

Speculative Fiction: Social Change and the Future

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Illustration 1: Planned Obsolescence(2011) by Steve Maher

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Robots, Mutants, Cyborgs and Genetic Immortals

How do we approach the future? The Future is something we will never see, just like the present is something which is eclipsed by our own introspection in regards to it. What will happen - no one knows, how we will approach what will happen is another story. The scope of what will happen is too large to foresee all of the variables, but if as a society our approach to the future was considerate of the repercussions of our actions then, what would the world that we and our descendants might one day live in look like? This is the central proposition in all science fiction as a genre and through this question it as a genre is capable of representing both a cautionary parable for how society might fall or an exemplary and aspirational proposition for a harmonious balance between society and its environment. There are varied sub-genres within the main genre of science fiction and the latter should be distinguished from sheer fantasy in that it makes use of empirical knowledge as the basis for its speculation, hence the terms speculative fiction and science fiction are interchangeable in this text. The future of these tales is hypothetical much like an approach which could be formulated towards the future we as a society face which is unknown, an unknown world which just like the tales of Arthur C Clarke and Issac Asimov could be full of robots, mutants, cyborgs and Genetic Immortals. It is not clear how fantastic by our current perception these future revelations will be but by using our inherent creative ability and the pool empirical knowledge at our disposal today we can propose several possible universes.

We Live in A Future, Triple Breasted Alien Prostitutes and Christopher Columbus

Relative to just ten years ago the technological advances of our species have been quite radical in the way that they have effected society via the very essential thing that makes a society, how it communicates. We live in the future, instantly contactable, able to travel anywhere within the space of days and able to access the combined information of entire generations in an instant by the tapping of a few buttons. These achievements are rendered mundane by their gradual adoption by society, the pace of which hides the immense change their inclusion in society has. Change is inevitable, it is the only thing which is certain, we can merely speculate what shape it will take based on the information which is available today. But we can only see so far, like a meteorologists, our predictions can only let us know if it will rain next week not the same week next year. Yet even though we can only speculate about the future, even our wildest predictions are tame in comparison what actually occurs, in the Words of Arthur C Clarke,

If we have learned one thing from the history of invention and discovery, it is that, in the long run — and often in the short one — the most daring prophecies seem laughably conservative.¹

The speculation science fiction writers made in the 1900's to the present of universal jumpsuits² and triple breasted alien prostitutes³ might seem outlandish by today's standards but probably pale in comparison to adaptations societies will make to new technologies. Indeed what ever shape future societies take one thing is for certain our methods for speculating what shape they will take are

¹ Clarke, Arthur C, *The Exploration of Space*, NY; Harper & Bros (1951) p, 111.

² Gene Rodenberry, *Star Trek*, 1964- , 20th CenturyFox,

³ *Total Recall* (1990), Paul Verhoven (Director), Philip K Dick (Writer) Arnold Swartzeneger (Starring) based on Philip K Dick's *We Can Remember it for you Wholesale*.



Illustration 2: Triple Breasted Alien prostitute from Total Recall by Paul Verhoven

inadequate, but this does not render them purposeless. Had Christopher Columbus not speculated that the world being round could provide a direct route to India he would had never discovered the Americas, by taking this risk based on the empirical data available at the time he literally changed the face of the earth. What he believed he would discover did not come to pass but because he was prepared to risk everything based on his own speculations in the face of the popular but not singular belief that he would fall of the side of the earth he discovered, as far as western Europeans were concerned, unknown territory. Even though Columbus was proven incorrect in his initial speculations, through his undogmatic approach the acceptance of this discovery was propagated and the next five hundred years have culminated in the repercussions of that discovery, both good and bad. But what has Christopher Columbus got to do with the future while being a historical figure?

It was easy enough for people to jump to the conclusion that prediction might imply control, because it was such a novel and impressive phenomenon. Columbus, after all, had been able to totally ignore the best contemporary maps, in the confidence that they were not all that superior to his own eccentric guesswork. The charts were actually much less inaccurate than Columbus. But when for the right reason - Of which he was ignorant - he got the most interesting wrong result, they still couldn't tell him anything useful about the situation he was in.

Geniuses of his time didn't need any theory of human error to maintain their intellectual humility factor. Sheer, visible muddle was always right alongside them in their grandest achievements. ⁴

His links to science fiction lie in his historical positioning as a speculator who followed through but also as an individual who delved into the unknown. Like our own predictions twenty years ago about how people might live today, might like those of Columbus be wrong but in a very interesting way

