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Scottish science fiction: writing Scottish literature back into history

The increasing vigour of Scottish literature since the 1980s has led not only to a revival in literary fiction, but also to a growing diversification into other narrative genres. The detective story – in the form of so-called "tartan noir" – has been the most obvious popular genre to undergo revival, but science fiction has also blossomed in the work of authors such as Alasdair Gray, Iain (M.) Banks, and Ken MacLeod. In this article, I trace something of the problematic history of Scottish science fiction, and argue for a particular thesis concerning its later development.

The history of Scottish science fiction is problematic because of the peculiar condition of the Scottish literary tradition. As Cairns Craig argues, Scottish narrative fiction did not develop along the same lines as English or American literature. Despite the work of Enlightenment historians, and the pre-eminence of Walter Scott and John Galt in the historical novel, Scottish literary culture's interest in historical progress dwindled as the nineteenth century wore on:

> […] if eighteenth-century Scotland pondered the issue of how history was ordered and how it developed and where it was aimed, nineteenth-century Scotland pondered what was before history and what might never have been incorporated into it. (*Out of History*, p. 43)

The twentieth-century Scottish novel continued this trend in its tendency to "oppose a static community, by-passed by history, to a world whose essential meanings are defined by the historical" (p. 32). The static community might be rural – Lewis Grassic Gibbon's *Sunset Song* (1932), George Mackay Brown's *Greenvoe* (1972) – or it might be the modern industrial city, as in William McIlvanney's *Docherty* (1975), but it was nonetheless "outside" of history. However, Craig believes that Scottish fiction makes up for its indifference to the historical by being particularly adept in the representation of those "values which stand outside of history as we define it: not *after* history, or *before* it, but *beyond* it" (p. 224).

There are though problems in Craig's account of what is "out of history". He claims that "[l]anguage, religion, culture […] can be changed and altered by historical development, but they move to a different rhythm from the rhythm of economic progress" (p. 224). Perhaps there is no such thing as progress in language and religion, but the term "culture" covers quite heterogeneous phenomena. What, for instance, of Western ecological consciousness? Craig refers approvingly to "ecological demands" that "found themselves on the absolute limits of a balanced system which we cannot control" (p. 225). Yet modern ecology is not a reservoir of ahistorical cultural identity: it develops instead from sciences that respond to the Western experience of the world's finitude. Craig's thesis must therefore be qualified. That which is "out of history" may be either necessarily or contingently so. It may be something to which the logic of regress and progress is entirely irrelevant (the conceptual paradigm here is the Saussurean arbitrariness of the signifier – no sound system is intrinsically better for language than any other). But that which is "out of history" may only be contingently so: it may be something that could and should inform our understanding of a different kind of progress (as is the case with modern environmentalism). Twentieth-century Scottish science fiction engages, I believe, in a sustained re-examination of what is "out of history" in order to discover what may be used to inform new visions of the future. As the naively techno-capitalist vision of early science fiction begins to crumble, Scottish science fiction draws upon what was once "out of history" in order to imagine *alternative* histories. This revisioning of history is particularly apparent in the utopian potential that later Scottish science-fiction writers discover in the once "ahistorical" feminine realms of motherhood, play, and domesticity.

But although Scottish science fiction will eventually turn toward that which is "out of history", it is indeed true that Scottish culture was not initially as hospitable to science fiction as other national traditions. Early science fiction is largely absent from the Scottish canon. This absence is not, of course, total; there are indeed texts that have a legitimate claim to the genre. *The Strange Case of Dr Jekyll and Mr Hyde* (1886) is one example – despite the efforts of Darko Suvin, one of the founders of properly academic science-fiction criticism, to exclude Stevenson's novel from the genre. Science fiction (or SF, "speculative fiction", in Suvin's preferred terminology) is "distinguished by the narrative dominance or hegemony of a fictional 'novum' (novelty, innovation) validated by cognitive logic" (p. 63). However, says Suvin, "the transmogrification Jekyll-Hyde becomes not only unrepeatable because the concoction had unknown impurities, but Hyde also begins 'returning' without any chemical stimulus, by force of desire and habit" (p. 69). Suvin regards this as an "unclear oscillation

