# Technological Utopianism in the Works of Neal Asher

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Fakulta humanitních studií

Ústav anglistiky a amerikanistiky

akademický rok: 2012/2013

# ZADÁNÍ BAKALÁŘSKÉ PRÁCE
## (PROJEKTU, UMĚLECKÉHO DÍLA, UMĚLECKÉHO VÝKONU)

Jméno a příjmení: **Milan MOCEK**

Osobní číslo: **H08350**

Studijní program: **B7310 Filologie**

Studijní obor: **Anglický jazyk pro manažerskou praxi**

Forma studia: **prezenční**

Téma práce: **Technologický utopismus v díle Neala Ashera**

Zásady pro vypracování:

**Technologický utopismus – historie a charakteristika konceptu**
**Neal Asher v kontextu vědeckofantastické literatury**
**Technologický utopismus ve vybraných dílech Neala Ashera**

Rozsah bakalářské práce:

Rozsah příloh:

Forma zpracování bakalářské práce: **tištěná/elektronická**

Seznam odborné literatury:

**Corn, Joseph J. Imagining Tomorrow: History, Technology, and the American Future. Cambridge, MA: MIT Press. 1986.**
**Fludernik, Monika. An Introduction to Narratology. London: Routledge, 2009.**
**Segal, P. Howard. Technological Utopianism in Amercian Culture. Syracuse, NY: Syracuse University Press, 2005.**
**Smith, M. David. Does Technology Drive History?: Dilemma of Technological Determinism. Cambridge, MA: MIT Press. 1994.**

Vedoucí bakalářské práce: **Mgr. Roman Trušník, Ph.D.**
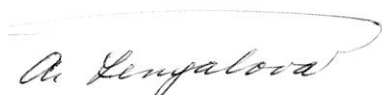Ústav anglistiky a amerikanistiky

Datum zadání bakalářské práce: **30. listopadu 2012**

Termín odevzdání bakalářské práce: **3. května 2013**

Ve Zlíně dne 1. února 2013

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## ABSTRAKT

Tato práce analyzuje přítomnost technokratického utopismu ve knihách napsaných Nealem Asherem. Charakterizuje technokratický utopismus a vysvětluje jeho literární využití. Součástí této práce jsou i souhrny Asherových názorů, jež jsou obsaženy v knihách *Stahovač*, *Plavba Sabla Keeche*, *Pradorský Měsíc*, *V Pavučině*, *Hranice Řádu*, *Mosazňák* a *Agent Řádu*.

Klíčová slova: technologický utopismus; technologický utopismus v americké kultuře; Neal Asher; technologický determinismus; vesmír Řádu

## ABSTRACT

This thesis analyzes the presence of technological utopianism in the books written by Neal Asher. It explores the features of technological utopianism necessary for its identification and its literary purpose. This thesis includes the outlines of Asher's views and arguments presented in the books *The Skinner*, *The Voyage of the Sable, Prador Moon*, *Keech*, *Gridlinked*, *Line of Polity*, *Brass Man* and *Polity Agent*.

Keywords: technological utopianism; technological utopianism in American Culture; Neal Asher; technological determinism; Polity universe

## ACKNOWLEDGEMENTS

To my bachelor thesis supervisor, Mgr. Roman Trušník, Ph.D., I owe a great debt of gratitude for all the unrelenting support, patience and advice he provided me with.

## CONTENTS

## INTRODUCTION

The purpose of my thesis is to demonstrate what constitutes technological utopianism and provide evidence of its presence in the work of Neal Asher. Therefore, thesis is divided into two parts. The first part contains the introduction to technological utopianism, the history of technological utopianism and the terminology necessary for its recognition. The second part discusses the works of Neal Asher, his vision of Polity and hidden opinions within his work.

According to Asher's own biography: he was born in 1961 in Billericay, Essex and, being a strongly-influenced child of two science-fiction fans, started to write science-fiction and fantasy at the age of sixteen, admittedly greatly influenced by the books by J. R. R. Tolkien and E. C. Tubb. During his post-school years, convinced he was qualitatively nowhere near enough to be called a writer, he rather worked and switched many jobs. Most of them were quite tedious such as builder, barman or coalman. Finishing the university, he took position at a successful machining company, where he programmed computerized machine tools. Three years later he left the company, realizing he wanted to be a full-time writer. Starting with his fantasy trilogy *Hadrim* (1993) he followed by successful novellas such as *Mindgames: Fool's Mate* (1992), *The Parasite* (1996), *The Engineer* (1998), *Africa Zero* (2001) or the short story collection *Runcible tales* (1999). Many of his short stories had been published by British small-press SF and fantasy magazines.[1]

This thesis proves the presence of technological utopianism in Asher's work, namely through the references in the books: *Prador Moon* (2006), *The Skinner* (2002), *The Voyage of the Sable Keech* (2006), *Gridlinked* (2001), *Line of Polity* (2003), *Brass Man* (2005) and *Polity Agent* (2006), as well as ascertains Asher's critique of contemporary society.

However, before proceeding with my thesis, I need to make one final addition. That is, identifying Asher in the context of science-fiction. However, before I am able to do that, I need to explain what science-fiction is and ironically, such endeavour seem to be impossible. An all-encompassing definition of what entails science-fiction or a general estimate when science-fiction started is yet to be agreed upon. As Paul Kincaid explains in his article, where he tries to identify the starting point of science fiction: "There is no

starting point for science fiction"[2] and shockingly enough, he does present valid points when comparing the definitions of others, who tried to encompass the meaning of science-fiction: "We have to be wrong, because there is no ancestral text that could possibly contain, even in nascent form, all that we have come to identify as science fiction."[3] Following his arguments, there seems to be only two sensible ways as how to approach science-fiction. The first one is quite simple indeed; the author himself acknowledges he is writing science fiction. The other, possibly because of authors who do not bother labelling their own work, is to find resemblances between the acknowledged works and the unlabeled ones. This leads, if not to eventual unravelling of the definition itself, to constant enrichment of science-fiction as well as creation of new branches.[4]

Therefore, for introducing Asher properly in the context of science-fiction, I checked for similarities in the works of other writers through several science-fiction reviews and decided to place him between two authors of distinct opinions. Close to the idea of necessary information processing of computer systems, sharing similarity with Asher's work in the presumed assistance of technology seem the novel *Permutation City* (1994) by Greg Egan. Egan describes the year of 2050, where humanity transcended their flesh and blood and copies of their mind are uploaded to computers and though they are hindered by the current processing power of computers, some are able to experience richer, fuller existence. He places emphasis on the question whether computers will eventually help humanity to further its evolution.[5] On the other hand, oppositely to Asher's enthusiasm to implementation of artificial intelligence, the novel of William Gibson *Neuromancer* (1984) pictures a bleak future, where people are forced to work in cyberspace in order to survive while the machines run the world. Humans here are pictured as powerless individuals, who can not affect any real change.[6] I presume this novel being good collision of opinions, as Asher advertises the world being run by artificial intelligences in order to reach utopia and human inability to affect change is a deliberate act, as not to let humans fight among each other for power.

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[1]   See "Biographical Information," last revised 17/2/2013.  http://freespace.virgin.net/n.asher/page8.html
[2]   Paul Kincaid, "On the Origins of Genre," *Extrapolation* (2003):409.
[3]   Kincaid, "On the Origins of Genre," 409.
[4]   See Kincaid, „On the Origins of Genre," 409 – 418.
[5]   See James Gunn, "Tales from Tomorrow," *Science & Spirit* (2005): 69.
[6]   See Gunn, "Tales from Tomorrow," 68–69.

# 1   TECHNOLOGICAL UTOPIANISM

The following chapter, I would like to clarify, is mostly comprised of the work by the Professor of History at University of Maine, Howard P. Segal. I used the provided terminology, definitions and insight solely for the purpose of explanation of my bachelor thesis - The Technological Utopianism in the Works of Neal Asher. My extensive use of Segal's work, citations and phrases is a deliberate act as I believe that his explanations are fully comprehensive and too many unnecessary changes on my part would damage Segal's explanatory intention and thus spoil the recognitions Segal deserves. To my best knowledge, I have yet to find another reference material which would contain more details about the technological utopianism, or European technological utopianism, Asher is naturally part of.

