

All this is played out in formal terms, especially in the nature of the lighting. In 'All Is Full Of Love', there is no duality between white and black, and therefore none between real and virtual. There are few colours to be seen. Nearly everything is a shade of white. The video's lighting ranges from a harsh white, to a muted bluewhite glow, to a few white lines gleaming in the darkness. And also there are no fast camera movements, and no shock cuts or jump cuts. It's as if the world had been bleached and rarefied, and chilled to nearly absolute zero. And in the midst of this, we have a persistent focus upon Björk's android body, as well as with her face and her voice.

Björk's face is blank and impassive, a perfect mask. Her eyes, nose, and mouth are delicately modelled. Otherwise, the surface of her face is entirely smooth. Björk's eyes flutter, and her mouth moves slowly and precisely, as she sings of endless love: 'Twist your head around, / It's all around you. / All is full of love, / All around you'. Björk speaks English almost without an accent. But her pronunciation is oddly toneless. She sings the way I imagine an alien would, or a mutant. Her voice is ethereal, almost disembodied. It seems to float in mid-air, as if it had come from a vast distance.

I want to dwell for a moment on Björk's face and voice, because they are the only things that distinguish her. They are the sole features that allow the machine to be Björk, rather than anybody-at-all and nobody-in-particular. Everything else about her is wholly anonymous, and tends to dissolve back into the blank walls behind her. The Björk android's eyes, nose, and mouth are exquisitely modelled. They are slits in the mask, holes in what is otherwise an absolutely smooth expanse of whiteness.

This Björk-mask might be understood in contrast to what Deleuze and Guattari call *faciality*: 'The inhuman in human beings: that is what the face is from the start. It is by nature a close-up, with its inanimate white surfaces, its shining black holes, its emptiness and boredom'. Deleuze and Guattari are referring here, of course, to the close-up in classic film: the way a face fills the screen, establishing an emotional reference point, and creating a powerful bond of identification for the audience. This close-up corresponds to the fixed form of bourgeois or Cartesian subjectivity, at the very heart of modern Oedipal narrative. Faciality is not in itself subjective, Deleuze and Guattari say, because it is what actually *produces* subjectivity. As such, faciality is the abstract, dominant standard that brands us with identity, and transforms us into a certain kind of willing, obedient subjects. And one more thing: Deleuze and Guattari emphasize the image of black holes on a white surface, because this dominating face is by definition white. They find a primordial horror in this white face, this mask that historically defines the power, authority, and privilege of white people.

It is not by accident that I bring up questions of race here. The history of popular music in the last fifty years, predominantly in the United States, but also in Europe and throughout the world, is a history of interchanges between black people and white people (primarily; of course, other groups have also played their parts). Or, to put it less idealistically, this history has been one of repeated appropriations by whites of innovations by people of colour. It's a recurrent event, from Elvis' relation

to rhythm and blues, all the way to how, today, white American suburban teenagers have adopted black urban hiphop as their rebellious music of choice.

The recent history of technology is fraught with racial issues as well. There has been a lot of talk in America recently about the 'digital divide'. White people – and to some extent Asians as well – have had a disproportionate share of access to the World Wide Web, compared to blacks, Latinos, and other groups. But I think it is less a question of access than it is one of invisibility: an issue that has been raised in recent years in the work in 'whiteness studies' by David Roediger and others. ¹⁴ We are often told, for instance, that the World Wide Web transcends colour, and that in virtual reality it doesn't matter what race you are. But what this really turns out to mean, in practice, is that everyone on the Web is presumed to be white. Whiteness is the unmarked, or default, term of racial identification in America and Europe today; so when race is not explicitly mentioned, whiteness is there by unconscious assumption. It remains to be seen whether the increasingly massive presence of Asia on the Web will change this dynamic.

