

**Mediating Human-Technology Relationships:
Explorations of Hybridity, Humanity and Embodiment in *Doctor Who***

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The relationship between human beings and technology has been a regular concern of the television series, *Doctor Who*. Though its titular hero moves through space-time by means of advanced technology and he is by his own admission a technological genius and Doctor ‘of everything really’, the program nevertheless consistently maps the unease that attends the interaction of humans and the technology – whether through the human characters’ horror at the abuse of technology and its power or through characters who incorporate this interaction.

The trope of the cyborg, the human-machine hybrid that articulates many contemporary fears (and desires) about the intrusion of technology on the ‘human’ is enacted and embodied in *Doctor Who* by the Daleks and the Cybermen – long-term enemies of the Doctor. In the recent new series (2005-2009) featuring Christopher Eccleston and David Tennant both Daleks and Cybermen have returned, to enact contemporary concerns about new technologies. This paper explores the recent Dalek double-episode, “Daleks in Manhattan” and “Evolution of the Daleks” (2007) for its representation of current human-technology relationships.

Emotion

The double episode is another version of Dalek genesis, another possible beginning for the Daleks. Ever since the (Tom Baker) Doctor’s agonized ethical debate in “Genesis of the Daleks” (1975) when he could have prevented the Daleks’ development, these stories have been a site of ethical interrogation. In that episode a single act (touching two wires together) could have destroyed the gestating Daleks; however, the Doctor identifies this as an act of genocide and refuses. This refusal finds an echo in the recent double-episode but the current politics are quite different, engaging instead with contemporary debates about the nature of ‘the human’, about embodiment and about human-technology relationships.

In this episode a small group of Daleks, known as the Cult of Skaro (four Daleks named Caan, Jast, Sec and Thay) have survived the Time War that destroyed all the other Daleks as well as the planet, Gallifrey and its resident Time Lords. Using an emergency time-shift to escape the War the four Daleks arrive in New York in the early 1930s. Under the guidance of Dalek Sec they have developed a strategy to restart the Dalek race by combining with humans to create a new generation of Daleks. This plan is their last resort after their other attempts to begin again have failed. The Doctor and Martha encounter one of their failed attempts in a tunnel deep underground – an oozing, stinking mass of gooey tissue, looking like a rotting jellyfish. The Doctor later comments on the lack of compassion shown by the creature's makers in leaving it to die alone in the tunnel.

Much of the episode focuses on emotion, particularly on compassion, and how it differentiates good from bad. The human characters (apart from Martha) are all living through the Great Depression of the 1930s, many of them in the Central Park "Hooverville" – a shanty town for the unemployed (though the episode puts it there one year early). In this setting it becomes clear that when people are down on their luck, the only way to exist with dignity is through sharing and compassion. The leader in Hooverville, Solomon is a dignified and wise Black man who embodies this compassion and demonstrates its wisdom to Hooverville inhabitants.

Lack of emotion is exemplified by the Daleks and by the entrepreneur, Mr Diagoras who is working for the Daleks, though his ruthlessness is related to the horrors he experienced while fighting in World War I. The Daleks have no such excuse; ruthlessness, lack of empathy and lack of emotion are characteristic of their behaviour and being.

The story of human-technology interaction enacted through this genesis story focuses on emotion as indicative of human being and as a crucial factor in the negotiation of human-technology relationships. In telling this story the episode refers the reader to multiple technologies and does so by multiple intertextual referencing, taking viewers on an journey through 20th century iconic visual representations (based on 19th century literary representations) of human-technology hybrids.

Compassion

The first hybrid the Doctor and Martha encounter is not the Dalek-human but the pathetic pig slaves. Humans engineered by the Daleks with pig DNA to be mindless workers, they have human bodies but with the heads of pigs. Their obvious referents are the human-animal hybrids of *The Island of Doctor Moreau*, H.G. Wells' science fiction novel of 1896, subsequently made into a number of films (1933, 1977, 1996). In the novel the first hybrid encountered by the traveler, Edward Prendick is part pig, part human. When Wells wrote his novel, the Western world was debating the ethics of vivisection and the impact of Darwinism on western belief systems. Moreau's arrogance in creating the hybrid is a version of the Prometheus story, a human who claims the divine power of creation – yet in his hands it becomes a source of human degradation, witnessed by not only the Beast folk he creates but also his lack of compassion for the humans he so horribly transforms. Moreau's behaviour also recalls the irresponsibility of Victor Frankenstein, who having vivified his creature cannot accept responsibility for it and abandons it to its fate.

