Abstract

Utopia has been one of the dominant ideas for many of the avant-garde movements that, since the enlightenment, have sought to use architectural means as part of a strategy to create an ‘ideal’ social order. If the utopian has lost its significance within the architecture of late capitalism, this article looks at ways in which that tradition is being maintained within the discourse of Science Fiction, where utopian concepts are bound to speculative engagements with new and imagined technologies. One of the most sustained recent attempts to develop and explore utopian ideas can be found in the science fiction novels and stories by Iain M. Banks set in the Culture. The Culture is a space-dwelling society developed by Banks over a series of nine full-length novels and a collection of short stories. The Culture is a technologically advanced post-scarcity civilization supervised by powerful Artificial Intelligences (AIs) called Minds and comprising trillions of ‘humanoid’ subjects living together with various forms of machine ‘life’ forms. In these stories, Iain M. Banks shows himself to be one of the most
innovative writers on a possible future; while his writing is clearly fiction, it explicitly
draws upon scientific, philosophical and political ideas, as well as extensive use of
nanotechnology, genetic engineering and augmentation, augmented and virtual realities,
and numerous forms of AI.

The article starts by mapping out a definition of science fiction with respect to
Darko Suvin’s ‘novum’ and the concept, developed by Frederic Jameson following
Suvin, that the utopian is itself a sub-genre of science fiction, and goes on to suggest that
some of the most significant speculative avant-garde architectures of the last 100 years
should be considered ‘as’ full-blown works of science fiction. This argument is
developed through an analysis of one of the most far-reaching and politically explicit
utopian projects – Constant Nieuwenhuys’ New Babylon, a society based on the concept
of Homo Ludens and the use of automation that clearly shows the existence of a number
of ‘novum’. The final section of the article is a detailed examination of Banks’ the
Culture and shows how many of the themes of New Babylon reappear in Banks’ Culture
novels. The purpose of looking at Banks in detail is to see how he is exploring, albeit
through fiction, ambitious spatial and cultural models predicated on a post-scarcity
civilization, as part of a direct lineage from New Babylon, and how this is a direct
response to the very problems that are facing contemporary society. The article concludes
by arguing that if architecture is to re-invigorate itself in the twenty-first century it needs
to embrace its links to speculative discourses such as science fiction.

Keywords
Utopia revisited

The concept of Utopia was one of the dominant ideas of architectural discourse, especially architectural modernism, from the eighteenth century to the later part of the twentieth century (Tafuri 1976). For some, these aspirations ended with the destruction of the Pruitt-Igoe estate in 1972 (Jencks 1984: 9), or were reversed by a return to ‘complexity and contradiction’ and aesthetic eclecticism (Venturi 1966), and for others the end of the ‘idea’ was signified with the destruction of the Berlin wall in 1989 and the subsequent collapse of Soviet socialism (Clark 1999: 8). Despite Whatever the competing claims regarding the demise of utopian ideas, architecture has putting its faith in the uncertainties of the ‘free market’ rather than creating an ideal social order, despite the fact that the ‘free market’ has itself proved to be an unreliable and elusive concept.
What underpinned many utopian ideas was a faith in the possibility of technology to create architectures that would deliver liberation and emancipation only to have them replaced by technologies that deliver architectures that are more uniform despite having a superficially futuristic appearance. According to authors such as Ray Kurzweil (2005), we are at a moment of great technological change; 100 years ago it was architects who were in the vanguard of imagining how the technologies of the industrial revolution might impact on our cities. Currently, the most interesting speculations on what forms a whole range of technologies from nanotechnology, synthetic biology, AI to augmented and virtual reality might take are being developed in science fiction.

Given the issues surrounding the discourse of architecture within the current period of late capitalism (Jameson [1991]), it may seem frivolous to suggest looking to science fiction as a possible source of inspiration or salvation. However, the tendency for architecture at times of difficulty to retreat into more conservative and reactionary forms needs to be challenged and science fiction offers an interesting point of departure for combining advanced technology with a socially aware politics that has at its centre a concern for social justice and freedom.

**Why science fiction?**

The scepticism towards science fiction may be due to a wider cultural prejudice based upon a reductive concept as to what constitutes science fiction. In literary discourse, science fiction writing is often seen as clichéd and lacking value, and those
authors whose work clearly does have value often avoid the term and refer to their work as ‘speculative fiction’, a term, ironically, coined by science fiction legend Robert A. Heinlein (1947). Even within contemporary science fiction itself, the definition and terminology of the genre is often contested; however, in this article the author relies on one of the most plausible and often cited definitions from literary critic Darko Suvin. Suvin contends that science fiction is a ‘literature of cognitive estrangement’ (1972: 372) expressing an ‘exclusive interest in a strange newness, a novum’ (Suvin 1972: 373) that distinguishes the represented world of a text as ‘an alternative to the author’s empirical environment’ (Suvin 1972: 375).