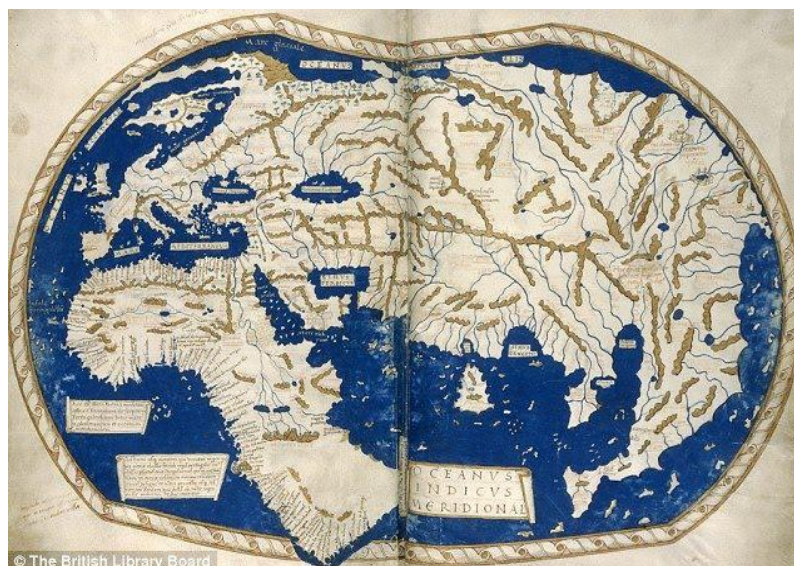


Illustration 3: Map used by Christopher Columbus to persuade support his global exploration campaigns

⁴ Page, Bruce. *Analysing the Future*, Asimov, Isaac, Ed., *Living in the Future*, New English Library, London, 1985, p 23.

The Invisible, Exponential Growth, Your Mobile Phone and The Network Society

Our predictions are not always off the mark, for instance, many technologies which are envisaged in science fiction have come to inspire the invention of technologies in use today or currently in development, the cloaking technologies thought of initially in Star Trek⁵ used by future human civilizations and various alien races (Romulans) within the show are now today a reality⁶. Although as is pointed out by Stephen Fry in hit show *QI* *One form of invisibility is only in infrared, one which is of objects which are so small as they are already invisible to the naked eye.. "Do you see that thing you cant see. Hello, I just made it Invisible."*⁷ Invisibility, like many Speculative Fiction motifs is useful in communicating what occurs to ones position in society when they are not obliged to fulfill the same moral obligations as others. The social contract, as understood by Thomas Hobbes, is essentially, as he saw it, the underlying motive for all human social decision making which is, in this understanding, morality. The basis of this theoretical contract is that moral decisions are based on what is prudentially/mutually beneficial. Hobbes believed essentially that given no repercussion for our actions, for instance the retribution of our peers, we act according to basic wants and needs *...in the state of nature, Profit is the measure of Right.*⁸ In H.G Wells classic *The Invisible Man*⁹ the main protagonist is, through an advancement of a speculative scientific formula and mechanics, gifted with the circumstance of invisibility. What occurs within this speculated world is an individual free from the normal repercussions of his actions and, without spoiling the text for the unfamiliar reader, this motif progresses in the semi Gothic style from which the genre science fiction is derived. The ending, to say the least, is tragic and the repercussions of the protagonist's actions are brought under thumb by the rule of mob law. Emanuel Kant's answer to

5 Gene Rodenberry, *Star Trek*, 1964 - , 20th CenturyFox.

6 <http://campustechnology.com/articles/2009/01/26/engineers-improve-real-life-cloaking-technology.aspx> 18-12-11

7 Episode 12 season 8, *Illumination*, *QI*, BBC 2, London 2012

8 Hobbes, Thomas, *De Cive: Liberty*, Kessinger Publishing, LLC (2004) Originally published (1642), p 9.

9 Wells, H.G, *The Invisible Man*, Penguin Classics, London (2005) Originally published (1897)

the question “*why be moral?*” is essentially a matter of consistency - to not be moral would be inconsistent. *There is ... only a single categorical imperative and it is this: Act only on that maxim through which you can at the same time will that it should become a universal law*¹⁰. Mark Rowlands discusses the same motif of invisibility in his book *Sci-Phi*, but under the guise of a modern piece of science fiction cinema *Hollow Man*¹¹ under the sub heading of the proposition *Why Be Moral?* The film itself is a retelling of Well's *The Invisible Man* and both tales are themselves a retelling of Plato's *Ring of Gyges* and occurred in his most famous work *The Republic*¹². Rowlands concludes in his examination of this film that

*It is not possible to give moral reasons, or a moral justification, for being a moral creature. Nor is it, ultimately, a rational choice either. At the end of the day, being moral is something we either do or don't do – it's not the sort of choice for which we can give reasons. It is our action that lies at the bottom of the moral game. But choice to be moral is, in an important sense, a self-defining one – it runs to the core of the sort of person we are, and sort of person we aspire to be.*¹³

The Invisibility motif offers a true parable for the challenges we, as individuals within a society may deal with, such as both a literal and metaphorical unknown and, unlike some speculations, this is a reality which we may not see but definitely will face at some point in our near future. As an emergent technology, invisibility is a useful comparative bridge to information technology, like the advances in cloaking technology, the changes which occur are gradual and unseen, but as the changes occurring in information technology accelerate so do the social ramifications. What direction is this acceleration headed? Are emergent communications escalating to the point where they could possess some form of technological intelligence? A synergy between human minds and

10 Kant, Immanuel, *Kant: The Metaphysics of Morals*, Cambridge University Press; 2nd edition ,1996, Ch 11.

11 *Hollow Man* (2000), (Staring) Kevin Bacon, Elizabeth Sheu and Josh Brolin (Director) Paul Verhoeven, Columbia Pictures

12 Plato, *The Republic*, Penguin Classics, London, 2007

13 Rowlands, Mark, *Sci-Phi: Philosophy from Socrates to Schwarzenegger*, Thomas Dunne Books, St Martins Griffin Edition, New York, 2005. P 179.

technological communication exists today to a certain extent, this is one of the types of scenarios envisaged in Science fiction. Irregardless to the extent of your ideological luddism you are connected at least by proxy to a cloud of information everywhere.