In this contemporary example the pig slaves are a version of human-animal gene-splicing nightmares that attend current debates about the manipulation of human DNA. While there may be no immediate plans for human-animal hybrids, the spectre of the chimera remains with us – embedded as it is in the oldest human mythologies. The problem for humans with this notion of genetic manipulation is not only with the possibility of some spectacular accident – ending in the reduction of human life to grey goo (in an earlier dystopian vision) – but also in what it tells us about our relationship to the world around us. It identifies the continuities and connection between human and animal, which has several consequences: it completes the Darwinian displacement of humanity from the peak of some developmental chain; it reveals the fragility of the boundary between human and animal and the importance of social and cultural processes and practices in constituting the human; and it challenges the disregard for the rights of animals that have attended some human-animal relationships.

The episode raises these concerns through its story of Tallulah, the dancer and her boyfriend, Laszlo who is captured by the Daleks. Laszlo is too clever for 'slave' status, so he is half-transformed so that he retains the ability to make decisions and to think; this is signified by the retention of human facial characteristics though he has pig tusks and ears. The pig slaves incite Martha's compassion, though she is forced to fight them to the death. However, her young Hovertown companion, Frank reassures her that the humans were killed by the Daleks, not her, when they stripped them of their humanity. Laszlo, the hybrid, on the other hand, retains the compassion of all humans. Loved by Tallulah and fighting with the humans against the Daleks, his chimerical appearance is a source of pity. In the end the Doctor saves his life, using the Daleks' genetics laboratory to prevent his further transformation but he cannot change Laszlo back to what he was – a 'normal' human being.

Laszlo represents a change in the politics of hybridity. He lives on with Tallulah, despite his 'difference'. Laszlo is a revision of human-animal relations – a recognition of the porosity of the boundaries between humans and other members of the animal world; of the continuity between humans and animals. He is not left to survive apart from human society, separated from humankind by a hygienic boundary but remains with them and his human love, Tallulah.

Embodiment

The other hybrid in the episode is the 'human Dalek' created when Dalek Sec absorbs Mr Diagoras. This does not take place by some sort of sophisticated genetic therapy. Instead the Dalek shell opens to reveal the organic creature within, which has tentacles and a soft body like an octopus. It put forth what looks like the ovipositor of the Alien (most graphically represented in James Cameron's *Aliens* (1986)) but rather than laying an egg, it sucks Dagoras up like an organic vacuum cleaner. After a period of gestation the hybrid walks free of the metallic casing – the first bipedal (human-)Dalek.

The episode reflects on the nature of humanity as the hybrid experiences human emotions and sensations. In the new series of *Doctor Who* emotion and being are often equated. For example, in the 2007 Cybermen genesis story (the double episode "Age of Steel" and "Rise of the Cybermen") the Doctor refuses the offer by the Cyber

Controller, Lumic to take away the emotions that cause him pain; without them, he tells Lumic, there is nothing, no feeling. For the Doctor the characteristic that makes the human race so attractive is their emotion, their embodied engagement with the world that brings them joy and pain – along with their joy in the unknown, that which is beyond the known and the rational.

In science fiction the lack of emotion is configured or represented in a number of ways – as mechanical or as lacking the ability to experience sensation and/or emotion. With organic life-forms the inability to feel sensation would be a life-threatening condition and lead to them being hurt needlessly; in fact, it is the emotional impact of sensation that is not felt by various non-human creatures – robots, cyborgs, aliens. Typically, what the science fiction narrative demonstrates is the power of emotion to guide human behaviour, to produce social behaviour such as care for others.