As part of this definition, Suvin also equates the idea of utopia as a ‘socio-political sub-genre of Science Fiction’ (1979: 61) based on the belief that utopia is itself ‘organised more perfectly than in the author’s community’ (1979: 45). In his book *Archaeologies of the Near Future: The Desire Called Utopia and Other Science Fictions* (2005), Frederic Jameson follows Suvin in arguing that Utopian writing is a ‘socio-economic subgenre of Science Fiction’ (2005).

Given that architectural theory has had such a close affinity with Utopian ideas, it seems strange that the conception of utopian architecture ‘as’ science fiction has not been made more clearly and it is equally strange that Jameson, who has written widely on architecture and whose theories draw upon the writings on Italian architectural historian Manfredo Tafuri (Jameson 1988: 38), author of one of the most canonic architectural texts on Utopia (Tafuri 1976), barely mentions this connection in the book *Archaeology of the Future: Utopia and other Science Fictions* (Jameson 2005).
While architecture may baulk at describing its practices as science fiction, a survey of much of the most advanced architectural production of the last 100 years reveals the existence of a whole series of fictional ‘novum’, even if they are not explicitly labelled as such. From the technological fantasies of the Russian Constructivists and Italian Futurists, through to the urban fictions of Tony Garnier’s Citée Industrielle and Le Corbusier’s, whose urban projects such as La Ville Radieuse, that contain fictional novum surrounding the social conditions and the technological implementation of his ideas[7]. Post-war architects such as Archigram and Superstudio clearly embraced science fiction more actively and contemporary architects such as Marcos Novak, Gregg Lynn, Brian Cantley and in particular Lebbeus Woods, who provided illustrations for a series of short stories for Arthur C. Clarke (1988[8]), all include science fiction elements in their work. Perhaps the project that more than any other embodied science fiction ideas within an explicitly utopian architectural framework was Constant Nieuwenhuys’ New Babylon.

In the next sections of this article, I shall outline Constant’s proposal for New Babylon and its numerous ‘novum’ and then describe Iain M. Banks’ the Culture showing the remarkable similarities between the two proposals. The primary aim of this comparison is to explicitly situate one of the most radical architectural proposals of the twentieth century firmly within the context of the discourse of science fiction, a relationship that has seemingly not been described before. Second, through an examination of Banks and Constant it is hoped to engage with the idea that alternative futures can be imagined away from the constraints of market capitalism and without recourse to a clichéd idea of dystopia and lack of freedom.
Constant’s New Babylon

The question of knowing how one would live in a society that knows neither famine nor exploitation nor work, in a society in which, without exception, anyone could give free rein to his creativity -- this troubling, fundamental question awakens in us the image of an environment radically different from any that has hitherto been known, from any that has been realized in the field of architecture or urbanism. The history of humanity has no precedent to offer as an example, because the masses have never been free, that is, freely creative. As for creativity, what has it ever meant but the output of a human being? (Constant 1974)

Constant Nieuwenhuys was a painter and sculptor born in Amsterdam in 1920; he became interested in architecture and urbanism amid the ruins of post-war Europe, largely under the guidance of the architect Aldo Van Eyk. In the 1950s, Constant began to develop an interest in experimental architectures through redefining the relationship of art and society, his architectural concepts were part sculpture, part installation and conceived of as a radical critique of and largely separate from the existing social structures. In the mid 1950s through his friendship with Asgar Jorn, with whom he had co-founded the COBRA group, Constant also became involved with the Lettriste International (LI), an avant-garde group of writers and film-makers centred around Guy Ernest Debord. Central to the programme of the LI was a series of urban concepts that
sought to radically transform the way we experience the city under a general heading of Unitary Urbanism.

Unitary Urbanism was developed around a number of key concepts: ‘psychogeography’ (Debord 1955), ‘the Désgrive’ (Debord 1958) and the creation of ‘ambiances and situations’ (Debord 1957). One of the central goals of Unitary Urbanism was to create temporary ‘ambiances’ through the construction events or situations; the role of architecture would be to facilitate and enhance these activities and not to create permanent static built form.

One of the key texts for the LI was written by Ivan Chtcheglov titled ‘Formulary for a new urbanism’, in which he condemns the contemporary city and calls for a new city to be created, which is to be founded on ambiances, moods and emotions (1953: 1).

In 1957 several groups around LI came together, under Guy Debord’s guidance to form the Situationist International (SI). To mark the formation of the SI, a conference was held on the island of Alba; Constant used this event to create the ‘first mobile architecture of unitary urbanism’, a highly speculative design for a Gypsy camp. Constant though initially reluctant to fully join the SI wrote a series of texts on Unitary Urbanism and presented a report on the foundation of the ‘Bureau of Unitary Urbanism’, published in the Internationale Situationniste no. 3 dedicated to the ‘conscious construction of ambient surroundings’ (Constant 1959b). Further developments were put forward in a series of exhibitions; an early motif in Constant’s ideas was the labyrinth, and Constant contributed a number of further texts to the Internationale Situationniste journal, but there was an obvious tension between his own personal interpretation of Unitary
Urbanism as built form and the desire of Debord to see Unitary Urbanism as a more ephemeral and agit-prop activity.

