

THE ODYSSEY OF INSTRUMENTAL RATIONALITY: CONFRONTING THE ENLIGHTENMENT'S INTERIOR OTHER

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ABSTRACT

In this paper we advocate and demonstrate the value of science fiction as a potent way of ‘practicalising philosophy.’ Science fiction narratives provide an ideal-typical setting through which theory can be represented, clarified and developed. They also help us link the abstraction of theory and the messiness of practice, while partly side-stepping the enigma whereby any study of the empirical world may merely reflect back the particular ontologies and epistemologies that constitute that world. In particular, we claim that the television series *Star Trek* provides a powerful metaphor for understanding and teaching certain themes regarding modernity, including the possibility of universal progress through economic expansion (capitalism, colonialism), technological development (industrialism, positivism), and the possibilities for universal emancipation (democracy). We especially focus on the Borg Collective, a form of life that has become one of the most enduring and critical mirrors that *Star Trek* has held up to contemporary society, and which can be usefully understood as a metaphor for the dark side of instrumental rationality. The paper draws on the various encounters between the *Enterprise* and the Borg to illustrate and engage with the diverse writings of Weber, the Frankfurt School, Habermas, Foucault, and Haraway on modernity’s continuing and ambivalent struggle with instrumental rationality.

INTRODUCTION

In seeking to “emphasise practical philosophy” this sub-theme follows in a long tradition of bridge-building between theory and practice (or, alternatively, between philosophy and politics (Arendt 1990). In this paper, we argue that science fiction can be a potent means of practicalising philosophy through its ability to link the abstraction of theory and the messiness of practice. Science fiction sheds light on theory by providing an ideal-typical

setting through which theory can be represented, clarified and developed. Conversely, it gives insight into the empirical world, while partly suspending the epistemological conundrum of the double hermeneutic that afflicts every empirical study in the social sciences.

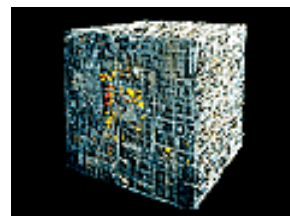
Although science fiction is usually thought to have a recent history, we maintain that it has long been used as a way of connecting philosophy and the world of practice. One of the earliest examples is Plato's famous allegory of the cave, which, as an imaginative exploration of an alternative form of intelligent existence, can be seen as a science fiction narrative. Plato's fictitious tale describes a world where men are chained in a cave since birth, and, seeing nothing but moving shadows on a wall, they falsely consider these shadows to be reality. Eventually, one man breaks free, leaves the cave, and finds that the images are only shadows of 'real' people that are walking past the cave, above the heads of those trapped below. What is important for our purposes is that Plato's ontological argument about the reality of Forms was centred on this narrative about an alternative life-world – this piece of science fiction. On this point it is notable that the same ontological issue is dealt with in contemporary science fiction narratives – such as films like *The Matrix*, *Pleasantville*, and *The Truman Show* – which are all variations on Plato's story, in that in each case the central characters believe in a 'reality' that proves to be 'unreal'.

Science fiction shares with all imaginative fictions the potential to think ourselves away from the contexts of action and the mundane realities in which we are constrained to think and act. In this way fictions increase our capacity for imaginative self-discovery. This deliberate self-estrangement from the world (which, it must be stressed and made explicit to critics who, adopting the mantle of "Science", would charge that science fiction is "bad data" and "soft-science") is nothing but the original source of scientific objectivity specified by Bacon. As such, it may also provide us with the opportunity for creatively exploring imaginative ways of dealing with "real" problems by vacillating between the "mimetic and the indeterminate" (Pfaelzer 1988: 289) and between the utopian (or dystopian) and the real. Put another way, science fiction enables a process of estrangement, and promotes a text/context interplay by engaging the author in a process through which s/he extrapolates his or her analysis of current historical tendencies into the future where they are both familiar and new. In this way, science fictional texts are a "species of political epistemology" and a "metaphor for potential histories" (1988: 289) and by facilitating a critical imaginary they can enable us to envision a variety of organisational alternatives with which we can assess our own practices and the theories that constitute them. In addition, as with Plato's allegory of the cave, science fictional texts can provide a vivid and dramatic way of interpreting and understanding a philosophical idea in a manner that is impossible if the idea can only be 'realised' in a known, empirical setting. And, as Plato has clearly demonstrated, science fiction texts allow us to

partly side-step the enigma whereby any study of the empirical world may merely reflect back the particular ontologies and epistemologies that constitute that world.

At the same time, we should note that while Plato clearly embedded an allegorical meaning into his little story, we are in no sense claiming that all science fictions are allegories. Rather, we use science fiction narratives primarily for didactic purposes, as a way of working with theories. Stories help us test, work with, understand, represent, critique and explicate a theory or theories. And if the story and theory are powerful enough then they will mutually complement one another, and indeed, in many ways, all theories need allegorical stories for their explication. (A recent example of the type of exercise that we are engaged in is presented in the edited collection by Irwin (1999) which uses the characters from the television series *Seinfeld* to explain and demonstrate a range of philosophical positions and arguments).

We will return to some of these issues at the end of the paper, but now we begin our reflexive hermeneutic study of the Borg Collective, as depicted in the television series, *Star Trek*. We have taken *Star Trek*, and the Borg in particular, because it ties in neatly with this conference's Odyssey theme; the *Enterprise*'s mission was, after all, "to boldly go, where no man has gone before". We begin by interpreting the *Star Trek* story – which has now been in the telling for some forty years – as a metaphor for modernity and its odyssey. We then present a range of interpretations of the Borg Collective, an alien life form that has played a central role in the *Trek* storyline. In particular, we discuss the various encounters between the Borg and the Federation, and between one Borg 'cube' and the Federation's flagship, the



Enterprise. The juxtaposition of the geometrical Borg cube of cyborg drones and the sleek and round lines of the *Enterprise* highlights the theme of collision between a liberal humanist ethic and an instrumentally rationalist one, collisions being negotiated in debates on postmodernism.

'To Boldly Go'...*Star Trek*'s various Odysseys as Metaphor for Modernity

The popularity and longevity of the *Star Trek* series illustrates that the themes this show addresses have a strong resonance within the viewing population. *Star Trek, The Original Series* ran during the 1960s, *Star Trek: The Next Generation* ran from 1987 to 1994, *Deep Space Nine* ran from 1993 to 1999, and *Voyager* ran from 1995 to 2001.¹ We claim that

¹ Hereinafter we will refer to the four series of *Star Trek* as *TOS*, *TNG*, *DS9*, and *Voyager*.

