

Contents

Introduction	2
1. Neoliberal Paradigm	6
1.1. Neoliberalism: Theoretical Framework	6
1.2. Neoliberalism in Practice	7
2. Economic Paradigm Shift	16
3. Trekonomics	18
3.1. Science Fiction and Science Fact: Star Trek's Impact on the World	22
3.2. Politics of Star Trek	25
4. The Final Frontier	29
Conclusion	40
Works Cited	42
Abstract	49

Introduction

Space, the final frontier. These are the lines that have been a trademark of American science-fiction series Star Trek and a source of inspiration for millions of people for more than 50 years. Nobody can argue against the fact that Star Trek is more than just a TV series. It is a phenomenon which has entered our culture and pervaded and influenced every aspect of it. Even those who have never watched Star Trek have heard of Spock, or use the expressions such as teleportation, warp drive or resistance is futile in their daily life.

In the context of American studies, these lines are also a reflection of the American 'Frontier Thesis' or the idea that the space exploration and technological and scientific innovation are, as John F. Kennedy put it, the "New frontier" of the development and progress of the society. As an American science-fiction series with technologically-advanced humans exploring space in 23rd through 24th centuries, *Star Trek* reflects this idea at the most obvious level.

However, the series takes this idea even further and imagines that in this end stage of the society development, the whole Earth and humanity will coexist in a peaceful, democratic and egalitarian manner. This vision of future is underpinned by the series' most profound speculation that the technological and scientific advances brings the future of equally distributed economic abundance. Therefore, *Star Trek* presents a futuristic, post-scarcity moneyless society in which technologically-induced abundance of resources goes hand in hand with democracy, egalitarianism, liberty and individualism.

For this reason, *Star Trek* is exceptional and unique and, as such, a reflection of American exceptionalism; the political differences of the United States can be related to the "material differences brought about by the wealth/resources of the United States . . . as the product of the inheritance of the North American continent's abundant resource" (Tyrrell). In

this way, *Star Trek* and American history testify to the role and impact of economic circumstances on the shaping of the society.

Since "Star Trek presents intelligent machines and technological change as unequivocally beneficial, instead of threatening or even apocalyptic . . ., it stands largely athwart its own genre—science fiction—and in many ways it stands out from the rest of popular culture" (Saadia 9-10). It is the only science-fiction series depicting an optimistic, utopian future, which is one of the reasons it became a very powerful part of popular culture.

Although *Star Trek* has been vastly analyzed in academic circles, the economic aspect of the series has only recently started to gain academic attention, partly because it is only now that it has become relatable and relevant in terms of our everyday existence. The technology and science are nowadays getting closer to what they only imagined when *Star Trek* first aired in 1966, and with automation, robotics, wasted food etc., a global post-scarcity society is starting to look more as a reality than fiction. In light of that, and with the premise that in the globalized world of today, economics and politics can only be discussed in global terms, it is now the right time to draw upon the series' ideas to our benefit once again. Therefore, this thesis begins with the claim that "no reading of the Star Trek texts or its conditions of production could account for its potential uses" (Decherny, 39) and the purpose of this study is to offer a different perspective on our limited present, as a way to imagine a limitless future.

This paper consists of four chapters. In the first chapter, we will briefly define what neoliberalism refers to in theory and afterwards analyze what it implies in practice, namely the socio-economic inequality, the demise of the state and politics and the environmental issues, which can be related to the neoliberal economic turn that started in the United States in the 1980's. For these purposes, we will employ *Star Trek* episodes which comment on these aspects of neoliberalism, with the aim of demonstrating the unsustainability of present neoliberal global order and the importance of discussing future.

In this way, we will introduce the second chapter which places neoliberalism in economic sense in a wider historical context of human development, placing the particular emphasis on the scientific and technological inventions and growth under capitalism. We will, thus, refer to the Keynes' theory about economic problem or scarcity, which, as he predicted, would be solved by 2030, with the purpose of demonstrating that the current trends in technology, science and resources point to the fact that the world may be at the beginning of a post-scarcity economy.

Based on the aforementioned, we will introduce the third chapter, where we will use the *Star Trek*'s futuristic society as an example of the impact the economic abundance has on the social values and political innovation in order to demonstrate that the series premises are grounded in our reality and therefore present a positive model to build our global society upon. Particular interest will be paid to the unique impact the series has on the real world, in terms of inspiring scientific and technological innovation under capitalism, which drives us closer to its vision of the future.

The fourth and final chapter will be used as a speculative part of the paper, where current technological and scientific innovation and global issues and trends will be related to the *Star Trek*'s model for achieving the ideal state of society. We will thus employ the history of humanity from the *Star Trek* canon that points to the revolutionary event and the World government as the core events in the progress of human global society. This will be related to neoliberalism which drives us, on the one hand, toward the revolutionary event of producing unlimited energy due to environmental problems, which could fundamentally change economics in the near future and bring about *Star Trek*-like post-scarcity economics, and on the other hand, toward political innovation on a global scale in order to address global issues such as climate change and socio-economic inequality in an adequate and democratic manner. Ultimately, we will point out the way in which this narrative of *Star Trek* reflects once more

the American political thought and presents the United States as a potential leader of any new world order.

1. Neoliberal Paradigm

Considering that this thesis deals with the possibilities beyond the current neoliberal paradigm, we will first need to address neoliberalism in order to show why we need to be concerned with the future.

1.1. Neoliberalism: Theoretical Framework

To begin with, it is almost impossible to provide an unambiguous definition of the term neoliberalism because, having had multiple connotations and interpretations throughout the history, it has become a concept that is rather problematic to define. In fact, the interpretations of the term have particularly multiplied in the numerous academic papers during the last couple of decades, in which it is often used as an analytical device for explaining a whole range of social, economic and political phenomena that can be seen as caused by or being symptomatic of neoliberalism. As a result, there exists a general lack of understanding or agreement about what neoliberalism by definition is.

However, in their article *What is neoliberalism?*, Thorsen and Lie attempted to encompass the features that are common to all the different conceptions of neoliberalism under one single 'definition', which is therefore going to be employed as the theoretical background in this study.

As Thorsen and Lie put it, neoliberalism is

a loosely demarcated set of political beliefs which most prominently and prototypically include the conviction that the only legitimate purpose of the state is to safeguard individual, especially commercial, liberty, as well as strong private property rights (cf. especially Mises 1962; Nozick 1974; Hayek 1979). This conviction usually issues, in turn, in a belief that the state ought to be minimal or at least drastically reduced in strength and size, and that any transgression by the state beyond its sole legitimate

purpose is unacceptable (ibid.). These beliefs could apply to the international level as well, where a system of free markets and free trade ought to be implemented as well; the only acceptable reason for regulating international trade is to safeguard the same kind of commercial liberty and the same kinds of strong property rights which ought to be realised on a national level (Norberg 2001; Friedman 2006). (Thorsen and Lie 14)

This also means that neoliberal theory advocates "that as little as possible ought to be subjected to genuinely *political* processes" (Thorsen and Lie 15). Instead, "Free markets and free trade will, it is believed, set free the creative potential and the entrepreneurial spirit . . . and thereby lead to more individual liberty and well-being, and a more efficient allocation of resources. (Thorsen and Lie 14-15).

1.2. Neoliberalism in Practice

In the 1980's, neoliberalism was offered as an alternative to the Keynesian policies, or the so called 'embedded liberalism': a form of political-economic organization under which market processes and entrepreneurial and corporate activities were surrounded by a web of social and political constraints and a regulatory environment that sometimes restrained but in other cases led the way in economic and industrial strategy (Harvey 11-12).