In 1960 Constant was expelled from SI; the supposed reason was that his work was ‘too individualist’. However, he continued with his own explorations of a new experimental city, which by then he had called New Babylon.

**New Babylon – 1954–1969**

New Babylon is a model for a post-capitalist technologically advanced society that exists within a culture of abundance, which Constant readily acknowledged ‘could be called architectural science fiction’ (Constant 1959a). As outlined by Constant, it was as much a social and political model as an architecture of form. New Babylon went through various iterations over a fifteen-year period between 1959 and 1974, but there were a number of consistent themes and ideas; it was to be constructed on the principles of ‘homo ludens’ (man the player) rather than ‘homo faber’ (man the worker); the overall layout and construction would be determined by the inhabitants and in a constant state of flux; the city would use robotic systems to carry out any work and maintenance required, which meant that the citizens of New Babylon would be free to constantly roam and explore the extended and ever-changing city structure, a structure that would eventually stretch out across the globe connected via a series of nodal points in one long continuous dérive.

While the development of New Babylon involved creating a wide variety of models, drawings and maquettes that described its architecture, what must be made clear is that the models and drawings were not fully resolved designs for fixed buildings. Few
of the elements in New Babylon are developed as full-blown detailed proposals; they are sketches, suggestions of how the use space-frames and mega-structures might be used to create the potential for a spatial typology that resisted traditional programmatic description. One of Constant’s most thorough going descriptions of the political and social elements of New Babylon was contained in his 1965 essay ‘New Babylon: Outline of a culture’ (Constant 1974).

Constant’s use of the concept of Homo Ludens was developed from Johann Huizinga in a work titled \textit{Homo Ludens: A Study of the Element of Play in Culture} (1955). Constant adapted Huizinga’s ideas to develop a total concept of society where the idea of work, especially the alienated work of capitalism, was to be replaced by continuous creative work of play, as Constant says ‘the liberation of man’s ludic potential is directly linked to his liberation as a social being’ (Constant 1974).

In New Babylon, there was to be no private ownership, all land and property and the means of production are under collective ownership. As a Marxist, Constant felt that private ownership meant that the majority of citizens never managed to realize their potential and effectively became slaves; for him, the collectivization of resources under a planned economy would realize the potential of all citizens.

The building of New Babylon can only begin once the economy is exclusively aimed at the satisfaction of our needs, in the widest sense of the term. Only such an economy permits the complete automation of non-creative activities, and consequently the free development of creativity. (Constant 1974)
New Babylon is a ‘new type of urbanism’ ([Constant Outline 1974]), a proposal for a global network of interconnected settlements that does away with ideas of individual and national segregation. The basic unit of the network is the sector. Sectors act as both ‘autonomous units of construction’ and combine to form a ‘continuous space’ that reaches across the globe, the whole earth becomes home to its owners’ (Constant 1974). The sectors of New Babylon, following the precedent set down by Chetchetglov, were referred to in terms of colour and ambience rather than programme; indeed, programme in its conventional sense is rarely mentioned.

In an article written for the Internationale Situationniste no. 4 (Constant 1960), Constant describes in detail one these sectors, the Yellow Zone. Constant starts by explaining that the Yellow Zone is named based on the colour of its floor, which ‘adds to the rather joyful atmosphere’ (Constant 1960), as the Yellow Zone is a zone of play. The sector is composed of a metal structure lifted off the ground and contains a number of different levels – three in the east, two in the west (Constant 1960). The metal structure uses Titanium and nylon to create walkways and internal cladding. This gives lightness and flexibility as the whole structure is ‘considered as the basis for an arrangement of interchangeable, dismounted element types and furniture’ (Constant 1960). In the resultant structure, ‘nowhere has it been sought to imitate natural conditions’ (Constant 1960). The ground level of the zone is ‘devoid of buildings’ with the exception of the structural supports and a circular building. Arrival is by air, car or underground train. There are apartment blocks that look out onto the landscape separated by a great hall, and throughout the sector lightweight materials create free-form enclosures within which the
inhabitants, led by ‘situationist teams’ (Constant 1960), can create their own architectures and ambiances.

The western part appears immediately more complicated. There are two labyrinth-houses, one large and one small, which take up and develop the ancient forces of architectural confusion: the water effects, the circus, the great ballroom, the white plaza beneath which is suspended the green plaza, which enjoys a splendid view of the freeway traffic that passes below. (Constant 1960)

The labyrinths house a number of ‘game’ spaces: radiophonic speaker games; cinematic games; games of psychological resonance; erotic games’ (Constant 1960). The citizens of New Babylon would immerse themselves in these hallucinogenic environments; each individual would be able to separately control their own immediate space, as form of positive ‘brain-washing’, which would ‘erase the effects of habits’ (Constant 1960), in a manner that would have been similar to the chemical experiments conducted by Timothy Leary and the anti-psychiatry of R. D. Laing.