these series, as a developing narrative, address certain themes regarding modernity, including the possibility of universal progress through economic expansion (capitalism, colonialism), technological development (industrialism, positivism), and the possibilities for universal emancipation (democracy). Increasingly as the show has progressed through its various incarnations, it has addressed the limits of these modern narratives of progress, of capitalism, colonialism, industrialism, positivism and democracy to guarantee universal emancipation, and has therefore questioned evolutionist assumptions underpinning the instrumentalist potential of these imperatives to progress. What unifies the various incarnations of Trek is their concern with the limits of these modern narratives of progress which are now being discussed under the rubric of debates on modernism/postmodernism. For instance, the issues of governance, leadership, communication and difference which pose the biggest problems for the Federation and Star Fleet in the context of a pluralistic, post-essentialist, post-colonial society illustrates our struggle with democracy, and reflects what some theorists are calling the 'legitimation crisis', or the contemporary crisis of the political and cultural authority. The Federation's principle of non-interference encapsulated in the "Prime Directive" and alleged openness to new cultures, reference contemporary dilemmas regarding the limits of neo-Liberalism, political and cultural representation of various Others, and the nature of "responsible" postcolonialism. Likewise, Trek's characterisation of technology is ambivalent and paradoxical. Technology is at once enabling (in that it enables encounters with others through interstellar travel, and has made the Federation a post-capitalist, post-scarcity economy), and destructive (embodied in the catastrophic consequences of war in technologically advanced societies and in the risks (Giddens 1991; Beck [1986] 1992) of decimated ecospheres symptomatic of post-industrial societies). In this manner, Trek addresses our anxiety regarding limits of reason, science, of the environment, of authority, of morality, and identity, categories postmodern theorists have identified as being "in crisis". Specifically, Trek exaggerates various problematic facets of modernity and thus provides a mirror which highlights contemporary dilemmas that inform current critiques of development, modernity, and postmodernity as articulated by theorists such as Bauman, Berman, McIntyre, Giddens, Beck, etc.

Specifically, our interpretations of Trek draw on and reflect various philosophical critiques of modernity, and, in turn these critique the modern narrative around the Other that underpins *TOS* and *TNG*. We can also see that *TNG*'s successor, *DS9*, was both a 'natural' response to this type of reflective critique and a major departure for the series. Simply put, *DS9* is a radical alternative to *TOS* and *TNG* precisely because it is not driven by its predecessors' logic of 'Progress', which was propelling, inexorably forwards, towards a Utopian reconciliation of the diverse species in a common ancestry, and/or in an alternate reality that may also be our own timeline, towards the catastrophe represented by the Borg -the abyss of degeneration to technocratic dystopia. Thus, Deep Space Nine is an immobile space station

in deep space, signifying that *DS9* is about stasis: instead of boldly going forward, *DS9* is bogged down, stuck at the cross-roads of time and space. The extended odyssey of the earlier two series is over. In other words, *DS9* depicts a world that is no longer (apparently) driven by the progressive logic of modernity.² In contrast to the *Enterprise*, *DS9* is maybe best seen as a postcolonial wasteland; akin to multi-ethnic postcolonial London where the ‘frontier’ talks back and the ‘native’ is ready to resist anything resembling a colonial presence. *DS9* not only gives the native a voice, but also provides a different story about the genealogy and rationale behind the existence of a particular setting. Thus, the space station in *DS9* might very well still be the *Enterprise*, except this time interpreted by a (post-colonial) Other.

Unlike the series that came before it, the arena of negotiation in *DS9* is not a formally organised occupational life and a hierarchical command structure, but rather radical Otherness (as symbolised by the wormhole to the other galaxy) and a multi-ethnic public space (as symbolised by the promenade). The central feature in Deep Space Nine is no longer the bridge – symbolising command and control – but a ‘promenade’ and bar where different races mingle, which is a microcosm of antagonistic multi-ethnicity. On *DS9*, inter-species conflict is simmering just under the surface, but unlike Kirk and Picard, Commander Sisko is only nominally in control, relying on a large network of informers to operate. While remaining within Hollywood conventions, Sisko is not a heroic figure in the tradition of Kirk and Picard, who were always able, through personal ingenuity, courage, and charismatic leadership, to achieve the impossible. And in contrast to *TOS* and *TNG*, where the storylines focused on the heroic exploits of the main characters, anti-heroes are given a much more central role in *DS9*. Hence, *DS9* concentrates our attention on the status of the hero in organisations, and the possible nature of what we might term anti-heroic or post-heroic forms of organisational leadership.

If *DS9* represents a more dystopian, antagonistic vision of multi-ethnicity, *Voyager* is much more utopian in that consensus and collective agreement are possible, but only with the explicit acknowledgement that no identities are pure or innocent, and all alliances are temporary, provisional and shifting. On *Voyager*, Federation law and Starfleet protocol does not always apply, which is analogous to the postmodern rejection of liberal humanism in favour of a context-dependant morality. Thus the location of *Voyager* on the edge of space

² Baudrillard (1991) argues that the end of ‘exploratory’ science fiction is because we no longer live in a world dominated by the reality principle, but in one governed by the principle of simulation. In the case of the former, the imaginary (which includes models) are ‘pretexts’ of the real, while in the latter, “it is no longer possible to manufacture the unreal from the real, to create the imaginary from the data of reality” (p. 311) because our ‘reality’ is now utterly constituted by models: “models no longer constitute an imaginary domain with reference to the real; they are themselves, an apprehension of the real, and thus leave no room for any fictional extrapolation” (p. 310). Thus, the new form of science fiction no longer describes an elsewhere, but an ‘everywhere’ that is our simulated environment. For instance, in Ballard’s *Crash* “there is neither fiction nor reality – a kind of hyperreality has abolished both” (p. 312), which this is why Baudrillard identifies *Crash* as an exemplar of this new science fiction.

and within new terrain symbolises a recurring theme on the series whereby boundaries between individual crew species of human, Maquis, Borg, Talaxian as well as between public and private, personal and professional, are continually compromised and often reconfigured. Despite shifting political alliances and the relativity of ethics in the *Voyager* universe, the central characters are continuously seeking to establish a principled relationship to Others, to each other, and to themselves. As such, *Voyager* can be viewed as an Odyssey towards a critical postmodernism, towards a principled relationship to difference, and towards an awareness that ethical actions are by necessity provisional, temporary, and context-dependent. Thus, *Voyager* acknowledges that Federation law and Starfleet protocol provide useful guidelines, but at the margins of space they do not always apply, and must be reconfigured and re-interpreted to accommodate their unique situation. As such, *Voyager* references the foundationalism/relativism debate in the social sciences regarding whether universally applicable standards of morality are desirable, or if morality must always be context-dependent.

The Borg Collective as a Metaphor for Modernity's Encounter with Rationality



In this paper, we focus on the Borg Collective, a form of life that has become one of the most enduring and critical mirrors that *Star Trek* has held up to contemporary society (and indeed to organisation studies). The Borg were introduced in a 1989 episode in which Q – an omnipotent deity/trickster who continually chides Picard about humanity's arrogance – sends the Federation's flagship, the *Enterprise*, seven-thousand light years away, 'to give you a taste of your future,' after Picard refuses to allow him join the crew. They immediately encounter a cube-shaped ship, from which two Borgs – hybrid

organic and artificial life forms – appear on the *Enterprise* and begin draining information from the ship's computers. Once their data survey is complete, the Borg vessel demands the



surrender of the *Enterprise*. The Borg state that they are intent on perfecting the standard of life of every species they encounter through assimilating each one into the 'Borg Collective,' a giant, hive-like, cybernetic network of technologically-linked cyborgs in which each being shares the thoughts and feelings of each and every other member. The Borg is so integrated and collective that individual cyborg/humanoids do not register as individuals: through assimilation, individuality, the Self, is necessarily sacrificed.

