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Scientific Science Fiction?

With Globalization society gets closer. Through new communication techniques, interaction around the world and knowledge transfer is guaranteed.

But how far will these developments take us? can we trust on scientific research to foresee the next big step of the world and its social systems? Obviously, nobody is able to predict the future (scientifically seen). Even though there are researches based on statistics and studies predicting different developments, another, underestimated source of future prediction receives not enough attention: science fiction!

Taking a look at past science fiction writings we can find many cases in which authors of these novels describe realized developments of the future. Here are some examples:

In "From the Earth to the Moon" written by Jules Verne in 1865, three Americans are landing on the moon. Their lunar vessel is called "Columbiad", weighing a little less than 20,000 lbs. The project costs are USD 5.5m (approx. worth USD 13bn in 1969). One century later, three Americans where sent to the moon. Their command module was called "Columbia" and weighed 26,300 lbs. The project costs were about USD 16bn (BBC.com)

Motorola introduced the first flip cellular phone in 1996. However, flip phones are the mean of communication in Star Trek since 1964.

In the popular futuristic novel "Fahrenheit 451" from 1953, Ray Bradbury writes about thimble-sized radios which fit in one's ear and transmit speech as well as music. Just this decade Apple released their Airpods and thereby turning science fiction into reality (cnn.com).

Having stated out the abilities of science fiction concerning predictions of the future, I gathered the most popular science fiction novels of the last decade (which I read). This essay intents to find possible directions of social developments regarding the social structure of the future. Important points which will be considered are the initial situation, the social structure and the end of the novels.

1. The Hunger Games

Initial situation:

We know there was a nuclear war that ended civilization as we know it.

As a result of the chaos, a communist, totalitarian government took over.

The center of the new system is the Capitol. There the power (and the money) is bundled and the system centralized.

Years before the beginning of the storyline there has been a rebellion against the Capitol and its misuse of power. After the Capitol stopped the rebellion, the Hunger Games were implemented in order to remind the people that everyone has to make a sacrifice and as a sign of power the capital has over the people.

Social structure:

In the Hunger Games, people are separated in 12 (before 13) different districts. The Capitol is very rich and people there are living in abundance and exaggeration. The further the districts are away from the capitol, situated in the Rocky Mountains, the poorer they are.

The candidates for the Hunger Games are randomly chosen. However, candidates coming from the inner districts tend to have a better chance since they are better much better taught and equipped. There is no way to change your district during your lifetime. You are born into your district.

The end:

The protagonist is able to bring down the Capitol by unifying people from all districts. After a violent ending of the totalitarian government a leader of the rebellion takes over and rules in a more democratic way.

2. The Giver

Initial situation:

The Giver plays in a world which at the beginning seems to be a utopia but that changes. There has been some sort of cataclysmic world events that have taken place, and forced the world to change and restart. We can assume some kind of nuclear disaster, some kind of war, some kind of climate disaster, but there is no concrete explanation in the book.

Social structure:

Society is divided in communities. Everything is controlled by the Elders (food, job, family, partner), who lead the communities. There is no war, no illness. The most important value in the society of The Giver is "sameness". This does not only apply for their standards of living but also for the weather and emotions. Adults are taking pills to suppress emotions. Marriages as well as families are arranged, every family has one girl and one boy. For the goal of sameness, the Elders also removed the ability to see colors in the world.

All the memory of the past way of living were banished and only one person carries them. The protagonist has the ability to see colors and is therefore dedicated to this job. The books describe carrying the memories and history as a unbelievably heavy burden, which hurts and is cruel.

The end:

The differences between the protagonist and the rest of the society provoke an instability of the social system. The ending is ambiguous. Running away, behind the wall of the

community, the protagonist almost freezes to death in the snow when hearing music playing and the hope comes back.

3. Divergent trilogy

Initial situation:

The Divergent trilogy takes place in a post apocalyptic world after a war over generic purity.

Social structure:

Society after war is divided into five fractions: Abnegation (the selfless), Amity (the peaceful), Candor (the honest) Dauntless (the brave) and Erudite (the intelligent). All sixteen-years-old have to take a test which allocate them to a specific fraction. The Protagonist is identified for 3 of the fractions which makes her "Divergent". Divergence are seen as a threat to the leaders because they have higher abilities than the rest. They are able to think in more than one direction and will never fit in one fraction. They are therefore a threat to the system. There is this fear that people with the abilities of thinking beyond any fraction borders will question the system and destroy it.

The end:

The protagonist is traveling to all fraction and, with the help of people there, is able to bring down the system of the Elders.

What can science fiction teach us? what are possible future developments?

Taking a look at all the novels it becomes clear that they agreed one thing: The world we know ended in a nuclear war or environmental catastrophe.

When believing the newspaper articles of the past weeks, referring to all the tension around the world, these science fictional forecasts can be soon considered as reality:

"If America's Military Loses World War III, Low Readiness Will Likely Be The Reason"

forbes.com, 11/15/2018

"From economic crisis and inequality to World War III"

- channelnewsasia.com, 11/27/2018

"Are we close to World War 3?"

theweek.co.uk, 11/28/2018

"Trump, Syria, North Korea: Are we heading for a third world war?"

