The Science Fiction of Whiteness

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Introduction

In this article, I shall explore the way post-war science fiction cinema represents, and gives textual significance to, science and scientists through contradictory and competing forms of white identity formation. I want to establish that there is a close correlation, a symbiotic relationship, between the science that is coded as "good" and "bad" for humankind and the "good" and "bad" types of white people, scientists and "aliens" involved in its production. It will be my contention that within post-war science fiction cinema "good" white science is twinned with humanism and/or religion and as such becomes a productive, life-generating form of science. By contrast, "bad" white science, science that is *too* white or *hyper*-white, and therefore excessively pure, rational, and cerebral, is a type of death for those scientists involved in its creation and brings "death" to humankind. By reading the science in science fiction in this way, then, I want to suggest that one gets closer to understanding how whiteness comes to be defined culturally as a contradictory or paradoxical racialisation; one that is constructed as a matter of life-and-death.

Before going onto explore what I will call this "science fiction of whiteness," I first want to examine science more generally as a dominant discursive formation in contemporary everyday life. I shall then outline and describe how the "good" and "bad" versions of science found in science fiction cinema are textually enunciated, before finally going on to explore the contradictory representation of whiteness and white science in post-war science fiction cinema. While there have been considerable filmic, economic and cultural changes and transformations over this period, I shall contend that the representation of the whiteness of science remains consistent in the science fiction text, a consistency that speaks to its hegemonic power, although this is a power continually marked by instability.

In this article, I will examine a number of science fiction films made since the cold war years of the 1950s. My analysis attempts to make sense of the science fiction of whiteness through mapping its consistent and continuing hold on, and presence in, science fiction film. While it is clear that the utopic and dystopic themes of science fiction film are often historically specific (fear of pollution, over-population and "big business" in the 1970s, for example) the representation and ideological meaning of whiteness appears as a suffocating, trans-historical blanket, at least in terms of what I want to define as its life/death paradox.

The (Counter) Hegemony of Science

The practices, processes and technologies of modern science extend so far into everyday living that one can argue human beings are reliant on the doctor, nurse, chemist, psychiatrist, nutritionist, and "specialist" to help them live normal, healthy, and what Michel Foucault (1977) would call "docile" lives. In this "technoculture," scientists and their sciences make people well, they make people happy, and they even change the way people look -- for

example through face lifts, liposuction, and scientifically monitored/inspired health and fitness regimes -- for the better (Menser and Aronowitz, 1996). The alchemy of modern science is so central to the processes of identity formation that people's individual or personal narratives, arguably, become scripted on what medication or treatment they are taking, or what type of specialist they are seeing. The (techno) science that people use -- heart monitors, organ transplantation, cosmetic surgery, IVF treatment, psychoanalysis, STD clinic, antibiotics, anti-depressants etc. -- begins to define them as particular types of people: old, ugly, anorexic, hysterical, promiscuous, lonely, and unstable. In fact, one can argue that such is the power and influence of science over human life that it has taken on/over the role of the vicar/priest, and the transformative power of God, as the meta-discourse that people look to, to heal them physically and mentally, and to extend (even resurrect) their sometimes faulty, failing lives. As John J. Jordan suggests:

> The scientist-as-priest serves as interpreter for the common culture, taking the dicta of an elite epistemology and applying them to everyday experiences of members of that culture…Through the priestly voice, scientists can re-interpret phenomena previously explained by folklore and/or supernatural mysticism as logical results of scientifically understood processes. (Jordan, 2000: 8)

The hegemony of science is produced and maintained in a myriad of regulatory places and through a multitude of cultural encounters. People are taught and shown how to embrace science by their peers, their family, their doctors and psychiatrists, their science books and CD-ROMS, and their television sets and cinema screens. However, it is principally through the motifs, articulations and cohering representations of the popular media that science is given its ideological centre, and where people are positioned or "hailed" in relation to its surveillance, healing and controlling techniques (Althusser, 1998: 302).

Media culture is saturated in or with seductive scientific symbols and metaphors, and the images and meanings of science are written into an enormous range of texts that people read, listen to, or watch on a daily basis. For example, hair and beauty adverts use the language of science and images of hi-tech laboratories to represent the transformative power of their products. Tabloid and broadsheet newspapers have regular science sections, a doctor's page, or choose their "hard" and "soft" stories based on how much "breakthrough science" there is in the story (a so-called news value). Newsagents and bookshops are full of health and beauty magazines, and have best-selling books on everything from how to lose weight and stay fit ("scientifically proven" to work, of course), to genetic engineering, and the origins of the universe. Television is full of medical dramas, science documentaries, and "star" family doctors and specialists who attempt to cure people's ills "live" on daytime chat shows, or who are used as "talking heads" to validate or authenticate a news report. American cinema is dominated by the "new frontier" science fiction blockbuster that reproduces across its genres the role of the forensic expert who is able to make the crucial discovery in a criminal case just because of their exacting expertise. In short, in the popular media, science is mythologised as the elixir of life, as the discipline that heals, protects, and provides the social glue that binds people together. Modern science is represented as a meta-discourse that can literally make the future better for people.

This meta-discourse is not without its "real-life" and representational challenges, oppositions, and contradictions. Science's hegemony over people's lives is notionally resisted or countered by those who incorporate into their daily lives the "art" of ancient "alternative medicines" and

herbal remedies, such as aromatherapy, natural oils and acupuncture, and by those who exert a self-control and a mastery over their bodies that consequently refuses and refutes the sex and gender labels put on them by science (Mellor and Shilling, 1997). Science that is signposted as a liberating force for good is opposed by pressure groups such as Greenpeace and ProLifers, who are resistant to the development of genetic modification in plants, and to in vitro fertilisation and artificial insemination in people, and who violently protest, through direct action, their implementation and experimentation. Various Christian religious groups and sects challenge and oppose the "scientific theory" of the evolution of "man" with and through close textual analysis of the scriptures and the teachings of Christ (and as recently seen in Europe, "Creationist" schools deliver these teachings within their curriculum). In terms of media representations, in everything from actuality documentaries, "real life" crime news stories, "casualty" tele-dramas, crime dramas, and thrillers, to horror and science fiction films and programmes, scientists and their sciences are encoded as impersonal, authoritarian, and ultimately destructive forces, bringing death, and in the most apocalyptic cases, (near) catastrophe on human kind because of their "meddling with nature" experiments. In this negativised inversion, the binary opposition of science versus nature, synthetic versus natural, man/scientist versus God/religion is played out, but with science/scientists on the anti-human side of the equation.

