

# The End of the Human? The Cyborg Past and Present

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## Introduction: The Present

Since the publication in 1985 of Donna Haraway's influential *Cyborg Manifesto*<sup>1</sup> the cyborg has been invoked as a key image with which to unlock contemporary Western culture. The cyborg is 'part-human, part-machine (a *cybernetic organism*)',<sup>2</sup> hence it straddles both the territories of nature and that of culture, the organic and the inorganic. In practical terms, the cyborg condition affects many contemporary individuals: the existence of cochlear implants and defibrillators, immunization and medications to alter psychological states, among other medical and technological innovations, ensure that many humans are no longer entirely 'natural.'<sup>3</sup> However, what value is to be accorded to this transformation of humanity is the subject of fierce debate.

Haraway's initial formulation presented the cyborg as positive. She was convinced that, particularly for feminists, the cyborg was an image that evaded most of the biologically based categorisations which had proved so restrictive in the past. Central to the cyborg is the subversion of organic wholes.

The cyborg is a creature in a post-gender world; it has no truck with bisexuality, pre-Oedipal symbiosis, unalienated labor, or other seductions to organic wholeness... In a sense, the cyborg has no origin story in the Western sense; a 'final' irony since the cyborg is also the awful apocalyptic telos of the 'West's' escalating dominations of abstract individuation, an ultimate self untied at last from all dependency, a man in space...The cyborg skips the step of original unity, of identification with nature in

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<sup>1</sup> Donna Haraway, 'Manifesto for Cyborgs: Science, Technology and Socialist-Feminist Perspective in the 1980s', *Socialist Review* 80, 1985, pp65-108.

<sup>2</sup> Gabriel Brahm, Jr., 'Introduction,' in Gabriel Brahm Jr. and Mark Driscoll (eds), *Prosthetic Territories: Politics and Hypertechnologies*, Westview Press (Boulder, San Francisco, Oxford, 1995), p1.

<sup>3</sup> Chris Hables Gray and Steven Mentor, 'The Cyborg Body Politic and the New World Order', in Brahm Jr. and Driscoll, *op cit*, p221.

the Western sense. This is its illegitimate promise that might lead to subversion of its teleology as star wars.<sup>1</sup>

Moreover, the negative potential of the cyborg, its 'teleology as star wars,' was also attractive to Haraway. She wished to preserve in her 'ironic political myth' the sense in which women constituted the infringement and pollution of male-defined boundaries throughout history, and she cited approvingly Page DuBois' study of the centaurs and Amazons of Greek mythology who were both violators of warrior codes.<sup>2</sup>

Cyborg theory was enthusiastically taken up by postmodern scholars, and related to contemporary technological developments including the internet, artificial intelligence, and virtual reality. The cyborg's transgression of boundaries was also congruent with certain fashionable academic reconstructions of personal identity, which argued against the stability or reality of the individual, and rather posited an identity that is perpetually negotiated and involved the balancing of inconsistencies and contradictions.<sup>3</sup> French sociologist Bruno Latour complicated matters further by claiming that the ability to 'conceive of hybrids' (including cyborgs) is the preserve of pre-modern cultures; the peculiar characteristic of moderns being that they are forbidden such conceptions. Yet, paradoxically, being forbidden to conceive of hybrids causes their proliferation, and allowing the conception of hybrids limits such proliferation.<sup>4</sup> Latour's argument is complicated and ultimately unsatisfying,<sup>1</sup> because he postulates

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<sup>1</sup> Haraway, *op cit*, p67.

<sup>2</sup> *Ibid*, p99, citing Page DuBois, *Centaurs and Amazons*, University of Michigan Press, (Ann Arbor, 1982).

<sup>3</sup> Catherine Belsey, 'Constructing the Subject: Deconstructing the Text', in R. Warhol and D. Price Herndl (eds), *Feminisms*, Rutgers University Press (New Brunswick: New Jersey, 1991) p597.