The study made by Segal notes only one author on European soil, who ever came close to be called a technological utopian, Etienne Cabet (1788 – 1856) and his *Voyage to Icaria* (1840). The rest of European utopians such as Robert Owen, Charles Fourier, Karl Marx or Friedrich Engels simply did not consider the technology the establishing means of utopia.[7] The lack of information about the European technological utopianism necessitated the use of American technological utopianism as reference instead, for it contained comprehensive examples and also shown the steady change from optimism to pessimism with the progress of time and technology, which I found intriguing.

## 1.1   History

Technological utopianism was originally one of the movements for change in the United States during unsettled period of 1880 to 1930. Unlike other movements at that time (such as Populist and Progressive crusades or Muckraker journalists) however, technological utopianism did not reach nearly as many listeners as speeches, tracts or political campaigns. The idea of technological utopianism was transferred purely through literary devices and the pursuit of change was more comprehensive than just economic or political reforms sought by the Populists and the Progressives. The advocates of technological utopianism believed in soon-to-come perfect society achieved through technology. A

society, where technology is not only *used* as machines and tools, but also where society's culture, institutions and values are shaped by said technology.[8]

Technological utopians were not so negligent as to deny the presence of concurrent problems (hunger, diseases or war), as well as future problems technological utopianism might cause – such as boredom or unemployment. Neither did they forget about psychological issues that were already present at their time and were slowly escalating and becoming a major problem – such as rudeness, aggression or social disorder. They were simply confident that the steadily progressing fusion of science and technology will find answers to these problems and present solutions in reasonable time frame.[9]

Utopians were also confident that the power of technology was potentially limitless and thus taming of the natural forces was just around the corner. Many perceived mastery of nature as fulfilment of man's destiny. Subjugation of the natural resources such as wind, water or geothermal energy would give future to the quiet and clean electricity opposed to the noisy and dirty image still persisting since industrialization. Technological progress would then exchange the mass of smoking factories, loud machines and smeared streets into society of perfect cleanness, efficiency and harmony. As all of the technological utopians of the 19th century shared the same "perfect" vision of clean future, they also shared the same time estimate. They placed the envisioned future in the following hundred years within the borders of United States, however hardly any of them presented any practical technological evidence of how will this society reach utopia.[10]

As for technological utopianism present in American literature today, where it was previously used the most, the phenomenon already faded greatly, especially because of the happenings of second half of 20th century. Historical moments such as world wars, where technology was widely used for mass destruction, the never-ending technology-related environmental crises, fear of nuclear weaponry or unsettling distrust for all public officials, dictators and technical experts permanently lowered society's faith in positive benefit of technology and thus technological utopianism.[11] What technological utopians presented as

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[7]    Howard P. Segal, *Technological Utopianism in American Culture* (Syracuse NY: Syracuse University Press, 2005), 70–73.

[8]    See Howard P. Segal, "The Technological Utopians," in *Imagining Tomorrow. History, Technology, and the American Future*, ed. Joseph J. Corn et al. (Cambridge, MA: MIT Press, 1986), 119.

[9]    See Segal, "The Technological Utopians," 122.

[10]   See Segal, "The Technological Utopians," 123.

[11]   See Segal, *Technological Utopianism in American Culture*, 165.

yearning for a flawless leadership (*planning*) was abruptly overshadowed by technologically-supported holocausts carried out by Adolf Hitler or other dictatorial visionaries (such as Stalin, Mao Ce-Tung or Pol Pot) who were willing to murder millions of citizens in order to reach their idea of perfection.[12]

A similar disappointment and distrust in their leaders took root in United States as a reaction to Vietnam War or the Watergate scandal, where President Richard Nixon sent several former members of CIA into Democratic National Committee headquarters to install voice-recording devices. This incident permanently undermined Americans' traditional faith in morality of their leaders as well as their ability to select proper experts who actually were more capable than the ordinary citizens.[13]

Although the technological utopianism seems to have long lost its primary function of turning the world into utopia, it still remains as a viable literary means of social criticism. As Segal concludes: "To be effective as social criticism, a utopian vision should be concrete enough to be applicable to the real world; and it should be detached enough to be truly critical."[14] With the utilization of utopianism today, the reader is given a chance to experience a new alternative society while being able to look back at the real world in different perspective.[15]

## 1.2 Technological Determinism

History of humankind is a history of progress. Be it slow progress, gradual or exponential. Be it progress in culture, technology or society (e.g., social progress could have well started in establishment of blood-related packs while men being leaders and women children caretakers, continued over non-equal voting rights till 1928's Equal Franchise act when women were finally able to vote with same voting rights as men).

Technological determinism is based on assumption that social progress is influenced (even driven) by technological innovation.[16] That is to say, to what extent the very essence of life changed with the progress of technology during the last millennium, century or

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[12]  See Segal, *Technological Utopianism in American Culture*, 178.
[13]  See Segal, *Technological Utopianism in American Culture*, 165–166.
[14]  Segal, *Technological Utopianism in American Culture*, 179.
[15]  See Segal, *Technological Utopianism in American Culture*, 179.
[16]  See Smith, M. L., "Recourse of Empire," in *Does Technology Drive History? The Dilemma of Technological Determinism*, edited by Merritt Roe Smith, and Leo Marx, (Cambridge: The MIT Press, 1994), 38.

decade. An introduction of computer, for example, was one of the most ground-breaking technological feats of 20th century. As limitlessly progressive technology, which has found its way to almost every household in this era, it is a subject to constant implementation as well as upgrades. Nowadays, although there are individuals who still do not care for or refuse to use the computers are swept away by the extensive coverage this technology provides in shops, markets, hospitals, trains, municipal offices, etc.[17] Introduction of new, aspiring technology gradually leads society to strong dependence on advancement while creating pressure for necessity of said technology. Therefore most have already become accustomed to the seemingly unending power of invention (as well as the power of *necessity*) and contemplating about why this phenomenon happens in the first place is all but necessary.[18]

## 1.3     Technological Determinism present in American Culture

The technological utopianism described in the book by Howard Segal, considers authors who wrote between the years of 1880 to 1930 and pictured a technological utopia on the soil of United States. Therefore, for purposes of explaining technological determinism in appropriate, understandable context I believe it is necessary to properly highlight cultural development in the society of United States, which stood as a base for technological utopia at that time.

The establishment of American culture was greatly marked, if not entirely conceived by the influence of technology. Devout supporters of technology in the early United States, men such as Tomas Jefferson and Benjamin Franklin, were captivated by the idea of human progress. They perceived the pursuit of scientific knowledge and technology as effort well invested, in the interest of spiritual betterment. Thus they emphasized technological changes as means to both intellectual and material improvements. With the prevalent attitude that every invention should be only for the benefit of society, Franklin was one of those who did not even patent his own inventions.[19]

However at the end of the 18th century, by the intervention of Tench Coxe, American society shifted its attention to technological means even more. Unlike Jefferson, who

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[17]     See Smith, M. R. "Introduction," in *Does Technology Drive History? The Dilemma of Technological Determinism*, edited by Merritt Roe Smith, and Leo Marx, (Cambridge: The MIT Press, 1994), 11.
[18]     See Smith, "Introduction," IX.

emphasized technological advancement in the interest of spiritual needs, Coxe shifted the meaning more to establishment of law and order. In the first decade of 19th century, industrial capitalism suddenly gained dominance. High expectations as well as hopes were placed into technology's ability to remedy problems arising in American society, influencing even art and journalism. Technology increasingly found its way into paintings and photographs. The ideas captured on the screen strongly presented the power of progress. The artists changed old republican symbols such as the goddess Liberty into maiden called Progress, just to illustrate the predominant believe in technology.[20]

With each decade the speed in which technology changed the face of society hastened. By introduction of roads, railroads, bridges, telegraphy or electricity the society was made aware of consecutive advancements and unlimited power of invention. And at the start of 20th century, as the answer for the need of ever-expanding markets, advertising became an instrument by which big companies started imprinting instrumental values upon society. Advertising companies started to employ psychological means such as suggestion or association to evoke a mental image that would encourage the buyers to think that buying new technology shaped society. And thus a strong form of technological determinism was embedded upon society. As psychology-based advertisements progressed their aim was changed to excite the customer by fulfilling their intangible needs – such as patriotism, elegancy, family affection or efficiency. Thus the new technology was not only saving time, but presumably making the users happier just by using it. Every customer was led to believe that technology would fix any kind of problem and ensure that every citizen would be given the legendary promise of American life.[21]

Additionally, technological determinism needs to be divided into two parts – a *soft* and *hard* view. Soft technological determinism presumes that technological change is a main driving force of social change, where even if technology seems to exhibit strong dependence on society, it merely responds to social pressures. This phenomenon was evident in United States since the 18th century.