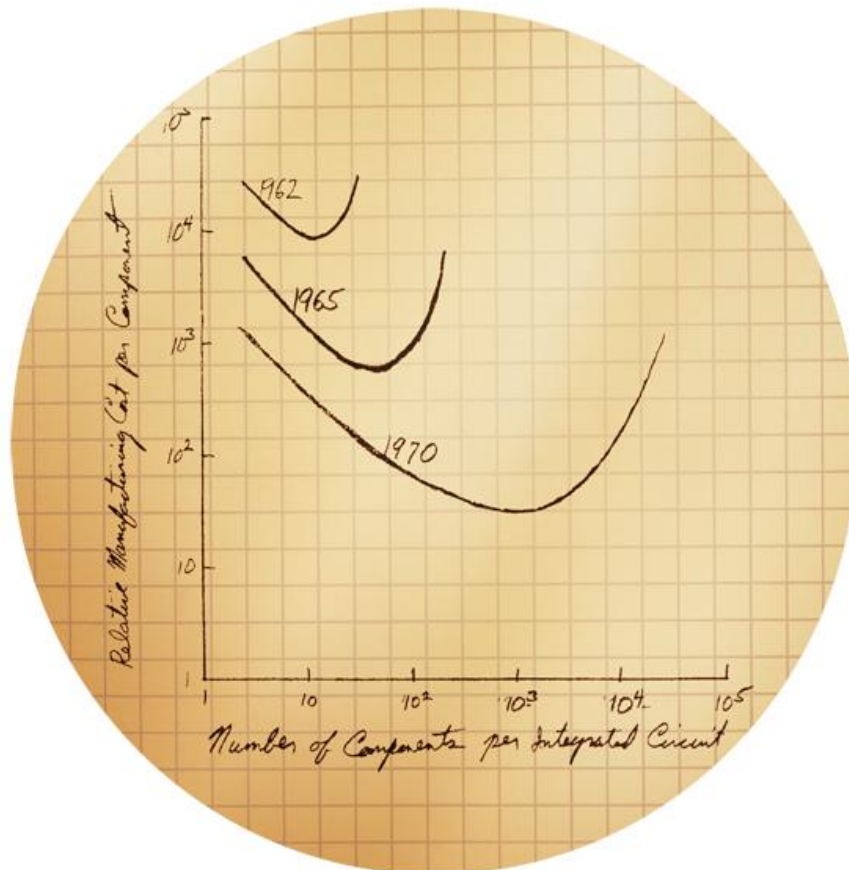


Illustration 4: Diagram of Moore's Law

The Nokia 3210 aside from its utilitarian function as a mobile phone is an iconic commercial object. This phone was reputed for housing within its molded plastic exterior computational power superior to that which landed the first Apollo lunar lander on the moon. This technological advancement can be attributed to the principals underlined in Moore's Law¹⁴ of exponential growth. Moore observed that every two years the number of transistor on a chip doubles. The phone today is a technological footnote, residing in household drawers and other hidden places through out the world, abandoned by most to the annals of time despite its ability to continue the function it was originally designed

¹⁴ ftp://download.intel.com/museum/Moores_Law/Printed_Materials/Moores_Law_2pg.pdf 25-12-11

for. The aspirational target of the exploration of space has in recent history been like the Nokia 3210 shelved, possibly to never see a resurgence in use again. *Technology is not something that humankind can control. It is an event that has befallen the world.*¹⁵ Today the phone seems primitive to most in comparison to smart phones and tablet computers but these commercial objects themselves are a legacy of this predecessor and they too will, in no doubt, succumb to the same progress, surpassed by a newer form of technology. As technology increases in power along with our social reliance on it the hybridization between man and machine increases as a likelihood, I am not discussing a mind in a vat¹⁶ controlling robotic limbs or human consciousness uploaded to the Internet but these tropes are useful in the genre of speculative fiction for drawing a caricature of what society may look like under a similar circumstance.

