

Transcript - *Horizon Zero Dawn*: Beyond the Horizon of Perpetual Growth

Forests in California, Siberia, Australia, Southern Europe, the Congo Basin, and the Amazon have been ravaged by floods of fire. Droughts are siphoning the life out of Northern China, western regions of the US, Central America, and the Horn of Africa. The rising sea level will gradually conquer the lands of several islands in the Pacific, the coastal delta cities, and the countries hiding behind embankments. To anyone that has paid but an ounce of attention to world news the past five years, these apocalyptic images and threats will be very familiar. Climate change is no longer a distant event for which humanity has to prepare. It is already here.

Protesters have been swarming the streets, various organizations and committees have been set up, and an increasing amount of art has been made. All to call for action against climate change. The blame for this existential threat is being thrown at everyone and everything. Consumers should consume less, companies should become greener, investors should spend their capital more wisely, politicians should create new laws, voters should vote green, and the list goes on and on and on. However, we are not only blaming individual humans or corporate entities, some of us blame systems. That is, the economic system that dominates the world today: Capitalism.

The focus of this video will be on climate change and capitalism in popular culture: How is the inability/ability of capitalism to combat climate change portrayed in the video game *Horizon Zero Dawn*? In order to effectively answer this question, I have a number of sub questions. You can pause the video if you want to read them all.

Now, first of all: Why capitalism, climate change, and popular culture? There are two reasons: I am approaching this topic from a radical environmentalist standpoint, which means that I see ecological issues such as climate change as something political. And the second reason is because I think there is a serious lack of popular culture that concretely deals with climate change in a politicized manner. Tied into these two reasons is that there is additionally a growing sense of discontent in the West with capitalism and the struggle against climate change, exemplified by the Occupy Wall Street movement of the early 10s, talks of the Green New Deal, an overall increase in interest of analyses of capitalism from an anti-capitalist perspective, and

the wave of climate strikes and protests. I gathered multiple songs, movies, youtube videos, and video games that use climate change for their stories and themes in preparation for this video, but, what will quickly become evident, is that climate change is arguably often merely a backdrop in pieces of art and entertainment. In news and education, on the other hand, climate change takes a more prominent and central role. Schneider-Mayerson et al. also goes over ecocriticism and its role in academia, and this paper among other things inspired me to explore ecology in a way that is not conventional for academia. This video falls in line with Hebel's observation of the iconographic turn of the 80s and 90s to visual cultures. Images have a powerful effect to shape ideologies and actions, and it is a shame that climate change is only frequently discussed in an education setting. I hope that this video will prompt people to actively engage with the topic of climate change in the sphere of popular culture.

Second: The case study. A broad overview of climate change and capitalism in popular culture will be given in a minute, and afterwards a single case study will be presented in more detail. This case study is the video game *Horizon Zero Dawn* made by a European company, which has sold over 10 million copies worldwide. This case study has been chosen because it deals with climate change in a considerably overt manner, and because it allows us to look at images of capitalism and environmentalism in a popular text.

Third: The theoretical framework. The theoretical framework for the analyses in this video is mostly Marxist with a tinge of social ecology. A marxist definition of capitalism is utilized. Aside from that, concepts such as the superstructure and the base play a vital role in the analysis as well.

What is capitalism and why might it be relevant?

Capitalism, according to a Marxist definition, is a historically specific mode of production consisting of generalized commodity production. Its peculiar characteristics are:

1. Most of production is primarily for exchange and not directly for use.
2. Money takes the role of the universal equivalent that can be exchanged for any other commodity.
3. The working class sells their labor power as a commodity on a market to the capitalist class.
4. Labor power creates the value of a commodity, and the working class is exploited for surplus value by a capitalist class.

5. The surplus value, that is represented in money, can become either revenue or capital.
6. Capital is money that is invested in the means of production, raw and auxiliary materials, and labor power.

Marx argued, based on the aforementioned characteristics, that capitalism has an inherent principle of growth that dominates production. We must look more closely at the capitalist enterprise and capital accumulation to understand this.