The hard view considers technological advancement as completely independent entity, unaffected by the social pressures or needs. As many of the soft determinists have cleverly

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[19]   See Smith, "Introduction," 3.
[20]   See Smith, "Introduction," 4–5.
[21]   See Smith, "Introduction," 13–15.

pointed out: how can anyone consider this disembodied entity capable to effect any action? As the argument continues, there is yet to be presented technology capable of doing anything else but what was pre-programmed by the humanity. The side of hard determinism in the recent years is getting, however, more and more ground in regards to slight advances in software programming and therefore presumable development of artificial intelligence.[22]

Though to a technological utopian, the question of technological determinism remains essential, for is technology truly a means to an end?

## 1.4    Technological Utopianism

To define the term of *technological utopianism* it is best to introduce the explanation presented by Howard P. Segal. He describes the term as a line of thought and activity that promotes technology as the means of achieving utopia.[23] And although individual utopian visions may vary greatly, Segal identifies ten common characteristics which are genuinely present in every piece of technological utopianism. As following chapter will make clear, characteristics related to the context of technological utopianism (namely utopia, technology, culture, evolution, equilibrium, efficiency, system, organization, planning and rationalization)[24] have a more complex meaning beyond what is commonly expected and are necessary to be explained in proper context.

## 1.5    Utopia

Utopia, a heading that has been used throughout our history's news a few too many times, is a seemingly perfect society – an effort to create a society void of strife, suffering or hunger, with the main notion being advancement when retrospectively compared to society before it became a utopia. The focus is usually placed on improvement of living conditions (or generally satisfaction rate) for each and every of its inhabitant or even perfection of every aspect of society. However the exact definition is not entirely possible. As Howard Segal notes: "Perfection does not come automatically: the inhabitants of utopia remain flawed by nature—save where, as in some utopian fiction, they are perfected through

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[22]    See Smith, "Introduction," X.
[23]    See Segal, *Technological Utopianism in American Culture*, 10.

genetic engineering. Utopian society must maximize their virtues and strengths and minimize their vices and weaknesses. In discussing a utopia, the particular objectives and the means devised to obtain them define the particular perfection that is sought. Perfection, like beauty, is an empty word unless it is given specific contents."[25] Therefore it is hard to determine what individuals see as satisfactory or what exactly the supporters of utopia see as an improvement or perfection.[26]

Also, it is important to distinguish utopias as genuine and false by their seriousness. Genuine utopia attempts to perfect both its inhabitants as well as conditions in the society in nearly all departments (values, norms, etc.) and is actively striving to complete the utopia. False utopias move about only in reform-like manner and try to change only one or two points (for instance: health care or schools) while usually exhibiting a dream-like attitude or simply searching for a means to escape reality. This attitude results in a stage where the status of inhabitants or state of affairs (or both) in genuine utopia is qualitatively much better (or absolute) compared to pre-utopia or false utopia.[27]

## 1.6 Technology

Technology is a term not easily definable, for its deep-rooted image which is either too narrow (any piece of machinery) or very broad (everything made by human creativity). Despite the narrow impression that only machines represent technology, structures play by no means a lesser role. Structures (represented by roads, power plants, dams, harbours, bridges, etc.) are built to be static, long-term and their purpose is to be pillars for machines, a dynamic part of technology. If several machines such as trucks, airplanes or ships are used to deliver building material for the construction of a structure, for instance factory, it is in change factory that is used to create trucks or airplanes. By widening the scope of what encompasses technology it is possible to say that even the smallest machines such as drills, pumps, motors or computers are on the same level of skyscrapers. Structures and machines are both the same, interchangeable parts of the term technology. Therefore technology should be imagined as coexistence of machines and structures.[28] Human

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[24]   See Segal. *Technological Utopianism in American Culture,* 10.
[25]   Segal, *Technological Utopianism in American Culture,* 11.
[26]   See Segal, *Technological Utopianism in American Culture,* 10–11.
[27]   See Segal, *Technological Utopianism in American Culture,* 11–12.
[28]   See Segal, *Technological Utopianism in American Culture,* 12.

ingenuity may not have any visible, physical form however is alone a crucial and inseparable part of technology as the final piece required for construction of a machine or building.

What was needed until 20th century to build a house (or a plough, for instance) was an operative with certain prowess, he then with the conversion of materials and proper use of acquired knowledge built the building (or machine). However what brought great change into the world of technology was in the invention of computers. Physical hardware of the computer could be retrofit with the software containing human expertise of *how*: establishing a possibility of creation of both machines and structures with computer being the only supervisor. This has caused the essence of technology to shift in meaning with time.

As mentioned before, technological utopianism can be understood as a means of achieving a utopia through the use of technology; however there is more to creation and preservation of perfect society. Every society, primitive or not, had some degree of technology and that degree determined how well could inhabitants control their environment. Our predecessors were able to protect themselves effectively enough with only stones and blowtorches against the unfriendly environment. However given the right amount of time, they were able to steadily exercise control over more of their environment with the advancement of their inventions.[29]

Looking in retrospect, technology seemed to have a direct impact on development of human race as well as close relationship with science. As described in the part by Robert L. Heilbroner *Do machines Make History?*, whenever scientist presented a new finding, it was not too unusual that simultaneity of invention occurred, meaning, several inventors could come up with the same piece of technology, inspired by the scientist's finding. This proved that technological advance, rather than random booms, went hand in hand with broadening of human understanding and helped to shape the society itself (and was shaped by society in return) while maintaining human history. Technological development was, in all of its complexity, also bound by constraints. And if evolution is not able to jump, neither is technology. For instance, steam-mill could not come first before hand-mill, or combustion-engine before steam-engine. Technology in all of history was always bound by

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[29] See Segal, *Technological Utopianism in American Culture,* 12–13.

the constraints of knowledge as well as material expertise of the society. Material expertise stands for the ability of applying acquired knowledge to practical use with affordable materials (or their conversion). Same constraints would likely render useless any hypothetical time-travelling as well. Even if humankind were able to go back in time and explain principles of atom energy to medieval society, our predecessors would not be able to replicate this technology and make proper use of it, given the current level of their metal-working.[30]

## 1.7 Culture

The very definition of the term *culture* has been debated repeatedly, its scale determined both narrowly and broadly and even still, reaching a final, clear definition became even more of an arduous task than in the case of *technology*. Segal helps with the explanation with the book *Culture and Society* by Raymond Williams. Williams presented the original meaning of the word as the tending of natural growth. However explains how the meaning started to shift during 19th century from "culture of something" to "culture as such, a thing in itself". Such understanding was present in both European and American culture. However what is, in fact, covered by *culture*? Assumptions continually progressed, considering the attributes of what should be accounted, what was necessary and what was in turn superfluous to include, ultimately leading to four main statements presenting culture's presumed meaning and scope. Segal concludes these main statements as: "(1) 'a general state or habit of the mind'; (2) 'the general state of intellectual development, in a society as a whole'; (3) 'the general body of the arts'; and (4) 'a whole way of life, material, intellectual, and spiritual.' "[31] Further debates tried to profusely determine whether culture could be only as narrow as (1) "the general state or habit of the mind", or even (2) and (3), or as broad as (4) "a whole way of life, material, intellectual, and spiritual." Another speculation was whether the purpose of culture was purely artistic and

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[30] See Robert L. Heilbroner, "Do Machines Make History?," in *Does Technology Drive History? The Dilemma of Technological Determinism*, edited by Merritt Roe Smith, and Leo Marx, (Cambridge: The MIT Press, 1994), 56–58.

