Scoring Incredible Futures: Science Fiction Screen Music, and ‘Post-Modernism’ as Romantic Epiphany

‘One of the crucial antinomies of art today is that it wants to be and must be squarely utopian, as social reality increasingly impedes utopia, while at the same time it should not be utopian, so as not to be found guilty of administering comfort and illusion. If the utopia of art were actualized, art would come to an end.’

This typically provocative dialectical construct of Adorno would seem to have special applications in the field of screen music, and more specifically within a genre—that of science fiction—predicated on a futurist representational aesthetic but whose products mostly lie outside or linger on the periphery of putative Adornian categories of high art. This study explores the implications of utopian thought, and Adorno’s claim, for scoring practices in small- and big-screen science fiction repertoire across the spectrum of artistic and commercial aspirations.

Utopia and dystopia: literature to screen

The years surrounding the turn of the twentieth century saw not only the birth of the cinema but also a great flowering of socialist and scientific utopian literature, led by works such as Edward Bellamy’s prediction of life in the year 2000, *Looking Backward* (1888), William Morris’s *News from Nowhere* (1890) whose Arcadian nostalgia was rooted in a nineteenth-century mediaevalism at odds with scientific progress, and H.G. Wells’s pro-science *A Modern Utopia* (1905). The complex history of utopian thought nevertheless reminds us that most of these works existed
both in a period framed by Shelley’s *Frankenstein* (1818) and Bram Stoker’s *Dracula* (1897) with Darwin’s *Origin of Species* (1859) at mid-point offering radical reappraisal of the human condition, and amid contemporaneous contexts of social, scientific and futuristic dystopias such as Dostoyevsky’s *The Brothers Karamazov* (1880), Wilde’s *The Picture of Dorian Gray* (1891) and Wells’s *The Island of Dr Moreau* (1896), *The Time Machine* (1895) and *The War of the Worlds* (1898), all of which dated from the last twenty years of the nineteenth century. Utopian and dystopian modes of thought became yet more closely linked at this time, interdependently feeding into a variety of related fields, from science fiction and gothic horror—with which they share the practice of presenting ‘otherness’ as symbol of desire or warning, as a discontinuity from a presumed ‘ordinary’—to political satire and social realism, energized by conflicting responses to modernity and continually examining and re-examining the bases of similarity and difference, of the known and the unknown. Furthermore, within the utopian category, Morris’s *News from Nowhere*, for example, was intended as a rebuttal of the ‘soulless mechanical socialism’ of Bellamy’s *Looking Backward*, and this crucial dichotomy within the modern literary repertoire, clearly a legacy of the similar, much earlier, divided concerns of classic works such as Thomas More’s humanist social *Utopia* (1516) and Francis Bacon’s scientific-industrial projections in *New Atlantis* (1627), is fundamental to this study’s claims.

Conflict and potential apocalypse led many to declare the twentieth-century death or paralysis of the utopian imagination, a belief that gains credibility given the domination of the literary sub-genre around the mid-century by Huxley’s *Brave New World* (1932) and Orwell’s *1984* (1949)—respective critiques of the two great modern political utopian experiments of Soviet communism and Western
capitalism—and Wells’s *The Shape of Things to Come* (1933), Bradbury’s *Fahrenheit 451* (1953) and Burgess’s *A Clockwork Orange* (1962). Nevertheless in the niche market of American pulp science fiction magazines such as *Amazing Stories* (from 1926) and *Astounding Stories* (from 1930) the utopian flame was kept burning, sensationally and graphically if not socially, politically or philosophically. Increasing liberation through technology, from ideology and of sexuality during the post-war years contributed to what might be called a ‘post-industrial’ utopian revival which, at least in science fiction literature, became more concerned with exploring inner states of consciousness than positing distant futures. 1970s political and economic gloom may have played its part in this, while subsequent issues of ecology, disease, terror and the apparent demise of the archetypal utopian dream of communism over the past two decades have, through a pervasive pessimism, rendered it more difficult to trace dominant trends within the genre. It may be that the ‘reality-transcending’ power of utopia has disintegrated, signalling the drastic decay of the human will. As one writer put it (in the blissful naivety of pre-feminist gendered language): ‘The writers of the utopias of earlier days were telling Man how to build heaven; today they are content to teach him how to survive in hell’. 3

Given the close structural and generic influence of literary models on early cinema, and screen’s increasing abilities through the past century to project visual illusion and fantasy more effectively than any other medium, it is not surprising that it has participated vigorously in the futurist representation of utopian and dystopian ideas, a practice which began as early as 1902 with Méliès’s *Gulliver’s Travels* and *Voyage to the Moon*. But it is this very ability that is inherently problematic, for to imagine such ideas and express them in conceptual language is easier than to re-create and embody them convincingly in a way which involves all the moving image’s multiple visual
and aural contributory media. This is the case, too, with certain major silent films whose premieres and selected early screenings were accompanied by live performances of specially written scores. Music’s role in the literary genres mentioned above is rare and mostly peripheral, and the difficulty surrounding the use of music in screen contexts of this nature is compounded by its dual diegetic and non-diegetic possibilities: what form should the non-diegetic musical accompaniment to futurist visual representations of utopian or dystopian topics take? And the problems of representing music of the future diegetically are self-evident. References in Bacon’s science-fiction utopia *New Atlantis* to microtonal musical ‘sound chambers’ generating ‘harmonies which you have not, of quarter-sounds, and lesser slides of sounds’ are, in late-twentieth-century terms, quickly susceptible to becoming clichéd, historicized electro-acoustic or avant-garde imitations in their attempted realization.

**Science fiction film and the music of the future**

Nevertheless, for better or worse, the anti-commercializing and anti-Hollywood call of Eisler and Adorno for ‘progressive’ film scoring through aesthetically conflicting atonal music was answered, perhaps against their expectations, by certain sectors of the science fiction and horror genres. Although there have been and will continue to be countervailing mass-media cultural patterns of appropriation (to be discussed below) at odds with this scoring philosophy, it is still true to say that, from the time of Gottfried Huppertz’s original ‘modernist’ score for Lang’s *Metropolis*, the science fiction genre has given composers and directors greater opportunities for experimentation than most others. That a film genre which, at least in early post-war America, was often predicated on the widespread fear of communist infiltration, indirectly supported the theories of such émigré Marxists is ironic in the extreme.
Excessive order and loss of individuality as corollaries of technological progress were the dystopian themes of Bertrand Russell’s *Icarus, or the Future of Science* of 1924, written in response to J.B.S. Haldane’s optimistic *Daedalus* (also 1924), and, perhaps significantly, this was the same year in which Lang began work on his film which explores similar themes. As Schönemann notes, in the Germany of the 1920s, and in particular in Berlin, the expressionist imagery of the machine and urban environments as nightmare co-existed with the constructivist and futurist admiration for technology, and as one thoroughly versed in the art of expressionism, surrealism and the Bauhaus, and fascinated by mechanization, Lang introduced these concerns visually into *Metropolis*. Perhaps as a result of this mélange of influences, however, there is a deep ambiguity at the heart of the film which presaged many of the subsequent problems of science fiction on screen, often embodied in its scoring traditions. The twin poles of, on the one hand, Egon Friedell’s early twentieth-century Berlin as ‘wonderful modern engine room’ and ‘brilliantly constructed homunculus-machine’, and on the other hand, George Simmel’s modern metropolis inducing an ‘intensification of nervous stimulation’ through the ‘rapid crowding of changing images, the sharp discontinuity in the grasp of a single glance, and the unexpectedness of onrushing impression’ invoke both the emerging sensory possibilities of cinematic representation and the deeply riven utopian-dystopian dialectic of technological and industrial progress.

