

## THE TECHNOPHILIC BODY

### ON TECHNICITY IN WILLIAM GIBSON'S CYBORG CULTURE

*No objects, spaces, or bodies are sacred in themselves; any component can be interfaced with any other if the proper standard, the proper code, can be constructed for processing signals in a common language.*

(Donna Haraway)

A number of recent science fiction works by William Gibson explore an alternative post-industrial hybrid culture predicated on the interface of bio-technologically enhanced human bodies, interactive information technology, and omniscient corporate power.<sup>1</sup> Gibson's novels and short stories are influential examples of 'cyberpunk' literature, a genre of science fiction literature that deals with first generation cyborg<sup>2</sup> or machine/human symbiotic activity in an immanent post-industrial information-governed universe.

Gibson's works are highly suggestive dystopic visions of a not-too-distant future when the human body has suffered a radical mutation in its ecological structure. As such, his works prefigure a culture where the organic architecture sustaining the human sensorium has undergone various degrees of collective bio-technological prosthetic transformations. From the point of view of the cultural complexity of their technological and ecological vision, the best of Gibson's works are therefore positioned at the imaginative threshold of potential post-industrial techno-dystopian cultures. In the following pages, I trace the salient characteristics of these cultures as presented in Gibson's short stories and novels, in particular the collection of short stories entitled *Burning Chrome* and his trilogy, *Neuromancer*, *Count Zero*, and *Mona Lisa Overdrive*. Amongst many possible observations one can make in connection with these pieces, I will concentrate on three interrelated items. The first concerns cyborg transformations that reconstitute the organic and sensorial architecture of the human body, the second pertains to a novel information space that Gibson describes in his novels and short stories, and the third relates to the social regeneration of ethnic identity under the influence of cyborg-governed processes of *technological* differentiation in marginal late-capitalist creolized technocultures.<sup>4</sup>

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*I wondered how they wrote off toothbud transplants from Dobermam as low technology. Immunosuppressives don't exactly grow on trees.*

(Johnny Mnemonic')

Gibson's novels and short stories depict the adventures of a volatile male-dominated underworld populated by small-scale independent entrepreneurs — fences and middlemen in 'corporate crossovers' tersely described by Gibson as 'point [men] in . . . skull wars' (NRH, 103), corporate mercenaries, console cowboys, and members of alternative 'tribal' groups. Gibson's main characters are human 'gomi'<sup>5</sup> whose economic activities are parasitic on omniscient military and multinational corporate or aristocratic formations. Individual and collective activities are confined, for the most part, to urban strips such as the Sprawl that link previously autonomous cities and metropolitan centres. The common fixtures of social and political power in this world are the multinational *zaibatsus* (NRH, 103, 107), Maas Biolabs GmbH and Hosaka, who are devoted, amongst other things, to genetic engineering and corporate espionage; Tessier-Ashpool, a decadent corporate high orbit aristocratic family; and the Yakuza, the multinational underworld organization. Two principal zones of illicit economic activity fuse this multinational/local laminate. One consists of a conglomerate of traffic in information systems hardware and software. The other is centred on configurations of data organized in matrix form in 'cyberspace', the special collective 'consensual hallucination' (N, 51) produced by interacting data systems. A wide variety of prosthetically and genetically enhanced individuals populate and negotiate these zones.

Information is a new form of blood in this post-industrial cyborg world. It oxygenates' the economic ecology that sustains multinational corporations (NRH, 107), individuals, and novel cyborg organisms. These part human, part cybernetic systems are sites of unusual manifestations of technological exchange and technological advantage. They are also sites of emergent cyborg cultural identities, identities that constantly appear and disappear in the wake of continuously upgraded information technology and bio-technology. These cyborg organisms can be considered *technophilic* from a number of points of view.

A technophilic body is the product of various degrees of aesthetic and functional transformations directed to the human body's surface and functional organic structure. Such transformations can be divided into two distinct categories. The first category is composed of techniques and technologies that are used for various *aesthetic* manipulations of the body's surface. These include cosmetically redesigned faces, muscle grafts, and animal and/or human transplants that effectively blur visual cues for gender and human/non-human differentiation. The second category is directed to fundamental *functional* alterations to the human body's organic architecture. It includes biochip implants, prosthetic additions mediated by myoelectric coupling, and redesigned upgraded senses.

Cyborg transformations are clearly of more than topical interest in distinguishing new and emerging socio-cultural forces. The continuous manipulation, for example, of the body's ectodermic surface and the constant exchange of organic and synthetic body parts can produce rewritings of the body's social and cultural form that are directly related to the reconstitution of social identities. These processes for 'technologizing' ethnic and individual

identities are fundamental to the composition of Gibson's version of a cyborg culture, as are questions about social power in relation to bodies whose architectures are subject to continual 'disassembly and reassembly'" and potential sites of (cyborg) resistance in a post-industrial society increasingly dominated by corporate formations and a global information economy. A brief examination of these shifting aesthetic and functional architectures is therefore in order.

Various 'tribal' groups, the Panther Moderns in *Neuromancer* or the Low Teks in 'Johnny Mnemonic', equate stylistic effects of elective cosmetic surgery and the bio-technological manipulation of the body's surface with technofetishistic bacchanalian celebrations of the body as trans-species heterotopic site.<sup>7</sup> This equation is geared to the creation of group identities spawned in the aesthetic dimensions of the cyborg continuum. A curt description of the Low Teks, given by Molly Millions in 'Johnny Mnemonic', typifies the social groups in question: 'Not us, boss. . . . "Low technique, low technology"' (JM, 14). Cosmetic surgery and bio-technology appear, in these cases, to create common signifying patterns that are used for the construction of social identities. Perhaps the best synopsis of this type of subculture is the following from *Neuromancer*.