Doctors (physicians, surgeons, pathologists, etc.), both real and fictional, are drawn into the centre of this contestation. On the one hand, so the cultural script runs, they are to be trusted and confided in. They are the most venerated in society, heroic, hard working professionals who do everything in their power to preserve and extend human life. American television's *Quincy* (NBC, 1976-1983) *or Dr Quinn's Medicine Woman* (CBS, 1993-1996) embody this trope. Or else they are seen as extraordinary geniuses who unravel the mysteries of the cosmos for "ordinary people" to understand: Stephen Hawking, for example. On the other hand, they are imagined as cold and arrogant professional extremists and, ultimately, murderers (above and beyond the law). They will stop at nothing to develop their expertise in the field and, in the final instance, can and will exert their control, in a God-like manner, over their "docile" patients, right up until the point where they choose whether they live or not. Dr. Frankenstein is the classic literary and cinematic example of this, while the UK's "mass murderer," Dr. Harold Shipman, is the most recent real-life diabolic incarnation.

In everyday life and across the popular media, then, science is encountered and represented in contradictory ways. The science of fact and fiction heals, liberates, explains, and extends human life, but it also over reaches, de-humanises, and ultimately destroys human life because of its pathological tendencies. Such inter-textual and intra-textual ruptures are in part managed by the way "good" and "bad" science are motored by or twinned with different forces. The "good" science of fact and fiction is predominately twinned with a degree of humanism, or quasi-religious belief, so that the practices, processes and technologies of science are underpinned by caring principles, and religious inscription. The "bad" science of fact and fiction is marked out as cold, calculating, and rationalist. It is driven by a remorseless, omnipotent set of principles that puts it on a collision course with (human) nature, or with the higher powers of God, which it comes to challenge and usurp.

Consequently, people have access to, and contribute towards, these competing visions of science, and are therefore subject to, and the object of, its competing discourses; either in the way they willingly take science into every corner of their lives, or through the way they reject and oppose science through "oppositional readings", alternative practices or religious conviction. In short, at the centre of modern life is a complicated, contradictory "story" of

science. This is a techno-scientific discourse that first comes to cultural dominance in the post-war period, shaped by economic and political anxieties, hopes and fears, and it is one that has remained in play ever since, particularly in the narratives of science fiction cinema.

Science and Science Fiction Cinema

One can argue that since the "re-birth" of science fiction cinema in the 1950s, the representation of science has been subject to, and the object of, a similar hegemonic struggle that is found in media texts more generally, and as such plays a central role in the way science is represented and understood in the post-war world, especially in relation to its contradictory nature. As Ziauddin Sardar suggests "science fiction is both afraid of science and in love with science." (Sardar, 2002: 5) This "doubling" (Telotte, 1990) manifests itself in two opposing ways or, as Hugh Ruppersberg suggests:

> Science fiction cinema often assumes a rather confused attitude toward science and technology. On the one hand, it views them as redemptive forces that can lift humanity out of the muck and mire of its own biological imperfections. On the other, it sees them as potentially destructive forces, inimical to humanity. What small hope there is, here on earth or elsewhere, lies in the human imagination and heart. (Ruppersberg, 1990: 32)

The science in post-war science fiction film can be wondrous and transformative, producing a miracle cure, an antidote to a deadly virus, a flying machine (and with it fantastic special effects), a techno-gadget, or a breakthrough piece of scientific "knowledge" that leads to the final defeat of the bug-eyed monster or the super-destructive extra-terrestrial -- often with just seconds of narrative time to spare. In *Earth vs. the Flying Saucers* (1956) Dr. Russell Marvin (Hugh Marlowe) has less than fifty-six days to first invent and then unleash a new prototype ultra-sonic gun to destroy the army of flying saucers sent to annihilate earth. With time running out -- with the alien invaders beginning to blow-up Washington monuments and innocent citizens -- Marvin's invention is ready just in time to bring the flying saucers crashing to earth. Similarly, in *Independence Day* (1996) a computer virus, created by the film's techno-nerd, is uploaded in to the nerve centre of the alien invasion force just as it is about to wipe out humankind.

In these "eve of destruction" narratives, it is science, albeit often in collaboration with the military, that saves humanity from ultimate destruction (H. Bruce Franklin, 1990). However, this "good," rational, methodical science can deliver salvation precisely because it is twinned with, or motored by, humanist (emotional) drives. Healing, helping, saving science is at the same time framed as a humanist project, a synthesis of rational and emotional energies (Jancovich, 1996). The "good" scientist embodies this, albeit through a set of contrasting representations. "Good" scientists are the discoverers and inventors who stand at the vanguard of a new frontier for humankind since they open up time and space to new possibilities (Sobchack, 1990: 113). They are reasoned and calculating geniuses who can pull apart an atom. At the same time (at least in the final analysis) they are emotional, caring human beings who use science for the good of all. These scientists are variously stereotyped as nerds (Rick Moranis/Wayne Szalinski in *Honey, I Shrunk the Kids* [1989]), off-beat techno eccentrics (Jeff Goldblum/David Levinson in *Independence Day*), mad or psychotic professors (Christopher Lloyd/Doc Brown in *Back to the Future* [1985]; Robert Cornthwaite/ Dr. Carrington in *The Thing from Another World* [1951]), social outsiders, or family,

"establishment" figures (*Invasion of the Body Snatchers* [1956], *Lost in Space* [1998]), but in all their incarnations they ultimately embody the positive and transformative powers of science touched by the impulses of human emotion.