between science and fantasy" (p. 69); the chemicals are not a true *novum*, but rather are an "added alibi for those readers who would no longer be disposed to swallow a straightforward fantasy or moral allegory" (p. 69). For Suvin, Jekyll should really be waving a magic wand or reading from a *grimoire*, rather than drawing upon some supposedly scientific method. But Suvin's argument is overly rigid: there are any number of science-fiction texts where the *novum* is under-explained, or erratic in its operation, or allows a psychological allegory. *Dr Jekyll and Mr Hyde* is, I suggest, open to interpretation as a science-fiction story about a hypocrite who invents a technology of perfect disguise, a *novum* that allegorises the anonymous bustle of Victorian London. In such a reading, the nearest relative to *Dr Jekyll and Mr Hyde* is H. G. Wells's *The Invisible Man* (1897), in which another technology of disguise leads the protagonist to moral dissolution and death.

Stevenson's novel – as I have indicated – is an exception. During the period in which the genre of science fiction was being developed by Jules Verne (1828-1905) and H. G. Wells (1866-1946), Scottish writers seemed far less willing or able to explore this new literary possibility. Verne's 1877 novel, *Les Indes noires* (The Black Indies), is particularly interesting in this regard, for it uses a Scottish setting to imagine a future classless technological utopia, while also upbraiding Scottish culture for its hostility to techno-capitalist progress. Verne's novel, currently in English translation as *The Underground City* (the text to which I will refer), tells of the attempt to re-open an apparently exhausted coal mine, Dochart Pit, in Aberfoyle. The project is led by a former mine worker, Simon Ford, and his son, Harry, who call for assistance from the mine's former general manager, James Starr. The three men discover underground caverns, complete with immense coal reserves, running under the West of Scotland. Despite the machinations of a disgruntled former mineworker ("old Silfax"), the men manage to establish in "New Aberfoyle" an enormous underground mining settlement which they name "Coal City".

Despite Verne's admiration for Scott – as noted by Ian Thompson (p. IX) – *Les Indes noires* criticises the Scottish author's nostalgia for an older, feudal order. When Starr is summoned back to Dochart Pit by Simon Ford, the narrative rather pointedly describes him turning his back on a pseudo-feudal Edinburgh where fact and literary fiction seem to have blended together:

> Perhaps for the first time on crossing the Canongate, James Starr did not turn round to look at Holyrood, the palace of the old sovereigns of Scotland. He did not notice the guards in front of its gates, dressed in the traditional Scottish costume of green kilts, tartan plaid and a long-haired goatskin sporran.

> Although he was a great fan of Walter Scott, as is every true son of Caledonia, the engineer failed to glance as usual at the inn where Waverley stayed and in which the tailor had brought him his famous tartan war costume. (p. 11)

In Verne's diagnosis, nineteenth-century Scotland has lost its capacity to imagine progress; it overlooks technological and economic stagnation precisely because of its cultural investment in a defeated Highland civilisation. In a description of the temporarily post-industrial landscape of Dochart Pit, the narratorial voice reminds readers that the "sharp impression of abandon, of misery, of sadness" was "somehow different from the ruins of an old stone castle, or the remains of a dismantled fortress" (p. 30). The difference is that the industrial ruin indicates historical regression: "stone and dirt tracks were gradually replacing the operations' old railtracks. James Starr felt he was crossing a desert" (p. 26). However, if Scots are able to share Starr's feeling that Scotland has regressed, then they will be able, Verne implies, to build utopias such as Coal City. This underground, electrically powered city rather resembles a modern metropolis, except that it lacks class distinctions: "The population, having the same interests, the same tastes and more or less the same income, constituted to all intents and purposes one large family." (p. 122).