The representation of the Borg can be interpreted in various

ways. A central theme in our readings is that the Borg Collective is actually the Federation, or, more precisely, it is what the Federation will become in the future if it continues along its present path of development. Thus, the Borg ‘cube’ *is* the *Enterprise*, and they only meet because Q sends the ship forward in *time* as well as in space. The Borg confront us as we ourselves may one day become (perhaps in all-important respects we already have become the Borg; Q said “to give you a taste of your future, of what’s in store for you”). The Borg is not an alien Other, but rather an alienated part of ourselves. Alternatively, the Borg are the *différance*, the unsaid but ever-present dystopia, that inheres within all Utopian visions, of which Trek is but a contemporary example.

Within this frame, we now present various interpretations of the Borg Collective to illustrate and explore particular philosophical positions. Our aim here is to demonstrate the pedagogical value of science-fictional representation to illuminate organisational issues and problems, not only in terms of the immanent problems and phenomena of common organisational settings, but more importantly, the transcendent contexts within which organisational problems are located; i.e. the broad historical, cultural, and discursive frames within which the situatedness of modern organisations can be interpreted and understood.

In mapping these macro-frames we will focus on four themes:

- i. Rationalisation of social action and the Other of modernity (Weber);
- ii. Domination by Instrumental reason: from Weber through the Frankfurt School;
- iii. Subjectification and colonisation (the internalisation of domination): Foucault and Habermas;
- iv. Reflexively re-appropriating the Other of technocratic rationality: Donna Haraway and Catherine Janeaway’s principled relations to domination by instrumental reason;

(i) The Borg as the literalisation of Weber’s ‘Iron Cage’

The first philosophical concept we will explore is Weber’s contention that instrumental rationality becomes institutionalised in modernity through science and bureaucracy. The rationalisation of social action is a central theme in Weber’s critical analysis of modernity. He identifies the disarticulation between *formal* (means-ends) and *substantive* (value based) rationality. Formal or instrumental rationality becomes institutionalised in two forms: (a) science and technology, and (b) bureaucratic organisation. These combine in modern society to constitute a characteristic form of social action: action that is concerned with the efficient achievement of instrumental objectives by the systematic application of technical means to instrumentally defined ends. This process can be seen at work in the mass production of goods, the treatment of disease, the collection of taxes, the management of a transnational insurance corporation, etc. The form of rationalisation underpinning institutionalised

collective action of this kind is not necessarily connected to questions of substantive value - i.e. *ought* we pursue these ends? Formal rationality, institutionalised in science and technology and bureaucratic organisation, increases exponentially our ability to continuously devise more efficient means to achieve further ends (i.e. our technical capacity and organisational ability increases), but substantive rationality (i.e. our moral ability to articulate, reflect on, and evaluate those ends) is relatively underdeveloped. This is because systems of formal rationality, though increasingly complex technically and organisationally, are straightforwardly single-minded, whereas systems of substantive rationality are increasingly pluralist and diversified, accommodating a variety of moral positions. For example, advances in medical and biotechnology increases our technical capacity to sustain severely damaged or terminally diseased bodies on life-support systems, or to manipulate genetic material to shape future life. But moral questions as to the governance of such technical capacities – when to suspend medical intervention, limitations as to who uses genetic information, and for what reason (physicians to pre-treat illness in utero? insurance companies to assess risk, parents to pre-select gender and IQ? etc. etc.) are left relatively unexamined. In other words, substantive rationality, moral discourse, is out of synch with formal-instrumental/technical discourses. Thus modernity increasingly encounters its own technological and organisational capacities institutionalised in technology and bureaucracy as ‘Other’, as an alien power with a life of its own that is not answerable to or governable by human normative discourse.

The Borg exemplifies this problem of the ascendancy of instrumental rationality and its disarticulation from morality characteristic of modern civilisation. They are technically advanced and organisationally sophisticated, and their systems tend towards exponential expansion of these capacities. The Borg Collective is single-minded in the calculation of its means to the efficient pursuit of its clearly defined ends: “We have analysed your defensive capabilities as being unable to withstand us. If you resist you will be punished. Resistance is futile. You will be assimilated.” Their end is clear: to acquire and assimilate the *Enterprise* and its technology, to assimilate it so that it augments their own resources. The Borg, like modern capital, is driven by a growth imperative. This is a ‘hostile take-over bid,’ the pure simple logic of capital accumulation. Picard, representing the Renaissance inheritance of broader discourses of humanist reason in the Enlightenment asks, “how can we reason with them?” In his version of modernity, there must be other grounds to action than purely formal instrumentality. But no, in this representation this discourse is hegemonic.

The dispassionate inhumanity of the Borg drones illustrates how within modernity we become, as Goethe and Weber predicted, “specialists without spirit, hedonists without heart, a nullity that imagines it has attained a level of civilisation never before achieved” (Weber [1930] 1958: 182). Thus, the Borg are an almost perfect pop culture representation of Weber’s central critical image of modern existence, the infamous “iron cage”, wherein all natural and social relations are dominated by the principle of rational instrumentalism. The

shape and social organisation of the ship and its crew also brings to light Weber's notion of the "iron cage". What Weber sees as the inexorable rise of instrumental reason in modern society culminates in the dystopia of the "iron cage" of rationalised acquisitiveness, where modernity's technical and organisational capacities, no longer linked to a discourse of higher values (religious, ethical, or political ideals) becomes oriented single-mindedly to accumulation for its own sake, an end in itself. The psychosis of modernity, for Weber, is manifest in a new form of barbarism wherein 'mature' civilisation in fact regresses to a child-like Hobbesian state of war of all against all where we are governed by an empty teleological ethic of 'the one who dies with the most toys wins!' This is the principle of Borg civilisation, a morally degenerative principle that produces a correspondingly dehumanised species of "specialists without spirit" – highly technically competent functionaries, but lacking the animation by ideals and moral conscience (lawyers who care nothing for justice, doctors who are not interested in health, scientists who are not concerned as to how their research is put to use, businessmen who are not concerned with the utility of their product, but solely with its profitability: the tobacco industry is a Borg cube with all of these functionaries)... "hedonists without heart" – rationalised acquisitiveness leads to accumulation of wealth, an abundant capital stock of material resources, but our enjoyment of what we accumulate becomes distorted and impoverished. The spiritual and moral impoverishment of the affluent society's growth imperative – accumulation for its own sake – is that works of art are not sought for their aesthetic value, but as 'investments'; houses are not homes, but abstractly "properties;" futures are speculative capital ventures rather than the realisation of institutionalised collective goods in accordance with a discursively elaborated ideal of the 'good life'. "This nullity flatters itself that it has achieved a level of civilisation never before achieved." The Borg Collective is one of the clearest textual representations of this scenario in both classical and popular fiction.

Addressing the consequences of bureaucratisation for modern humanity, Weber points to the tendency for the rationality of bureaucratic institutions to systematically cultivate the people who will become its functionaries. Even the best and brightest modern minds, university educated, with drive and commitment, become assimilated and ground down, so that they become "little men, clinging to little jobs", mere "cogs in a machine, who aware of that fact, their only preoccupation is how to become bigger cogs." As we are assimilated, we become uniform replaceable components, as Borg drones are, as the staff of Monty Burns' Springfield Nuclear Power Plant are – when Burns asks, "who is that man, Smithers?" "That's Homer Simpson, sir. One of your drones in sector 7G," – or as Arthur Miller's pathetic protagonist in *Death of a Salesman* is. The 'little men' of modern organisational life, Weber's sharper version of Nietzsche's 'mediocre man' is the cornerstone of modern totalitarianism as he is one who "needs order, and nothing but order, and becomes nervous and cowardly if that order wavers." In so far as this describes the existential condition of the Borg drone both within and

outside of the collective – comfortably functional when connected to the organisation, anxious and seeking to regain the security of the hive when isolated – the Borg represents the common form that modern organisations, from hospitals to armies, from banks to universities, share with the all encompassing state apparatus of totalitarian regimes.