After delivering high rates of growth post World War II, at least to the advanced capitalist countries, embedded liberalism started to break down and lead to the crisis of capital accumulation, unemployment, inflation and a global phase of 'stagflation' that lasted through the 1970's (Harvey 11-12). At this point, the IMF and the World Bank, supported by the United States and its Treasury, started giving loans to the countries in crisis, such as the Latin American countries or Russia, and afterwards to the so-called countries in transition, which in return had to reform their policies in accordance with the neoliberal ideal of the self-regulating market (Šimac). This means that they "were required to implement institutional reforms, such as cuts

in welfare expenditures, more flexible labour market laws, and privatization" (Harvey 29), which also meant the weakening of environmental regulations (Piven 3), in order to free the movement of capital, goods and services (Gonzales 41).

That is when capitalism entered its contemporary phase known as neoliberal capitalism, so although neoliberalism per se is not a mode of production, the term usually implies the "new rules of functioning of capitalism" (Duménil and Lévy 9-10).

Part of what this means is that markets in capital, goods, information, culture, and even labour are now international, or in other words it means globalization. Everything that can be traded moves across national borders, and government policies have been adjusted to smooth the way with, for example, the proliferation of new trade pacts that eliminate customs duties and other barriers. (Piven 2)

To put it simply, the world has become one global market. For this reason, present economics and the relating social and political issues cannot be discussed on a national level only, but only in the context of the economic sphere of the whole world. Also, the implementation of neoliberal policies in practice lead to the migration of power from political to economic processes, and from the state to markets and individuals (Thorsen and Lie 15). That is why the politicians are different today; they can be in the government, but they don't have power (Varoufakis 00:07:12-00:07:20).

Star Trek often pointed out to the problematic aspects of neoliberal policies, especially in Star Trek: Deep Space Nine series that was released in the 1990's, when the neoliberal restructuring was taking place. Such commentary is usually and most noticeably communicated through Quark, a member of the profit-driven Ferengi race which organizes its existence based on 285 rules of acquisition and thus also serves as the series' metaphor for capitalism. For example, in the following dialogue, Star Trek uses the reverse approach to comment the socio-

economic issues of the time related to neoliberalism through embedded liberalism and the welfare state:

BRUNT: You haven't been keeping up with the latest reforms, have you? Zek¹ instituted progressive income tax three months ago.

QUARK: You call that a reform? Taxes go against the very spirit of free enterprise.

That's why they call it free.

BRUNT: The government needed revenues to fund the new social programs. Wage subsidies for the poor, retirement benefits for the aged, health care for...

QUARK: Stop, stop, stop! I had no idea things had gotten so bad. This is all Moogie's² fault. She's been polluting Zek's mind with notions of equality and compassion. Whatever happened to survival of the fittest? Whatever happened to the rich getting richer and the poor getting poorer? Whatever happened to pure, unadulterated greed? ("The Dogs of War" 00:20:42-00:21:31)

This dialogue was probably the series commentary on the sharp rise in inequality that the United Stated experienced in the 1990's, when the rich got richer and the stock market reached record heights (real GDP grew at 2.8% rate per year while the Dow Jones average grew at 14.0% rate per year), while the average real wage declined and poverty and homelessness spread (Kotz). In this way, *Star Trek* points to the problematic aspect of growing inequality related to redistribution of income under neoliberalism. On the one hand, the gains in productivity are shifted from wages to the salaries of CEO's and stock owners (Piven 3). For these reasons, the income inequality in the United States is nowadays the largest recorded since the 1920's (Stone et al 14-15), and globally talking, there is an alarming projection that the world's 1% richest are on course to hold two-thirds of the world's wealth by 2030 (Savage). On the other hand, the taxes on rich are lowered, which is why those public programs which

¹ Political and economic leader of the Ferengis.

² Quark's nickname for his mother.

benefit the general public, the poor or the old are cut, and the remaining benefits are paid by taxation of middle-income and working-class earners (Piven 3-4). This is pointed out again in another episode, where a character from 2024 says that the United States Government cannot afford to keep mentally ill people in hospital, therefore they are transferred to a District for unemployed and poor ("Past Tense, Part I" 00:18:55-00:19:07).

Also, the lines "Whatever happened to survival of the fittest? Whatever happened to the rich getting richer and the poor getting poorer? Whatever happened to pure, unadulterated greed?" point out to the concerns expressed by some sceptics of neoliberal ideology throughout the history, who warned that the open market economy will inspire people to become acquisitive and self-centered, hampering thus their moral development and weakening the solidarity of the society (Thorsen and Lie 10). In that way, the society becomes stripped of the basic elements of liberal thought, such as egalitarianism and universalism (Thorsen and Lie 6).

This aspect of neoliberalism is addressed once again in another episode, in the conversations between Quark and his mother Ishka, whom he betrays for business purposes:

ISHKA: Don't you think about anyone but yourself?

QUARK: Of course I do. I just think about myself first. ("Ferengi Love Songs" 00:24:10-00:24:16)

. . .

ISHKA: You've proven yourself a true Ferengi. You've betrayed friends and family for personal gain. ("Ferengi Love Songs" 00:35:38-00:35:44)

These lines are therefore a direct comment on particularly individualistic character of the neoliberal theory which is best summarized in what one of the pioneers of neoliberalism Margaret Thatcher famously declared when she said there is "'no such thing as society, only individual men and women'" (Harvey 23). More importantly, the episode also addresses the

possible problematic consequences of this self-centered philosophy as well. Quark's profitdriven and acquisitive behavior, for example, leads to devastating consequences:

QUARK: A Ferengi without profit is no Ferengi at all. You taught me that.

ISHKA: The Rules of Acquisition aren't going to help you now, Quark.

QUARK: A hundred and ninety nine point slide.

ISHKA: And that's just the beginning. Congratulations, Quark. You've not only destroyed my life and Zek's life, you may have triggered the destruction of the entire Ferengi economy. I hope it was worth it. ("Ferengi Love Song" 00:33:08-00:33:29)

This was almost a prediction of what happened in 2008. According to Šimac, the crisis of 2008 started in the US, where the banks, believing that that they are 'too big to fail', packed uncertain mortgage loans and sold them across the world because, under the conditions of deregulation and easy money, neoliberalism imposed 'casino' capitalism, hazardous risks and excessive debts as something normal. Consequently, the state had to use thousands of billions of dollars in public money to save private banks and companies, which was the biggest state economic intervention since the 1930's. In addition, he continues, the state formed public funds for private companies and thus "socialized the losses" or transferred private irresponsibility and mistakes onto the general public. This considerably increased the public debt that excessively indebted and impoverished the people, including the generations to come, and eventually led to the public debt crisis in 2011 (Šimac).

Another consequence of the Great Recession of 2008, and the weakening of the labor rights under neoliberalism for that matter, has also been a persistently high unemployment (Gonzales 41). In that sense, a critique presented in a two part-episode *Past Tense* of the *Deep Space Nine* series holds true to this day. In *Past Tense*, *Part I*, Captain Sisko and two other Starfleet officers, Dr. Bashir and Lieutenant Commander Dax, accidentally travel back in time

12

to 2024 San Francisco. Sisko and Bashir end up in Sanctuary District, a sort of camp for the

poor and homeless, where they speak to one of the residents:

WEBB: Most of us agreed to live here because they promised us jobs. I don't know

about you, but I haven't been on any job interviews lately, and neither has anyone else.

They've forgotten about us.

SISKO: So what do we do?

WEBB: We make them remember. The day after tomorrow, we're going to hold a rally

outside the Processing Centre. I want everyone to be there. . . . I want to remind the

people outside that we haven't done anything wrong, that we're not criminals, and that

we don't deserve to live like this. . . . Tell people when they come to the rally to bring

their families, their kids, and try to look their best. We're not derelicts, no matter what

they say about us. (00:38:38-00:39:28)

This is a direct critique of neoliberal policies, which advocate noninterference of the state into

the market and under which issues such as poverty are seen as an individual responsibility, a

result of freely made decisions. Part II of Past Tense points out to this again:

LEE: When I first started working here, I processed a woman who had a warrant out on

her for abandoning her kid. She couldn't take care of him, so she left him with a family

that she worked for over in the Marina. I felt so sorry for her I didn't log her in. I just let

her disappear into the Sanctuary.