In the original *Star Trek* television series and the subsequent film franchise, both Dr McCoy (DeForest Kelley) and Mr Spock (Leonard Nimoy) represent, albeit in different ways, the enlightening benefits that come from melding science with/to humanism. McCoy is a first-class doctor and physician and a passionate man who argues, questions and doubts not only his own abilities (as a doctor, healer, and human) but also the reason and logic of science itself. Spock, by contrast, is supposed to be his direct opposite, seemingly driven by reason and logic alone -- so that when crew members go missing, or die, or when a whole galaxy or the Enterprise itself seems to be on the point of destruction, Spock neither shows nor experiences any human emotion but instead applies cold, pure logic to the crisis. However, in both the television series and the films, often prompted or initiated by an interjection from a sarcastic or scolding McCoy (or a pleading Captain Kirk, who is also a key humanist signifier), Spock -- a Vulcan/human hybrid -- is given mini-redemption scenes where he is caught by the camera feeling his way through a crisis, so that McCoy, Kirk, the crew, and the audience finally know that beneath his Vulcan exterior beats a human(ist) heart of gold.

But science in post-war science fiction film can also be terrifying and destructive, the cause or the trigger for a runaway virus, a plague, a killing machine, a new mutant species, a Frankenstein monster, a bug-eyed monster from the radioactive sewers, or for the arrival of an extra-terrestrial being hell bent on snuffing out all humanity. As Sardar observes:

> Science fiction in all its guises has never shed the essential characteristic of an air of menace. In some senses the essence of the science and the futures such fiction imagines is pervasive, potential doom. Science fiction, from the outset, has been the narrative of doomsday scenarios. (Sardar, 2002: 3)

Machiavellian, soulless scientists who have forgotten what it means to be human populate post-war science fiction films. They have rejected and abandoned (or perhaps have never experienced) human emotions such as love, remorse, and forgiveness, in favour of hard science, motherboards, and test tubes. Or alternatively, if they do show love or admiration, it is a cold form of "love" for the mutants, bug-eyed monsters and aliens that they have helped to create and nurture, and whose anti-human qualities they most admire. As such, this anti-human science, these evil scientists, often find their mirror image in the non-human "thing" that threatens the very existence of humanity, that brings the earth to the brink of destruction. The scientist's death, usually near the end of the film, often at the hands of either the science he created in the first place (virus, radiation) or the monster/alien he brought (in) to this world (who zaps, or tears them from limb to limb), reinforces the myth or allegory that too much science, science without human emotion, scientists that are given or take too much power, is/are ultimately destructive and must be stopped or destroyed.

In *Alien* (1979), Science Officer Ash (Ian Holm) initially seems to be the archetype scientist-humanist. He is a rationalist, scripted by scientific principles, who at the same time supposedly cares deeply for the welfare and safety of the crew. In the first rescue scene in the film, Ash "takes a chance, makes the seemingly human, spontaneous gesture in opening the airlock hatch; and seems genuinely hounded by Ripley when she complains about his acting inconsistently with his responsibilities as a science officer." (Kavanagh, 1990: 75) However, Ash's early humanism is slowly revealed to be a deadly ruse -- a ploy to allow the alien

creature to be brought onto the ship, to be then transported back to earth for both scientific experimentation and commercial exploitation.

Ash's pathological anti-humanism manifests itself in a number of ways in the film. First, the survival of the alien creature is an absolute priority for Ash -- way above the importance given to the survival of the crew -- Ash will even kill/be killed to protect the alien. Second, Ash views the reproductive and survival skills of the alien creature as the highest, purest form of existence. As he says in his own death scene, "I admire its purity. Unclouded by conscience, remorse or delusions of morality." In fact, Ash so admires the reproductive and attacking qualities of the alien creature that he reasons it is far superior to human life. Finally, and perhaps most importantly, Ash, again in his death scene, is revealed to be a robot ("Other"), and his techno-circuitry and programmed behaviour correlate to/with the relentless, techno-reproductive Otherness of the alien creature. Ash's death at the hands of Parker, midway through the film, is then a necessary death of what has been revealed to be a pure, soulless, destructive scientific force. Nonetheless, there is another way that one can read Ash's life and death: there is another way that one can read the "good" and "bad" stories of science found in post-war science fiction cinema -- a reading driven and underpinned by the life-and-death story of whiteness itself.

Black and White Science Fiction

The "good" and "bad" forms of science that one encounters in media/filmic texts are often identified as such based on the type(s) of white/non-white people involved in their production. That is, the stories of science are generally ethnically or racially inflected. For example, and most obviously, voodoo or "black science" is connected literally and metaphorically, in pulp fiction, popular film (such as *Angel Heart* [1987]) and television, to a sadomasochistic, ritualistic, "primitive" black culture tradition (Krzywinska, 2000). Alternative medicines such as "Chinese Medicine" are advertised, marketed, and drawn in to film texts such as *Gremlins* (1984) and *Big Trouble In Little China* (1986) through their connection to a mystic East where potions, remedies, the balance of Yin and Yang, and the release of Qi, heals or cures or gives magic capabilities to the human protagonist. By contrast, healing medicine, physics and chemistry are identified as part of the western tradition. They are identified as motors of the Enlightenment, and as emanating from, or originating with, enlightened high-status white people working in hi-tech laboratories, research centres or universities, who apply their white-realised rationalist, scholarly principles to all their scientific enquiries -- whether this be for "new and improved" shampoos, autopsy reports, or new gene break through discoveries. In Western culture this white science is highly prized and, more often than not, valorised, especially if it is combined with humanist tendencies. According to Sardar:

> Science fiction employs the particular constellations of Western thought and history and projects these Western perspectives on a pan-galactic scale. Science fiction re-inscribes Earth history, as experienced and understood by the West, across space and time. (Sardar, 2002: 2)

However, this ethnically driven story of science is not simply divided between "good" science equals enlightened white science versus "bad" science as the product of the "primitive" ethnic Other. To the contrary, the racialised story of science is much more complex. For example, voodoo science is in part represented as a more authentic, desirable alternative to white science in what Tanya Krzywinska describes as a "counter-discourse."

Krzywinska suggests, in relation to the representation of voodoo in voodoo film, that "Voodoo is taken to be a romantic and exotic form of magic that carries with it a Western dissatisfaction with rationalism and other key values. This involves identification with voodoo" (Krzywinska, 2000: 159). Similarly, when it comes to the representation of white science, counter-discourses emerge that posit white science, or rather hyper-white science, as a destructive force. For example, in science fiction generally, white science that is singularly driven by rationalist goals, that emerges from the pure calculations and experiments of hyper-white scientists, is often characterised as a sterile, pathological science. Because this type of science has left humanism behind, it brings danger and death (the threat of apocalypse) to the white people touched or infected by/with it (Dyer, 1997: 212-213).