The problem, of course, for modern readers of *Les Indes noires* is the deeply ideological nature of this subterranean *Gemeinschaft*. Verne's account of the mining community is rose-tinted, to say the least. The miners of the old Dochart Pit are figured as one enormous family, joined if not by consanguinity, then by the metaphorical mother at whom they all suckle – namely, the mine itself, about which Simon Ford exclaims: "We won't abandon the mine, our old wet nurse, just because her milk has dried up! My wife, my son and I, we will arrange things to stay faithful to her!" (p. 5). Verne's fanciful vision also rewrites class conflict as the overdramatic memory of past injustice. The narrator remarks dismissively:

> It is even thought that the coal miners, just like the workers in the salt-works at this period, were in fact real slaves. Indeed, in the eighteenth century this view was so well established in Britain that twenty thousand miners in Newcastle revolted to regain their freedom – something they believed they did not have. (p. 41)

Silfax personifies the revival of old grudges, for he is a former "penitent" (p. 205) at the mine – in other words, a person employed to manually explode pockets of so-called "firedamp" (methane, and other light hydrocarbons) before the invention of the Davy Lamp. Silfax, whose dangerous occupation was eliminated by better technology, represents a class consciousness which – so the text implies – simply stands in the way of social improvement.

This is only some of the ideological content in *Les Indes noires*. Coal City, built in the new "Black Indies", seems also a colonial city of sorts, what with its temperate climate, constant (albeit artificial) sunlight, and re-use of place names from the "old country". With this interpretation in mind, Silfax may be just as much a restless native as a revolting worker. But regardless of such elaborations, the problem for modern readers is clear. Although we can recognise the validity of Verne's allegation that nineteenth-century Scottish literary culture was "out of history", the historical vision that he proposes for Scotland has now been exposed as the legitimating logic for technological, capitalist, and imperialist exploitation. Verne's novel therefore unintentionally sets out a problem with which modern Scottish science-fiction writers must grapple. On one hand, they are – like Verne – almost inescapably concerned with restoring historical progressiveness to Scottish cultural traditions. On the other, they are well aware – as Verne was not – of the ideological content in the technological and capitalist vision of progress. They are writing in a time in which mainstream science fiction has itself subjected this ideal to withering scrutiny. Consider, for instance, the views of Ursula K. le Guin (1929-) on the ethical vacuity of the earlier US science-fiction tradition:

> Socialism is never considered as an alternative, and democracy is quite forgotten. Military virtues are taken as ethical ones. Wealth is assumed to be a righteous goal and a personal virtue. Competitive free-enterprise capitalism is the economic destiny of the entire Galaxy. In general, American SF has assumed a permanent hierarchy of superiors and inferiors, with rich, ambitious, aggressive males at the top, then a great gap, and then at the bottom the poor, the uneducated, the faceless masses, and all the women. (p. 99)

The dangers of nostalgia for a technological, capitalist, and masculinist future that has already failed are recognised by contemporary Scottish science-fiction writers who imagine alternative histories, or possible futures, in which Scotland's culture is one of victorious capitalist progress. Michael Cobley's Sherlock Holmes pastiche, "The Intrigue of the Battered Box", from the 2005 short-story anthology, *Nova Scotia: New Scottish Speculative Fiction*, centres on the private detective, Sheldrake Ormiston, and his Dr Watson-figure, Mr Ramsay, in a profoundly altered nineteenth-century Edinburgh. In Ormiston's world, the Jacobite uprising of 1745 was a success, and Charles Edward Stuart ascended to the throne in a Second Restoration. The capital of Britain has been moved to Edinburgh; the national – and, indeed, imperial – Church is Catholic; even the American Revolution has been defeated. Edinburgh's streets are tower-lined, filled with steam omnibuses, and centre on a looming monument to Robert the Bruce. There is even a Great Waverley Terminus, which suggests that

some alternative Walter Scott found materials for a more epic narrative than the *Waverley* of our reality. But this historically progressive imagining has its sinister side. The nation is now the centre of a vast Roman Catholic empire, and through Edinburgh runs not the Royal Mile, but the Imperial Mile, lined with the statuary of its most notable figures.