BASHIR: It's not your fault that things are the way they are.

LEE: Everybody tells themselves that, and nothing ever changes. (00:19:08-00:20:27)

Poverty and unemployment, however, are a much larger problem, which is also related

to another aspect of neoliberalism, globalization. Although globalization is not a new process,

but rather an inner tendency of capitalism itself, there are problematic new aspects of globalization that emerged with neoliberalism (Duménil and Lévy 10).

The long-term result of neoliberal deregulation has been a 'race to the bottom' in which workforces, regions, and nations compete to provide the cheapest labor, least environmental and social protection, and largest subsidies to globally mobile capital. That has led to growing inequality within and between countries. ("Globalization,

Neoliberalism, and Climate Change")

Star Trek touches upon the issues of environmental and labor force exploitation under neoliberalism in the following conversation:

QUARK: You can't even dump industrial waste anymore because it might harm the natural habitat. I'm supposed to start worrying about animals now? . . .

ROM: I suppose you could argue that Ferenginar's biodiversity is a precious resource that belongs to everyone. . . .

QUARK: And don't even get me started about this whole labour rights thing. What have we come to if you can't demand sexual favors from people in your employ? ("The Dogs of War" 00:26:52-00:27:18)

The issues related to globalization are also addressed in the *Part I* of the *Past Tense* episode:

CAPTAIN SISKO: By the early 2020s, there was a place like this in every major city in the United States.

DR. BASHIR: Why are these people in here? Are they criminals?

CAPTAIN SISKO: No, people with criminal records weren't allowed in the Sanctuary Districts.

DR. BASHIR: Then what did they do to deserve this?

CAPTAIN SISKO: Nothing. Just people, without jobs or places to live.

DR. BASHIR: Ah, so they get put in here?

CAPTAIN SISKO: Welcome to the 21st century, Doctor. (00:09:48-00:10:11)

As Gonzales notes,

Writing in the mid-1990s about internment camps for the poor and homeless being in place in every major American city within thirty years is an explicit critique of the neoliberal project, which was well established by the 1990s. Neoliberalism, whose proponents prioritize the free movement of capital, goods, and services, has been devastating to numerous urban centers, particularly in the former industrial American heartland. Cities like Detroit and Cleveland, which were global centers of industrial production, have been hollowed out as the manufacturing base has been shifted to cheap wage venues in the South, Mexico, China, and so on. (41)

In effect, what occurs in these 'manufacturing' countries is

the appropriation of [their] natural resources (agriculture, mining, energy) at low and declining prices; the exploitation by transnational corporations of segments of the cheap labour force of these countries, who are subjected to often extreme working conditions; and the draining of the flows of interest resulting from the cumulative debt of these countries. (Duménil and Lévy 18)

Just as the Ferengi's 111th Rule of Acquisition says, "Treat people in your debt like family. Exploit them" ("Past Tense, Part I" 00:01:47-00:43:37).

These results are economically, socially, and environmentally unsustainable for any nation and for the world as a whole. These long-term trends have, not surprisingly, culminated in global crisis. On the one hand, neoliberal deregulation has put the world into the deepest economic crisis since the Great Depression, with little indication that anything more than further crisis lies ahead. On the other hand, neoliberal deregulation has brought on an unprecedented global environmental crisis whose magnitude is so

great that it dwarfs the problems that the human species has ever had to deal with previously. ("Globalization, Neoliberalism, and Climate Change")

All across the world, climate abnormalities are awaiting a "tipping point": acidification is dissolving seashells because of excessive levels of CO2 from burning fossil fuels, there is a loss of water due to disappearance of glacial water towers in South America, Tibetan Plateau and the Alps, the Arctic sea ice is at its record low, threatening with a massive release of methane trapped by the ice for millennia (which poses a risk of runaway global warming), the coral reefs are disappearing due to CO2 and the heat absorbed by the ocean (which retains 90% of the excess heat), the jet streams are altered, causing thus extreme weather patterns all across the Northern Hemisphere every few years, etc. (Hunziker) The National Research Council of the National Academies has concluded that "The current rate of carbon emissions is changing the climate system at an accelerating pace, making the chances of crossing tipping points all the more likely" (Hunziker). In that sense, *Past Tense* episode ends with a meaningful thought:

DR. BASHIR: You know, Commander, having seen a little of the twenty first century, there is one thing I don't understand. How could they have let things get so bad? SISKO: That's a good question. I wish I had an answer. ("Past Tense, Part II" 00:42:21-00:42:36)

Considering all of the above, it does not surprise that there is a growing consensus among the economists, politicians and scholars like Joseph Stiglitz or IMF's Jonathan Ostry and Prakash Loungani that the neoliberal project has failed, or that it is doomed to fail completely in the near future (Geier; Will). For this reason, open and constructive dialogues coming from different disciplines and perspectives about the future, the alternatives and the possible solutions to the current problems we are facing should be encouraged and welcomed. After all, the "political innovation . . . is a collaborative process, in which convincing answers

to the big questions can only be formed when the questions are being asked through the lens of the actual (economic) lives lived by those who will populate any new order" (Berry).

2. Economic Paradigm Shift

We are normally so immersed into the present that we often fail to see the rich potentialities of the future and how much our own social period differs from the past, or a mere generation ago (Bookchin 11). That is because our contemporary life distorts our understanding of the world as it really is, such as the fact that the humanity has only recently gone through a profound change from material scarcity and the survival, to a society marked by private property, class domination and the state as we know it today (Bookchin 11).

According to Keynes,

The modern age opened . . . with the accumulation of capital which began in the sixteenth century . . . From the sixteenth century ..., the great age of science and technical inventions began, which since the beginning of the nineteenth century has been in full flood.

All of that has allowed us to "grow well beyond what was deemed possible at the onset of the Industrial Age" (Saadia 213).

The age of capitalism, however, has showed that there is "the general tendency towards crisis formation within capitalism" (Harvey 69). "A historically destabilizing factor of capitalism is the tendency of capital equipment (i.e., technology) to replace labor" (Gonzales 41). But, according to Keynes, "All this means in the long run is *that mankind is solving its economic problem* (Keynes), because the development of technology and the science under capitalism also generates the potential to overcome the material needs for everyone (Ewing 120). Keynes observed in 1930's that

what he called 'the economic problem' would be solved in less than a century. In his view, that economic problem, the compulsion to make choices in the face of scarcity, had been humanity's great affair since the beginning of history. Thanks to the miracle of compounding growth, society would soon reach a point where hitherto-unfathomable abundance would become the norm rather than the privilege of a few. (Saadia 210)

With the ongoing rise of robotics, machines and automation, energy technology and the obesity epidemics on the one hand and the food waste, among other things, on the other hand, it seems "that there are plenty of reasons to believe that we may be at the beginnings of a post scarcity economy" (Webb) and therefore close to solving our economic problem. As a result, our way of thinking about economics and our motives might change completely in the near future. In other words, we may be heading toward a paradigm shift; "an important change that happens when the usual way of thinking about or doing something is replaced by a new and different way" ("paradigm shift").

So, as the former Greek Minister of Finance Yanis Varoufakis said in his Ted talk, the question is not whether capitalism will survive the technological innovations it is spawning. The more interesting question is whether capitalism will be succeeded by something resembling a Matrix dystopia or something much closer to a *Star Trek*-like society (00:10:01-00:10:14).