Case met his first Modern two days after he'd screened the Hosaka's precis. The Moderns, he'd decided, were a contemporary version of the Big Scientists of his own late teens. There was a kind of ghostly teenage DNA at work in the Sprawl, something that carried the coded precepts of various short-lived subcults and replicated them at odd intervals. The Panther Moderns were a softhead variant on the Scientists. If the technology had been available, the Big Scientists would all have had sockets stuffed with microsofts. It was the style that mattered and the style was the same. The Moderns were mercenaries, practical jokers, nihilistic technofetishists. (N, 58-9)

Case goes on to give the following description of a 'soft-voiced' Panther Modern called Angelo.

His face was a simple graft grown on collagen and shark-cartilage polysaccharides, smooth and hideous. It was one of the nastiest pieces of elective surgery Case had ever seen. When Angelo smiled, revealing the razor-sharp canines of some large animal, Case was actually relieved. Toothbud transplants. He'd seen that before. (N, 59)

Subjects of aesthetic cyborg enhancements do not, however, elicit a great deal of observation and commentary when compared to those individuals that have absorbed the hardware of information systems and bio-technology in cool fits of individualized, customized technophilia. In contrast to the creation of group identities through stylistic rewritings of the human body's surface (that seem to function as cyborg versions of what Pierres Clastres has elsewhere identified as carnal textual inscriptions of the law of social equality in archaic societies),<sup>8</sup> technophiles strive to redesign the human body so that it can function as a technological site whose optimum performance is measured in terms of its

ability to sustain a competitive edge over other similar bodies. Social identity and social bonding are not directly dependent on the surface manipulation of the body in these cases. Two of Gibson's characters, Johnny Mnemonic and Molly Millions, are excellent examples of this functionally oriented type of sophisticated cyborg technophile.

Mnemonic sports a stereotypical version of a Sony Mao face. This type of aesthetic enhancement seems to indicate common kinship with the aforementioned 'tribal' groups. We note, however, that Mnemonic has opted for this process of stylistic normalization because of a provisional need to disguise his identity. The real logic of his cyborg identity lies elsewhere - in a series of more profound functional alterations. In the course of Gibson's story we learn that Mnemonic is, in fact, a piece of highly sophisticated hardware, functionally enhanced by a 'modified series of microsurgical contraautism prosthesis' (JM, 9) so that his brain can serve as a data storage unit for illicit information. The stored information can be accessed only by a client possessing the correct code. Mnemonic also has the ability to playback visual data.<sup>9</sup> His optical senses, are, in fact, part of a hardwired data storage system.

Mnemonic's ability to sustain a competitive edge in the world he moves through is predicated on the economic advantage provided by these data storage implants. His edge is therefore based on information - storage on the one hand, and, later in the story, access to residual traces of clients' data for blackmail purposes (N, 176). As he points out, in another context, 'We're an information economy. They teach you that in school. What they don't tell you is that it's impossible to move, to live, to operate at any level without leaving traces, bits, seemingly meaningless fragments of personal information. Fragments that can be retrieved, amplified' (JM, 16-17).

Millions, on the other hand, a principal character in 'Johnny Mnemonic', *Neuromancer*, and *Mona Lisa Overdrive*, is a 'razorgirl' (MLO, 60) with optically and electronically upgraded vision and prosthetically modified fingers that house a set of razor-sharp double-edged scalpel blades myoelectrically wired into her enhanced nervous system. Her cyborg sensorium can also be directly accessed with the proper interface unit (N, 56, 175, *passim*).

It is evident that Mnemonic and Millions are no longer independent biological organisms. They are customized functional products of a cyborg culture that serves as a genetic context for the implosion and mutation of biological organisms, bio-technology, and advanced information systems. This culture provides arenas for the cyborg reconstruction of human organisms according to different, cosmopolitan, synthetic architectures. Mnemonic and Millions, amongst others, emerge reconstituted simultaneously as information-processing units, enhanced nervous systems, and fluid electronic fields of social action.

When one is presented with a culture governed by cosmetic and functional alterations to the form and organic structure of the human body, it is not hard to imagine an emerging cyborg species that will evolve according to a different evolutionary logic. Genetic engineering, information technology, and powerful software programs ensure, for example, that death is no longer an entropic biological certainty for a small portion of the population of Gibson's novels and

short stories. In the course of these stories one learns that data storage is a new fountainhead for individual and corporate identity. Human memory is effectively dislocated from organic bodies gripped by a deteriorating natural ecosystem to be relocated and rewritten through a wide variety of hardware-based software personality constructs.

A cyborg culture ensures that technology and genetic engineering are the nodal points of human interaction. It is not surprising, therefore, to learn that relationships and identities are constantly negotiated through a sophisticated culture of technology that also functions as a rite of passage for the gradual transformation of the human organism into a cyborg entity. It is a rite of passage geared to the creation of powerful technologized collective transorganic cyborg data-based personality constructs. Given the range of this emerging culture - from the techno-enhancement of Mnemonic and Millions and the total hardware/software mutation of Lisa in the short story 'The winter market', to the pocket-size Artificial Intelligence called Colin in *Mona Lisa Overdrive* - it is not surprising that this emergent culture also provides provocative examples of cyborg strategies and technoscapes that are connected intimately to the social production of individual and group identities.