But in a Euro-American context, at least, it is extremely important that, in 'All Is Full Of Love', Björk is insistently marked as being white. (This is something that Björk has also explored in some of her other work, such as her musical collaborations with Tricky.) The invisible, unmarked, taken-for-granted term loses its dominance, when it is made visible and pointed out as such. Björk is so pale in this video, and her features are so tenuous, that they seem to capture whiteness at the very point of its emergence. Which is also to say, of course, at the point of its vanishing. Indeed, despite their prominence, these white features are scarcely there. They give the Björk android just a bare minimum of presence. But this bare minimum, this tiny sliver of whiteness, is precisely the point. Björk deploys her whiteness as something that is rare and singular, and even perverse. Whiteness is an alien mutation. Which means that it is no longer the norm. The same thing can be stated in the terms of Deleuze and Guattari's faciality: if the face of domination emerges out of blankness and negativity, then in the Björk android the face is being deprivileged. Björk's features are so barely there, that faciality finds itself on the verge of returning back to the nothingness whence it came.

Something similar happens with Björk's voice. Shimmering washes of sound accompany the song's vocals. Densely layered strings play a thick, dissonant drone. Ghostly harp arpeggios rise out of the murk. The original, album version of 'All Is Full of Love' has no percussion. The video remix adds a slow, synthesized beat. This steady rhythm grounds the song somewhat. But Björk pays it no mind. Her voice drifts away from any fixed pulse. She phrases the notes unevenly, now stretching them out, and now shortening them. She hovers around the beat, without ever landing precisely on it. In Björk's singing, time becomes elastic. It seems to have lost its forward thrust. It no longer moves at a fixed rate. It dilates and contracts irregularly, following the contours of the voice.

In Western culture, as the deconstructionists have taught us, the voice is generally taken to be a sign of interiority, authority, and authenticity. It is supposed to come from deep within, or from on high. Think of the voice of God, or the authority we

unreflectively grant to voice-overs in film; as well as the usual cinematic emphasis on the speaker or singer. But Björk undoes this dominance, thanks to the flexible, floating, unanchored quality of her singing. Purpose and linearity are undone. There's no more hierarchy of higher and lower, inner and outer, soul and body, melody and accompaniment. There are only modulations of sound and image and feeling.

It is a double movement, a double seduction. On the one hand, Björk's voice is dehumanized. It sheds the richness of texture and timbre that individuates a singing voice. Instead, it tends toward the anonymity and neutrality of digital, synthesized sound. It becomes less analogue, less vital, and less embodied. The living person moves closer to being a machine. But on the other hand, and at the same time, the nature of the machine is also transformed. At the heart of this digital blankness, a new sort of life emerges. Precisely because Björk's voice has lost its humanistic depth, it is now able to float free. Spare and without qualities, it is open to the minutest fluctuations of rhythm and tone. The voice wavers and hovers, on the very edge of perception. In this way, it weaves itself a new, tenuous body. At the same time that Björk herself is recast as a digitally programmed android, the digital machine itself becomes more analogue, and more nearly alive.

This process is evident throughout 'All Is Full Of Love'. At the start of the video, the camera pans upward, through cables and wires, to where the Björk android is splayed out upon a long platform; at the end, it slowly pans down again, revealing the operating room to be a sort of machinic set. Behind Björk, the walls are an antiseptic white. Other machines are busy working on her. Their flexible arms poke and pry into her. They attach a panel here, and tighten a bolt there. A cylinder turns, emitting a shower of sparks. A light flashes under an open hinge. Water gushes backwards, seeping out of the drain and leaping into the spout. Nothing is inert. Everything has a cool, sensuous presence. Every mechanical object in the video turns on its axis, or glistens, or thrusts and withdraws. Every material substance flows, or splashes, or sputters, or spurts. This all takes place in counterpoint to the flow of the music. We see all these processes in extreme close-up. The video thus reveals the erotic life of machines.