Contemporary reception of the film pointed to its hackneyed romanticism, weak script and entirely outdated technology (for Wells it was ‘the silliest film ever made’). It was attacked from the political left and right for respectively its visions of oppressive machinery and its pandering to the class struggle. Later it would be perceived both as inhuman, elitist reflection of the Weimar republic, and as proto-
Nazi in its projection of the will-less masses and a ‘steely romanticism’ of the type hailed by Goebbels. This latter characterization proves to be key to the discussion in this study, emanating as it does from a basic contradiction between some of the film’s conceptual and visual content and its reactionary ideology: a mis-match that would underpin not just the Nazification of art and culture during the Third Reich, but also the party’s very philosophy of reactionary modernism or technological romanticism, its fusing of modern technology with the romantic ‘cultural system of modern German nationalism’. As Thomas Mann observed: ‘the really characteristic and dangerous aspect of National Socialism was its mixture of robust modernity and an affirmative stance towards progress combined with dreams of the past: a highly technological romanticism’. Whilst this may be doing some injustice to the film’s altogether simpler narrative pretensions, it seems clear that it did embody much of Germany’s growing inter-war disenchantment with American modernity and progress, with the ‘rationalization [that] … kills the human side of humankind’. Metropolis thus both fed on the distancing of humankind from technology which was the legacy of the first world war (and thus international in scope), and attempted to re-humanize modernity by setting guarded spiritual traditions of old Europe against bald American progress and optimism, by interlacing an idealism tipping over into fantastic myth with the mechanical, the rational and the materialist. In doing this it held in tension the rejection of capitalist modernity seen as utopian in 1920s Germany and faithful to the old authoritarian social order, and the inverse dystopian ‘undoing of modernization and technological progress’ which leads to ‘self destruction’: hence the film’s simultaneous glorification and demonizing of technology as both liberating and oppressive.
Huppertz’s score, a rich kaleidoscope of musical topics ranging from Wagner and Strauss, through proto-Gebräuchsmusik, to Austro-German café music, colludes in and aestheticizes this ambivalence at the very start of the film. Here the majestic sight of towering skyscrapers is matched by a radiant C major full-orchestral chord with melodic added 6th, and the sudden shift to images of ever-turning cogs, wheels and machinery by a dissonant moto perpetuo built on motoric ostinati and augmented 6th chords and topped by continual swirling chromatic turn figures: an intensified, radicalized combination of topics that had already been heavily encoded with connotations of threat and negativity in the world of nineteenth-century opera and stage melodrama. Later the same musical opposition assumes narrative significance when the ostinato music provides the choreographed visions of the underground machine room (11:07) with the incessant sound world of clunking and whirring machinery unavailable to the director, stylistically calling on Neue Sachlichkeit sensibilities and yet also diluting, for mass consumption, the kind of extreme mechanistic approach characteristic of Antheil’s music for Léger’s Ballet mécanique (see Example 1: boxed numbers refer to shots within the scene, the content of which is outlined below the example). The utopian montage of the ‘futuristic’ cityscape constructed and maintained by the hands of oppressed workers, later viewed from the high-rise penthouses of the elite and referenced via the intertitles in Freder’s entreaty to his father (20:47), is again accompanied by a development of the earlier triumphant, sweeping romanticized orchestral textures, now involving liberating mediant shifts but concluding again in a strong diatonic C major plus added 6th (see Example 2). This seemingly innocuous form of musical characterization (essentially a juxtaposition of pared-down romanticist and modernist aesthetics), however virtuosically conceived and realized, can in retrospect be seen to have provided an
early example of a paradigm adopted by much subsequent science fiction scoring practice,\textsuperscript{19} with all its cultural-historical paradoxes and impossibilities hinging on the continued implicit privileging of diluted nineteenth-century idioms, and particularly tonality, as markers of affirmation in the narrative, and on the association of technological threat with a variety of forms of the latest musical avant-garde. Recourse to the latter throws up two immediate problems: today’s musical avant-garde is not tomorrow’s, and in light of that its use cannot resist historicization or an inevitable degeneration into the clichés of an outmoded futurism; furthermore, difficulties arise at moments in historical development when the very notion of a musical avant-garde loses potency, becomes culturally unlocatable, or assumes retrogressive tendencies. Notably at the key, transgressive moment in the film when the boundaries between the human and the machine are dissolved, and technology is held up as a medium of transcendent metamorphosis—the robot transformation scene (1:07:09)—the music called upon is again the post-Wagnerian, chromatic yet tonal, idiom of one of the film’s most distinctive Leitmotifs, of which John Williams would have been proud (see Example 3).

In the post-Metropolis sound era the use of music alongside visual representations of utopian and dystopian futurist themes reveals the intractable problems of its legacy, as suggested by the following survey of some of the more prominent and distinctively scored Anglo-American screen repertoire containing musical elements representative of significant scoring trends. Arthur Bliss’s war-march score for the 1936 H.G. Wells adaptation Things to Come, for instance, though described by Wells as ‘boldly experimental’, makes no concession to the 100-year time span of the film and appears determinedly anachronistic (and British) in its latter stages. The American cold-war fantasies The Thing From Another World and The Day The Earth Stood Still (both
1951), though quite different in their approach to alien incursion and not compelled to confront issues of a distant projected future, have scores in a similar, dissonant post-romantic style by Dmitri Tiomkin and Bernard Herrmann respectively, marking only moderate developments beyond Huppertz’s musical language through occasional bitonality and electronic timbres such as use of the Theremin. Furthermore, both *The Thing from Another World* and *The War of the Worlds* (1953, music by Leith Stevens) strongly contrast, Huppertz-like, this dissonant post-romantic style (standing for alien threat) with, respectively, four-square military march music and warm, ‘angelic’ romanticism replete with chorus and bells, as their concluding triumphant gestures.

The film which at first sight would seem to challenge most forcefully the aesthetic framework set up by *Metropolis* is *Forbidden Planet* (1956). Its entirely electronic ‘score’ by Louis and Bebe Barron, the first of its kind in Hollywood, is credited as ‘electronic tonalities’ and was composed at a time when the electronic music of Stockhausen and Eimert was in its infancy. Functioning both as music and sound effect track, it was clearly designed to sound alien and futuristic. For instance, it is increasingly aligned both with references to the astounding relics of a long-dead but highly advanced civilization and, in the latter half of the film, with the monstrous emanations unwittingly created from the main character’s subconscious mind with the help of the aliens’ unimaginably sophisticated technology. Yet at one point the score shifts effortlessly from this non-diegetic function into diegetic mode when an ancient recording of the creatures’ music is played, which has been clearly contextualized in the dialogue as an alien artefact of great value and wonder (c. 50:00). The ease of this slippage is facilitated by the largely non-dramatic nature of the score as a whole, which as both music and sound effect maintains a flexible and discreet distance from the emotional contours of the narrative. Despite Leydon’s claims, and even the
efforts of the composers themselves, this music, through its contemporaneous strangeness, seems to be for the most part conspicuously separate from the middle-American, patriarchal 1950s approach to human relationships depicted in the film, and to act as a repository of certain concerns about new technological growth characteristic of post-war Western culture—developing from lack of understanding and naïve wonderment at its benefits beyond those already harnessed by humankind, through fear and distrust of its potential, to a final rejection of its evil and uncontrollable superhuman power (the planet is set to self-destruct by the departing astronauts). There is a tension between its abstract, largely non-threatening ‘coffee-percolator’ sound world, which briefly intensifies into a louder, throbbing siren-like noise—sometimes ambiguously diegetic in origin—for moments of dramatic pressure (the only concession to the prevailing aesthetic), and the all-too-threatening real prospect of the amoral use of technology which seems to be the story’s message. If this sound world has since become the clichéd symbol of an old-fashioned future, the film should nevertheless be commended for resisting the temptation to provide a counterpoising sentimental ‘human’ element in its scoring, particularly in light of the underlying narrative’s all-too-neat closure, which through this resistance is curiously lent an open-ended, distanced, mythic quality.