[31] Segal, *Technological Utopianism in American Culture,* 14–15.

intellectual as in (1) through (3), or perhaps even materialistic as stated in (4). And last, should there be a presence of "high" culture for its elite and "low" for its masses.[32]

Technological changes present at the beginning of 20th century were certainly noteworthy though the responses to them were as often negative as positive; still they undoubtedly marked a significant change in society. Many began to ask, to what extent culture might be shaped by technological advances. Neil Harris defines cultural history as a search for unities in society through linking artefacts – for that purpose, consideration of both material and nonmaterial aspects of society is necessary. This approach considers the social generalizations along with the items (artefacts) and links the items with ideas, values and institutions when describing a distinctive culture they came from.[33] An example associated with American culture would be in the car industry the brand *Ford*, in comparison with the brand *Škoda* in the Czech culture.

The culture still, although may be greatly influenced by technology, does not encompass everything in society, it merely reflects the *texture of life* and not directly all material processes of society.[34] However Harris's approach is almost necessary for an understanding position of culture in technological utopianism. Technological utopians attempt to provide the technological answers (artefacts) or their technological predictions (making blueprints of the future), while imprinting them on the real world that is supposed to turn into utopia. This way, technological utopians try to evaluate, or even in better sense, estimate impact provided by said technology on the society, as well as encourage society to action.

## 1.8 Evolution (Technological)

Unlike Darwinian image of random variation, *evolution* (in the context of technological utopianism) does not only consider gradual change but indented transition to something more specific – a particular goal. Darwin considered evolution as a random evolution,

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[32]  See Raymond Williams, *Culture and Society, 1780-1950.* Harper Torchbooks: New York, 1966, xiv. Quoted in Howard P. Segal, *Technological Utopianism in American Culture,* 15. Syracuse, NY: Syracuse University Press, 2005. 14–15.
[33]  See Neil Harris, *The land of Contrasts: 1880-1901.* Braziller: New York, 1970, 2. Quoted in Howard P. Segal, *Technological Utopianism in American Culture,* 15. Syracuse, NY: Syracuse University Press, 2005.
[34]  See Segal, *Technological Utopianism in American Culture,* 15.

something by no means planned by humankind, without any set goal. Technological evolution relentlessly strives towards a set, final objective – perfection. [35]

## 1.9 Equilibrium

With similar nuance, equilibrium encompasses more than just stability. *Equilibrium* focuses on society's very condition and its ability to remain in equilibrium permanently or just temporarily. In most cases, permanent and temporary equilibriums periodically take turns, elevating society and driving it closer to a permanent equilibrium. This alternating process can be either gradual or spontaneous.[36]

## 1.10 Efficiency

The term *efficiency* should not be understood as a simple measurement of effectiveness (e.g., manufacture), where main focus is merely placed on cost or energy. In the work of technological utopians, what is considered efficient encompasses the decisions which are striving to bring the most social good as possible. In most cases, what might be the most cost effective (money-making) choice for an entrepreneur is not the most efficient (overall good-making) for a utopian adherent. The real profit here is considered the advancement of society as far as possible. However, rather than to excessively contemplate about every choice being efficient or not, it is preferred to simply avoid inefficiency and waste as such are as socially deleterious. *Efficiency* in this context converts economic thinking into moral crusade.[37]

Efficiency would also be an inseparable part present in the government, the educational institutions and the industry as only the technical experts are required to run such institutions. Therefore, in comparison to the democracy or republic where political popularity is decisive factor for election, the prerequisite for running the government in technological utopia is rather technical expertise.[38]

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[35]    See Segal, *Technological Utopianism in American Culture,* 16.
[36]    See Segal, *Technological Utopianism in American Culture,* 16.
[37]    See Segal, *Technological Utopianism in American Culture,* 16.
[38]    See Segal, "The Technological Utopians," 130.

## 1.11 System

The term *system* indicates a unified social order of coherence and integration. Such social order is at least partially planned by its higher echelons and maintained by its devices working in harmony. To be considered a system, size of such establishment should be no smaller than a city and no larger than United States. However in this context harmony does not stand for equilibrium. In fact, as system encompasses choices made by every internal part of its body (large scale choice made by the government and management or the small ones made by individuals) it tends to become rather unstable.[39] As Segal notes: "*System* as applied to a city, a state, a region, or the entire country presumes flux – a series of alternating, temporary equilibriums and disequilibriums"[40] and this flux is required for acquiring necessary experience. A more thoroughly planned system will be build upon such experience later, ultimately leading to a more permanent equilibrium.

## 1.12 Organization

The very essence of technological utopianism is a transformation of chaotic, low-technical and poorly ordered society into technical, well-organized and centrally planned society. Another objective is to reduce or completely erase inefficiency and waste.[41] Every action in such society is planned meticulously, integrated and its effect is intended to be long-lasting and prosperous. This insinuates an image of emotionless impersonality. However what is necessary, in fact, is a *sense of community* which ensures orders given by the leadership are trusted enough to be effectively realized, without any further questioning, in all parts of society.[42]

## 1.13 Planning

*Planning* in technological utopianism presumes an entity responsible for an extensive range of decisions. For instance: plans made for administrative department, economic department, social department and so on. Therefore *planning* in technological utopianism must be almost entirely central, in all aspects genuinely comprehensive and its power to reign over entrusted domain absolute. Hardly any intervention from outside sources

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[39]  See Segal, *Technological Utopianism in American Culture,* 17.
[40]  Segal, *Technological Utopianism in American Culture*, 17.
[41]  See Segal, *Technological Utopianism in American Culture,* 106.
[42]  See Segal, *Technological Utopianism in American Culture,* 104–105.

(individuals, companies etc.) can be allowed because of the threat of unforeseen contradictions. Although such restrictions might be considered extreme for the society, *planning* does not undermine social order. In fact, as *planning* is also a part of society, it helps to cultivate it even further with its flawless instructions.[43] And as all basic laws and institutions would be fixed, technological utopia's government would then be likely run by scientists and technicians rather than politicians. The only volatile problems would be technical in nature thus only technicians would be required to solve them. This would enable the society to work even more effectively as there would be no need for lawyers or politicians, thus more individuals would be employed as technicians.[44]

A pinnacle of *planning* in technological utopianism would then be an all-encompassing entity, a central guidance, presenting perfectly informed solutions. For this purpose, every internal part of society necessarily needs to be thoroughly documented first, recognized and taken into the entity's equation. The ultimate goal of this entity, constantly learning and encompassing more, is to lead the society to the permanent equilibrium.

## 1.14 Rationalization

*Rationalization* in this context stands for more than just a spread of reason. As there are as many optimistic visions as there are pessimistic, in the context of technological utopianism, *rationalization* refers to the author's ability to present logical evidence, facts and conclusions vindicating the plausibility of his vision.[45]

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[43]   See Segal, *Technological Utopianism in American Culture,* 120.
[44]   See Segal, "The Technological Utopians," 130.
[45]   See Segal, *Technological Utopianism in American Culture,* 17–18.

# 2 NEAL ASHER IN THE CONTEXT OF TECHNOLOGICAL UTOPIANISM

## 2.1 Outline of the selected books

Before discussing the precise features I consider the marks of technological utopianism in Asher's work, I will outline the books which contain most of the references, as they are necessary to be understood in proper context.

### 2.1.1 *Gridlinked*

First book published among the aforementioned is *Gridlinked*, a first part of the so-called Agent Cormac series. The story in the Agent Cormac series follows the service of Earth Central Security agent, Ian Cormac. As a Polity's policeman, Cormac's line of work mostly consists of investigation and subsequent dealing with murderers and dangerous troublemakers of Polity. The story in *Gridlink* starts, when Cormac is infiltrating a highly dangerous separatist cell on the planet called Cheyne III. However, his mission of exposing most of the cell to the AI's, who would promptly deal with such a treat, ends in failure when his cover is blown due to his gridlink overuse. The gridlink is a technology embedded in the brain of its user which provides buffered connection to an AI, enables the user a part of its calculating power and instantaneous access to any kind of information. However because Cormac already vastly exceeded the time allowed for its use, began to show addiction and alter his behaviour and thus he was considered to be an android, a separatist's enemy. He barely escapes the cell with his life while in process of self-defence kills sister of separatist' leader Arian Pelter. Pelter then hunts him for revenge, leaving a bloody trail in his wake.