A similarly ambivalent narrative is apparent in Neil Williamson's short story, "The Bennie and the Bonobo", also from *Nova Scotia*. The "Bennie" of the title is George Bennie (1892-1957), the real-world inventor of the unsuccessful propeller-driven "railplane" monorail system. Even outside of Williamson's story, the railplane – a notorious tale of unsuccessful Scottish innovation – stands metonymically for the nation's failure to enter the narratives of technological progress that dominated science fiction in the early and mid-twentieth century. William B. Black, a Scottish local historian, recalls for instance how "the basic shape [of the railplane] and the lines of windows along the side were reminiscent of the spaceships in which heroes like Flash Gordon or Dan Dare hurtled into space to thwart the evil plans of Ming the Merciless or the Mekon of Mekonta" (p. 3). In Williamson's tale, Bennie is given a taste of capitalist success: he is visited by Mrs Blanchflower, a genetically modified bonobo chimpanzee, who invites him to witness her future, one in which his invention was successful. Her visit, though, is a warning: the success of his invention has led to the "centuries-long, world-wide dominance of the Bennie Transport Corporation that stifles new ideas, new inventions […] if there's even a possibility that they might challenge a fraction of its monopoly" (p. 227).

The problem of a utopian desire to be in history, but not in Western capitalist and masculinist history, can also be found in the work of Ken MacLeod (1954-). In *The Sky Road* (1999), the use of strategic nuclear weapons in space destroys the artificial satellites that encircle the earth, and upon which much of its modern technology is dependent. This precipitates a technological and social collapse as primitivist Greens seize their opportunity to take control of the major urban centres. MacLeod depicts the ensuing future Dark Ages in the narrative of Clovis colha Gree, a young historical scholar, and his enigmatic lover, Merrial, who is a "tinker", a member of those marginal communities still expert in the Earth's remaining technologies. Clovis and Merrial inhabit a future Scotland with atomic reactors, fusion engines and optical computers, but with very little organised technological innovation – at least, not in mainstream society. Clovis's society, which he eventually leaves, is denounced to him by a tinker, Fergal, who declares that even capitalism (which is remembered dimly as the era of "The Possession") "would be better than this dark age you people have got yourselves bogged down in" (p. 281).

But, despite his criticism of Clovis's static Scotland, MacLeod is hardly more enamoured of the technological progress found in much contemporary science fiction. He refers in an essay, "Socialism: Millenarian, Utopian, and Science-Fictional" to "the sense of human helplessness" (p. 121) which he believes is apparent in our assumption that "[w]e're all victims of unmasterable forces, whether these are our genes, or our childhood experiences, or our addictions and compulsions, or the world market" (p. 119). This sense of hopelessness, he believes, has led to a modern-day revival of millenarian belief, an ideology apparent in the faith held by certain science-fiction writers in the so-called "Singularity", a term coined by the author Vernon Vinge. According to Vinge, our computers will eventually construct a series of increasingly clever artificial intelligences, until ultimately there emerge superhumanly powerful, nigh-on omniscient machines. MacLeod is sceptical of what he sees as a pseudo-historical vision:

> […] when human beings feel they can't change the future, they begin to imagine that maybe superhuman beings can: gods, angels, aliens – and now AIs [Artificial Intelligences]. The idea of the Singularity is just a sophisticated version of this ancient and embarrassing superstition, that human history is or soon will be made by something other and better than human beings. (p. 120)

MacLeod opposes a kind of predestination – "We have been convinced, too many of us, that in a sense *the future is written*" (p. 121) – in which progress is predetermined by an inevitable, and supposedly salvational logic of technological development. So, although MacLeod indeed uses contemporary science-fiction tropes of artificial intelligence, he does so ambivalently, since – as he comments in an interview with Andrew M. Butler – "the philosophy of mind implied in my own books […] is complete bollocks" (p. 12).