Largely because of this single-mindedness, Forbidden Planet set itself apart from conventional Hollywood practice, and in genre terms provided a foretaste of what would happen in a mere handful of later science fiction films which, in differing narrative and cultural contexts, refused to compromise in their aesthetics of musical underscoring. In the 1960s and 1970s, for instance, few films resisted the handed-down aesthetic framework: Fahrenheit 451 (1966) resorted to Vertigo-like wistful romanticism by Herrmann for references to humanistic literary heritage; Fantastic
Voyage (1966) backtracked to a Waltonesque expanded tonality by Rosenman for the concluding scene of escape; Goldsmith veered between quaint pastoralism (for rural settings), the virtuosic avant-garde writing of his early years and some electronic sonorities (for dystopian futures and moments of threat) both within and between the differing timeframes of The Illustrated Man (1969); Silent Running (1972) called on Schickele’s eco-folksong sung by Joan Baez for images of the last remaining forested biosphere floating in space; Logan’s Run (1976) ended in diatonic triumphalism by Goldsmith for the final emergence to new life outside the domes; and audience response to Alien (1979) led to the replacement of Goldsmith’s already quite consolatory score with Howard Hanson’s Symphony no. 2 (‘the Romantic’) for the closing credits. By contrast, as if to pay homage to Baconian utopian ideas, Kubrick’s 2001 (1968) employed the same dense vocal clusters of the ‘Kyrie’ of Ligeti’s Requiem for the tense, sonically painful and potentially dangerous discovery and examination of the black monolith, and the astronaut’s final transcendent journey towards re-birth, revealing an integrated aesthetics of identity between dystopian agony and utopian ecstasy perhaps surprising in a film that otherwise thematizes stark audio-visual polyphony. Within entirely different narrative contexts, at least the first two of the simian film franchise, Planet of the Apes (1968, Goldsmith) and Beneath the Planet of the Apes (1970, Rosenman) similarly maintained their harsh, post-Varèsian rhythmic, melodic and harmonic idiom throughout, opting to end with silent closing credits for their down-beat endings, as did the similarly scored The Andromeda Strain (1971, Mellé) which resists romantic apotheosis despite having a reasonably upbeat, if mildly admonitory ending questioning the response to future biological threats. Here, silence is perceived as the only appropriate way of resisting the lure of the ideal, in the face of the horribly real or the so nearly apocalyptic.
By this stage it is clear not only that a nucleus of ‘avant-garde’ musical techniques primarily centring on intense dissonance was becoming a commodified emblem of all kinds of on-screen negativity (personal, social, technological, dramatic and narrative), but also that (at least Anglo-American) consumer appetite for unresolved, mystical or pessimistic narrative closure was waning. As if to mirror this and a wider cultural malaise with such musical idioms (and no doubt in deference to market forces and the film’s deep immersion in the values of contemporary middle America) the last vestiges of creative boldness were perhaps to be found in the quasi-Ligeti sonorities of the early parts of John Williams’s *Close Encounters* score (1977), particularly in scenes of alien abduction. However, in allegiance with—or perhaps propelling—emerging cultural norms and expectations, these were essentially nullified during the course of the film whose final scenes of wonderment and sentimentality revealed that we did not need to be afraid of the aliens after all, for they too live in a diatonic world, complete with Kodaly hand signals. Matching old-fashioned adventure narratives, *Star Wars* (1977) along with many of its weak imitators such as *The Black Hole* (1979), *Battle Beyond the Stars* (1980) and *The Last Starfighter* (1984), marked a return to Golden-Era heroic Hollywood scoring often with ramped-up rhythmic propulsion, while in more recent times potentially thought-provoking science fiction repertoire such as *Total Recall* (1990), *Event Horizon* (1997), *Impostor* (2002), *The Time Machine* (2002), *Minority Report* (2002) and *Serenity* (2005) are scored in standard, though entirely expert, ways indistinguishable from that of other thriller, adventure or mystery genres: namely with a post-1977 orchestral lingua franca comprising a mildly extended tonal language with mediant and modal shifts, ubiquitous Lydian 4ths, quasi militaristic overtones (heavy brass fanfare material rooted in much earlier scores such as Bliss’s and Stevens’s) or neo-romantic
sentimentality (Gattaca (1997), Contact (1997), A.I. (2001), parts of Twelve Monkeys (1995)) as well as varied combinations of plentiful orchestral stingers, rapid crescendi on isolated, now-commodified, cluster-like pitch aggregates, sweeping horn melodies, pounding beats, multiple percussion, and tensioned upper string writing. In line with increasing commercialization of formulaic narrative closure, it is as if the dissonance and the excessive timbral stridency were needed to play their part in the same way that audiences of melodramatic pantomime feel cheated unless they have a villain to jeer at, and from whom they know they are comfortably protected, on the way towards predictable resolution of the Manichean human drama. As studio executives and producers are no doubt aware, ‘extremely radical departures in musical style risk alienating audiences’, and that simply will not do. The drive for commercial success ensures that ‘the music used in SF cinema overwhelmingly draws on recognizable and well-known conventions and associations’. The domesticating of avant-gardes, dissonance, and textural overload within an overarching reactionary aesthetics which defines these things as ultimately assimilable and controllable pockets of commodified radicalness demonstrates the power of the market place and imperial Hollywood culture to place limits on creativity. This is why I shall later turn to an examination of commercially peripheral repertoire in the final section of this study.

Even scores that tap highly effectively into the metallic, synthesized sound aesthetic of the post-apocalyptic industrial or corporate wasteland, such as those of the Terminator films, cannot resist lapses into romanticism within their overwhelmingly aggressive, pulse-, stinger- and cluster-orientated sonics: witness the turn to lyrical melody at the death of Kyle Reese towards the end of The Terminator (1984) and in Terminator 2: Judgment Day (1991) the brief romantic interlude for a sequence of mother-son reconciliation. It is also interesting that the longer a franchise goes on, and
the more that original artistic teams are diluted or replaced, the more likely it is that, in line with narrative and visual content, its scoring gravitates towards idiomatic standardization. *Terminator 3: Rise of the Machines* (2003), for example, largely eschews the bleak dystopian industrial aesthetic of its predecessors in favour of a humanized thriller format with familiar romanticized orchestral scoring; the quite innovative pastiches of desolate Bartok and Debussy in *Alien* (notwithstanding the capitulatory ending), were replaced with militaristic thriller clichés in *Aliens* (1986), quasi-religious wordless choruses in *Alien³* (1992), and Huppertz-like high-string and diminished-7th horror/tension formulae (along with the usual orchestral hits and rapid crescendo) in various scenes of *Alien Resurrection* (1997). As high-octane, aggressive and striking as Don Davis’s scoring of *The Matrix* (1999) is, it too nevertheless calls on the Huppertz legacy both idiomatically (signature high-pitched swirling chromatic string and woodwind textures) and aesthetically (‘avant-garde’ dissonance and clusters for tension, violence and scenes of devastation set against nineteenth-century tonality of almost Wagnerian grandeur, and/or Lydian 4ths, for monumental vistas, philosophizing about human freedom, Neo’s ‘resurrection’ and romance between characters). These elements and this classic scoring paradigm are consolidated and enhanced in the subsequent films of the *Matrix* franchise, particularly the recourse to heavenly choruses for moments of transcendent (CGI-enabled) action, and lush romanticism for human death scenes and supposed triumph at the narrative conclusion of the trilogy (see Examples 4 and 5).