Usually, we think of machines as being uniform in their motions. They are supposed to be more rigid than living beings, less open to change. But 'All Is Full of Love' systematically reverses this mythology. It suggests that robots and cyborgs might well be more sensitive than we are. They might have more exquisite perceptions than we do. They might respond, more delicately, to subtler gradations of change. It's just a matter of giving them the proper capacities, and then programming them correctly. This is the utopian prospect of the cyborg, the boundary-crossing fusion of human and machine famously described by Donna Haraway; she says that cyborgs cut across all three of the 'leaky distinctions' whose permeability is a feature of postmodern existence: 1) between human and animal; 2) between human/animal (organism) and machine; 3) between physical and non-physical. In fact, Björk has explored some of these boundary crossings in other videos: particularly the metamorphoses and boundary crossings between human and animal. 'All Is Full of Love', of course, concentrates on the second and the third of these leaky distinctions. All in all, it

marks Björk's most radical crossing-over, justifying Haraway's exuberant claim that 'cyborgs are ether, quintessence'. 16

Haraway's sense of leaky distinctions applies equally to the machines portrayed in 'All Is Full of Love', and to the machine that the video itself is. As McLuhan says, machines are first of all extensions of ourselves. We project them outwards from our bodies, and then they take on a life of their own. All machines, and all media, are our projections in this sense: not just in fantasy, but literally and physically. Just as 'the wheel is an extension of the foot', and 'the book is an extension of the eye', so too, McLuhan says, 'electronic circuitry [is] an extension of the central nervous system'. Film spectatorship has traditionally been understood in terms of fantasy: as a sort of imaginary identification. But even if the movies work this way (or used to work this way), the new digitally processed videos do not. Rather than using traditional cinematic concepts to understand music videos like Cunningham's, we would do better to see them in McLuhanesque, non-psychological terms: as sensorial relays, as modulators and amplifiers of emotion, or even as prosthetic extensions of our brains.

The spectator of 'All Is Full Of Love' is very different from the normative film spectator, as understood by classical film theory. The usual polarities of cinematic vision (between subject and object, between active looking and passive being-lookedat, or between identification with and objectification of the image) no longer function in the digital realm. (Of course, this is not to deny that, for instance, many music videos still objectify women's bodies in traditional ways. But the forms have changed, even when the content has not.) In the more intimate medium of digital video, the opposed poles of cinematic perception collapse into a single self-affecting, selfreflexive circuit. The viewer is included in the autoerotic feedback loop by means of which Björk caresses herself. And also, the video spectator is more directly a listener - rather than just a viewer - than is the case with classical film spectatorship. For the music envelops and caresses the video spectator, all the more so in that its source cannot be located. Sound suffuses the entire space of 'All Is Full Of Love', in the same way that fluorescent lighting does. The digital medium is thus fully audiovisual. It is even tactile, in the way it affects the spectator. At the same time, it keeps a certain reserve. It remains enigmatically distant and cool.

This seeming paradox, the conjunction of distance with a high degree of tactile involvement, is central to McLuhan's notion of 'cool', as opposed to 'hot', media. 18 The frenzied feedback loops of audiovisual perception go together with a special kind of detachment: that cold, ironic vision that is both Björk's and Cunningham's. Such a seductive, sensuous impassivity, as I argue elsewhere, is not unrelated to the aesthetic stance of *disinterest* in Kant's 'Analytic of the Beautiful', in the first part of *The Critique of Judgment*. 19 It's part of what I see as a new, postmodern aestheticism: a disaffected, ironically erotic pursuit of beauty, in striking contrast to modernism's heroic quest for the sublime. As Cunningham wonderfully says in an interview: 'My aim is to make images that are style-less but beautiful'. 20

If all the machines in the video have an erotic life, why should Björk herself be any different? Soon, we see that there are two Björk androids, instead of one. They face

each other, singing by turns in shot and reverse-shot. One of them holds out her arms in an imploring gesture. The other lowers her head bashfully. A moment later, the Björk androids are together in the frame, making love. We view them from a distance, in silhouette. They kiss, and slowly caress each other's thighs and legs and buttocks. All the while, the other machines keep on making adjustments to their bodies. Sexuality and reproduction are entirely separate activities, though they both go on simultaneously. Are the Björk androids so enraptured with each other, that they are oblivious to their own construction? Or does the process somehow enhance their bliss? In either case, their motions are so slow and formal, and yet entirely fluid (in contrast to our usual associations with the 'mechanical') — as to suggest a superhuman state of grace.