The recent *Doctor Who* episodes are distinguished by the gusto with which the new Doctors (Eccleston and Tennant) embrace the fully embodied experience of being. They are the first Doctors who admit to loving their companions and even to having or wanting some kind of physical relationship with them. Emotion for them is not an intellectualized distillation of sensory experience; rather sensation, emotion and intellect are all aspects of the composite experience of embodied being. In this they are appropriate Doctors for a time when the strict division of mind and body has come under interrogation and when reason and rationality are no longer seen as the major characteristic of human being. Indeed the Tennant Doctor says early in his tenure: “Oh, you don’t want to listen to Reason.” (“The Girl in the Fireplace” (2005))

The eccentricity of the Doctor has always been in conflict with the image of cool rationality that has been associated with the scientist, though this has its own cultural precedents – the eccentric Englishman and the eccentric genius. The Doctor is a kind of Quatermass figure – brilliant, technologically advanced, intolerant of bureaucracy and the restrictions it places on human behaviour and on the search for knowledge (as depicted in the BBC *Quatermass* serials and the films based on them). In fact, while earlier Doctors collaborated with Unit, the army battalion that battles aliens, in most cases bureaucracy is viewed with suspicion – as likely to limit or repress human

creativity and freedom. In fact, in *Doctor Who* it is not so much science and the scientist who are equated with rationalism, but bureaucracy.

The Eccleston and Tennant Doctors are in no danger of being considered ‘a mind-in-a-vat’, Bruno Latour’s formulation for those who maintain the separation of mind and body and consider the mind to be the essence of being. For Latour, the brain is the fully sensing, feeling, thinking entity that is at the core of being, not the abstract, distanced mind (Latour 2003). Of course, there are other ways of deconstructing and reconstituting the nature of embodied being, but the essential factor is the recognition of the body as integral to the nature and experience of being – not as the faulty carapace within which the ‘real’ experience of the mastering mind takes place.

When the human-Dalek hybrid Sec walks free of his carapace, the viewer is given another version of this understanding of embodied being, with the encased Daleks now seeming almost quaint with their shrill, repressive, mechanistic responses to any challenge. Once embodied the hybrid Sec begins to understand the world differently – specifically because of his newly embodied being. Effectively it is the Daleks who constitute Latour’s mind-in-a-vat – the disembodied, sensing but unfeeling, hyper-rational entities who are also, thereby, unable to move beyond the most simplistic responses to their environment: if in doubt, exterminate!

Hybrid Sec at first feels “everything we wanted from mankind”, which he identifies as “such a genius for war”. However, soon afterwards his experience of embodied being is provoked when the Doctor uses high pitch sound (to which the Daleks are sensitive) to escape and he feels “pain of the flesh that no Dalek has felt for thousands of years”. His apparently contradictory response is to stroke the apparatus that has emitted the painful signal. This begins Sec’s engagement through the senses with the world around him, which leads him to a new understanding of being.

Empathy

Sec’s embodied engagement immediately makes the other Daleks suspicious of him, which reflects the suspicion of the body and of its sensory responses that is a conventional feature of western philosophy and religion (Cranny-Francis 1995). Their characteristic strategy is to separate and hierarchize mind and body, based on

the notion that bodily responses are misleading and can undermine ‘true’ judgement. This understanding runs counter to the notion of embodied being and embodied subjectivity, which argues instead that bodily responses are inevitably a crucial and critical part of judgement.

Sec witnesses another of the iconic moments of the episode, when the Hovertown leader, Solomon tries to make contact with the Daleks. This scene is a direct reference to Byron Haskins’ film of *The War of the Worlds* (1953), when Pastor Dr Matthew Collins tries to make contact with the Martians in order to establish mutual understanding between humans and Martians. Solomon bases his appeal on the embodied understanding of shared experience despite difference, appealing to the Daleks as fellow outsiders, “From what I hear you’re outcasts too”. He continues: “Daleks, ain’t we the same? Underneath, ain’t we all kin?” and then appeals to them, “If you have any compassion in your hearts ...” The Daleks respond with one word, “Exterminate!”