(ii) From Weber through the Frankfurt School

Continuing from Weber, we interpret the Borg as an ideal type of the worst elements of science, the ascendance of one side of the Dialectic of the Enlightenment (Horkheimer and Adorno 1973), and the oppression of the political and ethical dimensions of the Enlightenment project that is implicated in the victory of Instrumental Rationality. In other words, the *Enterprise's* encounter with the Borg can be interpreted as a vivid illustration of the twentieth-century critique of Enlightenment thought. The Borg ship as a perfect geometric cube also illustrates an exaggerated representation of the Comptean hierarchy of the sciences whereby mathematics and geometry represent the highest level of the scientific hierarchy. If the Federation portrays a Utopian, modern future, then the Borg depicts a dystopian world that has lost its humanity to technological consciousness, driven only by the imperative of rationalised acquisition. Borg drones have no individuality, no conscience, and no morality beyond that of improving their technological expertise. Worse, their bodily boundaries have been thoroughly compromised to enhance their efficiency.

Weber's analysis of the development of modern instrumental reason, its institutionalised form in modern bureaucratic organisation and technocratic management, and its moral and political consequences, feeds directly into the Frankfurt school's Critical Theory. Reich and Fromm developed the social psychology of the 'authoritarian personality'; the 'little man' as not just the functional type of modern state power, but the malleable, obedient, disposable and replaceable subject envisaged by Taylorism and Scientific Management. Walter Benjamin sharpened the focus on the centrality of the commodity as fetish as the essential object of desire and the focal point of the nihilistic pursuit of modern action. This singular focus, repeated infinitely, always insatiable, stands at the centre of a monotonous eternal recurrence, a static repetition of action that constitutes the Hell to which modernity is condemned by rationalised acquisitiveness. The Borg represent this terrible stasis of repetition: "They are relentless", Q tells Picard, but their relentless pursuit is simply to accumulate more and more. Like the growth imperative of the modern capitalist world market it has no higher aim, but is an end in itself that is ultimately meaningless.

For Adorno, Horkheimer and Marcuse, the three central figures of the Frankfurt School, Fascism and Communism are expressions of the logical outcome of the Dialectic of Enlightenment. Their shared thesis is that Science first frees us from domination by Nature as it clears away ignorance, superstition, and myth. But in so far as humanity is embedded in Nature, as we come to dominate Nature by Science, through Science we progressively come

to dominate humanity: “What Science wants to learn from Nature is how to dominate Nature, and other men.” Enlightenment Science, as instrumental reason, emancipated humanity from the Other that was mythic Nature; but now humanity is dominated by the Other that instrumental reason as mythic Science has become.

The critical analysis of modernity for the Frankfurt School becomes a more focused critique of power as ‘domination by instrumental reason’. Horkheimer & Adorno are preoccupied primarily with how otherwise ordinary and well-meaning Germans and Russians became caught up in totalitarianism, functionaries in ‘purges’ and ‘Final Solutions.’ The evil of modern civilisation, as Hannah Arendt noted observing the Nuremberg trials, is ‘banal’: war and genocide largely entail the systematic and efficient performances of routine tasks. Concentration camp commandants and secret policemen accounted for their actions in terms of the ‘performance of duties,’ in precisely the same way as social workers, accountants, tax inspectors, and production managers perform their duties with the impartiality and fairness of professional detachment, and conduct business, as Weber says, ‘without regard for persons.’ Borg drones are thus not individually responsible for their actions, as they act on behalf of the Collective. Individually they are not evil, and when rescued from the Borg and de-programmed (for instance, both Hugh and Seven of Nine were drones who became disassimilated from the Hive) a former humanity can be recollected and cultivated. Similarly, abstracting from the non-culpable individual drone who becomes implicated in a collective process, the Borg collective is not necessarily self-consciously evil either, and in fact the deep underpinnings of its current actions, like Enlightenment Ideals, are Utopian and Progressive: Utopian Socialism devolves into Scientific Communism, National Development devolves into the military conquest of *lebensraum*; Eugenics and Social Hygiene devolves into extermination and ethnic cleansing. Like Enlightenment Science, the Borg’s pursuit of better technology – an end to improve means, becomes an end in itself, an empty tautology, and a Hobbesian “restless pursuit of power after power, ceasing only in death”.

As refugees from totalitarianism in America, Adorno, Horkheimer, and Marcuse developed their critique of domination by instrumental reason so that it encompassed not just institutions and practices of totalitarian regimes, but also the institutions of New York, the capital city and very heartland of the Free World. The conceit of modern civilisation is that the pathology of domination by instrumental reason – a risk that is widely recognised in modern social and political thought, not just in the Critical tradition outlined here but also by Liberal and Utilitarian schools – is realised only in extreme and abnormal instances, that ‘modernity as usual’ is free of domination and is a theatre of free will, freedom of choice, and democracy. In their critiques of the American culture industry (“Enlightenment as mass deception”) and the affluent society (“One Dimensional Man”), Adorno and Marcuse show that domination by instrumental reason is a pervasive, subtle and insidious ideology that permeates the entirety of modern civilisation. It is the animating principle not only of formal organisational

life in the marketplace, the workplace, the state administrative apparatus, but penetrates also into the realms of entertainment, leisure, domestic life, and even the vestiges of spiritual yearning as a form of pseudo-religion.

(iii) The Borg as Colonisation of the Lifeworld and the Swarming of Disciplinary Discourses

Developing Weber's stark prognosis of the fate of modernity, the Frankfurt School argue that the negative side of the potentially emancipatory dialectic of the Enlightenment, instrumental rationality, is ascendant in contemporary society. The stark irony of the Frankfurt School's philosophical and theoretical legacy is that their claim that domination by instrumental reason is insidious and all encompassing, replicates this very problem insofar as Critical Theory itself becomes a totalising critique. If ideology, power, and domination are everywhere, then there is no position of externality. Thus, the Frankfurt school's formulation of critical theory is as totalising as that expressed by the threat the Borg repeat when encountering every new species: "Resistance is futile. You will be assimilated".

Two responses to this problem, both deeply indebted to Weber and the Critical Theorists, but both dealing with that philosophical inheritance in quite different ways, are represented by the work of Michel Foucault and Jürgen Habermas. Though usually set in opposition to one another, they share much in their critique of the present. Foucault recasts the deep penetration of domination by instrumental reason in terms of "bio-power" in general, and "subjectification" (the internalisation of domination by instrumental reason in which the person himself is an active participant). The Borg is a good representation of these processes, wherein populations, races, and species become not the subject of extermination or enslavement, but assimilation. Their bodies are subjected, transformed, improved, and put to work, incorporated into collective corporate bodies, where they regenerate within the corporate structure like Japanese 'salarymen' and company golfers, willing participants in the increasingly all encompassing collective life of the organisation. When they are made redundant or retire they are lost and aimless, and mope around the former workplace, as decrepit academics haunt the corridors of the university. What Foucault calls the "capillary functioning of power" is graphically illustrated by the Borg, as assimilation involves the infusion of nanites into the body that reconfigure the entire organism at a microscopic level.