The Yellow Zone as Constant describes it, and as the drawings of it show, is an architecture that at the time was technically unrealizable; the spans and the construction was beyond the technical capacity of available materials and techniques, even allowing for the sculptural nature of Constant’s models. Furthermore, the complex environmental conditions would have been impossible to achieve with the analogue systems that he would have had at his disposal. However, the reality of the project was to critique the
banal nature of existing environments and suggest more sensuous possibilities, as in science fiction actuality was subservient to ‘what if’ possibilities.

Constant’s structural systems were not without some precedent, and the forms employed by him are often compared to engineer architects such as Yona Friedman, primarily due to the use of structural grids to create daring open span spaces, yet Constant was at pains to point out that while Friedman was using his structural systems to perpetuate the existing system he was actively trying to replace the existing city in toto. In many of the iterations for New Babylon, the urban plan is directly collaged on top of an existing city space; the structure of the new city appears like an infection enveloping and then replacing the existing city fabric.

Citizens of New Babylon

They wander through the sectors of New Babylon seeking new experiences, as yet unknown ambiances. Without the passivity of tourists, but fully aware of the power they have to act upon the world, to transform it, to recreate it. (Constant 1974)

The inhabitants of New Babylon are nomads wandering through the sectors in an extended continuous déérive. New Babylon extends to a logical extreme the growing cultural promiscuity and the sexual revolution of the 1960s; the new found sexual freedom of the city is opposed to the traditional bourgeois conventions, an entire city based on loosing inhibitions. The inhabitants would generally be considered artists but not necessarily in the traditional idea of an artist; Constant felt that they would use
performance-based audio-visual stimulus to create ambiences. The very fabric of New Babylon would be part of that artwork and the citizens of New Babylon would be constantly remaking and reworking the structure as a total work of art.

Constant believed that the antagonistic nature of the traditional city was perpetuated through an obsession with material possessions and created aggressive behaviour. New Babylon would channel aggressive behaviour into creativity; he even maintains that those members of society who are considered deviant or criminal act in such ways because they have not found a suitable creative output for their interests. In New Babylon, the shared interests and the ‘reciprocity’ fundamental to the collective lifestyle would render criminal and anti-social behaviour redundant. Equally with less concern for material possessions ‘competition disappears’, variety and difference would no longer be created at the expense of others but as part of a coherent collective approach developed through the creation of amenable spatial conditions and situations. Constant also calls for a fundamental re-evaluation of the role of education in the development of creativity; traditional education with its emphasis on utility actually makes people less spontaneously creative – play for its own sake is the primary form of learning.

The only education favourable to creation is that which unfetters the development of creativity. But Homo Ludens dispenses with education. He learns by playing.

(Constant 1974)

In two of the recent studies on Constant’s New Babylon, Mark Wigley’s Constant’s New Babylon: The Hyper-architecture of Desire (Wigley 1998) and Simon
Sadler’s *The Situationist City* (1998) neither author explicitly places New Babylon within the Science Fiction genre. Wigley states that the Space City of Schultze-Fielitz like New Babylon was described as ‘a realizable science fiction urbanism’ (1998: 41) and Sadler too mentions the science fiction qualities of New Babylon, but neither is prepared to explicitly describe it as a full-blown work of science fiction. But given Suvin’s definition of science fiction as the existence of the ‘novum’, it is clearly technologically, spatially, politically and culturally replete with ideas that firmly locate it outside of the actual physical and social paradigms of the 1960s and within the realm of science fiction.

Constant himself maintained that ‘New Babylon’ could never be achieved in ‘present society’; he understood that to enable New Babylon there needed to be a change of paradigm both politically and technologically, and like many works of science fiction he saw New Babylon not only as a proposition for the future but as way of critiquing the existing social and political conditions. While Constant may have given up on his ideas of technocratic utopian civilization based around concepts of automation and play, many of his ideas have been joyously revived in the novels of Iain M. Banks.

### Iain M. Banks’ *The Culture*

Firstly and most importantly: the Culture doesn’t really exist. Its only a story, It only exists in my mind and the minds of the people who’ve read about it. (Banks 1994: 1)
The Culture is an advanced space-dwelling society run by advanced AIs called Minds and comprising trillions of humanoid and machine life forms. The Culture was developed by Banks over nine novels and a collection of short stories spanning a 25-year period. In addition to the novels and short stories, one of the major sources of information for this article regarding the background and practical aspects of the Culture is ‘A few notes on the culture’ (Banks 1994), originally written by Banks in 1994; the purpose of the essay was to explain the wider political, social and technological thinking behind the Culture and allow him to situate some of the Culture’s ideas outside of the scope of the novels.