Solomon’s vain appeal establishes the ground on which the Daleks and humans are irrevocably different: the Daleks are *not* the same because they are without embodied experience – and, by implication, without compassion. In a classic Romantic move the ability to feel, and so to feel as others do, is established as the ground for ethical behaviour. Sec’s un-Dalek response to Solomon’s action is to remark: “Observe humanity, for all their faults, they have such courage.”

Sec’s difference from the other Daleks is confirmed when he discusses with the Doctor the mistake Davros made in removing emotion when he first created the Daleks:

DOCTOR: Removing the emotion makes you stronger; that’s what your creator thought all those years ago.

SEC: He was wrong.

DOCTOR: He was what?

SEC: It makes us less than our enemies. We must return to the flesh and to the heart.

DOCTOR: But you wouldn’t be supreme beings any more.

SEC: And that is good.

Sec's identification of emotion as a source of strength, not weakness, runs counter to conventional notions of mind/body that tend to identify emotion, and the bodily responses on which it is based and through which it is experienced, as debilitating. Like the Doctor(s) Sec configures a new understanding of the relationship between mind and body as inextricably intertwined, and of subjectivity and being as embodied. Without this embodied experience the individual is simply an organic mind within a fleshly carapace – a Dalek.

Exploitation

The other creature that is created in the episode is the genetically engineered Dalek, which is the focus of the Skaro Cult's activity. Using a burst of gamma radiation gathered by a collector attached to the spike on top of the Empire State Building, the Daleks' plan is to splice their DNA into human bodies gathered from among the homeless in Hooverville. When the Doctor is shown the laboratory, the machinery is given the sonic signature of Frankenstein's laboratory, familiar from a plethora of films. A single bier is lowered to show the Doctor whom the Daleks have captured and the scene becomes a kind of horrific obverse of the Frankenstein scenario. It reproduces all the iconic representations of Frankenstein's laboratory, except that here the body beneath the sheet is pristine, not the organic patchwork of the original creature. This human being, this embodied subjectivity, is to be transformed into the emotionless, dispassionate, wholly rationalistic, mad being of a Dalek.

Despite the best efforts of the Doctor, Martha and their friends the plan partially succeeds, with the gamma radiation striking the tower like an enormous bolt of lightning – again the iconic representation of Frankenstein's creation. However, when he realizes that he cannot prevent the process, the Doctor intervenes by holding onto the tower so that some of his DNA enters the mix. When the creatures are first awakened, their response to the Daleks' interrogation about their nature is to declare: "I am a Dalek!" At first they seem totally under Dalek control – but when faced with the command to kill the Doctor, they hesitate. With his prompting they establish that they have individual autonomy and can and do choose not to kill him. Unable to

accept this failure of their plans the Daleks implement a self-destruct command that destroys their creations. In so doing the Daleks enact the role of Victor Frankenstein, as Mary Shelley envisaged it – acting without care for the creature he created. The Doctor has already identified this callous indifference to their own creation, in his identification of the proto-Dalek abandoned in the tunnels and left “to die alone”.

The episode has taken the viewer back through the history of human-technology relations and their visual representation to Mary Shelley’s foundational text, *Frankenstein* (1818). Shelley’s text was a reflection on the effect of new industrial technologies on human society and human being, with the cyborg/creature representing those whose individual being and social experience is radically deformed by the use and consequence of new technologies, new work practices and the kind of society they generate. Shelley describes a society governed by the same pitiless rationalism that mobilizes the Daleks – a procedure-driven, bureaucratic culture with no understanding of or care for embodied subjects and their individual needs. Nineteenth-century social commentators from Hazlitt to Morris and Marx, Dickens and Gaskell to Hardy, present this same critique of the society of the Industrial Revolution.

The episode is situated in New York during the Great Depression of the 1930s, when many people were out of work and homeless, abandoned by the economic and social systems of their society. They too were at the mercy of those who controlled the means of earning a living, exemplified by the ruthless (and damaged) Mr Diagoras and his employers, the Daleks.