<sup>4</sup> Bruno Latour, *We Have Never Been Modern*, trans. Catherine Porter, Harvard University Press, (Cambridge: Massachusetts, 1993) p12: 'What link is there between the work of translation or mediation and that of purification? My hypothesis – which remains too crude – is that the second has made the first possible: the more we forbid ourselves to conceive of hybrids, the more possible their interbreeding becomes – such is the paradox of the moderns, which the exceptional situation in which we find ourselves today allows us finally to grasp. The second question has to do with premoderns, with the other types of culture. My hypothesis – once again too simple – is that by devoting themselves to conceiving of hybrids, the other cultures have excluded their proliferation. It is this disparity that would explain the Great Divide between Them – all the other

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an alternative essentialism...[renouncing] metaphysical dualism in favour of what appears to all the world to be a metaphysical hybridism.<sup>2</sup>

What is significant about all this interest in the figure of the cyborg was the challenge it posed to 'natural' humanity. Before long scholars raised the issue of the religious implications of the cyborg: if machine and human can meld, who is the Creator? What is unique about humanity when machines possess consciousness?<sup>3</sup> And, most fascinating of all:

[s]uppose silicon-based intelligence became as 'natural' as carbon-based intelligence; how should the theological statement of human beings as created in the image of God be understood?<sup>4</sup>

These issues could be approached from the starting point of humanity or the starting point of the nature of God/the divine.

In 1996, Brenda Brasher perceptively remarked that it was the new religions that were adapting most successfully to technologies such as the internet, although the ethical and moral questions raised by these technologies were largely being ignored by both traditional a new religions alike. Brasher, a decade on from

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cultures – and Us – the westerners – and would make it possible finally to solve the insoluble problem of relativism. The third question has to do with the current crisis: if modernity were so effective in its dual task of separation and proliferation, why would it weaken itself today by preventing us from being truly modern? Hence the final question, which is also the most difficult one: if we have stopped being modern, if we can no longer separate the work of proliferation from the work of purification, what are we going to become? Can we aspire to Enlightenment without modernity?

<sup>1</sup> Stephen Cole, 'Voodoo Sociology,' in Paul R. Gross, Norman Levitt, and Martin W. Lewis (eds), *The Flight From Science and Reason*, Annals of the New York Academy of Sciences 775 (New York, 1996) pp274-87; see also Alan Sokal and Jean Bricmont, *Intellectual Impostures: Postmodern Philosophers' Abuse of Science*, Profile Books (London, 1998; first published: Paris, 1997) pp85-91 and pp115-123.

<sup>2</sup> Oscar Kenshur, 'The Allure of the Hybrid: Bruno Latour and the Search for a New Grand Theory,' in Gross, Levitt and Lewis, *op cit*, p293.

<sup>3</sup> Noreen Herzfeld, 'Creating in Our Own Image: Artificial Intelligence and the Image of God', *Zygon*, 37:2, June 2002, p303.

<sup>4</sup> Antje Jackelen, 'The Image of God as Techno Sapiens', *Zygon*, 37:2, June 2002, p290.

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Haraway, was inclined to see technology as creating new problems, possibly even new sins. With reference to techno-sapiens, she noted the following religio-ethical issues:

concerns about the quantity and quality of their humanity in light of their symbiotic relationship to technology, ambiguity over the loss of self that follows fusion with technology, the challenge of cyborg intimacy, confusion over techno-blurred boundaries of life and death, worry over the vague duplicity involved in spending eight-plus hours a day watching television or a computer monitor in contrast to an average of four minutes a day conversing with one's partner or children, sins such as disembodiedness, data lust, flaming, cracking, releasing viruses, excessive upgrading.<sup>1</sup>

She concluded that traditional religions would have to radically change in order to address these concerns, and that such change might be beyond them.

Representatives of those traditional religions have different fears; chiefly that the progress of technology is the objectification and materialisation of the world, humanity included. In direct opposition to the cyborg theorists, Christian theologians uphold the uniqueness of the human, and the necessity of a relationship with nature to cure the malaise of an era of

technology gone mad, of horrendous environmental destruction, a period in which genuine individualism and creative eccentricity is lost.<sup>2</sup>

They are unsure whether to classify popular culture as satanic or spiritual, and profoundly anxious about the central preoccupations of contemporary Western society. For them the cyborg is a dark vision of humanity's future, dominated by fear and loss.

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<sup>1</sup> Brenda E. Brasher, 'Thoughts on the Status of the Cyborg: On Technological Socialization and Its Link to the Religious Function of Popular Culture', *Journal of the American Academy of Religion*, LXIV:4, 1996, pp817-818.

<sup>2</sup> Paul Collins, 'Imagination Abandoned,' in Chris McGillion (ed.), *A Long Way From Rome: Why the Australian Catholic Church is in Crisis*, Allen and Unwin (Sydney, 2003) p183.