Like the *Terminator* series, but somewhat more explicitly, the *Matrix* films exploit and integrate the link between post-apocalyptic scenarios and rock music (both *Terminator 2* and all the *Matrix* films use forms of heavy rock for the closing credit sequences, and the *Matrix* films occasionally call on rock- or drum-and-bass-like
beats in the underscore). Passages of extreme danger in the first *Matrix* film where these elements are combined with a repetitive minimalist use of insistent chordal rhythms (for example during Agent Smith’s final street chase of Neo in *The Matrix* (1:54:41)\(^{28}\) offer an interesting, novel approach to scoring mechanistic dystopia, but one which may readily be transplanted to any similar context within other screen genres. Nevertheless, as Hayward has outlined,\(^ {29}\) the rock-sci-fi network of connections is a long-standing one, and the approach encountered in these films would seem to relate practice forwards to Boyle’s *Sunshine* (2007) with its soundtrack by Underworld, and backwards via Lynch’s *Dune* (music by Toto, 1984) to the *Metropolis* Huppertz-Moroder legacy, albeit orchestrally and sonically intensified and with a degree of sophisticated temporal manipulation.\(^ {30}\)

Perhaps the closest heirs to the *Forbidden Planet* aesthetic are the early 1980s pre-sampling electronic scores of Carpenter’s *Scanners* (1981) and *Videodrome* (1983) both composed by Howard Shore. Although (much like the Barrons’ bubbling sounds) Shore’s poor-quality synthesized strings have dated badly, these scores notably play with diegetic functions and the music-sound boundary, enhancing and embodying the effects of unseen malevolent mental activity; they also resist any humanizing tendency towards musical compromise, determinedly remaining within a sound world of dissonant modality, glissandi, drones and pulses.\(^ {31}\) Despite these examples, it is true that in purely technical and idiomatic terms the *Forbidden Planet* score ‘failed to establish any sort of trend or “school” of film-music practice’.\(^ {32}\) Indeed, in their retreat not just to pitched sonorities but to tonality, the later electronic soundtracks of films such as *Blade Runner* (1982) and *The Terminator* might be said to have marked a regressive stylistic step in scoring practice: although the former shares with the Barrons’ a partially ambient function, Sammon describes Vangelis’s musical language
as one of ‘unabashed romanticism … and heartbreaking melancholy’,\textsuperscript{33} and this is echoed in Bukatman’s BFI monograph on the film.\textsuperscript{34} As with the neo-Golden-Age orchestral scores of John Williams, here advances in sound technology are thus coupled with a stylistic nostalgia that may turn out to be a central topic of the kind of post-modernity with which \textit{Blade Runner} has been attributed as multi-generic screen text.\textsuperscript{35} Similarly \textit{The Terminator}'s ubiquitous Aeolian mode partakes in the double-edged practices of certain rock repertoire associated with not only ‘historical and mythical narratives’ but also ‘fear of, but also fascination by, the future and modern technology’\.\textsuperscript{36}

It is of course a truism that nothing dates as quickly as the future, but it may also be the case that nostalgia is not what it used to be. It is often said that science fiction texts, in whatever media, tell us more about the period in which they were created than the period which they aim to represent. Screen works, more than other science fiction media, are particularly vulnerable to such inevitable ‘retro-futurism’ because of the dichotomy of their greater facility for realist representation and concomitant reduced capacity for imaginative suggestion, and their greater dependence on existing solidified conventions of representation (complex audio-visual practices of image, sound and, particularly, musical construction). Thus at the heart of the entire genre lurks even more strongly the intractable paradox that any projected fantasy, however outlandish, necessarily emerges from the context of the here-and-now, and can only have history and the past as conceptual, stylistic and technical reference points.\textsuperscript{37} Thus science fiction on screen may emerge as the archetypal post-modern text. The manner in which such putative post-modernity is configured around the past-present-future axis and notions of musical style history, within both highly commercial and
relatively non-commercial environments, will be the subject of the remainder of this study.

Post-modernism as romantic epiphany

The diegetic appropriation of 19th-century repertoire in ‘Star Trek: Voyager’

Given the particular economic demands of audience ratings and network syndication that apply to TV programming, it may be that a level of critical evaluation different from that associated with cinema comes into play in which even greater significance is likely to be attached to anything musically out of the ordinary. As one of the most commercially successful and arguably more intelligent of science fiction television series, Star Trek deserves particular attention in this regard.

The original Star Trek television series pre-dated the Star Wars phenomenon, but subsequent feature films and spin-off series generally embraced the sweeping orchestral language of the new musical romanticism wholeheartedly. Even Jerry Goldsmith and Leonard Rosenman appear to have abandoned the edginess of some of their previous work in favour of a Coplandesque pioneering nobility in the fanfares of their Star Trek theme tunes and film scores. Leaving aside non-diegetic music, however, the various incarnations of the Star Trek television franchise at least have a history of making moderately interesting allusions to Western culture, politics and history—from the art of Greco-Roman antiquity and Shakespeare to Nazi and 1960s hippie ideologies (and covertly the Vietnam war)—whether in aspects of plot development, script content, characterization, or broader conceptual frameworks. Until recently diegetic music within episodes, though not infrequent, was nevertheless excluded from this practice, having little important bearing on either the wider dramatic structuring of storylines or underlying conceptual themes. Spock has been
known to strum the occasional lyre; Captain Pickard of the Next Generation regularly samples music from the ship’s database; Lieutenant Worf has a working knowledge of Klingon opera; the android Data is an accomplished oboist and violinist; and the crew of Deep Space Nine are entertained by a holographic lounge singer. But these are generally peripheral elements.

Two episodes from the penultimate series of the franchise (‘Star Trek: Voyager’ (1995–2001))—the story of a crew trying to make it back to Earth from hundreds of light years away—depart from this practice and make unusual, potentially ironic, use of pre-existent diegetic music as integrated plot element. The first of these, ‘Counterpoint’ (1998), plays the second movement (scherzo) of Mahler’s First Symphony (1888) over some of the pre-credit sequence and the first few minutes of the episode proper as the crew submit to an enforced inspection by an alien race called the Devore. This race protects its region of space by outlawing telepathic species and regularly searches visiting ships for such people. The Devore leader, representative of a race that thus criminalizes ‘outsiders’, specifically chooses the music from the ship’s database to encourage the crew to ‘relax’.38

The somewhat crudely executed juxtaposition of the music with militaristic, weapon-carrying, jackbooted aliens searching, often brutally, for concealed individuals while the crew line up submissively is notable: substitute the Devore experience with Mahler’s self-confessed alienation from society39 and anti-Semitic Nazi vilification of his music, and an interesting if simplistic gloss emerges on Mahler’s reception history and the programme’s premise of a group of people forever searching for home. Furthermore, as the gentle Trio begins (much reduced in volume—an effect which is carried out for practical purposes but weakens the irony) the ship’s captain and Devore inspector exchange dialogue in which he expresses
fascination with the human cultural mix of ‘science and faith, violence and beauty’, comparing it with the integrating counterpoint in the music which he goes on to name directly. Would it be simplistic to suggest that such ancient concerns which preoccupied Mahler so much in his intellectual life and music and continued to rear their heads in the millennial context of this programme’s production, are a pretext for the choice of this music? Or is this a sly backward nod towards Kubrick’s unprecedented choreographic association of space, the movement of space craft and triple-time music in 2001, hinted at briefly in the triangular geometric placing of the human and alien ships at the beginning and end of the sequence scored with the Mahler? It is known, for instance, that one of the temp tracks used by Kubrick during the making of his film was Mahler’s Third Symphony. The music used here is one of Mahler’s most beguilingly völkisch movements, with its origins in the song ‘Hans und Grethe’, itself almost a replica of the earlier yodelling love song ‘Maitanz im Grünen’ (1880) marked ‘Im Zeitmaß eines Ländlers’. Did the Star Trek producers and musical directors simply jump on the fashionable post-modern Mahler bandwagon? While Strauss’s Blue Danube waltz symbolized the myth of Alt Wien even at the time of its composition (1867) when the Habsburg Empire began its crumbling descent from power, Mahler’s ironic treatment of similar source material (for which he seemed to have an ambivalent regard) just thirteen years later perhaps still carries powerful resonances with Brown’s notion of a ‘post-modern’ scoring of the image. (See Table 1 for a brief tabular description of the music’s alignment with image and dialogue.)