That is why another agent called Horace Blegg, a legendary human immortal and the only citizen in Polity whose orders are sanctioned by Earth Central to supersede even those of other AIs, steps in to set him right. Cormac is ordered to cease with use of gridlinked not long after his exposure and thus is turned back to the human being, an un-evolved human being. He is then reassigned to solve the destruction of the runcible device on the planet Samarkand while the separatist Pelter is still after him. However, although long suffering from the withdrawal symptoms and only slowly retracing his humanity, he is able to stay alive after countless assaults from Arian Pelter, the leader of Separatists on Cheyne III and his broken golem, the killing machine named Mr. Crane. During the Samarkand's

investigation Cormac encounters an intergalactic entity calling himself the Dragon, who accuses its creator, a being called the Maker, of destruction of the Runcible. Cormac is led by the Dragons explanation that the Maker was sealed beneath the ice by the Dragon himself and after its escape, destroyed the runcible. At the end of Cormac's long chase, Arian Pelter is finally killed and Mr. Crane destroyed. Cormac uncovers the truth of Maker's innocence and Dragon's involvement in providing Pelter with weaponry and information meant to kill him. Then, with the Maker's help, he destroys the Dragon as punishment for killing the population of Samarkand. Asher illustrates well the distinction between Pelter's selfish desires of an individual and a duty-bound policeman, who represents the law and order of the Polity and puts the needs of many before the needs of the few.

### 2.1.2 *Line of Polity*

The story of the *Line of Polity* continues several years later after Cormac defeated the Dragon and punished it for slaughtering the inhabitants of Samarkand. He follows a trail of tracking device implanted on one of the brightest scientists in Polity named Skellor, who was kidnapped by a large separatist group and is presumably being forced to develop advanced stealth technologies for them. However upon reaching the separatist base and conquering it with the help of a large battle ship called *Occam Razor*, Cormac learns that Skellor went with the separatists deliberately to study an old artefact remaining from an alien space race, called Jain. Skellor manages to escape Cormac's grasp and hides inside the *Occam Razor* where he activates the Jain artefact. He acquires the abilities of Jain nano-technology which enables him to manipulate matter on molecular level and, what Cormac soon realizes to be even more frightening, along with it assumes subversive power to dominate both AI's and human beings.

At the same time, a Polity space station Minostra positioned at the line of Polity is destroyed by similar nano-technology and Cormac, still unaware of Skellor already looming within the space ship he currently occupies is called to investigate. *Occam Razor* takes one additional stop at a non-Polity trading outpost with Runcible device called *Elysium*, where Cormac intends to gather his team. However the community's leader, scared of the huge Polity ship, forces him to meet him instead and after a harsh welcome, Cormac is warned never to show there again, or they will use solar panels orbiting the *Elysium* for their defence. At *Elysium*, not only does he gather his old companions, he also

meets again with Horace Blegg, who instructs him with another objective. Near the destroyed space station Cormac was meant to investigate, is located another habituated world, Masada. He is informed about the situation on the surface which is in a state of open revolt against the Theocracy, a group of religious separatists who enslave its population with technological advantage. However the Underground has only limited weaponry and not nearly enough power to pull down the corrupted Theocracy and become a part of Polity as they envy their freedom.

Cormac is then sent to Masada to find evidence of Theocracy's involvement with separatists and provide an adequate support to the Underground with their revolt. However on the way to Masada, *Occam Razor* encounters a familiar object in space. It is another Dragon, identical to the one Cormac already destroyed. As the Dragon is badly damaged, and even then would not stand much of a chance against a ship like Cormac currently occupies, he surrenders. Then he explains his connection with Theocracy who used him for the destruction of Minostra just to later betray him. Dragon is then promised by Cormac a safe passage to Masada to take revenge on Theocracy under a promise of leaving Underworld intact.

However on the way to Masada, Skellor finally masters the deadly technology and starts his takeover of the ship by killing the ship's AI and captain and taking their place. Dragon abandons the ship realizing the danger of the Jain technology, saving the Cormac and his crew in the process. Now, with the *Occam Razor* becoming an enemy and in pursuit of them to Masada, Cormac's options become limited. Upon arrival, Dragon manages to partly carry out his revenge by destroying Theocracy's weapon satellites, dying in the process. Cormac crash-lands on the surface and is trapped. No plea for help can be sent to the Polity since Skellor blocks all communications out of the system and is slowly bearing down on Masada to kill everyone that knows about him and his connection to the Jain technology, knowing that if Polity learned such information it would haunt him forever. When Skellor arrives at Masada, he begins to systematically destroy the Theocracy and Underworld where Cormac is hiding.

However with a clever ruse, Cormac escapes the planet and forces Skellor to chase after him rather than annihilating the whole population. Cormac, just minutes from being caught by the *Occam Razor*, arrives at *Elysium* station, where he takes advantage of the leader's fear of large Polity ships, effectively provoking him the use the giant solar mirrors against the enemy ship. Although Cormac succeeds in destroying a potentially lethal enemy

of Polity, he is haunted by his conscience. The *Line of Polity* is concluded by Cormac's reflection upon his work and his regrets about underestimating Skellor. He second-guesses his decisions and realizes that success in defeating a powerful Polity enemy does not justify the sacrifices of hundreds of thousands of civilians, who consequently lost their lives.

### 2.1.3 *Brass Man* and *Polity Agent*

The story continues in the next Agent Cormac book, the *Brass Man*. Cormac, being quarantined over a year at *Elysium* station, is ordered to board a Polity attack dreadnaught named *Jack Ketch*. Still contemplating about his past mistakes, certain of his guilt, he enters the ship expecting his punishment. Instead, to his confusion, he is congratulated by Horace Blegg himself. Suddenly, Cormac begins to question Blegg's seeming lack of humanity and he suspects Horace Blegg not being a human but an avatar of Earth Central. Blegg responds to that statement with presenting something of a lecture. He briefs Cormac about how vast human abilities to learn are, to acquire new abilities. He shows Cormac his transportation ability; the one he claims he used as a young Japanese boy, witnessing the first fission bomb being thrown at his hometown, and vanishes from Cormac's sight. Although an impressive trick, Cormac remains certain he is right. Until he reactivates his own gridlink, which was deactivated before his trip to Samarkand, its information processing powers and which somehow responds to his thoughts by activating on its own. And with this Cormac realizes, he is the next. Meanwhile Skellor, who barely escaped from *Occam Razor,* revives the killing machine, Mr. Crane, and starts his cloak and dagger search for means of destroying Polity with this technology.

The *Brass Man* and fourth continuation of Cormac series, *The Polity Agent*, picture the war between Polity, a technology governed utopia, and Jain, a parasitic alien technology used by human individuals with separatist thinking, who are consumed by its power. By this comparison, Asher presents a painful, yet valid contrast of how technology can be used. Just as it can be the means of eternal utopia, so can it be the means of extinguishing billions of lives.

## 2.2 Polity Universe

The following chapter demonstrates the aspects of technological utopianism in the Polity Universe provided through the examples and citations selected from Asher's books.