Generally talking, it is a peculiar fact that the science fiction films and TV series are almost all dystopian depictions of the future. According to Fisher, dystopia "is specific to late capitalism . . . [and] the world that it projects seems more like an extrapolation or exacerbation of ours than an alternative to it" (1-2). That is because it seems that "it is easier to imagine the end of the world than it is to imagine the end of capitalism" (qtd. in Fisher 2). As one character in an episode of *Star Trek* says, being mugged yesterday can give you a negative impression of the future ("Past Tense, Part I" 00:09:39-00:09:44).

On the other hand, as the only utopian science-fiction series, "Star Trek speaks to some basic human needs: that there is a tomorrow — it's not all going to be over with a big flash and a bomb; that the human race is improving; that we have things to be proud of as humans" (qtd. in Gross and Altman 14). Thus, Star Trek imagines that the final stage of capitalism will happen when, due to the solution of economic problem, the core capital of the society becomes human capital, and predicts that the economic abundance will have a huge positive impact on the society and politics.

In the following chapter, we will outline the exceptional features of the *Star Trek* society which demonstrate the importance of material prosperity for the development of society and political innovation. In that way, we will show that *Star Trek* presents itself as a plausible ending stage of the social development through technological innovation under capitalism and a positive model for the future of our global society.

3. Trekonomics

Science fiction and economics share an oft-overlooked kinship. Both are preoccupied with change, and predictions about change [and the future of society] . . . One approaches it through narrative flourish, the other through mathematical tools. Both, however, derive their conclusions from careful observation of the world as it is. (Saadia 10)

That is why the majority of science fiction genre revolves around the idea of economic scarcity or abundance, and the core premise of *Star Trek* is that of economic abundance.

While *Star Trek* was not the first to introduce the idea of economic abundance in science fiction, it was the first to visually elaborate it in a plausible futuristic context of technological and scientific progress of the society. Also, the existence of money in science fiction is rarely

questioned or put in play as it is by *Star Trek*, which makes *Star Trek* unique and very bold (Saadia 23).

Star Trek's solution of economic problem is best reflected in its crowning technological achievement, the replicators –devices that convert mater into energy and vice versa and thus replicate and recycle food, water, objects, clothing, building materials etc. In this way, replicators are "the ultimate economic machines" (Saadia 8) which "make everyone better off at nobody's expense" (Saadia 86). Given that replicators can even replicate themselves, everyone can have one, so save from few things such as spaceships or land, humanity in Star Trek lives in abundance of almost all goods.

Keynes had the intuition that human actions—our desires, our wants, our motivations—would be profoundly altered as a result [of abundance]. Overcoming the economic problem would condemn to obsolescence the entire panoply of economic behaviors that shaped our existence. (Saadia 210)

That is precisely what happens in *Star Trek*. As Captain Picard famously declares,

The economics of the future is somewhat different. You see, money doesn't exist in the twenty-fourth century. . . . The acquisition of wealth is no longer the driving force in our lives. We work to better ourselves and the rest of humanity" (*Star Trek: First Contact* 00:50:11-00:50:34).

People are no longer obsessed with the accumulation of 'things.' We have eliminated hunger, want, the need for possessions. We have grown out of our infancy. ("The Neutral Zone" 00:24:38-00:24:52)

In another episode, Picard has a conversation with a character named Ralph Offenhouse, a human from the 20th century who finds himself in the future:

OFFENHOUSE: There is no trace of my money. My office is gone. What will I do? How will I live?

PICARD: This is the twenty-fourth century. Material needs no longer exist.

OFFENHOUSE: Then what's the challenge?

PICARD: The challenge, Mr. Offenhouse, is to improve yourself. To enrich yourself. Enjoy it. ("The Neutral Zone" 00:42:18-00:42:47)

Thus, in Star Trek's futuristic world,

most if not all of the real-world conditions that drive economic behaviors essentially disappear. In *Star Trek*, currency has become obsolete as a medium of exchange. Labor cannot be distinguished from leisure. Universal abundance of almost all goods has made the pursuit of wealth irrelevant. (Saadia 5)

Star Trek's "ideal" society is usually labeled as 'utopia' and taken as an unattainable fiction. On the contrary, we argue that, despite being a science-fictional solution to economic problem, Star Trek is actually "anchored in the possibilities of the present, our everyday reality" (Saadia 211). That is because, firstly,

Every significant advance in wealth, technology and science extends the boundaries not only of the real but of the possible, of the ways this newly won potential can be realized. Today's production of goods and knowledge, together with accompanying skills, have transformed the utopias of an earlier time into practical alternatives to our everyday existence. (Ollman)

So, when viewed in a broader historical context of human development, *Star Trek* appears more as "a continuation of the present" than a fictional future, which is why it perhaps does not even deserve "its usual utopian label" (Saadia 106).

Secondly, while it may seem far-fetched that money will cease to exist and people will stop acquiring material things in the future, the research has showed, for example, that the "lack of money is a de-motivator, but money is not a motivator" even today (Gupta-Sunderji). In other words, once the basic needs of paying bills and providing for our families are covered,

the psychological benefits of money are questionable (Chamorro-Premuzic). Instead, the evidence suggest that, once people have decent paycheck, it is the intrinsic factors that motivate them, such as "achievement, recognition for achievement, the work itself, responsibility, growth, and advancement" (Gupta-Sunderji), which are precisely the factors which motivate the people in *Star Trek* to work. Hence, in the series, "competition among people is completely transformed. Reputation and honors, the esteem and recognition of one's peers, replace economic wealth as public markers of status" (Saadia 5-6).

Also, the people in *Star Trek*

think and act from the standpoint of terminal abundance. Unlike ours, their mental universe is not bounded by economic necessity. Class distinctions, profit seeking, and conspicuous consumption make absolutely no sense to them. . . . [They] live in a heightened state of what economics calls *satiation*: the point at which obtaining additional units of the same product starts to decline in value. The first cookie is always better than the tenth one, and even more so if one has unfettered access to the strategic reserve of cookies. . . . [And for humans in *Star Trek*, the cookies are free]. (Saadia 171) So, it is "human capital and innovation [that] form the cornerstones of *Star Trek*

So, it is "human capital and innovation [that] form the cornerstones of *Star Trek* society's welfare" (Saadia 104). That is further confirmed by the fact that there are traces of private ownership even in the *Star Trek*. For example, Captain Picard "owns" a vineyard. But, the value of such things has changed, or rather they do not have an exchangeable value:

It seems that private property in *Star Trek* is above all sentimental... Jean-Luc Picard's older brother Robert continues the family legacy of wine making. The house and the vineyard are not objects of speculation or repositories for wealth. They are heirlooms to be carefully tended. Their value is subjective and symbolic. (Saadia 39)

But this is not merely fiction, since the beginning of the transition from the material capital toward human capital is noticeable in our reality as well. For example, the goods and

services that are nowadays freely exchanged on the Internet also escape the traditional economics, as their value cannot be determined (Saadia 47). "While it is not the dominant form of economic interaction, it does thrive alongside the profit-oriented sector and feeds back and forth into it" (Saadia 230). Because of Internet, knowledge and information are nowadays largely free, and "knowledge is as much a factor of production as machines and money" (Saadia 231).

In the following subchapter, we will review the way in which *Star Trek* as a powerful piece of popular culture has made a unique impact on the real world in order to demonstrate that the current state of the real world technological and scientific innovation under capitalism is driving us closer to the *Star Trek*'s vision of the society, in which *Star Trek* itself plays an important role.

3.1. Science Fiction and Science Fact: Star Trek's Impact on the World

To begin with, science fiction actually helps shape the world by inspiring real science, and the two "have been explicitly intermingled for the most of the twentieth century" (Johnson 4). In that sense, science fiction is a fictional prototype that is somewhat between fact and fiction, since it is prompting new and different views on the emerging theories, the ways of exploring, and ultimately further developing thereof (Johnson 5). But, as William Shatner who played Captain James T. Kirk in *Star Trek: The Original Series* says in the documentary *The truth is in the stars*, "what role did *Star Trek* play?"