In short, hyper-white science is imagined to be an overly cerebral, asexual, ultimately destructive force that needs destroying if the human species is to continue to survive. This of course, as I shall discuss in more detail later, is one of the paradoxes of being of/from the white race. White people are meant to be pure, made out of/from the Holy Spirit: they are not supposed to have sexual drives in the first place (Dyer, 1997: 27). But when hyper-white science draws white people closer to this ideal, through its rationalist and cerebral over-investment and simultaneous under investment in the sex drive, life/reproduction -- white people as a "species" -- is threatened with extinction and faced with its own ghostly life/death paradox.

In *Alien*, the sterile, bleached-out technological re-birthing scene at the beginning of the film is an example of white life being brought into being through what is a technologically-inspired immaculate conception, devoid, consequently and ironically, of the sex, blood, and pain that procreation and reproduction necessarily have when humans are involved. The crew is re-born to an automated sequence of lights, heat, food and water being switched on as they emerge from their sterile pods. They wake up placid, floppy, bone dry, in white towelling worn like nappies, and yawn their way back into existence as if already half dead.

To summarise, one discourse constructs "white" science as ideologically positively centred, imagined to be the motor of human history, human development, while another discourse views the fear and loathing of hyper-white science as incorporated into "eve of destruction" narratives where the hyper-whiteness of science (whiteness that is overly rational, highly cerebral) is a purely destructive force. This science fiction of whiteness shows itself across an enormous range of narratives, allegories and spatial sites in post-war science fiction cinema, with very little change or variation in the way these faulty binaries are played out or communicated. The post-war science fiction film carries a version of whiteness that appears to be timeless, endlessly replayed and relayed, so that whiteness itself appears to be timeless and endless, the origin of the human species, as I would now like to go on to explore.

The Science Fiction of Whiteness: White Enlightenment

In one dominant representational paradigm science is imagined to be a white project, inspired, controlled and made available to white narrative agents who are empowered to use "their" science to adventure outwards, to miraculously heal and save people in distant galaxies across oceans of time and space. The inter-galactic and (miraculous) "time-loop" capabilities of white science/scientists further extend the cultural mapping and geographical fixing that Ella Shohat (1991) has identified in relation to a range of imperialist adventure stories that has the scientist making sense of Other places for spectators not familiar with the territory. In essence, white "frontier" scientists are the inter-generic descendants of these

adventure explorers but also of white cowboys who first tamed the west, but who now view the scientific exploration and colonisation of the cosmos as their "manifest destiny."

The *Star Trek* film and television franchise plays out a version of this manifest destiny, albeit with a multi-racial, "trans-global" cast: although racial myths still inflect the roles, responsibilities and personalities of the crew. Humanist rationalism is a quality most closely associated with the white scientists (humanoids) and captains and commanders who make the life-and-death decisions on the ship. They make "history" because they get to act heroically and then record and classify the outcomes in log-books and databases. The mandate of the Enterprise in fact reads like the imprint of any colonial text: "to boldly go where no man (humankind) has gone before… to seek out new life and new civilisations." This credo is impressively supported by the way the Enterprise is photographed. It is repeatedly shot streaking, glowing, humming across the starlit sky, technically and scientifically magnificent. It is also shot from beneath, in a stationary position, to place the spectator as accomplice ethnographer on the voyages that are about to be undertaken. As Kent A. Ono argues in relation to *Star Trek: The Next Generation* (1987-1994):

> the spectator's perspective below the ship emphasises the awesome power of both military and communications technology. The Enterprise hails the spectator to pay close attention to the opening sequence that foregrounds the entire episode and also cues the viewer to her own privileged viewing position, perhaps in her own spaceship from which to observe impending events -- an ethnographic perch from which to document "native life." (Ono, 1996: 162)

Science is encoded as white because not only white people produce and use it (for good) but also because intelligent, rational, philosophical and enquiring white people come to personify science's core transforming ingredients. In short, in post-war science fiction cinema, "good" science is given a white identity through the (type of) white people who are allowed to discuss it, make it, and shape it -- so that in effect hi-tech, healing, helping science is more often than not personified as a high-ranking, high-status white man or woman, or at least as a by-product of WASP (white Anglo-Saxon Protestant) culture. One only has to think about two of the archetypes of scientists found in post-war science fiction narratives to see how ingrained white (male) identity is to the embodiment of salvation science.

In post-war science fiction film, doctors are predominately middle-class, well educated, mild mannered WASPs, who safely reside in white suburbs, or in "small town America," and who at the beginning of the narrative are using science/medicine simply to preserve and protect their white communities and the core values of those communities. Alternatively, they are working on a medical advance that will have positive benefits for everyone (white) in their community/the world -- since black people as black people just do not seem to exist in the science fiction film, at least up until the 1970s. However, once the negative alien "Other" arrives (variously, seen as a metaphor of communism or black expansion into white neighbourhoods [Biskind, 1983; Avila, 2001]) or their experiments are stolen, and these core values are threatened, doctors use their science to destroy the force that seeks to infect those very white spaces and white values that they are there to preserve and protect.

In the 1956 version of *Invasion of the Body Snatchers*, aliens housed in giant seed-pods attempt to take over the small town of Santa Mira by replacing their human counterparts while they sleep, with "emotionless simulacra." (Sobchack, 1987: 122) Miles, the family

doctor and hero of the film, is the humanist-scientist and therefore the first to understand what is happening to the people of his town. He is the first who can scientifically explain the transformation that is taking place, and, at the end of the film, is the sole person to escape the alien invaders to let the rest of America know what is taking place there. This rationalist-humanist doctor, this *ideal* white type, will not be taken over by the Other, does not want the Other in his small town, and will resist the Other making its way into other small towns across America.

Professors and physicists are often white-coated, white-haired, bespectacled eccentrics or geniuses, driven by logic and a quest for knowledge that will, finally, confirm their status as salvation messiahs. They will always come up with the antidote, serum, gadget, travel device, weapon, to defeat the alien and save mankind from destruction; or they will devise and operate the communication device that will allow "first contact" to be made with a friendly alien force. But such white hero types also produce laser beams, warp drives, time travel machines, and hi-tech, visually spectacular, science fiction cities, so that all people (within the diegesis) can live better lives, and for audiences and spectators (extra-textually) to stand and admire, in what are therefore doubly encoded as "awe and wonder" and humanist encounters (Grant, 1999). In such an extra-textual dialogue, the audience witnesses white messiahs saving the earth with an array of dazzling special effects. In this instance, I would argue the audience is meant to be in awe of whiteness itself.