### 2.2.1 Utopia and Efficiency

In every single one of his works, Asher likes to demonstrate the fact that Polity universe is a system based on order and efficiency – and governed by the supreme rule of artificial intelligences. Unlike other writers of science fiction, who picture self-conscious machines as a start of apocalypse or human genocide, he chooses to vision artificial intelligence as the technology necessary for creation and preservation of utopia. Asher constantly promotes their management abilities while utterly sullying the idea of universe being ruled by anything other than AI's. He clashes AI's effectiveness with the comparison of human beings and their destructive nature and since most of his works take place within the line of Polity, a space where the rule of artificial intelligences confronts the space occupied by humans ruling themselves (Separatists, as he calls them), this contradiction takes on a painfully obvious image. Asher presents the difference in the book *Gridlinked*, when Ian Cormac contemplates his travels from Cheyne III to Minostra: "He looked ahead at the short queues before the various embarkation gates. *There* was an example of what he had been defending: those queues never became very long. There were no papers to be handed over, no passports, and no lengthy customs bureaucracy to bypass. Polity citizens travelled in absolute freedom from world to world."[46] Appropriately compared to Arian Pelter, who, on the other hand, is briefed about the situation on Huma, planet behind the lines of Polity, where he is headed for help:

> 'Customs here are pretty relaxed, but it's best to lubricate the wheels of their bureaucracy,' Jarvellis told them.
> Pelter looked at Stanton. 'Customs?'
> 'Yeah, we're not in the Polity now. You'll find that if you want anything done here, you'll have to do a fair bit of lubricating,' Stanton told him.
> 'They're eight solstan years prior to Polity subsumption, and what government they have is on the edge of collapse. It's completely corrupt and therefore just what we need. You can do anything you want here, if you have the money.'[47]

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[46]   Neal Asher, *Gridlinked* (London: Pan Books, 2002), 96.
[47]   Asher, *Gridlinked*, 148.

This exchange pictures the contrast between corruption and order as well as portrays a pre-utopian society (in this case the Huma) which will, when finally taken under the wings of Polity, become a utopia. A similar emphasis on the *effectiveness* of Polity's order and leadership is also presented in the *Brass Man*:"'For most humans power is a tool for obtaining sex, money, safety, regard from their fellows, or initially to enforce some hazy ideal, and then primarily because the exercising of power is its own reward. Most of these motives can be discounted as regards our AIs.'"[48]

### 2.2.2   Technology and Culture

The technology Asher presumes in his work as the base for Polity is labelled Runcible technology and all the citizens and thereafter users of this technology are instantly labelled members of runcible culture. What Asher likes to emphasize the most is the diversity this technology provides, despite the logical image of impersonality Polity tends to promote. Though, before explaining the implications of this technology on the culture, I will talk briefly about Asher's fictional inventor, Iversus Skaidon. As Asher did not repeat the mistakes of other technological utopians, he postulated exactly, how he expects the underspace (which Runcible genuinely is) technology come to being. He presumes noble sacrifices in the name of science, like the one made by Marie Curie, which will lead to giant technological leaps.

His technological hero, a scientist named Iversus Skaidon, while attempting a not-buffered interfacing with the Craystein Computer, achieves a short godlike synergy. As Asher explains in one his guides: "(…) *though, in most cases, the human mind is something that an AI could run as a brief sub-program, in some cases it has something that is beyond our silicon saints. Call that something imagination, vision, psychosis … it is something that is rooted in our primeval psyche and was never anything to do with the pellucid logic with which we created AI. Direct interfacing gives the AI this human madness, and in turn the human acquire the vast processing power of AI.*"[49] However Asher supposes that in the short minutes of such operation, before the human part dies from overtaxing the brain, the synergic being of human and AI will be capable of understanding the scope of universe itself and invent all the technology necessary for

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[48]   Neal Asher, *Brass Man.* (London: Tor, 2005), 397.
[49]   Asher, *Brass Man*, 12, Asher's italics.

achieving utopia – the Polity. Thus he postulates a runcible technology, developed by Skaidon, and thus envisions Polity as a society made of countless planets, all connected by runcibles and governed by artificial intelligences, which also operate runcibles.

Polity's citizens are mostly comprised of runcible technicians, who, similarly to the character in *Gridlinked*: "'No human understands Skaidon tech, even with augmentation. I work on the damned things, and half the time I don't know what am doing.'" do not comprehend the technology; tourists, who live for the thrills of new worlds, "Once, disease and accident had been the greatest killers of humankind; now the greatest killer was boredom, usually leading to the latter of the first two causes ..."[50] and other members of runcible culture with the physical alteration enabling them to survive on different planets. As explained in one of the guides Asher includes throughout his books: "***Cosmetics: We are allowed to alter ourselves cosmetically as much as we want, and can afford, and because of this humanity has now acquired such rich variety. Genetic adaptations are allowable in limited circumstances, hence seadapts who can work easily on ocean farms, heavy-G adaptations for obvious reasons, and the Outlinkers who are adapted for working in vacuum.***"[51] Members of runcible culture can change, with the help of technology, both their appearance and their body-matter accordingly to the environments they occupy, essentially fulfilling every one of their smallest physiological whims or take the option of severely boosting the very functions of their bodies. This possibility is documented through Cormac in the *Brass Man*: "Since the Cheyne III AI had turned off his gridlink all those years ago, he had refused all other augmentations, preferring to be no more than the human he had been born. But even with that limitation, he was still, due to genetic manipulation, the best human possible, possessing the reserves and strengths of an Olympian."[52]

Though commenting on physical appearance, Asher also maintains the lack of racial discrimination: "With the explosion of the human population across the stars, the gene pool had been thoroughly stirred… the 'melting pot' had occurred, but now, with adaptation and alteration, skin colour was spread across the spectrum and was the least of differences between human kinds."[53]

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[50] Neal Asher, *The Skinner* (London: Pan Macmillan, 2002), 11.
[51] Asher, *Gridlinked,* 33, Asher's italics.
[52] Asher, *Brass Man*, 506.
[53] Asher, *Gridlinked,* 128.

What Asher is aware of, however, is the subsequent hatred for a society, where out of psychological and physical sides; only the latter is being satisfied. A discontent resulting from the state where technology, although effectively, controls everything but the free choices of individuals, thus preventing human participation in the interactions of what would most assume to be a leading, or prime position above other humans. The Polity is indeed presented as a system where everyone is forced with the same amount of material bliss and any class distinction is purposefully disposed of. Asher realizes that after centuries of dominance, where certain individuals were always above others, such competiveness just does not fade away.

The same can be said about the feelings of inferiority flowing from being compared to a flawless machine. Asher summarizes this matter in the *Prador Moon* as Jebel Krong begins to asses one of his new companions: "Jebel understood that Cybercorp was debating the merits of actually making their Golem androids ugly so the people who bought their indentures would not feel quite so inferior. Studying Urbanus, he understood why. The Golem made him feel uncomfortable, double so when he came to understand that beyond being better looking, than him, Urbanus possessed a much larger knowledge base than himself, impeccable manners, and ten times the speed of mind, body and strength."[54]

Therefore Asher presents technology which, at least theoretically, allows human brain to be mentally enhanced such as the augmentation: This technology represents a small, thumb-sized computer, which is externally embedded to the side of head, right behind the ear. This technology allows the wearer buffered connection to AI servers, instant access and download of required information or, as any normal computer serves, a processing space. As some of the characters employ this technology: "Her augmentation – a piece of computer hardware that nestled behind her ear and linked into both her brain and into vast information network – displayed some text in her visual cortex ..."[55]

Asher presents another technological means for enhancement of human brain and subsequent expansion of intellectual capacity such as: the gridlink. Said technology is implanted in the inside of human brain and enables the wearer a buffered connection to the informational servers of artificial intelligences and fractionally to their calculation capacities. As Dragon summarizes in one of his exchanges with Cormac in the *Gridlinked*:

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[54]   Neal Asher, *Prador Moon* (San Francisco & Portland: NIGHT SHADE BOOKS, 2006), 4.

"'Running round the inside of your skull is a net of mycorhizal fibre optics connected to etched-atom processors, silicon synaptic interfaces and an underspace transmitter. Evolution is a wonderful thing,'"[56] Gridlink also provides additional informational storage for programs, memories and informational packages. Consequently, the connection is constant and unaffected by obstructions or distance.

Similarly to gridlink, another technology embedded in the brain, made for recording of thought process and the memories. The Memcording: "*We can now record our memories and even mental functions and store them separately, reload them should we wish. The technology is now available to actually delete stuff from the organic brain.*"[57] This technology is used for preserving the mind of the victim, should he or she, be killed by an assailant. This way, after breaking one of Polity's laws, would the criminal be sentenced to mind erasure and the hollowed body presented to the victim as a lifeboat.

Finally, Asher chooses to emphasise that regular humans, no matter how augmented, will not be able to reach the intellectual highs of synergic beings, however he leaves that option open – as another evolutionary step – human might one day obtain synergy with AI's, without dying.