- BBC.com, 04/11/2018

The societies of the survivors that formed out of these catastrophes are all dominated by the thought of protection, clarity and control. It is made sure, that every person has a clear structure and a specific thing to do. In favor of the particular social system the free will and the ability to think and make own decisions has been given up.

Taking a closer look at the systems people are divided districts, communities and fractions. These separations are based on personal attributes or work classifications. We can see no separation by culture such as languages, traditions or different personal values, since everything is strictly controlled and highly efficient. Also, we see that women and men are more or less treated the same. Women have to work as well as men and are part of the social system. The skin color is also of no importance.

Believing science fiction, a future social order will no longer pay attention to culture, race or gender. The systems are too efficient than to consider these attributes as relevant. In the post apocalyptic social systems there is no place for individualism. Everything people do or are supposed to do serves the mean to fit into the system. In everyone of these books, the rules and the order of the system is well guarded by the rulers. The functioning of the system is even protected violently always with the intend to prevent another phase of chaos which comes with war, violence and poorness.

For a certain amount of time, these systems seem to work well and are accepted by society. However, in every novel comes the time where the protagonist discovers his/ her special traits which makes them different from the others. Katniss Everdeen, from the Hunger games, knows how to use an arrow and bow even though she comes from the poorest agricultural district. Furthermore she is described as brave and caring because she volunteers to enter the Hunger Games instead of her little sister. Jonas from The Giver is able to see colors and therefore is meant for a special task. Tris from the last trilogy is divergent and has strengths in three personal attributes (selfless, brave, intelligent) rather than in only one like the other people.

With these attributes, every of the protagonists is able to see beyond the borders of the social system they are living in and opening the eyes of the other people. They are destroying the existing classification system and implement free will and thinking without barriers again.

These science fiction novels therefore show us the importance of a free will in society and the negative effect of a regime which suppresses emotions, free thoughts and choices. In the end it seems like individualism and striving to be different lies in the human nature. Nevertheless, it is possible that these strict structures, which nowadays we would consider as suppression and wrong, where necessary and needed after the atomic war or environmental catastrophe. After such events, people are looking for stability, for a save workplace to maintain their family and security.

However, science fiction teaches us, when the crisis has past and people are caught in their everyday life in that system, they want to break out. No system which is controlled by an elite or a minority can ever be good enough to make every person in society fit in it. After a time, people strive for development and for being recognized as individuals with special characteristics. Exactly because there are always people who do not fit in, I state that, up to now, there is no social system on earth which can be considered as completely stable.

All the novels end with the destruction or destabilizing of the exiting social system and rebuilding a "better" society more based on free will and less control by the leaders.

The Social systems implemented after the downfall of the totalitarian regimes, to me, seem very similar to the systems we are living in right now (in many countries e.g. Europe, North America etc.). Taking reference to my opinion that, until now, there is no such thing as an stable social system, one question arises: are those developments repeating? Maybe the need for freedom and individualism of the people in times of socialism, communism and/or social suppression then rises, until society becomes too capitalistic and individualistic in their thinking that the system breaks down again. And maybe, these destruction is then again regulated by another wave of control by the government/leaders. With regard to the science fiction novels of the last decade, I think this is very likely. It is possible, that these waves are continuing but becoming more flat with the time until they reach an equilibrium. This equilibrium then could be considered a stable social system that will be implemented in the whole world and therefore integrate it (this sounds like science fiction itself).

After having considered the possibilities offered by science fiction, a line is drawn to the issue of Globalization. These line follows the thought of Josh Feinman, chief global economist for Deutsche Asset Management, published in the "World Economic Forum":

Feinmann basically describes the world's situation nowadays as similar to the status of global economy and politics of the pre World War I area. From then on, he considers the development of the world as a cyclical one. Shortly summarized he states that a wave of globalization is always followed by a wave of the reduction of these Globalization movements. According to him, Globalization leads to inequality and thereby provoking political and social instability. The result of this unrest are trade barriers and immigration laws. The World Wars and the great depression were followed by some decades dominated by national protectionism and instability until the next wave of Globalization starts (weforum.org).

These cyclical of developments of the economy can be compared to the ones assumed by the science fiction novels.

A war, followed by internal control and protectionism leads to an outbreak. The solution and the freedom of the people are always found outside of the fraction/community/district, outside of the system and outside of the usual scheme of thinking. Districts and fractions

are working together and are unifying, just as a globalization process, and thereby gathering a higher level of well-being, strength and power.

"The best Science Fiction draws on genuinely scholarly research, and the scholars are themselves inspired by the creative writers' speculation"

 Susan Stepney, Professor of Computer Science at the University of York (theguardian.com)

In the end we cannot separate science fiction from scientific research. One should not fully rely on science fiction nor on scientific research to foresee future developments. However, this essay emphasizes that the relationship between those two things should be considered more importantly. Scientific research is based on the past developments and intends to foresee future events. Science fiction on the other hand, can sometimes be too far away from reality. Therefore, this essay states that the connection of science fiction and scientific research offers a high potential to forecast and form the future developments in times of globalization.

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