#### TECHNOLOGICAL EDGE

*Bobby's software and Jack's hard; Bobby punches console and Jack runs down all the little things that can give you an edge.*

(*'Burning chrome'*)

Cyborg technophiles define themselves, their activities, and their relations with others in tandem to the cutting edges of information and bio-technology. At the end of *Neuromancer*, for example, Millions leaves Case, a console cowboy, on the pretext that a life of luxury takes the edge 'off [her] game'. She goes on to state, 'It's the way I'm wired I guess' (N, 267). These comments, more than the product of flippant strategies in the arena of interpersonal relations, provide an insight into the function of technological edge in the construction of a technophile's identity. Edge is, however, not only a defining characteristic of cyborg identities; it also serves as a boundary between life and death. In *Neuromancer* Millions notes that easy living took the edge off the game that she and Mnemonic were engaged in, with the result that Mnemonic fell victim to a Yakusa assassin (N, 178).

Technological edge can be defined as the product of a successful conjunction of advanced technological hardware and contextually sophisticated techniques. This conjunction produces a technoscape that is also common to the functional architecture of the technophilic body. It is a space organized in relation to culturally valorized body functions - the structure and capacity of the human memory, the range and sensitivity of the senses, and relative questions of organically constrained speed and power.

Across the battlegrounds of Gibson's post-industrial landscape one can admire one's cyborg opponent, as Millions does in 'Johnny Mnemonic', because of the sophistication and uniqueness of (his) prosthetic and genetic

composition. When Mnemonic complains that he can't understand how he missed hitting the Yakuza assassin with the discharge from his archaic shotgun, Millions replies: "Cause he's fast, so fast." Millions's exuberant technophilia is expressed, in this example, in terms of technical virtuosity and operational speed, attributes that have been directly impregnated in the cyborg's sophisticated prosthetic and genetic architecture. Millions goes on to point out, 'His nervous system's jacked up. He's factory custom,' and continues, 'I'm gonna get that boy. Tonight. He's the best, number one, top dollar, state of the art' (JM, 8).

Edge is also at the core of another important facet of the technophile's cultural composition: common technological kinship. Again, one finds a good example of this characteristic in 'Johnny Mnemonic'. Faced with Millions's exuberant technophilia, Mnemonic curtly notes the assassin's probable cyborg origins: some vat in the black market medical wonderland of Chiba city. Millions is not perturbed by this information. In fact, she responds by revealing her literal technological kinship with this vat-grown cyborg wonder.

'Chiba. Yeah. See, Molly's been Chiba, too.' And she showed me her hands, fingers slightly spread. Her fingers were slender, tapered, very white against the polished burgundy nails. Ten blades snicked straight out from their recesses beneath her nails, each one a narrow, double-edged scalpel in pale blue steel. (JM, 8)

Millions's kinship is particularly interesting because it indexes a cyborg blueprint that is used to construct geotechnical patterns of kinship and ethnic identity. I will return to the tantalizing question of possible cyborg type ethnicities in the final section of this article. For the moment, note that it is possible to plot relative social patterns of aesthetic and functional cyborg uses of techniques and technologies within postulated post-industrial cultures, *and that these uses condense around questions of technological advantage, an advantage that can also form the basis of claims to technological kinship.*

The fundamental role of technological edge in sustaining a successful cyborg technophile's competitive edge is also illustrated in the case of strategic advantage achieved along a hardware continuum.<sup>10</sup> Mnemonic is again a paradigmatic example in this regard. He tells us, for instance, that he is 'a very technical boy', and we are privy to his particular brand of contextually sensitive technophilia in the following passage: 'I put the shotgun in an Adidas bag and padded it out with four pairs of tennis socks, not my style at all, but that was what I was aiming for: If they think you're crude, go technical; if they think you're technical, go crude. I'm a very technical boy. So I decided to get as crude as possible.' But technophiles are not confined to local high technology subcultures; they are sophisticated adepts along the continuum of hardware intersystems that comprise the material expressions of a systemic culture of technology. As Mnemonic points out, 'These days, though, you have to be pretty technical before you can even aspire to crudeness. I'd had to turn both these twelve-gauge shells from brass stock, on a lathe, and then load

them myself; I'd had to dig up an old microfiche with instructions for hand-loading cartridges; I'd had to build a lever-action press to set the primers - all very tricky. But I knew they'd work' (JM, 1).

These descriptions highlight transfers of technologies across various social and cultural zones that are of considerable importance. Transfers such as these set the stage for attempts at sustaining competitive edges in a more expansive culture of technology *where comparative juxtapositions between high and low technology subcultures create de facto positions of strategic technological advantage*. Technological edge, in the cases I have discussed, is produced by a clash of cultures when adepts and hardware from radically differing technological zones are brought into strategic contact. We have already seen primitive examples of attempts to create this type of technological edge in Mnemonic's adoption of a Sony Mao face, and in his reasons for constructing an archaic shotgun. Later in the story, Millions comments on Mnemonic's adoptive strategic technological lineage: 'Lo Tek, they'd think that shotgun trick of yours was effete' (JM, 14). It must be noted, however, that these positions are not necessarily constructed in favour of high technology. Edge is a strategic *geotechnological* concept.

The contextual relativity of technological edge is brilliantly illustrated in the final confrontation between Millions and the Yakuza assassin. In this scene, Millions has lured Mnemonic's assassin on to the 'Killing Floor', a Lo Tek cultural site. The Killing Floor is composed of a pastiche of cultural refuse in the form of an articulated floating platform suspended in the geodesic rafters high above Nighttown. One of its principal features is its acoustic dimension: 'It was miked and amplified, with pickups riding the four fat coil springs at the corners and contact mikes taped at random to rusting machine fragments' (JM, 19). The floor heaves 'like a crazy metal sea' as the protagonists meet, and 'booms and roars' in a 'vertigo of sound' (JM, 20) that seems, in Mnemonic's words, to herald 'a world ending' (JM, 19). The heaving platform and the sound that emanates from its articulated parts are premonitions of death predicated on what can only be described as *technological culture shock*.