Later, when the Devore leader has gained the Captain’s intimate confidence, the second movement of Tchaikovsky’s Fourth Symphony (1878) is employed diegetically both as romantic contextualization and as a model, cited by the alien, of the concept of ‘counterpoint’ which acts as a catalyst for complex scientific
operations undertaken to locate a time-space wormhole. The fact that this movement is decidedly non-contrapuntal perhaps reveals simply the convenience of its use as emotional signifier, or perhaps it indicates a level of irony and deception as the music (the Devore leader’s favourite) subsequently accompanies a second inspection of the crew and the revelation of the trickery he had all the time been planning (hence the fear of telepaths). Whatever the case, at the point when the Captain-as-heroine eventually turns the tables, countering his trickery with some technological subterfuge of her own, she changes the music selection deliberately back to the Mahler which then, as if mirroring the contours of the composer’s own 20th-century reception history, re-emerges as a superior cultural weapon against oppression, mocking the mocker and yet retaining a certain ironic distance and nostalgia in truly Mahlerian fashion—the Captain had genuinely fallen for her betrayer.

**Table 1. Use of Mahler’s First Symphony, Second Movement, at beginning of ‘Counterpoint’**

<table>
<thead>
<tr>
<th>Time</th>
<th>Music</th>
<th>Action/dialogue</th>
</tr>
</thead>
<tbody>
<tr>
<td>00:55</td>
<td>bb. 43 – 232</td>
<td>Captain Janeway meets Devore leader; he makes it known that music has been chosen for relaxation purposes (music not named)</td>
</tr>
<tr>
<td>01:13</td>
<td>bb. 43–373 (unscheduled repeat)</td>
<td>Animosity between Captain and Devore; inspection begins</td>
</tr>
<tr>
<td>01:45</td>
<td>Usual credit sequence with music by Jerry Goldsmith</td>
<td></td>
</tr>
<tr>
<td>03:25</td>
<td>bb. 1 – 1153 (second time)</td>
<td>Credits continue until 04:57 Brutal search for telepaths carried out: equipment disturbed; crew submissively lined up</td>
</tr>
<tr>
<td>05:16</td>
<td>Cut from bb. 1153 to bb. 1711</td>
<td>During questioning of Seven of Nine: ‘An interlink node. It permits communication with other Borg drones’. ‘You are not a telepath?’, ‘No’ links scene shift to Captain’s room</td>
</tr>
<tr>
<td></td>
<td>Horn transition, bb. 171 – 74</td>
<td></td>
</tr>
</tbody>
</table>
The episode ‘Virtuoso’ (2000) perpetuates the privileging of romantic musical language as universal signifier of human values. In the face of a technologically superior and mathematically orientated species which has never before experienced music, the ship’s holographic doctor—himself the non-human product of advanced technology who is constantly striving to be more human—is adulated as the singer of excerpts of Verdi’s *Don Carlos* and romantic Neapolitan ballad. Unfortunately a superior hologram is manufactured by the aliens which is able to sing their own, more complex, musical works. Thinking that it is him and his music that are the subject of veneration rather than the concept of music itself, the doctor eventually becomes disillusioned and rejected. Arguably the aliens’ composition, which is clearly intended by the programme’s music editors to sound like a simplified comic Xenakis or Schnittke (it comprises a wordless vocalese with absurdly wide tessitura over harmonizations which predominantly combine both transpositions of the whole-tone scale; see Example 6) is potentially of more interest than the Neapolitan Vincenzo de Crescenzo’s ‘Rondine al nido’ which the doctor performs in his farewell concert; but of course their music, built on complex ‘fractal’ mathematical relationships, remains totally incomprehensible to the human crew, who have just been visibly moved by the doctor’s performance. A ‘modernist’ or ‘avant-garde’ musical aesthetic is not just
turned to cliché here but also ridiculed and rubbished as an anti-human cultural tendency. In the real world the Crescenzo piece was of course made even more famous by the Three Tenors phenomenon and its peculiar association with world cup football. The world cup was hosted for the first time in the USA in 1994, and Pavarotti, Domingo and Carreras gave their customary concert on the eve of the competition’s finals at the Dodger Stadium in Los Angeles, subsequently touring America that summer with James Levine.

In this late 20th-century yet futuristic, ‘technocentric’ yet dramatic, mass-entertainment product, the message is again that technology is arid without artistry and soul which is only accessible through the romantic artwork, or perhaps more worryingly, the commodified popular ballad. Rather like Lang’s *Metropolis*, the programme both promotes and denies technology at the same time. Other types of music may even be expressible only through alienating, purely technological means. Although individualist cinematic auteurs may be able to afford to break creative moulds in a way that is not so easy for the producers of commercial television programmes, nevertheless in the face of the post-*Star wars* ingratiating approach to science fiction screen scoring, we may be obliged to revisit Eisler’s and Adorno’s critique and to conclude that in this example, at least musically, the future is not what it used to be. The entrenched traditions of association in a mass medium such as this challenge or at least modify the reception history of a musical modernism and post-war avant-garde that may obliquely have derived much from these disturbing external forces. In between the cracks in the commercial edifice, study of the relation between moving image and music may help uncover interesting tensions in our understanding of musical value and history, and these will be addressed in the final section of this
study with reference to the cinematic employment of Bach’s music as uninflected emblem of spiritual transcendence.

The Bachian intertext in science-fiction film scoring

If music, according to Caryl Flinn, is widely considered to ‘extend an impression of perfection and integrity in an otherwise imperfect, unintegrated world’, and assumes a unifying, utopian function, particularly, though not solely, in film music of the Hollywood Golden Age, how does this square with Royal Brown’s and Claudia Gorbman’s identification of the increasingly self-reflexive, interventionist deployment of music in the cinema of the last half century which disturbs the traditional aesthetic illusions and hierarchies of the medium (1994: 235-63; 1998: 45)? In other words, how legitimate and extensive is the assumed canonic shift in tendencies from music’s romantic, transcendent and aesthetically subordinate function in film roughly pre-1960, to a so-called post-modern, culturally implicated and aesthetically parallel or even dominating function, post-1960? In the concluding part of this study I would like to explore these questions with reference to two relatively non-commercial works of science-fiction cinema and their pre-existent musical usage—a film practice with which this issue is inextricably linked, and which also goes to the very heart of the problem of how much viewers are supposed to attend to music in screen contexts.

In the sound era the music of Bach has been used, diegetically or non-diegetically, in numerous films. These range from 1930s horror (The Black Cat, Dr Jekyll and Mr Hyde), through European ‘New Wave’ (La Dolce Vita, Accattone), to contemporary Hollywood epic romance and crime thriller (The English Patient and Seven). The earliest instances no doubt emerged from traditions of silent-film accompaniment and cue-sheet lists which quickly alighted on the Gothic and melodramatic potential of the
Toccata and Fugue in D minor, cementing a persistent link between organ playing and madness later frequently invoked or satirized, as, for example, in Sunset Boulevard’s performance of the Toccata by Erich von Stroheim. At the opposite end of the spectrum, the profound structural, aesthetic and symbolic use of Bach in the films of Ingmar Bergman stems from the director’s near worship of the composer. When asked recently what he believed in, the 86-year-old Bergman replied: ‘I believe in other worlds, other realities. But my prophets are Bach and Beethoven, they definitely show another world’. In his last years, he would apparently sit listening to classical music, ‘for him the most mysterious and greatest of artforms and the only sign of a divine presence he could accept’, and according to his wishes, instead of having speeches, Bach was played during his recent funeral. Bergman used Bach in ten films, significantly from 1960 onwards, including Through a Glass Darkly (1960), The Silence (1963), Persona (1966) Cries and Whispers (1973), Autumn Sonata (1979) and Saraband. (2003). Whether foregrounded diegetically as in The Silence, Persona, Autumn Sonata and Saraband or not, the music is almost always contextualized as a symbol of artistic sublimity, transcendence, or profound emotional-spiritual states, and is often charged with redemptive ethical qualities. This non-melodramatic, non-Hollywood hermeneutic context is one that was shared by the diegetic playing of the Toccata in D minor in Fellini’s La Dolce Vita (1960) which, characterized in the dialogue as ‘sounds we have forgotten how to hear; a mysterious voice from the bowels of the earth’, momentarily captivates, then shames the dissolute protagonist played by Marcello Mastroianni. If Bergman tended to avoid irony or extreme aesthetic oppositions in his reverent use of Bach, others have exploited these possibilities in the juxtaposition of the composer’s seemingly unassailable purity and profundity with images and narratives of moral depravity and decay. Such an
aesthetic of conflict underpins, for example, Pasolini’s depiction of prostitution and pimping in *Accattone* (1964, *St Matthew Passion* and slow movement from Brandenburg Concerto no. 2), and, more recently, images of slaughter in *Silence of the Lambs* (1991, *Goldberg Variations*) and the apocalyptic visions of Dante’s *Inferno* in the library scene of Fincher’s *Seven* (1997, *Air on a G String*).