One of the distinctive features of the Culture is that it is a successful utopian civilization that is essentially free and at peace. This not only sets it apart from the majority of science fiction where the future is nearly always presented in terms of dystopia, especially when run by a dominant non-human form of intelligence, but also challenging the received idea that utopias are inevitably compromised and can never be truly free, open and equal.

Banks populates the Culture with an extraordinary array of possible technologies, AI, nanotechnology and genetic manipulation; relatively standard speculative technologies, faster than light drives and object displacement; and even downright fanciful technologies such as a universal energy grid that powers Culture craft.

**Citizens of the Culture**
The Culture is made up of AIs, which can themselves be split into two groups, Minds and Drones, and ‘seven or eight humanoid species’. The Culture is a large and highly populous civilization with in ‘excess of eighteen trillion people’ and ‘many hundreds of thousands of Minds’ (Banks 1987: 87).

Minds are the dominant political and organizational group, representing the evolutionary peak of an imagined post-singularity ‘machinic phylum’ (De Landa 1991). Minds are responsible for the effective running of all Culture systems, particularly ships and habitats, and use Avatars to interact with biological entities such as human and alien species. Drones are often used as companions to humans; while they are not as powerful as Minds, they are not subservient to either Minds or humans.

The human citizens of the Culture might be more accurately referred to as post-human in that they nearly all carry ‘the results of genetic manipulation in every cell of their body’ (Banks 1994: 9). Culture humans are long lived; their lifespan is between 350 and 400 years. They live healthy lives due to their genetic make-up and they are highly intelligent since education is a primary activity for all Culture citizens.

Culture humans are dedicated to self-improvement through education and play. They do not work, unless they want to; they are a clear example of what Constant would have thought of as homo ludens. Indeed, one of Banks’ interests in these novels is to question what people would do if freed from the constraints that they are normally subject to. In the Culture, without the necessity of work citizens are free to fill their time with other activities;
such as sport, games, romance, studying dead languages, barbarian societies and impossible problems, and climbing high mountains without the aid of a safety harness. (Banks 1987: 87)

Banks states that a basic desire in the Culture is to be productive and useful while still having fun; the danger is that without productive goals, a system might slip into decline, but it is made clear that this freedom is highly prized and something that Culture citizens are keenly aware of.

For the Culture to continue without terminal decadence, the point needs to be made, regularly, that its easy hedonism is not some ground-state of nature, but something desirable, assiduously worked for in the past, not necessarily easily attained, and requiring appreciation and maintenance both in the present and the future. (Banks 1994: 7)

In their pursuance of personal enlightenment, human Culture citizens have the ability to change most of their physical and physiological functions; they can change gender, and the convention in the Culture is that all persons should give birth to one child in their lives. People in the Culture are not even confined to human form; they can become other species or even inanimate objects. While there is a genetic similarity to Culture humans, like all things in the Culture it is not universal or mandatory (Banks 1994: 20).
Culture humans have augmented glands, usually referred to as drug glands that they can use to change mood, dull or augment their senses at will. Most citizens are equipped with a neural implant, or net that allows the recording of all memories and experiences; in the event of death, the net can be used to retrieve the entire character of an individual up to the point of their last back-up and re-implant them into a newly grown body.

While biological entities live productive and emotionally rewarding lives, Minds and Drones are equally committed to full existences, as it is clear that Banks believes that AI carries with it a full range of sentience, self-consciousness and emotional responses. Minds are not simply machines; they possess a full range of experiential, emotional and intellectual capacities. They are fully conscious. Minds have an ethics and a fundamental commitment to self-improvement like their human counterparts. Throughout the novels, Banks poses the question that if non-biological entities share many of the same attributes as biological, then do they share the same rights and responsibilities?

For all citizens of the Culture, consciousness is a basic right; if anything has the capacity to have consciousness, it is equipped with it, even if it is unnecessary. In Surface Detail, one of the characters’ life support suit has its own consciousness, since it requires the capacity of intelligent thought to carry out its functions; as a consequence, it engages in constant chatter much to the annoyance of its occupier.

Minds are not presented as the sterile rationale machines of much science fiction; there is just as wide a range of Minds as there are humans. There are some Minds that are classed as Eccentric, and while their behaviour puts them outside the main Culture system they still tend to follow the same set of values and operate within the parameters
of Culture norms. Minds’ private thoughts involve the creation of complex Virtual Reality worlds, as shown in the novel Excession (Banks 1996), where complex puzzles and mathematical problems are combined into virtual reality environments. To achieve much of the Minds’ capabilities, a lot of their activities take place in hyperspace where they are able to transcend the physical limitations of normal space, being able to operate at faster than light speeds.

Much has been made of the relationship of the humans to the Minds; even Banks has stated that humans ‘have a status somewhere between passengers, pets and parasites’ (Banks 1994). However, Banks also suggests that the very irrationality of human subjects makes the lives of Minds less boring.