At the end of *Close Encounters of the Third Kind* (1977) a team of white scientists has been able to learn how to communicate with their alien visitors, and a high-ranking visitation point has been arranged in a remote hi-tech landing-strip and science station crafted into the interior walls of a mountain. This magnificent piece of techno-structure is itself, therefore, symbolic of white techno-science's mastery of nature. Through a mixture of futuristic gadgetry and face-to-face human encounters, the meeting is represented as a glorious, technologically spectacular, and ultimately holy-white encounter. The scale and size of the science station itself is initially a marvel, with acres of glass and shiny metal, dozens of computers, a gigantic electronic music machine, centralised "bright white" lighting rigs, and hundreds of white-coated technicians scurrying across the already busy mise-en-scène.

However, it is with the arrival of the enormous mother ship that the scientifically spectacular truly takes over. The ship is photographed so that it dominates the frame, and yet through the use of long shot is also revealed to be a bejewelled, neon-lit, glass-reflecting marvel. When the aliens decide to open the doors of the ship, white light pours from its interior and onto the landing strip. White people, mainly scientists, marvel at the reflection of their own whiteness -- in what is in effect a white scientific leap across time and space. The symbolism of whiteness is obviously crucial here. This science-made-white is often symbolically anchored through a white visual aesthetic and a signification chain that encodes whiteness with life-giving, changing, and status-achieving properties. White scientists unravel the mysteries of the universe, greet the alien(s), solve the problems of the cosmos in white encoded laboratories, hospitals, clinics, citadels and space stations, and through the use of special effects confirm the transformative white magic that lies in the palm of their hands. There is a symbolic moment that occurs in a great many post-war science fiction films where a character is taken from a chaotic, busy exterior into an inner room, sometimes a secret room that is completely white in terms of floor and ceiling space, and objects of furniture. The room is also flooded with high-key, white light. In this white space, the most advanced of technologies can be found. It is as if only the most special of discoveries can be "born" in a

white room/womb. From this nerve centre -- as is the case in *Men in Black* (1997) -- humanity fights back.

Such a finely drawn symbiotic relationship between salvation science and whiteness works to confirm and reaffirm white people's racial superiority and therefore their primary, essentialised position on a racially-inscribed evolutionary ladder. By positing that the most advanced forms of science are white-inspired, and by allowing this white science to "save the day," and also, at times, to permit travel back and forward in time, post-war science fiction film both constructs an imaginary timeline that has white people as navigators of all human history, and also imagines a human teleology that has been singularly driven by the ingenuity, by the brilliance, of white people. It is as if they were and are, finally, the origin and the future of the species. *2001: A Space Odyssey* (1968) plays this scenario out with the present meeting the future and the past (the primal scene) in white-encoded fantasies of the story of creation.

If one were to take again the example of the professor/physicist stereotype, one would find in his pursuit of answers, solutions, inventions, and as yet "unseen" patterns in the cosmos, the key signifiers for/of the highest form of human intelligence. As such, this figure embodies the racial myth that white people are, in effect, cerebral entities; all brain and no body entities that can and do solve the mysteries of the universe, and who therefore resonate at the core of the story of creation itself. In this context, the Professor can also be seen to work in relation to another, or Other, racial myth that circulates around the black male and female in popular culture. This is the myth of the black as all *body and no brain* -- bodies that have no place in the "enlightened" narratives of science fiction cinema -- unless that is, of course, they occur in the symbolic form of the marauding alien creature (Taubin, 1993).

The White Alien Messiah

In the narratives of science fiction, the "ethnic" alien is often placed in binary opposition to white communities, and the healing, positive values of white science and scientists. The ethnic alien visits Earth or a space "community" to destroy it, infect it, and transform its dominant cultures and moral systems. Monstrous, unstoppable and inter-racial reproduction is often the (white) terror that follows the alien creature. In *Alien*, one can offer a reading of the alien queen that recognises the hallmarks of a sexually charged, animalistic black woman. As Amy Taubin contends:

> the alien queen bears a suspicious resemblance to a scapegoat of the Reagan/Bush era -- the black welfare mother, the parasite on the economy whose uncurbed reproductive drive reduced hard-working taxpayers to bankruptcy. (Taubin, 1993: 95-96)

However, the white science salvation story is further extended or complicated in certain extra-terrestrial encounter narratives where the hegemony of white science is supported by positive "Alien Messiah" figures who in "visiting" Earth bring with them an even more advanced form of scientific knowledge than humans currently possess, and a range of scientific technologies that in effect put them in touch with the power of God -- since these Alien Messiahs can fly, wreak havoc, and resurrect the dead. Alien Messiahs often arrive in a halo of white light -- as in *Close Encounters* -- to awaiting disciples, who marvel at their transportation, their intelligence, their superior technology, in what are in effect thinly disguised Ascension and Redemption scenarios (Ruppersberg, 1990). In short, these superior,

scientifically advanced aliens are in fact techno-Gods visiting or returning to Earth to confirm both the hegemony of white science across time and space and the essentialist truth that white people are closest to, are in fact the "chosen ones," of these higher beings or techno-Gods. According to this scientifically binding essentialist trope then, life begins with white science, life evolves with white science, and the future is only known in and through white science. Politically speaking, of course, these techno-Gods speak to the emergence of a new powerful class, or power elite, of white doctors, surgeons, and technocrats that emerged in the post-war period. The white Alien Messiah brings something very special to the world he ordains with is technological presence.