The tenderness of this scene deserves extended comment. Cunningham says in an interview that the video is 'a combination of several fetishes: industrial robotics, female anatomy and fluorescent light in that order [...] I got to play around with the two things I was into as a teenager: robots and porn'. Nonetheless, despite this deliberate cynicism, the video does not come across as your typical adolescent male sex-and-power fantasy. Maybe it is thanks to Björk's guiding influence. Or maybe it's the happy result of Cunningham's fluorescent light fetish. But in any case, 'All Is Full Of Love' has quite a different feel than do the obligatory pseudo-lesbian scenes in porno films aimed at an audience of heterosexual men. There are none of those close-ups of legs and thighs and jiggling breasts, none of those rapid cuts, and none of those fake orgasmic moans. More, the video does not come to any sort of (sexual or narrative) climax. Instead, it maintains a sustained pitch of calmly distanced rapture.

Everything about the video furthers this impression of ecstatic quietude. The video conveys, or manufactures, or transmits, a certain affective tone (what Deleuze and Guattari call a non-climaxing *plateau*). And I think that this tone is more important than any psychological questions we might raise. Indeed, one can plausibly read the video both as lesbian (affirming a non-phallic female sexuality), and as auto-erotic and auto-affecting (displaying a narcissism that is also present elsewhere in Björk's persona as a pop icon). But all such readings are strangely unsatisfying. Human psychology somehow seems beside the point, when the video points so powerfully to a posthuman reinvention of both mind and body.

Psychoanalysis is most often taken as a deconstruction of the supposedly unitary bourgeois subject, and as a liberation of the forces repressed within it. I want to suggest that this is far too limited a view; the decentred psychoanalytic subject is not something that comes after the Cartesian, bourgeois subject, but something that is strictly correlative with it. In contrast, a new, posthuman subject will have to point away from Freudian and Lacanian conceptions of decentred subjects, as much as from the unitary Cartesian one. The whole frame of reference has to be different. We have to understand the body/mind in other terms, according to the play of other structurations and other forces. The current computer-based analogies to the mind, common among cognitive scientists, are as desperately simplistic as the old Cartesianism was; but it needs to be answered and complexified by something that responds to the new digital models as intimately as psychoanalysis responded to the

Cartesian notion of a unified ego. I don't really know what form this new theorization will take; I find the promising beginnings to such an approach in the Bergson- and Deleuze-influenced work of such recent theorists as Keith Ansell-Pearson, Barbara Kennedy, and especially Brian Massumi (who has deeply influenced the current essay). ²² But in any case, 'All Is Full of Love' is one of those works that doesn't illustrate theory, but precedes it and provokes it. In this video, Björk and Cunningham are inventing and developing new forms of sensibility, ones that are potentially appropriate to our cyborg future. The theorist's job – as in the present essay – is to follow up on their hints, trying to explain, formulate, and systematize these singular inventions.

Perhaps the digital is not the opposite of the analogue. It is rather the analogue at degree zero. The world of continuities and colours that we incipient posthumans know has not disappeared. In 'All Is Full Of Love' it has just been chilled, and cut into tiny separate pieces. These pieces have then been recombined, according to strange new rules of organization. They have congealed into new emotions, and new forms of desire. In its own way, the machine is also a sort of flesh. It moves; and as it moves, it feels. As Björk embraces Björk, the digital celebrates its nuptials with the organic.

And that is why I don't buy the fantasies and fears of those who say that virtual reality will liberate us — or alienate us — from our bodies. I think that current technological changes can be correlated with changes in the ways we sense and feel our increasingly media-saturated world. And in the longer run, these changes will increasingly affect the actual matter of our bodies, as well as the ways we think about our bodies. Our bodies may well become more mechanized, and at the same time, more ethereal and more diffuse. Yet for that very reason, we need not to think about the changes reactively, in terms of what we will have supposedly lost in comparison with our present suppositions. For even in that cool virtual realm, even when we have become posthuman cyborgs, we will still have some sort of bodies. We will still have tenderness and yearning, and still need to make love.