In capitalism, a company needs a constant source of income. The laborers, managerial staff, executives, and shareholders need a constant source of income in order to pay the means of subsistence, meaning their food, rent, etc. The company thus needs to continuously produce commodities it can sell on the market to generate that constant source of income. This means that capital has to be invested in the means of production, raw and auxiliary materials, and labor power on a regular basis, otherwise production ceases to continue and the source of income stops. Furthermore, a company is always in competition with other companies that produce the same commodities. Each company is perpetually looking to sell more commodities than their competitors. One of the ways to do this is to sell commodities below the average selling price, which will mean that people will more likely buy those commodities. According to the Marxist analysis, selling commodities below the average price can, for example, be done by increasing the number of commodities on the market, which, in turn, can be done by letting workers work more hours or by investing in more efficient machinery and tools that reduce the socially necessary labor time. Another issue is that the machinery becomes more and more advanced as technology develops leading to machinery and tools becoming proportionally more expensive per commodity produced. Since the surplus value that is needed to let capital grow comes out of labor power, an increasing number of commodities needs to be produced and sold so that even more efficient and technologically advanced machinery can be bought by capital to accelerate production. Herein we see how capitalism is governed by the principle of growth. Capital needs to keep expanding, and more and more commodities need to be produced in order for capitalism to keep existing. This principle of growth will become important when we get to the case studies.

Lastly, Gramsci's contributions to the Marxist analysis are also of importance, with which I mean his concepts of hegemony, the base, and the superstructure. To keep it short, hegemony is the dominating leadership of a group of people in the economic, political, spiritual, moral, and

intellectual fields. This is done by the driving forces of ideology. To understand how this works in practice, we have to look at society as having a base and a superstructure. The base is the social relations to production, and the superstructure is the manner in which the state, education, politics, culture, etcetera is organized. The base and superstructure influence each other, but they can also have a contradictory relationship. The superstructure can be used to legitimize, but also to delegitimize the base of society, sometimes leading to revolutionary action. In other words, the hegemonic power in a society could be anti-capitalist while the capitalist mode of production still prevails. Let us look at how climate change is portrayed in popular culture.

A brief and broad overview:

Ecological problems and climate change are sometimes depicted in popular culture. Various documentaries portray climate change as an existential threat meant to get people and governments to undertake action against climate change. Multiple musicians, such as Michael Jackson, Billie Eilish, the 1975, Miley Cyrus, Lil Dicky, Gorillaz and more have tried to use music for that purpose as well. This leads me to movies and video games, which tend to use climate disaster stricken dystopias as backdrops for the story, imagining a desolate world in which humans have to deal with the consequences of climate change or other grand ecological disasters. The environment and climate change, in my opinion, however, have been lagging behind topics such as race, gender, and class in the realm of popular culture. The upcoming case study is an example of how the environment and climate change should be discussed more in popular culture. On to the case study. Note that there are spoilers for *Horizon Zero Dawn* ahead.

The Portrayal of Ecology in Horizon Zero Dawn

Horizon Zero Dawn is an incredibly interesting case study when it comes to discussing climate change and ecological disaster. The regulation of ecology is the foundation for the story of the video game. It is set in the far future after all life on Earth has been wiped out by a disastrous man-made event, and after life has been reset by a conscious AI called GAIA. Humans now live in tribes and small kingdoms, and nature is filled with animal-like machines

that have been designed and built by GAIA to regulate the environment. Here is a clip that details the functions of GAIA and her machines.

The role of GAIA is to find a balance within nature. This, of course, assumes that there even is a balance to which nature can and must return to in order for it to survive. However, in reality, the environment and nature have never known a balance. The vast majority of life on Earth has been wiped out, and ecosystems and climates are perpetually changing. Antarctica was, for example, once home to large rainforests, but that is obviously no longer the case (find EONS source). A small side note which I think is necessary to state: this is not to justify or downplay the current on-going climate change we are facing or to say that extinction is okay because it might be inevitable. The point of regulating ecology will become important later on.

Back to *Horizon Zero Dawn*. One of the main antagonists in the game is the HADES AI, which was built to constrain GAIA if necessary. From a Marxist perspective, this clip details mechanisms that can be found in capitalism. An entity of highly chaotic nature that is unregulated and tries to take over other similar entities is an observation Marx made of the centralization of capital due to accumulation and annexation. In capitalism, as stated before, enterprises adhere to the principle of growth due to the need of capital to expand. The outcome is that enterprises outgrow other enterprises and/or they can annex other enterprises, which in turn can lead to the creation of monopolies. Large capitalist entities that control entire industries or sectors. In, *Horizon Zero Dawn*, HADES taking over GAIA is shown to be a bad thing, because it means the end of all life. In other words, the argument is implicitly made that letting an avaricious entity loose in an unregulated environment will lead to destruction and ruin. *Horizon Zero Dawn* ties this into the question of ecology and growth with the following scene. A bit of context first: A huge company called Faro Automated Solutions used to build all types of robots, including machines meant for warfare. American General Herres will talk about what happened with a variant of those machines and life on Earth.

