What is the Environmental Crisis Telling Us?[1]

In this article, we will briefly present the currently unfolding environmental breakdown, explore the key structural causes of the alarming situation, and conclude with the implications these findings have for directing us towards the struggle for a more sustainable future.

ENVIRONMENTAL CRISIS

Scientists, in light of humanity's existential dependence on nature and its ever-increasing pressures on the natural world, have previously presented nine planetary boundaries for the Earth's carrying capacity (Rockström et al., 2009; Steffen et al., 2015). If we wish to maintain the current biophysical conditions on our planet and operate at least approximately within the Holocene geological epoch, which is suitable for human development, we must remain within these planetary boundaries. However, if we approach these boundaries too closely or exceed them, we risk triggering irreversible, abrupt, and cascading environmental changes. These changes would unimaginably complicate and threaten human life on the planet.

There are nine such boundaries: climate change, biosphere integrity (i.e., biodiversity), stratospheric ozone depletion, ocean acidification, biochemical flows (phosphorus and nitrogen cycles), land-system change, freshwater use, atmospheric aerosol loading, and novel entities (see Figure 1). Although the boundaries are set individually, they are not independent of each other. They are interconnected, interdependent, and exceeding one increases pressures on others – for example, exceeding the nitrogen and phosphorus planetary boundaries affects the reduced capacity of aquatic and coastal ecosystems to absorb carbon dioxide, thereby increasing pressures on the climate change planetary boundary.

As we can see from Figure 1, we have already exceeded four of the nine planetary boundaries, and we are approaching most of the remaining ones. If the established operations within the existing system continues, leading to ever more intense transgression of planetary boundaries, we will be racing towards a "Hothouse Earth" state – a condition unsuitable for any serious existence and development of humanity (Steffen et al., 2018). There are multiple reasons for such an alarming state, as we will attempt to indicate in the upcoming chapter, but the central reason lies in the very operational laws of the existing socio-economic system.

[1] Izidor Ostan Ožbolt, Kaj nam sporoča okolja kriza?, prispevek v zborniku Poletne šole sociologije 2018

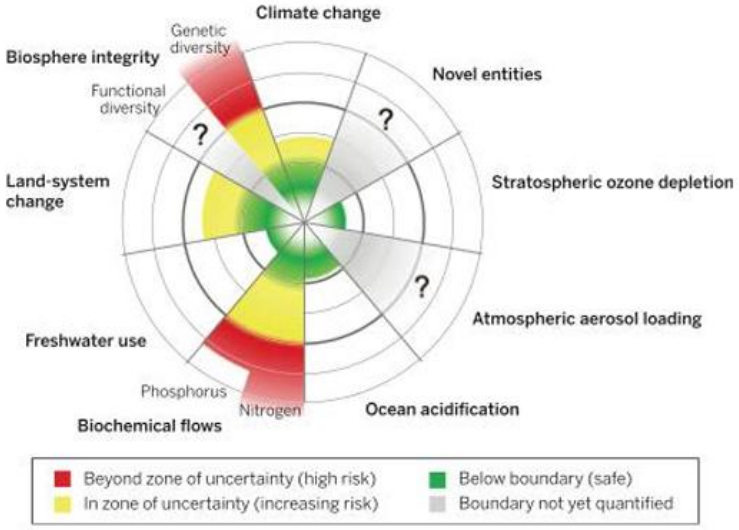

Figure 1. The state of seven of the nine planetary boundaries in 2015. The green zone represents the safe operating space, the yellow zone the area of uncertainty or increasing risk, and the red zone the high-risk area. The planetary boundary is set between the green and yellow zones. Boundaries that have not yet been quantified are marked with a grey zone (Steffen et al., 2015, p. 736).