It is perhaps significant that the last, apparently serious, dystopian use of Bach in a film took place (as far as I have been able to ascertain) in the early 1970s and in the quasi-science fiction film, *Rollerball*, which begins and ends with the *Toccata in D minor*, used without irony and in an apocalyptic spirit updated from its earlier Gothic implications. The link with the science fiction film genre is significant, for not only does this genre carry with it the inherent musical difficulties of anachronism and aesthetic separation from the image alluded to previously, but also the genre has been claimed, in both its literary and screen incarnations, as a pre-eminent post-modern cultural form, ‘since [science fiction] alone has the generic protocols and thesaurus of themes to cope with the drastic transformations that technology has wrought on life in the post-industrial West’. Annette Kuhn, for example, notes that ‘in its appropriateness to the moment of late capitalism [and ‘post-industrial decay’] … science fiction cinema has been hailed as a privileged cultural site for the enactment of the postmodern condition’, with its ‘ability to foster experiments in film form’, its concern for the subversion of the real, with simulacra and artifice, with rampant consumerism and surveillance, identity and the Other, and what Scott Bukatman calls the ‘dissolution of the very ontological structures we usually take for granted’.

Once again, however, we should acknowledge the fundamental dichotomy at the heart of much ‘serious’ (let alone ‘space-opera’) science fiction film: its predominant tradition of conservative anti-technological humanism and its adherence to
romanticized, ‘nineteenth-century notions about technology’, not to mention gender relations, through which it ‘resist[s] the transformations brought about by the new postmodern social order’.\textsuperscript{49} This is apparent, for example, in George Lucas’s \textit{THX 1138} (to be discussed below), whose hyper-technological, ultra-rational aesthetic stands at odds with its anti-technological, irrational parable.\textsuperscript{50} In turn, as suggested previously, the problematic practice of scoring science fiction film, which Vivian Sobchack has lamented for its general ‘lack of notability, its absence of unique characteristics which separate it from music in other films’,\textsuperscript{51} lies at the heart of this dichotomy. If even the genuine experimentation and innovation of \textit{Forbidden Planet} and \textit{The Day the Earth Stood Still} have dated badly and become clichés of an old-fashioned futurism that can no longer be taken seriously, then the increasing difficulty of scoring incredible futures has meant that most science fiction films of the last half-century have fallen back on one of two options: either regression to the security of the aforementioned large-scale, neo-romantic or neo-avant-garde symphonism whereby film scores (and, to an extent, the films themselves) become indistinguishable from those of any other genre, or, more rarely, reduction of music to minimal proportions, and replacement of it by increasingly sophisticated sound effects so as to avoid any identifiable cultural or stylistic implications—an approach which, like the explosion in visual special effects technology, tends to mask an ever-increasing intellectual conservatism. A third, perhaps even rarer, but still notable strand has involved the appropriation of pre-existent music with varying acknowledgment of its cultural baggage, a practice which in one particular case resulted in the almost complete semantic reconfiguring of the musical work.

Although, as model for such an approach, Kubrick’s \textit{2001} may have engaged for the most part in aesthetic separation and post-modern strategies of ‘strip[ping] away
traditional associations and reconfigur[ing] meaning’, it nevertheless appears that Kubrick had less interest in the actual cultural and historical significance of the music he used, than in its function as pure sound, structure, rhythm, texture and atmosphere. This has rendered all the more easy the historically disinterested development by others of a restrictive signifying principle welding Ligeti-like atonality and clusters—regardless of any authorially intended or critically examined meaning—to the unknown, the threatening, the monstrous and the evil. Indeed, like the reifying of the fantastic as commercial routine across many screen genres, the novelty of extreme dissonance, textural densities, and electronic manipulation, perhaps once the preserve of science fiction and horror genres, soon exhausts itself in the industry’s insatiable appetite for an ever-increasing stockpile of clichés.

THX 1138

Invoking George Lucas’s interest in the work of Godard and Kurosawa, von Gunden includes the director in his volume of ‘postmodern auteurs’, alongside Coppola and de Palma. Lucas’s early film *THX 1138* (1970) is likewise often enlisted for the post-modern cause, but is essentially a work of ecological nostalgia, full of internal contradictions which play on many of the themes described above: i) its dislocated sound and image, pervaded by the kind of impersonal surveillance technology thematized by Lucas’s mentor Coppola a few years later in *The Conversation* (1974), suggest an interrogation of filmic representation itself that is both a-historically modernist and self-referentially post-modernist: Watergate was just around the corner and much of the film was set in the historically iconic, high-modernist architectural environment of Frank Lloyd Wright’s Marin County Civic Center; ii) the drug-suppressed individuals inhabiting its repressive society are hollowed-out simulacra of
human beings, and the dialogue is therefore often meaningless and playful, and yet although these traces of the film’s origins in an experimental student short remain, and despite Lucas’s intended *cinema-verité* style and claims of non-linearity, the overall narrative trajectory of the film is thoroughly conventional, even romanticized: an individual bucks the system and successfully strives for freedom; and iii) in an attempt to lend the film a ‘musical’ quality, the legendary sound designer Walter Murch combined layers of Lalo Schifrin’s score based partly on his own ambient temp track of re-processed recorded music, with a complex array of sound effects so that, at least in the film’s earlier stages, the boundaries between music and non-music are, prophetically, often blurred; and yet Schifrin contributed some entirely traditional and historically identifiable musical elements, including alienating early modernist and avant-garde textures, jazz, Gregorian chant, romantic love theme and pastiche vocal baroque writing, this last linking in with the pre-existent music. This musicalization of sound (and vice versa), combined with stylistic musical eclecticism suggest archetypal post-modern tendencies.

It would seem, by contrast, that recent claims of the film’s deconstructed narrative and demand for reading strategies akin to those of the French New Wave, are nevertheless somewhat exaggerated.\(^{54}\) If anything, this film, which Murch describes as ‘from the future rather than … about the future’\(^{55}\) is less post-modernist in itself than *about* post-modernism. At the very least it reconfigures post-modern assumptions in a very specific manner, and the tell-tale sign is the recourse to Bach at the very end. A hangover from the Bach-like organ chords Lucas and Murch used in their earlier experimental student work, the resplendent opening chorus of the *St Matthew Passion* at the moment of final liberation is the neo-romantic *coup de grâce*, which seals the final dichotomy of the film: uniformity, order and submission to
technology have been signified by the blend of sound effect and largely atonal underscore, now the triumph of individuality, disorder, rejection of technology and return to nature is indicated by the functionally tonal, and arguably very ordered, Bach. Ironically the ‘real’, (quasi-)diegetic sound world of socially repressive and artificial existence gives way to ‘unreal’ non-diegetic music in the real world of individualism and freedom: the romance of cinematic illusion is restored.\textsuperscript{56}

If the rebellious THX character appears in true post-modernist fashion to reject the grand narrative of unrelenting technological progress, the musical accompaniment of this final achievement cannot escape the normative gestures of a regressive romanticism, ushered in by Schifrin’s emerging musical link to the Bach, trading on the nineteenth-century re-imagining of the composer as the purveyor of absolute divine mystery, and using the very work by which Mendelssohn sparked the composer’s revival in 1829. But then the post-modern celebration of difference is surely nothing if not grounded in a romantic notion of the suffering hero.