According to Ruppersberg, one can begin to understand the allegorical meaning of the Alien Messiah narrative in terms of the way that it attempts to explore and solve the prevalent fears of the age. Such fears include nuclear and biological warfare in the 1950s, the fear of racialised others in the 1980s, and the general spread of technology/hi-tech science into all areas of social life since the end of the Second World War (Ruppersberg, 1990: 32). The context for the arrival of the Alien Messiah figure is always predicated on an air of overwhelming despair. Either the world that he arrives into is on the point of auto-destruction -- threatened, for example, by nuclear catastrophe, as in *The Day the Earth Stood Still* (1951) and *Twelve Monkeys* (1995) -- or the "ordinary" lives that he will encounter are chaotic. They are failing, faulty lives looking for hope, needing transformation, wanting salvation. In *E.T. the Extra-Terrestrial* (1982), the Messiah is called upon to heal and transform an unstable nuclear family; in *Close Encounters of the Third Kind*, the Messiah is called upon to give existential hope and instruction to a dispirited, going-nowhere middle-aged white man; and in *The Last Starfighter* (1984), the Messiah is called upon to take a bored and lonely teenager on a inter-planetary rite of passage journey.

Alien Messiah figures then, are ascribed powers normally only associated with God, powers over life and death, with resurrection a common theme in these films (as in *E.T.*), and the holy power to provide counsel and credo for ordinary humans to follow, and ultimately to be redeemed by. The symbolism that accompanies the arrival of the Alien Messiah supports this redemption reading. His/their arrival is generally accompanied or heralded by the heavens opening up (in *Close Encounters* the clouds part, the sky rumbles, electricity grids light up the air), and by beams and streams of white light as he/they descend from their space ship(s). It is as if God himself has made the "second coming" journey across time and space. As Ruppersberg summarises, the Alien Messiah is "an overtly or covertly religious personage, whose numinous, supra-human qualities offer solace and inspiration to a humanity threatened by technology and the banality of modern life." (Ruppersberg, 1990: 32)

However, at the same time and almost paradoxically, the Alien Messiah figure is also fetishised as the supreme rationalist and archetype techno-scientist, brought to Earth through superior technology, furnished with advanced weaponry and scientific knowledge, and motivated by scientific reasoning and logic alone. In *The Day the Earth Stood Still*, the Alien Messiah Klaatu arrives to inform the Earth people that they are irrational creatures, who do not yet treat science with the care it needs, and as such threaten the stability of the Cosmos. The Alien Messiah can hurtle across galaxies because of the warp drive or advanced rocket fuel in their spacecraft, can cure the terminally ill and resurrect the dead because of a medicine or an advanced piece of medical equipment; he can protect his ship and defeat Earth's defences because of hi-tech weaponry devised in a laboratory off-world, and can persuade and convince people through the logic of argument and by reference to the paradigms of science, and can proclaim where and why Earth's science is going badly wrong,

as the example of Klaatu suggests above. The Alien Messiah, in short, is a scientific entity, a technological God, a higher white being no less (and certainly not in this context racially/politically other at all). It is this higher form of white techno-science that is being admired and worshipped. Ruppersberg suggests, in relation to the film *Close Encounters*:

> The aliens are exalted by their own technological sophistication. They behave as exalted beings. They appear exalted to earthly humans because of that sophistication. Technology has redeemed them from original sin, made them Godlike, sent them to us with the best of intentions. (Ruppersberg, 1990: 35)

The relationship between white techno-science and Christian religion in the figure of the Alien Messiah is all-important here. It establishes white science as the motor of human history, and ultimately secularises (rationalises) God and the story of creation while at the same time imbuing science with a spiritual side -- but all within a framework of white identity formation. As Richard Dyer has argued, the motifs, symbols, and rituals of Christianity, especially around the Ascension and Redemption narratives, are imbued with a white aesthetic, with holy white personage (Dyer, 1997: 15-18). In the Alien Messiah narratives, however, what is different is that hi-tech white science is not simply awarded, credited with the omnipotent and omnipresent powers of God, but the stories suggest or "prophesy" that God is or was a product or creature of white science "all along," and that white science, therefore, is at the heart of the origins of mankind. The techno God who arrives today is but a mirror of (the techno) God who arrived "yesterday" -- arrivals singularly motored by the technologies and spirituality of white science.

In Alien Messiah narratives then, white science is given the ultimate pedestal and position from which to display its powers, and to proclaim its importance to modern life, since viewers are also told it is through (the turn to) white science alone that the problems of today -- even if these problems seem to be science-based -- will be finally eradicated. A connection between the highly advanced spiritualised science that Alien Messiah brings and the white science on Earth is therefore firmly established -- each is part of the same lineage but at different moments of advancement, and it is only towards better, more advanced forms of science that earth people should progress (since this will also get them closer to God/techno-God, and to the purest forms of whiteness). More white science, not less is what is needed to cure the modern ills, and to give meaning, empowerment -- *real spirit* -- to post-war, or modern white lives.

In *Close Encounters*, one of the key characters chosen to be brought into the white light of the ship, to be taken away and redeemed through the healing, resurrecting powers of the Techno-Gods, is a crisis-ridden middle-aged white man looking for redemption, hoping for salvation. It is his manifest destiny to be taken on board and taken "out there," so that one day he can/will return as the enlightened one. But his redemption, finally, is every white person's redemption and salvation. This is a "calling" that goes out to every white person, regardless of gender, class, and nationality. In the bright, white light of the Techno-God's ship, all white people are treated as one.

The Science Fiction of White Death

However, white science or rather the hyper-white version of it, is also represented, sometimes within the same science fiction film, with a range of destructive, anti-human/life impulses and drives. That is, when science is literally and symbolically *too white*, when it draws into

its practices, processes and technologies too much or too many of the rationalist values and purist motives that are associated with or emanate from idealised whiteness, then that science becomes a sterile, absent, destructive force for the individual and for the wider society. In short, hyper-white science brings symbolic and literal death to those who embody or embrace it.

At the symbolic level, hyper-white science (science that is too white) is shown as a barren, sterile entity, an almost paradoxical force that is as much about absence as it is presence. Through what is often a visually loaded mise-en-scène, hyper-white science rids the space/spaces connected to it of colour, lines, shapes, texture and depth, and people/scientists of their irrational, emotional and sexual life forces, preventing them from being fully human; leaving them in a comatose, automaton-like state -- a state of collective negation. In white encoded laboratories, "nature," in the form of bacteria, germs, human sweat, human emotion is excluded, actively repulsed, in case it interferes with the synthetic, methodical experiments taking place. This white space is so ultra-clean that nothing could grow there unless it has been artificially planted by scientists in test tubes, incubators, or sealed walls. In these ultra-white spaces, hyper-white scientists give up on their humanity: they forget to eat and they lose all sense of time. They forget their social manners, and important social events/engagements, like family birthdays, or a meal with a girlfriend/boyfriend, for the pursuit of scientific truth. They give up life for the death wish of hyper-white science.