A fuller examination of MacLeod's substantial body of work is beyond the scope of this article. What can be addressed in the present context are some of the alternative versions of historical progress that develop within Scottish science fiction. In particular, there emerges a feminist, yet recognizably Scottish challenge to the masculine vision of a "phallic" unilinear progression based on the technological domination of nature. This challenge can be traced back to at least the Scottish Renaissance of the 1920s and 1930s when modernist revulsion at the industrialised slaughter of the Great War informed a science fiction critical of the genre's technological complacency. In James Leslie Mitchell's novel *Gay Hunter* (1934), the eponymous protagonist is mysteriously propelled forward into a future Earth populated by hunter-gatherer tribes who roam amongst

the ruins of their ancestors' technologically advanced civilisation. Gay is accompanied by a British fascist, and by a female British aristocrat, both of whom endeavour to lead the latter-day tribespeople toward a technological and imperial future that has already failed. As Gay approaches the ruins of London, intent on combating her contemporaries, she sees in its surviving architecture the guiding spirit of the imperial historical vision:

> […] a great pointed pillar rose in the clouds – it rose a full mile into the clouds. Even at this distance she could see its shape and symbolism. So that was what had replaced the cross.
> The Phallus (p. 147)

The fascist Major Houghton intends, in Gay's perceptions, to make the world again "one great pounding machine, pounding the life out of humanity" (p. 15). This pounding of nature and life is emphatically phallic: Gay reflects to herself that Houghton "was the brutalised and bedevilled spirit of all men […]. And for them and their horrific future they expected women to conceive and have fruitful bodies and bear children" (p. 15). Mitchell's suspicion of purely technological progress extends even to the generic conventions of *Gay Hunter*. Although the failed future world of the "Hierarchs" is extrapolated technologically (there are death rays, and atomic weapons, and all the usual 1930s science-fiction paraphernalia), Gay's arrival there does not depend upon a methodically cognised *novum*. Instead, she and her unwilling companions effectively dream themselves there, and Gay's return – without the fascists, who both perish – is equally unexplained and arbitrary.

Mitchell, though, does not abandon history altogether. Gay thinks to herself that humans "might yet, as in all the world, build them a life that would never know the nightmare of the Hierarchs" (p. 184), thereby hinting at alternative futures that are not rigidly erected, so to speak, by phallic visions of a single historical progress. This suggestion flows naturally into the alternative, feminine vision of historical progress offered by another Scottish science-fiction author, Naomi Mitchison (1897-1999). Mitchison, like Mitchell, first became active as a literary modernist, with primitivist, Frazerian texts such as *The Corn King and the Spring Queen* (1931), only later writing her science-fiction novels, *Memoirs of a Spacewoman* (1962) and *Solution Three* (1975). Although a comprehensive reading of these texts is beyond the scope of this essay, one example from *Memoirs* may show how Mitchison envisages an alternative to the phallic future that so appals Mitchell. One of the narrative sequences in *Memoirs* deals with the visit of the protagonist, Mary, to a planet on which the dominant species is a metamorphic entity whose life cycle splits into two stages – the "caterpillars", and the "butterflies". From her encounter with the cater-

pillars and butterflies, Mary comes away an altered person, having been made aware of how maternal nurture informs her sense of right and wrong. She reflects that "[w]e could not convey to them [the butterflies] any sense of compassion, as humans know it, at any rate not to larval forms" (p. 121). The butterflies, though they give birth to the caterpillars (and die in the process), have no sympathetic social relationship with the first instar of their species, whom they torment and torture:

> The butterfly had no maternal feelings, could not have. It was no part of this evolutionary pattern. The eggs would look after themselves, even if a few perished, and when they hatched it would be into something utterly alien from their mother, and, again, capable of survival on their own. Maternal feelings could have had no outlet. The butterfly's egg-laying then was pure loss. (p. 111)

The compassion that she expects is part, Mary realizes, of her own evolved human nature.