CAPITALISM AS AN INHERENTLY UNSUSTAINABLE SYSTEM

a) The growth imperative

Capitalism is a market system based on production for profit. Companies or capitalists, as personifications of capital, are structurally compelled to pursue the greatest possible profit maximization, as only such action enables their survival in competitive rivalry. Companies primarily allocate profit to expand production, seek additional markets, develop new products and machinery, lobby, market, and similar – essentially, they allocate these resources into further growth. If a company lacks profit or does not invest it in further growth, it is, based on the competitive battle of all against all, pushed out of the market, and fails.

b) Systemic necessity to lower environmental and labor standards

From the above statement, it follows that a capitalist, regardless of personal affinity or love for a clean environment, is structurally forced to constantly seek opportunities for lowering or disregarding environmental and labor standards, as this increases profit and makes survival in the market easier.

c) Productivity and the environmental footprint

It also follows from the above statement that the imperative of infinite growth and the associated constant technological progress leads to ever higher productivity, i.e., an ever-increasing number of commodities produced per unit of time. This means a growing environmental footprint, as every produced market commodity has a certain environmental impact.

d) Systemic tendencies towards maximum efficiency trapped within the existing system of constant growth

Some capitalist apologists would now argue that this very constant technological progress will solve the environmental crisis, as it will lower the environmental footprint per produced unit. Furthermore, in the same breath, they would argue that an individual capitalist, by using more natural resources per unit of commodity produced than their competitors, increases production costs, lowers profit, and worsens their market position, and that therefore environmental sustainability is in their own interest. It is true that, in principle, with technological progress and market pressure to minimize the consumption of natural resources per produced unit, the environmental footprint per produced unit decreases. However, these actions are not independent of the broader system; rather, they are trapped and determined by it. **Resources saved and not used in this way are not left untouched by the company; instead, they are allocated for further production.** This is discussed by the often-proven and explained paradoxes (among others Bellamy Foster, Clark and York, 2010, pp. 169-207; Bunker, 1996; Polimeni and Mayumi, 2015; Sellen and Harper, 2002).

The Jevons Paradox states that despite a reduction in the consumption of a specific resource per unit of commodity produced, there often occurs an absolute increase or a relatively smaller decrease in the consumption of that resource. **The paperless office paradox** warns that the consumption of a specific resource often increases despite its substitution with another resource. Why? In short, the saved resources resulting from lower consumption of a specific resource per produced unit are allocated to increasing production, thus consequently causing growth in the consumption of that resource; or, the substitution of a specific resource with another resource, amidst continuous growth and expansion of the economy, causes increased consumption of the substituted resource.

e) Fossil fuels as the rational choice of capital

Water energy was once the driving force of capitalist production even up to the mid-19th century. During this dependence on hydropower, industry was dependent on natural factors (during droughts or floods, industrial plants were stopped), the dispersion of natural resources (plants were scattered across the landscape), non-transferability (water energy could not be transmitted or stored), and variability (when there was too much or too little water, the plant was closed). It was structured according to absolute, natural space (Postone, 1993) and absolute, concrete time (Lefebvre, 2013). Since water energy did not allow for significant intensification of production, industry in this period was based on the production of absolute and not relative surplus value. And lastly, during this period, workers and unions held significant structural and bargaining power, as industrial colonies were established along rivers far away from the largest concentrations of humans (Malm, 2013, 2016).

Coal, however, was the complete opposite – as the only known energy source at the time, it offered capitalists precisely what they were seeking for their consolidation and expansion of dominance. They used its specific characteristics to their advantage – it enabled them to relocate industrial production to the cities, among the urban proletariat and unemployed masses, thereby greatly limiting the power of workers and unions. In it, they found a force that established an unprecedented independence from natural conditions, contingencies, and variability. The steam engine, powered by coal, was always available and entirely subordinated to the wishes of the capitalists. It could be turned on, off, sped up, or slowed down, thus allowing for the production of relative and not just absolute surplus value, as was the case with water energy.