While it is hard to summarize the importance of *Star Trek*, Stephen Edward Poe managed to do it well when he wrote that "never in the history of any entertainment medium has there ever been a story, an idea, a situation, a set of characters, or a theme that has approached the magnitude or impact of Star Trek (56).

First of all, the futuristic visions of the sci-fi shows give the scientists an idea about the collective imagination of what future technologies might look like, which helps them actively shape the future by designing and developing technologies and products that can be easily used and understood by people (Johnson 4). In this way, *Star Trek* foresaw a number of technologies that became reality, or as Stephen Hawking said, "will [become reality] in the not too distant future" (*The truth is in the stars* 1:13:19–1:13:25).

For example, *Star Trek* inspired the creation of cell phone (Dr. Martin Cooper of Motorola was a fan of the show and wanted a portable communicator just like Captain Kirk's), the first space shuttle was named after the *Star Trek's* spaceship *Enterprise*, and *Star Trek: The Next Generation* featured "one of the first instances of a software defined, touch-sensitive contextual user interface, also known in plain English as the iPhone" (Saadia 4). Similarly, the voice-activated virtual assistant such as Siri, virtual reality, tablets, medical tricorder (handheld diagnosis device), laser wound healing and the automatic doors that we enter on a daily basis were also some of the characteristic, and at that time fictional features of the *Star Trek* universe that came to life.

Also, the closest thing that we have to a replicator today are 3D printers, which have been taking over the world and the production, from bio-printing human organs and body parts to 3D printing of the whole houses. Given that converting energy into matter is also being experimented on³, it does not seem far-fetched anymore that we might even have real replicator-like devices in the future.

Thus, at this point in our history, we hear the news about different *Star Trek*-like technologies being produced and the discoveries made almost on a daily basis. Nowadays, the series inspires research in a vast number of fields, and it is "precisely this productive confusion

³ Physicists from Imperial College London, led by Professor Steven Rose, came up in 2014 with a way of testing the theory off the Breit-Wheeler process which says it should be possible to turn light into matter by smashing two particles of light (photons) together to create an electron and a positron. Experiments are underway this year (Dunning).

and fusion of fact and fiction that can unlock, broaden and expand the boundaries of current scientific thinking" (Johnson 5). For example, *Star Trek*'s trademark concept of *teleportation* has also entered the realm of real as "a small numbers of atoms and photons have been teleported. The principal use of this trick will be in quantum computer development, which has the potential to solve extremely complex mathematical problems extremely fast (Bachelor). Furthermore, the series inspires researchers in the fields of quantum physics and astronomy, as well as artificial body parts and artificial intelligence. For example, at a conference on cybernetics several years ago, the president of American Association for Artificial Intelligence said that the ultimate goal of his field of technology is the *Star Trek*'s android, "Lieutenant Commander Data" (Bachelor). Also, *Star Trek*'s ideas have deeply influenced the research in clean energy, medical diagnostics, nanotechnology, space exploration and interstellar travel (Mexican physicist Miguel Alcubierre proved the *Star Trek* famous *warp* drive possible in 1994 (Moskowitz)) and many more.

Therefore, *Star Trek* is in a way part of our every-day reality which has been greatly altered by the people and the technologies it inspired. That is an unprecedented achievement of any television series and it gives *Star Trek* a unique place and importance in our popular culture and everyday life. To put it in the words of Manu Saadia, "*Star Trek* is a source of constantly renewed inspiration for engineers, scientists, and entrepreneurs—a true, demonstrable engine of progress, and, ultimately, a force for good in the world" (4).

As astrophysicist Neil deGrasse concludes in the documentary *The truth is in the stars*, In the 1960's we had a Cold War with the Soviet Union and the hot war in Southeast Asia and the Civil rights movement, and here's *Star Trek* portraying Earth where all the countries in the world were at peace. Who makes tomorrow come, if not the dreamers, and the scientists and the technologists who enable it? (00:24:37-00:25:10)

Given that the scientific discoveries and technology industry change everything (*The truth is in the stars* 00:43:11-00:43:14), and that the slow but real appreciation of what science is and why it matters that we see manifesting today might owe its origin to *Star Trek*, as Neil deGrasse remarks (*For the love of Spock* 1:09:09–1:09:22), the series' impact on the real world is unquestionable. In this way, the series is a part of what drives us towards its utopian future.

But.

'how can a simple space opera with blinking lights and zap-guns and a hobgoblin with pointy ears reach out and touch the hearts and minds of literally millions of people and become a cult in some cases?' Obviously, what this means is that television has incredible power. (Roddenberry 00:00:38-00:00:58)

However, it also means that the audience accepts *Star Trek* prototype and its "imagined future as real, plausible and acceptable" (Johnson 5). That is because *Star Trek* seeks "to map current social, political, and economic trends into the future" (Gonzales, 32), which makes it plausible reality instead of pure fiction. Thus, the series makes a bold and optimistic claim that technological and scientific advances, such as the ones it is inspiring, will enable a future of economic abundance and social stability if we use of them in the right way, namely, if we govern them with the right politics.

3.2. Politics of Star Trek

As Keynes said, "there is no country and no people . . . who can look forward to the age of leisure and of abundance without a dread. For we have been trained too long to strive and not to enjoy". For example, *Star Trek*'s replicators can also be seen as "a metaphor for robots and automation" (Saadia 8). We are already witnessing the rise of robotics and automation that is replacing human labor. There are 3D printers, self-driving cars, robot receptionists etc., and it is safe to assume that the in the future this will happen at even more accelerating pace.

On the one hand, this has a desirable effect that "the output of goods and services will be extremely high, so with automation, there will come abundance . . . [and] almost everything will get very cheap" (Musk 00:23:44-00:23:57).

On the other hand, this "readjustment between one economic period and another" will manifest itself in form of *technological unemployment* – the increase of technical efficiency will be "outrunning the pace at which we can find new uses for labour" (Keynes).

But, "These anxieties are entirely about the political economy of technological progress. Who will reap the benefits of such wondrous inventions? Are we headed toward an even more unequal and oligarchic society?" (Saadia 11)

Star Trek provides commentary on this in the Past Tense episode of Deep Space Nine,

A Sanctuary District resident explains, 'I came to San Francisco to work in a brewery . . . but they laid a bunch of us off when they got some new equipment . . . and so I ended up here.' Another of the characters in 'Past Tense' notes, 'Right now jobs are hard to come by . . . what with the economy and all.' (Gonzales 42)

In the episode, these problems culminated with protests and violent riots. The riots ultimately change the public opinion on the Sanctuaries. As Captain Sisko says, they were torn down, and the United States finally began correcting the social problems it had struggled with ("Past Tense, Part I" 00:17:48-00:17:59).

The narrative of the episode suggests that the issues such as large scale technological unemployment have to be addressed in an adequate and fair manner. In other words, unemployed and poor people cannot merely be treated as a group of people to whom a shelter and free food should be given. As one character in *Part II* of *Past Tense* says, "If you treat people like animals, you're gonna get bit" (00:06:43-00:06:48). Instead, it is the wealth that comes with technology that should be fairly distributed. For example, in the near future we

probably will not have a choice but to introduce some form of Universal Basic Income that is simply going to be necessary (Musk 00:22:54-00:23:00).

Similarly, in *Star Trek*, it is not so much the invention of replicators that distinguishes United Federation of Planets, "but rather that these replicators are free and available to all as *public goods*" (Saadia 6). Therefore, *Star Trek* proposes the prototype of a society where the replacement of human labor goes hand in hand with an even distribution of wealth (Saadia 11). It is "A world where an evenly distributed cornucopia is both the norm and the policy profoundly changes its inhabitants" (Saadia 6).