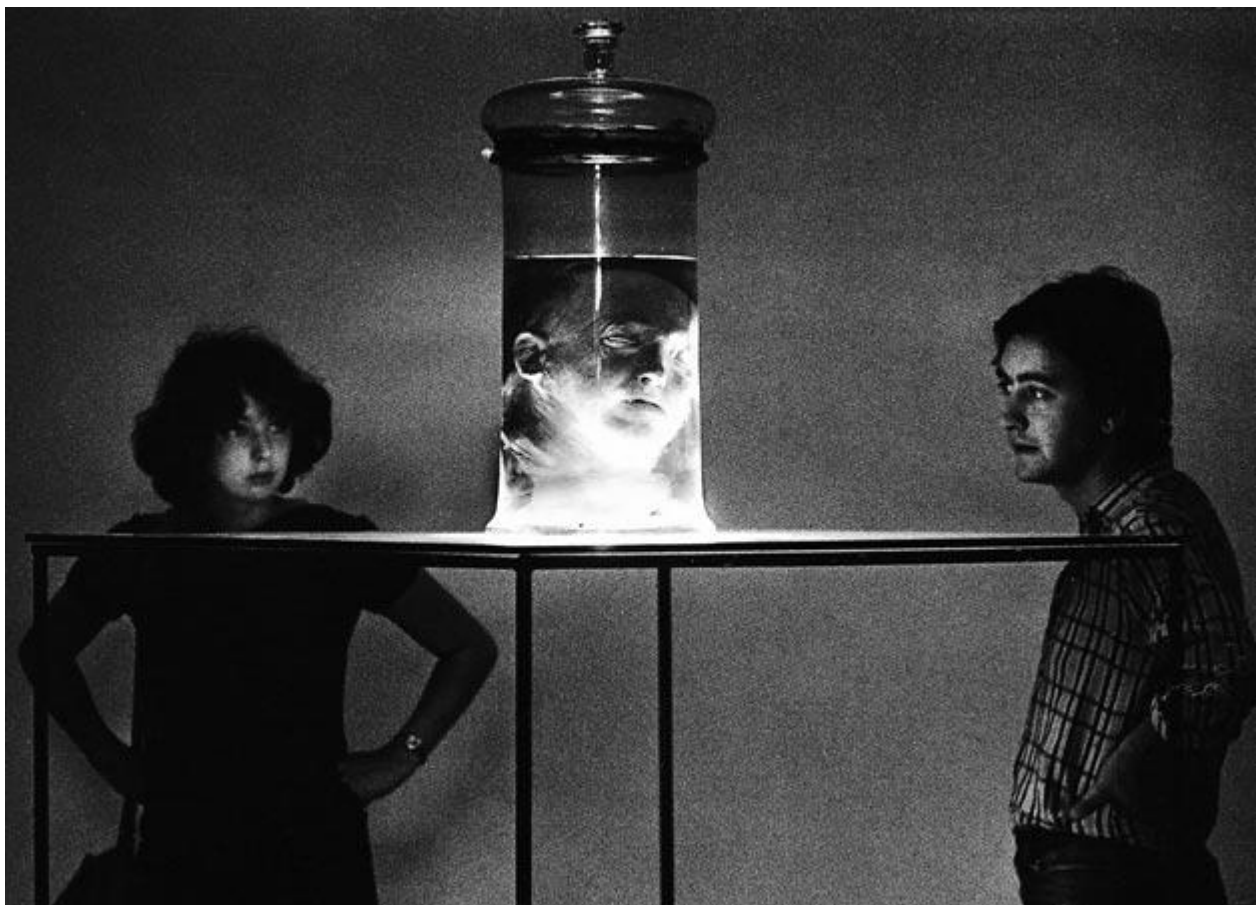


Illustration 5: Head in a vat

15 Gray, J . *Straw Dogs: Thoughts on Humans and Other Animals* , Granta Books, London, 2002, p 12

16 http://blogs.discovery.com/good_idea/2011/09/page/3/ 29-12-11

Today for most people lucky enough to be born predominantly in “developed” cultures, instant access to the wealth of information accumulated online is available in our pockets and personal computers. This new epoch has altered how we communicate and thus how we organize ourselves as a species. Manuel Castells has written extensively on the new structure in which humanity situates itself; The Network society, as he sees it, is a global society with a political, economic and cultural structure which mirrors the real world being an extension of it. What remains are the contemporary processes of globalization, not sole aspects of this globalization but interdependent now on this network. These processes occurred initially without the globalized digital communication technologies and information systems, but are now inherently linked to these things through the social interaction of its users. This is not to say that the shape society is in is drawn by the line of those who have access and those who don't, connected or not you are part of the network. In the words of Castells:

The uneven globalization of the network society is, in fact, a highly significant feature of its social structure. The coexistence of the network society , as a global structure , with industrial, rural, communal, or survival societies , characterizes the reality of all countries, albeit with different shares of population and territory on both sides of the divide, depending on the relevance of each segment for the dominate logic of each network.¹⁷

So, irregardless of the disproportional use of digital information technologies, the effects they have globally on varying social groups is obvious, the access available is not in dispute it is clear that access is only permitted to the few who find themselves lucky enough geographically to be born in the correct country and time period. The effect world wide can not be ignored, that is to say the effect of globalization on varying indigenous cultures both young and old, Isolated and situated in the heart of the global community. Access is clearly also permitted to a certain class, within

¹⁷ Castells, Manuel, *Communication Power*, Oxford University Press Inc, New York, 2009, p 26 .