## **Interlude: The Past**

The religion of pre-Christian Europe was pagan and polytheistic, and after the conversion of the Europeans Christianity incorporated aspects of this religion, while rejecting others. The mythology of the Indo-European peoples contributes greatly to the study of the figure of the cyborg in the Western tradition. Fascinatingly, it is not technological capacity that *creates* the image of the cyborg. Before Western culture could build complex machines, its mythology was distinguished by the inclusion of beings that were part human, part machine. These beings existed as acts of the creative imagination.

### *Talos: The Machine*

This paper will now consider the bronze giant Talos, created by the mythological Greek inventor Daedalus, the Norse goddess Freyja and the Celtic king god Nuada, all of whom are 'cyborgs' in the modern sense, whilst nonetheless being the imaginative products of more 'primitive' societies than that of the present.

There are two figures named 'Talos' in Greek mythology, and both closely associated with Daedalus. His nephew Talos surpasses Daedalus in skill by taking

a fish's spine; and finding that he could use it to cut a stick in half, copied it in iron and thereby invented the saw.<sup>1</sup>

However after inventing the potter's wheel and the compass he is thrown from the Acropolis to his death by his envious uncle.<sup>2</sup>

While in exile on Crete, Daedalus worked for King Minos; and when escaping from Crete wearing wings of his devising, his son Icarus perished by flying too close to the sun, causing the wax which held his wings together to melt. Minos also had a gigantic bronze servant called Talos, given to him by Zeus. Talos' origins were mysterious: it was claimed that he was a survivor of an ancient brazen race. Alternately, it was also claimed that he was forged on Sardinia by Hephaestus, Zeus' son, and that 'he had a single vein that ran from his neck down to his ankles, where it was stoppered by a bronze pin'.<sup>3</sup> Robert Graves described his duties thus:

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<sup>1</sup> Robert Graves, *The Greek Myths*, Penguin, (Harmondsworth, 1955), vol. 1, p312.

<sup>2</sup> Philip Slater, *The Glory of Hera: Greek Mythology and the Greek Family*, Princeton University Press, (Princeton: New Jersey, 1968) pp195, 385, 396.

<sup>3</sup> Graves, *op cit*, pp314-5.

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It was his task to run thrice daily around the island of Crete and throw rocks at any foreign ship; and also to go thrice yearly, at a more leisurely pace, through the villages of Crete, displaying Minos' laws inscribed on brazen tablets. When the Sardinians tried to invade the island, Talos made himself red-hot in a fire and destroyed them all with his burning embrace, grinning fiercely; hence the expression 'a Sardonic grin'.<sup>1</sup>

It is important to note that the inventions attributed to Daedalus were unrealisable for the level of technological development of ancient Greece. Yet these myths perform the function of connecting the imagination with real craft. Talos the giant meets his end when the stopper in his ankle is dislodged, in some sources by Medea, but in others by Poeas the Argonaut shooting an arrow. The positing of Talos' single vein was the result of an early method of casting bronze, called *cire-perdue*, in which a wax image was coated with clay, which was then baked. The clay was pierced to let the liquid wax out and molten bronze was poured in. Finally the clay mould was broken, revealing a bronze image. Graves even suggests that

the story of Talos' death may have been a misreading of an icon which showed Athene demonstrating the *cire-perdue* method.<sup>2</sup>

Talos was animated: a metal man who was deployed by Minos to perform civic functions. Whether he thought or felt is not recorded; the fact of his being an imagined animate machine is sufficient.

### *Freyja: A Natural Cyborg*

The Norse goddess Freyja is the best example within that pantheon of a creature that is both flesh and metal. Other examples of the fusion between metal and flesh exist within the corpus of mythology. These are all associated with the Vanir, the medial family of gods (ranked between the Aesir and the giants) to which Freyja belongs. Examples include the god Heimdall, about whom the thirteenth century Icelander Snorri Sturluson remarked 'his teeth were of gold';<sup>3</sup> Another example is the golden boar known as

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<sup>1</sup> *Loc.cit.*

<sup>2</sup> *Ibid*, p317, note 8.

<sup>3</sup> Snorri Sturluson, *Edda*, ed. and trans. Anthony Faulkes, J. M. Dent and Sons Ltd, (Melbourne, 1987), p25.