Conversely, for example, the profit-driven Ferengis do not reap the full social benefit of that because on their planet, a "replicator is just a supremely profitable robot, an employee that will not unionize nor try to take the place of the boss" (Saadia 85).

What this means in terms of real-world is that, for our global society to reap the benefits of the future large-scale inventions and production scales, they will have to be followed with equally large-scale politics.

In fact, there already exist the real-world analogies of such political decisions. For example Ronald Reagan made GPS the first global manmade public good. This is an example of public investment indirectly increasing overall social welfare: it "deepens our knowledge of the world thanks to better mapping and remote sensing", "multiplies our ability to monitor everything from harvest yields, to animal populations in the wild, to oceanic currents and global warming", "allows for quicker and thus less polluting car trips", "makes sea and air navigation safer and more efficient", it "is a crucial instrument for providing relief after a natural disaster", it "is at the heart of popular services such as Google Maps, Waze, and Uber" and "it will make possible self-driving cars, thus enabling a profound change in personal mobility" (Saadia 227-230).

In a similar fashion,

The advent of the Internet has enabled us to intensify and expand our deep-seated habit of sharing, giving, and collaborating. . . . [Thanks to the Internet, we] can have free, unlimited, and immediate access . . . to the accumulated wisdom of almost all of humanity, present and past. (Saadia 47)

So, "Star Trek is not solely a work of technological optimism—that is, the idea that technological advancement will alone drive social/political progress" (Saadia 85). On the contrary, as the case of Ferengis shows, "Star Trek renders cautions against unchecked/unregulated scientific/technological advancement" (Gonzales 32-33). Another example of that is the Borg, a species of cybernetic beings which are linked to a hive mind and exist as the Borg Collective, and which assimilate other species, technologies etc. They are the main antagonists of the Federation, but also a sort of a mirror image of it. As Manu Saadia notes,

the Borg's economy does not fundamentally differ from the economy of the Federation. The Borg has moved beyond scarcity. Individual drones do not have to worry about providing for themselves; their basic biological and psychological functions are all taken care of by technology. The Borg Collective does not require currency or market mechanisms to produce and exchange goods. . . . Borg's only significant difference from the Federation lies in the way it accumulates capital: through the grotesque and violent assimilation of foreign bodies, knowledge, and materials. (181-182)

"Hence, a prominent argument in *Star Trek* is that if technological development is to serve as a basis for justice, freedom, and societal well-being, humanity must get its politics right" (Gonzales 33). What that also means is that the "post-scarcity economy is as much a matter of technological progress as it is a result of politics and collective choices" (Saadia 85).

In the *Past Tense* episode, Sisko explains that nobody cared how many people were in the Sanctuaries for the poor and homeless as long as they were out of sight. Dr. Bashir, however, points out that they had means to help those people even in the 2024, if anyone cared about it:

SISKO: It's not that they don't give a damn, they've given up. The social problems they face seem too enormous to deal with.

BASHIR: That only makes things worse. Causing people to suffer because you hate them is terrible, but causing people to suffer because you have forgotten how to care? That's really hard to understand.

SISKO: They'll remember. It'll take some time and it won't be easy, but eventually people in this century will remember how to care. ("Past Tense, Part I" 00:22:46-00:22:49).

This brings us to our last chapter and the fact that we too must act on our global problems before they become too big to handle and we give up.

4. The Final Frontier

This final chapter is a speculative part of this paper dealing with the final frontier neoliberalism might take us to. In the following lines, we will discuss what this economic abundance that neoliberal capitalism is prompting thorough technological and scientific innovation might mean for the future development of our global society and politics. For these purposes, we shall employ the key points which *Star Trek* as a fictional prototype presents as a path toward its 'utopia' or a more egalitarian and socially stable future. That being said, this chapter will serve as an "intellectual experiment to explore the theory in the paper and examine its implications in an imagined future" (Johnson 3).

To begin with, the humans in *Star Trek* first experienced a radical shift in perspective. They were left in the aftermath of the World War III that lasted from 2026 to 2053 – which we hope will not turn out to be another thing that *Star Trek* foresaw – during which nuclear weapons were used, many millions of humans died and the Earth was almost destroyed. In such bad state, humans are contacted by the Vulcans – a highly advanced species from the planet Vulcan that

lives by reason and logic – who help humans recover and eventually form the United Earth Government. Ultimately, this mutual cooperation culminates with the formation of The United Federation of Planets – a federal interstellar republic that is based on utopian principles of equality, rights and liberty.

Just like the humanity before the World War III in *Star Trek*'s history, we are also facing a number of crisis which can either lead to war and chaos or some kind of change for the better. While we cannot tell if in reality we will be contacted by an advance extraterrestrial species which will enlighten us, it just might be that we are already heading that way ourselves. On the one hand, we are, or will be by 2030's, at the similar level of technological and scientific advances as the humanity in *Star Trek* history, so it may be that we are also at the verge of solving our economic problem and experiencing an economic paradigm shift. On the other hand, we are facing a number of global phenomena that ask for political innovation.

In accordance with the above, there are two points made by *Star Trek* describing how a society can achieve its ideal state, and which can be related to the current world affairs:

- 1) Revolutionary event that leads to a shift in perspective
- 2) The need for the governmental body higher than a nation

1. Revolutionary event that leads to a shift in perspective

Without a doubt, the most alarming of all the crisis we are currently facing is the environmental one. Considering the climate issues, the finiteness of fossil fuels and the fact that the energy demands are growing with each year (for instance, in 2017 they grew by 2.1% ("Global energy demand")), it has now become obvious that we must switch to and work on alternative energy sources, which we are already doing, in different ways. In fact, we might even be very close to the production of unlimited energy.

For example, the ITER clean energy experiment in southern France; a collaboration of 35 nations who have been researching nuclear fusion and building the world's largest fusion device, that is scheduled to start in 2025 (What is ITER?). Another US initiative has MIT scientist collaborating with private companies in order to produce fusion power within the next 15 years, using a "radically different approach to other efforts to transform fusion from an expensive science experiment into a viable commercial energy source" (Devlin). In another collaboration, Google and one leading US fusion company have developed a computer algorithm "that significantly speeds up progress towards clean, limitless energy" (Carrington). And there are many more similar initiatives.

On the other hand, there are solar cells which are more efficient than ever. In fact, inspired by photosynthesis, researchers recently combined the principles of quantum physics and biology to drastically improve current solar capabilities. Solar cells are no longer even necessary to capture solar energy, as scientists have created a synthetic leaf that does just that, while converting carbon dioxide into carbon monoxide. (Gohd)

Besides the fact that a source of unlimited energy would "provide an inexhaustible supply of energy, without pollution or global warming," as ardent advocate of nuclear fusion Stephen Hawking said ("Stephen Hawking"), it would also fundamentally change economics.

Around 80 percent of the world's energy still comes from fossil fuels ("Fossil Fuels") and energy is used for everything, from home heating or cooling to manufacturing of products. Therefore, if energy was to become unlimited and thus no longer require fuel to produce it, it would eventually become so cheap that the price would be negligible or it would be completely free. Consequently, the price of almost everything would eventually fall and the scale of production would increase, which would lead to economic abundance, since manufacturing of products would no longer depend on energy in economic sense.

The current example of this principle are Elon Musk's Tesla Gigafactories which are entirely powered by renewable energy sources and produce a huge number of lithium ion batteries with the aim of driving down the price "of these batteries and financially incentivizing the use of alternative energy sources" (Gohd). Furthermore, Musk said they calculated that it would only take 100 Gigafactories to transition the whole world to sustainable energy (Gohd).