prosperous western countries, and from this further social minorities can be described both occurring from this network as the genesis and prior to its dominance. The result is a world of those who are plugged in and those who are not, for both of whom the interactions within the network society alter the realities which they live with everyday. So outside of the on-goings of the process of the network there is a separation between social actors with access and without, the social ramifications of this can be seen in very everyday things like the availability of education and other essential services. Within the network and the confines of the interactions between the varying social actors an exemption from power structures does not occur either. Castells opens his book *Communication Power* with this brief but useful definition;

*What is power? Power is the most fundamental process in society , since society is defined around values and institutions, and what is valued and institutionalized is defined by power relationships...Power is the relational capacity that enables a social actor to influence asymmetrically the decisions of other social actor(s) in ways that favour the empowered actors will, interests, and values. Power is exercised by means of coercion (or the possibility of it) and/or by the construction of meaning on the basis of the discourses through which social actors guide their action.*¹⁸

18 Castells, Manuel, *Communication Power*, Oxford University Press Inc, New York, 2009, p 3.

Barack Obama, Fyborgs and The Ghost in the Machine

Power online is given by the consent of the users' adherence to the social norms as dictated by the same social rules propagated by the dominant ideologies of this current time, it is in this that we allocate power to those who would be king. But the Internet has great emancipatory capacity too, entire subcultures and movements have been born from both the wealth of information it allows to propagate and from the ease of communication it promotes. Many of the major politically activist events of 2011 were only possible because of the ease of communication the Internet allows and through this groups like the Occupy Movement, Anonymous and participants in the Arab Spring were able to organize their respective interventions and revolutions. But this same grass roots approach can be manipulated as a form of coercion by large companies and political groups. In case of large companies this influence is clear in viral marketing, a method of subconsciously affecting demand and increasing market trends in the favor of major companies by promoting products and services via the introduction of popular memes and product placement. A movie can today be promoted not by large billboards or an intensive television advertisement but sub-planting animated clips onto popular websites or simply by placing the trailer for the film high in a Google search for a nominal fee and a strategic placement of certain keywords. In terms of political promotion one need only look at the 2008 Barack Obama presidential campaign to see the effects of the availability of high speed broadband and an emotional reinforcement of a very old method of enculturation, the campaign slogan a seemingly defunct method of coercion and an award winning smile. *The Internet provided a most useful platform to mobilize those yearning for change, and those who believe in Obama's potential to deliver change.*¹⁹ The extent to which humanity is separate from its digital presence is becoming less clear, we are not necessarily cyborgs as they are defined in traditional

19 Castells, Manuel, *Communication Power*, Oxford University Press Inc, New York, 2009, p 393

Science Fiction, we have become as Mark Rowlands sees it something more like what he defines a *Fyborgs*²⁰

*The idea was that through the development of culture, broadly understood, it was impossible to separate human cognition from the wider informational environment in which Humans are embedded. Knowledge exists in the world around us, and what we do is tap into it. We are all, in effect, like networked computers.*²¹

If we are already comparable to networked computers and we carry powerful processing technology were ever we go then it is relatively a small step to the Technological Singularity. The Technological Singularity is a Science fiction staple and refers to the hypothetical future emergence of greater-than-human intelligence through technological means²², part of this concept is that it will be a self replicating system capable of sustaining itself, also part of this concept is that as a form of intelligence it would not be comparable to what we know as intelligent now and quite difficult to comprehend unaided. The social structure of the real world which underpins the actual mechanics of what the Internet does could be arguably a form of intelligence if not a new type of organism, the biology of which is reliant on the day to day interactions of human beings. This is of course a metaphorical argument reliant on an anthropomorphication of the network which is the Internet, but as a metaphor look at this way for a second. As an organism ourselves are individual human beings not reliant on, from our perspective, micro-organism with out which the structural foundation for our existence could not be possible? As a species hence a larger organism than the individual parts, like an ant colony, is humanity not reliant on, from that perspective, the individuals which make up the entirety of the species? The network humanity as an organism uses is not separate to humanity,

20 See Rowlands, Mark, *The Body Mind: Understanding cognitive*, Cambridge University press, 1999.

21 Pg ix, Rowlands, Mark, *Sci-Phi: Philosophy from Socrates to Schwarzenegger*, Thomas Dunne Books, St Martins Griffin Eddition, New York, 2005.

22 See Yudkowsky, Eliezer “Artificial Intelligence as a positive and negative factor in global risk”, in Nick Bostrom and Milan M. Ćirković (eds), *Global Catastrophic Risks*, Oxford, Oxford University Press, 2008.

it is humanity by the sheer fact that it today is a dominant tool in social interactions in this manner it is quiet easy to see the ghost in the machine²³²⁴. This ghost is not literally a meta-physical presence haunting the Internet, it exists via humanities adaption of this network the remnants of this interaction. Our Reliance on these systems is becoming ever more prevelant, is this a fatalist future or something emancipatory? In *Artificial intelligences and political organization: an exploration based on the science fiction work of Iain M. Banks*²⁵ Yannick Rumpala observes that,