The Faro robots, in this clip, have the same role as HADES did in the previous clip. They are a thing that replicates indefinitely, just as capital does. They require biomass for their replication, which seems similar to the role of human labor power in capitalism. Capital requires human labor power to grow itself since it is the source of surplus value. The robots are also impossible to shut down by using the networks that were invented to regulate them because of the complexity and ever-changing composition of their software. In capitalism, this could be

paralleled with the complexity of capital, the constant changing of capitalist periods from classical to keynesian to neoliberalist, and the possible inability of governments to fully regulate or stop capital. The physical fight against these machines have also been futile, because the Faro robots ultimately destroy all life on Earth leading to GAIA having to reset nature. Perhaps indicating that a violent revolution and attempting to overthrow the status quo will bear no successes in the struggle to end climate change. General Herres states that humanity had 16 months before all life would perish at the hands of the Faro robots, much akin to the limited time we currently have to cut our carbon emissions, stop our polluting production, and build up green energy alternatives to prevent the global temperature from rising too much.

Climate cynicism, capitalism, and a conclusion

To situate *Horizon Zero Dawn* in a periodical context, we must turn to concepts such as climate cynicism and capitalist realism. *Horizon Zero Dawn* was released in 2017, nearly three decades after the fall of the USSR and the start of the liberal world order. Neoliberal capitalism is mostly perceived to be, whatever its faults may be, the best economic and political model for our societies. Or as Margaret Thatcher famously said: There is no alternative. This plays into the capitalist realism that Mark Fisher wrote about in his 2009 book. Out of this capitalist realist mindset comes the issue of climate cynicism and cynicism in general. There is an inability for humanity to change or overcome the current economic system and to stop climate change. *Horizon Zero Dawn* emphasizes this aspect implicitly: Humanity is responsible for the inevitable destruction of the world by the Faro robots, such as how humanity is responsible for climate change and the related impending ecological disasters. This is where the tensions between the superstructure and base of society become relevant. The base of society, the social relations to production that result in chaotic, perpetual economic growth, is shown to be responsible for a mass extinction and a change in the global climate in *Horizon Zero Dawn*. If we were to extrapolate this to the real world, we can see a disconnect between the superstructure and the base of society. Our economies are also perpetually growing regardless of the effects on our environment, yet our superstructure is dominated by the idea that the base of society cannot be changed. The superstructure in its entirety continuously reflects the needs of the base of society. The superstructure, meaning our political institutions, culture, education, and so on, try to

validate our economic system, which means that any changes to the base of society are discouraged and deemed to be impossible by hegemonic forces. In other words, we are taught to believe that our current society is the best we can do.

Horizon Zero Dawn as a cultural object has a two-fold character regarding its place in the superstructure. On the hand it does what our dominant ideology demands we must believe but with a whiff of cynicism. *Horizon Zero Dawn* implicitly shows us there is no alternative to perpetual growth, it cannot be stopped, and it will eventually lead to a mass extinction. At the same time, *Horizon Zero Dawn* can be seen as a warning that if we do not stop indefinite, unregulated growth soon, all life will perish. Meaning that it does not consider the current base of society, so the capitalist mode of production, as a viable economic model. It further does this by showing that a system that is fully regulated is actually possible, because the story is set in a future after nature has been revived by a powerful AI that also regulates the entire biosphere with its machines. That AI, GAIA, is able to find a supposed natural balance in which all species, including humans, can continue to exist. However, it should be noted that GAIA gets taken over by one of its subordinate functions, but the main character is successful in defeating the chaotic HADES which prevents life on Earth from being eradicated again. This development along with GAIA having been created by humans might indicate that humans are needed to build regulating systems and that humans must keep both nature and our social and economic systems in check. *Horizon Zero Dawn* thus, in a way, goes against the capitalist realism and cynicism the hegemonic forces have been repeating since the advent of the liberal world order. Yes, another system is possible, but it requires a total destruction of our current societies and a complete start over.

Horizon Zero Dawn is an attempt at portraying and discussing enormous topics such as climate change and ecology. While other video games, movies, songs, books, and graphic novels often use climate change or ecological disasters as a mere backdrop, in *Horizon Zero Dawn* those issues are at the core of the story. This game can be seen as a small reflection and contribution to a zeitgeist dominated by climate cynicism and a sense of skepticism of capitalism or perpetual growth. It forces us to ask the decades old question, are there limits to growth?

I want to end this video with a quote from Bookchin that summarizes *Horizon Zero Dawn* and the struggle against climate change in my opinion: “The primary question ecology faces

today is whether an ecologically oriented society can be created out of the present anti-ecological one” (Bookchin 18).

Thank you for watching.