The trend of prices falling in relation to energy has also been noticed with the available solar and wind power. Since clean energy technologies operate at a very low cost,

the costs of renewable energy technologies have declined steadily, and are projected to drop even more. For example, the average price to install solar dropped more than 70 percent between 2010 and 2017. The cost of generating electricity from wind dropped 66 percent between 2009 and 2016. Costs will likely decline even further as markets mature and companies increasingly take advantage of economies of scale. ("Benefits of Renewable Energy Use")

In fact, in 2016 solar power became the world's cheapest form of energy, and both wind and solar power are now "so cheap that building new wind and solar farms costs less money than continuing to run current coal or nuclear plants" (Thompson).

It is, therefore, evident that the economics are already changing due to wind and solar energy, which is why it can be logically concluded that unlimited energy would change economics in a fundamental way. Therefore, in reality, humanity will probably witness the next radical shift in perspective when the revolutionary event of producing unlimited clean energy happens.

According to *Star Trek*, such revolutionary event should be followed by political progress. This brings us to our second point.

2. The need for the governmental body higher than a nation

Global political/military tension and upheaval among nation- states suggests the very real possibility of the outbreak of a planetary conflagration [just like in *Star Trek*] — even involving nuclear weapons. Additionally, the global warming phenomenon/crisis indicates the outstanding need for a worldwide regime governing humanity's interaction with the environment. The *Star Trek* franchise posits a future with Earth having a world government, pointing to both the geopolitical and environmental reasons for such a government. (Gonzales 87)

Unfortunately, "developing policy prescriptions is not nearly as straightforward as inventing new machines, if only because the global economy is a very complex and dynamic system" (Saadia 11).

However, the global challenges we are facing lead to the conclusion that "some type of worldwide regulatory regime is becoming more and more necessary . . . if humanity and civilization are to survive" (Gonzales 35-37). For that to happen, we need to "reunite the economic and the political spheres, but we'd better do it by democratizing the reunified sphere", or we end up in a Matrix-like dystopia (Varoufakis 00:09:38-00:00:10:00).

Unlike narratives and political arguments that view world government as unworkable or inherently oppressive, *Star Trek* holds that establishing political sovereignty on a planetary scale is a necessary step to achieve a peaceful and sustainable society. World government is ostensibly more preferable to the current nation- state system that is serving as the basis for persistent, and potentially expanding, military conflicts. (Gonzales 37)

As a matter of fact, in a recent article called *The Demise of the Nation State*, journalist and author Rana Dasgupta points to the fact that the demise of politics and nation state system and the need for political alternative is best reflected in the various upheavals of authoritarianism, nationalism, xenophobia and 'machismo' political style currently going on

around the world. As he remarks, the loss of national politics largely derives from the loss of control over money which is being transferred out of national space into a booming 'offshore' zone, which is materially and symbolically diminishing nation states.

Today, the distribution of planetary wealth and resources is largely uncontested by any political mechanism. . . . [In] our era of global finance, big data, mass migration and ecological upheaval, we have to imagine political forms capable of operating at that same scale. . . . That is how we will complete this globalization of ours, which today stands dangerously unfinished. Its economic and technological systems are dazzling indeed, but in order for it to serve the human community, it must be subordinated to an equally spectacular political infrastructure. (Dasgupta)

So, "If the capitalist liberal democracy which has triumphed in the west is to pass the big test of globalisation . . . as well as its own internal pressures from post-crash austerity – we need some new thinking on ways to widen opportunity, share ownership and philanthropy." (qtd. in Savage).

The first step, according to Dasgupta, is the global financial regulation to track transnational money flows and transfer a portion of them to public channels; the second step is global democracy, meaning the nesting of nations in a stack of stable and democratic structures, similar to the experiment of EU; and thirdly, a new concept of citizenship. As he points out,

97% of citizenship is inherited which means that the essential horizons of life on this planet are already determined at birth.... Deregulating human movement is an essential corollary of the deregulation of capital: it is unjust to preserve the freedom to move capital out of a place and simultaneously forbid people from following. (Dasgupta)

Therefore, in his view the citizenship should be de-linked from territory so it can be more fairly distributed, and the right and opportunities of western citizenship could be claimed anywhere. In that way, everybody could also participate elsewhere in political processes which nonetheless affect as all, such as a United States election which should involve most people on earth (Dasgupta).

Therefore, the destruction of the state and politics that neoliberalization has led to is what ultimately may lead to some kind of a governmental body on a world scale, since the sovereign states themselves can no longer deal independently with the socio-economic changes and issues that are nowadays global. The first step toward that might be the current pressure for the UN to adopt a clean environment as a human right and "for states to ensure a safe, clean, healthy and sustainable environment" (Keating).

However, *Star Trek* points out that the World Government should not be established for pragmatic reasons such as trade and security, as it would be the case under neoliberalism (Gonzales 93). Instead, the only path to "establish an effective, viable, and long-lasting global governance regime" would be through Federation and its values of solidarity, justice and equality (101). This idea is reflected throughout the whole *Star Trek* franchise in the form of the Vulcan philosophy which pervades it, with two most important Vulcan sayings being: *Infinite diversity in infinite combinations* and *The needs of the many outweigh the needs of the few*.

This is not incidental, as the philosophy of the series reflects American political thought. Along with exceptionalism and frontier thesis, *Star Trek* also reflects the concept of 'American Melting Pot'. As Captain Picard declares, "'If there's one ideal the Federation holds most dear it's that all men, all [alien] races, can be united." (qtd. in Gonzales 37). Hence, the internationalism of *Star Trek* is also a reflection of American belief that all humans can be assimilated into modern Western political culture (Gonzales 37).

That being said, through its idea of Federation, *Star Trek* emphasizes the diversity aspect as well, which means that the unification does not necessarily imply giving up on one's culture and that our differences do not need to be divisive. Just as the creator of *Star Trek* Gene Rodenberry said, the series "was an attempt to say that humanity will reach maturity and wisdom on the day that it begins not just to tolerate, but to take a special delight in differences in ideas and differences in life forms" (00:03:21-00:03:35). According to *Star Trek* and the American political thought, the modernity is "transparent and accessible to all, as well as places few political burdens on individuals" (Gonzales 37). *Star Trek* ultimately takes this idea to an optimistic conclusion

that modernity, science, and reason can serve as the basis for a peaceful, highly productive, and thriving world. . . . [and] as global society accepts modernity, reason, and science—that is, the Enlightenment—humans will collectively achieve a higher plane of intelligence, knowledge, and emotional maturity (Gonzales 44).

In this way the series is a science-fictional extension of the United States continuing mission to transform the world.

Given that the United States "has led in the formation of the neoliberal world system, which has brought substantial changes to the global economy" (Gonzales 98), perhaps it is also the United States that will lead the way in governing any new world order that may arise after the next revolutionary event that the humanity will witness.

It will be objected, inevitably, that any alternative to the nation-state system is a utopian impossibility. . . . [However,] there have been many moments in history when politics was suddenly expanded to a new, previously inconceivable scale – including the creation of the nation state itself. (Dasgupta)

Therefore, if we pass this test in politics, perhaps the final American and the humanity's frontier will indeed be space and *Star Trek* as the ending stage of the development of society. In fact, considering that the Earth's population is constantly growing, it might be that we indeed will be colonizing other planets in the future, just like in the world of *Star Trek*. After all, Stephen Hawking often urged that humanity has to colonize space to ensure its survival, while Elon Musk, with his Space X agency, is working seriously together with NASA to make this idea possible.

Finally, "Star Trek's 'utopia' is nothing more than the world that awaits us on the other side of that great social metamorphosis, provided that we decide to distribute our newly acquired [economic] freedom evenly and that we avoid boiling our planet" (Saadia 12).