*In the Culture novels, Iain M. Banks presents a civilization that appears to have been functioning for a long time. However, what is missing from his works (but this was probably not part of his intentions) is a presentation of course of events that led these technologies to become liberatory. And yet, this course of events is contingent and not necessarily the most probable one. The prospective reflections that have developed regarding the course of events that could be currently underway in the field of “new information and communication technologies”, and they oscillate between promise and fear. The worries are rising and based on the threats that such technologies could pose to freedom. As far as “artificial intelligences” are concerned, specialized academic journals are already dedicated to this subject, for example, AI & Society, and their publication is additional proof that the social integration of these technological developments will not happen without concerns.*²⁶

23 Gilbert, Ryle, *The Concept of Mind*, The University of Chicago Press, Chicago, 2002, p 11.

24 The Descartes Myth Essay available

http://www.informationphilosopher.com/solutions/philosophers/ryle/descartes_myth.html 04-01-12

25 Rumpala, Yannick, *Artificial intelligences and political organization: an exploration based on the science fiction work of Iain M. Banks*, University of France, Nice. June, 2011.

<http://www.inter-disciplinary.net/wp-content/uploads/2011/06/rumpalaepaper.pdf> 04-01-12

26 Ibid, p 12

Blind Progress and Astrosociology

That there are concerns here in the present about the outcome of technological progress is promising, it shows that for the most part as a civilization we are not blindly marching on in the name of progress alone. There are more conservative, often fatalist views of the role humankind will take in the face technological progress, these views are important to bear in mind when constructing a conceptual framework, for instance John Gray in *Straw Dogs* sees humankind's potential approach to a post human world with very little optimism with this cheerful and quotable remark,

*Humans are no more masters of machines than they are of the fire or the wheel. The forms of artificial life and intelligence they are constructing today will elude human control just as naturally occurring forms of life have done. They may even replace their creators.*²⁷

But theoretical examinations of these speculations on their own are not enough to massively effect on people's outlook on the potential events which follow our particular time and space in relation to prospective technological advancement, the world is lived in here and now and a social praxis towards the future must be formulated with this in mind. There is a limited readership dedicated to just speculative fiction although the genre has reverberations in many different fields and disciplines. In Simone Caroti's paper *Astrosociology and Science Fiction : a Synergy*²⁸ an argument is put forward as to whether Science/Speculative Fiction as genre can be identified as

²⁷ Gray, John. *Straw Dogs: Thoughts on Humans and Other Animals* , Granta Books, London 2002, p 185.

²⁸ Caroti, Simone, *Astrosociology and Science Fiction: a Synergy*, Purdue University
http://www.astrosociology.org/Library/PDF/SPESIF2010_Caroti_SciFi.pdf 06-01-12

sociological phenomenon particularly within the field of astrosociology. Astrosociology as an discipline under the umbrella of sociology does not simply pertain to the effects of any one scientific or technological effect on social change but specifically speculates in the tradition of sociology in relation to how space faring civilizations (which we still are if not in a ever diminishing way) are effected by the epoch of space travel. The paper goes on to explain why Science Fiction does not immediately fall in to this category, it being a form of literature with space fairing and the technological impact of space fairing being a back drop for the narrative. Caroti concludes that

*Stories are advocacies built upon a figment of one's imagination, not scholarly papers built on hard evidence, and even though science fiction is often far more factually savvy than most other fictional genres, it is still a literature.*²⁹

Caroti's main concern is with astrosociology on the whole and his concerns as to whether speculative fiction can fit within that discipline are well argued, it appears it can not fit into the parameters as a Astrosocial phenomenon. Although Caroti does note that the core science fiction being a creative endeavor will have a part to play in an a space fairing society.

*Indeed, from this characteristic come both its appeal for its fans and practitioners and its usefulness for astrosociology: its existence is spent in a state of constant negotiation between the attitudes of the disciplines indicated in the two words making up its name – the sciences (the rational, Apollonian part of human nature) and the arts (the irrational, Dionysian part). It is likely that the human venture into space, for all the research and the experimentation that will go into it, will partake of both sides in equal measure.*³⁰

29 Caroti, Simone, *Astrosociology and Science Fiction: a Synergy*, Purdue University
http://www.astrosociology.org/Library/PDF/SPESIF2010_Caroti_SciFi.pdf, 06-01-12, p 8

30 Ibid p 12

A Message In a Bottle

Science fiction may not be an astrosocial phenomenon but its uses as a trigger are undeniable, as in any form of creative work it can provide a starting point for dialogue. What could be a more emphatic way to establish dialogue than around a creative approach such as a narrative or some other form of creative project, rather than the seemingly cold hard facts most people associate with scientific theory. The creative approach need not be ignorant of scientific concepts and vice versa, in this way a social phenomenon could be potentially instigated in regards to the genre. The social change which could be enacted via discourse based on speculative fiction could create an outlook towards the future which would be considerate of the repercussions of our actions in the present. If we allow ourselves to speculate about the world which might one day occur than a personal investment has been made to this potential world, with a personal investment in mind there is the further potential that individuals approach to what they may be altered with a positive consideration. Furthermore, if in the present individuals make a consideration for worlds that may one day occur past their own particular time period than the cultural recordings and artifacts they make currently might have the potential to retain potency for future generations. But say for instance if the current trend in information technology persists, where products are created to increase profit margins then the culture of the present is becoming more and more ephemeral everyday. Stanley Schmidt editor of *Analog Science Fiction and Fact* issue March 2012 says in his editorial *What's Technology For?* states in relation to the accelerating trend of planned obsolescence