Millions has previously experienced this Lo Tek site (JM, 16), she knows the sensorial and technological space she is moving through. The assassin does not. Furthermore, it is evident that Millions has adopted a Lo Tek aesthetic camouflage and used it to functional advantage. Her professed Chiba city kinship is momentarily eclipsed by a 'mad-dog dance' (JM, 20) designed to negotiate strategic sensorial advantage in the context of a geotechnological artefact constructed beyond the progressive technical horizons of the Chiba clinics. The sensorial disruption that erupts in the wake of clashes between opposing technological subcultures produces a series of highly amplified perturbations in the Yakuza's optical and acoustic apparatus. The result is fatal.

The culture shock has been induced by the production of a strategic geotechnological advantage within an overall technological continuum. Thus the edge that Millions dances along produces a sensorial fracture that leads to an aesthetic cleavage between the assassin's speed and technical virtuosity. His

carefully crafted sensorium, the product, one imagines, of a vat tank in some sophisticated Chiba clinic, is shattered. Mnemonic is witness to the assassin's end:

at the end, just before he made his final cast with the filament, I saw something in his face, an expression that didn't seem to belong there. It wasn't fear and it wasn't anger. I think it was disbelief, stunned incomprehension mingled with pure aesthetic revulsion at what he was seeing, hearing - at what was happening to him. . . . There was a gap in the Floor in front of him, and he went through it like a diver, with a strange deliberate grace, a defeated kamikaze on his way down to Nighttown. Partly, I think, he took the dive to buy himself a few seconds of the dignity of silence. She'd killed him with culture shock. (JM, 20-1)

Millions has, in effect, produced a culture trap that strategically repositions the assassin in an alien portion of the hardware continuum. She achieves this by creating a situation in which the sophisticated vat-grown cyborg is suddenly transformed into *a tourist* (JM, 18-19) in a potentially apocalyptic Lo Tek technoscape. In the course of the confrontation, the Yakuza's vat-cultivated and hardware-enhanced advantages are overwhelmed by an alien geotechnological sensorial logic, because this Lo Tek technoscape is governed by the principle of articulated acoustically coupled balance, not speed and technical virtuosity.

Strategic, negotiations conducted in alien geotechnological arenas can have profound sensorial effects for technophiles of the calibre of Millions and the Yakuza assassin. The confrontation between Millions and the Yakuza assassin is a good example of the type of sensorial disruption that can erupt in the midst of violent confrontation between differing technological subcultures. As this case demonstrates, cyborg identities are not only the direct products of particular subcultures that organize and govern cyborg architectures, they are also influenced by the composition of the sensorial environment those architectures operate in. It is important to note, therefore, that violent changes in a cyborg's sensorial ecology can shatter its cultural identity. A more extreme version of a cyborg sensorial ecology is the special 'consensual hallucination' that Gibson describes in considerable detail in his short stories and novels.

#### JACKING INTO CYBERSPACE

In cyberspace . . . there are no shadows. (*Mona Lisa Overdrive*)

Gibson's depictions of urban sprawl and decay are closely allied to other recent postmodern renditions of dystopic urban centres.<sup>11</sup> Notwithstanding this kinship, however, metropolitan centres find only a fragmentary optic in his depictions of a post-industrial cyborg world. Gibson seems to be more interested in presenting and exploring a parallel 'urban' reality called 'cyberspace'. This virtual reality is the product of a techno-economic mutation in collective human memory, a historical product of the conjunction of interactive military systems and information technology.<sup>12</sup> Cyberspace is

without doubt a model late capitalist information universe, a capitalist macrocosm and cybernetic ecosystem globally articulated as a virtual information construct. This cybereconomic order can conveniently be contrasted with Gibson's chaotic urban environment, a visionary orientalist experiment in genetic and technological bricolage emanating from Chiba, Japan, a centrifuge of experimental state-of-the-art high technology. The two technospaces seem to be fundamental to the composition of an advanced hybrid cyborg culture and are worth pursuing in greater detail.

A succinct description of cyberspace's hierarchic military/industrial organization is given in Gibson's short story 'Burning chrome' where it is presented as a 'crowded matrix . . . where the only stars are dense concentrations of information, and high above it all burn corporate galaxies and the cold spiral arms of military systems' (BC, 170). Contrast the ordered hierarchy of this so-called 'space that [isn't] space' (CZ, 38) or 'non-space' (BC, 170) with the following kaleidoscopic *melange* of high technology and urban disintegration. The contrast will provide an insight into the epistemological composition of Gibson's cyborg culture.

Night City was like a deranged experiment in social Darwinism, designed by a bored researcher who kept one thumb permanently on the fast-forward button. Stop hustling and you sank without a trace, but move a little too swiftly and you'd break the fragile surface tension of the black market; either way, you were gone, with nothing left of you but some vague memory in the mind . . . though heart or lungs or kidneys might survive in the service of some stranger with New Yen for the clinic tanks. (N, 7)

A few pages later we come across the following observation: '[Case] also saw a certain sense in the notion that burgeoning technologies require outlaw zones, that Night City wasn't there for its inhabitants, but as a deliberate unsupervised playground for technology itself (N, 11).