Minds are highly complex; their capacity for completing a huge array of complex tasks simultaneously is perfectly described by the Mind of the Masaq Orbital in Look to Windward (Banks 2000: 243).

While citizens in the Culture and even Minds die, there are a number of ways that death can be put off. Like all aspects of Culture society, nothing is forced. Citizens can be placed in suspended animation or have their personalities transplanted in AIs; some can opt for a form of immortality (Banks 2012).

But it is perhaps best to understand the agency of the Culture as a whole, a mix of machines and human, a hybrid related to Donna Haraway’s cyborg (1991a, 1991b) as a third term that mediates between our conception of artificial and biological forms of life.

One of the main differences between Constant and Banks, apart from the fact the Culture is set in space, is that Constant’s machines are never described as intelligent even though they would have to be, and they are certainly never described as
For Constant, robots are simply part of New Babylon to serve man and to remove the drudgery from manual production; even if AI had been as conceptually developed as it is during Banks’ creative period, it is perhaps debatable that Constant would have wanted the same type of machine intelligence imagined by Banks.

**Politics**

In the same way New Babylon reflected Constants politics, the Culture reflects Banks’ own socialist views and his own long-term faith in the collective nature of the human species, providing we can avoid destroying ourselves in the short term, a belief that a planned economy ‘can be more productive – and more morally desirable – than one left to the market’ (Banks 1994: 4), and, echoing Constant’s views, that a post-scarcity society has no need for property, ownership or money.

The Culture is not a nation state; it is essentially a network, a loose alliance based on common interest and common values, a ‘confederation’ (Banks 2012). Culture citizens are not bound together by political dogma or an allegiance based around origin; they are united by common sense of decency and the desire to do the right thing.

The Culture is a highly liberal and egalitarian society, again echoing New Babylon; it is effectively anarchist in that it does not have any laws simply ‘agreed-on forms of behaviour’ (Banks 1994) based on consensus and shared values. However, crime of any kind is incredibly rare since the main values of the Culture are tolerance and individual liberty and this, over millenia, has made the citizens of the culture highly respectful and considerate. Citizens with anti-social tendencies can be ‘re-programmed’
or allowed to act out their fantasies within virtual reality environments. The Culture is effectively a society where the exploitation of any of its citizens, human or machines, is not allowed.

Briefly, nothing and nobody in the Culture is exploited. It is essentially an automated civilisation in its manufacturing processes, with human labour restricted to something indistinguishable from play, or a hobby. (Banks 1994: 6)

Internal politics are decided by ‘referenda’ (Banks 1994: 18); all citizens ‘who may reasonably claim to be affected’ have a vote, machine and human, and these votes are administered by a Mind or other ‘supervisory machine’.

However, the Culture is not a pacifist civilization; it has war-craft, and more importantly it has the ability to create deploy an extraordinary military capacity should it desire to do so (Banks 2010: 383 Surface Detail). Though Culture does not seek to impose its hegemony on others, it is not without a tendency to actively meddle in the politics of others; where it does engage with other societies, it is usually through its Contact division. Contact is effectively the outward face of the Culture with its own black-ops wing, Special Circumstances. The role of Contact and Special Circumstance provides a focus for Banks to discuss how a liberal society acts when it meets societies that do not hold its own liberal values.

Special Circumstances is perhaps the most morally ambiguous part of the Culture; the majority of stories involve SC agents, or more usually those who have been seconded to SC simply because that is where the story lines are the most interesting. Everyday life
in the Culture is rather uneventful, and from a narrative point of view relatively boring.

The origin of name ‘Special Circumstances’ is explained by one of the characters in *Use Of Weapons*;

In Special Circumstances we deal in the moral equivalent of black holes, where the normal laws – the rules of right and wrong that people imagine apply everywhere else in the universe – break down; beyond those metaphysical event-horizons there exist….special circumstances. (Banks 1990: 285)

One of Banks’ most intriguing ideas is that when a society reaches a particular stage in the evolution they decide to transcend this corporeal dimension of space time and move into another realm, that Banks names ‘to sublime’. The exact details of subliming are never fully revealed, obviously; however, it is most explicitly dealt with in Hydrogen Sonata confederation (Banks 2012), where the story takes place during the last days of another advanced society before they sublime. While some Minds and some sections of the Culture have sublimed, generally the Culture tends to think of it as something of a waste.

### Habitats

One of the most obvious characteristics of the Culture is that they do not possess a home planet, nor do they seek to colonize or exploit other planets. In contrast to societies where the obsession with gaining territory is largely based on the need to exploit resources, the Culture has no need to colonize other worlds; if it needs additional space, it
simply manufactures it. The main imperative for the Culture is to gain knowledge and principally it does this by exploring space, and like most of their other actions to not do so would be tremendously boring. Like the citizens of New Babylon, Culture citizens are driven with a sole ambition to seek out new knowledge, new experiences and new phenomena.