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Gullinbursti ('gold bristles') which Freyja's brother Frey rides. This boar was 'one of the treasures of the gods, forged in precious metal by the dwarves and adorned with bristles of shining gold.'<sup>1</sup>

Freyja is a major deity, the *Vanadis*, the 'Lady of the Vanir' and is the only named female member of the Vanir.<sup>2</sup> Only Frigg, queen of the Aesir, occupies a similarly exalted position among the Norse goddesses. Freyja is a complex figure; of her Snorri Sturluson commented:

Freyia is highest in rank next to Frigg. She was married to someone called Od. Hnoss is the name of their daughter. She is so beautiful that from her name whatever is beautiful and precious is called *hnossir* [treasures]. Od went off on long travels, and Freyia stayed behind weeping, and her tears are red gold. Freyia has many names, and the reason for this is that she adopted various names when she was travelling among strange peoples looking for Od. She is called Mardoll and Horn, Gefn, Syr. Freyia owned the Brisings necklace. She is known as Lady of the Vanir.<sup>3</sup>

Freyja is also closely associated with Odin, the king-god of the Aesir, and shares his involvement with war, sorcery and death.

For the purpose of this paper, it is necessary to note that Freyja's tears are gold, a precious metal; the names of her daughters Hnoss and Gersemi both mean 'jewels' or 'treasures'; and the object she is most profoundly associated with is her great necklace of gold and gems known as Brisingamen.<sup>4</sup> She is highly sexually desirable and Norse myth contains several episodes in which her abduction is attempted by the *jotunn* (giants); also, her necklace is stolen by the half-*jotunn* Loki and retrieved by Heimdall, the watchman of the gods. She is also the teacher of *seidr*, a potent and polluting (to males) form of sorcery.<sup>5</sup> The *Poetic Edda* ('Voluspá' 21) attributes this skill to a figure called Gullveig, commonly regarded as another identity of Freyja:

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<sup>1</sup> Hilda Ellis Davidson, *Myths and Symbols in Pagan Europe*, Manchester University Press, (Manchester, 1988) p50.

<sup>2</sup> Margaret Clunies Ross, *Prolonged Echoes, Studies in Northern Civilization* Volume 7, Odense University Press, (Odense, 1994) p97.

<sup>3</sup> Sturluson, *op cit*, pp29-30.

<sup>4</sup> Clunies Ross, *op cit*, p205.

<sup>5</sup> Ellis Davidson, *op cit*, p162.

Gullveig is very similar to Freyja in several key respects and we know from *Voluspa* that the Aesir not only rejected Gullveig but riddled her with spears and afterwards burnt her. Yet even after such violence we hear that she still lives (*po honn en lifir* 21, 10), an indication that, whatever she represents, it is an ineradicable principle. Moreover, the fact that Gullveig is then transformed into the sorceress Heidr, whose magical powers are so similar to those *Ynglinga saga* 4 attributes to Freyja, presses the equivalence between the two quite persuasively.<sup>1</sup>

‘Gullveig’ is most commonly interpreted as ‘gold-drunkenness,’ and this accords well with the desirability of Freyja, as lust for riches is equated with sexual lust.

The best way to interpret the tale that the Aesir burned Gullveig three times yet she still lived is to assume that the essence of Freyja’s being is metal since passing through fire unscathed is analogous to the smelting process. She is an organic cyborg in so far as she is naturally both flesh and metal; she is intensely desirable because she combines the lust for riches with the desires of the flesh. Her association with death, war and sorcery renders her ambivalent and dangerous; and the risk of pollution for males (including Odin) practising *seidr* calls to mind Haraway’s ‘monsters’ that define ‘the limits of community’ established by men seeking to avoid the ‘disruption of marriage and boundary pollutions of the warrior with animality and women’.<sup>2</sup>

### *Nuada: An Artificial Cyborg*

The *Lebor Gebala Erenn*, an epic melding history and mythology, tells of the conquest of Ireland by a sequence of groups including the Tuatha de Danann, the ‘people of the goddess Danu’. The section entitled ‘The Second Battle of Mag Tured’ tells how the king god, Nuada, lost his hand in the First Battle of Mag Tured against the Fir Bolg. The leech Dian Cecht ‘put on him a hand of silver with the motion of every hand therein’.<sup>3</sup> Because of this artificial hand Nuada was henceforth known as Nuada Argetlam,

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<sup>1</sup> Clunies Ross, *op cit*, p98.

<sup>2</sup> Haraway, *op cit*, p99.

<sup>3</sup> T. P. Cross and C. H. Slover, *Ancient Irish Tales*, Barnes and Noble (New York, reprint 1969), p32.