The same consideration applies to all records stored in digital form – which, these days, means practically all of them. A great many have already been, for all practical purposes, lost to posterity simply because they're stored in old electronic formats and nobody has the time or equipment to translate them to new ones. In creating a civilization with far more

*information-handling ability than any before it, we may also be creating the most ephemeral civilization in history.*³¹

As Schmidt sees it, with out consideration for the world which will follow us, our culture will be lost in the annals of history, technically everything is ephemeral and there is no guarantee that the life that proceeds us will have use for our knowledge human or otherwise. There is always a possibility though, that what proceeds us could have a use via the wisdom we could impart, even if the follies of our actions today ensures our extinction. Efforts have been made to establish a

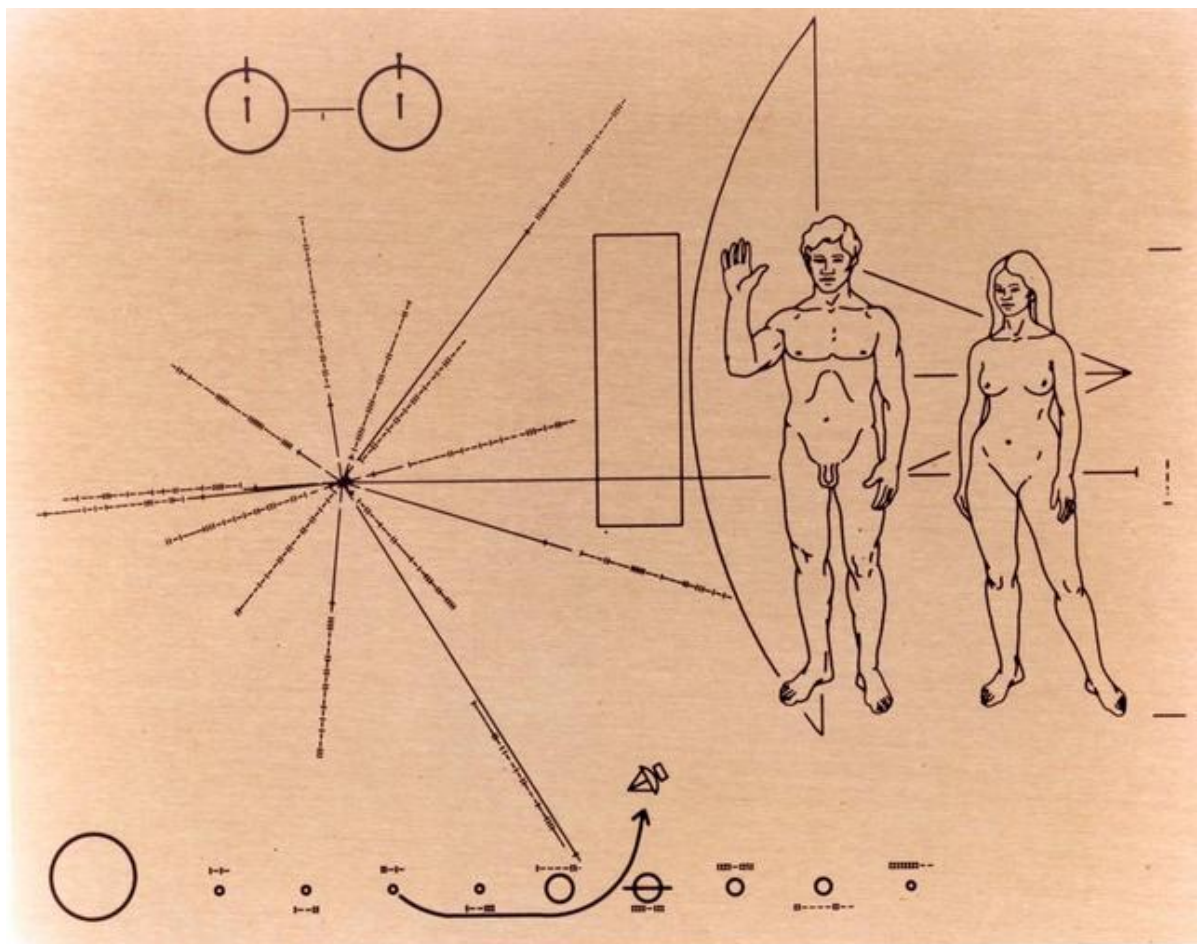


Illustration 6: The plaque itself intended so as to give all the information needed to establish who we are and where/when within the universe http://kirbymuseum.org/gallery2/d/17299-3/Pioneer10-plaque_1200.jpg

dialogue with our inheritors in the form of the time capsule which has taken many diverse forms.