Culture citizens mainly live on giant artificial habitats called Orbitals, in hollowed-out asteroids fitted with propulsion systems (Banks 1996), or in vast ships. Since their main habitats are mobile, Culture citizens are relatively nomadic, or at least they have the option to be, and here there is another direct parallel with the Citizens of New Babylon.

The nomadism of Culture citizens, as well as being conducive to expanding knowledge and experience, proved to be a highly effective as a military strategy. In the Culture-Idiran war with no home-base to defend, the Culture could simply retreat into the vastness of space.

The Culture was able to use almost the entire galaxy to hide in. Its whole existence was mobile in essence; even Orbitals could be shifted, or simply abandoned, populations moved. (Banks 1987: 461)

**Orbitals**

Orbitals are the main form of permanent habitat; they are giant rotating ring structures that orbit stars much like a planet. Banks admits that the Orbital concept is
borrowed from the Ringworlds invented by Larry Niven, which are segments of a Dyson sphere (Banks 1994). But it is probably true to say that Banks has also been inspired by the NASA space habitats of the 1960s and 1970s illustrated by Rick Guidace and Don E. Davis, except that orbitals are U-shaped open structures enclosed by force fields rather closed cylinder or spheres. Another significant difference is that Orbitals are of a complexity and magnitude that is well beyond the capabilities of the various spheres and toruses of Earth engineers. One of the Orbitals, Vavatch, is beautifully described as it is approached by a spaceship in Consider Phlebus

Vavatch lay in space like a god’s bracelet. The fourteen-million –kilometre hoop glittered and sparkled, blue and gold against the jet-black gulf of space beyond.

(Banks 1987: 99)

According to Banks, one of the attractions of the Orbital structure is that it is seen as a highly efficient use of materials, providing a large surface area for its mass in comparison with a solid planet (Banks 1994). Equally, Orbitals are constructed from space debris, particularly from ‘comets and asteroids’ but also from ‘interstellar matter in the form of dust clouds, brown dwarves and the like’ (Banks 1994: 14). Whatever material they are constructed from all Orbits are administered by a Mind occupying a ‘hub’ at the centre of the Orbitals rotation that controls and maintains all the necessary systems and is in charge of all its construction[13].

Orbitals often seem to be as much huge sculptures as they do habitats[14]. It is clear that the overriding concern in the design of the Orbital are the aesthetics, they seem
to be as much as huge sculptures as they do habitats; the utility and the materiality of the environments is a given, but it is the way they look that is important (Banks 2000:105). Orbitals are an expression of the aesthetic values of the Culture; for the Culture everything of value has to be beautiful.

The description of Orbitals shares many similarities with New Babylon, both formally through the merging of architecture and sculpture to create environments principally driven by aesthetic concerns, the structural separation of living environments and service and transportation systems, and also through the open programmes of the occupied spaces and the fact that these are architectures that are principally concerned with an appeal to the all senses.

Ships

Culture ships play a huge part in novels; they are not only the main form of Culture transport, but they provide one of the main types of habitat. In fact, Ships, especially the larger vessels, could be considered as mobile planets as they have everything that is necessary for independent existence. Ships are controlled by and some ways indistinguishable from their Minds; in some instances, ships are controlled by up to seven Minds – the complexity of the tasks performed by a ship’s Mind is equal to those of Orbitals.

There are three main types of Culture ships: Systems Vehicles; Contact Units; and Offensive Units. Each of these ship types is further broken down into specific classes of ship. GSVs are the biggest of The Culture ships; they range from 25 to 200km and can
hold millions of life forms. GSVs are capable of manufacturing and sustaining all the necessities of its inhabitants and much more. In Surface Detail, a potential adversary of the Culture is told that a single GSV is capable of producing enough space-craft to defeat the entire fleet of that system. GSVs are largely confined to use by Contact where as Banks says:

The idea behind them is that they represent the Culture fully. All that the Culture knows, each GSV knows; anything that can be done anywhere in the Culture can be done within or by any GSV. (Banks 1994:12)

One of the threads that runs through all the Culture novels is the naming of Ships/Minds, which is deliberately humorous and often provocative. After being accused of lacking ‘gravitas’ by one science fiction writer, Banks began a running joke in the naming of ships with ‘gravitas’ in the name itself: ‘Very Little Gravitas Indeed’ (Banks 1990), ‘Zero Gravitas’ (1996), ‘Experiencing A Significant Gravitas Shortfall’ (Banks 2000, 2008). The use of puns, self-deprecating, reflexive and parodic terminology, intermingled with dense passages of highly wrought prose is typical of Banks’ style, the power of his thought and language undercut with his humour allows us to engage with the seriousness of his ideas and his own position within science fiction, but not lose a critical sense of perspective.

Running these ships requires an almost limitless amount of power; the Culture, especially their starships, runs on something that Banks has called ‘the energy grid’, a source of energy that exists between the expanding hyper-spheres of multiple universes.
Exactly how this works is never described because as Banks admits ‘it’s all nonsense’ (Banks 1994).