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Nuada of the Silver Hand.<sup>1</sup> Nuada's maiming loses him the kingship, as a king must be perfect and unblemished, and the Second Battle of Mag Tured results when the ruler chosen in his stead, Bres, proves disastrous. The Tuatha, under a new commander, Lug, defeat Bres and his enemy kin, the Fomhoire.

Nuada is closely associated with other Indo-European deities who lose a hand or an arm such as the Norse Tyr and the Indian Savitr. Savitr, one of the twelve Ādityas and charioteer of the sun,<sup>2</sup> is especially relevant here 'because in one source, he lost his hands which were then replaced with hands of gold'.<sup>3</sup> Savitr is a sun god and Nuada a version of the Romano-British Nodens (whose chief shrine at Lydney Park in Gloucestershire has yielded a small bronze hand),<sup>4</sup> probably a Celtic Neptune. This would suggest that all they have in common is that they lost hands through violence and had them replaced by functioning hands of metal.<sup>5</sup>

The Welsh Lludd Llawereint, who features in the early Arthurian tale 'Culhwch ac Olwen', preserved in the *Mabinogion*, a fourteenth century collection, is another reflex of Nuada. His appellation means 'of the Silver Hand' and 'this correspondence suggests that the name Lludd also originated from Nudd (= Nuadu)'.<sup>6</sup> What is significant about the metal hands of Nuada and Savitr is that they were artificial and surgically attached; they are the ancient and medieval equivalents of cutting edge twenty-first century medical technology. Antje Jackelen has suggested that there were three possible applications of cyborg technology: to repair what had been broken, to correct 'defects' people are born with, and the

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<sup>1</sup> Alexandre Haggerty Krappe, 'Nuada a la main d'argent', *Revue Celtique*, Vol. XLIX, 1932, p92: 'À cause de sa main artificielle, on l'appela désormais Nuada Argetlam, c'est-à-dire Nuada a la main argent'; a translation of this article from French into English was made by Christopher Hartney. My sincere thanks are due to him.

<sup>2</sup> Wendy Doniger O'Flaherty, ed. and trans., *The Rig Veda*, Penguin (Harmondsworth, 1981). See especially the hymns 'Savitr at Sunset' and 'Savitr at Night', pp195-9.

<sup>3</sup> Daniel Bray, *What's in a Name?* Unpublished Master of Philosophy thesis, University of Sydney, 2000. See also Georges Dumezil, *Mitra-Varuna*, trans. Derek Coltman, Zone Books (New York, 1988 [1948]), Chapter IX, 'The One-Eyed God and the One-Handed God' and Chapter X, 'Savitr and Bhaga', pp139-74.

<sup>4</sup> Ellis Davidson, *op cit*, p208.

<sup>5</sup> *Mahābhārata* 10, 18 states that 'Rudra cut off both Savitr's hands, and, in his anger, put out both Bhaga's eyes', quoted in Dumezil, *op cit*, p168.

<sup>6</sup> Bernhard Maier, *Dictionary of Celtic Religion and Culture*, trans. Cyril Edwards, The Boydell Press, (Woodbridge, 1997 [1994]) p174.

‘optimization’ of the healthy.<sup>1</sup> Nuada and Savitr are in the first, and the most neutral of these categories.

### **Conclusion: The Present**

Examination of a range of figures from Indo-European mythology reveals that the melding of human and machine has been imagined far longer than it has been technologically realizable. But does this testimony to the fertility of the human imagination lessen the anxiety felt in contemporary culture about the diminution of the status of humanity? Perhaps it is that polytheistic religion permits a range of imaginings because the sources of authority are distributed, unlike those of monotheism. It could be that this is the true divide Bruno Latour was seeking to isolate: not between pre-modern and modern, but between the polytheistic and monotheistic imaginations; one is able to ‘conceive of hybrids’ while the other is not.

Monotheism in the West has of late needed to come to terms with the emergent technoculture. Technoculture has challenged the Judeo-Christian teaching that humans are

unique, separated from everything else by special gifts and qualities. Made in God’s image, ‘a little lower than the angels’, possessors of a soul, spiritual as well as corporeal... stand[ing] apart from and above the rest of the earth.<sup>2</sup>

Fears that human finitude – mortality – may be overcome by scientific advances, and hence that the image of the scientist may usurp the creative role of God have become widespread.<sup>3</sup>

These dilemmas will no doubt be overcome with the passage of time, but for the present the imaginative scenarios of the popular cinema and television phenomenon, *Star Trek*, may serve as a model. From its inception *Star Trek* has sought to be progressive and inclusive, with a black woman, Lieutenant Uhura, and a half-Vulcan, Mr Spock, being essential personnel on visionary Captain

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<sup>1</sup> Jackelen, *op cit*, pp292-3.