Solaris
Andrei Tarkovsky’s aesthetic manifesto, \textit{Sculpting in Time}, is littered with anti-modernist, anti-technological rhetoric, and at the risk of over-simplifying a densely complex work, it is reasonable to suggest that this kind of humanism and intellectual conservatism underpins his so-called science fiction film \textit{Solaris} (1972).\textsuperscript{57} Although ostensibly set in space, it is more an exploration of psychological states, dream, memory and loss, in which a series of structuralist binary oppositions prioritizes nature over science, art over technology, irrationality over logic, old over new, spirituality over materialism, tonal over avant-garde music. Tarkovsky appears to enlist a science-fiction aesthetic only to deny much of its essential nature. In complete
antithesis to both post-modern sensibilities and the Soviet regime (whose stipulations that he should shorten and de-mystify the film in various ways he ignored\textsuperscript{58}) Tarkovsky appears as an aristocratic, even elitist and perhaps antiquated creative romantic with an intentional message about the timelessness and transcendence of great art (including his own films) and the human spirit’s nostalgic quest for truth, that seems to close off interpretative ambiguity. As with the Lucas film, his work, and particularly \textit{Solaris}, is in search for what one commentator refers to as an Eden-like ‘vision of lost harmony’,\textsuperscript{59} and it is perhaps no surprise that he repeatedly locates this lost harmony in the music of Bach,\textsuperscript{60} which he declares to have no functional meaning beyond that of its absolute autonomy.\textsuperscript{61}

Yet in true post-modern fashion Tarkovsky declares himself \textit{against} the notions of the avant-garde, of relentless progress in art, of final truth, and \textit{for} the equivocal, readerly text.\textsuperscript{62} Furthermore, both structurally and in their manipulation of sound, his films seem to partake in a thoroughly post-modern aesthetic of decentred and discontinuous narrative: exceptionally long takes are combined with perplexing temporal and spatial shifts, and he often plays with viewer expectations of sound-image correlation to suggest transcendent, non-materialist states. In \textit{Solaris} this dichotomy is epitomized in the contrast between Eduard Artemiev’s electronic score (which Tarkovsky valued for its primeval, elemental qualities\textsuperscript{63}) and the repeated, refrain-like return of Bach, symbolic of Tarkovsky’s ethical intentions for the film’s narrative, grounded in a nostalgia for the Earth and for the ‘ordinariness’ of home. In interview the director once said: ‘technology, and how it develops, invariably relates to moral issues … humanity is constantly struggling between spiritual, moral entropy, the dissipation of ethical principles, on the one hand, and on the other—the aspiration towards a moral ideal’.\textsuperscript{64}
The Bach organ chorale ‘Ich Ruf zu dir’ BWV 639 from the *Orgelbüchlein* (the same piece played diegetically in the 1932 version of *Dr Jekyll and Mr Hyde*) frames the film and is used at two further crucial passages: one of nostalgic longing for earth and the past, and one involving intense aesthetic contemplation of high art in the form of a Breughel painting, a scene which presents the core of Tarkovsky’s cultural testament. According to the director’s declared music aesthetic of transfiguring recurring material, this, and to a greater degree the final appearance of the music, is elaborated upon electronically by Artemiev with vibraphone-like countermelody, and additional vocal, string and bell-like textures, perhaps in an attempt to absorb Bach’s ‘autonomous’ instrumental work more organically into the film’s sound fabric (see Example 7 for Artemiev’s insertions into the Bach chorale- prelude). Unlike Lucas’s seemingly arbitrary musical choice, it must surely have been significant that Tarkovsky chose this supplicatory chorale whose text runs:

Lord, hear the voice of my complaint,  
To thee I now commend me;  
Let not my heart and hope grow faint,  
But deign Thy grace to send me;  
True faith from Thee, O God, I seek,  
The faith that loves Thee solely.

For Tarkovsky the enigmatic ending of the film represented a return to the cradle for the main character Kelvin, after travelling along the path of technological progress. For others it is a regressive return to the patriarchal Dacha and perhaps to old Russia, or a scene of death and resurrection akin to the transcendent, timeless ending of *2001*. The problem of interpreting this ending is embodied in its sound. Has the humanist Bach been appropriated by Artemiev’s technological score or vice versa, or has a rapprochement been reached between the twin poles? Does the final gesture suggest merely the pessimism of Tarkovsky’s outlook or the redemption of
technology in some transcendent metaphysical realm? In an inversion of the Lucas film, adherence to the grand narrative of human aspiration and spiritual absolutes is problematized by the denial of a conventional concluding musical gesture. Lucas the technological post-modernist reveals a heart of romantic absolutism, while Tarkovsky the humanist romantic becomes a plural post-modernist.

Conclusion

The problem of these seeming contradictions and inconsistencies, however, may not be that difficult to disentangle. To begin with, both films display strong affinities with the nineteenth-century dialectic between pro- and anti-scientific literary utopias discussed at the beginning of this study, represented respectively by Edward Bellamy’s *Looking Backward* (1888) and William Morris’s *News from Nowhere* (1890). As suggested above, many have declared the twentieth-century death or paralysis of the pro-scientific utopian imagination, in favour of the Arcadian romance of anti-scientific utopia, and these films can be securely placed in this historical lineage. One of the chief characteristics which is often said to separate the modern from the post-modern is the latter’s refusal of the ‘utopian, dream-like elements which have accompanied the constant change of modernity’ and its search for a better world, and on this account alone these two films are unlikely to be regarded as post-modern. However, they do both primarily offer nostalgic critiques of the alienation and the centralized and homogenized materialism of modern society, whose products they, like Raymond Williams, would recognize as having achieved ‘comfortable integration into the new international capitalism’ of mass culture. Therefore again, if post-modern theory itself is correctly diagnosed by Fredric Jameson as being ‘the cultural logic of late capitalism’, the films’ aesthetics and ethical programmes (and
indeed lack of commercial success) would seem to lie in opposition to these contexts. The move beyond modernism articulated in their narratives and in their music is thus in one respect idealist and regressive, privileging certain high-art assumptions, and suggesting that Romanticism, and in particular Romantic anti-capitalism is, or at least was until recently, an unspent force in areas of contemporary culture. After all, at the heart of such Romanticism are themes deeply embedded within these films: the loss of human values; a nostalgia for home, for what has been lost; and a restless questioning, search and struggle. Furthermore, as Sayre and Löwy noted in the early 1980s: ‘the Romantic orientation towards the past can be … a look into the future; for the image of a dreamed-of future beyond capitalism is inscribed in the nostalgic vision of a pre-capitalist era’. This would seem to encapsulate the dialogic blend of chronologies and anachronisms central above all to screen science-fiction genres. The precise nature of this utopia remains unspoken for Lucas, but for Tarkovsky appears to lie in a thoroughly nineteenth-century blend of art and faith. Perhaps for both in the end it is a true utopia and thus exists nowhere. Whatever the case, the music aesthetics of these films, and indeed the majority of those discussed in this study, point to what Habermas saw as an ‘alliance of postmodernity with premodernity’ in the political contexts of early 1990s ecologists and other groups; and they also point to post-modernism’s continual search for tradition ‘while pretending to innovation’, as observed by Andreas Huyssen (whose book’s cover is illustrated with a cityscape still from Lang’s *Metropolis*): in other words they point to post-modernism redefined as romantic epiphany.

While Tarkovsky continued to search in this way during the years after *Solaris* through other film genres, what Lucas was soon to achieve in the late 1970s seems supremely ironic, and reportedly in his own view ‘guaranteed free of any meaning at
all’. In the wake of this, it has become difficult for the science fiction screen genre and its music to escape the demands of what Kuhn describes, after Guy DeBord, as the ‘society of the spectacle’, though one may consider there to be some exceptions among the films cited during the course of this study. How they might meaningfully respond in sound and image to her call for political re-engagement with the ‘marginalized … colonized subject’ remains to be seen.

NOTES


4. Interestingly, chapters 11 and 13 of Bellamy’s *Looking Backward* concern the relay of music to homes at the press of a button via remote telephonic links.