In that sense, it is worth noting that *Star Trek* is not being naive about its utopian premises. In fact, perhaps the biggest lesson of *Star Trek* is that "Utopia is never complete; it requires constant tending and care" (Saadia 143). In this way, *Star Trek* takes a realistic approach to the concept of utopia as not merely a final, static stage of society.

In fact, the interesting fact about the term 'utopia' is that it has two meanings. Sir Thomas More, the writer of the first *Utopia* (1516), coined the word from the Greek *ou-topos*, meaning *no place* or *nowhere*, which was a pun, since the almost identical Greek word *eu-topos* means a *good place* (Utopia). "So at the very heart of the word is a vital question: can a perfect world ever be realised?" ("Utopia").

Star Trek claims that it cannot. For example, in an episode of Star Trek: Deep Space Nine series, Michael Eddington, a member of rebellious organization the Maquis, tells Captain Benjamin Sisko:

I know you. I was like you once, but then I opened my eyes. Open your eyes, Captain. Why is the Federation so obsessed with the Maquis? We've never harmed you. And yet we're constantly arrested and charged with terrorism. Starships chase us through the

38

Badlands and our supporters are harassed and ridiculed. Why? Because we've left the

Federation, and that's the one thing you can't accept. Nobody leaves paradise. Everyone

should want to be in the Federation. . . . You know, in some ways you're even worse

than the Borg. At least they tell you about their plans for assimilation. You're more

insidious. You assimilate people and they don't even know it. ("For the Cause"

00:38:04-00:38:57)

But, it also points out to why it is worth trying to achieve it. For example, in one episode Quark,

who runs a bar on the Deep Space Nine station, asks Garak, a member of the Cardassian race,

to try a human drink called root beer:

QUARK: What do you think?

GARAK: It's vile!

QUARK: I know. It's so bubbly, and cloying, and happy.

GARAK: Just like the Federation.

QUARK: But you know what's really frightening? If you drink enough of it, you begin

to like it.

GARAK: It's insidious!

QUARK: Just like the Federation. ("The Way of the Warrior" 01:08:53-01:09:16)

This conversation implies that the "values of the Federation [and the United States in

that sense] are indeed contagious and threatening, because above all they are qualitatively better

at maximizing people's and society's overall welfare." (Saadia 208). For example, drawn by

the Federation's values, Quark's nephew Nog and brother Rom decide to join the Starfleet, the

Federation's exploratory and defensive service. As Saadia puts it, "one does not live alongside

utopian people without some measure of envy or inspiration" (Saadia 208). In fact, even the

profit-obsessed Quark says at one point:

QUARK: I think I've been hanging around Hew-mons too long. I think I'm developing a...

ISHKA: Conscience?

QUARK: It's been coming for a long time. I've fought against it, I really have. But living with those people, day in and day out, being exposed to their ethics, their morality - it's like I've been brainwashed. ("Ferengi Love Songs" 00:35:50-00:36:15)

To make a real world analogy, this concurs with Gene Roddenberry's claim that the immense impact and popularity of *Star Trek* does not owe to "any mystic or scriptural brilliance" of the series (00:04:17-00:04:21), but instead it proves "that the much-maligned common man and common woman has an enormous hunger for brotherhood. They are ready for the twenty-third century now, and they are light-years ahead of their petty governments and their visionless leaders" (00:04:26-00:04:39).

Conclusion

In this paper we have shown that neoliberalism today implies economic globalization and the relating economic, social, environmental and political crisis pointing out to the unsustainability of the global self-regulating market. However, when placed into a wider historical context of the human society development under capitalism, we see that technological and scientific developments under this latest, neoliberal stage of capitalism might indicate that we are at the beginning of a post-scarcity society or close to solving Keynes's economic problem. In effect, in the near future we are likely to experience economic abundance and a shift from material capital towards human capital.

In that sense, *Star Trek* presents a plausible model of a post-scarcity society and a logical continuation of ours. It reflects Keynes' idea of economic abundance through its crowning technological achievement, a replicator, and shows how this renders traditional economic behavior, such as profit-seeking and exchange currencies, obsolete and enables political innovation, such as equal distribution of wealth. *Star Trek*, therefore, presents the possibilities for social development offered by the technologically-induced abundance, which are grounded in our reality. Even today people are driven to work by intrinsic motives instead of money; there are cases of global political decisions that increase public wealth, such as GPS as a public good and the free goods and service on the Internet, which increase human capital. Moreover, with its unique optimism, *Star Trek* has shaped and influenced our world by inspiring generations of scientists, engineers and people in general, who have turned the series' science-fictional technologies into science fact or proved its concepts possible. In this way, *Star Trek* is part of our every-day reality and part of what drives us closer to its 'utopian' future.

Furthermore, *Star Trek* narrative also provides directions for achieving such ideal state of society: a revolutionary event and the World Government. We have pointed out the need to follow the *Star Trek* prototype and how the beginnings of it can be found in our neoliberal

present. For example, the environmental problems are prompting our research and use of clean energy, which is already changing economics and leading toward abundance or resources through automation and robotics. Therefore, the revolutionary event of producing unlimited energy is probably the next radical shift in perspective which the humanity will witness. However, for the whole global society to reap the benefits of the future achievements, we need politics on a global scale, as it is pointed out in *Star Trek*. In that sense, neoliberal destruction of the state and politics will probably lead toward some form of global governance, since our politics have to be reinvented to address the global issues.

According to *Star Trek*, the only way to establish a lasting and efficient governmental body is through a Federation and the values of justice, equality and solidarity. In that way, the series reflects the American political thought or its values of equality, solidarity, liberty, justice, modernity, reason and science as a way to achieve a peaceful and thriving society. Accordingly, the United States as the last Enlightenment project and the leader of the neoliberal project present themselves as a potential leader in governing any future world order and, in that sense, space and *Star Trek*-like society as the final American as well as humanity's frontier.

Finally, in this paper we have shown that *Star Trek* is as a plausible fictional prototype for our future global society and politics on the basis of coming economic abundance for which the way is already being paved in our neoliberal paradigm of the present and, provided we manage to follow it, a way for humanity to achieve a more egalitarian and socially stable future.

We would like to conclude with one William Shatner's thought: "I have taken a journey down the river of knowledge, and I've realized that the truth is not in the stars, but in the minds of the people who imagine a future of infinite possibility" (*The truth is in the stars* 1:23:11–1:23:26). Perhaps all we really need is a little bit of imagination to achieve our utopia and to *Live long and prosper*.

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Abstract

Despite the vast research on the American science-fiction series Star Trek, the economic aspect of the series is still under-analyzed. The purpose of this study is to offer a perspective on our limited present as a way to imagine a limitless future by relating the narrative and episodes of Star Trek and its premise of economic abundance to our present. The problems researched are unsustainable socio-economic inequality, environmental issues and the demise of politics symptomatic of the current global economic sphere, which are a result of neoliberal policies for free movement of capital, goods and services across countries. A perspective on issues is given by putting neoliberal capitalism in the historical context of technological and scientific innovation and growth under capitalism and considering that the current trends in these fields point out to the fact that the world may be at the beginning stage of a post-scarcity economy. Star Trek's vision of society presents the possibilities which economic abundance offers for the development of the society and political innovation. Being technologically, scientifically and politically grounded in our present and a reflection of the political thought of the United States as a product of abundant resources, Star Trek presents a positive model to build our globalized society upon. Considering the research, advances and innovation in the field of clean and unlimited energy, economic abundance seems to be a plausible near future. On the other hand, global issues are asking for political innovation on a global scale, such as the World Government. These trends point out to the probability of Star Trek's model of global society based on democracy, egalitarianism, justice, solidary and individualism, which reflects the politics of the United States and presents them as the leader of this speculative new world order of the future.

Key words: Star Trek, neoliberalism, economic abundance, technology and science, social development, political innovation