Gibson's Cartesian distinction between a cerebral cyberpsychic universe and a world of cyborged flesh has important ramifications for discussions that are too narrowly focused on the technologification of the human body. We have seen that a cyborg culture constantly reconfigures systems of belief and practices that operate around and through the technophilic body. Cyberspace, in contrast, absorbs the object of technologification so that cyborg systems are dematerialized and 'cybernetically' reconstituted within the context of this cyberpsychic space.

The data world of cyberspace is organized in a 'simulation matrix', designed to facilitate 'the handling and exchange of massive quantities of data' (BC, 170). This virtual reality is more than just a global three-dimensional representation. It is a veritable parallel world of industrial and military activity composed of brightly coloured and copyrighted geometric shapes<sup>13</sup> that represent individual military, corporate, and multinational data formations. Information is therefore governed by multinational corporate activity organized in urban and architectural forms.

Cyberspace is *accessed* by operators with the aid of hardwire interlace; (N, 55) connected to 'matrix simulators' or 'cyberdecks'. The process of

interfacing is known as 'jacking into' cyberspace. 'Jacking in' is the instantaneous rite of passage that separates body from consciousness. That disembodied human consciousness is then able to simultaneously traverse the vast cyberpsychic spaces of this global information matrix.<sup>14</sup> Access therefore promotes a purely sensorial relocation. The use of the word 'access' in this case is not gratuitous. It signifies a fundamental mutation in the human sensorium. In the words of Wintermute, one of Tessier-Ashpool's wayward Artificial Intelligences, 'Minds aren't *read*. See, you've still got the paradigms print gave you . . . I can *access* your memory, but that's not the same as your mind' (N, 170). The distinction is fundamental. Cyberspace is constructed according to a post-print paradigm of the collective nature of human knowledge that allows for the direct hardwiring of individual human memory to collective memory. The resulting cyborg interface effectively bypasses a world that has hitherto served as the historical stage for human activity.

A direct hardwiring of individual and collective memory has, as can be imagined, profound effects on the concept of an independently governed cyborg body. At its most extreme, this interface can spawn bodiless cyborgs, a condition heralded in Gibson's writings by the presence of Bobby Newmark's atrophied organic pod in *Mona Lisa Overdrive*, 'strapped down in alloy and nylon, its chin filmed with dried vomit' (MLO, 240). Newmark's body is an extreme example of a human body sustained by a life-support system and interfaced with sophisticated information technology. Other potentially more radical and powerful transorganic 'postclassical'<sup>15</sup> cyborg forms include personality constructs such as Colin, the pocket-sized Artificial Intelligence in *Mona Lisa Overdrive*, and the simulated version of Finn, the mouthpiece of Wintermute in *Neuromancer* (N, 208, 216); and finally Neuromancer and Wintermute, Artificial Intelligences that figure prominently in *Neuromancer*, who merge and attain cosmic sentience when their 'collective consciousness' annexes the matrix at the end of the novel (N, 269-70), and who 'are' a constant phantom presence in *Mona Lisa Overdrive* (259).

A cyberspace culture raises numerous questions as to the material form and composition of individual and group identities. Take, for example, the following question posed by Angela Mitchell, when faced with Newmark's withered body: 'Is Bobby the solid rectangular mass of memory bolted above the stretcher?' (MLO, 240). This question highlights Newmark's peculiar postclassical cyborg condition. Even when his cyborg identity is known (he was after all the young cyberspace console cowboy in *Count Zero*), it is still difficult to locate its aesthetic or functional location in *Mona Lisa Overdrive* - an apparently lifeless body or a mysterious piece of hardware? - because in his present condition he is, in fact, more than just another legendary data thief (MLO, 190-1). This confusion is compounded when one realizes that, in his present atrophied and interfaced condition, Newmark bears a strange kinship to Colin. The aleph unit that is home to this ex-console cowboy's sensorium is, in fact, an 'aleph-class biosoft', a piece of information technology that provides virtually unlimited storage capacity (MLO, 128). As it turns out, Newmark has used the aleph unit to construct an elaborate model of cyberspace (MLO, 175) that his consciousness now inhabits. In the opening pages of *Neuromancer*

we find another example that illustrates the marginal position of the body in a cyberspace version of a cyborg culture. At the beginning of the novel Case bemoans his recent fall from 'the bodiless exultation of cyberspace' into the inert materiality of his body after his nervous system was mycotoxically damaged by irate clients he has defrauded. In his opinion 'the body was meat . . . [a] prison of . . . flesh' (N, 6). His 'fall' was therefore a console cowboy's version of a living death.

Cyberspace poses a serious challenge to the identity composition of technophilic bodies, in particular in regard to their foundations in a hardware ecology. Cyborg bodies are clearly of no use in a world that has replaced organic and post-organic bodies with a consensual space of corporate and military data formations. If there are counter-culture sites in cyberspace,<sup>16</sup> the overall epistemological paradigm that nevertheless serves as its *modus operandi* is the model of a multinational economy. This is also true in the case of technological edge. Cyberspace redefines technological advantage in economic terms. This, in itself, does not represent a radical departure from the economic conditions that motivate the ebb and flow of technological edge in 'Johnny Mnemonic' except that cyberspace extrudes consciousnesses from cyborg bodies. Challenges such as these undermine materialist descriptions of post-industrial technophilic bodies simply because these bodies are epiphenomenal effects of a more extensive and radical technoeconomic transformation of synthetic body architectures. There is, however, an important question that remains to be answered. Can Gibson's cyberspace be considered an alternative multinational data metropolis specifically organized in terms of new bodiless rearticulations of cyborg identity and cyborg advantage? In other words, can one still speak of 'the technophilic body' albeit in somewhat different terms? This question is important because it can point to new patterns in the social organization of what it means to be human.