### 2.2.3   Evolution, System and Equilibrium

Asher chose the setting of his Polity the 25th century after a change of political regime he calls *The Quiet War*. "*This is often how the AI takeover is described, and even using 'war' seems overly dramatic. It was more a slow usurpation of human political and military power, while humans were busy using that power against each other.*"[58] The war pictured a seemingly familiar conflict, where individuals were striving to achieve even more personal power and wealth, while using other people and AI's for those means. However as the AI's rose to sufficient numbers and influence, they began their slow takeover of communication networks and control of weapon systems, eventually striping those in power of their position.[59] As Asher concludes in historical flashback: "*It had not taken the general population, for whom it was a long-established tradition to look upon their human leaders*

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[55]   Asher, Neal. *The Voyage of the Sable Keech*. London: Tor, 2006. 19.
[56]   Asher, *Gridlinked,* 203.
[57]   Neal Asher, *Polity Agent* (London: Tor, 2007), 475, Asher's italics.
[58]   Asher, *Brass Man,* 241, Asher's italics.
[59]   See Asher, *The Brass Man*, 241.

*with contempt, very long to realize that the AIs were better at running everything. And it is difficult to motivate people to revolution when they are extremely comfortable and well off.*"[60] And since the AI's established stable political dominance over human population, with the outcome being an utter freedom for its citizens, hardly any complains were voiced. As one of the characters in *Prador Moon* notices: "Bulbous chainglass windows occasionally revealed glimpses into luxurious homes, but then luxury were a standard in the Polity and people only lived impoverished lives as a matter of choice.[61] Therefore, through quick technological advances (made by runcible technicians), the inhabitants of Polity were soon able to enjoy perfect living conditions, near-immortality, unlimited access to information, stability and efficiency.

### 2.2.4 Organization and Planning

The Polity encompasses our known galaxy with the Earth (and the Sun, conveniently named Sol) being its centre and is led by Earth Central, an exceptionally large, if not the largest, artificial intelligence. "As it continued to collate extant information and give orders, it continued to absorb the vast body of human knowledge in the infinitesimally small fractions of seconds between. Hundreds of light-years away, its decisions were acted upon."[62] Within the borders of Polity, whole solar systems and worlds are colonized, their environment changed to suit the needs of human inhabitants and then managed indefinitely by selected AI. Each planet is then connected to a grid by runcible device, which allow instantaneous transfer of matter (mostly citizens) to any point in Polity. With regards to technology, Asher tends to describe and purposefully exaggerate the magnificence of future technology with the contrast of size and performance. Thus the Polity governor is made rather small for its duties for Asher likes to exemplify that already-crossed limit. "Earth Central was the size of a tennis ball, but then terabytes of information were processed in its etched-atom circuits in picoseconds; information received, collated, acted upon. Orders given. The ruler of the human polity was not human."[63] Subsequently there are many hints in Asher's work that explain the sole idea of artificial intelligence being the only reasonable governor, its purpose and its considerable patience compared to humans. As

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[60] Asher, *Brass Man*, 241, Asher's italics.
[61] Asher, *Prador Moon*, 13.
[62] Asher, *Gridlinked*, 7.
[63] Asher, *Gridlinked*, 7.

summarized by the character in *The line of Polity:* "'Stone Age men broke flint and found it cut things better than their own teeth did. We've created methods of transportation that work better than legs, and often do things we could only dream of, like flying. A hydraulic grip clamps on things better than a human hand. They're all tools and nobody objects to them, so why should anyone object to creating minds that are better at thinking than our own, and rulers that are better at their job than those humans who would aspire to rule?'"[64] Although this statement may justify the advantages as well as present reason as to why AI's would be more preferable rulers than humans, Asher realizes there is still not enough of practical evidence. Therefore he also establishes intellectual might of an AI, with its calculating capabilities, to show just how far it outclasses human being. The average AI capabilities are summarized in the *Brass Man*: "*Its IQ would be about 300.*"[65] Of course, the abilities of planetary AIs are far superior, as they are able to run multiple subminds of such calibre or balance planetary economy.[66]

## 2.3 Rationalization

According to Asher, the prime idea behind creating AI's is that it is supposedly next human evolutionary step. By creating a superior being, in this case an artificial intelligence, humanity proceeds with its own evolution. With the same notion in mind, which led to the creation of a car – to travel over distance – humanity created AI's to become its mental extensions. "*The truth is that their motivations and consequent behaviour patterns are much like our own, for being first created by us, they are just the next stage of us – the next evolutionary step.*"[67] Subsequently Asher also vindicates AIs principles of morality in one of the guides included in his books: "*They do not destroy us because they think and feel that to do so would be wrong.*"[68] This particular statement, along with idea of artificial intelligences running the perfect society, seems to carry almost a striking hint of technological determinism. The technology of Artificial intelligence with its ability to independently decide what is good or bad, while inventing its own moral values and imprinting them upon society, perfectly fulfils the hard deterministic role.

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[64] Neal Asher, *The Line of Polity* (London: Tor, 2005), 319.
[65] Asher, *Brass Man*, 198, Asher's italics.
[66] See Asher, *Brass Man*, 198.
[67] Asher, *Brass Man*, 333, Asher's italics.
[68] Asher, *Brass Man*, 333, Asher's italics.

Technological means in the Polity, I explained thus far, decisively provide for the security and physiological needs of the citizens. However, Asher realizes that even after providing most of the physically necessary content, the desires for achievement need to be satisfied clearly as much. Therefore Asher postulates a technology to enable human intellect to transcend its evolutionary boundaries and draw closer to the capabilities of AI's. By their intellectual improvements, citizens of Polity are able to further advance on the social ladder or receive recognition for achievements. "True, AIs could out-think humans on just about every level, unless those humans were ones making the transition into AI."[69] Asher likes to frequently emphasize the fact, although humans are inferior to artificial intelligences in practically every aspect, the legacy left over by Iversus Skaidon indicates leaves much to be desired. In his work, he introduces members of the runcible culture he calls Haimen. These individuals are connected, as closely and safely to AI, and are able to *create* new inventions and advance the technological boundaries even further. Or as another option: "*Is it time to upgrade myself and move beyond mere humanity, perhaps become the guiding AI of some ship or even a runcible AI?(…) Is this what our AI children, who are also our brothers and gods, are waiting for?*"[70] to seize being a human completely and undertake the procedure to become an AI.

Very idea of humankind thriving under the government of artificial intelligences is not the only unorthodox suggestion Asher proposes. The views upon law and order advocated in Polity definitely seem rather intricate in comparison to 21st century however there is a certain internal logic and striving intention of preserving *Equilibrium*. As Polity is well protected and governed by impeccable artificial intelligences, logically that should provide an estimated decrease in criminality in comparison. However as Asher likes to emphasize, there are always people who will protest even against a perfectly logical social system. These people are often labelled Separatists in Asher's works and for the most part; they are the main counterforce of Polity's welfare. Such individuals are introduced into Asher's works for the comparison purposes such as capitalistic greediness (*Gridlinked*) or religious fanaticism (*The Voyage of the Sable Keech*, *The Line of Polity*), for the ultimate goal being enrichment at the expense of other citizens.

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[69] Asher, *Brass Man*, 416.
[70] Asher, *Brass Man*, 495, Asher's italics.

For the preservation of the law and order, seemingly heavy sentences are placed upon criminals in Polity and Asher makes painfully obvious that he stands for the capital punishment. I believe, however, that by this exact instance Asher actually fulfilled one of the additional prerequisites for categorizing into technological utopianism – creating a technology (called mind-reaming) and then presented its estimated effects on society's values. By Asher's mind-reaming is meant a technology for complete mind reaming (overseen and performed by AI) and consecutive analysis of the suspect's memories. This way, the guilt or innocence is undeniably proven and the prosecuted is either freed or sentenced based on such investigation. As a sentence there can be either partial modification or entire removal of the mind and memories of said criminal. The hollowed body is then offered to another mind, which is likely to be either victim of the murderer or another dead person, who were recorded and saved by memplants (imprinting technology, which saves the memories and thought processes of the deceased).