In *THX 1138* (1971) the techno-totalitarian futuristic world in which the film is set is wholly imagined in terms of depthless, borderless white interiors and exteriors, so much so that the illumination from the screen is almost blinding, and dislocates the senses; one cannot recognise depth, or pick out distances, one cannot simply see through the white stuff; the artificial, synthetic white light that makes up the screen. This suffocating nausea (a metaphor for/of hyper-white science?) is compounded by the screen being filled -- or rather emptied -- with white scientific instrumentation, white uniforms, which are worn by everyone but the Police, and milky white bodies (shaved, hairless, sometimes naked, high-key lit) that are themselves regulated and controlled and conditioned by the drugs they are forced to take. As Vivian Sobchack notes, "Human beings -- hairless and dressed in white clothing -- show up against the white screen as disembodied heads and hands floating in limitless space, disconnected from a context and from themselves." (Sobchack, 1987: 98)

The notion of being "disembodied" is crucial here to understanding what hyper-white science brings to or forces upon this dystopian world. In this techno-totalitarian nightmare, the body has been denied the borders and boundaries that it needs to be identified or felt as flesh, tissue, bone, as a sexual entity. So people are made to exist solely in their heads, in free-floating space. They are, in effect, without bodies in the film, and consequently, are imagined to be the highest, purest, but simultaneously the "deadliest" form of whiteness. There is no -- or there is not meant to be -- any individuated, grounded life here aside from cybernetic simultaneity. In effect, what organises and regulates the spaces and behaviours of this sterile city are the principles and strategies of "scientific management", where time, motion, and a disciplined division of labour regiment all actions and motivations. The idea of white surveillance is again key. The sterile city in *THX 1138* has emerged out of the perceived need to record every moment of every day so that, in effect, racial purity and supremacy is maintained.

This is why the central character THX is so threatening to the dominant order. He desires, he conspires and he falls in love. In essence, he finds and explores his impure, libido-driven

body in the film. THX finds, in short, a humanist form of whiteness. As such, at the end of the film, he is driven out of what is a synthetic, soulless underground world into natural light, into a warm burnt-orange sun, rising on a new day. In *THX 1138* then, the spatial metaphor (Desser, 1999) of high/low, exterior/interior, good/bad works to finally valorise the natural version of white life above ground as against the hyper-white version of life found below. As Michael Ryan and Douglas Kellner conclude:

> THX flees the cybernetic society, and the last image depicts his emergence into freedom and nature. His liberation is associated with a bright orange sun that strikingly isolates him as he emerges. The bright sun is a metaphor for individual freedom, for the departure from a world of contrivance and artifice into nature. (Ryan and Kellner, 1990: 59)

But this new beginning for THX is one built on a premise of a return to a mythical agrarian past, a more natural age, one without the negation that advanced hyper-white science brings, one that puts him back in touch, finally, with his more natural, human form of whiteness. *THX 1138* is a message-driven story about the perils of letting too much whiteness -- too much techno-whiteness -- into the world.

Too much whiteness is also often defined in terms of the figure of the android in science fiction cinema (Dyer, 1997: 212-217). The android as the "highest point of human aspiration" exists as the embodiment of hyper-whiteness, of hyper-white science (Dyer, 1997: 213). Androids are on the one hand instruments of precision, computer-programmed, non-reproductive advanced life forms that are consequently supposedly superior to irrational, fallible, soft-bodied humans. They are also often symbolically hyper-white either in terms of their internal selves; made of precision "white" metal engineering, or white fluid (fake, non-reproductive semen) that flows beneath their pale, white simulacrum skins, or in their external manifestations. As Dyer observes in relation to *Blade Runner* (1982):

> The whitest of hue are the replicants, especially the two most formidable in resisting Deckard, Roy (Rutger Hauer) and Pris (Daryl Hannah) who both have pale faces and bleached blonde hair. The casting of Hauer, unmistakably Teutonic, and thus at the top of the Caucasian tree, is especially suggestive. (Dyer, 1997: 214)

But androids are also at the same time a type of nothingness, part absent creations that as a consequence inevitably draw attention back to the lack of life at the core of their hyper-white beings. Because androids cannot reproduce, or emote (except through circuitry and programming) they are singularly cerebral entities -- their bodies merely functional but never lived or ever experienced as real bodies (although many of them dearly long for this). They live life in their heads. They live empty lives, or rather since they are not really alive at all; they are (also) merely the lives of the walking dead.

In *Star Trek: The Next Generation*, the android Data (Brent Spiner) has been fitted with a positronic brain that enables him to possess a degree of human consciousness -- a consciousness that supposedly equips him to make decisions like a "normal" (humanist) human would. However, Data is still more machine than human. He cannot directly experience human emotions and so throughout the series exists in a form of identity crisis where he goes in search of emotions he does not have (Wilcox, 1996). Data, consequently, is foregrounded as someone caught in a life-and-death struggle over "who am I?" as someone

who is, in effect, hyper-white looking for life. Data is marked out by his pale, whiter-than-white skin, concealing but yet revealing the hard science that sits beneath it.

However, it is more often than not the hyper-white scientist who comes to "champion" and embody the core values of hyper-whiteness; who eventually acts out the destructive forces of having let too much of it into their lives; and who marvel at an alien creature precisely because it represents the core values of rationalism, calculation, and asexuality that they also embody. In what is often a crucial narrative moment, the hyper-white scientist is given the narrative space to espouse this position. Often shot in an unnerving close-up in his laboratory environment, the hyper-white scientist is allowed to explain and marvel at a recent supra-discovery or hi-tech invention, or at the amazing asexual biology of an alien creature he admires or identifies with so much. In so doing they reveal not only their own cold-and-calculating logic but also their obsessive affinity with an ultimately destructive force -- with hyper-whiteness personified.