#### ON TECHNICALITY

*Chiba. Yeah. See, Molly's been Chiba, too.)*

Traditional expressions of ethnicity are incapable of coming to terms with emergent technosymbolic 'systems of essential similarity and difference'<sup>17</sup> that conjoin individuals into groups in cyborg-dominated cultures. Cyborg transformations in traditional categories of kinship and ethnicity result in different systems of identity composition. I suggest that these transformations be described by the term 'technicality'. This term seems to be a more appropriate tool to describe ethnic-type relations among cyborgs, especially since traditional blood ties are increasingly replaced, in threshold cyborg cultures, by technologically defined social bonds.

Gibson's writings are not purged of representations of other ethnic communities or subcultural groups. His writings, in fact, abound with references to youth subcultures - the Low Teks in 'Johnny Mnemonic', the Big Scientists and Panther Moderns in *Neuromancer*, the Gothicks and Kasuals in *Count Zero*, and the Jack Draculas in *Mona Lisa Overdrive* - as well as

references to other ethnic groups, most notably the Zions in *Neuromancer*. Gibson's post-industrial culture is therefore, without doubt, an effervescent ethnically creolized culture whose *modus operandi* is contestatory and disruptive. What is distinctive about his work, however, is the active presence of another *technologically* creolized cultural laminate with a different set of ethnic-type rules of social bonding. This latter culture is equally contestatory as has been seen in the cases used to illustrate the composition of technophilic bodies and their relationship to technological edge.

There can be little doubt that systems analogous to what anthropologists describe as ethnicity,<sup>18</sup> although expressed in somewhat different terms, can be seen to act as a social cohesive in cyborg cultures. New body parts, cryogenic processes, enhanced digitalized senses, and collective cyberspaces redefine what it means to be human - to have a human body and to associate with others of one's own kind. This central preoccupation of human cultures is also a dominant theme in Gibson's novels. Descriptions of powerful personality constructs, including Artificial Intelligences, who actively mediate and guide human/cyborg relations abound in Gibson's books. These interactions are rendered 'natural' through complex technological processes that allow groups to reconfigure the human bodyscape along different avenues for the deployment of distinctive social/symbolic humanoid properties.

Cyborg identities are composed with elements drawn from an intersystemic hardware continuum. We have already found this to be the case with Mnemonic and Millions. Characters such as these are the product of a post-industrial culture whose ethnic, class, and gender categories are undergoing active transformation under the influence of systemic and intersystemic technoscapes that are focused on the body's aesthetic and functional architectures. One of the most influential and powerful of these 'technoscapes', in Gibson's writings, is cyberspace. A brief examination of this aspect of cyberspace is in order at this point because it allows one to link architectural configurations of data with the architectural construction of postclassical cyborg identities.

Classical cyborg transformations in a culture of human difference are predicated, as one would traditionally expect, on the production of distinctive patterns of physical or cultural attributes organized in relation to the body's architectures. The difference between the composition of traditional ethnic categories and cyborg technicity lies most clearly in the issue of 'inborn qualities'.<sup>19</sup> In cyborg cultures questions of technicity are constructed in relation to instrumentally defined hardware/software continua connected to a general technological collectivization of the human body. Historico-epistemological categories that operate from the points of view of the inborn or naturalized attributes - racial, linguistic, or geopolitical similarities and differences - are displaced by systems of technicity. In creolized post-industrial cultures, these systems reflect the social needs (identity compositions) of nomadic individuals and groups in highly urbanized technoscapes or metropolitan centres such as Gibson's *Sprawl* and *Nighttown*. Cyberspace complicates this necessarily simple picture of classic cyborg technicity. It does so because it presents itself as a virtual bodiless reality. Although this reality is the product of sophisticated information technology, the parallel world that it

creates is an all-encompassing sensorial ecology that presents opportunities for alternative dematerialized identity compositions. The corporate composition of cyberspace tends towards an attempt to homogenize individual and group heterogeneity under the sensorial order of a collective cyberpsychic non-space. In that 'space', cultures of technological similarity and difference are obviously no longer organized in relation to the human body, its shape, colour, sex. This eclipse in the body's aesthetic and functional structure is intimately connected to the aforementioned homogenizing cybereconomic relocation of the human sensorium. Note, however, that cyberspace is a *collective* 'consensual hallucination'. It is therefore as permeable to disparate economic activities as any other geopolitical space.

The formidable accumulation and centralization of data in the matrix ensure that it is the principal site of economic contestation, domination, and resistance in Gibson's writings. It follows that it is also the site of individual and corporate life and death, identity composition and decomposition. What was once an apparently homogenizing virtual corporate reality increasingly begins to reflect a chaotic urban existence, with the proviso that access is limited to those who have the requisite skills and technology. In this virtual urban environment, power is, as always, a relational hierarchic and oppositional concept: 'Information. Power. Hard data' (MLO, 218).

The various shapes and colours of the data formations in the matrix correspond, as previously noted, to different corporate entities. Corporate difference is therefore visually defined as a series of encoded architectural distinctions that demarcate ownership of data conglomerates. Collectivities are correspondingly differentiated into those who have and those who do not have legitimate access to corporate data. Those who have access to information are the 'legitimate programmers', and those who do not are the 'industrial-espionage artists and hustlers' (BC, 170) like the console cowboys, Bobby Quine, Case, Bobby Newmark, and Gentry, who seek coded entry sequences (N, 243).