The individuals saved by this technology are then released back to society as law-abiding citizens. Presuming such technological device is achievable, stating its cultural consequences is well within the range of logic. Asher therefore turns to the assumption that selective removal of the criminals will eventually lead to zero criminality.  As he states in *Gridlinked*: "*if you execute a criminal, he won't do it again*"[71] the causal effects of this statement certainly do speak with brash clarity and effectiveness Asher chooses to advertise however there is more to this statement as it follows:"*Why should we, as a society, look after and re-educate them when we hardly have the resources to do this for law-abiding citizens? Nowadays we have grasped these realities, so murderers and many recidivists are mind-wiped.*"[72] Based on this declaration it is clear that law and order are the primary concern in the Polity and any attempted contradictory behaviour is strictly sanctioned.

Asher purposefully extends the ideology behind Polity's law and order in the *Brass Man* to address presently controversial issue of capital punishment. He introduces the issue as common believe that death penalty is just juridical murder and those who sanction it are considered even worse than actual murderers. However according to Asher only gutless politicians afraid of responsibility and people blind to the truth do not understand the hard

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[71]    Asher, *Gridlinked,* 502, Asher's italics.
[72]    Asher, *Gridlinked,* 502, Asher's italics.

facts.[73] *"The death penalty is a response to a crime, not a crime in itself"*[74] Although Asher acknowledges the chance of mistakenly putting innocents to death, he claims that percentage of such cases would not even closely rival of those killed by the convicts returning back to the society after their prison sentence.[75] Asher's final argument to the definition of justice is, again, through the help of artificial intelligence. He ascertains that the fear of unjust capital punishment is forgotten by the citizens due to the AI's mind-raving and mind-wiping technology. As Asher continues: *"Our view now has a more evolutionary aspect: These are the laws; if you break them, these are the penalties. No excuses. We will be tough on the causes of crime: criminals."*[76]

Last offensive strike at, what Asher calls "soft and deluded Liberals"[77] in the name of justice, is the critique about the phenomenon he addresses as sins of the father. *"It was long accepted in the twenty–first century that an abused child might well grow into an abuser, and in that liberal age evidence of childhood abuse was looked upon as an excuse for later crimes. This was, remember, the time when many considered poverty sufficient excuse for criminality – a huge insult to those poor people who were not and would never become criminals."*[78] This issue is addressed several times, As Asher considers it important to mention. Presumably his intention is to arouse awareness of this injustice and seek correction at the contemporary trials, which tend to favour such excuses from criminals.

To conclude, Asher stands for the law and order being preserved under the threat of heavy penalties. Though, the harshness is only perceived as a response to a crime and the guilt and innocence (proven by the mind-reaming technology) provides the certainty of rightfulness.

Asher's final argument is further introduced by the twist in the *Polity Agent*. Asher complements his previous ideas with another hint, represented by the implications of lethal Jain technology. Hidden in the conversation between Blegg, a human representative of humanity, and an Artificial intelligence of long extinct technological civilization is a sad metaphorical prediction of humanity's future, referring to the continued advancement and

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[73]    See Asher, *Gridlinked*, 502.
[74]    Asher, *Brass Man*, 291, Asher's italics.
[75]    See Asher, *Brass Man*, 291.
[76]    Asher, *Brass Man*, 291, Asher's italics.
[77]    See Asher, *Brass Man*, 370.
[78]    Asher, *Brass Man*, 370, Asher's italics.

use of technology by individuals for destruction, necessarily carrying the resemblance of the wars accompanying the 20th century. The interchange between the alien AI and Blegg relays:

> 'Jain technology is a weapon.'
> 'So we believe'
> 'Who did they use it against?'
> 'It was made to destroy civilizations,' said Blegg, 'but that was rhetorical question which I presume you'll answer yourself.'
> 'Who is always the greatest enemy? (…) The greatest enemy is nearly always those you can understand enough to hate.'
> 'I see,' said Blegg. 'an internecine war.'[79]

The peak of the conversation is then concluded by the alien's statement: "It was made by their AIs, which were based on the Jain themselves as yours are on you, before those AIs transcended their erstwhile masters and left them to kill each other."[80]

Even though the establishment of utopia with the help of artificial intelligences is only Asher's particular wish, considering it being actually granted in the future, Asher's last intention is to warn the humanity about an impending deadline. Polity might be run by impeccable artificial intelligences, beings based on their creators, but such theory should also include that these entities have patience as well. Should such patience be depleted by the constant attempts of humans to conquer others of their kind, AIs might as well leave the humanity to their own devices, and let them destroy themselves.

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[79]  Asher, *Polity Agent*, 261.
[80]  Asher, *Polity Agent*, 263.

## CONCLUSION

In the context of technological utopianism Asher uses the historical moment of *The Quiet War* and its subsequent evolution into Polity as social criticism. As Asher's work presents a clean prospect of equal social status and supports the technological utopia as viable option, he criticizes contemporary political power struggles, bureaucracy, the nature-disregarding individuals driven by greed and in general – human stupidity. By that he tries to present a technological solution, in which he chooses to place control (political, economical, etc.) specifically in the hands of a third party – the impeccable leadership of an artificial intelligence – rather than to entrust the power to human representatives, respective politicians, who are bound to misuse it eventually.

Another of his intentions is to address the contemporary flaws in law and justice and the subsequent benevolence in the condemning of criminals, while vindicating a pro-harsher-sentence attitude.

Lastly, the intention behind Asher's constant promotion of the Polity as a possibly eternal technological society, supervised by artificial intelligences, is to create a comparison to the contemporary realities. By administering his technological utopia, he intends to create a contrast in readers mind, which makes the reader realize the reality in which most of the technology is used selfishly and for destruction. Asher uses the Jain technology to portray the fact that any human, given the power, will start to want more, possibly becoming oblivious and dangerous. Thus Asher faithfully presents his technological utopia and unlimited possibilities of technological advancements, where people are denied the option of self-corruption through power and their will for achievement is redirected into something harmless instead.

Finally, he makes a bleak assumption in which humanity, should it continue with the same, uncontrolled and selfish use of technology, will eventually going to destroy itself.

## BIBLIOGRAPHY

Asher, Neal. *Brass Man*. London: Tor, 2005.

Asher, Neal. *Gridlinked*. London: Pan Books, 2002.

Asher, Neal. *Polity Agent*. London: Tor, 2007.

Asher, Neal. *Prador Moon*. San Francisco: Night Shade Books, 2006.

Asher, Neal. *The Line of Polity*. London: Tor, 2005.

Asher, Neal. *The Voyage of the Sable Keech*. London: Tor, 2006.

Asher, Neal. *The Skinner*. London: Pan Macmillan, 2002.

Corn, Joseph. J. *History, Technology, and the American Future.* Cambridge, MA: MIT Press, 1986.

Freespace. "Biographical Information." Last modified February 17, 2013, http://freespace.virgin.net/n.asher/page8.html

Gunn, James. "Tales from Tomorrow." *Science & Spirit*. Vol. 16 issue 4. (2005): 66–69.

Kincaid, Paul. "On the Origins of Genre." *Extrapolation*. Vol. 44, issue 4. (2003): 409–419.

Segal, Howard P. *Technological Utopianism in American Culture*. Syracuse, NY: Syracuse University Press, 2005.

Segal, Howard P. "The Technological Utopians." In *Imagining Tomorrow. History, Technology, and the American Future*, edited by Joseph J. Corn, 119–136. Cambridge, MA: MIT Press, 1986.

Smith, Merritt Roe, and Leo Marx, eds. *Does Technology Drive History? The Dilemma of Technological Determinism.* Cambridge, MA: MIT Press, 1994.

Smith, Merritt Roe. "Introduction." In *Does Technology Drive History? The Dilemma of Technological Determinism*, edited by Merritt Roe Smith, and Leo Marx, IX–XV. Cambridge, MA: MIT Press, 1994.

Smith, L. Michael. "Recourse of Empire." In *Does Technology Drive History? The Dilemma of Technological Determinism*, edited by Merritt Roe Smith, and Leo Marx, 37–52. Cambridge, MA: MIT Press, 1994.