In *The Thing from Another World* (1951) the scientist Carrington discovers that the alien who has been terrorising the arctic camp is a "vegetable" that has all the positive qualities he associates with a superior life force. As Carrington sermonises to the rest of the military and scientific teams: "No pain or pleasure as we know it. No emotions. No heart. Our Superior in every way.... If we can only communicate with it, we could learn secrets that have hidden from man since the beginning." For Carrington then, "the alien is the 'ideal' of the system of scientific-technical rationality," or in my ethnically inflected reading, it is the ideal embodiment of hyper-whiteness (Jancovich, 1996: 36). It is a mechanical, calculating, complex creation that reproduces without the need for sexual, emotional contact -- the product and producer of an Immaculate Conception no less. From the moment that Carrington discovers how pure in thought and action the creature is, he begins to become more like the thing he so admires. He struggles to communicate (emotionally) with the other scientists and soldiers except through the terms and concepts of scientific enquiry. His pursuit for knowledge becomes, as he says, "more important than life," so that he will sacrifice inferior human life to preserve the alien, and he will attempt to extend the alien's life, for example, by planting seed pods that will help it re-produce.

Asexual reproduction is central here, because it draws into the narrative one of the key signifiers, one of the key contradictions, of what it means to be hyper-white. To be hyper-white is to be beyond those primitive, and impure sexual and reproductive drives that emerge in and between heterosexual, sexed individuals. To be a hyper-white male is to have resisted, denied, or negated the "dark drives" of sexuality (Dyer, 1997: 28). To be a hyper-white female is not "to have such drives in the first place... The model for white women is the Virgin Mary, a pure vessel for reproduction who is unsullied by the dark drives that reproduction entails." (Dyer, 1997: 28-29) In *The Thing from Another World* the hyper-white alien reproduces without the need for sexual contact, without the need for emotional involvement, and as such is emptied of, or has never had any of these "dark drives," and so the film displaces -- or at least tries to displace -- white human physicality from the reproductive equation. This is why, for Carrington, the alien is the higher ideal -- it is supremely sexless and yet reproduces with mathematical precision. It is a clean and pure form of reproduction. The Thing is hyper-whiteness embodied. However, on another level the presence of the alien allows Carrington to himself reproduce asexually (to become truly hyper-white) -- not just in his fantasies but because he gets to plant the seeds that will allow a superior, sexless form of reproduction to take place. In essence, Carrington has sex in the film but it is an absent, non-human, form of intercourse, which for him is "ideal."

In *The Thing from Another World*, all this is played out in apocalyptic fashion; at stake, not only the survival of the other scientists and soldiers, but humanity itself. The logic of the film suggests that if this asexual, immaculately hyper-white form of reproduction were to run its true course, then it would ultimately spell the end of white civilisation, since "normal" (here, read *real*) white people would no longer be required to love, emote, reproduce. In *The Thing from Another World***,** both the hyper-white scientist and the hyper-white alien must be destroyed if humanity ("normal" whiteness) is to survive or if is to continue to reproduce successfully. And so the film checks and balances their diabolic power with liberal soldiers and feminine scientists, who finally must destroy a "monstrous" form of nature, if humanity and the human species are to survive at all.

In this context, the cultural paradox of what it means to be white is clear. Achieve and reach for the higher state of whiteness -- spirit, rationalism, logic, and purity -- and you move a step closer to absence, negation, pathology and, ultimately, death. But this is also a cultural curse since white people who fail to reach for the heavens are always haunted by their "dark drives." Haunted by these drives, white people are compelled to reach for perfection but in so doing risk death. And so the horror story of being white goes on.

In summary, in this science fiction of white death, modern science is at its most destructive when it is produced by hyper-white scientists. It is at its most sterile and deathly when the symbols of whiteness come to dominate the mise-en-scène, and the spatial organisation of the film. This is narrativised through the way hyper-white scientists' actions, behaviours, and worldviews are often mirrored with a technologically superior alien life force (a Devil Messiah) whose apocalyptic, remorseless, techno-reproductive qualities they admire and in part share, and who, in effect, represent the logical end point of their hyper-white science, of their own hyper-white identities. If one was allowed to make a giant leap from science fiction text to life in the scientific age then one would find ambivalence around the values of the white power elite that emerged in the post-war period.

Conclusion

The science that people experience in the "real" post-war world is marked by a series of contradictions, and a number of contestations. While science is valorised as the healer and saviour of humankind, it is also denigrated for its de-humanising, oppressive practices, processes and technologies. Post-war science fiction, at least sub-textually, plays out this struggle (shaping it and being affected by it) through the way it allows science to magically transform the cosmos, but also to bring it the point of auto-destruction. Whiteness is an essential ingredient in this struggle since through the filter of whiteness science gets its contradictory, good and bad, forms of embodiment. And so the story of science, of science fiction, is also a story about the contradictions and contestations at the core of white identity formation. White science/whiteness can be a liberating force: hyper-white science/hyper-whiteness can be a truly apocalyptic one. When one reads science fiction in this way, one gets closer to an understanding of the life-and-death struggle at the core of white identity formation.

But one also gets closer to what is actually a *fiction of whiteness*; the fiction that whiteness exists a *priori*, and is at the core of the story of creation; and the fiction that whiteness is enlightenment and progress and is a racially superior category. One gets closer, in effect, to seeing whiteness as fiction, construction, as cultural *affect*. But, finally, one also gets closer

to seeing this fiction of whiteness as contradictory and unstable -- propelled by the logic of its own death-drive and asexual negation.

I want to end this article by returning to the 1956 version of the *Invasion of the Body Snatchers* to situate this life-and-death struggle over whiteness/science at the centre of the film. Family Doctor Miles, his beautiful fiancée, and his small-town family and friends represent "normal," everyday whiteness: all is well (conservative, heterosexual, religious, humanist) in Santa Mira until the alien pods arrive and begin to take everyone over. But the "pod people" are not symbolic of racial Others, or communists, or (just) Fordism/scientific rationalism as Jancovich has suggested (Jancovich, 1996). These lifeless, asexual, pale imitations of real (fleshy, sexed) white people are in fact hyper-white simulacra. Their collective negation, their not quite being there, their remorseless rationalism and purity of motive (wanting, offering, perfect assimilation to a higher state) embody the higher ideals and behaviours of whiteness, and the higher ideals and behaviours of hyper-white science. But these ideals and behaviours, as I have noted, bring death to bear on the hosts. This is why humanist white Doctor Miles is so fearful, and this is why he runs away -- away from the ghostly apparition of his own white death, from the brutal rationalism of modern science.

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