As an articulation of contemporary social and economic conditions this context evokes the insecurities of a community with a capitalist economy that was/is in crisis (more so now than when the episode was made!) and technologies that are new and unpredictable. Digital technologies have already caused major changes in work practices, not unlike the transformations caused by the steam technologies of the 19th century – with whole industries, crafts and professions lost and new ones created. The individuals who live through such times may have great opportunities but they also live the stress of transformation, which can be in some instances not unlike that suffered by Frankenstein’s creature – equally at the command of a creator who takes

no responsibility for the consequences of their own actions: the scientist who disavows any social responsibility for the practices in which they are involved or the processes and products they develop; the entrepreneur who deploys an emergent technology without concern for its effect on the workers who use it or its social and cultural consequences.

Technologies

In telling another Dalek genesis story this double episode revisits some of the major stories about human-technology relationships, which have been used to explore the nature of ‘the human’, of technology, and of their relationships – *The Island of Doctor Moreau* and *The War of the Worlds* by H.G. Wells and *Frankenstein* by Mary Shelley. Visually it deploys iconic moments from the films of all three books (as well as a disturbing reference to the *Aliens* ovipositor). In doing so the episode evokes the explorations of human-animal and human-machine hybridity that were the subject of these earlier fictions and directs them towards contemporary technologies – digital and biological. In particular, it voices contemporary concerns about these technologies – not simply or literally that they will result in some strange hybridization of human being, but that they will have a negative effect on human society and cultures.

The dominant voice in this debate is the Doctor, who embodies a specifically late 20th and early 21st century re-visioning of embodied being as the basis of human experience and hence of human knowledge and being. In fact, it is specifically the fidgety, jumpy, irritable, flighty, joyous, irrepressible, and sometimes anguished embodiment of the Doctor that figures this debate most effectively. And he argues the value of this embodiment in the case of each of the hybrids we encounter – the unfortunate aqueous goo in the tunnel, the pig slaves, Laszlo’s pig-human hybrid, Dalek Sec’s human-Dalek, and the human-Daleks who are leavened with Time Lord DNA. In each case the cause of concern is not simply the technology and the hybrid it produces but the conditions in which the hybridization occurs and the uses to which it is put.

In 2006 the DesignPlus Symposium in London discussed the development of new, ‘smart’ materials and their applications. Suzanne Lee and Sharon Baurley discussed

the potential of these new materials to enable new kinds of communication between people and between people and the environment. CuteCircuit described the development of the HugShirt, designed to enable intimate communication (hugs) between people separated geographically. And Colonel Silas Suchanek of the Ministry of Defence described the kinds of capabilities required of new materials, new textiles and their applications by the MOD for “the biomechanical platform”. When he realized his audience did not understand that term, the Colonel noted that this is what the MOD calls the contemporary soldier. The U.S. army is also using smart fabrics and new materials to construct a new kind of military uniform, which looks very like the Robocop of Paul Verhoeven’s film (1987). Ana Viseu quotes a description of the soldier from a U.S. army web site: “his body is transformed into a personal-area network, and becomes a node within the larger network” (quoted in Viseu, 2003).

For Lee, Baurley and CuteCircuit the embodied subject is the starting point of their research and design and they rejoice in the possibilities offered by new technologies to enhance human relationships and being. For Suchanek and the U.S. army the individual using these technologies is no longer an embodied being but a “biomechanical platform” or a “personal-area network” and a “node” – which sounds a lot like “Dalek”.

In exploring the different hybrids described above, the *Doctor Who* genesis episode was not simply playing with fanciful ideas; it was exploring the possibilities and potentials of technologies that are already in development. Furthermore, in showing not just the hybrids themselves, but the conditions under which they are produced and the motivations of the creators the episode locates some of the major concerns about these technologies: who controls them? Why are they developed? Who will use them? Who will make them and under what conditions? What will be their impact on our understanding of embodied human being? Will they enhance embodied being or subject it to bureaucratic and technological systems of control? What is the nature of the human subject that will emerge from these technologies?

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