Through its specific, **infinitely capital-accumulation-focused utilization**, coal thus enabled the "specific spatio-temporality" of the capitalist production system (Castree, 2009) and the dominance of abstract space (Lefebvre, 2013) and abstract time (Postone, 1993). Coal therefore represents the absolute opposite of hydropower and renewable energy sources in general, **and its choice points to one of the key structural reasons for the insufficient transition to renewable energy sources.**

f) The general law of environmental degradation under capitalism

There are two key laws of the existing system. The first, following Marx, could be called the general law of capitalist accumulation, and the second the general law of environmental degradation under capitalism (O'Connor, 1988, 1991; Bellamy Foster, 1992). The latter refers to the self-destructive, excessive, and unsustainable exploitation of the natural, personal, and communal conditions of production, which are crucial for the continuous and profitable operation of the capitalist economy. The destructiveness of this diverse process of excessive exploitation of natural and other conditions of production stems from the entirely rational behavior of the individual capitalist, who, by lowering production costs, i.e., externalizing the costs of the conditions of production onto society, increases their profit. However, by doing so, they unintentionally cause an increase in costs or a decrease in profits for the remaining capital, the state treasury, and society as a whole, and by destroying the very conditions of production, they ultimately lead to the cessation of production.

In the medium and long term, it undermines the conditions of production for itself as well. Unlike the first law, which highlights the problem of realizing surplus value, the general law of environmental degradation confronts us with the problem of the very production of surplus value, as production becomes unprofitable and increasingly difficult. Exemplary and mutually reinforcing examples are the exploitation of fossil fuels and the clearing of forests, peatlands, and other CO_2 sinks. Both actions are entirely rational from the perspective of individual capital, while having devastating consequences for the remaining capital, the state treasury, and society as a whole. The relevance and

destructiveness of the law of environmental degradation under capitalism is becoming increasingly visible today. [2]

CONCLUSION AS A CALL FOR A PROGRESSIVE ENVIRONMENTAL MOVEMENT

Therefore, any serious and meaningful environmental struggle must also be an anti-capitalist struggle. In Slovenia, we can observe a gradual increase in climate and environmental activism that transcends the framework of the existing system and defines environmental issues as issues of justice, class dynamics, profit logic, protection and rights of nature, and the role of unions and communities in the transition to a more sustainable society. As shown by the campaign against the proposal of the Slovenian Energy Concept, a key development document in the field of energy in Slovenia, in the winter of 2017/18 (Jurekovič, 2018; Youth for Climate Justice, 2017, 2018; Rečnik, 2018), such progressive climate activism is potent, as it activates individuals, and has considerable support even among the wider public, which is not overly interested in energy and climate issues. At the same time, it offers an excellent platform for connecting various environmental, trade union, nature conservation, and other groups, and operates in accordance with science, which warns of the necessity of rapid and fundamental changes to the existing system to prevent climate breakdown.

We can only hope that the Slovenian environmental and climate movement will continue and accelerate long-term action and organizing, internalize a broad, progressive, and emancipatory framing of various areas, deepen links between the most diverse trade union, environmental, nature conservation, and other groups, and further connect with left-leaning forces in parliament. In this way, the implementation of radical environmental reforms for the benefit of the working class and nature will not be delayed.

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[2] In the above presentation of capitalism as an inherently unsustainable system, due to spatial limitations, we have omitted the structural relationships and differences that exist between the working class and the capitalist class, and between the core and peripheral countries of the global capitalist system in the genesis of the environmental crisis, as well as their associated (in)abilities in confronting it. For example, the richest 10% of the world's population emits half of all greenhouse gas emissions (Oxfam, 2015), while the bottom three billion inhabitants emit only 5 percent (Steffen et al., 2018). Similar inequalities in causing the environmental breakdown exist between the core and periphery of the global capitalist system. Yet, the consequences of such actions are borne precisely by those who are least responsible for them – for instance, in 2010, more than 80% of the costs associated with the consequences of climate change were borne by developing countries (DARA & CVF, 2012), which, due to their peripheral, core-dependent and determined development, already have severely limited, even disabled, possibilities for seriously confronting the consequences of climate change.

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