10. Summarized in Elsaesser, *Metropolis*. An extensive listing, with examples, can also be found at:


17. Timings are given from *Metropolis* (special edition fully restored digitally remastered Eureka Video, EKA 00065 VFC 42873, 2002).

18. Although *Ballet méchanique* was premiered in Vienna in 1924, this took place without Antheil’s music, which was not completed until the following year. There is no evidence that Lang saw Léger’s film or that Huppertz knew Antheil’s music, though the possibility cannot be ruled out.

19. The sharing of this aesthetic is perhaps all the more noteworthy given that there is little evidence to suggest that Huppertz’s score accompanied the film beyond 1927, until a 1970s television presentation in East Germany which included a two-piano-
and-percussion version of the score. Huppertz’s score was used a) in Berlin throughout the film’s initial release period (January 10 1927 to May 13, 1927); b) in Austria, The Netherlands, Switzerland, Estonia, Finland and France (at least at its premiere), as well as possibly in Croatia, Sweden and Hungary during the first international release period (February 1927 to July 1927); and c) during the second international release period (from August 1927) in one theatre in Prague. During the second German release in August 1927, only a few of Huppertz’s musical ideas remained, the rest of the score comprising stock music by other composers, although Huppertz retained screen composer credits (the Prague screenings may also have employed this hybrid score). No evidence exists of the music used to accompany the film’s US premiere in March 1927, its subsequent national release there, or the Australian release in 1928 and the UK release. Since these showings were of the severely cut Channing Pollock version of the film, it is unlikely that Huppertz’s music was involved. (I am very grateful to Aitam Bar-Sagi and Martin Koerber for supplying this information on the history of the film’s various releases.) Although it may be the case, as Hayward suggests (Off the Planet. Music, Sound and Science Fiction Cinema (Eastleigh: John Libbey Publishing, 2004), 4), that Huppertz’s score was not widely enough known to have exerted direct influence on science-fiction film music of the sound era, its stylistic parameters nevertheless anticipated with uncanny precision the widely shared science-fiction scoring aesthetic and stylistic practices to come.

20. For further discussion of Herrmann’s score see Rebecca Leydon, ‘Hooked on Aetherophonics: The Day The Earth Stood Still’, in Hayward (ed.), Off the Planet, 30–41.

22. Timings are given from the UK television network broadcast version.


24. The latter film only departs from this in diegetic passages of extended modality sung during the scenes of perverted bomb-worship towards the close—a pastiche of post-1960s liturgical styles which furnishes another example of the difficulty of imagining the music of the future.

25. Morricone’s score for The Thing (1982)—like Alien, perhaps more a horror than a science fiction film—also maintains a uniform style of mildly astringent extended tonality throughout, sometimes accompanied by electronic pulses, although the poor quality of the early synthesizer string sound detracts from the impact and effect.


27. Hayward (ed.), Off the Planet, 25.

28. Timings are given from The Matrix (Warner Home Video SO16985, 1999).


30. Giorgio Moroder released a highly influential version of Metropolis in 1984 with a rock soundtrack performed by Freddie Mercury, Bonnie Tyler, Adam Ant and Pat Benatar. For further discussion of the soundtrack of The Matrix see Mark Evans, ‘Mapping The Matrix: Virtual Spatiality and the Realm of the Perceptual’, in Hayward (ed.) Off the Planet, 188–98.

31. See Paul Théberge, “These are my Nightmares”: Music and Sound in the Films of David Cronenberg’, in Hayward (ed.), Off the Planet, 129–48, for further discussion of these, and other, scores of Cronenberg films.


37. The multiple anachronisms of much science fiction screen repertoire and its scoring are exemplified in Forbidden Planet where the film is set in the distant future, projects the societal values and contexts of the time, now past, in which it was made (1950s patriarchal values, corny dialogue, clichéd cinematic subplots), derives its storyline from a 16th-century Shakespearean source, uses music/sound which was then innovative but has since become technologically dated and a stylistic cliché of ‘past futures’, centres diegetically on a civilization which was unimaginably advanced several thousand years in the film’s diegetic past, normalizes technology still not available in the real world (hyperspace travel), and marvels at technology not available in its own diegetic present.

38. Star Trek: Voyager, 5.5 ‘Counterpoint’ (Paramount VHR4795, 1998). It should be noted that either this 24th-century database must have been corrupted or previously unknown manuscripts of the work discovered in the intervening centuries since the performance is subject to unspecified repeats of the opening section and the beginning
of the Trio, and a large cut from bars 115–71, presumably to synchronize better with the visual narrative, as shown in Table 1.


56. See *THX 1138* (Director’s Cut, Warner Home Video Z1 11162, DVD, 1998), from 1:21:23.

57. Tarkovsky evidently disliked science fiction, and removed many of the ‘hard’ science fiction elements of the original novel by Stanislav Lem.


60. Soderbergh’s 2002 re-make makes comparatively inconsequential use of variation 15 from Bach’s *Goldberg Variations* (BWV 988).

61. Tarkovsky, *Sculpting in Time*, 112 & 192. On music in general, Tarkovsky writes: ‘it is the highest art form. It affects us in a purely emotional way, yet is a total abstraction. It is the most profound and total way to express the creative essence’


68. After the Bach has finished, the camera slowly pans ever further backwards to reveal that the scene of reconciliation between son and father at the family Dacha appears to be taking place within the ocean of the planet Solaris. During this sequence the soundtrack gradually crescendos on a dense, texturally mobile, electronic cluster which stops abruptly when the screen has turned white. See *Solaris* (The Criterion Collection 164, DVD, 2002) from 2:39:56.


77. This and the previous quotation, *Alien Zone*, 182.
Example captions (shot details are to be placed below the example)

Example 1. Lang, *Metropolis*: Freder enters underground machine room (11:07)

Shot 1: long shot of Freder in large turbine hall. Machinery and some workers visible on upper floor

Shot 2: medium shot of Freder walking round large piece of machinery looking around in awe; then he sees something and recoils

Shot 3: long shot of ‘Moloch’ machine with shunting pistons and choreographed workers’ movements to left and right

Shot 4: medium shot from below left row of machine workers

Shot 5: medium shot from behind a row of workers next to a giant piston

Example 2. Lang, *Metropolis*: utopian views of cityscape (20:47)

Shot 1: medium shot of Freder and his father; Freder’s hands placed on father’s shoulders

Shot 2: intertitles (Freder speaking), ‘Your magnificent city, Father, — and you the brain of this city — and all of us in the city’s light…”

Shot 3: same as shot 1; Freder points to window

Shot 4: long shot of cityscape through window

Shot 5: angled view of gleaming skyscraper with road and walkway; fades to

Shot 6: angled view of different glass skyscraper and cityscape on the right, leaning in opposite direction; fades to

Shot 7: dominant phallic tower, dwarfing other surrounding buildings; suggested location of the penthouse where Freder and his father live

Shot 8: intertitles (Freder speaking), ‘… and where are the people, father, whose hands built your city — — —?’
Shot 9: close up of head and shoulders of the two men; Freder has his arm around his father in imploring fashion

Shot 10: intertitles (father speaking), ‘Where they belong…’

Example 3. Lang, Metropolis: robot-Maria transformation scene (1:07:09)

Shot 1: medium frontal shot of scientist Rotwang who closes his eyes and throws the switch

Shot 2: electric light rays appear at either end of the recumbent, encased Maria

Shot 3: as shot 1; Rotwang pulls more levers

Shot 4: rings of light pass up and down robot

Example 4. Wachowski brothers, The Matrix (a) and b)) and The Matrix Reloaded (c), d) and e)): clusters (the prevailing non-metric rhythms have not been notated)

Example 5. Wachowski brothers, The Matrix: Neo’s resurrection (1:58:45; rhythms and durations are approximate)


Example 7. Tarkovsky, Solaris: excerpts of Artemiev’s electronic insertions into Bach’s chorale-prelude ‘Ich Ruf zu dir’, BWV 639 during the closing scenes of the film
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