Habermas formulates the same problem in terms of the "colonization of the social lifeworld by system media of money and power." The deep penetration of colonisation of the lifeworld does not only commence when one is assimilated – i.e. when one enters the formal organisation and undergoes a structured and prolonged programme of professional training - university degree, on the job training, progression along a career trajectory based on accumulated experience and attested by formal examination and further qualification, but begins "almost at birth" in "the Borg nursery" as Lt. Riker informs us when he encounters

new-born babies already fitted with Borg prostheses. Borg are born human, but implantation begins almost immediately with the formative early childhood experiences of gender typing, and socialisation for obedience at school, work, and at consumption. Habermas's argument is that the corporation's narrow set of human needs – money and power – is normally counterbalanced by the more meaningful life-world, but that as bureaucratic institutions grow, the life world becomes “overloaded” – so, for example, we go to professional counsellors rather than family or friends for help during trying times. Thus, the Away Team's discovery of the Borg nursery is a reference to Habermas's critique of the colonisation of the primary, language-based institutions of the life-world, such as family and community (Deetz 1992). In the extreme, we end up destroying the natural environment and narrowing the human character, creating a dismal “carceral” society (Foucault 1977). We become Borg.

How does one challenge this internalisation of instrumental rationality which Habermas describes as the colonisation of the lifeworld, and which Foucault presents as the process of subjectification? Both Habermas and Foucault see instrumental reason as a dominating, alien, and alienating power, and in this respect the representation of the Borg, as an alien Other, maps onto their respective theses. In other words, both authors confront domination by instrumental reason as Other, although they come to terms with its Otherness in quite different ways. Reformulating his position in terms of psychoanalysis, Habermas in Freudian fashion, recommends a rapprochement with a divided part of the Enlightenment self. A traumatic schism in the early childhood of modernity left a part of Enlightenment consciousness stunted and undeveloped, while other dimensions grew monstrous and threatening. Now in adulthood, late Modernity must get in touch with its damaged inner child in the hope that the reconciliation will govern and temper its wild and self-destructive drives.

Foucault, in a Lacanian vein, sees this as futile, as there is no ‘real,’ no particular trauma that can be healed, there is only Lack and desire. We are not innocent victims of historical trauma. Instead, we are deeply implicated in domination by instrumental reason, as ‘we are both subjects and objects of modernity’. Our symptom – our fear of domination by instrumental reason – is ourselves; we equally desire to be dominated by instrumental reason, for it is part of our modern selves, it is the Other that is interior to modern Enlightenment consciousness. That is why we can never get away from it.

It is useful to illustrate Foucault's theory by way of a particular encounter between the Borg and the Federation as depicted in *TNG*. In this episode, Picard is kidnapped by the Borg and assimilated into the Borg collective, a process that includes being fitted with invasive cybernetic brain implants, an electronic eye and an arm prosthesis. In his assimilated state, Picard takes on the same dispassionate cyborg persona and the same single-minded goals of assimilation as the other Borg, and negotiates ruthlessly with the *Enterprise* (in order to



assimilate their crew and co-opt their technology) under a new identity, as Locutus of Borg. Despite his apparent total assimilation to the Borg's coldly calculating worldview, we can see the residue of the 'real' Picard, and thus the incompleteness of his transformation, when, after assimilation, a single tear falls from his face (presumably and paradoxically in grief over his lost humanity). As well, Picard's/Locutus' ambiguous identity is highlighted when his 'human' self struggles against his Borg self, when, after being rescued by the enterprise crew from the Borg ship, he ultimately provides the key for the Borg's eventual defeat by informing Data how to disable the Borg: this can be done by commanding them to sleep.

Similarly, Captain Foucault as Picard of the *Enterprise*/ Locutus of Borg, evades the Borg, subverts the Borg, avoids the Borg, and represses the Borg. But they are always there, the humming of the hive an *object petit*, a little piece of the Real at the edge of his consciousness, the Borg hovering at the edge of Federation space. It is this persistence of the Real despite the deliberate practices of evasion and subversion that makes Captain Foucault the hero of modern radicalisms, but which leaves those very radicals open to assimilation by the Borg, so as they become as Foucault warns "politically correct" political correctors: "bureaucrats of the revolution and civil servants of truth."

The assimilation of Captain Picard by the Borg and his role as negotiator for and eventually subverter of the Borg is a prime example of the ambiguous nature of leadership in contemporary organisations, and it also provides examples of both Habermas and Foucault's positions. Foucault and Habermas differ not in terms of their substantive diagnoses of the pathology of modern civilisation – only their taxonomies are different – but in terms of subtle but important differences on the original germs in which the pathology is based and on its historical aetiology and prognosis. Habermas interprets Weber's analysis of the disarticulation of formal and substantive rationalities as the source of the problem, and like Picard, pins his hope on the possibility of communicating with the Borg. Habermas postulates that there is an anthropologically deep-seated reason built into communicative action that can provide the basis for bringing the system of instrumental action back again under the governance of reasonable discourse from which it has become separated. Thus, the faulty connection in the hardwiring between system and lifeworld can be traced, rewired, and the project of the Enlightenment corrected so that modernity is saved from catastrophe.

The ambiguity of Picard's transfiguration as Locutus both highlights the contradictory demands of contemporary leadership and raises interesting questions with regards to the possibility of a Habermasian communicative consensus. Locutus is the inter-locutor who holds out the possibility of mediation between the ego-ideal of the *Enterprise* as modernity

governed by reasoned discourse, and modernity's alter-ego the Borg, the ungoverned system of transnational corporate organisational bodies of the Free Market military-industrial-entertainment complex. Picard of the *Enterprise* / Locutus of Borg is thus the science-fictional representation of the role of contemporary executive political leadership – the American President, the British Prime Minister, the German Chancellor. Unlike senior bureaucrats and the CEOs of transnational enterprises who are operating primarily within self-contained and self-referential rational discursive frameworks, political leaders are highly ambiguous figures who struggle to reconcile divergent rationalities of private interests and public goods. The Admirals at the Federation are suspicious of Picard's residual link with the Borg (long after their Borg encounter), but his crew trust him, a subtle ideological inversion of our own suspicion of our political leaders links with the captains of Industry, though for the time being we tend to trust them!

Habermas's solution to the problem of the colonisation of the lifeworld is to reclaim this lifeworld through communicative action (establishing an ideal speech situation as a means to achieving a communicative consensus) and by insuring that institutions of global governance are democratically accountable and discursively constituted. Interestingly, the example of the Borg illustrates how some institutions of global governance are so dominated by an instrumental, rather than a democratic rationality that their participation in democratic discourse is impossible. This is demonstrated in a conversation between Captain Picard (a true product of the Enlightenment, at least before his assimilation) and Guinan, whose race was previously attacked by the Borg. Picard asks, "how can we reason with the Borg?" to which Guinan answers simply: "you can't". The clear message is that in the extreme, the product of reason – the Borg – becomes unreasonable, or alternatively that Enlightenment reason itself contains the possibilities for multiple – utopian or dystopian – rationalities. In keeping with Weber and Adorno before him, Habermas would most certainly not agree that this is being achieved by the political institutions of the advanced capitalist democracies, not even within national jurisdictions, and most certainly not in the post-national contexts of globalisation, where Federations of states (planets) NAFTA and the EU, are free trade and common market structures, not democratically accountable, discursively constituted institutions of global governance. Thus, in such contexts, Habermas' solution – communicative action – will not work. However, in so far as the most enduring character, Picard, always wins any battle and keeps the Borg at bay on the margins of space by the strength of his charismatic authority as a reasonable, well-rounded man, appealing to a Enlightenment values, democratic reason, a humanistic philosophy, in defence of the 'public good', *Star Trek* shows its ideological colours as more pro-Enlightenment than post-Enlightenment. Picard and the *Enterprise*'s encounters with the Borg illustrate a microcosm of a pro-Enlightenment, modernist world view held by thinkers such as Habermas, where

Enlightenment values through democratic reason, communicative consensus, and a unified notion of the common good are still possible.