31 Schmidt, Stanley, *Analog Science fiction and Fact*, March 2012, Del Magazines, New York, p 6.

The forms they have taken range from a physical marker, like a literal capsule containing preserved contributions from all the members of the project or they have taken place as plaques mounted to the interior of deep space probes. The popular scientist Carl Sagan³² in his work with NASA on the Pioneer 10 Probe³³ created a plaque with a messages designed to make contact with possible alien civilizations. He also wrote the seminal modern science fiction classic *Contact*³⁴. The now deceased Dr. Carl Sagan helped devised the plaques that bear the illustration of a man and a woman as well as a diagram identifying earth's location in the galaxy. Like a message in a bottle, these plaques will journey out into interstellar space possibly to be found one day by an extraterrestrial civilization.³⁵ Carl Sagan was a great proponent for the scientific knowledge in America until his untimely death, due to pneumonia aged 67 in December 20, 1996. In 2007 as part of the Nasa's Phoenix mission recordings from several science fiction writers, scientist and a musical score by Brian Eno were sent to Mars. Phoenix carried with it a DVD made of silica glass, designed to last the tens, hundreds or thousands of years it may take for humans to visit Mars and to rediscover it. Sagan's message was directed towards future Marsian colonists, bellow is a transcript from this message.

Science and Science Fiction have done a kind of dance over the last century particularly with respect to Mars, The scientists make a finding, it inspires science fiction writers to write about it and a host of young people read the science fiction, and are excited and inspired to become scientists to find out more about Mars, which they do. Then this feeds again into another generation of science fiction and science, that sequence has played a major role in our present ability to get to Mars....This certainly played a role in my scientific development.³⁶

32 <http://www.carlsagan.com/> 14-01-12

33 <http://quest.nasa.gov/pioneer10/mission/index.html> 12-01-12

34 Sagan, Carl, *Contact*, Pocket Books, New York, 1985.

35 <http://quest.nasa.gov/pioneer10/mission/index.html> 12-01-12

36 Transcribed from <http://www.youtube.com/watch?v=Oi3-0saiOs0> 13-01-12

Sagan saw the potential for science fiction to encourage the imagination of future generations and its ability to encourage curiosity. The preservation of our current knowledge could enable future generations to draw from this pool of collective wisdom, current information technologies as they stand are not future proof and could potentially disappear for generations to come. If efforts are made to safeguard this information we in our present could establish a dialogue which although one sided could potentially aid our descendants. What this type of consideration could provoke today and the social change this could provoke could be only for the betterment of ourselves, potentially helping people living for a better present and conversely a better tomorrow.



*Illustration 7: Insect incased in amber
sourced: [http://www.don-lindsay-archive.org/creation/amber work.jpg](http://www.don-lindsay-archive.org/creation/amber_work.jpg)*

The capsule could potentially represent all that we are well after our extinction, like amber preserving ancient insect life. If this is the case then efforts to leave some form of artifact are equally valid in the effort to leave some trace for what ever some day is capable of interpreting the message. Margaret Atwood author of *Year of the Flood*³⁷ wrote in contribution to the Guardian newspaper in support of a campaign based around reduction of carbon emissions, the short story is a time capsule message detailing the rise and fall of a civilization eerily similar to our own.

³⁷ Atwood, Margaret, *Year of the Flood*, Bloomsbury, London (2009)

3. *In the third age, money became a god. It was all-powerful, and out of control. It began to talk. It began to create on its own. It created feasts and famines, songs of joy, lamentations. It created greed and hunger, which were its two faces. Towers of glass rose at its name, were destroyed and rose again. It began to eat things. It ate whole forests, croplands and the lives of children. It ate armies, ships and cities. No one could stop it. To have it was a sign of grace.*

4. *In the fourth age we created deserts. Our deserts were of several kinds, but they had one thing in common: nothing grew there. Some were made of cement, some were made of various poisons, some of baked earth. We made these deserts from the desire for more money and from despair at the lack of it. Wars, plagues and famines visited us, but we did not stop in our industrious creation of deserts. At last all wells were poisoned, all rivers ran with filth, all seas were dead; there was no land left to grow food.*

Some of our wise men turned to the contemplation of deserts. A stone in the sand in the setting sun could be very beautiful, they said. Deserts were tidy, because there were no weeds in them, nothing that crawled. Stay in the desert long enough, and you could apprehend the absolute. The number zero was holy.

5. *You who have come here from some distant world, to this dry lakeshore and this cairn, and to this cylinder of brass, in which on the last day of all our recorded days I place our final words:*

Pray for us, who once, too, thought we could fly.³⁸

38 <http://www.guardian.co.uk/books/2009/sep/26/margaret-atwood-mini-science-fiction> 18-12-11

Possibilities

Creative offerings to a time capsule project can harbor a message not just for the people of tomorrow but potentially for the people of today too. The vast scope of speculation could certainly not be condensed for the purposes of this short text, the sheer geography of this topic is quite overwhelming but this does not render it useless. There are immense possibilities as to what the future may hold, we could never possibly predict them all, but with a small bit of foresight we can certainly try and approach the future with some responsibility for our actions and the repercussions of those actions.

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