Notes

¹ Chris Cunningham and Björk, *All Is Full of Love* (Elektra DVD, 1999).

The Nature of Information at the Turn of the Millennium (Chicago: University of Chicago Press, 2000); and Hubert L. Dreyfus, On the Internet (London and New York: Routledge, 2001).

² See Manuel Castells, The Rise of the Network Society: Volume 1 of The Information Age: Economy, Society, and Culture (Oxford: Blackwell, 2000 [Second Edition]).
³ See Ray Kurzweil, The Age of Spiritual Machines (Harmondsworth: Penguin, 2000); and Hans Moravec, Robot: Mere Machine to Transcendent Mind (Oxford: Oxford University Press, 2000).

⁴ William Gibson, *Neuromancer* (New York: Ace, 1984), p.6.

⁵ Wachowski Brothers, *The Matrix* (Warner Brothers, 1999).

⁶ See Arthur Kroker, Spasm: Virtual Reality, Android Music and Electric Flesh (New York: St. Martin's Press, 1993); Albert Borgmann, Holding on to Reality:

⁷ See N. Katherine Hayles, *How We Became Posthuman: Virtual Bodies in Cybernetics, Literature, and Informatics* (Chicago: University of Chicago Press, 1999).

⁸ Cunningham, quoted in Kevin Holly and Matt Fretwell, *Director File: Chris Cunningham* (http://www.director-file.com/cunningham/, accessed 7/13/2001).

⁹ Michel Chion, *Audio-Vision*, trans. Claudia Gorbman (New York: Columbia University Press, 1994), p.167.

¹⁰ Peter Relic, 'Chris Cunningham' (Interview), RES 1:4 (fall 1998).

- ¹¹ Ridley Scott, *Blade Runner* (The Ladd Company, 1982)
- ¹² Gilles Deleuze, *Cinema 1: The Movement-Image*, trans. Hugh Tomlinson and Barbara Habberjam (Minneapolis: University of Minnesota Press, 1986), pp.40–55.
- ¹³ Gilles Deleuze and Felix Guattari, A Thousand Plateaus: Capitalism and Schizophrenia, vol. 2, trans. Brian Massumi (Minneapolis: University of Minnesota Press, 1987), p.171
- ¹⁴ See David Roediger, Towards the Abolition of Whiteness: Essays on Race, Politics, and Working Class History (London: Verso, 1994).
- ¹⁵ Donna J. Haraway, 'A Manifesto for Cyborgs', in *Simians, Cyborgs, and Women: The Reinvention of Nature* (London and New York: Routledge, 1991), pp.149–181, here pp.151–154.
- ¹⁶ Haraway, 'Manifesto', p.153.
- ¹⁷ Marshall McLuhan and Quentin Fiore, *The Medium is the Massage* (New York: Bantam, 1967), pp.26–40.

- ¹⁸ Marshall McLuhan, *Understanding Media: The Extensions of Man* (Cambridge, MA: MIT Press, 1994), pp.22–32.
- ¹⁹ Immanuel Kant, *The Critique of Judgement*, trans. Werner S. Pluhar (Indianapolis, IN: Hackett, 1987), pp.43–95.
- ²⁰ Sarah Kent, 'The Beauty of Stylelessness', Time Out UK (September 2000).
- ²¹ Anonymous, 'Caution: The film you are about to watch deals with adult themes and contains startling originality from the outset', *Dazed and Confused* 55 (June 1999).
- ²² See Keith Ansell-Pearson, Germinal Life: The Difference and Repetition of Deleuze (London and New York: Routledge, 1999); Barbara Kennedy, Deleuze and Cinema (New York: Columbia University Press, 2001); and Brian Massumi, Parables for the Virtual: Movement, Affect Sensation (Durham, NC: Duke University Press, 2002).

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