One of the things that make the Borg so perplexing and ominous was the realisation by Picard that the Borg cube's networked and distributed form of cognition and action enables it to manoeuvre, attack, defend, and rebuild itself at a much faster speed than the *Enterprise*, which relies on a centrally controlled hierarchy. For us, this contrast provides a vivid illustration of Foucault's ideas on power and especially his central thesis that in the nineteenth century disciplinary power (which is based on self-control, examination, and the micro-practices of ordering) supplanted sovereign power (based on ritual, tradition, and respect for the monarch). Translated into the world of *Star Trek*, we can see that sovereign power is alive and well in the *Enterprise*, but as it 'progresses' – i.e. as it becomes Borglike – the sovereigns/heroes become disempowered and eventually vanish leaving a disciplinary matrix that operates without any apparent centre or heroic individuals. This is the 'democratic deficit' that is the source of anxiety animating the current 'anti-globalisation' protests: that transnational political-economic institutions like the World Bank, World Trade Organization, NAFTA and the EU are post-democratic matrices of bureaucratic and technocratic instrumental reason that are disconnected from any particular political centre, and thus as they expand and increase in terms of capacity, human control over their power diminishes. On the other hand, the idea that heroes will vanish is probably fanciful. Even in the *Star Trek* series, the scriptwriters eventually introduced a sovereign – the Borg Queen – probably because the Borg were destined to be dull otherwise. This, of course, transformed the Collective into a centrally-controlled empire that, like the Roman and Aztec empires of old, was susceptible to a focused attack by the Federation.

Picard's assimilation by and eventual subversion of the Borg from within their ranks also demonstrates a Foucauldian notion of subversion or reverse discourse as well, although the Foucauldian interpretation involves a slightly different emphasis. Foucault sees the historical origins of the problem and its solution quite differently than Habermas. For a start, in Foucault's view there is not a single form of domination by instrumental reason, no one point of origin or disarticulation to which we can retrace our steps and begin to set the problem right. Instead, in keeping with Weber's broad analysis of the multiple sources of modern civilisation, Foucault's own close historical investigations into historical instances of power shows that domination begins from a multiplicity of points in the historical cosmos. Like Borg cubes, medical, penal, military, governmental, educational and other modern disciplinary discourses are relatively autonomous self-contained and self-sufficient entities, discourses that have varying degrees of connectivity and elective affinity with one another, that compliment one another, such that power and domination in modern society is an effect of the 'swarming of disciplinary discourses.' The Borg is a hive, and Guinan tells Picard how they swarmed through her solar system. Part of the reason the Borg cannot be reasoned with

is that there is no central authority. Power in modernity, as LeFort tells us, is “an empty place.”

Within the Foucauldian view, the Habermasian hope for a governance of the system presupposes a system, where there is in fact none, but instead a loose association of organisations, institutions, discourses, medical, financial, productive, distributive, public, private, local and transnational, whose power is derived from their swarming in loose affinity. From Weber, Foucault also takes the idea of a multiplicity of actions and rationalities, that depending on the situatedness of the social actor can be seen to be reasonable or not. Contrary to Habermas, therefore, Foucault says that there is no one form of reason to which we can look to provide a basis for agreement that would provide the ground of a social lifeworld in which to anchor the institutions that would govern the system. Captain Foucault’s enterprise occupies an alternate timeline, a parallel universe to the Utopian Habermasian Picard. Captain Foucault (who bears some follicular resemblance to Picard) fights a running battle with the Borg. “Let’s get the hell out of here! Warp eight. Any heading. Engage.” When the Borg track him down “Evasive manoeuvres” is Michel Picard’s command, and when his ship is captured and boarded, and he is assimilated and incorporated, his tactics become a micropolitics of resistance. Rather than Jean-Luc Habermas’s appeal to governance through discursive reason, Captain Foucault tactics are to subvert from within. His recommendation to Data and the crew of the *Enterprise* is to forget about central functioning systems, power, weapons, propulsion, communications, and instead to focus on unguarded peripheral functions: “Sleep, Data, Sleep” he says. The minor adjustment to the operations code of the Borg, the instruction that its time for bed, brings the whole organisation to a standstill.

To summarise their respective positions with regard to instrumental reason as Other, we have used the example of how Habermas would advocate communicative action and Foucault a micropolitics of resistance in the face of the dangers of a totalising instrumental rationality posed metaphorically by the Borg. As we have shown, Habermas’ solution is limited in that it demonstrates how communicative action presumes that consensus and discussion is a priority for all participants, and as we know all too well, this is not always the case. In the words of the Borg, “we have analysed your defensive capabilities as unable to withstand us. Discussion is irrelevant”. Against this, the Foucauldian micropolitics of resistance poses a better model for how to deal with the encounter with Instrumental Rationality, since it illustrates how this rationality is not radically Other or exterior, but exists within the Self. As such, the treatment of the Borg on *TNG* only partially illustrates a Foucauldian position in



that it implies that by this resistance we become cleansed of the Borg, and truly human again: only a trace of the Borg remains with Picard, and he is back as Captain again in no time, albeit somewhat traumatised by his encounter.

Various *TNG* encounters with various Others problematise uncritical use of technology and challenge instrumentalist applications of reason (often shown in the many episodes dedicated to debating the applicability of the Prime Directive), and thus demonstrate a strong critique of evolutionary, linear versions of development. In other ways, the horizons *Trek* presents are quite ethnocentric and anthropomorphic, reflecting predominantly a liberal individualist philosophy of rights and a liberal humanist philosophy of evolutionary species development. Aliens are usually bipedal, while anthropological encounters – particularly between human and Borg – do not seem to be able to get beyond a residual essentialist, and at times idealised humanism. Individual Borg drones when captured by the crew are usually forced to become individuals (for instance, as shown by Janeway's role in the deassimilation of Seven of Nine, *Trek*'s most famous Borg). The real-life corollary of this fetishisation of the autonomous individual is illustrated by medical and legal rationales for insisting on the separation of Siamese twins in several recent court cases. Alternately, de-assimilated drones are shown as desiring of human characteristics, as demonstrated in a maudlin, sentimental episode where "Hugh", an orphaned Borg gets 'adopted' by the *Enterprise* crew, and becomes a gentle, human-like drone.

Thus, *TNG*'s representation of the Borg is enlightening in illustrating the irrationality of reason, and the possibilities for subversion from within. However, up to this point in the series the malleability of boundaries between Self and Other, and between instrumental and democratic rationality are envisaged as too rigid. In short, the Borg are continuously depicted as either a dangerous enemy, or are deassimilated, domesticated, and made over in our own (idealised) image. What both positions fail to recognise is that this Other, the Borg, this icon of Instrumental Rationality is in ourselves, and thus cannot be radically exteriorised or domesticated. It is a part of the inheritance of modernity.