<sup>2</sup> Anne Kull, ‘Speaking Cyborg: Technoculture and Technonature’, *Zygon*, 37:2, June 2002, pp279-280.

<sup>3</sup> Jackelen, *op cit* pp297-299.

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Kirk's ship, the Enterprise.<sup>1</sup> Between the original *Star Trek* and the *Next Generation* television series nearly thirty years had elapsed and the enemy Klingons had now become friends of the Federation. The most problematic of the remaining alien groups were the Borg: cyborgs with no sense of an individual self, and virtually indestructible, in so far as if they were damaged they regenerated:

You can't outrun them. You can't destroy them. If you damage them, the essence of what they are remains...they regenerate and keep coming. Eventually, you'll weaken. Your reserves will be gone. They are relentless.<sup>2</sup>

First featured in the *Next Generation* episode, 'Q Who,' the Borg became the particular enemy of Captain Jean-Luc Picard, who had been temporarily 'assimilated' to the Borg as Locutus in the double episode 'Best of Both Worlds'.<sup>3</sup> This process was presented as a violation of borders, an experience of pollution, very much as the cyborg theorists posited. Picard, a free individual, is traumatized by his encounter with the monoculture of the Borg; as Julia Witwer notes, '[a]ssimilation is annihilation when you are an autonomous self, Federation style.'<sup>4</sup> In the eighth *Star Trek* feature film, 'First Contact' (1996),<sup>5</sup> Picard again confronted the Borg. At the climax of the action, the Borg Queen believed she had seduced the robot Data, a machine, into welcoming a flesh transplant, in a bizarre reversal of the fleshly body receiving a technological enhancement.

While the Borg are clearly conceptually brilliant, there are problems with the presentation of the concept. Technically, there can be no speaking subjects, as the

Borg units themselves are not isolated from each other: they are locked into the net with no precise sense of self... with effectively *no* chain of command.<sup>6</sup>

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<sup>1</sup> Jeff Greenwald, *Future Perfect: How Star Trek Conquered Planet Earth*, Penguin (Harmondsworth, 1998).

<sup>2</sup> Q as quoted at [http://www.bbc.co.uk/cult/st/tng/borg\\_more.shtml](http://www.bbc.co.uk/cult/st/tng/borg_more.shtml). Accessed 11 March 2003.

<sup>3</sup> Tanya M. Blakeley, 'A Brief Perspective on the Borg,' (1999): <http://www.suite101.com/article.cfm/3384/17133>. Accessed 11 March 2003.

<sup>4</sup> Julia Witwer, 'The Best of Both Worlds: On Star Trek's Borg', in Brahm Jr. and Driscoll, *op cit*, p275.

<sup>5</sup> [http://www.bbc.co.uk/cult/st/films/st\\_first.shtml](http://www.bbc.co.uk/cult/st/films/st_first.shtml). Accessed 11 March 2003.

<sup>6</sup> Witwer, *op cit*, p274.

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This means that Locutus and the Borg Queen are anomalous. They speak so that the Borg can communicate to the Federation and so to the film audience. What is fascinating is that such a collective being, technologically modified, can be incorporated into the world of the Federation. However this comes at a price: Borg can only relate to humanity when separated from the Collective.

This theme is first developed in the *Next Generation* episode 'I, Borg', in which Captain Picard and his crew rescue a lone male Borg originally known as Third of Five whose fellow-Borg have been killed. Through interaction with humans he becomes an individual named 'Hugh'. However, he is later re-assimilated into the Borg Collective. In a further spin-off series, *Deep Space Nine*, Captain Kathryn Janeway encounters another lone Borg, this time the female Seven of Nine, in the double episode 'Scorpions'. She, too, learns how to be human, and continues as a regular character in the series.

Imaginatively, *Star Trek* seems to suggest that while we view the cyborg as a violation of humanity's special status, we will hate and fear it, and perhaps be more vulnerable to being taken over by it. However, closer contact with the cyborg reveals that, although modified, it is still human, 'one of us'. Whether this is the case in reality remains to be seen.