Gibson's console cowboys are exemplary technophiles whose brand of technicity is cerebrally cyberpsychic as opposed to materially technic. They are the cybernetic 'test-pilots' who operate at the cutting edges of a software continuum. Console cowboys are different from those hardware technophiles like Automatic Jack who specialize in producing a technological edge through customized cyberspace hardware and exotic software diagnostics. What makes the console cowboys different from the classic hardware technophiles is the fact that they manoeuvre along a related yet different technological continuum. This cyberpsychic (software) continuum defines the nature of the edge they cultivate. Their success is therefore a measure of their cyberpsychic activities *vis-a-vis* a collective incorporated cyberspace meta-sensorium. They are in the business of opening windows in 'the bright walls of corporate systems' with the aid of "exotic software" (N, 5) (ice-breaking virus programs or killer-virus programs usually of Russian or Chinese origin). Once they have accessed corporate data formations they set about stealing or manipulating information. These oppositional and economically disruptive activities are the focus of much of the ebb and flow of social action in Gibson's depictions of cyberspace.

They also highlight the existence of a marginal sensorial version of technicity based on the architectural distinction between inside/outside or inclusion/exclusion. The distinction is, of course, between those who do and those who do not have access to corporate data. One would therefore expect to find the most perfect representation of this marginal type of technicity in the walls of data that invariably serve as the harbingers of post-industrial cultural and social difference. This is, in fact, the case.

Data bases in the matrix are invariably defended by ICE (Intrusion Countermeasures Electronics) and the illegal *black ice* of 'lethal neural-feedback weapons' (BC, 182). These defences are produced, continually altered, and upgraded, by corporate Artificial Intelligences (CZ, 78). The result is a heavily defended advanced data-based system of distinctions between those who have legitimate access to the data and those who do not. This distinction is of more than passing interest because not only does cyberspace replace the need for bodies and associated ethnic distinctions, but the urban/architectural composition of the matrix presents an alternative system of polychromatic differences. One can accept these distinctions as simple architectural expressions of data organized in a simulated metropolis. If one does so, one becomes a cyberspace tourist who can admire these latest creations of the corporate mind (MLO, 220). Or, alternatively, one can confront the systems of difference that these heavily defended configurations represent. If one opts for this avenue of investigation, one quickly perceives that human and posthuman differences are directly inscribed in the walls of these polychromatic forms. Difference becomes the product of a hierarchic systemic order based on exclusive access to data constructs, a fact paradoxically compounded here by the narrative exclusion of legitimate or legitimating corporate points of view - Gibson's stories are always constructed from the point of view of those who are excluded from an industrial/military order. The oppositional point of view explored in Gibson's portrayal of a post-industrial information-governed global metropolis ensures that cyborg strategies of contestation and resistance are the principal motifs to be explored. These strategies are constantly highlighted in Gibson's creolized *melange* of classical and postclassical cyborg motifs, and they are intimately connected to the activities of technophilic bodies, *nodi* in an emerging oppositional cyborg matrix of technicity.

#### CONCLUSION

The tack negotiated through Gibson's version of a threshold cyborg culture has provided material for the extrapolation of a number of preliminary observations on the interaction between advanced technology, human identity, and marginal oppositional cultures at the close of the twentieth century. Gibson has observed, in this connection, that 'apprehending the present . . . seems to require the whole Science Fiction toolkit'.<sup>0</sup> This point has also been made by another cyberpunk writer, Bruce Sterling, in the preface to an anthology devoted to that genre. In his opinion, 'The cyberpunks are perhaps

the first SF generation to grow up not only within the literary tradition of science fiction but in a truly science-fictional world. For them, the techniques of classical "hard SF" - extrapolation, technological literacy - are not just literary tools but an aid to daily life.<sup>21</sup> The preceding descriptions of technophilic bodies, technological edge, cyberspace, and technicity were based on observations about a fictional world. But as Gibson and Sterling are at pains to point out, that fictional world is now a very real part of contemporary existence. Examinations of fictional cyborg cultures can sensitize us to the possibility of explosive social/biological mutations produced by rapidly changing technoscapes. It should come as no surprise, given recent advances in information technology, genetic engineering, and nanotechnology, that these changes will encompass the human body and its sensorial architecture. There seems to be little doubt that these changes will also produce new domains of domination, contestation, and resistance. Issues of differential access to sophisticated state-of-the-art hardware and software programs, access to data, and hierarchies of technical competence, all implicate positions and systems of power that can be plotted in relation to individuals, groups, and geopolitical/geotechnological zones.

#### NOTES

I am indebted to David Peerla for drawing my attention to William Gibson's work, and to Jody Berland for a critical reading of this article.

- 1 The term 'post-industrial' is used throughout this paper in order to emphasize the confluence of bio-technology, information technology, and multinational activity in Gibson's novels, as opposed to dominant aesthetic confluences. Critical literature on postmodernism has tended to disregard developments in these areas, with the exception of Jean-Francois Lyotard's seminal work, *The Postmodern Condition: A report on knowledge* (Minneapolis, Minn.: University of Minnesota Press, 1984).
- 2 A cyborg is a compound cybernetic system/biological organism. The term cyborg was first proposed in 1960 by Manfred E. Clynes and Nathan S. Kline in a short article, 'Cyborgs and space', published in *Astronautics* (September 1960). In the article they defined 'cyborg' as follows:

What are some of the devices necessary for creating self-regulating man-machine systems? This self-regulation must function without the benefit of consciousness in order to cooperate with the body's own autonomous homeostatic controls. For the exogenously extended organizational complex functioning as an integrated homeostatic system unconsciously, we propose the term 'Cyborg'.  
(27)