The intellectual resources upon which Mitchison draws in linking motherhood, compassion, and evolution, predate even post-war feminism. In Mitchison's short story, "Conversation with an Improbable Future" (1990), set in the same fictional world as *Memoirs*, she alludes to the attachment theory developed by John Bowlby (1907-1990), who argued that psychological health was dependent upon reciprocal love relations between mother and child. The narrator of the story explains that "most women who decide to have children give one or two years of their life to the first bonding, which means the assurance of love for the life-time when the child, having this base, can and does reach out for others" (p. 223-224) – the vocabulary of a "base" is emphatically Bowlby's, and appears in his 1988 monograph, *A Secure Base* (Bowlby). Recent research by Ben Mayhew traces Bowlby's psychology to the Christian socialism of Henry Drummond (1851-1897), a Scottish theologian, clergyman, and natural scientist (p. 22). Drummond's theological-cum-scientific treatise, *The Ascent of Man* (1894), might have been better called *The Ascent of Mothers*, for in it he argues that motherly love is the *telos* of evolution:

> […] through […] Mothers society has been furnished with an institution for generating, concentrating, purifying, and redistributing Love in all its enduring forms; […] the perfecting of Love is thus not an incident in Nature but everywhere the largest part of her task. (p. 430-431)

Even more striking, in the present context, is Drummond's speculation in *The Ascent of Man* upon the kind of life-form for which our own ethical standards could only be an irrelevance:

> If a butterfly could live till its egg was hatched – which does not happen – it would see no butterfly come out of the egg, no airy likeness of itself, but an earth-bound caterpillar. If it recognized this creature as its child, it could never play the Mother to it. The anatomical form is so different that were it starving it could not feed it, were it threatened it could not save it, nor is it possible to see any direction in which it could be of the slightest use to it. (p. 347)

There may or may not exist external evidence to establish that Mitchison had Drummond's text in mind, but the co-incidence is remarkable. At the very least, it indicates a profound continuity of concern between this late Victorian thinker and one of Scotland's most prolific feminist writers.

Drummond's reinterpretation of historical progress confronts scientific positivism with the ethical resources of motherhood. Society, according to Drummond, will be perfected according to God's plan only when motherly love is fully diffused throughout it: the evolution of mothers must be understood as "the revelation of a purpose of benevolence and a God whose name is Love" (p. 431). Such a feminine, maternal challenge to science fiction's account of progress continues (though very probably without any conscious indebtedness to Drummond, or Christianity) in the science fiction of later authors such as Iain (M.) Banks (1954-), for whom maternity, and childhood play, are crucial to a genuine utopian vision. Banks – unlike Mitchison – seems to have no great sympathy for animal life, but the motifs of his future Utopia, "The Culture", are emphatically female and feminine. The human inhabitants of the Culture are something like pets or children, sheltered and protected in the metaphorical wombs created by Banks's curiously maternal spaceships, artificial worlds and super-intelligent minds: "the prototypical Culture world", remarks Gavin Miller, "is a Culture Ship, a structure *within* which its inhabitants are contained, rather than a territory which they claim to possess" ("Iain (M.) Banks", p. 207). Miller elsewhere argues that The Culture also develops the utopian potential of childhood play, another resource that might seem "out of history". Banks, in science-fiction novels such as *Walking on Glass* (1985) and *Player of Games* (1988), offers play as a way of revisioning Marxist history:

> […] play in all its dimensions […] is taken over by social and economic imperatives, and then later liberated from them in a society such as the Culture. The reader is encouraged to perceive traces of play in the present, and to envisage the form play might take when freed from its corruption into socially "functional" practices such as economic competition, alienation from self, passivity before fate, and thrill-seeking or drug abuse. ("Beyond Make-Believe", p. 64)

Another matriarchal future appears in Alasdair Gray's *A History Maker* (1994), which depicts a future Earth where a ruling female caste tend so-called "powerplants": these organic machines generate power, manufacture commodities, and can even regrow body parts. While the womenfolk get on with the business of running the world, the men engage in televised competitive games that replay famous historical conflicts in sometimes lethal hand-to-hand combat. *A History Maker*, with its feminist semi-utopia, reveals something of the blind spots in Craig's otherwise compelling account of the Scottish literary tradition. Although Craig refers to the "desire, deeply inscribed in the tradition of the modern Scottish novel, […] for the reintroduction of historical dynamic into the suspended world of modern Scotland" (*Modern Scottish Novel*, p. 125), he does not perceive that the future society of *A History Maker* is part of the feminine historical dynamism found in Scottish science fiction. He contends instead that "[t]his ahistorical society, like the Scotland of the Kailyard, is a matriarchy whose business is to maintain peace by diverting the energies of men away from real conflict into fake violence" (p. 126): "real conflict" would amount to "defiance of the gentle amnesia of an eventless domestic world" (p. 126). Craig's reading assumes that there is, in fact, something that the men *should* be fighting over in full-blown conflict, and that this *casus belli* is cloaked by a feminine domestic ideology. Yet there is little that could be recognised as a traditional historical grievance in the society of *A History Maker*; in particular, there is no room for class conflict since the economy is entirely handled by the powerplants. Craig's model of history, though it may seek to jettison capitalism and imperialism, still assumes that conflict between men in the aptly-named historical "arena", rather than consensus between women in the domestic sphere, is the only cause of genuine historical change.

Part of the utopian challenge of *A History Maker* is thus precisely its interrogation of what Mitchell's Gay Hunter would have seen as "the brutalised and bedevilled spirit of all men" that identifies change with violent conflict. Although the protagonist, Wat Dryhope, longs nostalgically for what he calls "the bad old days when wars had no rules and bombs fell on houses and men and women died together like REAL equals!" (p. 56), the text treats this longing for "real conflict" as the symptom of a deeper problem. It is part of what the narrator calls "a world-wide male reaction to the omnicompetence of women who only needed them as inseminators" (p. 205). The equality that Wat desires is in fact equality in the giving and receiving of love. As one revealing dialogue indicates, Wat is the victim of a gendered culture in which men are cut off from the satisfactions of paternity. His longing for the bad old days of patriarchal monogamy is in fact a yearning for the possibility of a loving relationship

with his own children. But to his future culture – as perhaps to ours, also – men are presumed incapable of such tenderness. His temporary sexual partner Annie informs him that his dream of retreating with her to form a nuclear family would fail because "Bairns don't love dads", to which Wat responds, "They would *have* to love me because they'd have nobody else – apart from you" (p. 54).

The work of Mitchell, Mitchison, Banks and Gray illustrates one way in which Scottish science fiction makes a virtue out of a cultural necessity. Early science fiction, with its vision of technological, capitalist, and masculinist innovation and expansion, could not be easily accommodated by a Scottish canon that preferred what was outside of positivist visions of historical progress. Nonetheless, this early handicap turned out to be advantageous when science fiction later responded to the failure of the techno-capitalist vision of the future. Scottish literature's affinity with what seemed to be "out of history" meant that it was a reservoir for cultural materials that challenged and modified ideas of historical progress. Scottish science fiction writes Scottish literature "back into history", and it does so by drawing upon what is seemingly ahistorical in order to critique Western progress: motherhood, domesticity, childhood play, parental nurture – such seemingly historically irrelevant dimensions of human culture are mobilised to provide *alternative* visions of progress.

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