(iv) *'We are all Cyborgs': Towards a Principled and Responsible Relationship to Instrumental Rationality*

This brings us to our next reading of the Borg narratives. Drawing on the writings of Donna Haraway ([1985] 1991; 1991) in particular, we can interpret the Borg as organic/mechanical hybrids – they are 'cyborgs' (or cy/borg). In this case, the salient theoretical discourse is Haraway's ([1985] 1991) questioning of the essentialist boundaries of the modern project. For instance, when an Away Team from the *Enterprise* beams aboard the Borg ship, they find that infants are cybernetically fused with machines soon after birth, and, tellingly, there are no females. Thus, the potency of the Borg threat to the *Enterprise* is a metaphor for the cyborg's threat to the modern, humanist paradigm where essentialist models of the self, and apparently inviolable boundaries – such as between the human and the nonhuman, leader and follower, individual and society, whole and part, mind and body, culture and nature, male and

female – are subverted. In Haraway's ([1985] 1991: 178) words, cyborgs "make very problematic the statuses of man or woman, human, artefact, member of a race, individual entity, or body," and, while this may contain a radical promise of emancipation, this development is profoundly ambiguous, as, like the Borg, cyborgs represent the "final imposition of a grid of control on the planet" (Haraway [1985] 1991: 154). For Haraway, the cyborg's ambiguous status can only be explicated and resolved by accepting that cyborgs are the Other within us – we are already cy/borg.

Haraway advocates a cyborg version of politics based on strategic alliances as well as a non-essentialist version of identity. She refuses to frame the issues in terms of a utopian/dystopian discourse which she sees as unhelpful. The world, as she says, "is messier than that". Instead, she proposes that we take responsibility for the Other (Instrumental Reason) within the Self rather than treat it in any way as 'external' or 'alien' to the 'pure' Self (which is itself a chimera): "Technology is not neutral," she says, "We're inside of what we make, and it's inside of us". In her prescient 1985 essay "A Manifesto For Cyborgs" she wrote "we are all chimeras, theorized and fabricated hybrids of machine and organism; in short we are all cyborgs" ([1985] 1991: 191). Her cyborg metaphor thus suggests that we need to formulate a new relationship to science, technology, and rationality that takes account of the fact that there is no outside, no pure, natural authentic space outside of the exigencies of instrumental rationality: globalisation means we have all been compromised, and the age of innocence is lost. Furthermore, this metaphor suggests a new relationship to social political, and organisational relations, one which suggests that purity be eschewed in favour of "new myths of political identity" based not on false commonalities, but rather "partial, contradictory, permanently unclosed constructions of personal and collective selves" ([1985] 1991: 199). She argues for alliances that are contradictory, partial, and strategic rather than 'pure' positions that make claims to epistemological priority, and which presume to hierarchically order categories of oppression whereby "she who has the most categories wins".

By arguing for strategic alliances and a non-essentialist version of identity, it is clear that Haraway's cyborg heroine in terms of identity would be *Voyager's* partially disassimilated Borg crew member, Seven of Nine, and in terms of politics would be Captain Catherine Janeaway. Seven of Nine has at times betrayed the *Voyager* crew or at least continuously challenges orders she is given, initially due to her residual allegiance to the Borg and later because her priorities of efficiency are not always shared by her superiors. Janeaway has at times formed strategic alliances with the Borg in order to fight an enemy both judged to be far worse a threat than each other. In the *Voyager* universe, no one is innocent, and we acknowledge our domination by instrumental reason (and our complicity in its genesis) but try to act in a principled fashion nonetheless. The boundaries between human and machine, and the multiple alliances they form illustrates



Haraway's dictum that we are now 'wet- wired', we are cyborgs. there can never again be a hard wired system and a warm organic lifeworld. Our invention is not an alien Other to us, but the Other within ourselves, for as William Gibson says "Technology R Us now!" Like Gibson, Haraway argues that rather than denying or repressing this dark side of the Enlightenment we must acknowledge and make the best of it, while both keeping alive a utopian vision that acknowledges reality but strives above it.

Thus, the new challenge in *Voyager's* postmodern universe is living in world(s) where morality is context-dependent, and decisions must be continually negotiated in the context of the multiple rationalities that emerge in the encounters with many radically different Others. This is the quest of *Voyager* and Captain Janeaway. Modernity is lost in space, thrown too far, light years ahead of ourselves, divided, disunited, at odds with ourselves and with one another, a semi-disassimilated Borg, a holographic medical officer, and a mixed bag of technocrats, misfits and rebels, constitute the crew of our post-modern '*Enterprise*'. Captain Jean-Luc Habermas's model of a united Federation of [European] planets is a nostalgic Utopia now, light years and a few generations behind our current situation, and Foucauldian transgressive and evasive manoeuvres belongs to an older set of problems. The *Voyager* crew invariably negotiate and compromise with (rather than resist) the hostile Others they encounter: a micropolitics of resistance won't buy the *Voyager* dilithium crystals or get us safe passage through Borg space to get us any closer to home. Divested of the conceits and assurances that underpinned Captains Habermas and Foucault's confrontations with the Borg, Captain Catherine Haraway is not labouring under the delusion that reasoned agreement with alien Other powers is possible nor that their subversion and evasion is in all instances desirable, for she needs the Other to try to get her crew home. She doesn't trust them, nor they her, but she must truck with them. She relates to hostile alien Others pragmatically and reflexively. Captain Catherine Haraway and her cyborg vessel are in an (in)appropriate/d Others in inappropriate time/space. Monstrously compromised, they make monstrous compromises: they trade with unscrupulous wheelers and dealers; they make strategic alliances with supremacists, warmongers, and barbarians. However, the crew are monsters as well "We have all been injured, injured profoundly" Haraway says, but from phaser burns and truncated stumps monstrous new limbs can be grown, grafted, prosthetically articulated. The archetypical Other, domination by instrumental reason, is acknowledged as no longer simply an alien Other, but a familiar Other: the Other that is within us.

Haraway advocates a confusion of boundaries, which provides a fruitful way of looking at the Other of Instrumental Rationality within ourselves. In her essay "Postscript to Cyborgs at Large" (Haraway, 1991) in the book *Technoculture*, she explores the Promises of Monsters and in/appropriate/d others such as simians, cyborgs and women which occupy a destabilising space within discourses about what it means to be human, animal, and machine. She argues that science fiction is "generically concerned with the interpenetration of boundaries between

problematic selves and unexpected other and with the exploration of possible worlds in a context structured with transnational technoscience” (Haraway, 1991:24). In other words, science fiction, like debates on postmodernity, is grappling with the notion of boundaries in attempts to negotiate future worlds, possible utopias that deal with what lies at the cusp between nature/culture, human/non-human, first world/third world, civilisation/ primitivism, and with issues of oppression in attempts to articulate whether or not postfeminist, postracist, postcolonialist, postimperialist, postcapitalist worlds are possible.

In this fashion, themes explored in science fiction are not so speculative or fictional as one might think. Many of these works deal with the breakdown or boundaries between human and animal, between organism and machine, between the physical and the non- physical, ambiguities which Haraway claims define our contemporary existence in the early part of the 21st century.