The appellation has since gained wide currency in science fiction literature, robotics studies, and most recently in critical studies. The literature, fictional and otherwise, that pertains to cyborgs is substantial. In lieu of a detailed survey I direct the reader to a popular but nevertheless useful 1965 introductory text by D. S. Halacy, *Cyborg - Evolution of the Superman* (New York: Harper & Row, 1965). A more recent overview of cyborg imagery in twentieth-century art and science fiction was published by Craig Adcock: 'Dada cyborgs and the imagery of science fiction', *Arts Magazine*, 58, 2 (October 1983), 66-71. For a socialist

feminist perspective on a cyborg oppositional culture see Donna Haraway, 'A manifesto for cyborgs: science, technology, and socialist feminism in the 1980s', *Socialist Review*, 15, 2 (1985), 65-107.

- 3 All further references to Gibson's short stories and novels will appear in parentheses in the main body of the text, unless otherwise noted. They will be abbreviated as follows: 'Johnny Mnemonic', (JM); 'New Rose Hotel', (NRH); 'The winter market', (WM); 'Burning chrome', (BC); *Neuromancer* (New York: Ace Books, 1984), (N); *Count Zero* (New York: Ace Books, 1987) (CZ); *Mona Lisa Overdrive* (Toronto, New York: Bantam Books, 1988), (MLO). The short stories are from *Burning Chrome* (New York: Ace Books, 1987).

For a short profile on Gibson and his work see Candace Jane Dorsey, 'Beyond cyberspace', *Books in Canada*, 17, 5 (June-July 1988), 11-13. Interviews with Gibson include: 'Doug Walker interviews science fiction author William Gibson', *Impulse*, 15, 1 (Winter 1989), 36-9; 'The king of cyberpunk: William Gibson talks to Victoria Hamburg', *Interview* (January 1989), 84-6, 91; and Adam Greenfield's 'New romancer', *Spin*, 4, 9 (December 1988), 96-9, 119.
- 4 On a creole metaphor of culture, see Lee Drummond, 'The cultural continuum: a theory of intersystems', *Man* (N.S.), 15 (1980), 352-74. I have borrowed and adapted Drummond's theory of the intersystemic nature of cultures in order to deal with an overall technologization of the human body in cyborg cultures, I have benefited from his observations on ethnicity in creolized cultures, and his outline of a contemporary semiotics of human identity and a 'totemism of machines' in 'Movies and myths: theoretical skirmishes' (*American Journal of Semiotics* 3, 2 (1984), 1-32) in the course of my own attempts, to develop an analogous concept of *technicity* that can be applied to post-industrial cyborg 'social' relations.
- 5 'Gomi' is the Japanese word for 'junk' (WM, 118-20). From the point of view of a dominant information culture, most of Gibson's major characters are corporate refuse in the sense that they are members of nomadic underworld oppositional subcultures. As cyborgs they are also subject to technological obsolescence and decay.
- 6 Haraway, 'A manifesto', 81.
- 7 See Michel Foucault, 'Of other spaces', *Diacritics*, 16, 1 (1986), 24-7 for a discussion of heterotopias.
- 8 Pierre Clastres, 'Of torture in primitive societies,' in *Society Against the State: Essays in political anthropology* (New York: Zone Books, 1987), 177.
- 9 See, for example, Mnemonic's simstim replay of Ralfi Face's death, described to the reader as a feat of (artistic) virtuosity (JM, 7).
- 10 See 'Burning chrome' for a description of a related software continuum. I return to this point in the last section of the article.
- 11 ' The classic vision of a postmodern metropolis is presented in *Blade Runner* (1982). For a cogent discussion of the postmodern logic of *Blade Runner's* futuristic Los Angeles see Eric Alliez and Michel Feher, 'Notes on the sophisticated city', *Zone*, 1/2 (1986), 41-55.
- 12 For brief histories of the interactive military and arcade games origins of cyberspace see, respectively, N, 51 and MLO, 40.
- 13 See MLO, 64, and the example of Tessier-Ashpool's blue data reconstruction of the RCA building in New York (N, 256-7).
- 14 Descriptions of speed of travel in cyberspace abound in Gibson's writing. See, for example, the description of the attack on Tessier-Ashpool's AI defence system in *Neuromancer* (N, 256-8), and Tick's comments on the use of instantaneous bodiless shifts in MLO, 220.

NEW FORMATIONS

- 15 I have introduced the term 'postclassical' in order to make a distinction between hardware interfaced cyborgs (classic) and software interfaced cyborgs (postclassic).  
16 Chrome is one example that comes to mind (BC, 180).  
17 Drummond, 'The cultural continuum', 355.  
18 Drummond, for example, defines ethnic difference as follows:

the notion that the social setting is populated by distinct kinds of people, who are what they are as a consequence of inborn qualities or deeply held beliefs manifest in their everyday behaviour and difficult or impossible to renounce. A particular attribute, such as physical appearance, dress, speech, mode of livelihood, or religion, has ethnic significance, or marking, only by virtue of the system of meanings in which it is embedded, (ibid., 354)

For a semiotic interpretation of the contemporary construction of human identity based on, amongst other relations, a 'totemism of machines,' see Drummond, 'Movies and myths'.

- 19 ibid.  
20 Walker, 'Doug Walker interviews', 38. See also Gibson's comments to the same effect in Hamburg, 'The king of cyberpunk'.  
21 Bruce Sterling, in *Mirrorshades* (New York: Ace Books, 1988), xi.