Throughout the novels, Virtual Reality is presented as another fully viable environment for all Culture citizens to live within. VR is extensively used by Culture citizens; often, it is a place where they can live out anti-social desires, and for Minds it is a place where they indulge themselves in fantastic thought experiments, building complex mathematical constructions and running simulations of incredible intricacy.

Indeed, the ethical issues of creating a virtual environment simulation where cruelty takes place is a major narrative strand in Surface Detail (Banks 2010). The idea that simulated cruelty is just as real as actual cruelty is a provocative concept.

A key principle at work at most levels in the Culture and certainly behind the approach to physiology and all their habitats is their artificiality. One of the important features of bodies, orbitals and ships, is the way they show disdain for any conception of the ‘natural’. Bodies become augmented, and biospheres, even though they can accurately recreate any type of ecological system and be home to all manner of alien life and vegetation, are constructed. With current architectural debates, the idea of ‘nature’ is always presented as something morally superior to anything constructed through technology, whereas Banks presents the Culture’s artificial bodies and environments as superior to natural systems because they have been designed to be as aesthetically pleasing as possible and optimized to be as efficient as possible. Banks believes man is intrinsically a technological animal, and the desire for the authenticity of nature is a form romanticism that simply does not exist within his Culture paradigm.
The type of spaces that Banks creates are freed from the practicalities of materiality, and like New Babylon largely unencumbered by the constraints of programme the spaces also appeal much more directly to the sensory, or in post-human terms the extra-sensory, capacities of their inhabitants. Like New Babylon, the architecture of the Culture is one of sensory immersion facilitated by interaction between the intelligent systems of the space and the augmented nervous systems of Culture citizens. The architecture of the Culture is not programme led or predicated on function, but responds to the desires of its inhabitants. Banks joyfully uses the sheer scale of Orbitals and Ships to signify the level of technological advance of the Culture; and through their physical size, the technological sophistication of their artificial structures, the numbers of inhabitants and their manufacturing capacities, he is keen to make it clear that this is a civilization beyond the practical imagination of any human society.

In the *Use of Weapons*, one of the characters spends some time drifting around the 80km long GSV Size Isn’t Everything, ‘the huge ship was an enchanted ocean in which you could never drown’ (Banks 1990:273), and it is noticeable that the environments, the encounters and the experiences could have been the description of a derive through New Babylon itself.

**Conclusion: The speculative tradition**

The concept of a political and social Utopia as something that is actually possible rather than an abstract idea has become so marginal in mainstream architectural discourse
that the thought of conceiving of a social order where inequality and injustice are addressed, except through the mechanisms of the market, has all but been forgotten, and the desire to create a better society has been replaced by the vague hope of developing one that is slightly less worse. As Slavoj Zizek has stated, ‘today it’s much easier to imagine the end of all life on earth than a more modest change in capitalism’ (Taylor 2005).

In the work of both Banks and Constant, there is an attempt to look beyond the limitations of the existing political and social structures and imagine a world that through the use of advanced technologies questions many of the basic assumptions of contemporary society; its reliance on work, money, social structures; and the fixed nature of the physical environment.

Both Banks and Constant are utopians by any definition; Banks’ science fiction presents the Culture as a stable society, which is essentially, within the author’s terms of reference a ‘good’ society, which seeks to promote its values, without actively interfering in the politics of others. Obviously as has already been explained, many of the stories take place at a point where that frame of reference is somewhat blurred, but Banks has essentially created an altruistic, technologically advanced society, and while that in itself is unusual in science fiction it has a clear architectural antecedent in the work of Constant’s New Babylon, which shares not only the same political values but many strikingly similar formal issues. Banks and Constant share a belief that through technology society will overcome injustice and inequality, and in an abundant society aesthetic and ludic qualities will become the main forces shaping social structures.
If Architecture is to maintain its relevance in the twenty-first century, it has to deal with the political and social implications of advanced technologies; it has to engage with the virtual as much as the actual; it has to embrace the realization that our cities are augmented and saturated with information and that this information is an integral part of the architecture of those spaces; and acknowledge that the very concept of nature has changed. Architecture has to deal with the possibilities of new materials and even new forms of life. It has to regain its curiosity and, like Constant and Banks, begin to ask ‘what-if’ questions again.

Postscript

This article was begun before the announcement that Iain Banks was suffering from cancer and it was finished shortly after his death. Although I never met Iain, I have read his books and read and watched countless interviews with him and with those who did know him, and in all that material he comes across as a genuinely wonderful human being who loved doing what he did. If there was ever the hope that homo-ludens was possible, it is perhaps to be found in his life and work.

References


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Note
1 ‘Refreshingly Unconcerned With The Vulgar Exigencies of Veracity and Value Judgement’ is the name of a Culture ship from ‘The Hydrogen Sonata’.