Conclusion

In the preceding analysis we have shown that *Star Trek* addresses certain themes regarding modernity, including the possibility of universal progress through economic expansion (capitalism, colonialism), technological development (industrialism, positivism), and the possibilities for universal emancipation (democracy) with specific reference to Weber, the Frankfurt School, Habermas, Foucault and Haraway. Increasingly as the show has progressed through its various incarnations, it has addressed the limits of these modern narratives of progress, of capitalism, colonialism, industrialism, positivism and democracy to guarantee universal emancipation, and has therefore questioned evolutionist assumptions underpinning the instrumentalist potential of these imperatives to progress. Insofar as *Trek* illustrates a concern with the limits of these modern narratives of progress, it can serve a valuable pedagogical function in teaching students how to think critically about these various critiques and responses to Instrumental Reason.

There are, of course, other possible interpretations of the *Star Trek* and the Borg Collective. We will end with four supplementary readings. The first is that the Collective represents the dark side of the information age, eliciting an unconscious fear in the technological age of our bodies being violated by cybernetic ‘viruses’, ‘bugs’ etc. In cyber-punk jargon, the Borg are “wet-wired”; i.e. communications technology has been directly interfaced with the brain (which is only a short step from where we are at now – the micro-cellular telephone as implant). More generally, what is sinister and disturbing about beings who are integrated in a perpetual feedback loop in an information-rich society of perfect communication, is that since Bacon we have known that knowledge is power, and in the Borg we encounter the modern will to power/ knowledge taken to (one possible) conclusion. Thus, the Collective is a metaphor for our contemporary fear of technological nemesis. The Borg serve as a collective representation of the source of the widespread paranoia in contemporary techno-utopian

societies, where co-existing with the celebratory and affirmative discourse on the advances to civilisation and humanity wrought by the internet, genetic mapping, and the transparency and security of constant CCTV recording, are very legitimate fears of loss of privacy (individuality) and of bodily integrity. In other words, like the Borg, we are embedded in a technological imbroglio that strips us of our power under the false guise of increasing it.

The second reading is concerned with the different leadership philosophies of the various *Star Trek* captains. In turn, this also raises questions regarding the balance between rationalism, altruism, empathy and charisma each captain utilises. *Star Trek*, especially the first two series, follows in the tradition of the European Romantic movement which flourished in the first half of the nineteenth century, and which was, in many ways, a direct alternative to 18th century Rationalism. In keeping with its Romantic roots, *TOS* and *TNG* always depicted its heroic captain as superior to the characters (caricatures) representing Rationalism: Spock in *The Original Series* and Data in *The Next Generation*.³ But Romanticism also has a dark side: the ever-present danger that the heroic genius/charismatic leader may lead his/her unquestioning followers into the abyss. In literature, this scepticism towards the heroic tradition provided a strong theme during the twentieth century; writers like James Joyce and Samuel Beckett being especially hostile to the heroic images of the Celtic literary revival led by W.B. Yeats. Beckett's antipathy to nationalism, to the Celtic literary revival, and to heroism in general is vividly depicted in *Murphy* (1938) where one of his characters tries to brain himself against the statue of Cú Chulainn⁴ that was erected in Dublin's General Post Office to commemorate the Easter 1916 rising. In place of the (Celtic) hero, Beckett presents an image of the exhausted (predominantly male) ego of twentieth-century Western man. This raises an interesting question. Are we living in a 'post-heroic' or 'anti-heroic' society? In many ways we are if we consider the long list of anti-heroes that have become central to popular culture: television programmes like *Seinfeld* and *Friends*; films like *American Beauty*, and Woody Allen's films; the Budweiser lizard ads and the Budweiser Wassup ads (a contemporary take on Beckett's *Waiting for Godot*); and popular depictions of organisational life (e.g. *Dilbert* and *The Simpsons*). In terms of organisation studies, this line of thinking suggests that we might fruitfully inquire into the nature of anti-heroic or post-heroic forms of organisational leadership.

Our third reading is to consider the Borg Collective as a dramatic representation of Lacan's concept of the 'Big Other': thus, the Borg/'Big Other' is the virtual symbolic order that structures reality for us, deciding what counts as normal, the accepted truth, and the horizon

³ In the 19th century, the heroic role was filled most completely by Napoleon who typified the individual challenging the world and subduing it by his genius. Other examples of this Romantic vision of the 'superman' include Nietzsche's *übermensch*; Carlyle's ([1841] 1926) heroic model of social change; and the various musical works that celebrated Napoleon.

⁴ Cú Chulainn was a Celtic demi-god. Celtic mythology and folklore was a major influence on Romanticism in the early nineteenth century and it was also central to the Celtic literary revival and Irish nationalism in the period 1880-1920.

of meaning in a given society. Following Lacan, the Borg Collective depicts the constitutive alienation of the subject in the symbolic order: within the Collective the subject no longer 'speaks' but is instead 'spoken' by the symbolic structure.

Finally, on an optimistic note, we can interpret the *Star Trek* fantasy about the Borg as a reaffirmation that we are not Borg, since the ability to fantasise is patently lacking in the Big Other/Borg. Consequently, our only bulwark against becoming Borg is to continue fantasising and critically imagining, which is precisely why fantasy and science fiction are of such importance. This neatly returns us to our initial point, and the theme of this paper, which is that science fiction provides an underused and potent method for articulating, translating, developing, and implementing philosophical concepts.

REFERENCES

- Arendt, Hannah (1990), "Philosophy and Politics", *Social Research*, Vol. (1), pp. 73-103.
- Baudrillard, Jean (1991), "Simulacra and Science Fiction", *Science-Fiction Studies*, Vol. 18(3), pp. 309-313.
- Beck, Ulrich ([1986] 1992), *Risk Society: Towards a New Modernity*, Sage, London.
- Carlyle, Thomas ([1841] 1926), *Heroes, Hero-worship and the Heroic in history*,
- Deetz, Stanley (1992), *Democracy in an Age of Corporate Colonization*, State University of New York Press, Ithaca, New York.
- Foucault, Michel (1977), *Discipline and Punish: The Birth of the Prison*, Penguin, Harmondsworth.
- Giddens, Anthony (1991), *Modernity and Self-identity: Self and Society in the Late Modern Age*, Polity Press, Cambridge.
- Haraway (1991), "Postscript to Cyborgs at Large", in C. Penley and A. Ross (ed.), *Technoculture*, University of Minnesota Press, Minneapolis, pp.
- Haraway, Donna ([1985] 1991), "A Manifesto for Cyborgs: Science, Technology and Socialist Feminism in the 1980's", in D. Haraway (ed.), *Simians, Cyborgs and Women: The Reinvention of Nature*, Free Association Books, London, pp. 149-81.
- Horkheimer, Max and Adorno, Theodor W (1973), *Dialectic of Enlightenment*, Allen Lane, London.
- Irwin, William, ed. (1999), *Seinfeld and Philosophy: A Book about Everything and Nothing*, Open Court Publishing Company,
- Pfaelzer, Jean (1988), "The Changing of the Avant-Garde: The Feminist Utopia", *Science Fiction Studies*, Vol. 15(3), pp. 282-294.
- Weber, Max ([1930] 1958), *The Protestant Ethic and the Spirit of Capitalism*, Macmillan, New York.